

MULTI 9™, COMPACT®, MASTERPACT®, INTERPACT™, and VIGIREX™ Circuit Protection Products

PRICING

June 2004

Class 600



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MULTI 9™ Supplementary Protectors and Miniature Circuit Breakers

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UL 489 Listed MULTI 9 Miniature Circuit Breakers**Selection Table**

		C60
		  

Ratings as per UL489, CSA 22.2 no. 235M-89 and IEC 947-2 Standards

Number of Poles			1	2	3
Rated Current (A) at 25°C			0.5–35	0.5–35	0.5–35
Interrupting Ratings as per UL489 (kA RMS)	AC 50/60 Hz	120 V	10	–	–
		240 V	5	10	10
		277 V	–	–	–
		480Y 277 V	–	–	–
	DC	60 V	10	–	–
		125 V	–	10	–
		250 V	–	–	–
		–	–	–	–
Ultimate Breaking Capacity (Icu) as per IEC 60947-2 (kA RMS)	AC 50/60 Hz	240 V	10	20	20
		415 V	3	10	10
		440 V	–	6	6
	DC	60 V	10	–	–
		125 V	–	10	–
		–	–	–	–
Service Breaking Capacity (Ics) (% Icu)			75%	75%	75%

Trip Units

Magnetic Setting	B curve	–
	C curve	Between 7 and 10 times ampere rating (7 and 14 for DC)
	D curve	Between 10 and 14 times ampere rating

Dimensions and Weights

Dimensions (in./mm)	Width		0.71/18	1.42/36	2.13/54
	Height	box/box	4.21/107		
		ring/ring	4.86/123.4		
		box/ring	4.54/115		
	Depth		3.00/76		
Weight (oz/g)	box/box	4.4/136	8.7/271	13.1/407	
	ring/ring	5.2/161	10.3/321	15.5/482	
	box/ring	4.8/148	9.5/297	14.3/445	

UL 489 Listed MULTI 9 Miniature Circuit Breakers**Selection Table**

C120	
	

Ratings as per UL489, CSA 22.2 no. 511 and IEC 947-2 Standards

Number of Poles			1	2	3	
Rated Current (A) at 25°C			20–100	20–100	20–200	
Interrupting Ratings as per UL489 (kA RMS)	AC 50/60 Hz	120 V	–	–	–	
		240 V	14	14	14	
		277 V	–	–	–	
		480Y 277 V	–	–	–	
	DC ①	60 V	–	–	–	
		125 V	14	14	–	
		250 V	–	–	–	
	Ultimate Breaking Capacity (Icu) as per IEC 60947-2 (kA RMS)	AC 50/60 Hz	240 V	20	20	20
			415 V	10	10	10
440 V			–	6	6	
DC		60 V	–	–	–	
		125 V	14	14	–	
		250 V	–	14	–	
Service Breaking Capacity (Ics) (% Icu)			75%	75%	75%	

Trip Units

Magnetic Setting	B curve	Between 3.2 and 4.8 times ampere rating
	C curve	Between 7 and 10 times ampere rating (7 and 14 for DC)
	D curve	Between 10 and 14 times ampere rating

Dimensions and Weights

Dimensions (in./mm)	Width	1.06/27	2.13/54	3.19/81
	Height box/box	3.50/89		
	Depth	3.00/76		
Weight (oz/g)		6.3/205	12.6/410	18.9/615

① C curve only.

UL Listed C120 circuit breakers are scheduled to be available in 4th quarter 2004. For information and availability, contact your nearest Square D/Schneider Electric sales office.

UL 489 Listed C60 Miniature Circuit Breakers**UL 489 Listed C60 Miniature Circuit Breakers 120/240 Vac and 60 Vdc (1P) or 125 Vdc (2P)①**

Rating (A)	1P	List Price	2P	List Price	3P	List Price
C Curve—Magnetic Setting Between 7 and 10 Times Ampere Rating AC (7–14 DC)—Box Lug/Box Lug						
0.5	60100①	\$ 83	60134①	\$ 179		
1	60101①	83	60135①	179	60168	\$ 258
1.5	60102①	83	60136①	179	60169	258
2	60103①	83	60137①	179	60170	258
3	60104①	83	60138①	179	60171	258
4	60105①	83	60139①	179	60172	258
5	60106①	83	60140①	179	60173	258
6	60107①	76	60141①	164	60174	237
7	60108①	76	60142①	164	60175	237
8	60109①	76	60143①	164	60176	237
10	60110①	76	60144①	164	60177	237
13	60111①	76	60145①	164	60178	237
15	60112①	76	60146①	164	60179	237
20	60113①	76	60147①	164	60180	237
25	60114①	76	60148①	164	60181	237
30	60115①	80	60149①	171	60182	248
35	60116①	80	60150①	171	60183	248
C Curve—Magnetic Setting Between 7 and 10 Times Ampere Rating—Ring Tongue/Ring Tongue						
0.5	60200	\$ 87	60234	\$ 188		
1	60201	87	60235	188	60268	\$ 273
1.5	60202	87	60236	188	60269	273
2	60203	87	60237	188	60270	273
3	60204	87	60238	188	60271	273
4	60205	87	60239	188	60272	273
5	60206	87	60240	188	60273	273
6	60207	81	60241	174	60274	252
7	60208	81	60242	174	60275	252
8	60209	81	60243	174	60276	252
10	60210	81	60244	174	60277	252
13	60211	81	60245	174	60278	252
15	60212	81	60246	174	60279	252
20	60213	81	60247	174	60280	252
25	60214	81	60248	174	60281	252
30	60215	84	60249	182	60282	263
35	60216	84	60250	182	60283	263
C Curve—Magnetic Setting Between 7 and 10 Times Ampere Rating—Box Lug/Ring Tongue						
0.5	60300	\$ 86	60334	\$ 186		
1	60301	86	60335	186	60368	\$ 269
1.5	60302	86	60336	186	60369	269
2	60303	86	60337	186	60370	269
3	60304	86	60338	186	60371	269
4	60305	86	60339	186	60372	269
5	60306	86	60340	186	60373	269
6	60307	80	60341	171	60374	248
7	60308	80	60342	171	60375	248
8	60309	80	60343	171	60376	248
10	60310	80	60344	171	60377	248
13	60311	80	60345	171	60378	248
15	60312	80	60346	171	60379	248
20	60313	80	60347	171	60380	248
25	60314	80	60348	171	60381	248
30	60315	83	60349	179	60382	258
35	60316	83	60350	179	60383	258

① DC ratings apply to box lug/box lug only. Contact your nearest Square D/Schneider Electric sales office for information and availability of ring tongue DC rating.

Continued on next page

Ratings and interrupting ratings: page 4

Cable range: pressure terminals are suitable for copper cables:

■ 0.5 to 25 A: #14 to #4 AWG

■ 32 to 63 A: #14 to #2 AWG

Width: 1P: 18mm, 2P: 36mm, 3P: 54mm, 4P: 72mm

Additional information:

■ Catalog no. 0860CT9501R2/01

UL 489 Listed C60 Miniature Circuit Breakers (120/240 Vac)—Continued

Rating (A)	1P	List Price	2P	List Price	3P	List Price
D Curve—Magnetic Setting Between 10 and 14 Times Ampere Rating—Box Lug/Box Lug						
0.5	60117	\$ 83	60151	\$ 179		
1	60118	83	60152	179	60184	\$ 258
1.5	60119	83	60153	179	60185	258
2	60120	83	60154	179	60186	258
3	60121	83	60155	179	60187	258
4	60122	83	60156	179	60188	258
5	60123	83	60157	179	60189	258
6	60124	76	60158	164	60190	237
7	60125	76	60159	164	60191	237
8	60126	76	60160	164	60192	237
10	60127	76	60161	164	60193	237
13	60128	76	60162	164	60194	237
15	60129	76	60163	164	60195	237
20	60130	76	60164	164	60196	237
25	60131	76	60165	164	60197	237
30	60132	80	60166	171	60198	248
35	60133	80	60167	171	60199	248
D Curve—Magnetic Setting Between 10 and 14 Times Ampere Rating—Ring Tongue/Ring Tongue						
0.5	60217	\$ 87	60251	\$ 188		
1	60218	87	60252	188	60284	\$ 273
1.5	60219	87	60253	188	60285	273
2	60220	87	60254	188	60286	273
3	60221	87	60255	188	60287	273
4	60222	87	60256	188	60288	273
5	60223	87	60257	188	60289	273
6	60224	81	60258	174	60290	252
7	60225	81	60259	174	60291	252
8	60226	81	60260	174	60292	252
10	60227	81	60261	174	60293	252
13	60228	81	60262	174	60294	252
15	60229	81	60263	174	60295	252
20	60230	81	60264	174	60296	252
25	60231	81	60265	174	60297	252
30	60232	84	60266	182	60298	263
35	60233	84	60267	182	60299	263
D Curve—Magnetic Setting Between 10 and 14 Times Ampere Rating—Box Lug/Ring Tongue						
0.5	60317	\$ 86	60351	\$ 186		
1	60318	86	60352	186	60384	\$ 269
1.5	60319	86	60353	186	60385	269
2	60320	86	60354	186	60386	269
3	60321	86	60355	186	60387	269
4	60322	86	60356	186	60388	269
5	60323	86	60357	186	60389	269
6	60324	80	60358	171	60390	248
7	60325	80	60359	171	60391	248
8	60326	80	60360	171	60392	248
10	60327	80	60361	171	60393	248
13	60328	80	60362	171	60394	248
15	60329	80	60363	171	60395	248
20	60330	80	60364	171	60396	248
25	60331	80	60365	171	60397	248
30	60332	83	60366	179	60398	258
35	60333	83	60367	179	60399	258

Ratings and interrupting ratings: page 4

Cable range: pressure terminals are suitable for copper cables:

■ 0.5 to 25 A: #14 to #4 AWG

■ 32 to 63 A: #14 to #2 AWG

Width: 1P: 18mm, 2P: 36mm, 3P: 54mm, 4P: 72mm

Additional information:

■ Catalog no. 0860CT9501R2/01

MULTI 9™ Listed Miniature Circuit Breakers

UL 489A for DC Telecom Applications

Selection Table

			C60
			
Ratings as per UL489A and IEC 947-2 Standards			
Number of Poles			1
Rated Current (A) at 25°C			0.5–63
Interrupting Ratings as per UL489A (kA RMS)	AC 50/60 Hz	240 V	–
		277 V	–
		480Y 277 V	–
	DC	60 V	10
		125 V	–
Ultimate Breaking Capacity (Icu) as per IEC 947-2 (kA RMS)	AC 50/60 Hz	240 V	10
		415 V	–
		440 V	–
Service Breaking Capacity (Ics)	(% Icu)		75%
Trip Units			
Magnetic Setting	C curve	Between 7 and 14 times ampere rating	
Dimensions and Weights			
Dimensions H x W x D (in./mm)			3.19 x 0.71 x 3.00/81 x 18 x 76
Weight (oz/g)			3.85/110



UL489A MULTI 9 C60 Circuit Breakers for use in Communications Equipment

Rating (A)	1P	List Price
C Curve—Magnetic Setting Between 7 and 10 Times Ampere Rating		
0.5	60406	80
1	60407	67
2	60408	67
3	60409	67
4	60410	67
5	60411	67
6	60412	67
8	60413	67
10	60414	67
13	60415	67
15	60416	67
20	60417	67
30	60418	67
40	60419	74
50	60420	78
63	60421	82

Ratings and interrupting ratings: page 14
Cable range: pressure terminals are suitable for copper cables:
■ 0.5 to 25 A: #14 to #4 AWG
■ 32 to 63 A: #14 to #2 AWG
Width: 1P: 18mm

Additional information:
■ Catalog no. 0860CT9501R2/01

UL 489 Listed MULTI 9 C120 Miniature Circuit Breakers**UL 489 Listed C120 Miniature Circuit Breakers 240 Vac and 125 Vdc (1P) or 250 Vdc (2P)**

Rating (A)	1P	List Price	2P	List Price	3P	List Price
B Curve—Magnetic Setting Between 3 and 5 Times Ampere Rating						
20	19864	84	19885	183	19976	266
30	19865	84	19886	183	19977	266
40	19866	84	19887	183	19978	266
50	19867	84	19888	183	19979	266
60	19868	106	19889	201	19980	300
80	19869	109	19890	218	19981	326
100	19870	120	19891	240	19982	360
C Curve—Magnetic Setting Between 5 and 10 Times Ampere Rating						
20	19871	84	19892	183	19983	266
30	19872	84	19893	183	19984	266
40	19873	84	19894	183	19985	266
50	19874	84	19895	183	19986	266
60	19875	106	19896	201	19987	300
80	19876	109	19897	218	19988	326
100	19877	120	19898	240	19989	360
D Curve—Magnetic Setting Between 10 and 14 Times Ampere Rating						
20	19878	84	19899	183	19990	266
30	19879	84	19970	183	19991	266
40	19880	84	19971	183	19992	266
50	19881	84	19972	183	19993	266
60	19882	106	19973	201	19994	300
80	19883	109	19974	218	19995	326
100	19884	120	19975	240	19996	360

Ratings and interrupting ratings: page 5

Cable range: pressure terminals are suitable for copper cables:

■ #14 to #1 AWG (1–50mm²)

Width: 1P: 27 mm, 2P: 54 mm, 3P: 81 mm

Accessories: C120 uses same electrical auxiliaries as C60. See page 10
C120 uses the same mechanical accessories as NC100. See page 20.

Additional information:

■ Catalog no. 0860CT9501R2/01

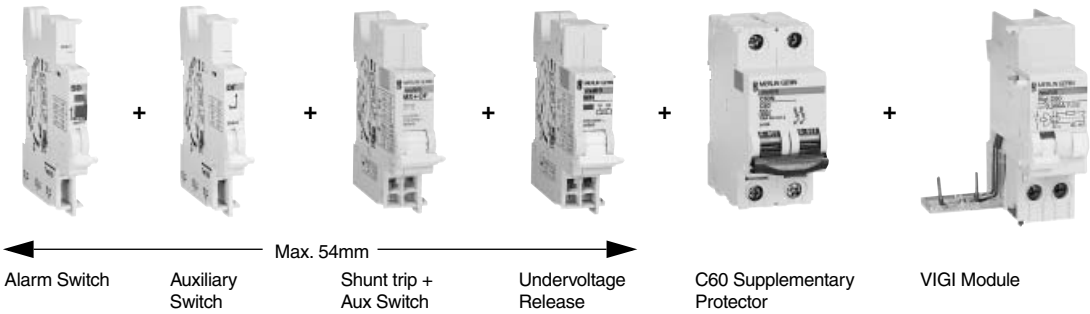
These UL Listed C120 circuit breakers are scheduled to replace NC100 products in 4th quarter 2004. For information and availability, contact your nearest Square D/Schneider Electric sales office.

Accessories for C60 and C120①

Electrical
Auxiliaries

Possible Combinations

Mounted the left of the circuit breaker with a maximum width of 54mm.



		Volts (V)	VA or W	Width (mm)	Catalog No.	List Price
MX + OF Shunt Trip + Auxiliary Switch for UL489 or UL1077 Rated C60 or C120						
	AC	24	6	18	27118	\$ 93.00
		48	6	18	27110	93.00
		120	6	18	27109	93.00
		240	6	18	27109	93.00
		277	3	18	27109	93.00
	DC	12	6	18	27118	93.00
		24	6	18	27118	93.00
		48	3	18	27110	93.00
		125	1	18	27109	93.00
MN Undervoltage Release for UL489 or UL1077 Rated C60 or C120						
	AC	24		18	27108	134.00
		48		18	27106	134.00
		120		18	27107	134.00
		240		18	27105	134.00
	DC	24		18	27108	134.00
		48		18	27106	134.00
OF Auxiliary Switch for UL489 or UL1077 Rated C60 or C120						
	AC	12–240	6	9	26925	40.00
		277	3	9	26925	40.00
	DC	12–24	6	9	26925	40.00
		48	3	9	26925	40.00
		125	1	9	26925	40.00
SD Alarm Switch for UL489 or UL1077 Rated C60 or C120						
	AC	12–240	6	9	26928	40.00
		277	3	9	26928	40.00
	DC	12–24	6	9	26928	40.00
		48	3	9	26928	40.00
		125	1	9	26928	40.00
Ground-fault VIGI™ Module (IEC Rated, Non UL)—See page 19						

① C60—UL489 Listed, UL1077 Recognized and CSA 22.2 #5-02 and #235 Certified. C120—UL489 Listed

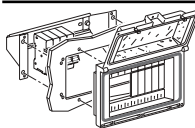
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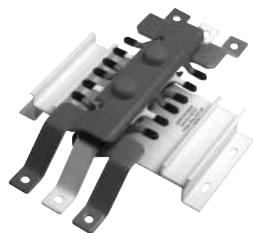
Accessories — *Continued*

Connection Accessories	Ring Tongue Terminal Kit for UL 1077 C60		Catalog No.	List Price
		For one pole	17400	\$ 10.50
Plug-in Base— Non UL Recognized — IEC Rated				
	One pole		MG26996	52.00
Comb Busbar with integral end caps – 63 A – Recognized for use with UL 1077 C60 – See page 30 for IEC Rated type				
	12-Pole Long	1 Phase	MG10285	42.00
		2 Phase	MG10286	46.20
		3 Phase	MG10287	53.00
Tooth caps	20 pieces		60488	25.20
Interphase Barrier — Non UL Recognized (not for UL489 C60)				
	Bag of 10 pieces		MG27001	33.70
Terminal Screw Shield — Non UL Recognized (not for UL489 C60)				
	Supplied as bag of two 4-Pole shields (May be divided into 1-, 2- or 3-Pole length)		MG26981	33.70
Terminal Cover — Non UL Recognized (not for UL489 C60)				
	1-Pole (Set of two)		MG26975	16.90
	2-Pole (Set of two)		MG26976	33.70
	3-Pole (Requires one 1-Pole and one 2-Pole)		MG26975	16.90
			+MG26976	33.70
	4-Pole (Set of two)		MG26978	68.00
Spacer — Non UL Recognized				
			MG27062	6.20
Padlock Attachment — Non UL Recognized				
	Set of two—Accepts 0.315 in/8mm diameter padlock		MG26970	22.10
Heavy-duty Padlock Attachment — Non UL Recognized				
	Set of two—Accepts 0.315 in/8mm diameter padlock		M9PAF	39.90

Accessories — *Continued*

Other
Accessories

Front Mounting Kit		Catalog No.	List Price				
	1P (18mm)	MG26983	\$ 11.20				
	2P (36mm)	MG26984	11.20				
	3P (54mm)	MG26985	11.20				
	4P (72mm)	MG26989	11.20				
	6P (108mm)	MG26990	11.20				
Multi-pole Front Mounting Kit — Allows installation of up to 20–9mm modules (10 poles of C60)— Non UL Recognized							
	DIN rail support		14211	35.70			
	Hinged transparent cover		14210	105.00			
Rotary Handle — Non UL Recognized							
	2P/3P/4P	Operating subassembly (Fixed to MULTI 9). Requires handle.	MG27046	86.00			
		Drawout door interlock handle (6.5 in/165mm shaft)	MG27047	71.00			
		Fixed handle (Front or lateral)	MG27048	78.00			
Label Holders for 2, 3 or 4P C60 or NC100 – Non UL Recognized							
	Bag of 10 pieces		27150	33.70			
Identification — Non UL Recognized							
	Strip of 10 characters.		See Table below	0.52			
	Order must specify a standard pack of 25 strips of same character.						
Marking	Catalog No.	Marking	Catalog No.	Marking	Catalog No.	Marking	Catalog No.
A	AB1GA	K	AB1GK	U	AB1GU	5	AB1R5
B	AB1GB	L	AB1GL	V	AB1GV	6	AB1R6
C	AB1GC	M	AB1GM	W	AB1GW	7	AB1R7
D	AB1GD	N	AB1GN	X	AB1GX	8	AB1R8
E	AB1GE	O	AB1GO	Y	AB1GY	9	AB1R9
F	AB1GF	P	AB1GP	Z	AB1GZ	0	AB1R0
G	AB1GG	Q	AB1GQ	1	AB1R1	0–9	AB1R11
H	AB1GH	R	AB1GR	2	AB1R2	+	AB1R12
I	AB1GI	S	AB1GS	3	AB1R3	-	AB1R13
J	AB1GJ	T	AB1GT	4	AB1R4	Blank	AB1RV



MULTI 9 MSC Mounting Base

Technical Data :

- IEC Rated: 250 A
- Insulation Voltage: 690 Vac
- Tested to Australia Standards AS3439-1 and AS3439-3 (IEC 439)
- Bus connectors compatible with COMPACT NS250 molded case circuit breakers and INTERPACT INS 250 switches

Additional information:

- Catalog no. 0860CT9501R2/01

	Pole Capacity	Length (mm) ①	Cat . No.	List Price
For C60 Circuit Breakers				
MSC DC	12	110	C3DC123	\$ 328
2 Phase	16	146	C3DC163	416
(Black and Red)	20	182	C3DC203	478
MSC 18	12	11	C325123	218
3 Phase	18	164	C325183	259
(Red, White and Blue)	24	218	C325243	296
For NC100 Circuit Breakers				
MSC27	12	164	C125123	259
3 Phase	18	245	C125183	312
(Red, White and Blue)	24	326	C125243	300

Consult Factory for other sizes, up to 60 poles.

① Busbars extend 67.5 mm either end of pan, width is 215 mm.

UL Rated MSC mounted bases are scheduled to be available in 4th quarter 2004. For information and availability, contact your nearest Square D/Schneider Electric sales office.

MULTI 9™ Supplementary Protectors

UL 1077 Recognized MULTI 9 Supplementary Protectors

Selection Table

	C60
	

Ratings as per UL1077, CSA 22.2 no. 235 and IEC 947-2 Standards

Number of Poles		1	2	3	4
Rated Current (A) at 25°C		0.5–63	1–63	1–63	1–63
Interrupting Ratings as per UL1077 (kA RMS)	AC 50/60 Hz	240 V	10	10	10
		277 V	5	—	—
		480Y 277 V	—	5	5
	DC	60 V	10	—	—
		125 V	—	10	—
Ultimate Breaking Capacity (Icu) as per IEC 947-2 (kA RMS)	AC 50/60 Hz	240 V	10	20	20
		415 V	—	10	10
		440 V	—	6	6
Service Breaking Capacity (Ics) (% Icu)		75%	75%	75%	75%

Trip Units

Magnetic Setting	B curve	Between 3.2 and 4.8 times ampere rating
	C curve	Between 7 and 10 times ampere rating (7 and 14 for DC)
	D curve	Between 10 and 14 times ampere rating

Dimensions and Weights

Dimensions H x W x D (in./mm)	3.19 x 0.71 x 3.00/ 81 x 18 x 76	3.19 x 1.42 x 3.00/ 81 x 36 x 76	3.19 x 2.13 x 3.00/ 81 x 54 x 76	3.19 x 2.48 x 3.00/ 81 x 72 x 76
Weight (oz/g)	3.85/110	7.70/220	11.55/330	15.40/440

NC100H^①

1		2		3		4	
10–40	50–80	10–40	50–80	10–40	50–80	10–40	50–80
20	5	20	5	20	5	20	5
10		10		10		10	
10							
	10	10	10				
10		20		20		20	
		10		10		10	
		6		6		6	

3.19 x 1.06 x 3.00/ 81 x 27 x 76	3.19 x 2.13 x 3.00/ 81 x 54 x 76	3.19 x 3.19 x 3.00/ 81 x 81 x 76	3.19 x 4.25 x 3.00/ 81 x 108 x 76
6.30/180	12.60/360	18.9/540	25.20/720

NC100H will be replaced by UL489 C120 equivalents at 240 V during 4th quarter 2004.
For information and availability, contact your nearest Square D/Schneider Electric sales office.

UL 1077 Recognized C60 Supplementary Protectors**MULTI 9 C60 Supplementary Protectors**

Rating (A)	1P	List Price	2P	List Price	3P	List Price	4P	List Price
B Curve—Magnetic Setting Between 3.2 and 4.8 Times Ampere Rating								
1	MG24110	\$ 67	MG24125	\$ 145	MG24140	\$ 210	MG24155	\$ 277
1.2	MG17402	67	MG17432	145				
1.5	MG17403	67	MG17433	145				
2	MG24111	67	MG24126	145	MG24141	210	MG24156	277
3	MG24112	67	MG24127	145	MG24142	210	MG24157	277
4	MG24113	67	MG24128	145	MG24143	210	MG24158	277
5	MG17404	67	MG17434	145				
6	MG24114	67	MG24129	145	MG24144	210	MG24159	277
7	MG17405	67	MG17435	145				
8	MG24115	67	MG24130	145	MG24145	210	MG24160	277
10	MG24116	67	MG24131	145	MG24146	210	MG24161	277
13	MG24117	67	MG24132	145	MG24147	210	MG24162	
15	MG17406	67	MG17436	145	MG17461	210		
16	MG24118	67	MG24133	145	MG24148	210	MG24163	277
20	MG24119	67	MG24134	145	MG24149	210	MG24164	277
25	MG24120	67	MG24135	145	MG24150	210	MG24165	277
30	MG17407	67	MG17437	145	MG17462	210		
32	MG24121	67	MG24136	145	MG24151	210	MG24166	277
35	MG17408	67	MG17438	145	MG17463	210		
40	MG24122	74	MG24137	149	MG24152	216	MG24167	280
50	MG24123	78	MG24138	160	MG24153	225	MG24168	292
60	MG17409	82	MG17439	168	MG17464	235		
63	MG24124	82	MG24139	168	MG24154	235	MG24169	300
C Curve—Magnetic Setting Between 7 and 10 Times Ampere Rating (7 and 14 for DC)								
0.5	MG17411	80						
1	MG24425	67	MG24442	145	MG24459	210	MG24476	277
1.2	MG17412	67	MG17442	145				
1.5	MG17413	67	MG17443	145				
2	MG24426	67	MG24443	145	MG24460	210	MG24477	277
3	MG24427	67	MG24444	145	MG24461	210	MG24478	277
4	MG24428	67	MG24445	145	MG24462	210	MG24479	277
5	MG17414	67	MG17444	145				
6	MG24430	67	MG24447	145	MG24464	210	MG24481	277
7	MG17415	67	MG17445	145				
8	MG24431	67	MG24448	145	MG24465	210	MG24482	277
10	MG24432	67	MG24449	145	MG24466	210	MG24483	277
13	MG24433	67	MG24450	145	MG24467	210	MG24484	
15	MG17416	67	MG17446	145	MG17466	210		
16	MG24434	67	MG24451	145	MG24468	210	MG24485	277
20	MG24435	67	MG24452	145	MG24469	210	MG24486	277
25	MG24436	67	MG24453	145	MG24470	210	MG24487	277
30	MG17417	67	MG17447	145	MG17467	210		
32	MG24437	67	MG24454	145	MG24471	210	MG24488	277
35	MG17418	67	MG17448	145	MG17468	210		
40	MG24438	74	MG24455	149	MG24472	216	MG24489	280
50	MG24439	78	MG24456	160	MG24473	225	MG24490	292
60	MG17419	82	MG17449	168	MG17469	235		
63	MG24440	82	MG24457	168	MG24474	235	MG24491	300

Continued on next page

Ratings and interrupting ratings: page 14

Cable range: pressure terminals are suitable for copper cables:

■ 0.5 to 25 A: #14 to #4 AWG

■ 32 to 63 A: #14 to #2 AWG

Width: 1P: 18mm, 2P: 36mm, 3P: 54mm, 4P: 72mm

Additional information:

■ Catalog no. 0860CT9501R2/01

MULTI 9 C60 Supplementary Protectors—Continued

Rating (A)	1P	List Price	2P	List Price	3P	List Price	4P	List Price
D Curve—Magnetic Setting Between 10 and 14 Times Ampere Rating								
0.5	MG17421	\$ 80						
1	MG24500	67	MG24516	\$ 145	MG24532	\$ 210	MG24548	\$ 277
1.2	MG17422	67	MG17452	145				
1.5	MG17423	67	MG17453	145				
2	MG24501	67	MG24517	145	MG24533	210	MG24549	277
3	MG24502	67	MG24518	145	MG24534	210	MG24550	277
4	MG24503	67	MG24519	145	MG24535	210	MG24551	277
5	MG17424	67	MG17454	145				
6	MG24504	67	MG24520	145	MG24536	210	MG24552	277
7	MG17425	67	MG17455	145				
8	MG24505	67	MG24521	145	MG24537	210	MG24553	277
10	MG24506	67	MG24522	145	MG24538	210	MG24554	277
13	MG24507	67	MG24523	145	MG24539	210	MG24555	277
15	MG17426	67	MG17456	145	MG17471	210		
16	MG24508	67	MG24524	145	MG24540	210	MG24556	277
20	MG24509	67	MG24525	145	MG24541	210	MG24557	277
25	MG24510	67	MG24526	145	MG24542	210	MG24558	277
30	MG17427	67	MG17457	145	MG17472	210		
32	MG24511	67	MG24527	145	MG24543	210	MG24559	277
35	MG17428	67	MG17458	145	MG17473	210		
40	MG24512	74	MG24528	149	MG24544	216	MG24560	280
50	MG24513	78	MG24529	160	MG24545	225	MG24561	292
60	MG17429	82	MG17459	168	MG17474	235		
63	MG24514	82	MG24530	168	MG24546	235	MG24562	300

UL 1077 Recognized NC100H Supplementary Protectors**MULTI 9 NC100H Supplementary Protectors 480Y/277 Vac**

Rating (A)	1P	List Price	2P	List Price	3P	List Price	4P	List Price
B Curve—Magnetic Setting Between 3.2 and 4.8 Times Ampere Rating								
80	MG27164	\$ 109	MG27175	\$ 218	MG27186	\$ 326	MG27197	\$ 481
C Curve—Magnetic Setting Between 7 and 10 Times Ampere Rating								
10	MG27154	84	MG27166	183	MG27177	266	MG27188	351
15	MG18256	84	MG18271	183	MG18286	266		
16	MG27155	84	MG27167	183	MG27178	266	MG27189	351
20	MG27156	84	MG27168	183	MG27179	266	MG27190	351
25	MG27157	84	MG27169	183	MG27180	266	MG27191	351
30	MG18257	84	MG18272	183	MG18287	266		
32	MG27158	84	MG27170	183	MG27181	266	MG27192	351
35	MG18258	84	MG18273	183	MG18288	266		
40	MG27159	84	MG27171	183	MG27182	266	MG27193	351
50	MG27160	84	MG27172	183	MG27183	266	MG27194	351
60	MG18259	106	MG18274	201	MG18289	300		
63	MG27162	106	MG27173	201	MG27184	300	MG27195	410
80	MG27163	109	MG27174	218	MG27185	326	MG27196	481
D Curve—Magnetic Setting Between 10 and 14 Times Ampere Rating								
10	MG27333	84	MG27344	183	MG27355	266	MG27366	351
15	MG18261	84	MG18276	183	MG18291	266		
16	MG27334	84	MG27345	183	MG27356	266	MG27367	351
20	MG27335	84	MG27346	183	MG27357	266	MG27368	351
25	MG27336	84	MG27347	183	MG27358	266	MG27369	351
30	MG18262	84	MG18277	183	MG18292	266		
32	MG27337	84	MG27348	183	MG27359	266	MG27370	351
35	MG18263	84	MG18278	183	MG18293	266		
40	MG27338	84	MG27349	183	MG27360	266	MG27371	351

Ratings and interrupting ratings: page 15

Cable range: pressure terminals are suitable for copper cables:

■ 10 to 40 A: #18 to #2 AWG

■ 50 to 80 A: #8 to #1 AWG

Width: 1P: 27mm, 2P: 54mm, 3P: 81mm, 4P: 108mm

Additional information:

■ Catalog no. 0860CT9501R2/01

■ D-Fax no. 2940

NC100H will be replaced by UL489 C120 equivalents at 240 V during 4th quarter 2004.
For information and availability, contact your nearest Square D/Schneider Electric sales office.
See page 9.

Accessories for UL 1077 Rated NC100

Electrical
Accessories

Possible Combinations



+

+

+

or

or



Alarm Switch

Auxiliary Switch

NC100 Supplementary Protector

Shunt trip + Aux Switch

Undervoltage Release

VIGI Module

Shunt Trip		Volts (V)	Catalog No.	List Price
	AC	220–277	MG27128	\$ 93.00
		110–220	MG27129	93.00
	DC	110–130	MG27129	93.00
		24–48	MG27130	93.00

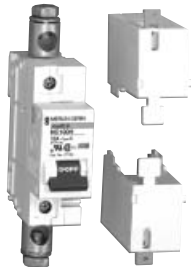
Undervoltage Trip				
	AC	220–240	MG27125	134.00
		110–130	MG27126	134.00

Auxiliary and Alarm Switches				
 	Auxiliary Switch		MG27121	40.00
	Alarm Switch		MG27122	40.00

Ground-fault VIGI Module — IEC Rated, Non UL Recognized—See page 33

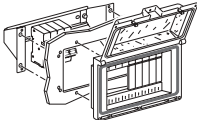
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Accessories — Continued

Connection Accessories		Catalog No.	List Price
	Rear connection with terminal cover For cable up to #1/0 AWG (50mm²)	MG27153	28.70
Terminal Screw Shield – Non UL Recognized			
	Supplied as bag of two 4-Pole shields (May be divided into 1-, 2- or 3-Pole length)	MG27152	33.70
Terminal Cover – Non UL Recognized			
	1-Pole (set of two)	MG27151	22.50
Spacer – Non UL Recognized			
		MG27062	6.20

Accessories — *Continued*

Other
Accessories

Front Mounting Kit for NC100		Catalog No.	List Price	
	1P (27mm)	MG26986	\$ 11.20	
	2P (54mm)	MG26987	11.20	
	3P (81mm)	MG26988	11.20	
	4P (108mm)	MG26990	11.20	
Multi-pole Front Mounting Kit — Allows installation of up to 20–9mm modules — Non UL Recognized				
	DIN rail support	14211	35.70	
	Hinged transparent cover	14210	105.00	
Rotary Handle – Non UL Recognized				
	2P/3P/4P	Operating subassembly	MG27046	86.00
		Door interlock handle	MG27047	71.00
		Fixed handle (Front or lateral)	MG27048	78.00
Label Holders for 2, 3 or 4P C60 or NC100 – Non UL Recognized				
	Bag of 10 pieces		MG27150	33.70
Padlock Attachment – Non UL Recognized				
	Set of two		MG27145	39.40

IEC 947-2 Rated MULTI 9 Miniature Circuit Breakers

Selection Table

			DPN-N	C60									
													
Ratings as per IEC 898 and IEC 947-2 Standards			DPN-N	C60N		C60H		C60L					
Number of poles			1Ph + N	1	2, 3, 4	1	2, 3, 4	1	2, 3, 4				
Rated current (A)			In	30°C 40°C	1 to 40	0.5 to 63	0.5 to 63	0.5 to 63	0.5 to 63	0.5 to 63	0.5 to 25	32 to 40	50 to 63
Rated operational voltage (V)			Ue	230	440	440	440	440	440	440			
Ultimate breaking capacity as per IEC 947-2 Standards (kA rms)			Icu AC 50/60 Hz	130 V	—	—	30	—	—	—			
				230-240 V	7.5	10	20	15	30	25	50	40	30
				400-415 V	2 ①	3 ①	10	4 ①	15	6 ①	25	20	15
				440 V	—	6	—	10	—	20	15	10	
			DC (Poles in series)	60 V	—	15	—	20	—	25	—		
				125 V	—	—	2P=20, 3P=30	—	2P=25, 3P=40	—	2P=30, 3P=50		
			250 V	—	—	4P=40	—	4P=50	—	4P=60			
Service breaking capacity			Ics (% Icu)	50%	75%	75%	50%	50%	50%	50%			
Ultimate breaking capacity as per EN60898 Standards (kA)			Icn AC 50/60 Hz	230-400 V	6000 at 230 V	6000		10000					
				415 V	—		6000		10000				
Limitation class as per IEC 898			3	3									
Trip Units													
Magnetic setting (Times Ampere Rating)			B curve	3 to 5	3 to 5								
			C curve	5 to 10	5 to 10								
			D curve	—	10 to 14								
			MA curve	—	—	12							
Dimensions and Weights													
Dimensions H x W x D (in./mm)			1P	3.03 x 0.71 x 3.00/ 77 x 18 x 76	3.19 x 0.71 x 3.00/81 x 18 x 76								
			2P	—	3.19 x 1.42 x 3.00/81 x 36 x 76								
			3P	—	3.19 x 2.13 x 3.00/81 x 54 x 76								
			4P	—	3.19 x 2.48 x 3.00/81 x 72 x 76								
Weights (oz/g)			1P	4.23/120	3.88/110								
			2P	—	7.76/220								
			3P	—	11.64/330								
			4P	—	15.52/440								

① Single pole breaking capacity as per IT ungrounded grounding system (case of double fault)

C32		C120H	
			
C32H-DC		C120H	
1	2	1	2, 3, 4
1 to 40	1 to 40	10 to 125	10 to 125
		440	440
		30	—
		15	30
		4.5 ①	15
		—	10
10	20		
	20		
		50%	75%
		15	15
		—	—
—		3 to 5	
7 to 10		5 to 10 (5 to 14 for DC)	
—		10 to 14	
—		—	
3.19 x 0.71 x 3.00/81 x 18 x 76		3.19 x 0.71 x 3.00/81 x 27 x 76	
3.19 x 1.42 x 3.00/81 x 36 x 76		3.19 x 1.42 x 3.00/81 x 54 x 76	
—		3.19 x 2.13 x 3.00/81 x 81 x 76	
—		3.19 x 2.48 x 3.00/81 x 108 x 76	
4.48/127		6.35/205	
8.82/250		12.70/410	
—		19.05/615	
—		25.40/820	

IEC 947-2 Rated MULTI 9 DPN Miniature Circuit Breakers

**MULTI 9 DPN-N Circuit Breaker** — IEC 898: 6000A — IEC 947-2: 7.5 kA at 230 Vac

Rating (A)	1P+Neutral	List Price
B Curve—Magnetic Setting Between 3 and 5 Ampere Rating		
4	19249	\$ 124.00
6	19250	124.00
10	19252	124.00
16	19254	124.00
20	19255	124.00
25	19256	124.00
32	19257	124.00
40	19258	128.00

C Curve—Magnetic Setting Between 5 and 10 Ampere Rating

1	19260	124.00
2	19261	124.00
4	19263	124.00
6	19264	124.00
10	19266	124.00
16	19268	124.00
20	19269	124.00
25	19270	124.00
32	19271	124.00
40	19272	128.00

Accessories

Auxiliary switch, Alarm switch, Shunt trip, Undervoltage release and Padlocking device — See page 29 & 31

Comb Busbar for DPN-N	1 Phase + Neutral (13 Poles)	14880	26.30
	1 Phase + Neutral (24 Poles) — set of 2	14890	97.00
	Insulated connector (25mm ²) — set of 4	14885	37.50

**MULTI 9 DPN-N Vigi Residual Current Circuit Breakers**

Consist of the above Circuit Breaker with a built-in Ground Fault Device

Rating (A)	30 mA Sensitivity		300 mA Sensitivity	
	Catalog No.	List Price	Catalog No.	List Price
B Curve—Magnetic Setting Between 3 and 5 Ampere Rating				
6	19651	\$ 285.00	19671	\$ 356.00
10	19653	285.00	19673	356.00
13	19654	285.00	...	...
16	19655	285.00	19675	356.00
20	19656	285.00	19676	356.00
25	19657	285.00	19677	356.00
32	19658	292.00	19678	365.00
40	19659	296.00	19679	371.00

C Curve—Magnetic Setting Between 5 and 10 Ampere Rating

6	19661	285.00	19681	356.00
10	19663	285.00	19683	356.00
16	19665	285.00	19685	356.00
20	19666	285.00	19686	356.00
25	19667	285.00	19687	356.00
32	19668	292.00	19688	365.00
40	19669	296.00	19689	371.00

Accessories

Auxiliary switch, Alarm switch, Shunt trip, Undervoltage release and Padlocking device — See page 29

Comb Busbar for DPN-N	1 Phase + Neutral (13 Poles)	14880	26.30
	1 Phase + Neutral (24 Poles) — set of 2	14890	97.00
	Insulated connector (25mm ²) — set of 4	14885	37.50

Ratings and Interrupting ratings : page 22

Cable range : pressure terminals are suitable for 16mm² solid copper cables:

Width of DPN-N: 18mm

Width of DPN-N Vigi: 36mm

Additional information:

■ Catalog no. 0860CT9501R2/01

IEC 947-2 Rated MULTI 9 C60 Miniature Circuit Breakers

**MULTI 9 C60N Circuit Breaker** — IEC 898: 6000 A — IEC 947-2: 10 kA at 415 Vac

Rating (A)	1P	List Price	2P	List Price	3P	List Price	4P ^①	List Price
B Curve—Magnetic Setting Between 3 and 5 Ampere Rating								
1	24045	\$ 64	24071	\$ 138	24084	\$ 200	24097	\$ 264
2	24046	64	24072	138	24085	200	24098	264
3	24047	64	24073	138	24086	200	24099	264
4	24048	64	24074	138	24087	200	24100	264
6	24049	64	24075	138	24088	200	24101	264
10	24050	64	24076	138	24089	200	24102	264
16	24051	64	24077	138	24090	200	24103	264
20	24052	64	24078	138	24091	200	24104	264
25	24053	64	24079	138	24092	200	24105	264
32	24054	64	24080	138	24093	200	24106	264
40	24055	70	24081	142	24094	213	24107	267
50	24056	74	24082	151	24095	224	24108	277
63	24057	78	24083	160	24096	224	24109	286
C Curve—Magnetic Setting Between 5 and 10 Ampere Rating								
0.5	24067	78	24068	158	24069	229	24070	302
1	24395	64	24331	138	24344	200	24357	264
2	24396	64	24332	138	24345	200	24358	264
3	24397	64	24333	138	24346	200	24359	264
4	24398	64	24334	138	24347	200	24360	264
6	24399	64	24335	138	24348	200	24361	264
10	24401	64	24336	138	24349	200	24362	264
16	24403	64	24337	138	24350	200	24363	264
20	24404	64	24338	138	24351	200	24364	264
25	24405	64	24339	138	24352	200	24365	264
32	24406	64	24340	138	24353	200	24366	264
40	24407	70	24341	142	24354	213	24367	267
50	24408	74	24342	151	24355	224	24368	277
63	24409	78	24343	160	24356	224	24369	286
D Curve—Magnetic Setting Between 10 and 14 Ampere Rating								
1	24625	64	24653	138	24667	200	24681	264
2	24626	64	24654	138	24668	200	24682	264
3	24627	64	24655	138	24669	200	24683	264
4	24628	64	24656	138	24670	200	24684	264
6	24629	64	24657	138	24671	200	24685	264
10	24630	64	24658	138	24672	200	24686	264
16	24632	64	24660	138	24674	200	24688	264
20	24633	64	24661	138	24675	200	24689	264
25	24634	64	24662	138	24676	200	24690	264
32	24635	64	24663	138	24677	200	24691	264
40	24636	70	24664	142	24678	213	24692	267
50	24637	74	24665	151	24679	224	24693	277
63	24638	78	24666	160	24680	224	24694	286

① 4th Pole protected

Ratings and Interrupting ratings : page 22

Cable range : pressure terminals are suitable for solid copper cables:

■ 0.5 to 25 A : 16mm² stranded or 25mm² solid■ 32 to 63 A : 25mm² stranded or 35mm² solid

Width : 1P: 18mm, 2P: 36mm, 3P: 54mm, 4P: 72mm

Additional information:

■ Catalog no. 0860CT9501R2/01



MULTI 9 C60H Circuit Breaker — IEC 898: 10000 A — IEC 947-2: 15 kA at 415 Vac

Rating (A)	1P	List Price	2P	List Price	3P	List Price	4P①	List Price
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B Curve—Magnetic Setting Between 3 and 5 Ampere Rating

6	24643	\$ 83	24725	\$ 179	24738	\$ 259	24751	\$ 342
10	24644	83	24726	179	24739	259	24752	342
13	24645	83						
16	24646	83	24727	179	24740	259	24753	342
20	24647	83	24728	179	24741	259	24754	342
25	24648	83	24729	179	24742	259	24755	342
32	24649	83	24730	179	24743	259	24756	347
40	24650	91	24731	185	24744	277	24757	360
50	24651	96	24732	196	24745	291	24758	360
63	24652	101	24733	208	24746	291	24759	372

C Curve—Magnetic Setting Between 5 and 10 Ampere Rating

0,5	24900	101	24902	205	24906	297	24908	393
0,75	24901	101	24903	196	24907	284	24909	377
1	24968	83	24981	179	24994	259	25007	342
2	24969	83	24982	179	24995	259	25008	342
3	24970	83	24983	179	24996	259	25009	342
4	24971	83	24984	179	24997	259	25010	342
6	24972	83	24985	179	24998	259	25011	342
10	24973	83	24986	179	24999	259	25012	342
16	24974	83	24987	179	25000	259	25013	342
20	24975	83	24988	179	25001	259	25014	342
25	24976	83	24989	179	25002	259	25015	342
32	24977	83	24990	179	25003	259	25016	342
40	24978	91	24991	185	25004	277	25017	347
50	24979	96	24992	196	25005	291	25018	360
63	24980	101	24993	208	25006	291	25019	372

D Curve—Magnetic Setting Between 10 and 14 Ampere Rating

0,5	25171	101	25172	205	25173	297	25174	393
1	25152	101	25183	196	25196	284	25211	377
2	25155	83	25184	179	25197	259	25212	342
3	25157	83	25185	179	25198	259	25213	342
4	25158	83	25186	179	25199	259	25214	342
6	25159	83	25187	179	25200	259	25215	342
10	25160	83	25188	179	25201	259	25216	342
16	25161	83	25189	179	25202	259	25217	342
20	25164	83	25190	179	25203	259	25218	342
25	25165	83	25191	179	25205	259	25219	342
32	25166	83	25192	179	25207	259	25220	342
40	25167	91	25193	185	25208	279	25221	347
50	25168	96	25194	196	25209	291	25222	360
63	25169	101	25195	208	25210	291	25223	372

① 4th Pole protected

Ratings and Interrupting ratings : page 22

Cable range : pressure terminals are suitable for solid copper cables:

■ 0,5 to 25 A : 16mm² stranded or 25mm² solid

■ 32 to 63 A : 25mm² stranded or 35mm² solid

Width : 1P: 18mm, 2P: 36mm, 3P: 54mm, 4P: 72mm

Additional information:

■ Catalog no. 0860CT9501R2/01



MULTI 9 C60L Circuit Breaker — IEC 947-2: 25 kA at 415 Vac^①

Rating (A)	1P	List Price	2P	List Price	3P	List Price	4P4T	List Price
Z Curve—Magnetic Setting Between 2.4 and 3.6 Ampere Rating								
1	26133	\$ 103						
1.6	26134	103	26154	\$ 221	26174	\$ 319	26232	\$ 422
2	26135	103	26155	221	26176	319	26234	422
3	26136	103	26157	221	26177	319	26236	422
4	26137	103	26158	221	26178	319	26237	422
6	26139	103	26159	221	26180	319	26239	422
10	26141	103	26161	221	26182	319	26241	422
16	26142	103	26163	221	26184	319	26242	422
20	26143	103	26164	221	26185	319	26243	422
25	26145	112	26165	227	26224	341	26244	426
32	26146	118	26166	242	26225	358	26245	443
40	26147	124	26167	255	26226	358	26246	457
B Curve—Magnetic Setting Between 3.2 and 4.8 Ampere Rating								
6	25331	103	25357	221	25370	319	25383	422
10	25332	103	25358	221	25371	319	25384	422
16	25333	103	25359	221	25372	319	25385	422
20	25334	103	25360	221	25373	319	25386	422
25	25335	103	25361	221	25374	319	25387	422
32	25336	103	25362	221	25375	319	25388	422
40	25337	112	25363	227	25376	341	25389	426
50	25338	118	25364	242	25377	358	25390	443
63	25339	124	25365	255	25378	358	25391	457
C Curve—Magnetic Setting Between 7 and 10 Ampere Rating								
0.5	25406	124	25407	252	25408	366	25409	484
1	25392	103	25418	221	25431	319	25444	422
2	25393	103	25419	221	25432	319	25445	422
3	25394	103	25420	221	25433	319	25446	422
4	25395	103	25421	221	25434	319	25447	422
6	25396	103	25422	221	25435	319	25448	422
10	25397	103	25423	221	25436	319	25449	422
16	25398	103	25424	221	25437	319	25450	422
20	25399	103	25425	221	25438	319	25451	422
25	25400	103	25426	221	25439	319	25452	422
32	25401	103	25427	221	25440	319	25453	422
40	25402	112	25428	227	25441	341	25454	426
50	25403	118	25429	242	25442	358	25455	443
63	25404	124	25430	255	25443	358	25456	457
K Curve—Magnetic Setting Between 10 and 14 Ampere Rating								
1	25460	103	25478	221	25496	319	25514	422
1.6	25461	103	25479	221	25497	319	25515	422
2	25462	103	25480	221	25498	319	25516	422
3	25463	103	25481	221	25499	319	25517	422
4	25464	103	25482	221	25500	319	25518	422
6	25465	103	25483	221	25501	319	25519	422
10	25467	103	25485	221	25503	319	25521	422
16	25468	103	25486	221	25504	319	25522	422
20	25469	103	25487	221	25505	319	25523	422
25	25470	103	25488	221	25506	319	25524	422
32	25471	103	25489	221	25507	319	25525	422
40	25472	112	25490	227	25508	341	25526	426

① 0–25 A: 25 kA, 32–40 A: 20 kA, 50–63 A: 15 kA

Ratings and Interrupting ratings : page 22

Cable range : pressure terminals are suitable for solid copper cables:

■ 0.5 to 25 A : 16mm² stranded or 25mm² solid

■ 32 to 63 A : 25mm² stranded or 35mm² solid

Width : 1P: 18mm, 2P: 36mm, 3P: 54mm, 4P: 72mm

Additional information:

■ Catalog no. 0860CT9501R2/01



MULTI 9 C60L-MA Circuit Breaker for Motor Circuit Protection ^①

Rating (A)	2P	List Price	3P	List Price
MA Curve — Magnetic Only — Magnetic Setting at 12 x Ampere Rating				
1.6	26345	\$ 207	26357	\$ 299
2.5	26346	207	26358	299
4	26347	207	26359	299
6.3	26348	207	26360	299
10	26349	207	26361	299
12.5	26350	207	26362	299
16	26352	207	26368	299
25	26353	207	26369	299
40	26355	213	26370	320

Ratings and Interrupting ratings : page 22

Accessories : see page 29

Cable range : pressure terminals are suitable for solid copper cables:

■ 1 to 40 A : 16mm² stranded or 25mm² solid

Width : 2P: 36mm, 3P: 54mm

Additional information:

■ Catalog no. 0860CT9501R2/01



MULTI 9 C32H-DC Circuit Breaker for DC Application

Rating (A)	1P	List Price	2P	List Price
C Curve—Magnetic Setting Between 7 and 10 Ampere Rating				
1	20531	\$ 138	20541	\$ 264
2	20532	138	20542	264
3	20533	138	20543	264
6	20534	138	20544	264
10	20535	138	20545	264
16	20536	138	20546	264
20	20537	138	20547	264
25	20538	138	20548	264
32	20539	138	20549	264
40	20540	142	20550	267

① Up to 25 A: 50 kA @240 Vac, 25 kA @415 Vac

40 A: 40 kA @240 Vac, 20 kA @415 Vac

Note: For applications above 40 A, C60 and NC100 circuit breakers can be used.



Ratings and Interrupting ratings : page 22

1P=127 Vdc

2P=250 Vdc; in series with load

Accessories :

■ Auxiliary and alarm switch #27132 and 27135. See page 29.

■ Padlocking device #26970. See page 31.

Cable range : pressure terminals are suitable for solid copper cables:

■ 1 to 40 A : 16mm² stranded or 25mm² solid

Width : 1P: 18mm, 2P: 36mm

Additional information:

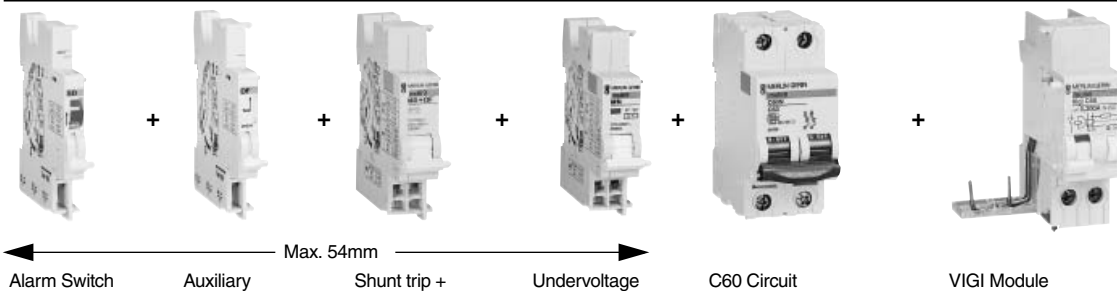
■ Catalog no. 0860CT9501R2/01

Accessories for IEC Rated C60

Electrical Accessories

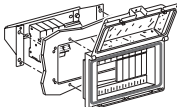
Possible Combinations

Mounted the left of the circuit breaker with a maximum width of 54mm.



		Volts (V)	VA or W	Width (mm)	Catalog No.	List Price
MX + OF Shunt Trip + Auxiliary Switch						
	AC	12	6	18	26948	\$ 93.00
		24	6	18	26948	93.00
		48	6	18	26947	93.00
		130	6	18	26947	93.00
		220–415	6	18	26946	93.00
	DC	12	6	18	26948	93.00
		24	6	18	26948	93.00
		48	3	18	26947	93.00
		110–130	1	18	26946	93.00
MN Undervoltage Release						
	AC	24			–	–
		48		18	26961	134.00
		115 400 Hz		18	26959	134.00
		220		18	26960	134.00
	DC	24			–	–
		48		18	26961	134.00
Auxiliary and Alarm Switches						
	Auxiliary (OF) 12–415 Vac;12–130 Vdc				26924	40.00
	Alarm (SD) 12–415 Vac;12–130 Vdc				26927	40.00
Ground-fault VIGI Module (220-415 Vac – AC Class)						
	2P	25 A	10 mA	26580	412.00	
			30 mA	26581	412.00	
		63 A	30 mA	26611	412.00	
			300 mA—Selective	26616	412.00	
			1 A—Selective	26618	412.00	
	3P	63 A	30 mA	26620	449.00	
			300 mA—Selective	26631	449.00	
			1 A—Selective	26636	449.00	
	4P	63 A	30 mA	26643	471.00	
300 mA—Selective			26648	471.00		
1 A—Selective			26650	471.00		

Accessories — *Continued*

Electrical Accessories (cont.)		Motor Operator				
	1P, 2P	AC	230	18310	454.00	
	3P, 4P	AC	230	18311	638.00	
Other Accessories		Front Mounting Kit			Catalog No.	List Price
	1P (18mm)				MG26983	\$ 11.20
	2P (36mm)				MG26984	11.20
	3P (54mm)				MG26985	11.20
	4P (72mm)				MG26989	11.20
Multi-pole Front Mounting Kit — Allows installation of up to 20–9mm modules (10 poles of C60)						
	DIN rail support				14211	35.70
	Hinged transparent cover				14210	105.00
Comb Busbar – IEC Rated						
	Comb busbars (12-Pole long)	1 Phase			14881	21.10
		2 Phase			14882	26.30
		3 Phase			14883	33.70
		4 Phase			14884	43.80
	24 poles (Set of 2)	1 Phase			14891	69.00
		2 Phase			14892	100.00
		3 Phase			14893	131.00
		4 Phase			14894	184.00
	1-meter long (57 poles)	1 Phase			14801	116.00
		2 Phase			14802	132.00
		3 Phase			14803	164.00
		4 Phase			14804	228.00
	Extra end caps	1P/2P (40 pieces)			14886	33.70
		3P/4P (40 pieces)			14887	37.50
	Connector	1P/4P – #4 AWG/25mm ² (Set of four)			14885	37.50
		Tooth caps	40 pieces			14888
Rotary Handle						
	2P/3P/4P	Operating subassembly (Fixed to MULTI 9)			27046	86.00
		Drawout door interlock handle (6.5 in/165mm shaft)			27047	71.00
		Fixed handle (Front or lateral)			27048	78.00
Spacer						
					27062	6.20
Terminal Screw Shield						
	Bag of two 1, 2, 3 or 4-Pole shields				26981	33.70
Terminal Cover						
	1-Pole (Set of two)				26975	17.00
	2-Pole (Set of two)				26976	33.70
	3-Pole (Requires one 1-Pole and one 2-Pole)				26975	17.40
					+26976	33.70
	4-Pole (Set of two)				26978	68.00

Continued on next page

Accessories — *Continued*

Other Accessories		Catalog No.	List Price
    	Interphase Barrier	Bag of 10 pieces	27001 33.70
	Crimped Lug Connection	Bag of 8 pieces	27053 33.70
	Plug-in Base	One pole	26996 52.00
	Label Holders for 2, 3 or 4P C60 or NC100	Bag of 10 pieces	27150 33.70
	Padlock Attachment	Set of two—Accepts 0.315 in/8mm diameter padlock	26970 22.00

**MULTI 9 C120H (10–125 A) - Circuit Breakers – 15 kA at 240 Vac**

Rating (A)	1P	List Price	2P	List Price	3P	List Price	4P4T	List Price
B Curve—Magnetic Setting Between 3 and 5 Ampere Rating								
10	18394	\$ 80	18405	\$ 173	18416	\$ 252	18427	\$ 333
16	18395	80	18406	173	18417	252	18428	333
20	18396	80	18407	173	18418	252	18429	333
25	18397	80	18408	173	18419	252	18430	333
32	18398	80	18409	173	18420	252	18431	333
40	18399	80	18410	173	18421	252	18432	333
50	18400	80	18411	173	18422	252	18433	333
63	18401	101	18412	190	18423	286	18434	390
80	18402	104	18413	208	18424	310	18435	457
100	18403	104	18414	208	18425	310	18436	457
125	18404	135	18415	270	18426	402	18437	594
C Curve—Magnetic Setting Between 5 and 10 Ampere Rating								
10	18438	80	18449	173	18460	252	18471	333
16	18439	80	18450	173	18461	252	18472	333
20	18440	80	18451	173	18462	252	18473	333
25	18441	80	18452	173	18463	252	18474	333
32	18442	80	18453	173	18464	252	18475	333
40	18443	80	18454	173	18465	252	18476	333
50	18444	80	18455	173	18466	252	18477	333
63	18445	101	18456	190	18467	286	18478	390
80	18446	104	18457	208	18468	310	18479	457
100	18447	104	18458	208	18469	310	18480	457
125	18448	135	18459	270	18470	402	18481	594
D Curve—Magnetic Setting Between 10 and 14 Ampere Rating								
10	18482	80	18493	173	18504	252	18515	333
16	18483	80	18494	173	18505	252	18516	333
20	18484	80	18495	173	18506	252	18517	333
25	18485	80	18496	173	18507	252	18518	333
32	18486	80	18497	173	18508	252	18519	333
40	18487	80	18498	173	18509	252	18520	333
50	18488	80	18499	173	18510	252	18521	333
63	18489	101	18500	190	18511	286	18522	390
80	18490	104	18501	208	18512	310	18523	457
100	18491	104	18502	208	18513	310	18524	457
125	18492	135	18503	270	18514	402	18525	594

Ratings and Interrupting ratings : page 23

Cable range : pressure terminals are suitable for solid copper cables:

■ 10 to 100 A : 35mm² stranded or 50mm² solid

Width : 1P: 27mm, 2P: 54mm, 3P: 81mm, 4P: 108mm

Additional information:

■ Catalog no. 0860CT9501R2/01

Accessories for IEC Rated C120 (Electrical auxiliaries same as C60)

Electrical Accessories

Possible Combinations

Mounted the left of the circuit breaker with a maximum width of 54mm.



Alarm Switch

+



Auxiliary Switch

+



Shunt trip + Aux Switch

+



Undervoltage Release

+



C120 Circuit Breaker

+



VIGI Module

←

Max. 54mm

→

		Volts (V)	VA or W	Width (mm)	Catalog No.	List Price
MX + OF Shunt Trip + Auxiliary Switch						
	AC	12	6	18	26948	\$ 93.00
		24	6	18	26948	93.00
		48	6	18	26947	93.00
		130	6	18	26947	93.00
		220–415	6	18	26946	93.00
	DC	12	6	18	26948	93.00
		24	6	18	26948	93.00
		48	3	18	26947	93.00
		110–130	1	18	26946	93.00
MN Undervoltage Release						
	AC	24			–	–
		48		18	26961	134.00
		115 400 Hz		18	26959	134.00
		220		18	26960	134.00
	DC	24			–	–
		48		18	26961	134.00
Auxiliary and Alarm Switches						
	Auxiliary (OF) 12–415 Vac;12–130 Vdc				26924	40.00
	Alarm (SD) 12–415 Vac;12–130 Vdc				26927	40.00
Ground-fault VIGI C120 Module — AC Class						
	2P	230 to 415 Vac	100 A	30 mA	27818	18591.00
				300 mA—Selective	27823	18556.00
				1 A Selective	27825	18557.00
	3P	230 to 415 Vac	100 A	30 mA	27826	18594.00
				300 mA—Selective	27831	18558.00
				1 A Selective	27833	18559.00
	4P	230 to 415 Vac	100 A	30 mA	27835	18597.00
				300 mA—Selective	27840	18560.00
				1 A—Selective	27842	18561.00

Continued on next page

Accessories — Continued

Other Accessories

Front Mounting Kit for C120



1P (27mm)

2P (54mm)

3P (81mm)

4P (108mm)

MG26986

MG26987

MG26988

MG26990

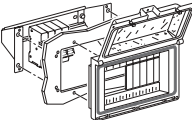
\$ 11.20

11.20

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11.20

Multi-pole Front Mounting Kit — Allows installation of up to 20–9mm modules — Non UL Recognized



DIN rail support

Hinged transparent cover

14211

14210

35.70

105.00

Rotary Handle



2P/3P/4P

Operating subassembly

Door interlock handle

Fixed handle (Front or lateral)

27046

27047

27048

86.00

71.00

78.00

Spacer



9 mm

27062

6.20

Terminal Screw Shield



Supplied as bag of two 4-Pole shields
(May be divided into 1-, 2- or 3-Pole lengths)

18527

33.70

Terminal Cover

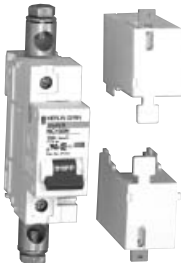


1-Pole (set of two)

18526

22.50

Rear Connection



Rear connection with 1P C120 screw shield
For cable up to #1/0 AWG (50mm²)

18528

28.70

Label Holders for 2, 3 or 4P C60 or C120



Bag of 10 pieces

27150

33.70

Padlock Attachment



Set of two

27145

39.40

MULTI 9™ Miniature Circuit Breakers

Other MULTI 9 Devices



UL Rated MULTI 9 SPD Series Transient Voltage Surge Suppressor (TVSS)

Service Voltage U _N	No. of Poles	Dry Contacts	Max Surge Current/Phase I _{MAX}	UL Suppressed Voltage Rating L-N (SVR)	Catalog Number	List Price
120 V	1	No	20 kA	500 V	12710	\$ 94
230 V	1	No	20 kA	700 V	12711	94
400 V	1	No	20 kA	1500 V	12712	94
120 V	1	No	45 kA	500 V	12713	161
120 V	1	Yes	45 kA	500 V	12714	189
230 V	1	No	45 kA	700 V	12715	161
230 V	1	Yes	45 kA	700 V	12716	189
400 V	1	No	45 kA	1500 V	12717	161
400 V	1	Yes	45 kA	1500 V	12718	189
120 V	1	No	65 kA	400 V	12719	243
120 V	1	Yes	65 kA	400 V	12720	269
230 V	1	No	65 kA	700 V	12721	243
230 V	1	Yes	65 kA	700 V	12722	269
400 V	1	No	65 kA	1200 V	12723	243
400 V	1	Yes	65 kA	1200 V	12724	269
120 V	2	No	20 kA	400 V	12725	136
230 V	2	No	20 kA	700 V	12726	136
120 V	2	No	45 kA	400 V	12727	215
230 V	2	No	45 kA	700 V	12728	215
208Y/120 V	4	No	20 kA	400 V	12729	269
208Y/120 V	4	Yes	20 kA	400 V	12730	323
400Y/230 V	4	No	20 kA	700 V	12731	269
400Y/230 V	4	Yes	20 kA	700 V	12732	323
208Y/120 V	4	No	45 kA	400 V	12733	484
208Y/120 V	4	Yes	45 kA	400 V	12734	538
400Y/230 V	4	No	45 kA	700 V	12735	484
400Y/230 V	4	Yes	45 kA	700 V	12736	538
208Y/120 V	4	No	80 kA	400 V	12737	660
208Y/120 V	4	Yes	80 kA	400 V	12738	713
400Y/230 V	4	No	80 kA	700 V	12739	660
400Y/230 V	4	Yes	80 kA	700 V	12740	713

Cable range: #12–#4 AWG (3–25mm²)
Width : 1P: 18mm; 2P: 36mm; 4P: 89mm

Additional information:
■ Catalog no. 1311CT0101

NOTE: See Class 1312 Catalog 1312CT0101 for recommended protection of the SPD.



Replacement Modules for 1P MULTI 9 SPDs

Select the replacement module for SPD with corresponding catalog number.

Cat. No.	List Price
12710M	\$ 86
12711M	86
12712M	86
12713M	153
12714M	153
12715M	153
12716M	153
12717M	153
12718M	153
12719M	235
12720M	235
12721M	235
12722M	235
12723M	235
12724M	235

MULTI 9™ Miniature Circuit Breakers

IEC Rated Switches



IEC Rated ID Residual Current Switches

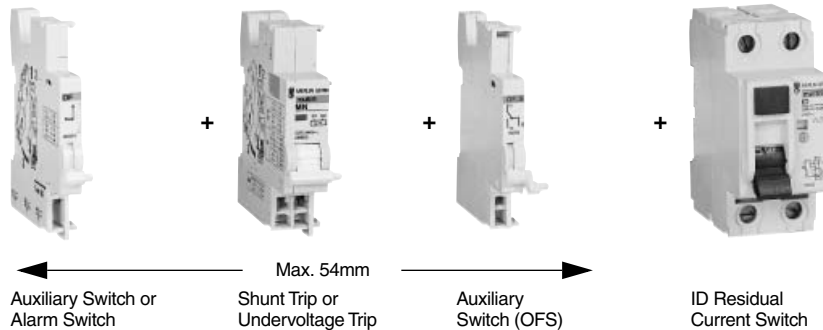
Consist of IEC Rated Switches and Built-in Ground Fault Device

Rating (A)	Sensitivity — AC Class	2P (240 Vac) List Price	4P (415 Vac) List Price
25	10 mA	16200 \$ 221	
	30 mA	16201 147	16251 \$ 235
40	30 mA	16204 154	16254 247
	30 mA	16208 263	16258 420
63	300 mA — Selective	23028 263	16265 420
	30 mA	16212 309	
80	300 mA — Selective	23032 309	16266 494
	300 mA	23034 339	
100	300 mA — Selective	23035 339	23059 543

Note: Does not provide overcurrent or short circuit protection.

Accessories

Possible Combination	Cat. No.	List Price
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Auxiliary switch (OFS) – Required to install any other accessory

26923 \$ 40.00

Auxiliary switch, Undervoltage release, Shunt trip, Terminal shield and Padlocking device – See page 29, 30, 31

Cable range : pressure terminals are suitable for copper cables up to 35mm² stranded or 50mm² solid
Width : 2P: 36mm; 4P: 72mm

Additional information:
 ■ Catalog no. 0860CT9501R2/01

Note : Consult Factory for UL Rated Residual Current Switches during 2002.



IEC Rated I Current Switches

Rating (A)	1P (250 Vac)	List Price	2P (440 Vac)	List Price	3P (440 Vac)	List Price	4P (440 Vac)	List Price
20	15005	\$ 32.60	15006①	\$ 69	15007①	\$ 100	15008①	\$ 132
32	15009	32.60	15010①	71	15011①	107	15012①	133
40	15024	35.70	15020	71	15023	107	15019	133
63	15013	38.90	15014	80	15015	112	15016	143
100	15090	53.00	15091	104	15092	155	15093	229
125	15057	68.00	15058	135	15059	202	15060	297

Accessories

	Cat. No.	List Price
Auxiliary Switches	15096	\$ 40

① 415 Vac

Width :

- 20 to 32 A — 1P and 2P : 18mm
- 20 to 32 A — 3P and 4P : 36mm
- 40 to 125 A — 18mm per pole (similar to C60)

Cable range : pressure terminals are suitable for cables up to 35mm²

- 20 and 32 A : 10mm²
- 63 and 100 A : 50mm²

Additional information:

- Catalog no. 0860CT9501R2/01

IEC Rated CM Changeover Switch

		Cat. No.	List Price
2 positions	1 circuit – Double through switch	18070	\$ 33.60
	2 circuits – Two Double through switches	18071	58.00
	1 circuit – One normally open + one normally closed	18072	42.00
3 positions	1 circuit + one stop	18073	42.00
	2 circuits – one stop	18074	88.00

Width : 15102 (18mm), 12129 (36mm), 15103 (36mm), 15130 (36mm), 15131 (36mm)

Voltage: 250 Vac

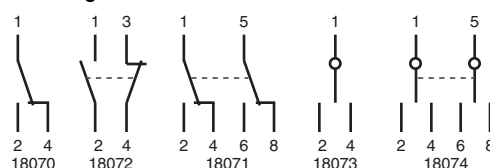
Rating: 20 A

Lamp: Neon type – ignition at 60 Vac

Cable range: pressure terminals are suitable for cables from 10mm² up to 2 x 2.5mm²

Additional information:

- Catalog no. 0860CT9501R2/01



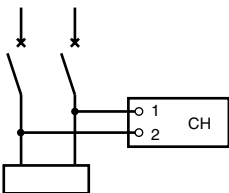
MULTI 9™ Miniature Circuit Breakers

IEC Rated Counters



IEC Rated CH Hours Counter

		Cat. No.	List Price
Hour counter	220 to 240 Vac 50 Hz	15440	\$ 148



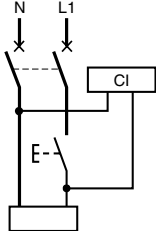
Cable range: pressure terminals are suitable for cables up to 2.5mm²
Maximum counting: 99999.99 Hours
Width : 36mm

Additional information:
■ **Catalog no.** 0860CT9501R2/01



IEC Rated CI Impulse Counter

		Cat. No.	List Price
Impulse counter	220 to 240 Vac 50/60 Hz	15443	\$ 302



Cable range: pressure terminals are suitable for cables up to 2.5mm²
Maximum impulsions: 999 999
Width : 36mm

Additional information:
■ **Catalog no.** 0860CT9501R2/01



IEC Rated Multi 9 BP Push Button

Type	Width in 9mm modules	Power	Color	BP	Circuit	Cat. No.	List Price
Single BP							
2			Grey		1 NC	18030	\$ 33.60
			Red		1 NC	18031	33.60
			Grey		1 NO	18032	33.60
			Grey		1 NO + 1 NC	18033	42.00
Double BP							
2			Green/Red		1 NO/1 NC	18034	42.00
			Green/Red		1 NO/1 NO	18035	42.00
Single BP + Indicator Light							
2		110–230 Vac	Green/Grey		1 NO	18036	\$ 42.00
			Red/Grey		1 NC	18037	42.00
		12–48 Vac/Vdc	Green/Grey		1 NO	18038	42.00
			Red/Grey		1 NC	18039	42.00

Width : 18mm

Voltage: 250 Vac

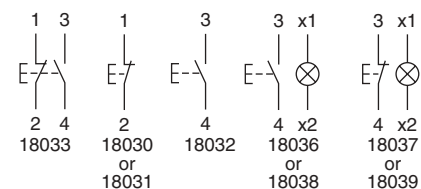
Rating: 20 A

Lamp: LED technology

Cable range: pressure terminals are suitable for 10mm² cables

Additional information:

■ Catalog no. 0860CT9501R2/01



IEC Rated Multi 9 V Indicator Lights

Type	Width in 9 mm modules	Color	Cat. No. 110–230 Vac	List Price	Cat. No. 12–48 Vac/Vdc	List Price
Single Indicator Light						
2		Red	18320	\$ 33.60	18330	\$ 33.60
		Green	18321	38.90	18331	38.90
		White	18322	37.80	18332	33.60
		Blue	18323	37.80	18333	37.80
		Yellow	18324	33.60	18334	33.60
Double Indicator Light						
2		Green/Red	18325	\$ 37.80		
Blinker						
2		Red	18326	\$ 58.00		

Width : 18mm

Lamp: LED technology

Maximum power of the LED: 0.3 w

Cable range: pressure terminals are suitable for 10mm² cables

Additional information:

■ Catalog no. 0860CT9501R2/01

Enclosures for IEC Rated Miniature Circuit Breakers

MINI PRAGMA™ DIN Type Enclosure


Includes:

- Plastic enclosure with a symmetrical DIN rail,
- Ground or neutral terminal block,
- Hinged transparent cover,
- Circuit identification labels,
- Rigid cover with markings to ease cable or through entry cutouts.

Degree of protection: IP40 as per IEC 529.

Standard: IEC 439.3

Additional information:

- Catalog no. 0860CT9501R2/01

	No. of C60 poles	No. of 9mm modules	Cat. No.	List Price
Surface Mounting with Transparent Door (H x W x D)				
201 x 112 x 94mm	4	8	13326	\$ 59
201 x 148 x 94mm	6	12	13327	66
201 x 184 x 94mm	8	16	13328	74
201 x 256 x 94mm	12	24	13329	88
Accessories				
Sealing kit			13319	7.40
Ronis Key Lock			14180	22.10
Extra terminal block for ground or neutral—80 A—Eight holes: four 10mm ² + four 16mm ² — Mountable on the DIN rail using one pole space			13576	16.80
Extra blanking plate divisible per module of 9mm — (5) poles			13229	20.00



PRAGMA™ F DIN Type Enclosure

Includes :

- A metallic back plate,
- A removable metallic chassis,
- A front plastic frame,
- Insulating front plates with circuit identification labels,
- Two insulating gland plastic plates,
- A ground/neutral terminal block - (14) 10 + (15) 16 + (1) 35mm²

Degree of protection: IP30 without door, IP41 with door as per IEC 529.

Standard: IEC 439.3

Additional information:

- Catalog no. 0860CT9501R2/01

	Dimensions (H x W x D)	No. of 18mm modules	Cat. No.	List Price
Surface mounting without transparent door				
1 Row	300 x 550 x 170mm	24	13811	\$ 448
2 Row	450 x 550 x 170mm	48	13812	566
3 Row	600 x 550 x 170mm	72	13813	639
4 Row	750 x 550 x 170mm	96	13814	809
5 Row	900 x 550 x 170mm	120	13815	911
6 Row	1050 x 550 x 170mm	144	13816	1080
Transparent Door				
1 Row		24	13851	243
2 Row		48	13852	287
3 Row		72	13853	345
4 Row		96	13854	397
5 Row		120	13855	478
6 Row		144	13856	537
Accessories				
Ronis Lock			13877	22.10
Compact NS Installation Kit (as a main) - two rows are required			13863	103.00
Extra blanking plate (24 poles)			13430	20.00

KAEDRA Weatherproof DIN Type Enclosures

Includes :

- Non-metallic (styrene) enclosure with a symmetrical 35 mm DIN rail,
- Ground or neutral terminal block,
- Hinged transparent cover,
- Ergonomic design for simplified cabling

Degree of protection: IP65 as per IEC 529.**Impact strength:** IK09**Insulating Material:** Class 2**Standard:** IEC 670 and IEC 439.3**Additional information:**■ **Catalog no.** 0860CT9501R2/01

	Dimensions (H x W x D)	No. of 18mm modules	Cat. No.	List Price
KAEDRA Weatherproof Mini Enclosures^①				
1 row 3 modules	3.15 x 5.9 x 3.86 in (80 x 150 x 98 mm)	3	13956	\$ 78
1 row 4 modules	4.84 x 7.87 x 4.41 in (123 x 200 x 112 mm)	4	13957	93
1 row 6 modules	6.26 x 7.87 x 4.41 in (159 x 200 x 112 mm)	6	13958	103
1 row 8 modules	7.68 x 7.87 x 4.41 in (195 x 200 x 112 mm)	8	13959	133
1 row 12 modules	10.51 x 7.87 x 4.41 in (267 x 200 x 112 mm)	12	13960	173

KAEDRA Weatherproof Enclosures^②				
1 row of 12 modules	13.39 x 11.02 x 6.23 in (340 x 280 x 160 mm)	12	13962	\$ 173
2 rows of 12 modules	13.39 x 18.11 x 6.23 in (340 x 460 x 160 mm)	24	13964	252
3 rows of 12 modules	13.39 x 24.02 x 6.23 in (340 x 610 x 160 mm)	36	13966	336
1 row of 18 modules	13.39 x 11.02 x 6.23 in (340 x 280 x 160 mm)	18	13963	221
2 rows of 18 modules	13.39 x 18.11 x 6.23 in (340 x 460 x 160 mm)	36	13965	336
3 rows of 18 modules	13.39 x 24.02 x 6.23 in (340 x 610 x 160 mm)	54	13967	431
4 rows of 18 modules	13.39 x 33.15 x 6.23 in (340 x 842 x 160 mm)	72	13968	525

Accessories

	Association kit, 2 sleeves + 4 nuts + 4 washers	13934	31.50
	Blanking plate (set of 10 x 5 modules)	13940	20.00
	Sealing kit (2 screws, 5 fasteners)	13947	14.70
	Keylock (Eurolock no. 850)	13948	22.10
	Plain front plate, 12 modules	13944	21.00
	Plain front plate, 18 modules	13945	21.00
	Cable gland, PG11 (18.6 mm/0.732 in)	83992	4.20
	Cable gland, PG13.5	83993	5.00
	Cable gland, PG16 (22.5 mm/0.886 in)	83994	7.60
	Cable gland, PG21 (28.3 mm/1.114 in)	83995	9.10
	Cable gland, PG29 (37 mm/1.457 in)	83996	14.20
	Cable gland, PG36 (47 mm/1.85 in)	83997	18.90

① **Accessories include:** Terminal blocks and terminal block support; 1 marking kit, Class II plugs.

② **Accessories include:** Terminal blocks and terminal block support; 1 marking kit per row; 1 wiring strap per row; Class II plugs, and blanking plates (5 x 18 mm modules).

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UL 489 Listed COMPACT NS and C Circuit Breakers

Selection Table

			NSE100	NSF150-250	
					
Type of Circuit Breaker			N	N	H
Number of poles			3	3, 4, 4 with Oversized Neutral	
Rated current (A)			15–100 ③	15–250	
Rated voltage (Vac)			480	600Y/347	600Y/347
Interrupting Rating as per UL 489 (kA RMS)	AC 50/60 Hz	240 V	65	65	100
		480 V	18	35	65
		600Y/347 V		18	25
		600 V		–	–
Ultimate breaking capacity (Icu) as per IEC 947-2 (kA RMS)	AC 50/60 Hz	220/240 V	50	85	100
		380/415 V	30	36	70
		440 V	15	35	65
		500 V	–	30	50
		525 V	–	22	35
		660/690 V	–	8	10
	DC	125 V	10 (1-Pole)	50 (1-Pole)	85 (1-Pole)
		250 V	10 (2-Pole)	50 (1-Pole)	85 (1-Pole)
		500 V	–	50 (2-Pole)	85 (2-Pole)
Service breaking capacity (Ics) as per IEC 947-2 (kA RMS)	(%Icu)	50%	100%		
Trip Units					
Functions	Thermal-magnetic	Yes	Yes		
	Electronic	No	No		
	Instantaneous only	Yes	Yes		
Type of Switch		A – Automatic		A – Automatic	
Suitable for use on a circuit capable of delivering no more than (kA RMS)②	240 V	65	100		
	480 V	18	65		
	600Y/347 V	–	25		
	600 V	–	–		
Magnetic trip point (A)		1100	2000		
Short-time withstand current (Icw)		–	–		
Dimensions and Weights					
Dimensions H x W x D (in./mm)	3P	4.72 x 3.54 x 3.14/ 120 x 90 x 80	7.44 x 4.13 x 3.38/ 189 x 105 x 86		
	4P		7.44 x 5.5 x 3.38 189 x 139 x 86		
Weight (lb/kg)	3P	2.21/1.00	NSF150: 3.53/1.60 NSF250: 3.75/1.70		
	4P		NSF 150: 4.6/2.1 NSF250: 5.1/2.3		

① 800 A in CK1000L and HL drawout version; 1000 A in CK1200 drawout version.

② When protected by any protective device.

③ 15 A–60 A marked Line and Load; NOT suitable for reverse feeding.

④ 100% rated.

NSJ400-600				CK400-1200				CM1250-2500 ^①
								
N	H	L		N	H	HL	L	H
3, 4, 4 with Oversized Neutral				3, 4	3, 4	3	3	3
150 ^④ , 250 ^④ , 400 ^④ , 600		400, 600		400, 800, 1200 ^①		1000 ^①	1000 ^①	1250, 1600, 2000, 2500
600				600			480	600
65	100	150		65	100	150	150	125
35	65	100		50	65	125	125	85
—	—	—		—	—	—	—	—
18	25	25		35	42	65	—	50
85	100	150		85	100	150	150	125
45	70	150		50	70	150	150	85
42	65	130		42	65	100	100	85
30	50	70		40	50	100	100	50
22	35	50		—	—	—	—	50
10	20	35		25	40	60	60	50
—	85 (1-Pole)							
—	85 (1-Pole)							
—	85 (2-Pole)							
100%				50%				50%
No				No				No
Yes				Yes				Yes
Yes				Yes				No
A — Automatic				NA — Non automatic				NA — Non automatic
150								
100								
25								
6000				Non automatic				Non automatic
—				15 kA RMS — 1 sec.				32 kA RMS — 3 sec.
13.38 x 5.51 x 4.33/ 340 x 140 x 110				15.75 x 8.27 x 4.33/ 400 x 210 x 110		15.75 x 8.27 x 7.87/ 400 x 210 x 200		16.93 x 16.46 x 10.39/ 430 x 418 x 264
13.38 x 7.5 x 4.33 340 x 191 x 110								
13.25/6.0				31/14.0		55/25		CM1250–1600: 90/40 CM2000: 118/54 CM2500: 195/88
17.2/7.8								

^① In obsolescence. For new applications, use Powerpact R-frame. See Digest 173.

COMPACT® Circuit Breakers

Catalog Number Construction

COMPACT NS Circuit Breakers

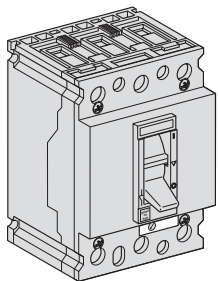
1	2	3	4	5	6	7	8	9	10	11	12	13
1 Type UL Line: NE: NSE100 NF: NSF150/250 NJ: NSJ400/600 IEC Line NF: NS100/160/250 NJ: NS400/630	2 Interrupting Ratings N: Standard interrupting H: High interrupting L: Very high interrupting	3 Termination F: Bus bar L: Lugs (both ends) S: Rear connections N: Plug-in D: Drawout M: Lugs (line-side only) P: Lugs (load-side only)	4 Standard None: UL-CSA E: IEC	5 Poles 2: 3-pole 2-trip 3: 3-pole 3-trip 4: 4-pole 3-trip or 4-pole 4-trip 5: 4-pole Oversized neutral rating	6 Voltage 4: 480 Vac 6: 600 or 690 Vac 7: 750 Vdc 1: 1000 Vac	7 Amperage 015: 15 A to 630: 630 A						
8 Trip Function None: Thermal-magnetic M_: Magnetic only S_: Switch D_: DC circuit breaker E_: Electronic F_: Frame only N_: Protected neutral	9 Accessories A_: Aux. switches B_: Alarm switches S_: Shunt trip U_: Undervoltage trip	10 Vigi Module V_: Vigi	11 Operators M_: Motor operator R_: Rotary handle	12 Term. Options T_: Special termination H_: Drawout options	13 Ammeters P_: Ammeter							

COMPACT CK Circuit Breakers

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1 Type UL Line: CK: CK400/1200 IEC Line: CK: C801/1251	2 Interrupting Ratings A: Standard interrupting H: High interrupting I: Very high interrupting	3 Standard or 100% Rating X: Standard rating E: 100% rating None: Switch	4 Termination F: Bus bar or rear connection L: Lugs (both sides) M: Lugs (line side) P: Lugs (load side) D: Drawout	5 Standard None: UL-CSA E: IEC										
6 Poles 3: 3-Pole 3-Trip 4: 4-Pole 3-Trip or 4-Pole 4-Trip	7 Voltage 4: 480 Vac 6: 600 or 690 Vac 7: 750 Vdc 1: 1000 Vdc	8 Amperage UL Listed: 20: 200 A to 12: 1200 A IEC Rated: 08: 800 A to 12: 1250 A	9 Sensor Rating UL Listed: 4: 400 A 8: 800 A 0: 1000 A 1: 1200 A 5: 1250 A (IEC)	10 Trip Function LI: L-I protection LS: L-I-S protection L2-L8: L-I-S protection plus other options										
11 Accessories A_: Aux. switches AT: Overcurrent switches S_: Shunt trip U_: Undervoltage trip	12 Disconnecting Blocks D	13 Special Termination FRL: Flat rear connection ERL: Edgewise rear connection E: Edgewise rear connection (drawout) F: Flat rear connection (drawout)	14 Other Accessories M_: Motor operator PL: Padlocking device _K: KIRK® key lock BT: Boot	15 Drawout Options DO: Standard drawout DU: Universal drawout										

COMPACT CM Circuit Breakers

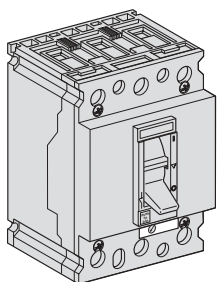
1	2	3	4	5	6	7	8	9	10	11	12
1 Type UL Line: CM: CM1250/2500 IEC Line: CM: CM1250/3200	2 Interrupting Ratings None: High interrupting A: Switch	3 Standard or 100% Rating X: Standard rating E: 100% rating	4 Termination F: Bus bar	5 Standard None: UL-CSA E: IEC	6 Poles 3: 3-pole 3-trip 4: 4-pole 3-trip or 4-pole 4-trip	7 Voltage 6: 600 or 690 Vac	8 Amperage 125: 1250 A to 320: 3200 A	9 Trip Function L1: L-I protection LS: L-S-I protection L2: L-S-I-G protection	10 Accessories A_: Aux. switches S_: Shunt trip U_: Undervoltage trip	11 Special Termination S_: Rear connections	12 Other Accessories M_: Motor operator PL: Padlocking device _K: KIRK® key lock BT: Boot

UL 489 Listed COMPACT NSE Circuit Breakers**COMPACT NSE Circuit Breaker with Thermal-Magnetic Trip Unit**

Rating (A)	Cable Connection	List Price
NSE100N—480 Vac Max.—18 kA at 480 Vac		
15	NENL34015	\$ 573
20	NENL34020	573
30	NENL34030	573
40	NENL34040	573
50	NENL34050	573
60	NENL34060	573
70	NENL34070	678
80	NENL34080	678
90	NENL34090	678
100	NENL34100	678

COMPACT NSE Molded Case Switch**NSE100A—Automatic 480 Vac**

100	NEHL34000S10	543
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**COMPACT NSE Circuit Breaker for Motor Circuit Protection****NSE75HC—600Y/347 Vac**

3	NEHL36003M01	726
7	NEHL36007M02	726
15	NEHL36015M03	726
30	NEHL36030M04	726
50	NEHL36050M05	920
75	NEHL36075M06	1095

Ratings and interrupting ratings: page 44

Cable range: Pressure terminals are suitable for copper and aluminum cables:

- #14 AWG—#1/0 AWG Cu or
- #8 AWG—#1/0 AWG Al

Additional information:

■ **Catalog no.** 0621CT9701

■ **Data Sheet no.** 0615HO9701 (NSE100), 0615HO9801 (NSE75)

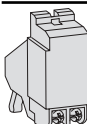
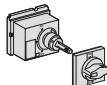
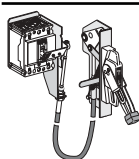
■ **D-Fax no.** 2427 (NSE100), 2834 (NSE75)

Accessories: See page 49

Accessories

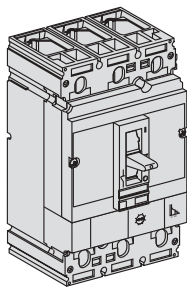
- For factory-installed accessories complete the circuit breaker catalog number by inserting the **option number** in the appropriate block.
- For field-installable accessories order the 5-digit catalog number.

N E N L 3 4 0 1 5 A A S A
Options

Electrical Accessories	Auxiliary Switch (SPDT Type)		Voltage (V)	Option No.	Catalog No.	List Price
	Standard	Standard auxiliary switch (OF)	AA		29450	\$ 198
		Standard alarm switch (SD)	BC		29450	198
	Low level	Low level auxiliary switch (LOF)	AE		29452	248
		Low level alarm switch (SD)	BH		29452	248
Shunt Trip and Undervoltage Trip						
	MX (Shunt trip)	AC 50/60 Hz	42	SW	28069	478
			48	SL	28070	478
			110/130	SA	28071	478
			208	SB	28067	478
			220/240	SC	28072	478
			277	SD	28068	478
		DC	380/415	SF	28073	478
			440/480	SH	28074	478
			24	SO	28075	478
			48	SP	28076	478
			110/125	SR	28077	478
			250	SS	28078	478
	MN (Undervoltage trip)	AC 50/60 Hz	48	UL	28080	478
			110/130	UA	28081	478
			208	UB	28089	478
			220/240	UC	28082	478
			277	UD	28090	478
			380/415	UF	28083	478
		DC	440/480	UH	28084	478
			24	UO	28085	478
			48	UP	28086	478
			110/125	UR	28087	478
			250	US	28088	478
Operating Handles						
	Directly Mounted					
	Black handle		RD12	28050	138	
	Red handle on yellow bezel		RD22	28051	143	
	MCC conversion accessory			28054	51	
	Door Mounted					
	Black handle			28052	234	
	Red handle on yellow bezel			28053	239	
	DIN rotary handle①			28059	216	
Indication Auxiliary Switch						
	One early break switch				28056	80
Cable Operating Handle with A1 Handle						
	Cable length (in./mm)	36/914		9422CGJ30	127	
		60/1524		9422CGJ50	135	
		120/3048		9422CGJ10	155	
	A1 painted handle (order separately)			9422A1	66	
					CP1 Discount	
Connection Accessories						
	Long Terminal Covers (1 Pair)					
		3P		28034	72	
Miscellaneous						
	Base Plate for Adaptation on DIN Rail (35 x 15mm DIN rail)				28040	77
	Removable Locking Device for 3 Padlocks				29370	33.60
	100 Identification Labels				29314	79
	DIN Front Accessory Cover				28039	26.7

① Will need the DIN Front Accessory Cover (Catalog No. 28039—listed above in the Miscellaneous section) in order to complete the assembly.

UL 489 Listed COMPACT NSF Circuit Breakers



COMPACT NSF Circuit Breaker with Thermal-Magnetic Trip Unit

Rating (A)		Bus Bar Connection		Cable Connection				
		3-Pole	List Price	3-Pole	List Price			
NSF150N—3-Pole—600Y/347 Vac Max—35 kA at 480 Vac								
15	NFNF36015	\$ 945		NFNL36015	\$ 995			
20	NFNF36020	945		NFNL36020	995			
30	NFNF36030	945		NFNL36030	995			
40	NFNF36040	945		NFNL36040	995			
50	NFNF36050	945		NFNL36050	995			
60	NFNF36060	945		NFNL36060	995			
70	NFNF36070	1079		NFNL36070	1195			
80	NFNF36080	1079		NFNL36080	1195			
90	NFNF36090	1079		NFNL36090	1195			
100	NFNF36100	1079		NFNL36100	1195			
125	NFNF36125	1758		NFNL36125	1874			
150	NFNF36150	1758		NFNL36150	1874			
NSF150N—4-Pole—600Y/347 Vac Max—35 kA at 480 Vac ^①								
Rating (A)	4P3T	List Price	4P4T	List Price	4P3T	List Price	4P4T	List Price
100	NFNF46100	1403	NFNF46100N10	1478	NFNL46100	1560	NFNL46100N10	1635
125	NFNF46125	2285	NFNF46125N12	2408	NFNL46125	2442	NFNL46125N12	2565
150	NFNF46150	2285	NFNF46150N15	2408	NFNL46150	2442	NFNL46150N15	2565
NSF150N—4-Pole with Oversized Neutral Protection—600Y/347 Vac Max—35 kA at 480 Vac ^①								
Phase	N	4P4T Oversized Neutral				4P4T Oversized Neutral		
100	150	NFNF56100N15 1927				NFNL56100N15 2084		
125	250	NFNF56125N25 3319				NFNL56125N25 3476		
150	250	NFNF56150N25 3319				NFNL56150N25 3476		
NSF250N—3-Pole—600Y/347 Vac Max—35 kA at 480 Vac								
Rating (A)	3-Pole	List Price			3-Pole	List Price		
175	NFNF36175	1758			NFNL36175	1874		
200	NFNF36200	1758			NFNL36200	1874		
225	NFNF36225	1758			NFNL36225	1874		
250	NFNF36250	3028			NFNL36250	3144		
NSF250N—4-Pole—600Y/347 Vac Max—35 kA at 480 Vac ^①								
	4P3T		4P4T		4P3T		4P4T	
175	NFNF46175	2285	NFNF46175N17 2408		NFNL46175	2442	NFNL46175N17 2565	
200	NFNF46200	2285	NFNF46200N20 2408		NFNL46200	2442	NFNL46200N20 2565	
225	NFNF46225	2285	NFNF46225N22 2408		NFNL46225	2442	NFNL46225N22 2565	
250	NFNF46250	3936	NFNF46250N25 4149		NFNL46250	4093	NFNL46250N25 4306	
NSF150H—3-Pole—600Y/347 Vac Max—65 kA at 480 Vac								
	3-Pole	List Price			3-Pole	List Price		
15	NFHF36015	1277			NFHL36015	1327		
20	NFHF36020	1277			NFHL36020	1327		
30	NFHF36030	1277			NFHL36030	1327		
40	NFHF36040	1277			NFHL36040	1327		
50	NFHF36050	1277			NFHL36050	1327		
60	NFHF36060	1277			NFHL36060	1327		
70	NFHF36070	1452			NFHL36070	1568		
80	NFHF36080	1452			NFHL36080	1568		
90	NFHF36090	1452			NFHL36090	1568		
100	NFHF36100	1452			NFHL36100	1568		
125	NFHF36125	2387			NFHL36125	2503		
150	NFHF36150	2387			NFHL36150	2503		

^① 4-pole available in plug-in, drawout and rear connected configurations only. Availability of 4-pole busbar and lug configurations to be announced.

Continued on next page

Ratings and interrupting ratings: page 44

Other termination: page 52

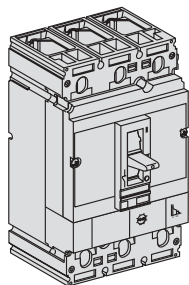
Accessories: See page 54

Additional information:

■ **Catalog no.** 0615CT9901

■ **Data Sheet no.** 0615HO9703

■ **D-Fax no.** 2429



COMPACT NSF Circuit Breaker with Thermal-Magnetic Trip Unit—Continued

Rating (A)	Bus Bar Connection				Cable Connection			
	List Price				List Price			
NSF150H—4-Pole—600Y/347 Vac Max—65 kA at 480 Vac①								
	4P3T		4P4T		4P3T		4P4T	
100	NFHF46100	\$ 1888	NFHF46100N10	\$ 1990	NFHL46100	\$ 2045	NFHL46100N10	\$ 2147
125	NFHF46125	3103	NFHF46125N12	3270	NFHL46125	3260	NFHL46125N12	3417
150	NFHF46150	3103	NFHF46150N15	3270	NFHL46150	3260	NFHL46150N15	3417
NSF150H—4-Pole with Oversized Neutral Protection—600Y/347 Vac Max—65 kA at 480 Vac								
Phase	N	4P4T Oversized Neutral				4P4T Oversized Neutral		
100	150	NFHF56100N15 2779				NFHL56100N15 2936		
125	250	NFHF56125N25 4748				NFHL56125N25 4905		
150	250	NFHF56150N25 4748				NFHL56150N25 4905		
NSF250H—3-Pole—600Y/347 Vac Max—65 kA at 480 Vac								
Rating (A)	3-Pole	List Price			3-Pole	List Price		
175	NFHF36175	2387			NFHL36175	2503		
200	NFHF36200	2387			NFHL36200	2503		
225	NFHF36225	2387			NFHL36225	2503		
250	NFHF36250	4077			NFHL36250	4193		
NSF250H—4-Pole—600Y/347 Vac Max—65 kA at 480 Vac①								
	4P3T		4P4T		4P3T		4P4T	
175	NFHF46175	3103	NFHF46175N17	3270	NFHL46175	3260	NFHL46175N17	3427
200	NFHF46200	3103	NFHF46200N20	3270	NFHL46200	3260	NFHL46200N20	3427
225	NFHF46225	3103	NFHF46225N22	3270	NFHL46225	3260	NFHL46225N22	3427
250	NFHF46250	5300	NFHF46250N25	5586	NFHL46250	5457	NFHL46250N25	5743

COMPACT NSF Molded Case Switch

3-Pole Molded Case Switch—Automatic—600Y/347 Vac Max.

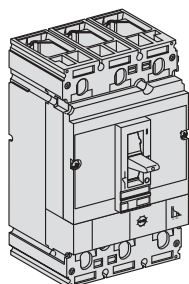
Rating (A)	3-Pole	List Price	3-Pole	List Price
60	NFHF36000S06	1275	NFHL36000S06	1391
150	NFHF36000S15	1275	NFHL36000S15	1391
225	NFHF36000S22	1525	NFHL36000S22	1641
250	NFHF36000S25	1525	NFHL36000S25	1641

4-Pole Molded Case Switch—Automatic—600Y/347 Vac Max^①

	4P	List Price	4P	List Price
150	NFHF46000S15	1746	NFHL46000S15	1903
225	NFHF46000S22	1746	NFHL46000S22	1903
250	NFHF46000S25	2088	NFHL46000S25	2245

4-Pole Molded Case Switch with Oversized Neutral—Automatic—600Y/347 Vac Max^①

Phase	N	4P Oversized Neutral	4P Oversized Neutral
100	150	NFHF56000S10 1989	NFHL56000S10 2146
150	250	NFHF56000S15 1989	NFHL56000S15 2146



COMPACT NSF Circuit Breaker for Motor Circuit Protection

NSF150HC—600Y/347 Vac Max		Bus Bar Connection		Cable Connection	
150	Magnetic adjustable from 6 to 12 handle rating	NFHF36150M29	1758	NFHL36150M29	1874
NSF250HC—600Y/347 Vac Max					
200	Magnetic adjustable from 5 to 10 handle rating	NFHF36200M30	1758	NFHL36200M30	1874
250	Magnetic adjustable from 5 to 10 handle rating	NFHF36250M32	1758	NFHL36250M32	1874

^① 4-pole available in plug-in, drawout and rear connected configurations only. Availability of 4-pole busbar and lug configurations to be announced.

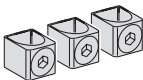
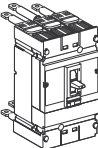
Ratings and interrupting ratings: page 44
Other termination: page 52
Accessories: See page 54

Additional information:
■ Catalog no. 0615CT9901
■ Data Sheet no. 0615HO9703
■ D-Fax no. 2429

Installation and Connection

- For factory-installed connection accessories complete the circuit breaker catalog number by inserting the **termination numbers** in the appropriate block.
- For field-installable accessories order the 5-digit catalog number.

N | F | N | L | 3 | 6 | 0 | 1 | 5
Termination No.

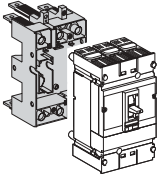
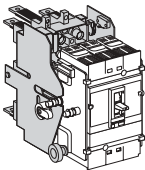
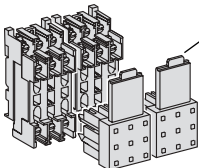
				Term. No.	Catalog No.	List Price
Bus Bar Connection						
3-Pole Kit for COMPACT NSF Circuit Breaker (Terminal Cover Included)				F	37405	\$ 72
4-Pole Kit for COMPACT NSF Circuit Breaker (Terminal Cover Included)①				F	M37406	100
Cable Connection						
15–60 A Lugs (Terminal Cover Included)						
	Field-installable	One side	Following wire sizes only: #14–#3/0 AWG solid or stranded Cu (1) #12–#4/0 AWG stranded Al (1)	3P	29280	25
	Factory-installed	Both sides		3P L		50
		Line side only		3P M		25
		Load side only		3P P		25
70–175 A Lugs (Terminal Cover Included)①						
Field-installable	One side	Following wire sizes only: #4–#3/0 AWG solid or stranded Cu (1) #3–#3/0 AWG stranded Al (1)		3P	37486	58
				4P	M37485	79
Factory-installed	Both sides			3P L		116
				4P L		157
	Line side only			3P M		58
				4P M		79
	Load side only			3P P		58
				4P P		79
200–250 A Lugs (Terminal Cover Included)①						
Field-installable	One side	Following wire sizes only: 250–350 kcmil solid or stranded Cu (1) 250–350 kcmil stranded Al (1)		3P	37488	58
				4P	M37491	79
Factory-installed	Both sides			3P L		116
				4P L		157
	Line side only			3P M		58
				4P M		79
	Load side only			3P P		58
				4P P		79
Voltage Takeoffs for 70–250 A Lugs (Set of Two)					29348	19
Rear Connection = Bus Bar Connection + Rear Connection Kit						
	Mixed Rear Connection Kit			3P S	29239	254
				4P S	29240	343
	Consisting of:	Kit 3P	Short rear connections (Set of two)		29235	56 ea.
			Long rear connections (Set of two)		29236	70 ea.
			Short terminal covers		29321	72
		Kit 4P	Short rear connections (Set of two)		29235	56 ea.
			Long rear connections (Set of two)		29236	70 ea.
			Short terminal covers		29322	79

① 4-pole available in plug-in, drawout and rear connected configurations only. Availability of 4-pole busbar and lug configurations to be announced.

Continued on next page

Installation and Connection—Continued

- For factory-installed connection accessories complete the circuit breaker catalog number by inserting the **termination numbers** in the appropriate block.
- For field-installable accessories order the 5-digit catalog number.

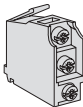
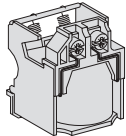
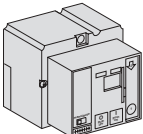
				Term. No.	Catalog No.	List Price
Plug-In Mounting = Bus Bar Connection + Plug-In Kit						
	Kit for COMPACT NSF Circuit Breaker (Stationary and Moving Part)			3P N	29293	\$ 425
				4P N	M29294	567
	Consisting of:	Stationary Part				
		Plug-in base	3P			29278 232
			4P			M29279 336
	Moving Part		3P HJ00			193
			4P HJ00			234
	Short terminal covers	3P			29321	72
		4P			29322	79
	Power connections	3P			29268 (3)	31.50 ea.
4P				29268 (4)	31.50 ea.	
Drawout Mounting = Bus Bar Connection + Drawout Kit						
	Kit for COMPACT NSF Circuit Breaker (Stationary and Moving Part)			3P D	29303	946
				4P D	M29304	1277
	Consisting of:	Stationary Part				
		Plug-in base	3P			29278 232
			4P			M29279 313
	Fixed part of chassis				29282	391
	Moving Part		3P HJ00			323
			4P HJ00			360
	Moving part of chassis				29283	130
	Short terminal covers	3P			29321	72
4P				29322	79	
Safety Trip Interlock				29270	26.30	
Power connections	3P			29268 (3)	31.50 ea.	
	4P			29268 (4)	31.50 ea.	
Plug-in and Drawout Accessories						
	Secondary Disconnecting Blocks					
	Fixed part	9-wire connector				29273 63
	Moving part	9-wire connector				29274 39.90
		Support for 2 moving connectors				29275 22.10
	Shutters		Two shutters for plug-in base		29271 31.50	
	Chassis Accessories					
	Extended escutcheon for toggle				29284 51	
	Locking device (key lock is not included)				29286 109	
	Two position indicating switches (connected/disconnected)				29287 138	

Accessories

- For factory-installed accessories complete the circuit breaker catalog number by inserting the **option number** in the appropriate block.

- For field-installable accessories order the 5-digit catalog number.

N₁ F₁ N₁ L₁ 3 6 0 1 5 A₁ B₁ S₁ A₁ M₁ A₁ R₁ D₁ 1 2
Options

Electrical Accessories	Auxiliary Switch (SPDT Type)		Voltage (V)	Option No.	Catalog No.	List Price	
	Standard			One auxiliary switch (OF)	AA	29450 \$ 198	
				Two auxiliary switches (OF)	AB	29450 (2) 198 ea.	
				Alarm switch (SD)	BC ^①	29450 198	
				Overcurrent trip switch (SDE)	BD ^①	226	
				Consisting of:	OF switch	29450 198	
				SDE adapter ^②	29451 27.30		
	Low level				One auxiliary switch (OF)	AE	29452 248
					Two auxiliary switches (OF)	AF	29452 (2) 248 ea.
					Alarm switch (SD)	BH ^③	29452 248
					Overcurrent trip switch (SDE)	BJ ^③	275
					Consisting of:	OF switch	29452 248
					SDE adapter ^②	29451 27.30	
Shunt Trip and Undervoltage Trip							
	MX (Shunt trip)	AC 50/60 Hz	24	SK	29384 478		
			48	SL	29385 478		
			110/130	SA	29386 478		
			208/277	SD	29387 478		
			380/480	SH	29388 478		
			525/600	SJ	29389 478		
		DC	12	SN	29382 478		
			24	SO	29390 478		
			30	SU	29391 478		
			48	SP	29392 478		
			60	SV	29383 478		
			125	SR	29393 478		
			250	SS	29394 478		
	MN (Undervoltage trip)	AC 50/60 Hz	24	UK	29404 478		
			48	UL	29405 478		
			110/130	UA	29406 478		
			208/277	UD	29407 478		
			380/480	UH	29408 478		
			525/600	UJ	29409 478		
		DC	12	UN	29402 478		
			24	UO	29410 478		
			30	UU	29411 478		
			48	UP	29412 478		
			60	UV	29403 478		
			125	UR	29413 478		
			250	US	29414 478		
Motor Operator with SDE Adapter							
	MT150 for NSF150	AC 50/60 Hz	48/60	ML	29440 774		
			110/130	MA	29433 774		
			208/277	MD	29434 774		
			380/480	MH	29435 774		
		DC	24/30	MO	29436 774		
			48/60	MP	29437 774		
			110/130	MR	29438 774		
			250	MS	29439 774		
	MT250 for NSF250	AC 50/60 Hz	48/60	ML	31548 208		
			110/130	MA	31540 208		
			208/277	MD	31541 208		
			380/480	MH	31542 208		
		DC	24/30	MO	31543 208		
			48/60	MP	31544 208		
			110/130	MR	31545 208		
			250	MS	31546 208		
Locking device with Ronis key lock					29449 156		

① BE = BC + BD

② SDE adapter provided with motor operator

③ BK = BH + BJ

① BE = BC + BD

② SDE adapter provided with motor operator

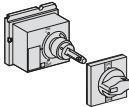
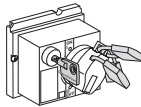
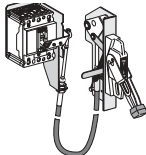
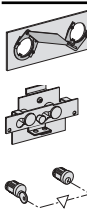
③ BK = BH + BJ

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Accessories—Continued

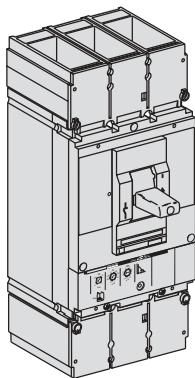
- For factory-installed accessories complete the circuit breaker catalog number by inserting the **option number** in the appropriate block.
- For field-installable accessories order the 5-digit catalog number.

N | F | N | L | 3 | 6 | 0 | 1 | 5 | A | B | S | A | M | A
Options

			Option No.	Catalog No.	List Price		
Operating Handles	Directly Mounted						
		Standard black handle		RD12	29337	\$ 150	
		Red handle on yellow bezel		RD22	29339	156	
		MCC conversion accessory			29341	63	
	Door Mounted						
		Standard black handle		RE12	29338	255	
		Red handle on yellow bezel		RE22	29340	266	
		Telescopic handle for drawout mounting		RT12	29343	328	
	Accessories						
		Key lock adapter			29344	38.90	
		Key locks①	Ronis 1351.500		41940	122	
			Profalux KS5 B24 D4Z		42888	122	
		Indication auxiliary switch	One early-break switch		29345	80	
			Two early-make switches		29346	119	
Cable Operating Handle with A1 Handle							
	Cable length (in./mm)	36/ 914	9422CSF30	134			
		60/1524	9422CSF50	142			
		120/3048	9422CSF10	162			
	A1 painted handle (order separately)		9422A1	66			
				CP1 Discount			
Locks, Interlocking	Handle Padlocking Device						
	Removable (lock OFF or ON)			29370	33.60		
	Fixed (lock OFF or ON)			29371	51		
	Fixed (lock OFF only)			NFPAF	81		
	Interlocking (Not UL Listed)						
		Mechanical for circuit breakers with rotary operating handles			29369	329	
		Mechanical for circuit breakers with toggles			29354	329	
		Two locks (keyed alike)	Ronis 1351.500		41950	122	
			Profalux KS5 B24 D4Z		42878	122	
	Installation Accessories	Front Panel Escutcheons					
			Toggle			29315	31.50
			Rotary operating handle, motor operator or extended escutcheon			29317	42
		Phase Barriers					
Set of 6			29329	34.70			
Handle Rubber Boot							
					29319	90	
Sealing Accessories			29375	29.40			
Spare Parts		10 Toggle Extensions			29313	93	
	100 Identification Labels			29314	79		
	Voltage Takeoffs for the 70–250 A Aluminum Lug (Set of 2)			29348	18.90		

^① Will need the key lock adapter above (Catalog No. 29344) for both Ronis and Profalux key lock installation.

UL 489 Listed COMPACT NSJ Circuit Breakers



COMPACT NSJ Circuit Breaker with STR23SP Electronic Trip Unit

Rating (A)	Bus Bar Connection	List Price	Cable Connection	List Price
NSJ400N—3-Pole—35 kA at 480 Vac				
150 ^①	NJNF36150E20	\$ 3199	NJNL36150E20	\$ 3389
250 ^①	NJNF36250E20	3199	NJNL36250E20	3389
400 ^①	NJNF36400E20	3199	NJNL36400E20	3389
NSJ400N—4-Pole—35 kA at 480 Vac—Adjustable Neutral Protection setting for None, 50%, 100%^③				
150 ^①	NJNF46150E20	4318	NJNL46150E20	4570
250 ^①	NJNF46250E20	4318	NJNL46250E20	4570
400 ^①	NJNF46400E20	4318	NJNL46400E20	4570
NSJ400N—4-Pole with Oversized Neutral Protection—35 kA at 480 Vac—Adjustable Neutral Protection^{②③}				
Phase	Neutral Settings	4P4T Oversized Neutral	4P4T Oversized Neutral	
250 ^①	Off 200 400	NJNF56250E20	NJNL56250E20	5434
400	Off 300 600	NJNF56400E20	NJNL56400E20	6324
NSJ600N—3-Pole—35 kA at 480 Vac				
600		NJNF36600E20	NJNL36600E20	5543
NSJ600N—4-Pole—35 kA at 480 Vac—Adjustable Neutral Protection setting for None, 50%, 100%^③				
600		NJNF46600E20	NJNL46600E20	7479
NSJ400H—3-Pole—65 kA at 480 Vac				
150 ^①		NJHF36150E20	NJHL36150E20	5654
250 ^①		NJHF36250E20	NJHL36250E20	5654
400 ^①		NJHF36400E20	NJHL36400E20	5654
NSJ400H—4-Pole—65 kA at 480 Vac—Adjustable Neutral Protection setting for None, 50%, 100%^③				
150 ^①		NJHF46150E20	NJHL46150E20	7627
250 ^①		NJHF46250E20	NJHL46250E20	7627
400 ^①		NJHF46400E20	NJHL46400E20	7627
NSJ400H—4-Pole with Oversized Neutral Protection—65 kA at 480 Vac—Adjustable Neutral Protection^{②③}				
Phase	Neutral Settings	4P4T Oversized Neutral	4P4T Oversized Neutral	
250 ^①	Off 200 400	NJHF56250E20	NJHL56250E20	7726
400	Off 300 600	NJHF56400E20	NJHL56400E20	7900
NSJ600H—3-Pole—65 kA at 480 Vac				
600		NJHF36600E20	NJHL36600E20	5911
NSJ600H—4-Pole—65 kA at 480 Vac—Adjustable Neutral Protection setting for None, 50%, 100%^③				
600		NJHF46600E20	NJHL46600E20	8088
NSJ400L—3-Pole—100 kA at 480 Vac				
400 ^①		NJLF36400E20	NJLL36400E20	6613
NSJ400L—4-Pole—100 kA at 480 Vac—Adjustable Neutral Protection setting for None, 50%, 100%^③				
400 ^①		NJLF46400E20	NJLL46400E20	7757
NSJ400L—4-Pole with Oversized Neutral Protection—35 kA at 480 Vac—Adjustable Neutral Protection^{②③}				
Phase	Neutral Settings	4P4T Oversized Neutral	4P4T Oversized Neutral	
250 ^①	Off 200 400	NJLF56250E20	NJLL56250E20	9887
400	Off 300 600	NJLF56400E20	NJLL56400E20	10356
NSJ600L—3-Pole—100 kA at 480 Vac				
600		NJLF36600E20	NJLL36600E20	9058
NSJ600L—4-Pole—100 kA at 480 Vac—Adjustable Neutral Protection setting for None, 50%, 100%^③				
600		NJLF46600E20	NJLL46600E20	12223

① 100% Rated

② Only available with STR23SP-OSN trip unit factory installed.

③ 4-pole available in plug-in, drawout and rear connected configurations only. Availability of 4-pole busbar and lug configurations to be announced.

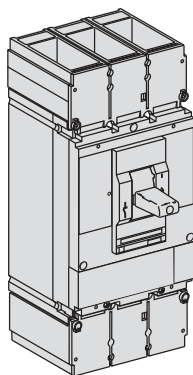
Rating and interrupting ratings: page 45

Cable range: pressure terminals are suitable for copper and aluminum cables.

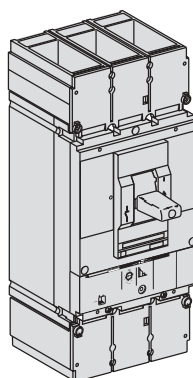
- 400 A terminal:
 - 1 cable: #2 AWG–600 kcmil Cu or
 - 1 cable: #2 AWG–500 kcmil Al
- 600 A terminal
 - 2 cables: 2/0 AWG–350 kcmil Cu or
 - 2 cables: 2/0 AWG–500 kcmil Al

Additional information:

- Catalog no. 0615CT9901
- Data Sheet no. 0615HO9702
- D-Fax no. 2428
- Other termination: page 59
- Other trip units: page 58
- Accessories: See page 61

**COMPACT NSJ Molded Case Switch — Automatic**

Rating (A)	Bus Bar Connection	List Price	Cable Connection	List Price
NSJ400A—3-Pole				
400	NJHF36000S40	\$ 2859	NJHL36000S40	\$ 3049
NSJ400A—4-Pole^①				
400	NJHF46000S40	3860	NJHL46000S40	4112
NSJ400A—4-Pole with Oversized Neutral^①				
Phase	Neutral			
250	400	NJHF56000S25	4246	NJHL56000S25 4498
400	600	NJHF56000S40	5432	NJHL56000S40 5684
NSJ600A—3-Pole				
600	NJHF36000S60	4737	NJHL36000S60	4989
NSJ600A—4-Pole^①				
600	NJHF46000S60	6393	NJHL46000S60	6729

**COMPACT NSJ Circuit Breaker for Motor Circuit Protection**

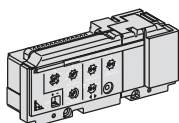
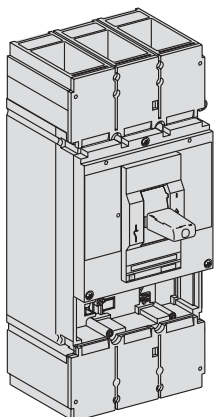
NSJ400HC				
400	Magnetic adjustable from 5 to 10 handle rating	NJHF36400M36	3029	NJHL36400M36 3219
NSJ600HC				
600	Magnetic adjustable from 5 to 10 handle rating	NJHF36600M42	5014	NJHL36600M42 5266

^① 4-pole available in plug-in, drawout and rear connected configurations only. Availability of 4-pole busbar and lug configurations to be announced.

Rating and interrupting ratings: page 45
Cable range: pressure terminals are suitable for copper and aluminum cables.

- 400 A terminal:
1 cable: #2 AWG—600 kcmil Cu or
1 cable: #2 AWG—500 kcmil Al
- 600 A terminal
2 cables: 2/0 AWG—350 kcmil Cu or
2 cables: 2/0 AWG—500 kcmil Al

Additional information:
■ **Catalog no.** 0615CT9901
■ **Data Sheet no.** 0615HO9702
■ **D-Fax no.** 2428
Other termination: page 59
Other trip units: page 58
Accessories: See page 61



COMPACT NSJ Circuit Breaker Basic Frame

Rating (A)	Bus Bar Connection			
	3P	List Price	4P ^②	List Price
NSJ400/600N				
150 ^①	NJNF36150F40	\$ 1844	NJNF46150F40	\$ 2490
250 ^①	NJNF36250F40	1844	NJNF46250F40	2490
400 ^①	NJNF36400F40	1844	NJNF46400F40	2490
600	NJNF36600F60	3436	NJNF46600F60	5315
NSJ400/600H				
150 ^①	NJHF36150F40	4109	NJHF46150F40	5546
250 ^①	NJHF36250F40	4109	NJHF46250F40	5546
400 ^①	NJHF36400F40	4109	NJHF46400F40	5546
600	NJHF36600F60	4304	NJHF46600F60	5811
NSJ400/600L				
400 ^①	NJLF36400F40	5068	NJLF46400F40	6589
600	NJLF36600F60	7451	NJLF46600F60	9686

Electronic Trip Unit (Field Replaceable)

Long-time, Short-time and Instantaneous Protection	Trip Function	Catalog Number	List Price
STR23SP	E20	36940	1355
Long-time, Short-time, Instantaneous Protection and Options			
STR53UP-F	E53	36942	2101
STR53UP-FT	E54	36943	2986
STR53UP-FI	E58	36944	3075
STR53UP-FIT	E59	36945	3961
Communication wiring		32441	72
Replacement battery		32434	280

External Neutral Sensor

150	36950	537
250	36951	537
400	36952	537
600	36953	537

Summary of options:

F: Fault indicators

T: Residual type ground-fault protection

I: Ammeter

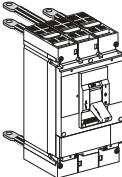
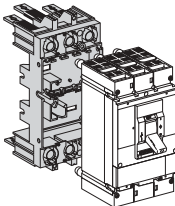
① 100% Rated

② 4-pole available in plug-in, drawout and rear connected configurations only. Availability of 4-pole busbar and lug configurations to be announced.

Installation and Connection

- For factory-installed connection accessories complete the circuit breaker catalog number by inserting the **termination numbers** in the appropriate block.
- For field-installable accessories order the 5-digit catalog number.

N J N L 3 6 4 0 0 E 2 0
Termination No.

			Term. No.	Catalog No.	List Price	
Bus Bar Connection						
Bus Bar Connection Hardware COMPACT NSJ Circuit Breaker①			F			
Set of 3 terminal screws and washers for one side			3P	36966	\$ 15.80 ea.	
Set of 4 terminal screws and washers for one side			4P	M36967	21 ea.	
Cable Connection						
 	400 A Lugs (Terminal Cover Included)①					
	#2 AWG–600 kcmil stranded copper cable					
	#2 AWG–500 kcmil stranded aluminum cable					
	Field-installable	One side	3P	32508	95	
			4P	M32509	126	
	Factory-installed	Both sides	3P L		190	
			4P L		252	
		Line side only	3P M		95	
			4P M		126	
		Load side only	3P P		95	
			4P P		126	
	600 A Lugs (Terminal Cover Included)①					
	2 x #2/0 AWG–350 kcmil stranded copper cable					
	2 x #2/0 AWG–500 kcmil stranded aluminum cable					
	Field-installable	One side	3P	32510	126	
		4P	M32511	168		
Factory-installed	Both sides	3P L		252		
		4P L		336		
	Line side only	3P M		126		
		4P M		168		
	Load side only	3P P		126		
		4P P		168		
Voltage Takeoffs for 400 and 600A Lugs (Set of Two)				29348	18.90	
Rear Connection = Bus Bar Connection + Rear Connection Kit						
	Mixed Rear Connection Kit		3P S	32477	565	
			4P S	32478	748	
	Consisting of:	Kit 3P	Short rear connections (Set of two)	32475	146 ea.	
			Long rear connections (Set of two)	32476	174 ea.	
			Short terminal covers	32562	99	
		Kit 4P	Short rear connections (Set of two)	32475	146 ea.	
			Long rear connections (Set of two)	32476	174 ea.	
			Short terminal covers	32563	107	
	Plug-in Mounting = Bus Bar Connection + Plug-in Kit					
		Kit for COMPACT NSJ Circuit Breaker (Stationary and Moving Part)		3P N	32546	1028
		4P N	M32574	1388		
Consisting of:		Stationary Part				
		Plug-in base	3P	32514	710	
			4P	M32515	957	
		Moving Part				
			3P HJ00		318	
			4P HJ00		390	
		Short terminal covers	3P	32562	99	
			4P	32563	107	
		Safety Trip Interlock		32520	30.50	
		Power connections	3P	32518 (3)	63 ea.	
			4P	32518 (4)	63 ea.	

^① 4-pole available in plug-in, drawout and rear connected configurations only. Availability of 4-pole busbar and lug configurations to be announced.

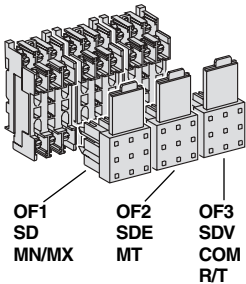
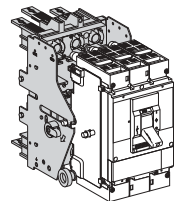
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Installation and Connection—Continued

- For factory-installed connection accessories complete the circuit breaker catalog number by inserting the **termination numbers** in the appropriate block.
- For field-installable accessories order the 5-digit catalog number.
- | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|-----------------|---|
| N | J | N | L | 3 | 6 | 4 | 0 | 0 | E | 2 | 0 |
| | | | | | | | | | | Termination No. | |

				Term. No.	Catalog No.	List Price
Drawout Mounting = Bus Bar Connection + Drawout Kit						
Kit for COMPACT NSJ Circuit Breaker (Stationary and Moving Part)				3P D	32548	1644
				4P D	M32549	2187
Consisting of:						
Stationary Part						
Plug-in base				3P	32514	710
				4P	M32515	957
Fixed part of chassis					32532	462
Moving Part				3P HJ00		473
				4P HJ00		573
Moving part of chassis					32533	154
Short terminal covers				3P	32562	99
				4P	32563	107
Safety trip interlock					32520	30.50
Power connections				3P	32518 (3)	63 ea.
				4P	32518 (4)	63 ea.

Plug-in and Drawout Accessories						
Secondary Disconnecting Blocks						
Fixed part		9-wire connector		29273		63
Moving part		9-wire connector		32523		39.40
		Support for 3 moving connectors		32525		28.40
Shutters						
Two shutters for plug-in base				32521		54
Chassis Accessories						
Extended escutcheon for toggle				32534		69
Locking device (key lock is not included)				29286		109
Two position indicating switches (connected/disconnected)				29287		138



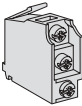
Accessories

- For factory-installed accessories complete the circuit breaker catalog number by inserting the **option number** in the appropriate block.
- For field-installable accessories order the 5-digit catalog number.

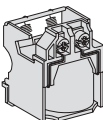
N | J | N | L | 3 | 6 | 4 | 0 | 0 | E | 2 | 0 | **A** | **B** | **S** | **A** | **M** | **A**

Options

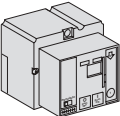
Electrical Accessories

Auxiliary Switch (SPDT Type)	Volts (V)	Option No.	Catalog No.	List Price
 Standard	One auxiliary switch (OF)	AA	29450	\$ 198
	Two auxiliary switches (OF)	AB	29450 (2)	198 ea.
	Three auxiliary switches (OF)	AC	29450 (3)	198 ea.
	Alarm switch (SD)	BC ^①	29450	198
	Overcurrent trip switch (SDE)	BD ^①	29450	198
Low level	One auxiliary switch (OF)	AE	29452	248
	Two auxiliary switches (OF)	AF	29452 (2)	248 ea.
	Three auxiliary switches (OF)	AG	29452 (3)	248 ea.
	Alarm switch (SD)	BH ^②	29452	248
	Overcurrent trip switch (SDE)	BJ ^②	29452	248

Shunt Trip and Undervoltage Trip

	MX (Shunt trip)	AC 50/60 Hz	24	SK	29384	478
			48	SL	29385	478
			110/130	SA	29386	478
			208/277	SD	29387	478
			380/480	SH	29388	478
			525/600	SJ	29389	478
		DC	12	SN	29382	478
			24	SO	29390	478
			30	SU	29391	478
			48	SP	29392	478
	MN (Undervoltage trip)	AC 50/60 Hz	60	SV	29383	478
			125	SR	29393	478
			250	SS	29394	478
			24	UK	29404	478
			48	UL	29405	478
			110/130	UA	29406	478
		DC	208/277	UD	29407	478
			380/480	UH	29408	478
			525/600	UJ	29409	478
			12	UN	29402	478
			24	UO	29410	478
			30	UU	29411	478
			48	UP	29412	478
			60	UV	29403	478
			125	UR	29413	478
			250	US	29414	478

Motor operator with SDE Adapter

 MT600	AC 50/60 Hz	48/60	ML	32839	2263
		110/130	MA	32840	2263
		208/277	MD	32841	2263
		380/415	MF	32842	2263
		440/480	MH	32847	2263
	DC	24/30	MO	32843	2363
		48/60	MP	32844	2363
		110/130	MR	32845	2363
		250	MS	32846	2363
	Locking device	Mounting hardware		32649	38.90
		Ronis lock		41940	97
		Profalux lock		42888	97

Test Kits

	Mini test kit (battery not supplied)		43362	538
	Portable test kit	120	55391	9961

① BE = BC + BD
② BK = BH + BJ

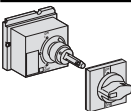
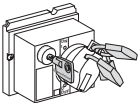
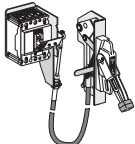
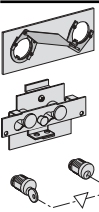
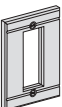
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Accessories—Continued

- For factory-installed accessories complete the circuit breaker catalog number by inserting the **option number** in the appropriate block.

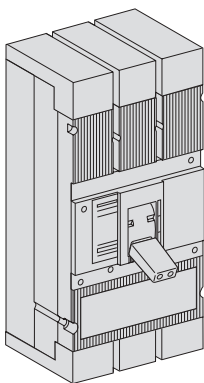
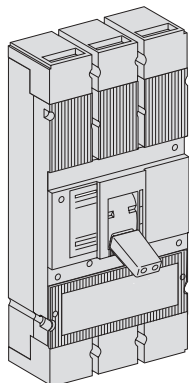
N₁J₁N₁L₃6₄0₀E₂0₁A₁B₁S₁A₁M₁A₁R₁D₁1₂
Options

- For field-installable accessories order the 5-digit catalog number.

		Option No.	Catalog No.	List Price
Operating Handles	Direct Mounted			
		Standard black handle	RD12	32597 \$ 244
		Red handle on yellow bezel	RD22	32599 271
		MCC conversion accessory		32606 68
	Door Mounted			
		Standard black handle	RE12	32598 371
		Red handle on yellow bezel	RE22	32600 398
		Telescopic handle for drawout mounting	RT12	32603 411
	Accessories			
		Key lock adapter		32604 38.90
		Key locks ^①	Ronis 1351.500	41940 97
			Profalux KS5 B24 D4Z	42888 97
		Indication auxiliary switch	One early-break switch	32605 80
			Two early-make switches	29346 119
	Cable Operating Mechanism and A1 Handle			
		Cable length	36/ 914	9422CSJ30 227
		(in./mm)	60/ 1524	9422CSJ50 235
			120/3048	9422CSJ10 255
		A1 painted handle (order separately)	9422A1	66
			CP1 Discount	
Locks, Interlocking	Handle Padlocking Device			
		Removable (lock OFF or ON)	29370	33.60
		Fixed (lock OFF or ON)	32631	81
		Fixed (lock OFF only)	NJPAF	81
	Interlocking (Not UL Listed)			
		Mechanical for circuit breakers with rotary operating handles	32621	329
		Mechanical for circuit breakers with toggles	32614	329
		Key lock type	Ronis	41950 122
		(2 locks, 1 key)	Profalux	42878 122
Installation Accessories	Template for Front Panel Cut-outs			
		Toggle	32556	36.80
		Rotary operating handle, motor operator or extended escutcheon	32558	49.40
	Phase Barriers	Set of 6	32570	48.30
	Handle Rubber Boot			
			32560	114
	Sealing Accessories		29375	29.40
	Terminal Shield, 3P (One side)		36965	72
	100 Identification Labels		29314	79
Spare Parts	Extended Handle		32553	22.10
	Voltage Takeoffs (Set of 2)		29348	18.90

^① Will need the key lock adapter above (Catalog No. 32604) for both Ronis and Profalux key lock installation.

UL 489 Listed COMPACT CK Circuit Breakers



COMPACT CK Circuit Breaker with STR25DP Trip Unit and Full Ampere Rating Plug^①

Bus Bar Connection

	Plug Rating (A)	3-Pole		4-Pole	
		Catalog No.	List Price	Catalog No.	List Price
CK400/800/1200N—Standard Rated—50 kA at 480 Vac					
CK400N	400	CKAXF36404LI	\$ 6653	CKAXF46404LI	\$ 7660
CK800N	800	CKAXF36808LI	6653	CKAXF46808LI	7660
CK1200N	1200	CKAXF36121LI	11556	CKAXF46121LI	14034
CK400/800/1200NN—100% Rated—50 kA at 480 Vac					
CK400NN	400	CKAEF36404LI	7324		
CK800NN	800	CKAEF36808LI	7324		
CK1200NN②	1200	CKAEF36121LIERL	14025		
CK400/800/1000/1200H—Standard Rated—65 kA at 480 Vac					
CK400H	400	CKHXF36404LI	8003	CKHXF46404LI	9132
CK800H	800	CKHXF36808LI	8003	CKHXF46808LI	9132
CK1000HL③	1000	CKIXF36100LI	20421		
CK1200H	1200	CKHXF36121LI	12913	CKHXF46121LI	15797
CK400/800/1200HH—100% Rated—65 kA at 480 Vac					
CK400HH	400	CKHEF36404LI	8943		
CK800HH	800	CKHEF36808LI	8943		
CK1200HH②	1200	CKHEF36121LIERL	15547		

Cable Connection

CK400/800/1200N—Standard Rated—50 kA at 480 Vac					
CK400N	400	CKAXL36404LI	\$ 7058	CKAXL46404LI	\$ 7930
CK800N	800	CKAXL36808LI	7058	CKAXL46808LI	7930
CK1200N	1200	CKAXL36121LI	12035	CKAXL46121LI	14354
CK400/800/1200NN—100% Rated—50 kA at 480 Vac					
CK400NN	400	CKAEL36404LI	7729		
CK800NN	800	CKAEL36808LI	7729		
CK1200NN ^②	1200				
CK400/800/1000/1200H—Standard Rated—65 kA at 480 Vac					
CK400H	400	CKHXL36404LI	8408	CKHXL46404LI	9685
CK800H	800	CKHXL36808LI	8408	CKHXL46808LI	9685
CK1000HL ^③	1000	CKIXL36100LI	20900		
CK1200H	1200	CKHXL36121LI	13392	CKHXL46121LI	16116
CK400/800/1200HH—100% Rated—65 kA at 480 Vac					
CK400HH	400	CKHEL36404LI	9348		
CK800HH	800	CKHEL36808LI	9348		
CK1200HH ^②	1200				
CK1000L—Standard Rated—480 Vac Max.—150 kA at 480 Vac					
CK1000L	1000	CKIXL34100LI	20900		

COMPACT CK Molded Case Switch — Non-Automatic

Bus Bar Connection

CK800NA	800	CKAF36008S	5202	CKAF46008S	6762
CK1200NA	1200	CKAF36001S	8259	CKAF46001S	10737

Cable Connection

CK800NA	800	CKAL36008S	5607	CKAL46008S	7032
CK1200NA	1200	CKAL36001S	8738	CKAL46001S	11057

- ① STRxxDP, SP and UP trip units allow Long Time adjustment from 0.8 to 1 times plug rating.
 ② Edgewise rear connectors are mandatory for line and load. Not available for cable connected.

Ratings and interrupting ratings: page 45

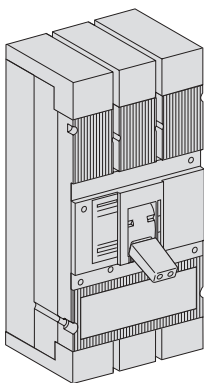
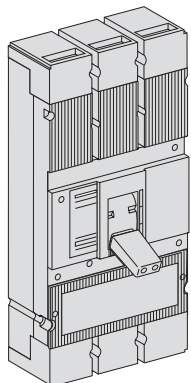
Cable range: pressure terminals are suitable for copper and aluminum cables:

- | | |
|---|--|
| ■ 800 A terminal: | ■ 1200 A terminal: |
| 1 to 2 cables: #2/0 AWG to 400 kcmil Cu | 1 to 4 cables: #3/0 AWG to 500 kcmil Cu |
| 1 to 3 cables: #2/0 AWG to 300 kcmil Al | 1 to 4 cables: #4/0 AWG to 500 kcmil Al |
| 1 to 3 cables: #4/0 AWG to 400 kcmil Al | 1 to 3 cables: 250 to 600 kcmil Cu or Al |

③ 150 kA at 480 Vac.

Additional information:

- Catalog no. AC0037/2E
- Data Sheet no. 0628HO9801
- D-Fax no. 2662
- Other termination:** page 66
- Other trip units:** page 65
- Other rating plugs:** page 65
- Accessories:** See page 68



COMPACT CK Circuit Breaker with STR25DE Trip Unit^①

Bus Bar Connection

Sensor Rating (A)	3-Pole		4-Pole		
	Catalog No.	List Price	Catalog No.	List Price	
CK400/800/1200N—Standard Rated—50 kA at 480 Vac					
CK400N	400	CKAXF3604E1	\$ 6653	CKAXF4604E1	\$ 7660
CK800N	800	CKAXF3608E1	6653	CKAXF4608E1	7660
CK1200N	1200	CKAXF3612E1	11556	CKAXF4612E1	14034

CK400/800/1200NN—100% Rated—50 kA at 480 Vac

CK400NN	400	CKAEF3604E1	7324		
CK800NN	800	CKAEF3608E1	7324		
CK1200NN ^②	1200	CKAEF3612E1	14025		

CK400/800/1000/1200H—Standard Rated—65 kA at 480 Vac

CK400H	400	CKHXF3604E1	8003	CKHXF4604E1	9132
CK800H	800	CKHXF3608E1	8003	CKHXF4608E1	9132
CK1000HL ^③	1000	CKIXF3610E1	20421		
CK1200H	1200	CKHXF3612E1	12913	CKHXF4612E1	15797

CK400/800/1200HH—100% Rated—65 kA at 480 Vac

CK400HH	400	CKHEF3604E1	8943		
CK800HH	800	CKHEF3608E1	8943		
CK1200HH ^①	1200	CKHEF3612E1	15547		

CK1000L—Standard Rated—480 Vac Max.—150 kA at 480 Vac

CK1000L	1000	CKIXF3410E1	20421		
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Cable Connection

CK400/800/1200N—Standard Rated—50 kA at 480 Vac

CK400N	400	CKAXL3604E1	\$ 7058	CKAXL4604E1	\$ 7930
CK800N	800	CKAXL3608E1	7058	CKAXL4608E1	7930
CK1200N	1200	CKAXL3612E1	12035	CKAXL4612E1	14354

CK400/800/1200NN—100% Rated—50 kA at 480 Vac

CK400NN	400	CKAEL3604E1	7729		
CK800NN	800	CKAEL3608E1	7729		
CK1200NN ^②	1200				

CK400/800/1000/1200H—Standard Rated—65 kA at 480 Vac

CK400H	400	CKHXL3604E1	8408	CKHXL4604E1	9685
CK800H	800	CKHXL3608E1	8408	CKHXL4608E1	9685
CK1000HL ^③	1000	CKIXL3610E1	20900		
CK1200H	1200	CKHXL3612E1	13392	CKHXL4612E1	16116

CK400/800/1200HH—100% Rated—65 kA at 480 Vac

CK400HH	400	CKHEL3604E1	9348		
CK800HH	800	CKHEL3608E1	9348		
CK1200HH ^②	1200				

CK1000L—Standard Rated—480 Vac Max.—150 kA at 480 Vac

CK1000L	1000	CKIXL3410E1	20900		
---------	------	-------------	-------	--	--

^① STRxxDE, SE and UE trip units allow Long Time adjustment from 0.4 to 1 times sensor rating.

^② Edgewise rear connectors are mandatory for line and load. Not available for cable connected.

^③ 150 kA at 480 Vac.

Ratings and interrupting ratings: page 45

Cable range: pressure terminals are suitable for copper and aluminum cables:

■ 800 A terminal:

1 to 2 cables: #2/0 AWG to 400 kcmil Cu
1 to 3 cables: #2/0 AWG to 300 kcmil Cu
1 to 3 cables: #4/0 AWG to 400 kcmil Al

■ 1200 A terminal:

1 to 4 cables: #3/0 AWG to 500 kcmil Cu
1 to 4 cables: #4/0 AWG to 500 kcmil Al
1 to 3 cables: 250 to 600 kcmil Cu or Al

Additional information:

■ Catalog no. AC0037/2E

■ Data Sheet no. 0628HO9801

■ D-Fax no. 2662

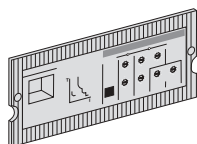
Other termination: page 66

Other trip units: page 65

Other rating plugs: page 65

Accessories: See page 68

Other Electronic Trip Units (Replaceable by Field Services only)



	Trip Function	Catalog No.	List Price
Long-time^①, and Instantaneous Protection			
STR25DP	LI	35400	3134
STR25DE	E1	46501 ^②	
Long-time^①, Short-time and Instantaneous Protection			
STR45SP	LS	35407	5041
STR35SE	E5	46504 ^②	
Long-time^①, Short-time, Instantaneous Protection and Options			
STR55UP T	L2	35413	6552
STR55UP RF	L3	35416	7585
STR55UP TRF	L4	35417	9097
STR55UP FC	L5	35420	5887
STR55UP RFC	L7	35422	7585
STR55UP TFC	L6	35424	7379
STR55UP TRFC	L8	35425	9097
STR55UE T	E9	46512 ^②	6236
STR55UE RF	E3	46516 ^②	7748
STR55UE TRF	E4	46517 ^②	9560
STR55UE FC	E5	46520 ^②	6050
STR55UE RFC	E7	46522 ^②	7748
STR55UE TFC	E6	46524 ^②	7542
STR55UE TRFC	E8	46525 ^②	9260

① Long Time:

- Adjustable from 0.8 to 1 times plug rating on STRxxDP, SP and UP trip units
 - Adjustable from 0.4 to 1 times sensor rating on STRxxDE, SE and UE trip units
 - Can be defeated by using LT OFF rating plug Cat. No. 35300 on STRxxDP, SP and UP trip units.
- Substitute MI in the trip function block for factory installation. For use only on 400 A, 800 A and 1200 A.

② Cannot be used in a drawout assembly.

Summary of Options :

- F: Fault indicators.
T: Residual type ground fault protection
R: Load monitoring
C: Communication with DIGIPACT®



Rating Plugs^③

	Rating (A)	Amperage No.	Catalog No.	List Price
CK400	200	204	35301	\$ 163
	225	224	35302	163
	250	254	35303	163
	300	304	35304	163
	350	354	35305	163
	400	404	35306	163
CK800	400	408	35311	163
	500	508	35312	163
	600	608	35313	163
	700	708	35314	163
	800	808	35315	163
	1000	101	35335	163
CK1200	600	061	35331	163
	700	071	35332	163
	800	081	35333	163
	900	091	35334	163
	1000	101	35335	163
	1200	121	35336 ^④	163
CK1000L	500	050	35321	163
CK1000HL	600	060	35322	163
	700	070	35323	163
	800	080	35324	163
	1000	100	35325 ^④	163

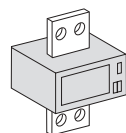
External Neutral Sensor

Ground-fault Protection for 3Ø4W System

400	35700	1073
800	35701	1073
1000	35702	1073
1200	35703	1073

③ Required on STRxx25DP, SP and UP trip units only.

④ Cannot be used in a drawout assembly.



Installation and Connection

- For factory-installed connection accessories complete the circuit breaker catalog number by inserting the **termination numbers** in the appropriate block.
- For field-installable accessories order the 5-digit catalog number.

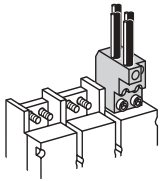
C K A X L 3 6 1 2 1 L I
Termination No.

	Term. No.	Special Term. No.	Catalog No.	List Price
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Bus Bar Connection

Connection screws and terminal cover	F		35626 (2)	No Charge
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Cable Connection



800 A Lugs—(3) #2/0 AWG—300 kcmil for CK400 and CK800

Field-installable	One side		46961	\$ 203
Factory-mounted	Both sides	L		405
	Line side only	M		203
	Load side only	P		203

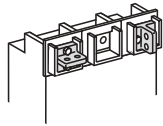
1200 A Lugs—(4) #4/0 AWG—500 kcmil for CK1000 and CK1200

Field-installable	One side		46960	239
Factory-mounted	Both sides	L ①		479
	Line side only	M ①		239
	Load side only	P ①		239

Optional 1200 A Lugs—(3) 250–600 kcmil

Field-installable	One side		46966	239
Factory-mounted	Both sides	L ②		479
	Line side only	M ②		239
	Load side only	P ②		239

Rear Connection



Flat Connection		N/H	F	FRL③	46415	813
		L	F	FRL③	46417	1134
Consisting of:	Rear connectors	N/H			46958 (6)	99 ea.
		HL/L			46916 (6)	152 ea.
	Terminal cover				46993 (2)	110 ea.
Edgewise Connection		N/H	F	ERL③	46415	813
		L	F	ERL③	46419	1260
Consisting of:	Rear connectors	N/H			46958 (6)	99 ea.
		HL/L			46913 (6)	173 ea.
	Terminal cover				46993 (2)	110 ea.

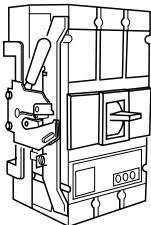
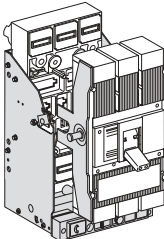
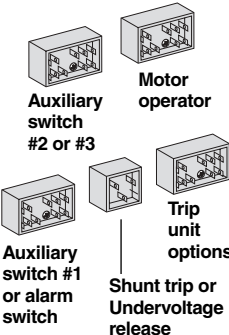
Continued on next page

① For CK400 or CK800 insert PT1 in block 13. (See catalog number construction, page 46)
 ② For CK400, CK800 or CK1200 insert PT2 in block 13. (See catalog number construction, page 46)
 ③ Insert FRL or ERL in block 13. (See catalog number construction, page 46)

Installation and Connection—Continued

- For factory-installed connection accessories complete the circuit breaker catalog number by inserting the **termination numbers** in the appropriate block.
- For field-installable accessories order the 5-digit catalog number.

C K A X F 3 6 1 2 1 L I D O
Termination No.

			Term. No.	Special Term. No.①	Drawout Option②	Catalog No.	List Price		
Standard Chassis									
	Flat Connection		N/H	D	F	DO	\$ 3388		
			HL/L	D	F	DO	3388		
	Consisting of:	Complete chassis	N/H			46851	2472		
			HL/L			46852	2472		
	Plugs	N/H			46896 (3)	127 ea.			
		HL/L			46915 (3)	127 ea.			
	Terminal cover					46993 (2)	110 ea.		
	Rear connections					46990 (6)	53 ea.		
	Edgewise Connection		N/H	D	E	DO	3388		
			HL/L	D	E	DO	3388		
	Consisting of:	Complete chassis	N/H			46851	2472		
			HL/L			46852	2472		
	Plugs	N/H			46896 (3)	127 ea.			
		HL/L			46915 (3)	127 ea.			
	Terminal cover					46993 (2)	110 ea.		
	Rear connections					46988 (6)	68 ea.		
	Universal Chassis								
		Flat Connection		N/H	D	F	DU	4438	
				HL/L	D	F	DU	4438	
		Consisting of:	Moving chassis				46824	655	
Fixed chassis			N/H			46820	2867		
		HL/L			46822	2867			
Plugs		N/H			46896 (3)	127 ea.			
		HL/L			46915 (3)	127 ea.			
Terminal cover					46993 (2)	110 ea.			
Rear connections					46990 (6)	53 ea.			
Edgewise Connection		N/H	D	E	DU	4533			
		HL/L	D	E	DU	4533			
	Consisting of:	Moving chassis				46824	655		
		Fixed chassis	N/H			46820	2867		
	LH/L				46822	2867			
	Plugs	N/H			46896 (3)	127 ea.			
		HL/L			46915 (3)	127 ea.			
	Terminal cover					46993 (2)	110 ea.		
	Rear connections					46988 (6)	67 ea.		
	Accessories								
		Secondary Disconnecting Blocks					Option No.	Catalog No.	List Price
		Moving part	3 term. ③			D ⑤	36693	\$ 33.60	
6 term. ④					D ⑤	36696	50		
Fixed part		3 term. ③			D ⑤	42940	33.60		
		6 term. ④			D ⑤	42941	50		
Optional fixed part cover					39967	62			
Door Escutcheon									
Door frame		Around racking mechanism				46830	153		
		Around handle				46831	308		
		Around rotary handle				46832	431		
Drawout Shutters									
		On fixed chassis (1 piece)				46987 (6)	134 ea.		
Lockings (see page 69)									

① Insert F or E in block 13. (See catalog number construction, page 46)

② Insert DO or DU in block 15. (See catalog number construction, page 46)

③ Three wires are needed for shunt trip or undervoltage trip.

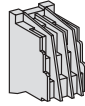
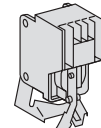
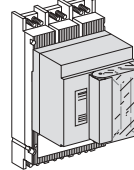
④ Six wires are needed for auxiliary switches or motor operator.

⑤ Option D inserted in block 12, (See catalog number construction, page 46), will supply both moving and fixed parts for all electrical accessories installed.

Accessories

- For factory-installed accessories complete the circuit breaker catalog number by inserting the **option number** in the appropriate block.
- For field-installable accessories order the 5-digit catalog number.

C K A X L 3 6 1 2 1 L I A 2 S A M A
Options ☐

		Volts (V)		Option No.	Catalog No.	List Price	
Electrical Accessories	Auxiliary and Alarm Switch						
		One auxiliary (OF) + 1 alarm (SD) switch ①		AB	36405	\$ 302	
		Three auxiliary (OF) + 1 alarm (SD) switch ①		A3	36402	823	
		Two auxiliary (OF) switches ①		A2	36404	427	
		Overcurrent trip switch SDE ②		AT	36403	240	
		Position switches For drawout only ③	One connected	DA	46963	331	
	One disconnected for Universal chassis		DB	46964	331		
	One disconnected for Standard chassis			39965	331		
	Shunt Trip and Undervoltage Trip						
		MX (Shunt trip) ④	AC 60 Hz	120	SA	36437	478
240				SC	36446	478	
480				SH	36446	478	
DC			12	SN	36434	478	
			24	SO	36435	478	
			48	SP	36436	478	
MN (Undervoltage trip) ⑤		AC 60 Hz	125	SR	36437	478	
			120	UA	36418	478	
			240	UC	36419	478	
		DC	480	UH	36420	478	
			24	UO	36410	478	
			48	UP	36411	478	
		125	UR	36412	478		
		Motor Operator					
			Standard type	AC 60 Hz	120	MA	35678
240	MC				35679	3953	
DC	24			MO	35670	3953	
	48			MP	35671	3953	
	125		MR	35672	3953		
	Locking device for Ronis key lock 1351.500 (Lock not supplied, cannot be fitted on automatic transfer switch)			44876	179		
	One Ronis key lock 1351.500			41945	122		
Test Kits							
	Battery operated (battery not supplied)				43362	538	
	Portable test kit				55391	9961	

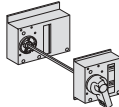
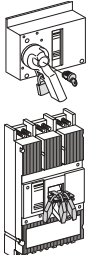
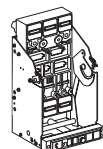
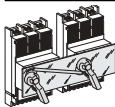
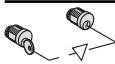
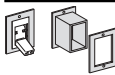
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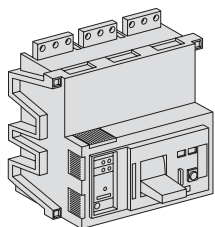
- ① 6 A (auxiliary), 5 A (alarm) at 480 Vac; 3 A at 600 Vac; 0.5 A at 125 Vdc, 0.25 A at 250 Vdc.
 ② 2 A at 240 Vac, 0.1 A at 125 Vdc. Factory-mounted.
 ③ 6 A at 480 Vac, 3 A at 600 Vac, 0.5 A at 125 Vdc, 0.25 A at 250 Vdc.
 ④ Minimum operating voltage 55% of rated voltage in ac and 75% of rated voltage in dc.
 ⑤ Dropout at 35–70% of rated voltage, pickup at 85% of rated voltage.

Accessories—Continued

- For factory-installed accessories complete the circuit breaker catalog number by inserting the **option number** in the appropriate block.
- For field-installable accessories order the 5-digit catalog number.

C K A X L 3 6 1 2 1 L I A 2 S A M A R O
Options ☐

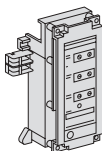
				Option No.	Catalog No.	List Price
Rotary Operating Handles	Directly Mounted					
		Standard	With black toggle	RO	46933	\$ 377
	Door Mounted					
		Rear door	(=46933+42897)		46872	647
Locks, Interlocking	Padlocking and Locking Devices					
		Of the Handle (in OFF position)				
		For 1 to 3 padlocks (padlocks not supplied)				44936 33.60
		By key lock	Mounting kit (factory mounted)	LK	35636	161
			Mounting kit and key interlock	KK	35636+35635-F	940
			Key interlock only		35635-F	779
			Of the Rotary Operating Handle (circuit breaker in OFF position)			
	For 1 to 3 padlocks (not supplied)				Built-in	
	One key lock		Ronis 1351.500		41940	97
	Drawout Assembly Locking					
		By 3 padlocks (padlocks not supplied)				Built-in
		Key lock for locking in disconnected position				35635 704
		Door interlock, connected position locking device				46834 210
Racking interlock locking device				46835 153		
Mechanical Interlocking (for fixed circuit breakers with rotary handle)						
	Mechanical device (rotary operating handles not included)				46946 813	
Mechanical Interlocking (for fixed circuit breakers with rotary handle)						
	One set of 2 key locks (keyed alike)	Ronis 1351.500		41950	122	
Installation Accessories	Door Cutout Escutcheons					
		For fixed mounting of circuit breaker				44938 \$ 33.60
		Escutcheon with handle extension (IP 40), for withdrawable device without motor operator				46977 372
	Handle Rubber Boot					
				BT	44965	153
	Sealing Accessories					
		For trip unit				46939 106
		For cover				44937 50
	Circuit Label Holder					
	Set of 10				42976 54	
Extended Handle						
	Standard				46998 29.40	
	Long for extended escutcheon (drawout mounting)				46996 29.40	
Toggle						
	For rotary handle	Black		46970	101	
		Red		46971	101	

UL 489 Listed COMPACT CM Circuit Breaker^①**COMPACT CM Circuit Breaker with ST206D Trip Unit**

	Rating (A)	Trip Function	Catalog No.	List Price
Standard Rated—85 kA at 480 Vac				
CM1250HE	1250		CMXF36125LI	\$ 13551
CM1600HE	1600		CMXF36160LI	14483
CM2000HE ^②	2000		CMXF36200LI	16652
CM2500HE ^②	2500		CMXF36250LI	26836
100% Rated—85 kA at 480 Vac				
CM1250HH	1250		CMEF36125LI	14561
CM1600HH	1600		CMEF36160LI	15585
CM2000HH ^②	2000		CMEF36200LI	17969
CM2500HH ^②	2500		CMEF36250LI	29174

COMPACT CM Molded Case Switch — Non-Automatic

CM1600HA	1600	CMAF36016S	11038
CM2000HA ^②	2000	CMAF36020S	13208
CM2500HA ^②	2500	CMAF36025S	24901

Other Electronic Trip Units (Replaceable by Field Services only)**Long-time and Instantaneous Protection**

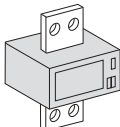
ST206D	LI	55722	3445
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Long-time, Short-time and Instantaneous Protection

ST306S	LS	55723	5028
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Long-time, Short-time, Instantaneous Protection and Ground-fault Protection

ST306ST (1250–2000 A)	L2	55724	6597
ST316ST (2500 A)	L2	55725	6597

External Neutral Sensor**Ground-fault Protection for 3Ø4W System**

For CM1250	55760	1215
For CM1600	55759	1215
For CM2000	55758	1215
For CM2500	55757	1215

① In obsolescence. For new applications, use Powerpact R-frame. See Digest 173.

② Rear connectors are included.

Note: CM3200 circuit breaker or switch (IEC Rated, not UL Listed) is available with 3200 A rating. See the IEC Rated COMPACT CM section, page 101.

Ratings and interrupting ratings: page 45

Additional information:

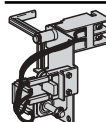
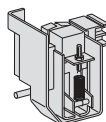
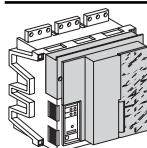
- Catalog no. AC0036/3E
- Data Sheet no. 0630HO9801
- D-Fax no. 2833

Accessories: See page 71

Accessories

- For factory-installed accessories complete the circuit breaker catalog number by inserting the **option number** in the appropriate block.
- For field-installable accessories order the 5-digit catalog number.

C M X F 3 6 2 5 0 L I A 2 S A
Options

			Volts (V)	Options	Catalog No.	List Price	
Connection Accessories	Connectors						
	2000 A (3 per kit for one side)				55797	\$ 964	
	2000 A (Complete kit for line and load)				55798	1928	
	2500 A (Complete kit for line and load)				55799	4363	
	Connectors are mandatory for line and load. Prices are given for replacement only.						
Electrical Accessories	Auxiliary Switches						
		Two auxiliary switch (OF) ①		A2	55755	559	
		Four auxiliary switch (OF) + 1 alarm switch (SD) ①		A4	55754	1398	
		Overcurrent trip switch ②			Standard		
	Shunt Trip and Undervoltage Trip						
		MX (shunt trip) ③	AC 60 Hz	120	SA	55740	826
				240	SC	55741	826
				480	SH	55742	826
			DC	24	SO	55744	826
48				SP	55745	826	
125				SR	55746	826	
	MN (undervoltage trip) ④	AC 60 Hz	120	UA	55728	826	
			240	UC	55729	826	
			480	UH	55730	826	
		DC	24	UO	55732	826	
			48	UP	55733	826	
			125	UR	55734	826	
Motor Operator ⑤⑥							
		AC 60 Hz	120	MA	55611	8093	
			240	MC	55613	8093	
			277	MD	55615	8093	
			480	MH	55617	8093	
		DC	24	MO	55618	8093	
			48	MP	55620	8093	
			125	MR	55624	8093	
Test Kit			Portable test kit (120 Vac)		55391	9961	
							
Locks	OFF Position Locking Device						
		Padlock device for 1 to 3 padlocks (padlocks not included) ⑦		PL	55653	186	
		By key lock	Mounting provision ⑧	LK	55768	215	
			Mounting provision and Key interlock ⑧	KK	55768+35635	919	
		Key interlock only			35635	704	
		Operating handle			55661	67	
	Extended toggle			55662	92		
Spare Parts							
							

- ① 6 A (auxiliary), 5 A (alarm) at 480 Vac; 3 A at 600 Vac; 0.5 A at 125 Vdc; 0.25 A at 250 Vdc.
 ② 2 A at 240 Vac and 0.1 A at 125 Vdc.
 ③ Minimum operating voltage 55% of rated voltage in AC and 75% of rated voltage in dc.
 ④ Dropout at 35–70% of rated voltage, pickup at 85% of rated voltage.
 ⑤ Not UL Listed. Includes 4 auxiliary and 1 alarm switch #55676: factory-mounted only.
 ⑥ Factory-mounted only.
 ⑦ Field installable.
 ⑧ In obsolescence. For new applications, use Powerpact R-frame. See Digest 173.

IEC 947-2 Rated COMPACT NS and C Circuit Breakers

Selection Table

				NS100			NS160–250				
											
Ratings as per IEC 947-2 and EN 60947-2 Standards				N		H	L	N		H	L
Number of poles				2, 3, 4			2, 3, 4				
Rated current (A)		In	40°C	100			160, 250				
Rated insulation voltage (V)		Ui		750			750				
Rated impulse withstand voltage (kV)		Uimp		8			8				
Rated operational voltage (V)		Ue	AC 50/60 Hz	690			690				
			DC	500			500				
Ultimate breaking capacity (kA RMS)	Icu	AC 50/60 Hz	220/240 V	85	100	150	85	100	150		
			380/415 V	25	70	150	36	70	150		
			440 V	25	65	130	35	65	130		
			500 V	18	50	100	30	50	70		
			525 V	18	35	100	22	35	50		
			660/690 V	8	10	75	8	10	20		
			1000 V	–	–	–	–	–	–		
		DC ②	250 V	50 (1P)	85 (1P)	100 (1P)	50 (1P)	85 (1P)	100 (1P)		
			500 V	50 (2P)	85 (2P)	100 (2P)	50 (2P)	85 (2P)	100 (2P)		
			750 V	–	–	–	–	–	–		
Service breaking capacity		Ics	(% Icu)	100%	100%	100%	100%	100%	100%		
Utilization category				A			A				
Suitability for isolation				Yes			Yes				
Trip Units											
Functions		Thermal-magnetic		Yes			Yes				
		Electronic		Yes			Yes				
		Instantaneous only		Yes			Yes				
		Molded case switch		Yes			Yes				
Type of Switch				NA – Non-automatic							
Short-time withstand current (RMS)		Icw	1 sec.	NS100NA: 1800 A, NS160NA: 2500 A, NS250NA: 3500 A							
Making capacity (peak)		Icm		NS100NA: 2600 A, NS160NA: 3600 A, NS250NA: 4900 A							
Dimensions and Weights											
Dimensions H x W x D (in./mm)		2/3P		6.3 x 4.1 x 3.4/ 161 x 105 x 86			6.3 x 4.1 x 3.4/ 161 x 105 x 86				
		4P		6.3 x 5.5 x 3.4/ 161 x 140 x 86			6.3 x 5.5 x 3.4/ 161 x 140 x 86				
Weight (lb/kg)		2/3P		3.5/1.6			NS160 = 3.5/1.6 NS250 = 4.2/1.9				
		4P		4.6/2.1			NS160 = 4.6/2.1 NS250 = 5.1/2.3				

① Rated current is at 40°C for drawout mounting.

C1001N/H = 1000 A

C1001L = 910 A

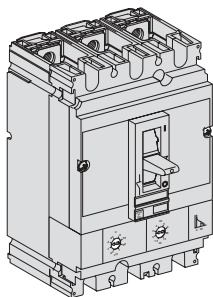
C1251N/H = 1160 A

② 1P, 2P, 3P are the number of poles required to perform the dc interruption.

③ NS400L is 100 kA @ 500 V; 100 kA @ 525 V; 75 kA @ 660/690 V.

NS400–630				C801–1001			C1251		CM1250–3200 ^①			
												
N	H	L	H-DC	N	H	L	N	H	N-1000 V	N-DC	N	H
3, 4			3	3, 4			3, 4		3	3	3, 4	
400, 630			–	800, 1000			1250 ①		1250 ①	1250 ①	1250, 1600, 2000, 2500, 3200	
750			–	750			750		1000	750	750	
8			–	8			8		8	8	8	
690			–	690			690		1000	–	690	
			500	–			–		–	750	–	
85	100	150	–	85	100	150	85	100	–	–	85	125
45	70	150	–	50	70	150	50	70	–	–	70	85
42	65	130	–	42	65	100	42	65	–	–	65	85
30	50	70 ^③	–	40	50	100	40	50	–	–	50	50
22	35	50 ^③	–				–	–	–	–	–	–
10	20	35 ^③	–	25	40	60	25	40	–	–	50	50
–	–	–	–	–	–	–	–	–	20	–	–	–
–	–	–	85 (1P)	–	–	–	–	–	–	50 (2P)	–	–
–	–	–	85 (2P)	–	–	–	–	–	–	50 (3P)	–	–
–	–	–	–	–	–	–	–	–	–	25 (3P)	–	–
100%	100%	100%	100%	50%	50%	50%	50%	50%	50%	50%	50%	
A				B	B	A	B	B	B	A	B	
Yes				Yes			Yes				Yes	
–				–			–		–			
Yes				Yes			Yes		Yes			
Yes				Yes			Yes		–			
Yes				Yes			Yes		Yes			
NA – Non-automatic				NI – Non-automatic					NI – Non-automatic			
NS400NA: 5000 A, NS630NA: 6000 A				C801NI: 10000 A, C1251NI: 15000 A					32000 A for 3 sec.			
NS400NA: 7100 A, NS630NA: 8500 A				C801NI: 20000 A, C1251NI: 30000 A					65000 A			
10.0 x 5.5 x 4.3/ 255 x 140 x 110				14.7 x 8.3 x 6.8/ 374 x 210 x 172		14.7 x 8.3 x 10/ 374 x 210 x 262	14.7 x 8.3 x 6.8/ 374 x 210 x 172		16.9 x 16.5 x 17.8/ 430 x 418 x 451			
10.0 x 7.3 x 4.3/ 255 x 185 x 110				14.7 x 11.0 x 6.8/ 374 x 280 x 172		14.7 x 11.0 x 10/ 374 x 280 x 262	14.7 x 11.0 x 6.8/ 374 x 280 x 172		16.9 x 22.6 x 17.8/ 430 x 573 x 451			
13.2/6.0				29/13		55/25	29/13		CM1250–1600 = 90/41 CM2000 = 101/46 CM2500 = 139/63 CM3200 = 183/83			
17.2/7.8				38/17		73/33	38/17		CM1250–1600 = 124/56 CM2000 = 135/61 CM2500 = 172/78			

① In obsolescence. For new applications, use Powerpact R-frame. See Digest 173.

IEC 947-2 Rated COMPACT NS100/160/250 Circuit Breakers**Complete Device****COMPACT NS100/160/250N Circuit Breaker with Thermal-Magnetic Trip Unit**

Bus Bar Connection								
	3P 2T		3P 3T		4P 3T		4P 4T	
Rating (A)	Catalog No.	List Price	Catalog No.	List Price	Catalog No.	List Price	Catalog No.	List Price
NS100N—25 kA at 380/415 Vac								
16	NFNFE26016	\$ 718	NFNFE36016	\$ 898	NFNFE46016	\$ 1168	NFNFE46016N01	\$ 1257
25	NFNFE26025	718	NFNFE36025	898	NFNFE46025	1168	NFNFE46025N02	1257
32	NFNFE26032	718	NFNFE36032	898	NFNFE46032	1168	NFNFE46032N03	1257
40	NFNFE26040	718	NFNFE36040	898	NFNFE46040	1168	NFNFE46040N04	1257
50	NFNFE26050	718	NFNFE36050	898	NFNFE46050	1168	NFNFE46050N05	1257
63	NFNFE26063	718	NFNFE36063	898	NFNFE46063	1168	NFNFE46063N06	1257
80	NFNFE26080	821	NFNFE36080	1026	NFNFE46080	1334	NFNFE46080N08	1436
100	NFNFE26100	821	NFNFE36100	1026	NFNFE46100	1334	NFNFE46100N10	1436
NS160N—36 kA at 380/415 Vac								
125	NFNFE26125	1279	NFNFE36125	1598	NFNFE46125	2078	NFNFE46125N12	2238
160	NFNFE26160	1279	NFNFE36160	1598	NFNFE46160	2078	NFNFE46160N16	2238
NS250N—36 kA at 380/415 Vac								
200	NFNFE26200	1403	NFNFE36200	1754	NFNFE46200	2198	NFNFE46200N20	2455
250	NFNFE26250	2302	NFNFE36250	2877	NFNFE46250	3539	NFNFE46250N25	4028
Cable Connection								
NS100N—25 kA at 380/415 Vac								
16	NFNLE26016	752	NFNLE36016	948	NFNLE46016	1235	NFNLE46016N01	1324
25	NFNLE26025	752	NFNLE36025	948	NFNLE46025	1235	NFNLE46025N02	1324
32	NFNLE26032	752	NFNLE36032	948	NFNLE46032	1235	NFNLE46032N03	1324
40	NFNLE26040	752	NFNLE36040	948	NFNLE46040	1235	NFNLE46040N04	1324
50	NFNLE26050	752	NFNLE36050	948	NFNLE46050	1235	NFNLE46050N05	1324
63	NFNLE26063	752	NFNLE36063	948	NFNLE46063	1235	NFNLE46063N06	1324
80	NFNLE26080	855	NFNLE36080	1076	NFNLE46080	1401	NFNLE46080N08	1503
100	NFNLE26100	855	NFNLE36100	1076	NFNLE46100	1401	NFNLE46100N10	1503
NS160N—36 kA at 380/415 Vac								
125	NFNLE26125	1379	NFNLE36125	1748	NFNLE46125	2278	NFNLE46125N12	2438
160	NFNLE26160	1379	NFNLE36160	1748	NFNLE46160	2278	NFNLE46160N16	2438
NS250N—36 kA at 380/415 Vac								
200	NFNLE26200	1503	NFNLE36200	1904	NFNLE46200	2398	NFNLE46200N20	2655
250	NFNLE26250	2403	NFNLE36250	3027	NFNLE46250	3739	NFNLE46250N25	4228

Continued on next page

Ratings and interrupting ratings: page 72
Cable range: pressure terminals are suitable for copper and aluminum cables:

- 100–160 A terminal:
1 cable: 1.5 to 95mm² Cu or Al
- 250 A terminal:
1 cable: 1.5 to 185mm² Cu or Al

Other termination: page 80

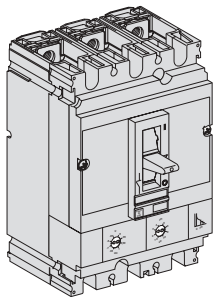
Other trip units: page 78

Accessories: See page 82

Additional information:

- **Catalog no.** ABTED297054EN
- **Installation Guide no.** ABTED297054EN
- **Data Sheet no.** ABTED396051
- **D-Fax no.** 1001

Complete Device—Continued



COMPACT NS100/160/250H Circuit Breaker with Thermal-Magnetic Trip Unit

Bus Bar Connection						
	3P 3T		4P 3T		4P 4T	
Rating (A)	Catalog No.	List Price	Catalog No.	List Price	Catalog No.	List Price
NS100H—70 kA at 380/415 Vac						
16	NFHFE36016	\$ 1252	NFHFE46016	\$ 1628	NFHFE46016N01	\$ 1717
25	NFHFE36025	1252	NFHFE46025	1628	NFHFE46025N02	1717
32	NFHFE36032	1252	NFHFE46032	1628	NFHFE46032N03	1717
40	NFHFE36040	1252	NFHFE46040	1628	NFHFE46040N04	1717
50	NFHFE36050	1252	NFHFE46050	1628	NFHFE46050N05	1717
63	NFHFE36063	1252	NFHFE46063	1628	NFHFE46063N06	1717
80	NFHFE36080	1380	NFHFE46080	1793	NFHFE46080N08	1896
100	NFHFE36100	1380	NFHFE46100	1793	NFHFE46100N10	1896
NS160H—70 kA at 380/415 Vac						
125	NFHFE36125	2267	NFHFE46125	2947	NFHFE46125N12	3107
160	NFHFE36160	2267	NFHFE46160	2947	NFHFE46160N16	3107
NS250H—70 kA at 380/415 Vac						
200	NFHFE36200	2382	NFHFE46200	2931	NFHFE46200N20	3229
250	NFHFE36250	3506	NFHFE46250	4312	NFHFE46250N25	4802
Cable Connection						
NS100H—70 kA at 380/415 Vac						
16	NFHLE36016	1302	NFHLE46016	1695	NFHLE46016N01	1784
25	NFHLE36025	1302	NFHLE46025	1695	NFHLE46025N02	1784
32	NFHLE36032	1302	NFHLE46032	1695	NFHLE46032N03	1784
40	NFHLE36040	1302	NFHLE46040	1695	NFHLE46040N04	1784
50	NFHLE36050	1302	NFHLE46050	1695	NFHLE46050N05	1784
63	NFHLE36063	1302	NFHLE46063	1695	NFHLE46063N06	1784
80	NFHLE36080	1430	NFHLE46080	1860	NFHLE46080N08	1963
100	NFHLE36100	1430	NFHLE46100	1860	NFHLE46100N10	1963
NS160H—70 kA at 380/415 Vac						
125	NFHLE36125	2417	NFHLE46125	3147	NFHLE46125N12	3307
160	NFHLE36160	2417	NFHLE46160	3147	NFHLE46160N16	3307
NS250H—70 kA at 380/415 Vac						
200	NFHLE36200	2532	NFHLE46200	3131	NFHLE46200N20	3429
250	NFHLE36250	3656	NFHLE46250	4512	NFHLE46250N25	5002

Continued on next page

Ratings and interrupting ratings: page 72
 Cable range: pressure terminals are suitable for copper and aluminum cables:

- 100–160 A terminal:
1 cable: 1.5 to 95mm² Cu or Al
- 250 A terminal:
1 cable: 1.5 to 185mm² Cu or Al

Other termination: page 80

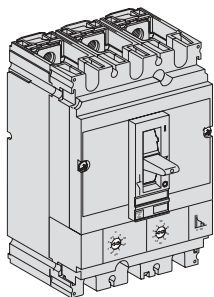
Other trip units: page 78

Accessories: See page 82

Additional information:

- Catalog no. ABTED297054EN
- Installation Guide no. ABTED297054EN
- Data Sheet no. ABTED396051
- D-Fax no. 1001

Complete Device—Continued



COMPACT NS100/160/250L Circuit Breaker with Thermal-Magnetic Trip Unit

Bus Bar Connection						
	3P 3T		4P 3T		4P 4T	
Rating (A)	Catalog No.	List Price	Catalog No.	List Price	Catalog No.	List Price
NS100L—150 kA at 380/415 Vac						
16	NFLFE36016	\$ 1955	NFLFE46016	\$ 2542	NFLFE46016N01	\$ 2631
25	NFLFE36025	1955	NFLFE46025	2542	NFLFE46025N02	2631
32	NFLFE36032	1955	NFLFE46032	2542	NFLFE46032N03	2631
40	NFLFE36040	1955	NFLFE46040	2542	NFLFE46040N04	2631
50	NFLFE36050	1955	NFLFE46050	2542	NFLFE46050N05	2631
63	NFLFE36063	1955	NFLFE46063	2542	NFLFE46063N06	2631
80	NFLFE36080	2083	NFLFE46080	2708	NFLFE46080N08	2811
100	NFLFE36100	2083	NFLFE46100	2708	NFLFE46100N10	2811
NS160L—150 kA at 380/415 Vac						
125	NFLFE36125	3276	NFLFE46125	4259	NFLFE46125N12	4418
160	NFLFE36160	3276	NFLFE46160	4259	NFLFE46160N16	4418
NS250L—150 kA at 380/415 Vac						
200	NFLFE36200	3570	NFLFE46200	4391	NFLFE46200N20	4689
250	NFLFE36250	4694	NFLFE46250	5773	NFLFE46250N25	6262
Cable Connection						
NS100L—150 kA at 380/415 Vac						
16	NFLLE36016	2005	NFLLE46016	2609	NFLLE46016N01	2698
25	NFLLE36025	2005	NFLLE46025	2609	NFLLE46025N02	2698
32	NFLLE36032	2005	NFLLE46032	2609	NFLLE46032N03	2698
40	NFLLE36040	2005	NFLLE46040	2609	NFLLE46040N04	2698
50	NFLLE36050	2005	NFLLE46050	2609	NFLLE46050N05	2698
63	NFLLE36063	2005	NFLLE46063	2609	NFLLE46063N06	2698
80	NFLLE36080	2133	NFLLE46080	2775	NFLLE46080N08	2878
100	NFLLE36100	2133	NFLLE46100	2775	NFLLE46100N10	2878
NS160L—150 kA at 380/415 Vac						
125	NFLLE36125	3426	NFLLE46125	4459	NFLLE46125N12	4618
160	NFLLE36160	3426	NFLLE46160	4459	NFLLE46160N16	4618
NS250L—150 kA at 380/415 Vac						
200	NFLLE36200	3720	NFLLE46200	4591	NFLLE46200N20	4889
250	NFLLE36250	4844	NFLLE46250	5973	NFLLE46250N25	6462

Continued on next page

Ratings and interrupting ratings: page 72

Cable range: pressure terminals are suitable for copper and aluminum cables:

- 100–160 A terminal:
1 cable: 1.5 to 95mm² Cu or Al
- 250 A terminal:
1 cable: 1.5 to 185mm² Cu or Al

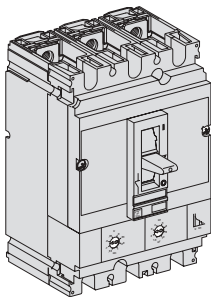
Other termination: page 80

Other trip units: page 78

Accessories: See page 82

Additional information:

- Catalog no. ABTED297054EN
- Installation Guide no. ABTED297054EN
- Data Sheet no. ABTED396051
- D-Fax no. 1001

Complete Device—Continued**COMPACT NS100/160/250NA Molded Case Switch – Non-Automatic**

Bus Bar Connection						
	2P		3P		4P	
Rating (A)	Catalog No.	List Price	Catalog No.	List Price	Catalog No.	List Price
NS100NA						
100	NFNFE26000S10	\$ 781	NFNFE36000S10	\$ 977	NFNFE46000S10	\$ 1305
NS160NA						
160	NFNFE26000S16	1098	NFNFE36000S16	1372	NFNFE46000S16	1820
NS250NA						
250	NFNFE26000S25	1336	NFNFE36000S25	1670	NFNFE46000S25	2138
Cable Connection						
NS100NA						
100	NFNLE26000S10	815	NFNLE36000S10	1027	NFNLE46000S10	1327
NS160NA						
160	NFNLE26000S16	1198	NFNLE36000S16	1522	NFNLE46000S16	2020
NS250NA						
250	NFNLE26000S25	1436	NFNLE36000S25	1820	NFNLE46000S25	2338

Cable range: pressure terminals are suitable for copper and aluminum cables:

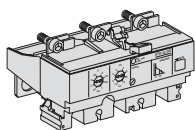
- 100–160 A terminal:
1 cable: 1.5 to 95mm² Cu or Al
- 250 A terminal:
1 cable: 1.5 to 185mm² Cu or Al

Other termination: page 80

Accessories: See page 82

Additional information:

- **Catalog no.** ABTED297054EN
- **Installation Guide no.** ABTED297054EN
- **Data Sheet no.** ABTED396051
- **D-Fax no.** 1001



Trip Unit (Replaceable by Field Services only)

Thermal-Magnetic Trip Unit TM16D to TM250D

	2P		3P		4P 3T		4P 4T	
Rating (A)	Catalog No.	List Price	Catalog No.	List Price	Catalog No.	List Price	Catalog No.	List Price
16	29025	\$ 223	29035	\$ 278	29045	\$ 362	29055	\$ 452
25	29024	223	29034	278	29044	362	29054	452
32	29027	223	29037	278	29047	362	29057	452
40	29023	223	29033	278	29043	362	29053	452
50	29026	223	29036	278	29046	362	29056	452
63	29022	223	29032	278	29042	362	29052	452
80 for NS100	29021	326	29031	406	29041	528	29051	631
100 for NS100	29020	326	29030	406	29040	528	29050	631
125	30421	466	30431	583	30441	758	30451	918
160 for NS160	30420	466	30430	583	30440	758	30450	918
200	31421	466	31431	583	31441	758	31451	1015
250	31420	1365	31430	1706	31440	2099	31450	2588

Thermal-Magnetic Trip Unit TM16G to TM63G

	Trip Function	Magnetic	3P 3T		4P 4T	
16	H56	63 A	29155	342	29165	501
25	H57	80 A	29154	342	29164	501
40	H57	80 A	29153	342	29163	501
63	H58	125 A	29152	342	29162	501

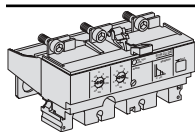
Magnetic Only Trip Unit MA2.5 to MA220

2.5	M59	6-14xIn	29125	357		
6.3	M60	6-14xIn	29124	357		
12.5	M61	6-14xIn	29123	357		
25	M62	6-14xIn	29122	357		
50	M63	6-14xIn	29121	357		
100	M64	6-14xIn	29120	357	29130	500
150	M52	8-13xIn	30500	357	30510	500
220	M53	8-13xIn	31500	499	31510	698

Molded Case Switch Trip Module NA250 — Non Automatic

250		29201	195	29202	273
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Continued on next page

**Electronic Trip Unit STR—SE (Standard Protection)**

	Rating	Trip Function	3P 3T		4P 3T, 4T, 3T+rN	
			Catalog No.	List Price	Catalog No.	List Price
STR22SE	40 A	E20	29072	\$ 822	29802	\$ 1069
STR22SE	100 A	E20	29070	822	29800	1069
STR22SE	160 A	E20	30470	822	30480	1069
STR22SE	250 A	E20	31470	1878	31480	2311

Electronic Trip Unit STR—ME (Motor Protection)

STR22ME	40 A	E40	29173	822		
STR22ME	50 A	E40	29172	822		
STR22ME	80 A	E40	29171	822		
STR22ME	100 A	E40	29170	822		
STR22ME	150 A	E40	30520	822		
STR22ME	220 A	E40	31520	1878		

SDTAM contactor opening module for STR22ME trip unit

110-240 Vac and Vdc	29424	273
24-48 Vac, 24-72 Vdc	29430	273

Electronic Trip Unit STR—GE (Protection of systems supplied by generators)

STR22GE	40 A (NS100)	E30	29076	822	29086	1069
STR22GE	100 A (NS100)	E30	29075	822	29085	1069
STR22GE	160 A (NS160/250)	E30	30475	822	30485	1069
STR22GE	250 A (NS250)	E30	31475	1878	31485	2311

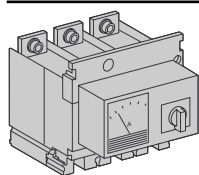
VIGI™ Module or Ammeter Module**VIGI Module**

ME for NS100/160 200-400 Vac	0.3 A	VA	29212	1145	29213	1158
MH for NS100/160 220-440 Vac	0.03 A-10 A	VB	29210	1635	29211	1654
MH for NS250 220-440 Vac	0.03 A-10 A	VB	31535	2445	31536	2692
MH for NS100/160 440-550 Vac	0.03 A-10 A	VC	29215	1635	29216	1654
MH for NS250 440-550 Vac	0.03 A-10 A	VC	31533	2445	31534	2692
Connection of a 4-pole VIGI on a 3-pole circuit breaker					29214	43.10

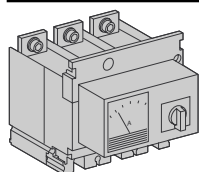
Insulation Monitoring Module

Operation is identical to that of a VIGI module but without circuit breaker tripping

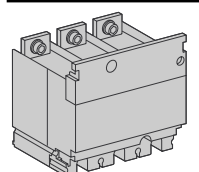
For NS100/160/NS250	VF	29459	1615	29460	1666
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Ammeter Module

100 A	PA	29455	989	29456	1094
160 A	PB	30555	989	30556	1094
250 A	PC	31565	989	31566	1094

Ammeter Module with I Max

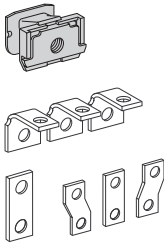
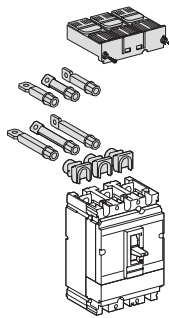
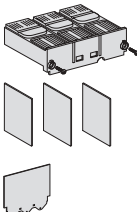
100 A	PL	34849	911		
160 A	PM	34850	911		
250 A	PN	34851	911		

Current Transformer Module

100 A	PF	29457	651	29458	704
160 A	PG	30557	651	30558	704
250 A	PH	31567	651	31568	704

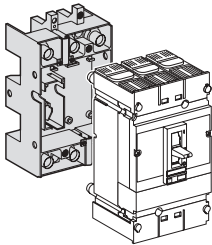
Installation and Connection

N	F	N	L	E	3	6	0	1	6
									Termination No.

				Term. No.	Catalog No.	List Price
Bus Bar Connection						
	Connecting Nuts and Bolts			F		
	Twelve M6 nuts and bolts for NS100				29234	\$ 79
	Twelve M8 nuts and bolts for NS160/250				30554	79
	Terminal Extensions — Supplied with 2 (or 3) Phase Barriers					
	Angular terminal	set of 3			29261	46
		set of 4			29262	61
	Straight terminal extensions	set of 3			29263	46
		set of 4			29264	61
	Spreaders	3P			31563	43.10
		4P			31564	59
Cable Connection						
	100–160 A Lugs (1) 1.5 to 95mm² Cu or Al					
	Field-installable	One side	3P		29242	25.20
			4P		29243	33.60
	Factory-mounted	Both sides	3P	L		50
			4P	L		67
		Line side only	3P	M		25.20
			4P	M		33.60
		Load side only	3P	P		25.20
			4P	P		33.60
	250 A Lugs (1) 95 to 185mm² Cu or Al					
	Field-installable	One side	3P		29259	75
			4P		29260	100
	Factory-mounted	Both sides	3P	L		150
			4P	L		200
		Line side only	3P	M		75
			4P	M		100
		Load side only	3P	P		75
			4P	P		100
Voltage takeoffs for 250 A lugs			set of 2	29348	18.90	
Distribution Lugs (6) 35mm² Cu or Al (Field-installable Only)						
	Set of 3 lugs with phase barriers			29248	189	
	Set of 4 lugs with phase barriers			29249	247	
Rear Connection = Bus Bar Connection + Rear Connection						
	Short Rear Connection Kit			3P	S	29237 240
				4P	S	29238 303
	Consisting of:	Kit 3P	Short rear connections (set of two)		29235 (3)	56 ea.
			Short terminal covers (set of two)		29321	72
		Kit 4P	Short rear connections (set of two)		29235 (4)	56 ea.
			Short terminal covers (set of two)		29322	79
	Mixed Rear Connection Kit			3P		29239 254
				4P		29240 331
	Consisting of:	Kit 3P	Short rear connections (set of two)		29235 (2)	56 ea.
			Long rear connection (set of two)		29236	70
			Short terminal covers (set of two)		29321	72
		Kit 4P	Short rear connections (set of two)		29235 (2)	56 ea.
			Long rear connections (set of two)		29236 (2)	70 ea.
			Short terminal covers (set of two)		29322	79
Connection Accessories						
	Terminal Covers		Short (1 pair) (Cable connection)	3P	29321	72
				4P	29322	79
			Long (1 pair) (Bus connection)	3P	29323	81
				4P	29324	86
	Phase Barriers			Set of 6	29329	34.70
	Two Insulating Screens (fixed circuit breaker)			3P	29330	35.70
4P				29331	35.70	

Continued on next page

Installation and Connection—Continued

			Term. No	Catalog No.	List Price	
Plug-in Mounting = Bus Bar Connection + Plug-in Kit						
	Kit for COMPACT Circuit Breaker (Stationary and Moving Part)		2P (3P frame)	N	29288	\$ 348
			3P	N	29289	425
			4P	N	29290	567
	Stationary Part Consisting of:	Plug-in base	2P		29265	186
			3P		29266	232
			4P		29267	336
	Moving Part① Consisting of:	Safety trip interlock			29270	26.30
		Short terminal covers	3P		29321	72
			4P		29322	79
		Power connections	2P		29268 (2)	31.50 ea.
			3P		29268 (3)	31.50 ea.
			4P		29268 (4)	31.50 ea.
		Kit for VIGICOMPACT™ Circuit Breaker (Stationary and Moving Part)		3P	N	29291
	4P			N	29292	762
	Stationary Part Consisting of:	Plug-in base	3P		29266	232
4P				29267	336	
Moving Part① Consisting of:	Safety trip interlock			29270	26.30	
	Short terminal covers	3P		29321	72	
		4P		29322	79	
	Power connections	3P		29269 (3)	82 ea.	
		4P		29269 (4)	82 ea.	

Drawout Mounting = Bus Bar Connection + Drawout Kit						
	Kit for COMPACT Circuit Breaker (Stationary and Moving Part)		2P (3P frame)	D	29298	868
3P	D	29299	945			
4P	D	29300	1087			
Stationary Part Consisting of:	Plug-in base	2P		29265	186	
3P		29266	232			
4P		29267	336			
	Fixed part of chassis	2P/3P/4P		29282	391	
Moving Part① Consisting of:	Safety trip interlock			29270	26.30	
Short terminal covers	3P		29321	72		
4P		29322	79			
Power connections	2P		29268 (2)	31.50 ea.		
3P		29268 (3)	31.50 ea.			
4P		29268 (4)	31.50 ea.			
	Moving part of chassis	2P/3P/4P		29283	130	
Kit for VIGICOMPACT Circuit Breaker (Stationary and Moving Part)		3P	D	29301	1097	
4P	D	29302	1283			
Stationary Part Consisting of:	Plug-in base	3P		29266	232	
4P		29267	336			
	Fixed part of chassis	3P/4P		29282	391	
Moving Part① Consisting of:	Safety trip interlock			29270	26.30	
Short terminal covers	3P		29321	72		
4P		29322	79			
Power connections	3P		29269 (3)	82 ea.		
4P		29269 (4)	82 ea.			
	Moving part of chassis	3P/4P		29283	130	
Plug-in and Drawout Accessories						
	Secondary Disconnecting Blocks	Fixed part	9-wire connector	29273	63	
Moving part	9-wire connector	29274	39.90			
Support for 2 moving connectors	29275	22.10				
Plug-In Base Accessories	Long insulated terminals	3P	29276	53		
4P	29277	67				
	Two shutters for plug-in base		29271	31.50		
Chassis Accessories	Extended escutcheon for toggle		29284	51		
Extended escutcheon for VIGI module		29285	53			
Locking device (key lock is not included)		29286	109			
Two position indicating switches (connected/disconnected)		29287	138			

OF1
SD
MN/MX

OF2
SDE
MT

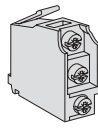
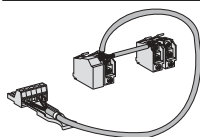
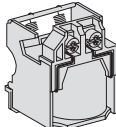
① Termination number is HJ00 for moving part only.

① Termination number is HJ00 for moving part only.

Accessories

- For factory-installed accessories complete the circuit breaker catalog number by inserting the **option number** in the appropriate block.
- For field-installable accessories order the 5-digit catalog number.

N₁F₁N₁L₁E₁3₁6₁0₁6₁A₁B₁S₁A₁M₁A₁
Options

Electrical Accessories	Auxiliary Switch (SPDT Type)		Volts (V)	Option No.	Catalog No.	List Price
	Standard	One auxiliary switch (OF)		AA	29450	\$ 198
		Two auxiliary switches (OF)		AB	29450 (2)	198 ea.
		Alarm switch (SD)		BC ①	29450	198
		Overcurrent trip switch (SDE)		BD ①		226
		Consisting of:	OF switch		29450	198
			SDE adapter ②		29451	27.30
	Low Level	One auxiliary switch (OF)		AE	29452	248
		Two auxiliary switches (OF)		AF	29452 (2)	248 ea.
		Alarm switch (SD)		BH ③	29452	248
		Overcurrent trip switch (SDE)		BJ ③		275
		Consisting of:	OF switch		29452	248
			SDE adapter ①		29451	27.30
Auxiliary, Alarm and Overcurrent Trip Switches with Communication Module						
	Low level OF+SD+SDE				29453	674
Shunt Trip and Undervoltage Trip						
	MX (shunt trip)	AC 50/60 Hz	24	SK	29384	478
			48	SL	29385	478
			110/130	SA	29386	478
			208/277	SD	29387	478
			380/480	SH	29388	478
			525/600	SJ	29389	478
		DC	12	SN	29382	478
			24	SO	29390	478
			30	SU	29391	478
			48	SP	29392	478
			60	SV	29383	478
			125	SR	29393	478
			250	SS	29394	478
	MN (undervoltage trip)	AC 50/60 Hz	24	UK	29404	478
			48	UL	29405	478
			110/130	UA	29406	478
			208/277	UD	29407	478
			380/480	UH	29408	478
			525/600	UJ	29409	478
		DC	12	UN	29402	478
			24	UO	29410	478
			30	UU	29411	478
			48	UP	29412	478
			60	UV	29403	478
			125	UR	29413	478
			250	US	29414	478
	MN 48 Vac with time delay				29420	847
	Consisting of: MN 48 Vdc				29412	478
	Delay unit 48 V 50/60 Hz				29426	370
	MN 220/240 Vac with time delay				29422	814
	Consisting of: MN 250 Vdc				29414	478
	Delay unit 220/240 V 50/60 Hz				29427	336
Wiring Harness						
9-wire disconnecting harness					29272	151

Continued on next page

① BE = BC + BD

② Not needed with STR trip unit. SDE adapter provided with motor operator.

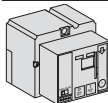
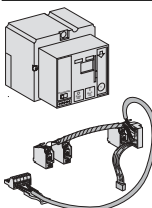
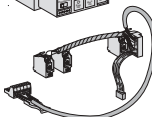
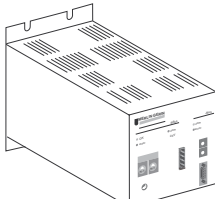
③ BK = BH + BJ

COMPACT® NS100/160/250 Circuit Breakers

Accessories—Continued

- For factory-installed accessories complete the circuit breaker catalog number by inserting the **option number** in the appropriate block.
- For field-installable accessories order the 5-digit catalog number.

N₁F₁N₁L₁E₁3₁6₁0₁1₁6₁A₁B₁S₁A₁M₁A₁
Options

Electrical Accessories	Motor Operator with SDE Adapter			Volts (V)	Option No.	Catalog No.	List Price
	MT150 for NS100/160	AC 50/60 Hz	48/60	ML	29440	\$ 774	
			110/130	MA	29433	774	
			208/277	MD	29434	774	
			380/480	MH	29435	774	
		DC	24/30	MO	29436	774	
			48/60	MP	29437	774	
			110/130	MR	29438	774	
			250	MS	29439	774	
	MT250 for NS250	AC 50/60 Hz	48/60	ML	31548	2082	
			110/130	MA	31540	2082	
			208/277	MD	31541	2082	
			380/480	MH	31542	2082	
		DC	24/30	MO	31543	2082	
			48/60	MP	31544	2082	
			110/130	MR	31545	2082	
			250	MS	31546	2082	
Locking device with Ronis key lock					29449	156	
Wiring Harness							
9-wire disconnecting harness					29272	151	
Motor Operator with Communication and Auxiliary Switches Modules and SDE Adapter							
	MT150 for MS100/160	AC 50/60 Hz	220/240		29441	1782	
	MT250 for NS250	AC 50/60 Hz	220/240		31549	2528	
	Mini test kit (batteries not supplied)					43362	538
	Calibration test kit					120	55391
							
	Communication Module						
	Data Concentrator						
	DC150	AC 50/60 Hz and DC	110/240 115/125		50823	4150	

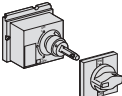
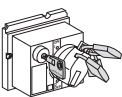
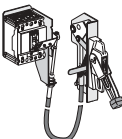
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Accessories—Continued

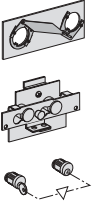
- For factory-installed accessories complete the circuit breaker catalog number by inserting the **option number** in the appropriate block.
- For field-installable accessories order the 5-digit catalog number.

N F I N I L E 3 6 0 1 6 A B S A M A R D 1 2
Options ☐

Operating Handles

Directly Mounted		Option No.	Catalog No.	List Price
	Standard black handle	RD12	29337	\$ 150
	Red handle on yellow bezel	RD22	29339	156
	MCC conversion accessory		29341	63
	CNOMO conversion accessory (not UL Listed)		29342	103
Door Mounted				
	Standard black handle		29338	255
	Red handle on yellow bezel		29340	266
	Telescopic handle for drawout mounting		29343	328
Accessories				
	Key lock adapter		29344	38.90
	Key locks ①	Ronis 1351.500	41940	97
		Profalux KS5 B24 D4Z	42888	97
	Indication	One early-break switch	29345	80
	Auxiliary switch	Two early-make switches	29346	119
Cable Operating Handle and A1 Handle				
	3P operating mechanism	36/914	9422CSF30	134
	cable length (in./mm)	90/1524	9422CSF50	142
		120/3048	9422CSF10	162
	A1 painted handle (order separately)		9422A1	66
			CP1 Discount	

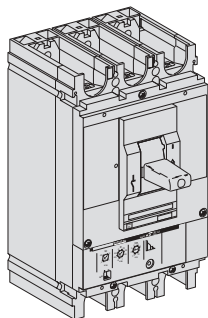
Locks, Interlocking

Handle Padlocking Device				
	Removable (lock OFF or ON)		29370	33.60
	Fixed (lock OFF or ON)		29371	51
	Fixed (lock OFF only)		NFPAF	81
Interlocking				
	Mechanical for circuit breakers with rotary operating handles		29369	329
	Mechanical for circuit breakers with toggles		29354	329
	Key lock type (2 locks, 1 key)	Ronis 1351.500	41950	122
		Profalux KS5 B24 D4Z	42878	122

Installation Accessories

Front-panel Escutcheons				
	Toggle		29315	31.50
	VIGI™ module		29316	29.40
	Rotary operating handle, motor operator or extended escutcheon		29317	42
	VIGI module or ammeter (IP405)		29318	42
Handle Rubber Boot				
			29319	90
Sealing Accessories			29375	29.40
Spare Parts				
10 Spare Handle Extensions			29313	93
100 Identification Labels			29314	79

① Will need the key lock adapter above (Catalog No. 29344) for both Ronis and Profalux key lock installation.

IEC 947-2 Rated COMPACT NS400/630 Circuit Breakers**Complete Device****COMPACT NS400/630N Circuit Breaker with STR23SE Trip Unit—45 kA at 380/415 Vac**

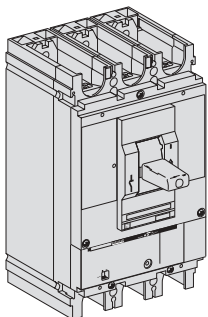
Bus Bar Connection					
	Rating (A)	3P		4P	
		Catalog No.	List Price	Catalog No.	List Price
NS400N	150	NJNFE36150E20	\$ 3039	NJNFE46150E20	\$ 3768
	250	NJNFE36250E20	3039	NJNFE46250E20	3768
	400	NJNFE36400E20	3039	NJNFE46400E20	3768
NS630N	630	NJNFE36630E20	5026	NJNFE46630E20	5931
Cable Connection					
NS400N	150	NJNLE36150E20	3228	NJNLE46150E20	4020
	250	NJNLE36250E20	3228	NJNLE46250E20	4020
	400	NJNLE36400E20	3228	NJNLE46400E20	4020
NS630N	630	NJNLE36630E20	5278	NJNLE46630E20	6267

COMPACT NS400/630H Circuit Breaker with STR23SE Trip Unit—70 kA at 380/415 Vac

Bus Bar Connection					
NS400H	150	NJHFE36150E20	5190	NJHFE46150E20	6539
	250	NJHFE36250E20	5190	NJHFE46250E20	6539
	400	NJHFE36400E20	5190	NJHFE46400E20	6539
NS630H	630	NJHFE36630E20	5376	NJHFE46630E20	6774
Cable Connection					
NS400H	150	NJHLE36150E20	5379	NJHLE46150E20	6791
	250	NJHLE36250E20	5379	NJHLE46250E20	6791
	400	NJHLE36400E20	5379	NJHLE46400E20	6791
NS630H	630	NJHLE36630E20	5565	NJHLE46630E20	7026

COMPACT NS400/630L Circuit Breaker with STR23SE Trip Unit—150 kA at 380/415 Vac

Bus Bar Connection					
NS400L	150	NJLFE36150E20	6102	NJLFE46150E20	7505
	250	NJLFE36250E20	6102	NJLFE46250E20	7505
	400	NJLFE36400E20	6102	NJLFE46400E20	7505
NS630L	630	NJLFE36630E20	8365	NJLFE46630E20	10289
Cable Connection					
NS400L	150	NJLLE36150E20	6291	NJLLE46150E20	7757
	250	NJLLE36250E20	6291	NJLLE46250E20	7757
	400	NJLLE36400E20	6291	NJLLE46400E20	7757
NS630L	630	NJLLE36630E20	8554	NJLLE46630E20	10541

**COMPACT NS400/630NA Molded Case Switch**

Bus Bar Connection					
NS400NA	400	NJNFE36000S40	2796	NJNFE46000S40	\$ 3523
NS630NA	630	NJNFE36000S63	3569	NJNFE46000S63	4283
Cable Connection					
NS400NA	400	NJNLE36000S40	2985	NJNLE46000S40	3985
NS630NA	630	NJNLE36000S63	3821	NJNLE46000S63	4619

Continued on next page

Ratings and interrupting ratings: page 73
 Cable range: pressure terminals are suitable for copper and aluminum cables:

- 400 A terminal:
1 cable: 35 to 300mm² Cu or Al
- 630 A terminal:
2 cables: 85 to 240mm² Cu or Al

Other termination: page 89

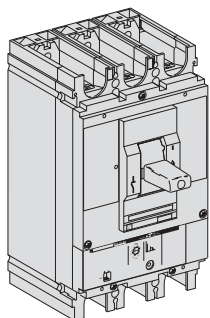
Other trip units: page 87

Accessories: page 91

Additional information:

- Catalog no. ABTED297054EN
- Installation Guide no. ABTED297054EN
- Data Sheet no. ABTED396041
- D-Fax no. 2384

Complete Device—continued

**COMPACT NS400/630H Circuit Breaker for DC Application—Magnetic Only**

Bus Bar Connection						
	Rating (A)	Type	Magnetic (A)	Trip Function	Catalog No.	List Price
NS400H	400	MP1	800–1600	D10	NJHFE36400D10	\$ 4775
		MP2	1250–2500	D32	NJHFE36400D32	4775
NS630H	630	MP1	800–1600	D10	NJHFE36630D10	4946
		MP2	1250–2500	D32	NJHFE36630D32	4946
		MP3	2000–4000	D36	NJHFE36630D36	4946
Cable Connection						
NS400H	400	MP1	800–1600	D10	NJHLE36400D10	4964
		MP2	1250–2500	D32	NJHLE36400D32	4964
NS630H	630	MP1	800–1600	D10	NJHLE36630D10	5198
		MP2	1250–2500	D32	NJHLE36630D32	5198
		MP3	2000–4000	D36	NJHLE36630D36	5198

COMPACT NS400/630H Circuit Breaker for Motor Circuit Protection—Magnetic Only

Bus Bar Connection						
NS400H	400	MA320	2016–4000	M36	NJHFE36400M36	\$ 3522
NS400L	400	MA320	2016–4000	M36	NJLFE36400M36	4207
NS630H	630	MA500	3150–6250	M64	NJHFE36630M64	5836
NS630L	630	MA500	3150–6250	M64	NJLFE36630M64	6972
Cable Connection						
NS400H	400	MA320	2016–4000	M36	NJHLE36400M36	3711
NS400L	400	MA320	2016–4000	M36	NJLLE36400M36	4396
NS630H	630	MA500	3150–6250	M64	NJHLE36630M64	6088
NS630L	630	MA500	3150–6250	M64	NJLLE36630M64	7224

**COMPACT NS400N Circuit Breakers – 1000 Vac—10 kA at 1150 Vac**

	Rating (A)	3P	List Price
Bus Bar Connection			
NS400N with STR23SP Trip Unit	150	NJNFE1150E20	\$ 3192
	250	NJNFE1250E20	3192
	400	NJNFE1400E20	3554
Cable Connection			
NS400N with STR23SP Trip Unit	150	NJNLE1150E20	\$ 3381
	250	NJNLE1250E20	3381
	400	NJNLE1400E20	3806

Ratings and interrupting ratings: page 73
Cable range: pressure terminals are suitable for copper and aluminum cables:

- 400 A terminal:
1 cable: 35 to 300mm² Cu or Al
- 630 A terminal:
2 cable: 85 to 240mm² Cu or Al

Other termination: page 89

Other trip units: page 87

Accessories: page 91

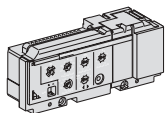
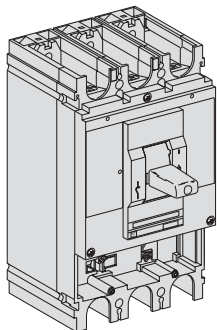
Additional information:

■ **Catalog no.** ABTED297054EN

■ **Installation Guide no.** ABTED297054EN

■ **Data Sheet no.** ABTED396041, ABTED397078 (1000 Vac)

■ **D-Fax no.** 2384, 998 (1000 Vac)



COMPACT NS400/630 Circuit Breaker Basic Frame

	3P		4P	
Rating (A)	Catalog No.	List Price	Catalog No.	List Price
NS400/630N—Bus Bar Connection				
150	NJNFE36150F40	\$ 1823	NJNFE46150F40	\$ 2553
250	NJNFE36250F40	1823	NJNFE46250F40	2553
400	NJNFE36400F40	1823	NJNFE46400F40	2553
630	NJNFE36630F63	3810	NJNFE46630F63	4716
NS400/630H—Bus Bar Connection				
150	NJHFE36150F40	3974	NJHFE46150F40	5324
250	NJHFE36250F40	3974	NJHFE46250F40	5324
400	NJHFE36400F40	3974	NJHFE46400F40	5324
630	NJHFE36630F63	4160	NJHFE46630F63	5558
NS400/630L—Bus Bar Connection				
150	NJLFE36150F40	4886	NJLFE46150F40	6290
250	NJLFE36250F40	4886	NJLFE46250F40	6290
400	NJLFE36400F40	4886	NJLFE46400F40	6290
630	NJLFE36630F63	7149	NJLFE46630F63	9073

Electronic Trip Unit (Field Replaceable)

	Trip Function	Catalog No.	List Price
Long-time and Instantaneous Protection			
STR23SE	E20	32420	\$ 1216
Long-time, Short-time, Instantaneous Protection and Options			
STR53UE-F	E53	32424	2101
STR53UE-FT	E54	32425	2986
STR53UE-FI	E58	32426	3075
STR53UE-FTI	E59	32427	3961
Communication wiring		32441	72
Replacement battery for STR53UE		32434	280
Motor Circuit Protection			
STR43ME-F	E43	32430	1776
Optional STDAM (110/240 Vac)		29424	273
Optional STDAM (24/48 Vdc)		29430	273
STR43ME-FI	E48	32431	2750
Optional STDAM (110/240 Vac)		29424	273
Optional STDAM (24/48 Vdc)		29430	273
Communication wiring		32441	72
Replacement battery for STR43ME		32434	280

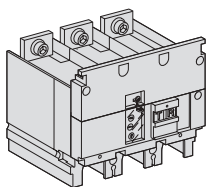
Summary of options:

F: Fault indicators

T: Residual type ground fault protection

I: Ammeter

Continued on next page



VIGI™ Module or Ammeter Module

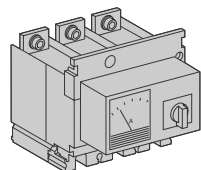
			3P		4P	
Rating		Trip Function	Catalog No.	List Price	Catalog No.	List Price
VIGI Module						
MB 220 to 440 Vac	0.3-30 A	VD	32455	\$ 2903	32456	\$ 3131
MB 440 to 550 Vac	0.3-30 A	VE	32453	2903	32454	3131
Connection for a 4P VIGI on a 3P circuit breaker					32457	46.20

Insulating Monitoring Module

Operation is identical to that of a VIGI module but without circuit breaker tripping

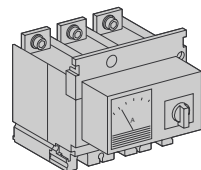
220 to 440 Vac		VF	32659	2875	32660	3073
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Ammeter Module



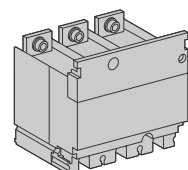
400 A	PD	32655	1350	32656	1450
630 A	PE	32855	1350	32856	1450

Ammeter Module with I Max



400 A	PJ	34852	1350		
630 A	PK	34853	1350		

Current Transformer Module



400 A	PP	32657	975	32658	1025
630 A	PQ	32857	975	32858	1025

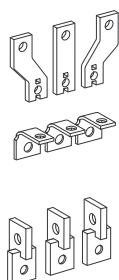
Installation and Connection

- For factory-installed connection accessories complete the circuit breaker catalog number by inserting the **termination numbers** in the appropriate block.
- For field-installable accessories order the 5-digit catalog number.

N J N L E 3 6 4 0 0 E 2 0
Termination No.

			Term. No.	Catalog No.	List Price
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Bus Bar Connection



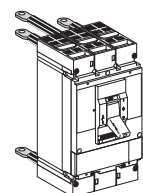
Bus Bar Connection Hardware		3P (three per set)	36966	\$ 15.80
		4P (four per set)	36967	21
Front Connection				
Distance between poles of all COMPACT and VIGICOMPACT NS400/630/N/H/L circuit breakers is 1.8 in./45mm				
A set of spreaders is available for connection to extend this distance to 2.1 in./52.5mm or 2.8 in./70mm				
	2.1 in./52.5mm	3P	32490	101
		4P	32491	134
	2.8 in./70mm	3P	32492	194
		4P	32493	259
Terminal Extensions				
	angular terminals	set of 3	32484	101
		set of 4	32485	134
	edgewise pads	set of 3	32486	207
		set of 4	32487	277

Cable Connection



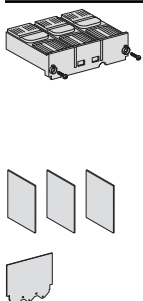
400 A Lugs (1) 2/0 AWG to 600 kcmil Cu or 500 kcmil Al/35 to 300mm² Cu/Al					
Field-installable	One side	3P		32479	\$ 95
		4P		32480	126
Factory-mounted	Both sides	3P	L		189
		4P	L		252
	Line side only	3P	M		95
		4P	M		126
	Load side only	3P	P		95
		4P	P		126
630 A Lugs (2) 2/0 AWG to 500 kcmil Cu/Al/35 to 240mm² Cu/Al					
Field-installable	One side	3P		32481	126
		4P		32482	168
Factory-mounted	Both sides	3P	L		252
		4P	L		336
	Line side only	3P	M		126
		4P	M		168
	Load side only	3P	P		126
		4P	P		168
Voltage Take Offs for 400 and 630 A Lugs (Set of Two)				29348	18.90

Rear Connection = Bus Bar Connection + Rear Connection



Mixed Rear Connection Kit		3P	S	32477	565
		4P	S	32478	747
Consisting of:	Kit 3P	Short rear connections		32475 (2)	146 ea.
		Long rear connections		32476	174
		Short terminal covers		32562	99
	Kit 4P	Short rear connections		32475 (2)	146 ea.
		Long rear connections		32476 (2)	174 ea.
		Short terminal covers		32563	107

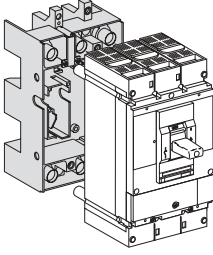
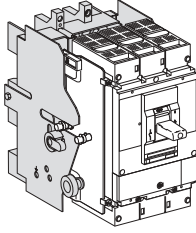
Connection Accessories

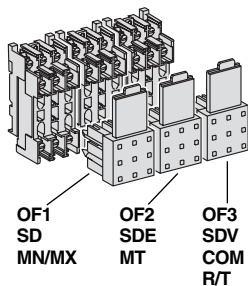


Terminal Shields	Short (1 pair)	3P	32562	99
		4P	32563	107
	Long (1 pair)	3P	32564	130
		4P	32565	146
	For spreaders (1 pair)	3P	32572	146
		4P	32573	162
Phase Barriers		Set of 6	32570	48.30
Two Insulating Screens (fixed breaker)	2.1 in./52.5mm pitch	3P	32576	36.80
		4P	32577	36.80
	2.8 in./70mm pitch	3P	32578	43.10
		4P	32579	43.10

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Installation and Connection—Continued

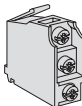
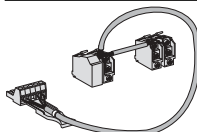
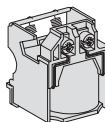
			Term. No.	Catalog No.	List Price
Plug-in Mounting = Bus Bar Connection + Plug-in Kit					
	Kit for COMPACT Circuit Breaker (Stationary and Moving Part)		3P	N	32538 \$ 1029
			4P	N	32539 1268
	Consisting of:				
	Stationary Part				
	Plug-in base	3P		32516	711
		4P		32517	879
	Moving Part HJ00				
	Safety trip interlock			32520	30.50
	Short terminal covers	3P		32562	99
		4P		32563	107
	Kit for VIGICompact™ Circuit Breaker (Stationary and Moving Part)		3P	N	32540 1246
			4P	N	32541 1558
	Consisting of:				
	Stationary Part				
	Plug-in base	3P		32516	711
		4P		32517	879
	Moving part HJ00				
	Safety trip interlock			32520	30.50
	Short terminal covers	3P		32562	99
		4P		32563	107
	Kit for COMPACT Circuit Breaker (Stationary and Moving Part)		3P	D	32542 \$ 1645
			4P	D	32543 1885
	Consisting of:				
	Stationary Part				
	Plug-in base	3P		32516	711
		4P		32517	879
	Fixed part of chassis	2P/3P/4P		32532	462
	Moving Part HJ00				
	Safety trip interlock			32520	30.50
	Short terminal covers	3P		32562	99
	Kit for VIGICompact™ Circuit Breaker		3P	D	32544 1863
			4P	D	32545 2175
	Consisting of:				
	Stationary Part				
	Plug-in base	3P		32516	711
		4P		32517	879
	Fixed part of chassis	2P/3P/4P		32532	462
	Moving part HJ00				
	Safety trip interlock			32520	30.50
	Short terminal covers	3P		32562	99
	Plug-in and Chassis Accessories				
	Secondary Disconnecting Blocks				
	Fixed part	9-wire connector		29273	63
	Moving part	9-wire connector		32523	39.90
		Support for 3 moving connectors		32525	28.40
	Plug-In Base Accessories				
	Two IP4 shutters for plug-in base			32521	54
	Long insulated terminals	3P		32526	69
		4P		32527	89
	Chassis Accessories				
	Extended escutcheon for toggle			32534	69
	Extended escutcheon for VIGI module			29285	53
	Locking devices (not included)			29286	109
	Two position indicating switches (connected/disconnected)			29287	138



Accessories

- For factory-installed accessories complete the circuit breaker catalog number by inserting the **option number** in the appropriate block.
- For field-installable accessories order the 5-digit catalog number.

N₁J₁N₁L₁E₁3₁6₁4₁0₁0₁E₁2₁0₁**A₁B₁S₁A₁**
Options

			Volts (V)	Option No.	Catalog No.	List Price		
Electrical Accessories	Auxiliary Switch (SPDT Type)							
		Standard	One auxiliary switch (OF)	AA	29450	\$ 198		
			Two auxiliary switches (OF)	AB	29450 (2)	198 ea.		
			Three auxiliary switches (OF)	AC	29450 (3)	198 ea.		
			Alarm switch (SD)	BC ①	29450	198		
			Overcurrent trip switch (SDE)	BD ①	29450	198		
		Low Level	One auxiliary switch (OF)	AE	29452	248		
		Two auxiliary switches (OF)	AF	29452 (2)	248 ea.			
		Three auxiliary switches (OF)	AG	29452 (3)	248 ea.			
		Alarm switch (SD)	BH ②	29452	248			
		Overcurrent trip switch (SDE)	BJ ②	29452	248			
	Auxiliary, Alarm and Overcurrent Trip Switches with Communication Module							
		Low level	OF + SD + SDE		32551	674		
	Shunt trip and Undervoltage Trip							
	MX (Shunt trip)	AC 50/60 Hz	24	SK	29384	478		
			48	SL	29385	478		
			110/130	SA	29386	478		
			208/277	SD	29387	478		
			380/480	SH	29388	478		
			525/600	SJ	29389	478		
		DC	12	SN	29382	478		
			24	SO	29390	478		
			30	SU	29391	478		
			48	SP	29392	478		
			60	SV	29383	478		
			125	SR	29393	478		
			250	SS	29394	478		
			MN (Undervoltage trip)	AC 50/60 Hz	24	UK	29404	478
					48	UL	29405	478
					110/130	UA	29406	478
					208/277	UD	29407	478
					380/480	UH	29408	478
	525/600	UJ		29409	478			
	DC	12		UN	29402	478		
		24		UO	29410	478		
		30		UU	29411	478		
		48		UP	29412	478		
		60	UV	29403	478			
		125	UR	29413	478			
		250	US	29414	478			
	MN 48 Vac with time delay					29420	847	
	Consisting of:		MN 48 Vdc		29412	478		
		Delay unit 48 V 50/60 Hz		29426	370			
MN 220/240 Vac with time delay					29422	814		
Consisting of:		MN 250 Vdc		29414	478			
		Delay unit 220/240 V 50/60 Hz		29427	336			
Wiring Harness								
9-wire disconnecting harness					29272	151		

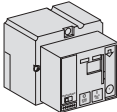
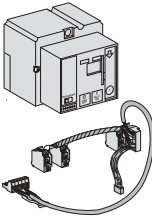
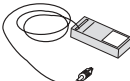
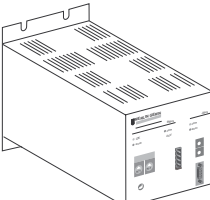
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① BE = BC + BD
② BK = BH + BJ

Accessories—Continued

- For factory-installed accessories complete the circuit breaker catalog number by inserting the **option number** in the appropriate block.
- For field-installable accessories order the 5-digit catalog number.

N₁J₁N₁L₁E₁3₁6₁4₁0₁0₁E₁2₁0₁A₁B₁S₁A₁M₁A₁
Options —

				Voltage (V)	Option No.	Catalog No.	List Price
Electrical Accessories	Motor Operator with SDE Adapter						
		MT400 for NS400	AC 50/60 Hz	48 /60	ML	32639	\$ 2263
				110/130	MA	32640	2263
				208/277	MD	32641	2263
				380/415	MF	32642	2263
				440/480	MH	32647	2263
			DC	24/30	MO	32643	2363
				48/60	MP	32644	2363
				110/130	MR	32645	2363
				250	MS	32646	2363
		MT630 for NS630	AC 50/60 Hz	48/60	ML	32839	2263
				110/130	MA	32840	2263
				208/277	MD	32841	2263
				380/415	MF	32842	2263
				440/480	MH	32847	2263
			DC	24/30	MO	32843	2363
				48/60	MP	32844	2363
				110/130	MR	32845	2363
				250	MS	32846	2363
	Locking device with Ronis key lock (not included)					32649	38.90
	Operations counter					32648	150
	Wiring Harness						
	9-wire disconnecting harness					29272	151
	Motor Operators with Communication and Auxiliary Switches Modules						
		MT400 for NS400	AC 50/60 Hz	220/240		32652	3749
		MT630 for NS630	AC 50/60 Hz	220/240		32848	3749
Test Kits		Mini test kit (battery not supplied)				43362	538
		Portable test kit				55391	9961
Communication Module	Data Concentrator						
		DC150	AC 50/60 Hz and DC	110/240 115/125		50323	4150

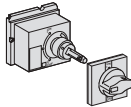
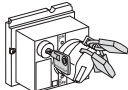
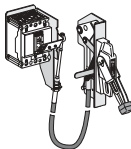
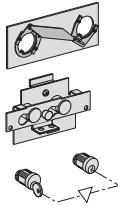
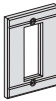
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COMPACT® NS400/630 Circuit Breakers

Accessories—Continued

- For factory-installed accessories complete the circuit breaker catalog number by inserting the **option number** in the appropriate block.
- For field-installable accessories order the 5-digit catalog number.

N J N L E 3 6 4 0 0 E 2 0 A B S A M A R D 1 2
Options —

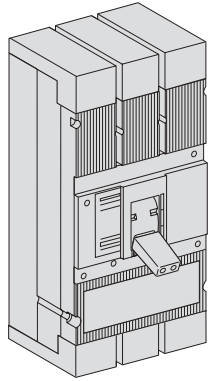
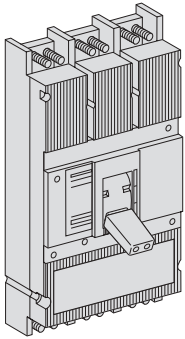
			Option No.	Catalog No.	List Price	
Operating Handles	Direct Mounted					
		Standard black handle		RD12	32597	\$ 244
		Red handle on yellow bezel		RD22	32599	271
		MCC conversion accessory			32606	68
		CNOMO conversion accessory			32602	129
	Door Mounted					
		Standard black handle		RE12	32598	371
		Red handle on yellow bezel		RE22	32600	398
		Telescopic handle for drawout mounting		RT12	32603	411
	Accessories					
		Key lock adapter			32604	38.90
		Key locks①	Ronis 1351.500		41940	97
			Profalux KS5 B24 D4Z		42888	97
		Indication auxiliary switch	One early-break switch		32605	80
	Two early-make switches		29346	119		
Cable Operating Mechanism and A1 Handle						
	3P operating mechanism cable length (in./mm)	36/914	CP1 Discount	9422CSJ30	227	
		90/1524	CP1 Discount	9422CSJ50	235	
		120/3048	CP1 Discount	9422CSJ10	255	
	A1 painted handle (order separately)		CP1 Discount	9422A1	66	
	Locks, Interlocking	Handle Padlocking Device				
Removable (lock OFF or ON)			29370	33.60		
Fixed (lock OFF or ON)			32631	81		
Fixed (lock OFF only)			NJPAF	81		
Interlocking (Not UL Listed)						
		Mechanical for circuit breakers with rotary operating handles			32621	329
		Mechanical for circuit breakers with toggles			32614	329
	Keylocktype (2 locks, 1 key)	Ronis		41950	122	
		Profalux		42878	122	
	Installation Accessories					
	Front-panel Escutcheons					
	Toggle			32556	36.80	
	Rotary operating handle, motor operator or extended escutcheon			32558	49.40	
	VIGI module			29316	29.40	
	VIGI module or ammeter (IP405)			29318	42	
Handle Rubber Boot						
				32560	114	
Sealing Accessories				29375	29.40	
Spare Parts	Spare Extended Handles			32553	22.10	
	100 Identification Labels			29314	79	

^① Will need the key lock adapter above (Catalog No. 32604) for both Ronis and Profalux key lock installation.

COMPACT® C801/1001/1251 Circuit Breakers

IEC 947-2 Rated COMPACT C Circuit Breakers

Complete Device



COMPACT C801/1001/1251 Circuit Breaker with STR25DE Trip Unit

Bus Bar Connection					
		3P 3T		4P 3T	
Rating (A)		Catalog No.	List Price	Catalog No.	List Price
C801/1001/1251N—50 kA at 380/415 Vac					
C801N	800	CKAXFE36080LI	\$ 6485	CKAXFE46080LI	\$ 7441
C1001N	1000	CKAXFE36100LI	8814	CKAXFE46100LI	10469
C1251N	1250	CKAXFE36125LI	11143	CKAXFE46125LI	13497
C801/1001/1251H—70 kA at 380/415 Vac					
C801H	800	CKHXFE36080LI	7768	CKHXFE46080LI	9109
C1001H	1000	CKHXFE36100LI	10100	CKHXFE46100LI	12141
C1251H	1250	CKHXFE36125LI	12432	CKHXFE46125LI	15173
C801/1001L—150 kA at 380/415 Vac					
C801L	800	CKIXFE36080LI	10168	CKIXFE46080LI	12229
C1000L	1000	CKIXFE36100LI	19566	CKIXFE46100LI	24446
Cable Connection					
C801/1001/1251N—50 kA at 380/415 Vac					
C801N	800	CKAXLE36080LI	6891	CKAXLE46080LI	7969
C1001N	1000	CKAXLE36100LI	9292	CKAXLE46100LI	11091
C1251N	1250	CKAXLE36125LI	11621	CKAXLE46125LI	14119
C801/1001/1251H—70 kA at 380/415 Vac					
C801H	800	CKHXLE36080LI	8174	CKHXLE46080LI	9637
C1001H	1000	CKHXLE36100LI	10578	CKHXLE46100LI	12763
C1251H	1250	CKHXLE36125LI	12910	CKHXLE46125LI	15795
C801/1001L—150 kA at 380/415 Vac					
C801L	800	CKIXLE36080LI	10574	CKIXLE46080LI	12757
C1000L	1000	CKIXLE36100LI	20044	CKIXLE46100LI	25068

COMPACT C801/1251NI Molded Case Switch

Bus Bar Connection					
C801NI	800	CKAFE36008S	4941	CKAFE46008S	6424
C1251NI	1250	CKAFE36001S	7847	CKAFE46001S	10201
Cable Connection					
C801NI	800	CKALE36008S	5347	CKALE46008S	6951
C1251NI	1250	CKALE36001S	8325	CKALE46001S	10823

Ratings and interrupting ratings: page 73

Cable range: pressure terminals are suitable for copper and aluminum cables:

- 800 A terminal:
1 to 3 cables: 70 to 185mm² Cu or Al
- 1250 A terminal:
1 to 4 cables: 70 to 240mm² Cu or Al

Other termination: page 97

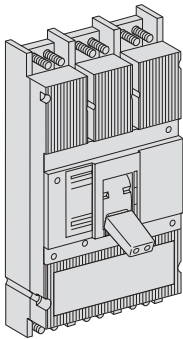
Other trip units: page 96

Accessories: See page 99

Additional information:

- **Catalog no.** ABTED297054EN
- **Installation Guide no.** ABTED297054EN
- **Data Sheet no.** ABTED396042
- **D-Fax no.** 999

Complete Device—Continued



COMPACT C1251N Circuit Breaker with STR25DE Trip Unit —1000 Vac

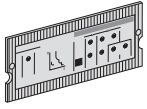
Rating (A)		3P 3T	
Bus Bar Connection		Catalog No.	List Price
400		CKAXFE31040LI	\$ 7774
800		CKAXFE31080LI	10103
1250		CKAXFE31125LI	12453
Cable Connection			
400		CKAXLE31040LI	8180
800		CKAXLE31080LI	10581
1250		CKAXLE31125LI	12931

COMPACT C1251N DC Circuit Breaker for DC Application—Magnetic Only

Rating (A)		Type	Magnetic	3P	
				Catalog No.	List Price
Bus Bar Connection					
1250	P21	1600–3200 A		CKAXFE37125M2	\$ 10431
	P41	3200–6400 A		CKAXFE37125M4	10431

Ratings and interrupting ratings: page 73
Cable range: pressure terminals are suitable for copper and aluminum cables:
■ 800 A terminal:
1 to 3 cables: 70 to 185mm² Cu or Al
■ 1250 A terminal:
1 to 4 cables: 70 to 240mm² Cu or Al

Other termination: page 97
Other trip units: page 96
Accessories: See page 99
Additional information:
■ **Catalog no.** ABTED297054EN
■ **Installation Guide no.** ABTED297054EN
■ **Data Sheet no.** ABTED397062
■ **D-Fax no.** 997 (1000 Vac)



Electronic Trip Unit (Replaceable by Field Services only)

Long-time and Instantaneous Protection

STR25DE with fine setting	LI	46501	3134
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Long-time, Short-time and Instantaneous Protection

STR35SE	LS	46504	5041
STR35GE	LG	46506	5041

Long-time, Short-time, Instantaneous Protection and Options

STR55UE	L9	46512	6236
STR55UE RF	L3	46516	7748
STR55UE TRF	L4	46517	9260
STR55UE FC	L5	46520	6050
STR55UE RFC	L7	46522	7748
STR55UE TFC	L6	46524	7542
STR55UE TRFC	L8	46525	9260
Optional ZSI wiring		46485	542

Summary of options:

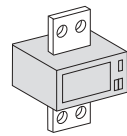
F: Fault indicators
T: Residual type ground-fault protection
R: Load monitoring
C: Communication with DIGIPACT®

Instantaneous Protection Only

STR35ME	M1	46505	5230
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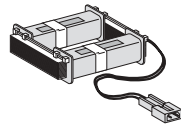
Neutral Sensor

Ground-fault Protection for 3Ø4W System (External Neutral Sensor)



800	46248	1073
1000	46249	1073
1250	46250	1073

Neutral Protection (Internal Neutral Sensor)



500	46223	1073
800	46220	1073
1000	46221	1073
1250	46222	1073

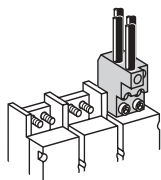
Installation and Connection

- For factory-installed connection accessories complete the circuit breaker catalog number by inserting the **termination numbers** in the appropriate block.
- For field-installable accessories order the 5-digit catalog number.

C | K | A | X | L | E | 3 | 6 | 1 | 2 | 5 | L | I |
Termination No.

		Term. No.	Special Term. No.	Catalog No.	List Price
--	--	-----------	-------------------	-------------	------------

Cable Connection



800 A Lugs—(3) 70 to 185mm² for C801

Field-installable	One side	3P		46961	\$ 203
		4P		46965	264
Factory-mounted	Both sides	3P	L		406
		4P	L		528
	Line side only	3P	M		203
		4P	M		264
	Load side only	3P	P		203
		4P	P		264

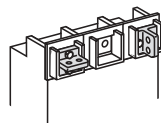
1250 A Lugs—(4) 70 to 240mm² for C1001/1251

Field-installable	One side	3P		46960	239
		4P		46994	311
Factory-mounted	Both sides	3P	L		478
		4P	L		622
	Line side only	3P	M		239
		4P	M		311
	Load side only	3P	P		239
		4P	P		311

Optional 1250 A Lugs — (3) 250–600 kcmil for C1001/1251

Field-installable	One side			46966	239
Factory-mounted	Both sides	3P	L		478
		4P	L		622
	Line side only	3P	M		239
		4P	M		311
	Load side only	3P	P		239
		4P	P		311

Rear Connection



Flat Connection		N/H	3P	F	FRL ①	46415	813		
			4P	F	FRL ①	46416	1077		
		L	3P	F	FRL ①	46417	1134		
			4P	F	FRL ①	46418	1506		
Consisting of:	Rear connectors	N/H	3P			46958 (6)	99 ea.		
			4P			46958 (8)	99 ea.		
		L	3P			46916 (6)	152 ea.		
			4P			46916 (8)	152 ea.		
	Terminal cover		3P			46993 (2)	110 ea.		
			4P			46992 (2)	144 ea.		
		Edgewise Connection		N/H	3P	F	FRL ①	46415	813
					4P	F	FRL ①	46416	1077
L	3P			F	FRL ①	46419	1260		
	4P			F	FRL ①	46420	1260		
Consisting of:	Rear connectors	N/H	3P			46958 (6)	99 ea.		
			4P			46958 (8)	99 ea.		
		L	3P			46913 (6)	173 ea.		
			4P			46913 (8)	173 ea.		
	Terminal cover		3P			46993 (2)	110 ea.		
			4P			46992 (2)	144 ea.		
					3P			46913 (6)	173 ea.
					4P			46913 (8)	173 ea.

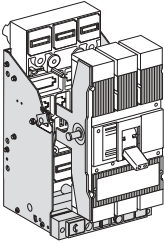
① Consult factory for other available options.

Continued on next page

Installation and Connection—Continued

- For factory-installed connection accessories complete the circuit breaker catalog number by inserting the **termination numbers** in the appropriate block.
- For field-installable accessories order the 5-digit catalog number.

C K A X F E 3 6 1 2 5 L I D U
Termination No.

				Term. No.	Special Term. No.	Drawout Option	Catalog No.	List Price		
Universal Chassis										
	Flat Connection		N/H	3P	D	F	DU ①	46423	\$ 4438	
				4P	D	F	DU ①	46424	5794	
			L	3P	D	F	DU ①	46429	4438	
				4P	D	F	DU ①	46430	5794	
	Consisting of:	Moving chassis		3P				46824	655	
				4P				46825	852	
		Fixed chassis	N/H	3P				46820	2867	
				4P				46821	3726	
			L	3P				46822	2867	
				4P				46823	3726	
		Plugs	N/H	3P				46896 (3)	127 ea.	
				4P				46896 (4)	127 ea.	
			L	3P				46915 (3)	127 ea.	
				4P				46915 (4)	127 ea.	
		Terminal cover		3P				46993 (2)	110 ea.	
				4P				46992 (2)	144 ea.	
		Rear connections		3P				46990 (6)	53 ea.	
				4P				46990 (8)	53 ea.	
		Edgewise Connection		N/H	3P	D	E	DU ①	46425	4533
					4P	D	E	DU ①	46426	5920
				L	3P	D	E	DU ①	46431	4533
					4P	D	E	DU ①	46432	4533
		Consisting of:	Moving chassis		3P				46824	655
					4P				46825	852
			Fixed chassis	N/H	3P				46820	2867
					4P				46821	3726
				L	3P				46822	2867
					4P				46823	3726
	Plugs		N/H	3P				46896 (3)	127 ea.	
				4P				46896 (4)	127 ea.	
			L	3P				46915 (3)	127 ea.	
				4P				46915 (4)	127 ea.	
	Terminal cover			3P				46993 (2)	110 ea.	
				4P				46992 (2)	144 ea.	
	Rear connections			3P				46988 (6)	68 ea.	
				4P				46988 (8)	68 ea.	

Accessories

Auxiliary switch #2 or #3

Motor operator

Auxiliary switch #1 or alarm switch

Trip unit options

Shunt trip or Undervoltage release

Secondary Disconnecting Blocks

Door Escutcheon

Drawout Shutters

Moving part	N/H	3 term. ②	D ④	42942	33.60	
		6 term. ③	D ④	42943	50	
		L	3 term. ②	D ④	42944	33.60
			6 term. ③	D ④	42945	50
	N/H/L	10 term.	D ④	46894	202	
		Fixed part	3 term.	D ④	42940	33.60
			6 term.	D ④	42941	50
			10 term.	D ④	46893	202
	Fixed Part Block Cover				39967	62
	Door Escutcheon					
Around racking mechanism				46830	153	
Around handle				46831	308	
Around rotary handle				46832	431	
Drawout Shutters						
On fixed chassis (1 piece)				46987 (6)	134 ea.	

① Consult factory for other available options.

② 3 wires are needed for shunt trip or undervoltage trip.

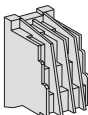
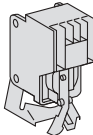
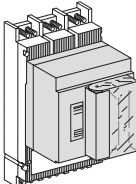
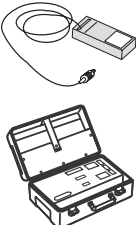
③ 6 wires are needed for auxiliary switches or motor operator.

④ Option D inserted in block 12. (See catalog number construction, page 46), will supply both moving and fixed parts for all electrical accessories installed.

Accessories

- For factory-installed accessories complete the circuit breaker catalog number by inserting the **option number** in the appropriate block.
- For field-installable accessories order the 5-digit catalog number.

C	K	A	X	L	E	3	6	1	2	5	L	A	B	S	A	M	A
Options																	

			Volts (V)	Option No.	Catalog No.	List Price		
Electrical Accessories	Auxiliary and Alarm Switch							
		1 auxiliary (OF) + 1 alarm (SD) switch ①		AB	44900	\$ 302		
		3 auxiliary (OF) + 1 alarm (SD) switch ①		A3	44901	823		
		Overcurrent trip switch SDE ②		AT	46962	240		
		Position switches ③ (for drawout only)	1 connected		46963	331		
			1 disconnected		46964	331		
	Shunt Trip and Undervoltage Trip							
		MX (shunt trip)	AC 50/60 Hz or DC	110/130	SA	44912	478	
				220/300	SC	44913	478	
				380/480	SH	44914	478	
24				SO	44910	478		
48/60				SP	44911	478		
MN (undervoltage trip)		AC 50/60 Hz	48 (50 Hz)		44924	478		
			110/130	UA	44925	478		
			220/250	UC	44926	478		
			380/415		44932	478		
			440 (60 Hz)		44932	478		
		DC	24/30	UO	44923	478		
			48	UP	44924	478		
			110/130	UR	44925	478		
			250		44926	478		
			300		44932	478		
	Motor Operator							
	Standard type	AC 50/60 Hz	110/127	MA	46928	3953		
			220/240	MC	46929	3953		
			380/415 ④		46930	3953		
			440/480 ⑤		46931	3953		
			DC	24	MO	46917	3953	
				48/60		46918	3953	
				110/125	MR	46919	3953	
				220/250		46920	3953	
			Locking device for Ronis key lock 1351.500 (lock not supplied, cannot be fitted on automatic transfer switch)				44876	179
			1 Ronis key lock 1351.500				41945	122
	Test Kits							
	Battery operated (battery not supplied)				43362	538		
	Portable test kit				120	55391	9961	

① 6 A (auxiliary), 5 A (alarm) at 480 Vac; 3 A at 600 Vac, 0.5 A at 125 Vdc, 0.25 A at 250 Vdc.

② 2 A at 240 Vac, 0.1 A at 125 Vdc. Factory-mounted.

#46967 when used with TS type motor operator.

③ 6 A at 480 Vac, 3 A at 600 Vac, 0.5 A at 125 Vdc, 0.25 A at 250 Vdc.

④ Consists of a 220/240 Vac motor operator #46929 and a dropping resistor #44870.

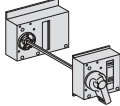
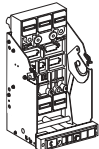
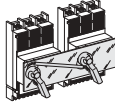
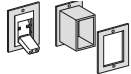
⑤ Consists of a 220/240 Vac motor operator #46929 and a dropping resistor #44871.

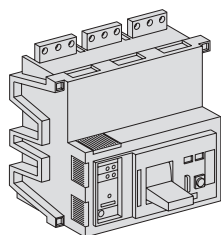
Continued on next page

Accessories—Continued

- For factory-installed accessories complete the circuit breaker catalog number by inserting the **option number** in the appropriate block.
- For field-installable accessories order the 5-digit catalog number.

C | K | A | X | L | E | 3 | 6 | 1 | 2 | 5 | L | I | A | B | S | A | M | A | R | O |
Options _____

				Option No.	Catalog No.	List Price
Rotary Operating Handles	Directly Mounted					
		Standard	With black toggle	RO	46933	\$ 377
	Door Mounted					
		Rear door	(=46933+42897)		46872	647
Locks, Interlocking	Padlocking and Locking Devices					
		Of the Handle (in OFF Position)				
		For 1 to 3 padlocks (padlocks not supplied)		PL	44936	33.60
		By key lock	Mounting kit (factory mounted)	LK	35636	161
			Mounting kit and key interlock	KK	35636+35635-F	940
			Key interlock only		35635-F	779
		Of the Rotary Operating Handle (Circuit Breaker in OFF Position)				
		For 1 to 3 padlocks (not supplied)			Built-in	
		One key lock	Ronis 1351.500		41940	97
	Drawout Assembly Locking					
		By 3 padlocks (padlocks not supplied)			Built-in	
		Key lock for locking in disconnected position			35635	704
		Door interlock, connected position locking device			46834	210
		Racking interlock locking device			46835	153
	Mechanical Interlocking (for Fixed Circuit Operating Handles Not Included)					
		Mechanical device (rotary operating handles not included)			46946	813
	Mechanical Interlocking (for Fixed Circuit Breakers with Rotary Handle)					
		One set of 2 key locks (keyed alike) Ronis 1351.500			41950	122
Installation Accessories	Door Cutout Escutcheons					
		For fixed mounting of circuit breaker			44938	33.60
		Escutcheon with handle extension (IP 40), for withdrawable device without motor operator			46977	372
	Handle Rubber Boot					
				BT	44965	153
	Sealing Accessories					
		For trip unit			46939	106
		For cover			44937	50
	Circuit Label-holder					
		Set of 10			42976	54
	Extended Handle					
		Standard			46998	29.40
		Long for extended escutcheon (drawout mounting)			46996	29.40
	Toggle					
		For rotary handle	Black		46970	101
			Red		46971	101

IEC 947-2 Rated COMPACT CM Circuit Breakers^①**Complete Device****COMPACT CM1250/1600/2000/2500/3200 Circuit Breaker with STCM1 Trip Unit**

		3P 3T		4P 3T	
	Rating (A)	Catalog No.	List Price	Catalog No.	List Price
70 kA at 380/415 Vac					
CM1250N	1250	CMAFE36125LI	\$ 13045	CMAFE46125LI	\$ 15925
CM1600N	1600	CMAFE36160LI	13930	CMAFE46160LI	17076
CM2000N	2000	CMAFE36200LI	15992	CMAFE46200LI	19756
CM2500N	2500	CMAFE36250LI	21303	CMAFE46250LI	26661
CM3200N ②	3200	CMAFE36320LI	32333		
85 kA at 380/415 Vac					
CM1250H	1250	CMHFE36125LI	14389	CMHFE46125LI	17673
CM1600H	1600	CMHFE36160LI	15398	CMHFE46160LI	18984
CM2000H	2000	CMHFE36200LI	17748	CMHFE46200LI	22038
CM2500H	2500	CMHFE36250LI	23804	CMHFE46250LI	29911
CM3200H ②	3200	CMHFE36320LI	36377		

COMPACT CM1600/2000/2500/3200 Molded Case Switch

CM1600NI	1600	CMAFE36016S	10485	CMAFE46016S	13631
CM2000NI	2000	CMAFE36020S	12548	CMAFE46020S	16312
CM2500NI	2500	CMAFE36025S	19293	CMAFE46025S	25080
CM3200NI ②	3200	CMAFE36032S	30752		

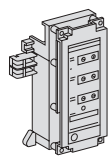
① In obsolescence. For new applications, use Powerpact R-frame. See Digest 173.

② Rear connectors are included.

Ratings and interrupting ratings: page 73

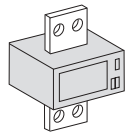
Additional information:

- Data Sheet no. ABTED397059
- D-Fax no. 996



Electronic Trip Unit (Replaceable by Field Services only)

	Trip Function	Catalog No.	List Price
Long-time and Instantaneous Protection			
STCM1	LI	55532	\$ 3445
Long-time, Short-time, and Instantaneous Protection			
STCM2	LS	55533	5028
Long-time, Short-time, Instantaneous Protection and Ground-fault Protection			
STCM3 Not available on CM1250 to 3200 4P and CM3200 3P.	L2	55534	6597



External Neutral Sensor

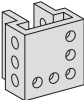
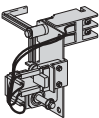
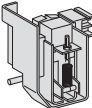
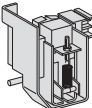
Ground-fault Protection for 3Ø4W System			
For CM1250		55528	1215
For CM1600		55529	1215
For CM2000		55530	1215
For CM2500		55531	1215

① In obsolescence. For new applications, use Powerpact R-frame. See Digest 173.

Accessories

- For factory-installed accessories complete the circuit breaker catalog number by inserting the **option number** in the appropriate block.
- For field-installable accessories order the 5-digit catalog number.

C M A F E 3 6 3 2 0 L I A 2
Options

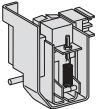
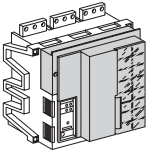
				Volts (V)	Options	Catalog No.	List Price
Connection Accessories	Rear Connectors 	CM1250—CM2000	Phase or neutral (one piece)			55660	\$ 256
		CM2500	Phase (set of 4)			55377	868
			Neutral			55660	256
		CM3200	Phase			Built-in	No charge
			Neutral (1 piece)			Built-in	No charge
Electrical Accessories	Auxiliary Switches 	2 auxiliary switches (OF)			A2	55541	559
		4 auxiliary switches (OF) + 1 alarm switch (SD)			A4	55542	1398
		Overcurrent trip switch				Standard	No charge
		Shunt Trip and Undervoltage Trip					
			MX (Shunt trip)	AC 50 Hz	48	55546	826
					110/127	55547	826
					208/240	55548	826
					380/415	55549	826
					440	55550	826
			AC 60 Hz		120/127	55547	826
					240/265	55548	826
					440/480	55550	826
			DC		24	55544	826
					30	55545	826
					48	55546	826
					110/125	55547	826
					220	55548	826
			MXP (Permanent shunt trip)	AC 50 Hz	48	55693	1074
					110	55586	1074
					127	55587	1074
					220	55588	1074
					240	55589	1074
			AC 60 Hz		380/415	55591	1074
					120	55592	1074
					127	55586	1074
					240	55593	1074
					265	55588	1074
					277	55594	1074
					440	55595	1074
			DC		480	55591	1074
					24	55597	1074
					30	55598	1074
					48	55599	1074
					60	55697	1074
					110	55600	1074
					125	55601	1074
					220	55602	1074
			MN (Undervoltage release)	AC 50 Hz	48	55681	826
					110	55552	826
					127	55553	826
					220	55554	826
					240	55555	826
			AC 60 Hz		380/415	55557	826
					120	55558	826
					127	55552	826
					240	55559	826
					265	55554	826
					277	55560	826
					440	55561	826
					480	55557	826

① In obsolescence. For new applications, use Powerpact R-frame. See Digest 173.

Continued on next page

Accessories—Continued

- For factory-installed accessories complete the circuit breaker catalog number by inserting the **option number** in the appropriate block.
- For field-installable accessories order the 5-digit catalog number.

Electrical Accessories	Shunt Trip and Undervoltage Trip		Volts (V)	Options	Catalog No.	List Price	
continued		MN (undervoltage release)	DC	24		55563	826
				30		55564	826
				48		55565	826
				60		55685	826
				110		55566	826
				125		55567	826
				220		55568	826
Motor Operator ①②							
	AC 50 Hz		48		55603	8093	
			110		55604	8093	
			127		55605	8093	
			220/240		55607	8093	
			380		55609	8093	
			415		55610	8093	
	AC 60 Hz		120/127		55611	8093	
			240		55613	8093	
			265		55614	8093	
			277		55615	8093	
			440		55616	8093	
			480		55617	8093	
	DC		24/30		55618	8093	
			48		55620	8093	
			100		55622	8093	
			110		55623	8093	
			125		55624	8093	
			220		55625	8093	

Accessories					
		Sealable Cover			
		Sealable transparent cover for STCM tripping unit	55652	68	
		OFF Position Locking Device			
		Padlock device for 1 to 3 padlocks (Padlocks not included) ③		55653	186
		Padlock device (Padlock not included) + 1 key lock	Profalux B24D4Z ①	55654	308
			Ronis 1351B ①	55655	308
		Test Kit			
		Text kit (110–220 Vac)	55391	9961	

Spare Parts		For COMPACT CM Circuit Breaker			
		Operating handle		55661	67
		Extended handle		55662	92
		3P cover		55663	307
		Neutral pole cover		55664	209
		Cover screen for auxiliary terminal knock-out location		55665	44
		For Motor Operator			
		Cover		55670	301
		Circuit-breaker handle		55671	61
		Manual operating		55672	42
		Connector for COMPACT CM2500 N/H Circuit Breaker			
		Upstream right or downstream left		55673	272
		Upstream left or downstream right		55674	272
		Upstream or downstream central		55675	249
		For COMPACT CM Circuit Breaker Switch			
		Trip unit cover device		55535	223

① Factory mounted only

② Includes (4) auxiliary + (1) alarm switches

③ Field Installable

④ In obsolescence. For new applications, use Powerpact R-frame. See Digest 173.

MASTERPACT® Circuit Breakers

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UL 489/1066 Listed MASTERPACT Circuit Breakers

Selection Table for UL 489 Listed MASTERPACT Circuit Breakers

Ratings as per UL 489 and NEMA AB1 Standards			MP08		MP12		MP16	
Number of poles			3, 4		3, 4		3, 4	
Rated current (A)			800		1200		1600	
Rating of 4th pole (A)			800		1200		1600	
Type of Circuit Breaker			H1	H2	H1	H2	H1	H2
Interrupting ratings as per UL 489 (kA RMS)	AC 50/60 Hz	240 V	65	100	65	100	65	100
		480 V	65	100	65	100	65	100
		600 V	65	65	65	65	65	65
Short-time ratings (kA RMS)	AC 50/60 Hz	1s	50	50	50	50	50	50
Ultimate breaking capacity as per IEC 947-2 (Icu) (kA RMS)	AC 50/60 Hz	220/415 V	65	100	65	100	65	100
		440 V	65	100	65	100	65	100
		500/690 V	65	85	65	85	65	85
Control Units								
Sensor ratings (A)			250, 400, 600, 800		250, 400, 600, 800, 1200		250, 400, 600, 800, 1200, 1600	
Functions	STR 18M		I		I		I	
	STR 28D		LI		LI		LI	
	STR 38S		LSI		LSI		LSI	
	STR 58U		LSI		LSI		LSI	
Dimensions and Weights								
Dimensions H x W x D (in./mm)	3P	Fixed	16 x 17 x 11/ 406 x 432 x 279		16 x 17 x 11/ 406 x 432 x 279		16 x 17 x 11/ 406 x 432 x 279	
		Drawout	17 x 17 x 14/ 432 x 432 x 356		17 x 17 x 14/ 432 x 432 x 356		17 x 17 x 14/ 432 x 432 x 356	
	4P	Fixed	16 x 22 x 11/ 406 x 559 x 279		16 x 22 x 11/ 406 x 559 x 279		16 x 22 x 11/ 406 x 559 x 279	
		Drawout	17 x 22 x 14/ 432 x 559 x 356		17 x 22 x 14/ 432 x 559 x 356		17 x 22 x 14/ 432 x 559 x 356	
Weight (lb/kg)	3P	Fixed	105/48		105/48		120/54	
		Drawout	150/68		165/74		215/98	
	4P	Fixed	132/60		132/60		151/68	
		Drawout	185/84		185/84		265/120	

Selection Table for UL 1066 Listed MASTERPACT Circuit Breakers

Ratings as per UL 1066/ANSI C37.13/NEMA SG3 Standards			MC08		MC16		MC20
Number of poles			3, 4		3, 4		3, 4
Rated current (A)			800		1600		2000
Rating of 4th pole (A)			800		1600		2000
Type of Circuit Breaker			N1	H1	N1	H1	H1
Interrupting ratings (kA RMS)	AC 50/60 Hz	254 V	50	65	50	65	65
		508 V	50	65	50	65	65
		635 V	50	65	50	65	65
Short-time ratings (kA RMS)	AC 50/60 Hz	1s	42	50	50	50	65
Control Units							
Sensor ratings (A)			250, 400, 600, 800		250, 400, 600, 800, 1200, 1600		250, 400, 600, 800, 1200, 1600, 2000
Functions	STR 18M		I		I		I
	STR 28D		LI		LI		LI
	STR 38S		LSI		LSI		LSI
	STR 58U		LSI		LSI		LSI
Dimensions and Weights							
Dimensions H x W x D (in./mm)	3P	Drawout	17 x 17 x 14/ 432 x 432 x 356		17 x 17 x 14/ 432 x 432 x 356		17 x 17 x 14/ 432 x 432 x 356
Weight (lb/kg)	3P	Drawout	150/68		165/75		215/98

	MP20		MP25		MP30		MP40		MP50		MP63	
	3, 4		3, 4		3, 4		3, (4: not UL Listed)		3, (4: not UL Listed)		3	
	2000		2500		3000		4000		5000		6300: not UL Listed	
	2000		2500		3000		4000		5000			
	H1	H2	H1	H2	H1	H2	H1	H2	H1	H2	H1	H2
	75	100	75	100	75	100	100	125	100	125	100	150
	75	100	75	100	75	100	100	125	100	125	100	150
	75	75	75	75	75	75	100	100	100	100	100	100
	75	75	75	75	75	75	100	100	100	100	100	100
	75	100	75	100	75	100	100	150	100	150	100	150
	75	100	75	100	75	100	100	150	100	150	100	150
	75	85	75	85	75	85	85	85	85	85	85	85

	250, 400, 600, 800, 1200, 1600, 2000	600, 800, 1200, 1600, 2000, 2500	800, 1200, 1600, 2000, 2500, 3000	2000, 2500, 3000, 3200, 4000	2000, 2500, 3000, 3200, 4000, 5000	2000, 2500, 3000, 3200, 4000, 5000, 6300
	I	I	I	I	I	I
	LI	LI	LI	LI	LI	LI
	LSI	LSI	LSI	LSI	LSI	LSI
	LSI	LSI	LSI	LSI	LSI	LSI

	16 x 17 x 11/ 406 x 432 x 279	16 x 17 x 11/ 406 x 432 x 279	16 x 17 x 11/ 406 x 432 x 279	16 x 32 x 11/ 406 x 813 x 279	16 x 32 x 11/ 406 x 813 x 279	
	17 x 17 x 14/ 432 x 432 x 356	17 x 17 x 14/ 432 x 432 x 356	17 x 17 x 14/ 432 x 432 x 356	19 x 32 x 14/ 483 x 813 x 356	19 x 32 x 14/ 483 x 813 x 356	19 x 41 x 14/ 483 x 1041 x 356
	16 x 22 x 11/ 406 x 559 x 279	16 x 22 x 11/ 406 x 559 x 279	16 x 22 x 11/ 406 x 559 x 279			
	17 x 22 x 14/ 432 x 559 x 356	17 x 22 x 14/ 432 x 559 x 356	17 x 22 x 14/ 432 x 559 x 356	19 x 41 x 14/ 483 x 1041 x 356	19 x 41 x 14/ 483 x 1041 x 356	
	160/73	260/118	260/118	300/136	390/177	
	215/98	365/166	365/166	560/254	650/295	727/330
	200/91	325/147	325/147	430/195		
	265/120	453/205	453/205	600/272	695/315	

	MC32	MC40	MC50
	3	3, (4: not UL Listed)	3, (4: not UL Listed)
	3200	4000	5000
		4000	5000
	H1	H1	H1
	65	100	100
	65	100	100
	65	100	100
	65	100	100

	2000, 2500 3000, 3200	2000, 2500 3000, 3200, 4000	2000, 2500 3000, 3200, 4000, 5000
	I	I	I
	LI	LI	LI
	LSI	LSI	LSI
	LSI	LSI	LSI

	17 x 22 x 14/ 432 x 559 x 356	19 x 32 x 14/ 483 x 813 x 356	19 x 32 x 14/ 483 x 813 x 356
	410/186	560/254	650/295

UL 489/1066 Listed MASTERPACT Circuit Breakers

To order a complete circuit breaker, order:

- 1 Circuit breaker framepage 108
or cradle onlypage 109
or circuit breaker without cradlepage 109
- 2 Connectionspage 109
- 3 Control unit.....page 110
- 4 Rating plugpage 111
- 5 Accessories.....page 112
- 6 Request for quote formspage 133

Additional information:

- Catalog no. 0631CT9501 (Square D)
- Data Sheet no. 0631HO9701
- D-Fax no. 350

UL Listed MASTERPACT Circuit Breaker Frame

Rating (A)	AIR/480 V (kA)	Fixed 3P	List Price	Fixed 4P	List Price	Drawout with Cradle 3P	List Price	Drawout with Cradle 4P	List Price	
MP08 to MP63—UL 489/NEMA AB1 Standards										
Standard Interrupting (H1)										
MP08H1	800	65	P08H13FPPS0800	\$ 6236	P08H14FPPS0800	\$ 9354	P08H13DPPS0800	\$ 8972	P08H14DPPS0800	\$ 13457
MP12H1	1200	65	P12H13FPPS1200	7031	P12H14FPPS1200	10547	P12H13DPPS1200	11822	P12H14DPPS1200	17734
MP16H1	1600	65	P16H13FPPS1600	7837	P16H14FPPS1600	11755	P16H13DPPS1600	13149	P16H14DPPS1600	19725
MP20H1	2000	75	P20H13FPPS2000	9373	P20H14FPPS2000	14060	P20H13DPPS2000	15538	P20H14DPPS2000	23306
MP25H1	2500	75	P25H13FPPS2500	16148	P25H14FPPS2500	24221	P25H13DPPS2500	22564	P25H14DPPS2500	33846
MP30H1	3000	75	P30H13FPPS3000	20084	P30H14FPPS3000	30125	P30H13DPPS3000	28825	P30H14DPPS3000	43237
MP40H1	4000	100	P40H13FPPS4000	37549			P40H13DPPS4000	52351	P40H14DPPS4000 ①	78527
MP50H1	5000	100	P50H13FPPS5000	49519			P50H13DPPS5000	65320	P50H14DPPS5000 ①	97979
MP63H1	6300	100					P63H13DPPS6300 ①	89115		
High Interrupting (H2)										
MP08H2	800	100	P08H23FPPS0800	6792	P08H24FPPS0800	10190	P08H23DPPS0800	9524	P08H24DPPS0800	14286
MP12H2	1200	100	P12H23FPPS1200	7422	P12H24FPPS1200	11133	P12H23DPPS1200	12214	P12H24DPPS1200	18322
MP16H2	1600	100	P16H23FPPS1600	8271	P16H24FPPS1600	12407	P16H23DPPS1600	13588	P16H24DPPS1600	20381
MP20H2	2000	100	P20H23FPPS2000	9892	P20H24FPPS2000	14838	P20H23DPPS2000	17228	P20H24DPPS2000	25842
MP25H2	2500	100	P25H23FPPS2500	18109	P25H24FPPS2500	27165	P25H23DPPS2500	24441	P25H24DPPS2500	36662
MP30H2	3000	100	P30H23FPPS3000	23094	P30H24FPPS3000	34641	P30H23DPPS3000	30703	P30H24DPPS3000	46054
MP40H2	4000	125	P40H23FPPS4000	45423			P40H23DPPS4000	60352	P40H24DPPS4000 ①	90528
MP50H2	5000	125	P50H23FPPS5000	59487			P50H23DPPS5000	75287	P50H24DPPS5000 ①	112929
MP63H2	6300	150					P63H23DPPS6300 ①	107341		
Switches (NA)—Control Unit and Rating Plug Not Required										
MP08NA	800		P08NA3FPPS0000	6109	P08NA4FPPS0000	9162	P08NA3DPPS0000	8341	P08NA4DPPS0000	12511
MP12NA	1200		P12NA3FPPS0000	6924	P12NA4FPPS0000	10386	P12NA3DPPS0000	11132	P12NA4DPPS0000	16699
MP16NA	1600		P16NA3FPPS0000	7198	P16NA4FPPS0000	10796	P16NA3DPPS0000	11409	P16NA4DPPS0000	17112
MP20NA	2000		P20NA3FPPS0000	9053	P20NA4FPPS0000	13578	P20NA3DPPS0000	13645	P20NA4DPPS0000	20467
MP25NA	2500		P25NA3FPPS0000	14106	P25NA4FPPS0000	21159	P25NA3DPPS0000	19479	P25NA4DPPS0000	29217
MP30NA	3000		P30NA3FPPS0000	17725	P30NA4FPPS0000	26588	P30NA3DPPS0000	27368	P30NA4DPPS0000	41052
MP40NA	4000		P40NA3FPPS4000	34990			P40NA3DPPS0000	47745	P40NA4DPPS0000 ①	71617
MP50NA	5000		P50NA3FPPS5000	43876			P50NA3DPPS0000	59675	P50NA4DPPS0000 ①	89513
MP63NA	6300						P63NA3DPPS0000①	85949		
MC08 to MC50—UL1066/ANSI C37.13/NEMA SG3 Standards										
Special Interrupting (N1)										
MC08N1	800	50					C08N13DPPS0800	9229	C08N14DPPS0800	13844
MC16N1	1600	50					C16N13DPPS1600	13186	C16N14DPPS1600	19779
Standard Interrupting (H1)										
MC08H1	800	65					C08H13DPPS0800	10278	C08H14DPPS0800	15416
MC16H1	1600	65					C16H13DPPS1600	15320	C16H14DPPS1600	22980
MC20H1	2000	65					C20H13DPPS2000	17927	C20H14DPPS2000	26892
MC32H1	3200	65					C32H13DPPS3200	31695		
MC40H1	4000	100					C40H13DPPS4000	53369		
MC50H1	5000	100					C50H13DPPS5000	65320		

① Not UL Listed

MASTERPACT Drawout Circuit Breaker Without Cradle or Cradle Only

- Prices do not include control unit and rating plug.
- Cradle price is included in the complete drawout price.
- Vertical connections (CCS) are mandatory on 1600 A frame and above, and are optional for 800 A and 1200 A frames.

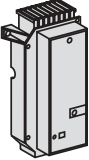
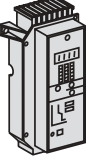
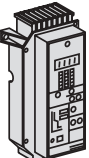
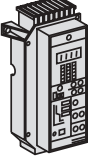
Rating (A)	AIR/480 V (kA)	Drawout w/o Cradle 3P	List Price	Cradle Only 3P	List Price	Drawout w/o Cradle 4P	List Price	Cradle Only 4P	List Price
MP08 to MP63—UL 489/NEMA AB1 Standards									
Standard Interrupting (H1)									
MP08H1	800	65	P08H13A0800	\$ 6878	P16H03C	\$ 2514	P08H14A0800	\$ 10317	P16H04C \$ 3770
MP12H1	1200	65	P12H13A1200	9730	P16H03C	2514	P12H14A1200	14595	P16H04C 3770
MP16H1	1600	65	P16H13A1600	11056	P16H03C	2514	P16H14A1600	16584	P16H04C 3770
MP20H1	2000	75	P20H13A2000	13211	P20H03C	2849	P20H14A2000	19817	P20H04C 4272
MP25H1	2500	75	P25H13A2500	18240	P30H03C	5188	P25H14A2500	27360	P30H04C 7781
MP30H1	3000	75	P30H13A3000	24503	P30H03C	5188	P30H14A3000	36755	P30H04C 7781
MP40H1	4000	100	P40H13A4000	44495	P40H03C	9429	P40H14A4000 ①	66743	P40H04C ① 14144
MP50H1	5000	100	P50H13A5000	50682	P50H03C	17566	P50H14A5000 ①	76022	P50H04C ① 26349
MP63H1	6300	100	P63H13A6300 ①	69406	P63H03C ①	24440			
High Interrupting (H2)									
MP08H2	800	100	P08H23A0800	7432	P16H03C	2514	P08H24A0800	11148	P16H04C 3770
MP12H2	1200	100	P12H23A1200	10125	P16H03C	2514	P12H24A1200	15188	P16H04C 3770
MP16H2	1600	100	P16H23A1600	11495	P16H03C	2514	P16H24A1600	17243	P16H04C 3770
MP20H2	2000	100	P20H23A2000	14903	P20H03C	2849	P20H24A2000	22354	P20H04C 4272
MP25H2	2500	100	P25H23A2500	20119	P30H03C	5188	P25H24A2500	30179	P30H04C 7781
MP30H2	3000	100	P30H23A3000	26382	P30H03C	5188	P30H24A3000	39573	P30H04C 7781
MP40H2	4000	125	P40H23A4000	52370	P40H03C	9429	P40H24A4000 ①	78554	P40H04C ① 14144
MP50H2	5000	125	P50H23A5000	60649	P50H03C	17566	P50H24A5000 ①	90973	P50H04C ① 26349
MP63H2	6300	150	P63H23A6300 ①	86973	P63H03C ①	24440			
Switches (NA)—Control Units and Rating Plug Not Required									
MP08NA			P08NA3A0000	6246	P16H03C	2514	P08NA4A0000	9369	P16H04C 3770
MP12NA			P12NA3A0000	9040	P16H03C	2514	P12NA4A0000	13560	P16H04C 3770
MP16NA			P16NA3A0000	9316	P16H03C	2514	P16NA4A0000	13974	P16H04C 3770
MP20NA			P20NA3A0000	10069	P20H03C	2849	P20NA4A0000	15103	P20H04C 4272
MP25NA			P25NA3A0000	15180	P30H03C	5188	P25NA4A0000	22770	P30H04C 7781
MP30NA			P30NA3A0000	23044	P30H03C	5188	P30NA4A0000	34566	P30H04C 7781
MP40NA			P40NA3A0000	39888	P40H03C	9429	P40NA4A0000 ①	59832	P40H04C ① 14144
MP50NA			P50NA3A0000	45036	P50H03C	17566	P50NA4A0000 ①	67554	P50H04C ① 26349
MP63NA			P63NA3A0000 ①	65581	P63H03C ①	24440			
MC08 to MC50—UL 1066/ANSI C37.13/NEMA SG3 Standards									
Special Interrupting (N1)									
MC08N1	800	50	C08N13A0800	7135	C16H03C	2514	C08N14A0800	10702	C16H04C 3770
MC16N1	1600	50	C16N13A1600	11093	C16H03C	2514	C16N14A1600	16639	C16H04C 3770
Standard Interrupting (H1)									
MC08H1	800	65	C08H13A0800	8182	C16H03C	2514	C08H14A0800	12273	C16H04C 3770
MC16H1	1600	65	C16H13A1600	13226	C16H03C	2514	C16H14A1600	19840	C16H04C 3770
MC20H1	2000	65	C20H13A2000	15600	C20H03C	2849	C20H14A2000	23399	C20H04C 4272
MC32H1	3200	65	C32H13A3200	26353	C32H03C	6380			
MC40H1	4000	100	C40H13A4000	44495	C40H03C	9429			
MC50H1	5000	100	C50H13A5000	52256	C50H03C	17566			

Vertical Connections

■ Vertical terminations are mandatory on 1600 A frame and above.			3P	4P
MP08—MC08—MP12—MP16—MC16			R16H03CBCP 697	R16H04CBCP 1045
MP20—MC20			R20H03CBCP 872	R20H04CBCP 1309
MP25—MP30			R30H03CBCP 2325	R30H04CBCP 3489
MC32			R32H03CBCP 2960	
MP40—MC40			R40H03CBCP 2960	R40H04CBCP 4444
MP50—MC50—MP63			R63H03CBCP 5925	R50H04CBCP 8886

① Not UL Listed.

Control Units

STR 18M		Option	List Price
	Control Unit (instantaneous protection only)		
	STR18M		\$ 1406
STR 28D			
	Control Unit (long-time and instantaneous protection)		
	STR28D (long-time = 0.4x1 sensor rating)		1489
	STR28DP (long-time = 0.8x1 plug rating)		1380
	Options		
	Ammeter	I	896
Pre-trip overload indication switch		ALR	No charge
STR 38S			
	Control Unit (long-time, short-time and instantaneous protection)		
	STR38S (long-time = 0.4x1 sensor rating)		1718
	STR38SP (long-time = 0.8x1 plug rating)		2069
	Ground-fault Protection ①		
	Residual type	T	879
Source ground return type		W	980
External neutral sensor (TCE) – see page 112			
Options	Ammeter	I	896
	Pre-trip overload indication switch	ALR	No charge
	LED fault indicators on the circuit breaker front face (PIL or AD module or 24 Vdc external power supply is required)	F	357
	Power supply with battery	PIL	240
STR 58U			
	Control Unit (long-time, short-time and instantaneous protection)		
	STR58U (long-time = 0.4x1 sensor rating)		2446
	STR58UP (long-time = 0.8x1 plug rating)		2337
	Ground-fault Protection ①②		
	Residual type	T	879
Source ground return type		W	980
External neutral sensor (TCE) – see page 112			
Options	Ammeter	I	896
	Pre-trip overload indication switch	ALR	No charge
	LED fault indicators on the circuit breaker front face (PIL or AD module or 24 Vdc external power supply is required)	F	357
	Segregated alarm switch (fault indicator [F] included. Output contact as a function of selected fault type. 24 Vdc external power supply or AD module is mandatory)	FV	978
	Power supply with battery	PIL	240
Zone-selective interlocking, for short-time protection (ST) and ground-fault protection (T/W)		Z	815
Load monitoring (outputs optical trial output contacts 0.1 A/240 Vac)		R	1057
Communication (transmits all the trip unit parameters via DIGIPACT® modules) ③		C	641

Continued on next page

① External neutral sensor not included.

② External AD module (see page 112) is required if load is below 20% or if setting is red zone.

③ Communication options are available for MASTERPACT circuit breakers with STR 58U control unit, C option and DIGIPACT communication modules. See page 112.

Control Units—Continued

Rating Plug (RL)	Sensor Rating (A)	Plug Rating (A)	Catalog No.	List Price
■ Mandatory for UL Listed MASTERPACT circuit breakers with STR 28D, STR 38S and STR 58U control units. ■ Not required on IEC Rated MASTERPACT circuit breakers.				
250		125	54731	\$ 109
		150	54732	109
		200	54733	109
		250	54734	109
400		200	54735	109
		250	54736	109
		300	54737	109
		400	54738	109
600		300	54739	109
		400	54740	109
		500	54741	109
		600	54742	109
800		400	54743	109
		500	54744	109
		600	54745	109
		800	54746	109
1200		600	54747	109
		800	54748	109
		1000	54749	109
		1200	54750	109
1600		800	54751	109
		1000	54752	109
		1200	54753	109
		1600	54754	109
2000		1000	54755	109
		1200	54756	109
		1600	54757	109
		2000	54758	109
2500		1200	54759	109
		1600	54760	109
		2000	54761	109
		2500	54762	109
3000		1600	54763	109
		2000	54764	109
		2500	54765	109
		3000	54766	109
3200		1600	54846	109
		2000	54845	109
		2500	54844	109
		3000	54843	109
4000		3200	54842	109
		2000	54767	109
		2500	54768	109
		3000	54769	109
5000		3200	54841	109
		4000	54770	109
		2500	54771	109
		3000	54772	109
6300		3200	54840	109
		4000	54773	109
		5000	54774	109
		3000	54839	109
		3200	54838	109
		4000	54837	109
		5000	54836	109
		6000	54835	109
		6300	54834	109

Continued on next page

Control Units—Continued**Neutral Sensor for
3ØH4W Systems
(TCE)**

Rating (A)	Catalog No.	List Price
■ External neutral transformer (TCE) must have the same rating as the circuit breaker current sensor.		
200	685511	\$ 528
250	685512	528
320	685513	528
400	685514	528
500	685515	528
600	685516	528
630	685517	528
800	685518	528
1000	685519	528
1200	685522	528
1250	685523	528
1600	685524	528
2000	685525	528
2500	685526	528
3000	685527	528
3200	685528	528
4000	685521	528
5000	685673	1004
6300	685674	1004

Accessories

■ Must be ordered as separate items.

Sealable Cover (PBD)

For sealing STR 18M, STR 28D, STR 38S and STR 58U control units (supplied with unit at no charge)

685837

54

Test Kit (ME)For testing STR 28D, STR 38S and STR 58U control units
Power supply 110, 220 Vac 50/60 Hz

55391

10910

Spare test cable for MASTERPACT

55390

164

Spare test cable kit (COMPACT and MASTERPACT)

34546

877

Mini Test Kit (BU)

For testing STR 28D, STR 38S and STR 58U control units—identical to COMPACT test kit box (batteries not supplied)

43362

589

DE2 discount

Power Supply Module (AD)

For STR 18M to STR 58U control units

Output voltage: 24 Vdc**Input voltage**

24/30 Vdc

685823

619

48/60 Vdc

685824

619

125 Vdc

685825

619

120 Vac 50/60 Hz

685826

619

220 Vac 50/60 Hz

685827

619

380 Vac 50/60 Hz

685829

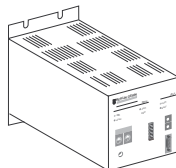
619

Battery Module (BAT)

Battery back-up power supply for AD module

685831

1785

Data Concentrator

DC150

110/240 Vac or 115/125 Vdc

50825

4545

UL Pending – Consult us

DE2 discount

Indication and Control Interface

SC150

Powered by the DC150 module

50784

1596

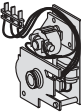
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Accessories—Continued

- When adding (not replacing) field-installable accessories, refer to page 114 for secondary disconnects.
- Maximum 2 shunt trips or 1 shunt trip + 1 undervoltage trip.

For Circuit Breaker Frame		Closing Coil (XF)/Shunt Trip (MX) Volts (V)		Catalog No. (XF)	Catalog No. (MX)	List Price
	AC 50/60 Hz	100 ①		685655CC	685655ST	\$ 365
		110/127		685654CC	685654ST	365
		200 ①		685657CC	685657ST	365
		220/250		685658CC	685658ST	365
		277 ①		685659CC	685659ST	365
		380/415 ①		685660CC	685660ST	365
		440/480		685661CC ①	685661ST	365
		500/525 ①		685662CC	685662ST	365
	DC	24		685650CC	685650ST	365
		30 ①		685651CC	685651ST	365
		48		685652CC	685652ST	365
		60 ①		685653CC	685653ST	365
		100/110 ①		685654CC	685654ST	365
		125		685656CC	685656ST	365
		200/220 ①		685658CC	685658ST	365
		250		685659CC ①	685659ST	365
		350		685660CC	685660ST	365
Undervoltage Trip (MN)						
	AC 50/60 Hz	100 ①		685680	577	
		110/127		685679	577	
		200 ①		685682	577	
		220/250		685683	577	
		277 ①		685684	577	
		380/415 ①		685685	577	
		440/480		685686	577	
		500/525 ①		685687	577	
	DC	24		685675	577	
		30 ①		685676	577	
		48		685677	577	
		60		685678	577	
		100/110 ①		685679	577	
		125		685681	577	
		200/220 ①		685683	577	
		250		685684	577	
		350 ①		685685	577	
Time Delayed Undervoltage Trip (MNR) – Not UL Listed						
	AC 50/60 Hz	100		685689	1120	
		110/127		685690	1120	
		200		685691	1120	
		220/250		685692	1120	
		380/415		685693	1120	
		440/480		685694	1120	
		MNRI=MNR (see above) + 688337			79	
Spring Charging Motor (MCH)—Includes Spring Charged Switch						
	AC 50/60 Hz	100/127		685762	2045	
		200/240		685763	2045	
		250/277 ①		685759	2045	
		380 ①		685764	2045	
		415 ①		685767	2045	
		440 ①		685768	2045	
		480 ①		685769	2045	
	DC	24/30		685760	2045	
		48/60		685761	2045	
		100/125		685765	2045	
		200/250 ①		685766	2045	
		Mechanical Operation Counter (CDM) with Motor Only			685733	504

① Not UL Listed.

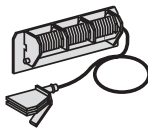
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① Not UL Listed.

Continued on next page

Accessories—Continued

■ When adding (not replacing) field-installable accessories, refer to this page for secondary disconnects.

For Circuit Breaker Frame		Catalog No.	List Price		
Two Standard (2a+2b) Auxiliary Switches		Standard	No charge		
Four Auxiliary Switches (OF)					
	Four changeovers (SPDT)	685725	\$ 299		
24 Additional Auxiliary Switches (OFSUP)					
	Twenty-four additional switches (SPDT) not available on fixed mounted. Not compatible with mechanical interlocking Must be ordered as a separate item	685724	1485		
One Ready to Close Switch (PF)					
	One ready to close switch	685727	258		
One Overcurrent Trip Switch (SDE)					
	Not available on switch version	Standard	No charge		
Secondary Disconnects					
■ Supplied at no charge when ordering with complete circuit breaker or adding field-installable accessories.					
	Fixed mounting	685871	No charge		
	Consisting of:				
	Empty socket	685990 (1)	No charge		
	Connectors (12 terminals)	685995 (2)	No charge		
	Drawout mounting	685868	No charge		
	Five additional terminal blocks (BS)	685994	No charge		
Push Button Padlocking Device (VBP)					
	By padlock (not supplied)	685728	102		
“OFF” Position Lock by Key Lock					
	KIRK® key lock with provision	VSKA	685732+35635	1073	
	Provision for KIRK key lock	VKA	685732	497	
	Ronis (1 key lock) with provision	VSRA1	685730	237	
	Ronis (2 key locks keyed alike) with provision	VSRA2	685738	473	
Mechanical Interlocking for Fixed Circuit Breakers					
■ Must be ordered as a separate item. Not UL Listed.					
	Two circuit breakers	Stacks—mounted, by rigid link	VM2FT	685985	1589
		Adjacent, by flexible link	VM2FC	685982	1816
	Three circuit breaker stacks—mounted	By rigid link (2 normal sources + 1 standby)	VM31FT	685976	2542
		By rigid link (2 normal sources + 1 coupler)	VM32FT	685987	2542
		By rigid link (3 normal sources/only one device closed)	VM33FT	685986	2542

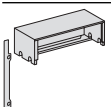
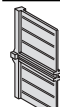
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Accessories—Continued

				Catalog No.	List Price
For Cradle					
Position Switches					
	Four SPDT connected position switches (CE)			685977	\$ 125
	Two SPDT disconnected position switches (CD)			685978	61
	One SPDT test position switch (CT) Not available on MC circuit breakers			688789	61
Padlocking Device				Standard	No charge
Disconnected Position Lock by Key Lock (Factory Mounted) (Not UL Listed)					
	By Ronis key lock	One key lock supplied + provision	VSRC1	685969	256
		Two key locks supplied + provision	VSRC2	685740	512
	By KIRK® key lock	One key lock + provision	VSKC	35635+ 685971	1073
		Provision only	VKC	685971	497
Door Interlock (VPEC)					
	Lock when circuit breaker connected			685966	181
Racking Interlock when Door Opened (VPOC)					
	One piece			685967	130
Withdrawal/Spring Charged Interlock (VEAA) (Factory Mounted)					
	Incompatible with MN or MNR undervoltage trip			685857	342
Mechanical Interlocking for Drawout Circuit Breakers					
■ Must be ordered as a separate item. Not UL Listed.					
	Two device	Stacks—mounted, by rigid link	VM2CT	685975	1262
		Adjacent, by flexible link	VM2CC	685959	1488
	Three device stacks—mounted	By rigid link (Two normal sources + one standby)	VM31CT	684499	2018
		By rigid link (Two normal sources + one coupler)	VM32CT	684498	2018
		By rigid link (Three normal sources/ only one device closed)	VM33CT	684497	2018
Rejection Feature (VDC)					
	Standard (supplied at no charge when supplied with the circuit breaker)			685974	No charge

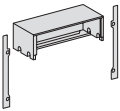
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Accessories—Continued

					Catalog No.	List Price	
For Cradle	Safety Shutters (VO)						
		MP08–MP20–MC08–MC20	3P	M08–M25	685946	\$ 373	
			4P	M08–M25	685947	485	
		MP25–MP30	3P	M32 ①	685948	373	
			4P	M32 ①	685949	485	
		MC32	3P	M40 ①	685950	373	
			4P	M40 ①	685951	485	
		MP40–MP50–MC40–MC50	3P	M50 ①	684480	636	
			4P	M50 ①	684481	828	
		MP63	3P	M63 ①	684483	812	
			4P	M63 ①	684484	1056	
		Shutter Locking Device (VVC)					
			MP08–MP30–MC08–MC20		M08–M32	685965	55
	MC32		4P	M40	685965 (2)	55 ea.	
	MP40–MP63–MC40–MC50		M50–M63	685965 (2)	55 ea.		
	Arc Chute Cover (CC)						
	■ Incompatible with top front connections and partitioning fixture.						
		Fixed			No charge		
		Drawout			No charge		
	Secondary Disconnect Terminal Cover (CB)						
		Drawout			No charge		
Door Escutcheon							
	Can be used with fixed or drawout circuit breakers			685980	202		
Door Escutcheon with Transparent Cover (CCP)							
	Provides a higher degree of protection			685981	706		
Interphase Barrier (EIP)							
■ Not available for 4000 A, 5000 A, 6300 A and all fixed-mounted circuit breakers. (Kit contains 3 barriers.)							
	3P			685979	87		
	4P			685979	87		

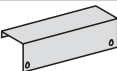
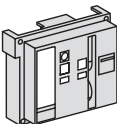
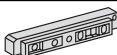
① Only field-installable if not mounted in switchgear.

Spare Parts

			Catalog No.	List Price
Arc Chute (1 piece)				
		AC	685548	\$ 215
		DC	688870	371
		1000 Vac	690212	371
Clusters for Cradle (Set of 2)				
		M08-M12N 3P	685870 (3)	223 ea.
		M08-M12N 4P	685870 (4)	223 ea.
	MP08-MP16 3P	M16N 3P	685872 (3)	446 ea.
	MC08-MC16 3P		685872 (3)	446 ea.
	MP08-MP16 4P	M16N 4P	685874 (3)	615 ea.
	MC08-MC16 4P		685874 (3)	615 ea.
	MP20-MC20 3P	M20-M25N 3P	685874 (3)	615 ea.
	MP20-MC20 4P	M20-M25N 4P	685874 (4)	615 ea.
		M08-M16H/L 3P	685872 (3)	446 ea.
		M08-M16H/L 4P	685872 (4)	446 ea.
		M20-M25H 3P	685874 (3)	615 ea.
		M20-M25H 4P	685874 (4)	615 ea.
	MP25-MP30 3P	M20-M25L 3P	685875 (3)	782 ea.
	MP25-MP30 4P	M20-M25L 4P	685875 (4)	782 ea.
		M32H 3P	685875 (3)	782 ea.
		M32H 4P	685875 (4)	782 ea.
	MC32 3P	M40H 3P	685875 (1) +685876 (2)	782 ea. 1340 ea.
		M40H 4P	685875 (2) +685876 (2)	782 ea. 1340 ea.
	MP40-MP50 3P	M50H 3P	685875 (6)	782 ea.
	MC40-MC50 3P		685876 (2)	1340 ea.
	MP40-MP50 4P		685876 (8)	1340 ea.
	MC40-MC50 4P		685876 (8)	1340 ea.
		M50H 4P	685875 (7)	782 ea.
	MP63 3P	M63H 3P	685875 (3) +685876 (3)	782 ea. 1340 ea.
		M63H 4P	685875 (4) +685876 (3)	782 ea. 1340 ea.
Arc Chute Cover (CC)				
	Fixed			
	MP08-MP30 3P	M08-M30 3P	690300	368
	MP08-MP30 4P	M08-M30 4P	690301	490
	MP40-MP50 3P		690302	651
		M40 3P	690301	490
		M40 4P	690302	651
	Drawout			
	MP08-MP30 3P	M10-M40DC 3P	689623	298
	MC08-MC20 3P		689623	298
	MP08-MP30 4P	M10-M40DC 4P	689676	397
	MC08-MC20 4P	M60-M80DC 2P	689676	397
	MC32 3P		689676	397
	MP40-MP50 3P		689624	529
	MP40-MP50 4P		689625	706
	MP63 3P		689625	706
		M08-M32 3P	685960	259
		M08-M32 4P	685961	397
		M40 3P	685961	397
		M40 4P	685962	529
		M50 3P	685962	529
		M50 4P	685963	706
		M63 3P	685963	706
		M63 4P	685963	706

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Spare Parts—Continued

			Catalog No.	List Price
Secondary Disconnect Terminal Cover (CB)				
	Drawout			
	MP08–MP30 3P		689619	\$ 186
	MC08–MC20 3P		689619	186
	MP08–MP30 4P		689620	248
	MC08–MC20 4P		689620	248
	MC32 3P		689620	248
	MP40–MP50 3P		689621	332
	MP40–MP50 4P		689622	443
	MP63		689622	443
		M08–M32 3P	685955	186
		M08–M32 4P	685956	248
		M40 3P	685956	248
		M40 4P	685957	332
		M50 3P	685957	332
		M50 4P	685958	443
		M63 3P	685958	443
		M63 4P	685958	443
Escutcheon for Circuit Breaker (1 Piece)				
	MP08–MP30 3P	M08–M32 3P	685710	227
	MC08–MC20 3P	M40 4P		
	MP40–MP50 3P	M50 3P		
	MC40–MC50 3P			
	MP08–MP20 4P			
	MC08–MC20 4P			
	MP63 3P	M32 4P	685711	273
	MC32 3P	M40 3P		
	MP40–MP50 4P	M50 4P		
	MC40–MC50 4P	M63 3P		
Left Side Escutcheon for Circuit Breaker				
	3P		684450	261
	4P		684451	313
Escutcheon for Chassis				
	One piece		685633	147
Shunt Trip Close Coil and Undervoltage Retaining Nut				
	One piece		685712	66
Charging Handle				
	One piece		685713	89
Fixing Bracket				
	Two pieces		685926	251
Racking Handle				
	One piece		685631	150
Battery Module (PIL)				
	For STR 38S–STR 58U		54726	240

Continued on next page

Spare Parts—Continued

		Catalog No.	List Price
Circuit Breaker Mismatch Protection (Vdc)			
	One piece	685974	\$ 53
Sealable Cover			
	For STR 18M to STR 58U (PBD) control units	685837	54
	For direct current MASTERPACT circuit breakers (PCB)	689462	54
Installation Instructions			
	IEC Rated MASTERPACT circuit breakers	689990	No charge
	UL Listed MASTERPACT circuit breakers	48049-071-02	No charge
Lifting Hooks			
	Set of two	3U14321	429
Vertical UL 489—UL 1066 Connectors			
	MP08—MC08—MP12—MP16—MC16 3P (set of three)	685884 (2)	348 ea.
	MP08—MC08—MP12—MP16—MC16 4P (one connector)	690973 (8)	131 ea.
	MP20—MC20 3P (set of three)	685916 (2)	436 ea.
	MP20—MC20 4P (one connector)	690974 (8)	163 ea.
	MP25—MP30 3P (set of three top or bottom connectors)	685915 (2)	1163 ea.
	MP25—MP30 4P (set of four top or bottom connectors)	691295 (2)	1743 ea.
	MC32	690529 (4)+ 690530 (2)	493 ea. 493 ea.
	MP40—MC40 3P (set of six connectors)	688256 (1)	2962 ea.
	MP40—MC40 4P (one connector)	691296 (8)	555 ea.
	MP50—MC50—MP63 3P (set of six top or bottom connectors)	688256 (2)	2962 ea.
	MP50—MC50 4P (one connector)	691296 (16)	555 ea.

IEC 947-2 Rated 690 Vac MASTERPACT Circuit Breakers

Selection Table

Ratings as per IEC 947-2 and EN 60947-2 Standards				M08				M10				M12			
Number of poles				3, 4				3, 4				3, 4			
Rated current (A) In 40°C				800				1000				1250			
Rating of 4th pole (A)				800				1000				1250			
Rated insulation voltage (V) Ui				1000				1000				1000			
Rated impulse withstand voltage (kV) Uimp				8				8				8			
Rated operating voltage (V) Ue AC 50/60 Hz				690				690				690			
Type of Circuit Breaker				N1	H1	H2	L1	N1	H1	H2	L1	N1	H1	H2	L1
Ultimate breaking capacity (kA RMS) Icu	AC 50/60 Hz	220/415 V	40	65	100	130	40	65	100	130	40	65	100	130	
			440 V	40	65	100	110	40	65	100	110	40	65	100	110
			500/690 V	40	65	85	65	40	65	85	65	40	65	85	65
Service breaking capacity Ics	(% Icu)		100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	
Short-time withstand current (kA RMS) Icw	AC 50/60 Hz	0.5s	40	65	65	12	40	65	65	12	40	65	65	12	
		1 s	30	50	50	12	30	50	50	12	30	50	50	12	
		3 s	22	32	32	12	22	32	32	12	22	32	32	12	
Making capacity (kA peak) Icm	AC 50/60 Hz	220/415 V	84	143	220	286	84	143	220	286	84	143	220	286	
		440 V	84	143	220	242	84	143	220	242	84	143	220	242	
		500/690 V	84	143	187	143	84	143	187	143	84	143	187	143	
Electrodynamic withstand (kA peak)			84	143	143	24	84	143	143	24	84	143	143	24	
Utilization category			B	B	B	B	B	B	B	B	B	B	B	B	
Suitability for isolation As per IEC 947-2 Standards			Yes				Yes				Yes				
Control Units															
Sensor ratings (A)			200 to 800				200 to 1000				200 to 1250				
Function	STR 18M		I				I				I				
	STR 28D		LI				LI				LI				
	STR 38S		LSI				LSI				LSI				
	STR 58U		LSI				LSI				LSI				
Type of Switch			NI				NI				NI				
Short-time withstand current (kA RMS) Icw	AC 50/60 Hz	0.5 s	40				40				40				
		1 s	30				30				30				
		3 s	22				22				22				
Making capacity (kA peak) Icm	AC 50/60 Hz	440 V	84				84				84				
		500/690 V	84				84				84				
Electrodynamic withstand (kA peak)			84				84				84				
Suitability for isolation as per IEC Standards			Yes				Yes				Yes				
Closing time (ms)			70				70				70				
Endurance (C-O cycles) x 1000	Mechanical	With maintenance	20				20				20				
		W/O maintenance	10				10				10				
	Electrical	W/O maintenance 440 V - In	10				10				10				
		690 V - In	10				10				10				
	Motor control (AC3-947-4) ①	690 V	10				10				10				
Dimensions and Weights															
Dimensions H x W x D (in./mm)	Fixed	3P	14 x 17 x 11/ 356 x 432 x 279				14 x 17 x 11/ 356 x 432 x 279				14 x 17 x 11/ 356 x 432 x 279				
		4P	14 x 21 x 11 356 x 533 x 279				14 x 21 x 11/ 356 x 533 x 279				14 x 21 x 11/ 356 x 533 x 279				
	Drawout	3P	17 x 17 x 14/ 432 x 432 x 356				17 x 17 x 14/ 432 x 432 x 356				17 x 17 x 14/ 432 x 432 x 356				
		4P	17 x 22 x 14/ 432 x 559 x 356				17 x 22 x 14/ 432 x 559 x 356				17 x 22 x 14/ 432 x 559 x 356				
Maximum weight (lb/kg)	Fixed	3P	95/43				95/43				95/43				
		4P	119/54				119/54				119/54				
	Drawout	3P	143/65				143/65				143/65				
		4P	177/80				177/80				177/80				

① Closing at six times Ie and opening at 0.17 times Um.

	M16				M20				M25				M32		M40		M50		M63	
	3, 4				3, 4				3, 4				3, 4		3, 4		3, 4		3, 4	
	1600				2000				2500				3200		4000		5000		6300	
	1600				2000				2500				3200		4000		2500		3200	
	1000				1000				1000				1000		1000		1000		1000	
	8				8				8				8		8		8		8	
	690				690				690				690		690		690		690	
	N1	H1	H2	L1	N1	H1	H2	L1	N1	H1	H2	L1	H1	H2	H1	H2	H1	H2	H1	H2
	40	65	100	130	55	75	100	130	55	75	100	130	75	100	75	100	100	150	100	150
	40	65	100	110	55	75	100	110	55	75	100	110	75	100	75	100	100	150	100	150
	40	65	85	65	55	75	85	65	55	75	85	65	75	85	75	85	85	85	85	85
	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
	40	65	65	17	55	75	75	17	55	75	75	17	75	75	75	75	100	100	100	100
	40	50	50	17	55	75	75	17	55	75	75	17	75	75	75	75	100	100	100	100
	22	32	32	12	50	57	57	17	50	75	75	17	75	75	75	75	100	100	100	100
	84	143	220	286	121	165	220	286	121	165	220	286	165	220	165	220	220	330	220	330
	84	143	220	242	121	165	220	242	121	165	220	242	165	220	165	220	220	330	220	330
	84	143	187	143	121	165	187	143	121	165	187	143	165	187	165	187	187	187	187	187
	84	143	143	34	121	165	165	34	121	165	165	34	165	165	165	165	220	220	220	220
	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B
	Yes				Yes				Yes				Yes		Yes		Yes		Yes	
	200 to 1600				200 to 2000				300 to 2500				600 to 3200		2000 to 4000		2000 to 5000		2000 to 6300	
	I				I				I				I		I		I		I	
	LI				LI				LI				LI		LI		LI		LI	
	LSI				LSI				LSI				LSI		LSI		LSI		LSI	
	LSI				LSI				LSI				LSI		LSI		LSI		LSI	
	NI				NI				NI				HI		HI		HI		HI	
	40				55				55				75		75		100		100	
	30				55				55				75		75		100		100	
	22				50				50				75		75		100		100	
	84				84				84				105		105		187		187	
	84				84				84				105		105		187		187	
	84				121				121				165		165		220		220	
	Yes				Yes				Yes				Yes		Yes		Yes			
	70				70				70						80		80		80	
	20				15				15				15		10		10		10	
	10				10				10				10		5		5		5	
	10				9				8				4		3		3		2	
	10				7				6				2.6		2.5		2.5		1.5	
	10				7				6				2.6		2.5		2.5		1.5	
	14 x 17 x 11/ 356 x 432 x 279				14 x 17 x 11/ 356 x 432 x 279				14 x 17 x 11/ 356 x 432 x 279				14 x 17 x 11/ 356 x 432 x 279		14 x 21 x 11/ 356 x 533 x 279		14 x 32 x 11/ 356 x 812 x 279		–	
	14 x 21 x 11/ 356 x 533 x 279				14 x 21 x 11/ 356 x 533 x 279				14 x 21 x 11/ 356 x 533 x 279				14 x 21 x 11/ 356 x 533 x 279		14 x 32 x 11/ 356 x 812 x 279		–		–	
	17 x 17 x 14/ 432 x 432 x 356				17 x 17 x 14/ 432 x 432 x 356				17 x 17 x 14/ 432 x 432 x 356				17 x 17 x 14/ 432 x 432 x 356		17 x 22 x 14/ 432 x 559 x 356		19 x 32 x 14/ 483 x 812 x 356		19 x 41 x 14/ 483 x 1041 x 356	
	17 x 22 x 14/ 432 x 559 x 356				17 x 22 x 14/ 432 x 559 x 356				17 x 22 x 14/ 432 x 559 x 356				17 x 22 x 14/ 432 x 559 x 356		19 x 32 x 14/ 483 x 812 x 356		19 x 41 x 14/ 483 x 1041 x 356		19 x 41 x 14/ 483 x 1041 x 356	
	102/46				121/55				121/55				177/80		198/90		242/110		–	
	128/58				152/69				152/69				198/90		242/110		–		–	
	152/69				181/82				181/82				287/130		331/150		474/215		540/245	
	187/85				225/102				225/102				331/150		441/200		507/230		584/265	

IEC 947-2 Rated 1000 Vac MASTERPACT Circuit Breakers**Selection Table**

Ratings as per IEC 947-2 and EN 60947-2 Standards				M08	M10	M12
Number of poles				3, 4	3, 4	3, 4
Rated current (A)		In	40°C	800	1000	1250
Rating of 4th pole (A)				800	1000	1250
Rated insulation voltage (V)		Ui		1000	1000	1000
Rated impulse withstand voltage (kV)		Uimp		8	8	8
Rated operational voltage (V)		Ue	AC 50/60 Hz	1000	1000	1000
Type of Circuit Breaker				H1	H1	H1
Ultimate breaking capacity (kA RMS)	Icu	AC 60/60 Hz	220/415 V	65	65	65
			440 V	65	65	65
			500/690 V	65	65	65
			1000 V	45	45	45
Service breaking capacity		Ics	(% Icu)	100%	100%	100%
Short-time withstand current (kA RMS)	Icw	AC 60/60 Hz	0.5 s	45	45	45
			1 s	45	45	45
			3 s	32	32	32
Making capacity (kA peak)	Icm	AC 50/60 Hz	220/415 V	95	95	95
			440 V	143	143	143
			500/690 V	143	143	143
			1000 V	143	143	143
Utilization category				B	B	B
Suitability for isolation as per IEC 947-2				Yes	Yes	Yes
Control Units, Dimensions and Weights (Same as 690 Vac Circuit Breaker)						

	M16	M20	M25	M32
	3, 4	3, 4	3, 4	3, 4
	1600	2000	2500	3200
	1600	2000	2500	3200
	1000	1000	1000	1000
	8	8	8	8
	1000	1000	1000	1000
	H1	H1	H1	H1
	65	75	75	75
	65	75	75	75
	65	75	75	75
	45	45	45	45
	100%	100%	100%	100%
	45	45	45	45
	45	45	45	45
	32	45	45	45
	95	95	95	95
	143	165	165	165
	143	165	165	165
	143	165	165	165
	B	B	B	B
	Yes	Yes	Yes	Yes

IEC 947-2 Rated 690/1000 Vac MASTERPACT Circuit Breakers

To order a complete circuit breaker, order:

- 1 Circuit breaker frame page 124
 or cradle only page 125
 or circuit breaker without cradle page 126
- 2 Connections page 127
- 3 Control unit page 110
- 4 Accessories page 112
- 5 Request for quotation form page 135

Additional information:

- Catalog no. ABTED36050EN
 ■ Installation Guide no. ABTED29601V1EN
 ■ Data Sheet no. ABTED29601V1EN
 ■ D-Fax no. 995

IEC 947-2 Rated MASTERPACT Circuit Breaker Frame

- Prices do not include control unit.
 ■ Prices include horizontal connections (PPS).

Rating 40°C (A)	Ics=100% Icu (kA) 220/440 V	Fixed 3P	List Price	Fixed 4P ①	List Price	Drawout with cradle 3P	List Price	Drawout with cradle 4P ①	List Price	
M08 to M25 N1 Type—690 Vac										
M08	800	40	M08N13FPPS0800	\$ 5551	M08N14FPPS0800	\$ 7216	M08N13DPPS0800	\$ 8040	M08N14DPPS0800	\$ 10452
M10	1000	40	M10N13FPPS1000	5912	M10N14FPPS1000	7687	M10N13DPPS1000	8887	M10N14DPPS1000	11554
M12	1250	40	M12N13FPPS1200	6274	M12N14FPPS1200	8157	M12N13DPPS1200	10634	M12N14DPPS1200	13824
M16	1600	40	M16N13FPPS1600	7007	M16N14FPPS1600	9109	M16N13DPPS1600	11842	M16N14DPPS1600	15395
M20	2000	55	M20N13FPPS2000	8405	M20N14FPPS2000	10926	M20N13DPPS2000	14015	M20N14DPPS2000	18219
M25	2500	55	M25N13FPPS2500	14571	M25N14FPPS2500	18942	M25N13DPPS2500	20409	M25N14DPPS2500	26532

M08 to M63 H1 Type—690 Vac

M08	800	65	M08H13FPPS0800	6236	M08H14FPPS0800	8108	M08H13DPPS0800	8971	M08H14DPPS0800	11663
M10	1000	65	M10H13FPPS1000	6634	M10H14FPPS1000	8624	M10H13DPPS1000	9903	M10H14DPPS1000	12874
M12	1250	65	M12H13FPPS1200	7031	M12H14FPPS1200	9140	M12H13DPPS1200	11822	M12H14DPPS1200	15369
M16	1600	65	M16H13FPPS1600	7836	M16H14FPPS1600	10188	M16H13DPPS1600	13149	M16H14DPPS1600	17095
M20	2000	75	M20H13FPPS2000	9373	M20H14FPPS2000	12184	M20H13DPPS2000	15538	M20H14DPPS2000	20199
M25	2500	75	M25H13FPPS2500	16148	M25H14FPPS2500	20992	M25H13DPPS2500	22564	M25H14DPPS2500	29333
M32	3200	75	M32H13FPPS3200	20081	M32H14FPPS3200	26105	M32H13DPPS3200	28825	M32H14DPPS3200	37472
M40	4000	75	M40H13FPPS4000	32958	M40H14FPPS4000	42844	M40H13DPPS4000	46946	M40H14DPPS4000	61031
M50 ②	5000	100	M50H13FPPS5000	49519			M50H13DPPS5000	65320	M50H14DPPS5000	84916
M63 ②	6300	100					M63H13DPPS6300	89115	M63H14DPPS6300	115849

M08 to M63 H2 Type—690 Vac

M08	800	100	M08H23FPPS0800	6793	M08H24FPPS0800	8831	M08H23DPPS0800	9524	M08H24DPPS0800	12382
M10	1000	100	M10H23FPPS1000	7108	M10H24FPPS1000	9240	M10H23DPPS1000	10505	M10H24DPPS1000	13657
M12	1250	100	M12H23FPPS1200	7422	M12H24FPPS1200	9650	M12H23DPPS1200	12215	M12H24DPPS1200	15879
M16	1600	100	M16H23FPPS1600	8272	M16H24FPPS1600	10753	M16H23DPPS1600	13588	M16H24DPPS1600	17665
M20	2000	100	M20H23FPPS2000	9892	M20H24FPPS2000	12860	M20H23DPPS2000	17228	M20H24DPPS2000	22396
M25	2500	100	M25H23FPPS2500	18110	M25H24FPPS2500	23543	M25H23DPPS2500	24441	M25H24DPPS2500	31773
M32	3200	100	M32H23FPPS3200	23094	M32H24FPPS3200	30023	M32H23DPPS3200	30703	M32H24DPPS3200	39914
M40	4000	100	M40H23FPPS4000	37779	M40H24FPPS4000	49113	M40H23DPPS4000	49953	M40H24DPPS4000	64938
M50 ②	5000	150	M50H23FPPS5000	59487			M50H23DPPS5000	75286	M50H24DPPS5000	97872
M63 ②	6300	150					M63H23DPPS6300	107341	M63H24DPPS6300	139543

M08 to M25 L1 Type—690 Vac

M08	800	130	M08L13FPPS0800	9042	M08L14FPPS0800	11755	M08L13DPPS0800	11663	M08L14DPPS0800	15162
M10	1000	130	M10L13FPPS1000	9619	M10L14FPPS1000	12505	M10L13DPPS1000	12836	M10L14DPPS1000	16688
M12	1250	130	M12L13FPPS1200	10196	M12L14FPPS1200	13254	M12L13DPPS1200	15387	M12L14DPPS1200	20003
M16	1600	130	M16L13FPPS1600	11755	M16L14FPPS1600	15281	M16L13DPPS1600	19688	M16L14DPPS1600	25594
M20	2000	130	M20L13FPPS2000	14059	M20L14FPPS2000	18277	M20L13DPPS2000	22473	M20L14DPPS2000	29216
M25	2500	130	M25L13FPPS2500	20992	M25L14FPPS2500	27290	M25L13DPPS2500	28310	M25L14DPPS2500	36803

① The 4th pole is not protected; add \$459 for neutral protection.

② The 4th neutral pole rating is half the phase rating.

Continued on next page

IEC Rated MASTERPACT® Circuit Breakers

IEC 947-2 Rated MASTERPACT Circuit Breaker Frame—Continued

- Prices do not include control unit.
- Prices include horizontal connections (PPS).

Rating 40°C (A)	Ics=100% Icu (kA) 220/440 V	Fixed 3P	List Price	Fixed 4P ①	List Price	Drawout with Cradle 3P	List Price	Drawout with Cradle 4P ①	List Price
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M08 to M32 H1 Type—1000 Vac

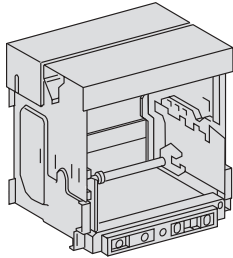
- Extra list price to add to M08 to M32—690 Vac.
- Prices do not include control unit.
- Not available in switch version.
- Drawout only.
- Non-compatible with front connections (AA).

M08 to M32 800 to 3200 A	1040	1386
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M08 to M63 NI and HI Switches—690 Vac

M08	800	M08NI3FPPS0000	\$ 6109	M08NI4FPPS0000	\$ 7941	M08NI3DPPS0000	\$ 8341	M08NI4DPPS0000	\$ 10842
M10	1000	M10NI3FPPS0000	6516	M10NI4FPPS0000	8471	M10NI3DPPS0000	9736	M10NI4DPPS0000	12657
M12	1200	M12NI3FPPS0000	6924	M12NI4FPPS0000	9001	M12NI3DPPS0000	11132	M12NI4DPPS0000	14472
M16	1600	M16NI3FPPS0000	7198	M16NI4FPPS0000	9358	M16NI3DPPS0000	11409	M16NI4DPPS0000	14832
M20	2000	M20NI3FPPS0000	9053	M20NI4FPPS0000	11768	M20NI3DPPS0000	13645	M20NI4DPPS0000	17738
M25	2500	M25HI3FPPS0000	14106	M25HI4FPPS0000	18338	M25HI3DPPS0000	19479	M25HI4DPPS0000	25322
M32	3200	M32HI3FPPS0000	17725	M32HI4FPPS0000	23043	M32HI3DPPS0000	27368	M32HI4DPPS0000	35578
M40	4000	M40HI3FPPS0000	28361	M40HI4FPPS0000	36869	M40HI3DPPS0000	43789	M40HI4DPPS0000	56925
M50	5000	M50HI3FPPS0000	43876			M50HI3DPPS0000	59675	M50HI4DPPS0000	77578
M63	6300					M63HI3DPPS0000	85949	M63HI4DPPS0000	111734

Cradle Only



- Cradle price is included in the complete drawout price.

	3P	List Price	4P	List Price
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N1/NI Type—690 Vac

M08	M08N03C	\$ 2287	M08N04C	\$ 2973
M10	M10N03C	2287	M10N04C	2973
M12	M12N03C	2287	M12N04C	2973
M16	M16N03C	2287	M16N04C	2973
M20	M20N03C	2592	M20N04C	3370
M25	M25N03C	4720	M25N04C	6136

H1/H2/HI/L1 Type—690 Vac

M08	M08H03C	2514	M08H04C	3268
M10	M10H03C	2514	M10H04C	3268
M12	M12H03C	2514	M12H04C	3268
M16	M16H03C	2514	M16H04C	3268
M20	M20H03C	2847	M20H04C	3702
M25	M25H03C	5188	M25H04C	6744
M32	M32H03C	5188	M32H04C	6744
M40	M40H03C	8298	M40H04C	10788
M50	M50H03C	17566	M50H04C	22836
M63	M63H03C	24440	M63H04C	31772

H1 Type—1000 Vac—Extra list price to add to the price of a 690 Vac H1 cradle

M08 to M32	491	654
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① The 4th pole is not protected; add \$459 for neutral protection.

IEC Rated MASTERPACT Drawout Circuit Breaker Without Cradle

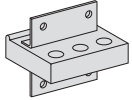
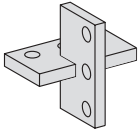
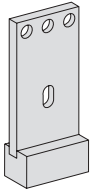
■ Prices do not include control unit.

	Rating 40°C	Ics=100% Icu (kA) 220/440 V	Drawout without Cradle 3P	List Price	Drawout without Cradle 4P ①	List Price
M08 to M25 N1 Type—690 Vac						
M08	800	40	M08N13APPS0800	\$ 6041	M08N14APPS0800	\$ 7852
M10	1000	40	M10N13APPS1000	6931	M10N14APPS1000	9010
M12	1250	40	M12N13APPS1200	8764	M12N14APPS1200	11394
M16	1600	40	M16N13APPS1600	10033	M16N14APPS1600	13042
M20	2000	55	M20N13APPS2000	11995	M20N14APPS2000	15593
M25	2500	55	M25N13APPS2500	16473	M25N14APPS2500	21414
M08 to M63 H1 Type—690 Vac						
M08	800	65	M08H13APPS0800	6780	M08H14APPS0800	8815
M10	1000	65	M10H13APPS1000	7759	M10H14APPS1000	10087
M12	1250	65	M12H13APPS1200	9774	M12H14APPS1200	12706
M16	1600	65	M16H13APPS1600	11168	M16H14APPS1600	14518
M20	2000	75	M20H13APPS2000	13324	M20H14APPS2000	17321
M25	2500	75	M25H13APPS2500	18246	M25H14APPS2500	23719
M32	3200	75	M32H13APPS3200	24819	M32H14APPS3200	32264
M40	4000	75	M40H13APPS4000	40580	M40H14APPS4000	52755
M50 ②	5000	100	M50H13APPS5000	50141	M50H14APPS5000	65184
M63 ②	6300	100	M63H13APPS6300	67909	M63H14APPS6300	88281
M08 to M63 H2 Type—690 Vac						
M08	800	100	M08H23APPS0800	7361	M08H24APPS0800	9569
M10	1000	100	M10H23APPS1000	8392	M10H24APPS1000	10909
M12	1250	100	M12H23APPS1200	10187	M12H24APPS1200	13241
M16	1600	100	M16H23APPS1600	11629	M16H24APPS1600	15117
M20	2000	100	M20H23APPS2000	15100	M20H24APPS2000	19628
M25	2500	100	M25H23APPS2500	20217	M25H24APPS2500	26281
M32	3200	100	M32H23APPS3200	26792	M32H24APPS3200	34829
M40	4000	100	M40H23APPS4000	43737	M40H24APPS4000	56858
M50 ②	5000	150	M50H23APPS5000	60606	M50H24APPS5000	78789
M63 ②	6300	150	M63H23APPS6300	87046	M63H24APPS6300	113160
M08 to M25 L1 Type—690 Vac						
M08	800	130	M08L13APPS0800	9607	M08L14APPS0800	12488
M10	1000	130	M10L13APPS1000	10840	M10L14APPS1000	14091
M12	1250	130	M12L13APPS1200	13517	M12L14APPS1200	17572
M16	1600	130	M16L13APPS1600	18033	M16L14APPS1600	23443
M20	2000	130	M20L13APPS2000	20607	M20L14APPS2000	26789
M25	2500	130	M25L13APPS2500	24279	M25L14APPS2500	31563
M08 to M63 NI/HI Switches—690 Vac						
M08	800		M08NI3APPS0000	6118	M08NI4APPS0000	7953
M10	1000		M10NI3APPS0000	7584	M10NI4APPS0000	9858
M12	1200		M12NI3APPS0000	9049	M12NI4APPS0000	11763
M16	1600		M16NI3APPS0000	9340	M16NI4APPS0000	12142
M20	2000		M20NI3APPS0000	11337	M20NI4APPS0000	14737
M25	2500		M25NI3APPS0000	15006	M25NI4APPS0000	19507
M32	3200		M32NI3APPS0000	23290	M32NI4APPS0000	30276
M40	4000		M40NI3APPS0000	37263	M40NI4APPS0000	48444
M50	5000		M50NI3APPS0000	44214	M50NI4APPS0000	57479
M63	6300		M63NI3APPS0000	64585	M63NI4APPS0000	83960

① The 4th pole is not protected; add \$459 for neutral protection.

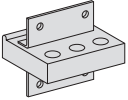
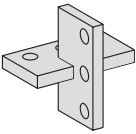
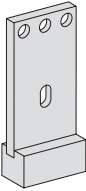
② The 4th neutral pole rating is half the phase rating.

Connections

			Fixed 3P	List Price	Fixed 4P	List Price ①	Drawout 3P	List Price ①	Drawout 4P	List Price ①
M08 to M25 N1										
Horizontal (PP)			Standard	No charge	Standard	No charge	Standard	No charge	Standard	No charge
										
Vertical (CC)										
										
	M08–M10 M12	Line	R12N03FUCM	\$ 315	R12N04FUCM	\$ 419	R12N03CUCM	\$ 138	R12N04CUCM	\$ 184
		Load	R12N03FDCM	315	R12N04FDCM	419	R12N03CDCM	138	R12N04CDCM	184
		Both	R12N03FBCM	630	R12N04FBCM	837	R12N03CBCM	276	R12N04CBCM	368
	M16	Line	R16N03FUCM	327	R16N04FUCM	436	R16N03CUCM	145	R16N04CUCM	194
		Load	R16N03FDCM	327	R16N04FDCM	436	R16N03CDCM	145	R16N04CDCM	194
		Both	R16N03FBCM	653	R16N04FBCM	872	R16N03CBCM	290	R16N04CBCM	389
	M20–M25	Line	R25N03FUCM	593	R25N04FUCM	792	R25N03CUCM	293	R25N04CUCM	392
		Load	R25N03FDCM	593	R25N04FDCM	792	R25N03CDCM	293	R25N04CDCM	392
		Both	R25N03FBCM	1187	R25N04FBCM	1585	R25N03CBCM	587	R25N04CBCM	784
	M08–M10 M12	Line	R12N03FUAM	265	R12N04FUAM	352	R12N03CUAM	600	R12N04CUAM	800
		Load	R12N03FDAM	265	R12N04FDAM	352	R12N03CDAM	600	R12N04CDAM	800
		Both	R12N03FBAM	529	R12N04FBAM	704	R12N03CBAM	1201	R12N04CBAM	1601
	M16	Line	R16N03FUAM	638	R16N04FUAM	851	R16N03CUAM	490	R16N04CUAM	652
		Load	R16N03FDAM	638	R16N04FDAM	851	R16N03CDAM	490	R16N04CDAM	652
		Both	R16N03FBAM	1277	R16N04FBAM	1702	R16N03CBAM	980	R16N04CBAM	1304
	M20–M25	Line	R25N03FUAM	886	R25N04FUAM	1181	R25N03CUAM	983	R25N04CUAM	1310
		Load	R25N03FDAM	886	R25N04FDAM	1181	R25N03CDAM	983	R25N04CDAM	1310
		Both	R25N03FBAM	1771	R25N04FBAM	2362	R25N03CBAM	1967	R25N04CBAM	2620

Continued on next page

Connections—Continued

			Fixed 3P	List Price	Fixed 4P	List Price ^①	Drawout 3P	List Price ^①	Drawout 4P	List Price ^①
M08 to M63 H1/H2										
Horizontal (PP)			Standard	No charge	Standard	No charge	Standard	No charge	Standard	No charge
										
Vertical (CC)										
										
M08–M10 M12–M16	Line	R16H03FUCM	\$ 315		R16H04FUCM	\$ 436		R16H03CUCM	\$ 145	R16H04CUCM \$ 194
	Load	R16H03FDCM	315		R16H04FDCM	436		R16H03CDCM	145	R16H04CDCM 194
	Both	R16H03FBCM	630		R16H04FBCM	872		R16H03CBCM	290	R16H04CBCM 389
M20–M25	Line	R25H03FUCM	593		R25H04FUCM	792		R25H03CUCM	293	R25H04CUCM 392
	Load	R25H03FDCM	593		R25H04FDCM	792		R25H03CDCM	293	R25H04CDCM 392
	Both	R25H03FBCM	1187		R25H04FBCM	1585		R25H03CBCM	587	R25H04CBCM 784
M32	Line	R32H03FUCM	874		R32H04FUCM	1164		R32H03CUCM	715	R32H04CUCM 955
	Load	R32H03FDCM	874		R32H04FDCM	1164		R32H03CDCM	715	R32H04CDCM 955
	Both	R32H03FBCM	1748		R32H04FBCM	2328		R32H03CBCM	1431	R32H04CBCM 1909
M40	Line	R40H03FUCM	1342		R40H04FUCM	1789		R40H03CUCM	1193	R40H04CUCM 1510
	Load	R40H03FDCM	1342		R40H04FDCM	1789		R40H03CDCM	1193	R40H04CDCM 1510
	Both	R40H03FBCM	2684		R40H04FBCM	3579		R40H03CBCM	2385	R40H04CBCM 3020
M50	Line	R50H03FUCM	1764					R50H03CUCM	1569	R50H04CUCM 2006
	Load	R50H03FDCM	1764					R50H03CDCM	1569	R50H04CDCM 2006
	Both	R50H03FBCM	3528					R50H03CBCM	3137	R50H04CBCM 4011
M63	Line							R63H03CUCM	2444	R63H04CUCM 2870
	Load							R63H03CDCM	2444	R63H04CDCM 2870
	Both							R63H03CBCM	4888	R63H04CBCM 5741
Front (AA) ^①										
										
M08–M10 M12–M16	Line	R16H03FUAM	638		R16H04FUAM	851		R16H03CUAM	490	R16H04CUAM 652
	Load	R16H03FDAM	638		R16H04FDAM	851		R16H03CDAM	490	R16H04CDAM 652
	Both	R16H03FBAM	1277		R16H04FBAM	1702		R16H03CBAM	980	R16H04CBAM 1304
M20–M25	Line	R25H03FUAM	886		R25H04FUAM	1181		R25H03CUAM	983	R25H04CUAM 1304
	Load	R25H03FDAM	886		R25H04FDAM	1181		R25H03CDAM	983	R25H04CDAM 1304
	Both	R25H03FBAM	1771		R25H04FBAM	2362		R25H03CBAM	1967	R25H04CBAM 2608
M32	Line	R32H03FUAM	1219		R32H04FUAM	1625		R32H03CUAM	1668	R32H04CUAM 2224
	Load	R32H03FDAM	1219		R32H04FDAM	1625		R32H03CDAM	1668	R32H04CDAM 2224
	Both	R32H03FBAM	2438		R32H04FBAM	3250		R32H03CBAM	3335	R32H04CBAM 4448

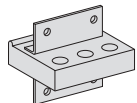
^① Incompatible with AC partitioning fixture;
Incompatible with CC (arc chute cover) if front connections are on top.

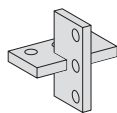
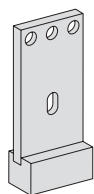
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IEC Rated MASTERPACT® Circuit Breakers

Connections—Continued

	Fixed 3P	List Price	Fixed 4P	List Price ^①	Drawout 3P	List Price ^①	Drawout 4P	List Price ^①
M08 to M25 L1								
Horizontal (PP)	Standard	No Charge	Standard	No Charge	Standard	No Charge	Standard	No Charge



Vertical (CC) 	M08–M10 M12–M16	Line	R16L13FUCM	\$ 315	R16L14FUCM	\$ 436	R16L13CUCM	\$ 145	R16L14CUCM	\$ 194
		Load	R16L13FDCM	315	R16L14FDCM	436	R16L13CDCM	145	R16L14CDCM	194
		Both	R16L13FBCM	630	R16L14FBCM	872	R16L13CBCM	290	R16L14CBCM	389
	M20–M25	Line	R25L13FUCM	873	R25L14FUCM	1164	R25L13CUCM	715	R25L14CUCM	955
		Load	R25L13FDCM	873	R25L14FDCM	1164	R25L13CDCM	715	R25L14CDCM	955
		Both	R25L13FBCM	1746	R25L14FBCM	2328	R25L13CBCM	1431	R25L14CBCM	1909
Front (AA) ① 	M08–M10 M12–M16	Line	R16L13FUAM	638	R16L14FUAM	851	R16L13CUAM	490	R16L14CUAM	652
		Load	R16L13FDAM	638	R16L14FDAM	851	R16L13CDAM	490	R16L14CDAM	652
		Both	R16L13FBAM	1277	R16L14FBAM	1702	R16L13CBAM	980	R16L14CBAM	1304
	M20–M25	Line	R25L13FUAM	1219	R25L14FUAM	1625	R25L13CUAM	1668	R25L14CUAM	2224
		Load	R25L13FDAM	1219	R25L14FDAM	1625	R25L13CDAM	1668	R25L14CDAM	2224
		Both	R25L13FBAM	2438	R25L14FBAM	3250	R25L13CBAM	3335	R25L14CBAM	4448

Control Units—see page 110

Accessories—see page 112

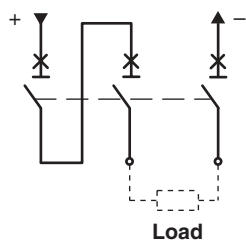
① Incompatible with AC partitioning fixture; incompatible with CC (arc chute cover) if front connections are on top.

IEC 947-2 Rated 250 to 1000 Vdc MASTERPACT Circuit Breakers

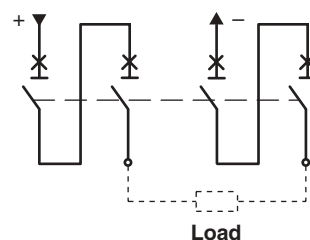
Selection Table

Ratings as per IEC 947-2 Standard			M10DC		
Number of poles			3	4	
Rated operational voltage (Vdc)	Ue		250/500	750/1000	
Rated current (A)	In	40°C	1000	1000	
Rated insulation voltage (V)	Ui		1000	1000	
Rated impulse withstand voltage (kV)	Uimp		8	8	
Ultimate breaking capacity (kA)	Icu	L/R ≤ 15 ms	100	50	
Service breaking capacity	Ics	(% Icu)	100%	100%	
Suitability for isolation	As per IEC 947-2 standard		Yes	Yes	
Utilization category			B	B	
Short-time withstand current	Icw	(kA, 1s)	100	50	
Endurance (C-O cycles)	Mechanical	Without maintenance	10000	10000	
		With maintenance	15000	15000	
	Electrical (at Ue)	No maintenance	10000	1600	
Operating time	Total max. breaking time		30 to 75 ms		
	Closing time		60 ms		
Protection			D or H	E, F, H or J	
Function	DINA	Adjustable magnetic trip unit (kA)	1.5–3, 3–6, 6–12, 10–20	1.5–3, 3–6, 6–12, 10–20	
	STR 08I	Non-automatic switch	Yes	Yes	
Rated operational voltage (Vdc)			250/500	750	1000
Distribution system	Ungrounded		D	E	E
	Center point grounded		D	E	E
	Negative point grounded	Alternative #1	D	F	–
		Alternative #2	H	H	J
Pole connections					

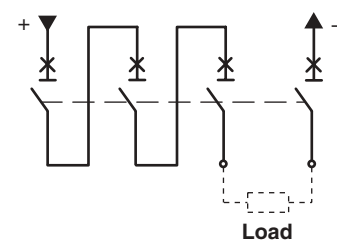
Type D
3P circuit breaker



Type E
4P circuit breaker
U>750 V: mandatory supply
via upper terminals



Type F
4P circuit breaker



Dimensions and Weights

Dimensions H x W x D (in/mm)	Drawout circuit breaker	17.3 x 17.1 x 21.1/ 439 x 435 x 536	404 x 21.7 x 21.1/ 439 x 550 x 536
	Fixed circuit breaker	15.9 x 17.2 x 15.5/ 404 x 438 x 393	15.9 x 17.2 x 15.5/ 404 x 553 x 393
Weight (lb/kg)	Drawout circuit breaker	276/125	353/160
	Fixed circuit breaker	143/65	176/80
	Chassis only	176/80	221/100

① Type H: Do not exceed 3600 A for an ambient temperature of 40°C.

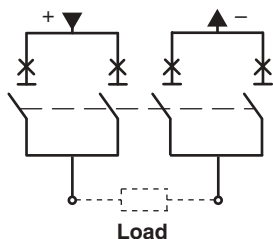
② Type J: Do not exceed 3500 A for an ambient temperature of 40°C.

Refer to catalog no.: AC0452E

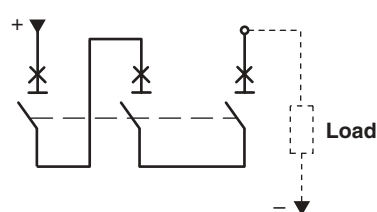
M20DC		M40DC		M60DC	M80DC
3	4	3	4	2	2
250/500	750/1000	250/500	750/1000	250	250
2000	2000	4000 ①	4000 ②	6000	8000
1000	1000	1000	1000	1000	1000
8	8	8	8	8	8
100	50	100	50	100	100
100%	100%	100%	100%	100%	100%
Yes	Yes	Yes	Yes	Yes	Yes
B	B	B	B	B	B
100	50	100	50	100	100
10000	10000	5000	5000	5000	5000
15000	15000	10000	10000	10000	10000
8500	1600	4000	1600	1600	1600

D or H	E, F, H or J		D or H	E, F, H or J		G	G
1.5-3, 3-6, 6-12, 10-20	1.5-3, 3-6, 6-12, 10-20		1.5-3, 3-6, 6-12, 10-20	1.5-3, 3-6, 6-12, 10-20		9-18, 10-24, 24-40	9-18, 10-24, 24-40
Yes	Yes		Yes	Yes		Yes	Yes
250/500	750	1000	250/500	750	1000	250	250
D	E	E	D	E	E	G	G
D	E	E	D	E	E	G	G
D	F	—	D	F	—	G	G
H	H	J	H	H	J	G	G

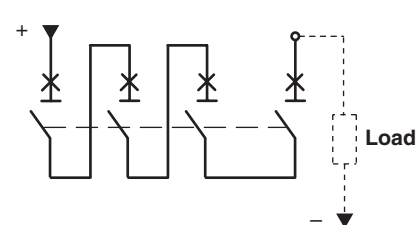
Type G
2P circuit breaker



Type H①
3P circuit breaker

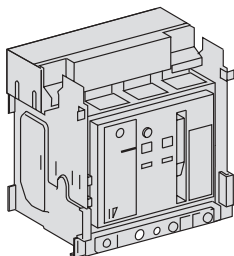


Version J②
4P circuit breaker



17.3 x 17.1 x 21.1/ 439 x 435 x 536	17.3 x 21.7 x 21.1/ 439 x 550 x 536	17.3 x 17.1 x 25.2/ 439 x 435 x 641	17.3 x 21.7 x 25.2/ 439 x 550 x 641	17.3 x 21.7 x 19.1/ 439 x 550 x 484	17.3 x 21.7 x 19.1/ 439 x 550 x 484
15.9 x 17.2 15.5/ 404 x 438 x 393	15.9 x 21.8 x 15.5/ 404 x 553 x 393	15.9 x 17.2 x 20.9/ 404 x 438 x 530	15.9 x 21.8 x 20.9/ 404 x 553x530		
276/125	353/160	298/135	375/170	331/150	331/150
143/65	176/80	143/65	176/80	176/80	176/80
176/80	221/100	198/90	243/110	198/90	198/90

IEC Rated MASTERPACT® Circuit Breakers



To order a complete circuit breaker, order:

- | | |
|-------------------------------------|----------|
| 1 Circuit breaker frame | page 132 |
| or cradle only | page 132 |
| or circuit breaker without cradle | page 132 |
| 2 Protection | page 132 |
| 3 Optional Connections | page 132 |
| 4 Accessories | page 112 |
| 5 Request for quotation form | page 137 |

Additional information:

- Catalog no. AC0452E
- Installation Guide no. ABTED296010V1EN

IEC Rated MASTERPACT Circuit Breaker Frame

■ Basic circuit breaker including poles in series, safety shutters and arc chute in drawout version.

	Rating 40°C	Poles connection	Fixed ①			Drawout		
			2P	3P	4P	2P	3P	4P
M10 to M40 DC—250 Vdc to 500 Vdc—100 kA								
M10 DC	1000	D, H	\$ 9834			\$ 12793		
M20 DC	2000	D, H	15916			19795		
M40 DC	4000	D, H	33201			40669		
M10 to M40 DC—750 Vdc to 1000 Vdc—50 kA								
M10 DC	1000	E, F, J	13766			\$ 17233		
M20 DC	2000	E, F, J	21335			26321		
M40 DC	4000	E, F, J	46523			55239		
M60 to M80 DC—250 Vdc—100 kA								
M60 DC	6000	G				\$ 113935		
M80 DC	8000	G				130775		

Protection

STR 08I control unit for non-automatic switch	No charge
DINA control switch for magnetic only circuit breaker with adjustable instantaneous pickup	1528

Connections

■ Extra prices are for optional top and bottom vertical connections (CC). When only either top or bottom connections are requested, prices must be divided by 2.

M10 DC	1000	Horizontal	No charge	No charge	No charge	No charge
	1000	Vertical	653	872	291	388
M20 DC	2000	Horizontal	No charge	No charge	No charge	No charge
	2000	Vertical	1188	1584	587	783
M40 DC	4000	Vertical	No charge	No charge	No charge	No charge
M60 DC	6000	Vertical			No charge	
M80 DC	8000	Vertical			No charge	

Cradle only

■ Including poles in series, arc chute and safety shutters

M10 DC	1000		3941	5004
M20 DC	2000		4867	6530
M40 DC	4000		9164	11700
M60 DC	6000		15482	
M80 DC	8000		17797	

Accessories—see page 112

- CT (test position switches), CD (disconnected position switches), CE (connected position switches) are not available with this dc version.
- Safety shutters or drawout version are standard.
- SDE overcurrent trip switch is not available on STR 08I control unit.

① Consult factory for availability.

UL 489 Listed MASTERPACT® Circuit Breakers

For faster quote processing, please use the following request for quotation form. For each section, check the applicable box or enter value corresponding to your choice. **Note:** This request for quotation form does not take into account incompatibilities. Orders to be placed on Q2C.

Square D:

Date
From
Location
Phone No.
Fax No.
Messages

Customer:

Customer Name
Account No.
Contact Name
Location
Phone No.
Fax No.
RFQ No.
Q2C No.

1—Circuit Breaker Frame

Brand	Merlin Gerin		
	Square D		
Quantity			
Rating (08–63)	UL 489	P	
	UL 1066/ANSI	C	
Type	N1, H1, H2, NA		
Version	Fixed	F	
	Complete drawout	D	
	Drawout circuit breaker alone	A	
	Chassis alone	C	
Connection	Top	Horizontal P08–P12, C08	P
		Vertical P16–P63, C16–C50	C
	Bottom	Horizontal P08–P12, C08	P
		Vertical P16–P63, C16–C50	C
Sensor Rating	Circuit breaker CT ratings (amperes)		
	External neutral sensor (3Ø4W) (Amperes)	TCE	

2—Control Unit

STR 08I	Non-automatic switch	STR 08I	
STR 18M	Instantaneous only	STR 18M	
STR 28D	Long-time, instantaneous	STR 28D	
	Ammeter	I	
	Pre-trip overload switch	ALR	Standard
STR 38S	Long-time, short-time, instantaneous	STR 38S	
	Residual ground-fault protection	T	
	Source ground return protection	W	
	Ammeter	I	
	Pre-trip overload switch	ALR	Standard
	Fault indicator	F	
	Safeguard battery module	BAT	
	Power supply with battery	PIL	
STR 58U	Long-time, short-time, instantaneous	STR 58U	
	Residual ground-fault protection	T	
	Source ground return protection	W	
	Ammeter	I	
	Pre-trip overload switch	ALR	Standard
	Fault indicator	F	
	Safeguard battery module	BAT	
	Power supply with battery	PIL	
	Zone-selective interlocking	Z	
	Load monitoring	R	
	Segregated alarm switch (fault indicator [F] included)	FV	
	Communication	C	
Rating Plug (Amperes)	Required only on STRxxDP, SP and UP Trip Units	PL	
Control Unit Accessories	Power supply module	AD	
	Sealable cover	PBD	Standard
	Automatic reset	RAR	

Manufacturing no. provided with quotation

For faster quote processing, please use the following request for quotation form. For each section, check the applicable box or enter value corresponding to your choice. **Note:** This request for quotation form does not take into account incompatibilities. Orders to be placed on Q2C.

3—Electrical Accessories

Electrical Operating Mechanism	Spring charging motor (specify volts)	MCH	
	Operations counter (with motor only)	CDM	
	Closing coil release (specify volts)	XF	
Voltage Release	Shunt trip (specify volts)	MX	
	Undervoltage release (specify volts)	MN	
	Time delayed undervoltage (not UL) (specify volts)	MNR	
	With instantaneous wiring (specify volts)	MNRI	
Auxiliary Switch	2a+2b aux. switches		Standard
	Overcurrent trip switch	SDE	Standard
	4 SPDT aux. switches	OF	
	Ready to close switch	PF	
	4 connected position switches (drawout only)	CE	
	2 disconnected position switches (drawout only)	CD	
	1 test position switch (drawout only)	CT	

① Please note that KIRK® key locks are ordered from an outside vendor and are registered keys. The following information is required before the order can be processed.

Ultimate customer's name and address:

Contact person and phone number:

--

4—Mechanical/Installation Accessories

Push Button Locking Device		VBP	
Locking In "Open" Position	Provision for key interlock only	VKA	
	1 KIRK® key lock with provision ①②	VSKA1	
	2 KIRK® key locks with provision ①②	VSKA2	
	1 Ronis key lock with provision	VSRA1	
	2 Ronis key locks with provision	VSRA2	
Disconnect- ed Position Locking	Padlocking provision	VEC	Standard
	Provision for KIRK® key interlock only	VKC	
	1 KIRK® key lock with provision ①②	VSKC1	
	2 KIRK® key locks with provision ①②	VSKC2	
	1 Ronis key lock with provision	VSRC1	
	2 Ronis key locks with provision	VSRC2	
Installation Accessories	Right-hand door interlock	VPECD	
	Left-hand door interlock	VPECG	
	Racking interlock in open position door	VPOC	
	Withdrawal/spring charged interlock (required for UL 1066/ANSI) (non-compatible with undervoltage release)	VEAA	
	Safety shutters	VO	
	Shutter lock (1 or 2)	VVC	
	Arc chute cover	CC	Standard
	Terminal cover	CB	Standard
	Interphase barriers	EIP	
	Door escutcheon (frame—IP405)	CDP	
	Door escutcheon with transparent cover (frame—IP549)	CCP	
	Rejection feature mismatch protection	VDC	Standard

② KIRK® key lock configuration:

If order quantity is more than one, please check appropriate box.

All locks keyed alike	
All locks keyed differently	

If locks are to be keyed like another current or previous order, indicate factory order number and MP number below.

	1	2	3	4
Order number				
MP number				
Quantity				

MASTERPACT is a registered trademark of Schneider Electric.
Square D is a registered trademark of Square D Company.
KIRK is a registered trademark of Brown Boveri Electric Inc.

Catalog description	Manufacturing no. provided with quotation	List price	Delivery
		\$	From receipt of order
Square D standard conditions of sale apply.			

IEC 947-2 Rated MASTERPACT® Circuit Breakers

For faster quote processing, please use the following request for quotation form. For each section, check the applicable box or enter value corresponding to your choice. **Note:** This request for quotation form does not take into account incompatibilities. Orders to be placed on Q2C.

Square D:

Date
From
Location
Phone No.
Fax No.
Messages

Customer:

Customer Name
Account No.
Contact Name
Location
Phone No.
Fax No.
RFQ No.
Q2C No.

1—Circuit Breaker Frame

Quantity			
Rating (08—63)	IEC 947-2	M	
Type	N, H, L or 1000 Vac type		
Number of poles			
Version	Fixed	F	
	Complete drawout	D	
	Drawout circuit breaker alone	A	
	Chassis alone	C	
Connection	Top	Horizontal	P
		Vertical	C
		Front	A
	Bottom	Horizontal	P
		Vertical	C
		Front	A
Sensor Rating	Internal	IN	
	External	TCE	
Neutral Protection For 4-pole	No protection	None	
	Full	N	
	Reduced	N/2	
Neutral on Right-hand			

2—Control Unit

STR 08I	Non-automatic switch	STR 08I	
STR 18M	Instantaneous only	STR 18M	
STR 28D	Long-time, instantaneous	STR 28D	
	Ammeter	I	
	Pre-trip overload switch	ALR	Standard
STR 38S	Long-time, short-time, instantaneous	STR 38S	
	Residual ground-fault protection	T	
	Source ground return protection	W	
	Ammeter	I	
	Pre-trip overload switch	ALR	Standard
	Fault indicator	F	
	Safeguard battery module	BAT	
	Power supply with battery	PIL	
STR 58U	Long-time, short-time, instantaneous	STR 58U	
	Residual ground-fault protection	T	
	Source ground return protection	W	
	Ammeter	I	
	Pre-trip overload switch	ALR	Standard
	Fault indicator	F	
	Safeguard battery module	BAT	
	Power supply with battery	PIL	
	Zone-selective interlocking	Z	
	Load monitoring	R	
	Segregated alarm switch (fault indicator [F] included)	FV	
	Communication	C	
Control Unit	Power supply module	AD	
Accessories	Sealable cover	PBD	Standard
	Automatic reset	RAR	

Manufacturing No. Provided With Quotation

For faster quote processing, please use the following request for quotation form. For each section, check the applicable box or enter value corresponding to your choice. **Note:** This request for quotation form does not take into account incompatibilities. Orders to be placed on Q2C.

3—Electrical Accessories

Electrical Operating Mechanism	Spring charging motor (specify volts)	MCH	
	Operations counter (with motor only)	CDM	
	Closing coil release (specify volts)	XF	
Voltage Release	Shunt trip (specify volts)	MX	
	Undervoltage release (specify volts)	MN	
	Time delayed undervoltage (not UL) (specify volts)	MNR	
	With instantaneous wiring (specify volts)	MNRI	
Auxiliary Switch	2a+2b aux. switches		Standard
	Overcurrent trip switch	SDE	Standard
	4 SPDT aux. switches	OF	
	Ready to close switch	PF	
	4 connected position switches (drawout only)	CE	
	2 disconnected position switches (drawout only)	CD	
	1 test position switch (drawout only)	CT	

① Please note that KIRK® key locks are ordered from an outside vendor and are registered keys. The following information is required before the order can be processed.

Ultimate customer's name and address:

Contact person and phone number:

4—Mechanical/Installation Accessories

Push button locking device		VBP	
Locking in "Open" Position	Provision for key interlock only	VKA	
	1 KIRK key lock with provision ①②	VSKA1	
	2 KIRK key locks with provision ①②	VSKA2	
	1 Ronis key lock with provision	VSRA1	
	2 Ronis key locks with provision	VSRA2	
Disconnected Position Locking	Padlocking provision	VEC	Standard
	Provision for KIRK key interlock only	VKC	
	1 KIRK key lock with provision ①②	VSKC1	
	2 KIRK key locks with provision ①②	VSKC2	
	1 Ronis key lock with provision	VSRC1	
	2 Ronis key locks with provision	VSRC2	
Installation Accessories	Right-hand door interlock	VPECD	
	Left-hand door interlock	VPECG	
	Racking interlock in open position door	VPOC	
	Withdrawal/spring charged interlock (required for UL 1066/ANSI) (non-compatible with undervoltage release)	VEAA	
	Safety shutters	VO	
	Shutter lock (1 or 2)	VVC	
	Arc chute cover	CC	Standard
	Terminal cover	CB	Standard
	Interphase barriers	EIP	
	Door escutcheon (frame—IP405)	CDP	
	Door escutcheon with transparent cover (frame—IP549)	CCP	
	Rejection feature mismatch protection	VDC	Standard

② KIRK key lock configuration:

If order quantity is more than one, please check appropriate box.

All locks keyed alike	
All locks keyed differently	

If locks are to be keyed like another current or previous order, indicate factory order number and MP number below.

	1	2	3	4
Order number				
MP number				
Quantity				

Catalog Description	Manufacturing No. Provided With Quotation	List price	Delivery
		\$	From receipt of order

Square D standard conditions of sale apply.

For faster quote processing, please use the following request for quotation form. For each section, check the applicable box or enter value corresponding to your choice. **Note:** This request for quotation form does not take into account incompatibilities. Orders to be placed on Q2C.

Square D:

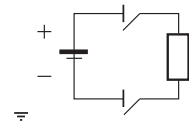
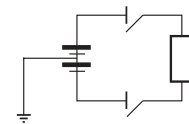
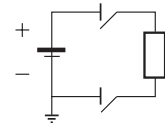
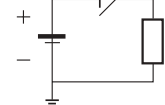
Date
From
Location
Phone No.
Fax No.
Messages

Customer:

Customer Name
Account No.
Contact Name
Location
Phone No.
Fax No.
RFQ No.
Q2C No.

1—Circuit Breaker Frame

Quantity			
Rating	1000 A	M10DC	
	2000 A	M20DC	
	4000 A	M40DC	
	6000 A	M60DC	
	8000 A	M80DC	
Maximum Voltage	500 V	Up to 4000 A	500 V
	750 V	Up to 4000 A	750 V
	1000 V	Up to 4000 A	1000 V
	250 V	6000–8000 A	250 V
Type	(For distribution system selection, see diagrams opposite)		
	Up to 4000 A		
	All systems (#1-2-3/1st alt.)	3 poles 500 V max.	D
	Isolated system (#1)	4 poles 1000 V max.	E
	Grounded middle point (#2)	4 poles 1000 V max.	E
	Grounded negative polarity (#3/2nd alt.)	3 poles 750 V max.	H
	Grounded negative polarity (#3/1st alt.)	4 poles 750 V max.	F
	Grounded negative polarity (#3/2nd alt.)	4 poles 1000 V max.	J
	6000 A—8000 A		
	All systems (#1-2-3)	2 poles 250 V max.	G
Version	Fixed	Up to 4000 A	F
	Drawout		D
	Drawout without chassis		A
	Chassis only		C
Connection	Top	Horizontal (up to 2000 A)	P
		Vertical	C
	Bottom	Horizontal (up to 2000 A)	P
		Vertical	C

Diagrams**System #1** Ungrounded**System #2****System #3 (1st Alternative)****System #3 (2nd Alternative)**

Manufacturing no. provided with quotation

For faster quote processing, please use the following request for quotation form. For each section, check the applicable box or enter value corresponding to your choice. **Note:** This request for quotation form does not take into account incompatibilities. Orders to be placed on Q2C.

2—Protection

Type	Switch		STR 08I	
	Or instantaneous DINA for M10—M20—M40	1.5 kA—3 kA	1.5/3K	
		3 kA—6 kA	03/06K	
		6 kA—12 kA	06/12K	
		10 kA—20 kA	10/20K	
	Or instantaneous DINA for M60—M80	9 kA—18 kA	9/18K	
		12 kA—24 kA	12/24K	
		20 kA—40 kA	20/40K	
		Accessories Sealable cover		PBC

3—Electrical Accessories

Electrical Operating Mechanism	Spring charging motor (specify volts)	MCH	
	Operations counter (with motor only)	CDM	
	Closing coil release (specify volts)	XF	
Voltage Release	Shunt trip (specify volts)	MX	
	Undervoltage release (specify volts)	MN	
	Time delayed undervoltage (not UL) (specify volts)	MNR	
	With instantaneous wiring (specify volts)	MNRI	
Auxiliary Switch	4 SPDT aux. switches	OF	
	Ready to close switch	PF	
Plug	Disconnectable plug (1 or 2)	DP	Standard

① Please note that KIRK® key locks are ordered from an outside vendor and are registered keys. The following information is required before the order can be processed.

Ultimate customer's name and address:

Contact person and phone number:

--

4—Mechanical/Installation Accessories

Push button locking device		VBP	
Locking in "Open" Position	Provision for key interlock only	VKA	
	1 KIRK key lock with provision ①②	VSKA1	
	2 KIRK key locks with provision ①②	VSKA2	
	1 Ronis key lock with provision	VSRA1	
	2 Ronis key locks with provision	VSRA2	
Disconnect- ed Position Locking	Padlocking provision	VEC	Standard
	Provision for KIRK key interlock only	VKC	
	1 KIRK key lock with provision ①②	VSKC1	
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	1 Ronis key lock with provision	VSRC1	
	2 Ronis key locks with provision	VSRC2	
Installation Accessories	Right-hand door interlock	VPECD	
	Left-hand door interlock	VPECG	
	Racking interlock in open position door	VPOC	
	Withdrawal/spring charged interlock (required for UL 1066/ANSI) (non-compatible with undervoltage release)	VEAA	
	Safety shutters	VO	Standard
	Shutter lock (1 or 2)	VVC	Standard
	Arc chute cover	CC	Standard
	Door escutcheon (frame—IP405)	CDP	
	Door escutcheon with transparent cover (frame—IP549)	CCP	
	Rejection feature mismatch protection	VDC	Standard

② KIRK key lock configuration:

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	1	2	3	4
Order number				
MP number				
Quantity				

Catalog Description

Manufacturing No.
Provided With Quotation

List price

Delivery

From receipt of order

Square D standard conditions of sale apply.

UL Listed INTERPACT™ Switches

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UL Listed INTERPACT Switches

A range of UL Listed Interpact Disconnect switches is scheduled to be available 3rd quarter 2004.

These include three amperages in the INSE80 range: 40 A, 60 A and 80 A.

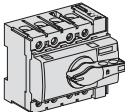
Also, two amperages in the INSJ400 range: 250 A and 400A.

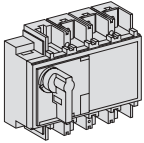
Consult your nearest Square D/Schneider Electric sales office for availability.

INTERPACT™ Switches

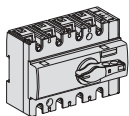
UL Listed INTERPACT Switches

Selection Table

					INSE80				
									
Ratings as per UL 489 and CSA C22.2 No. 5.2									
Number of poles					3, 4	3, 4	3, 4		
Conventional thermal current (A)	I _{th}	At 60°C			40	60	80		
Rated insulation level (V)	U _i	AC 50/60 Hz			690	690	690		
Impulse-withstand voltage (kV)	U _{imp}				8	8	8		
Rated operational voltage (V)	U _e	AC 50/60 Hz			600	600	600		
		DC			—	—	—		
Rated operational current (A)	I _e	AC 50/60 Hz							
			220/240 V	40	60	80			
			380/415 V	40	60	80			
			440/480 V	40	60	80			
			500 V	40	60	80			
			660/690 V						
		DC							
			125V (2P in series)	40	60	80			
			250 V (4P in series)	40	60	80			
Short-circuit making capacity (kA peak)	I _{cm}	min. (protected by any protection device)			10	10	10		
		max. (with Class T or RK fuse)			50	50	50		
Short-time withstand current (A RMS)	I _{cw}	1 s			3000	3000	3000		
		3 s			1730	1730	1730		
		20 s			670	670	670		
Suitability for isolation					Yes	Yes	Yes		
Endurance (category A) (CO cycles)	Mechanical				20000	20000	20000		
	Electrical AC	AC22A 500 V			1500	1500	1500		
		AC22A 690 V			—	—	—		
		AC23A 440 V			1500	1500	1500		
		AC23A 500 V			1500	1500	1500		
		AC23A 690 V			—	—	—		
	Electrical DC	DC23A 250 V			1500	1500	1500		
Positive contact indication					Yes	Yes	Yes		
Dimensions and Weights									
Dimensions W x H x D (in./mm)	3P				3.2 x 3.5 x 2.5/ 81 x 90 x 62.5	3.2 x 3.5 x 2.5/ 81 x 90 x 62.5	3.2 x 3.5 x 2.5/ 81 x 90 x 62.5		
	4P				3.2 x 3.5 x 2.5/ 81 x 90 x 62.5	3.2 x 3.5 x 2.5/ 81 x 90 x 62.5	3.2 x 3.5 x 2.5/ 81 x 90 x 62.5		
Weight (lb/kg)	3P				1.10/0.5	1.10/0.5	1.10/0.5		
	4P				1.32/0.6	1.32/0.6	1.32/0.6		
When protected by a Merlin Gerin circuit breaker type NSE 100 A rating or Square D type GJL 100 A rating					100 kA rms				
					65 kA rms				
					18 kA rms				
When protected by a Merlin Gerin circuit breaker type NSJ 400 A rating									

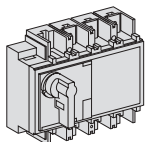
INS400		
		
	3, 4	3, 4
	250	400
	750	750
	8	8
	690	690
	250	250
	AC 22 A	AC 22 A
	400	400
	400	400
	400	400
	400	400
	400	400
	DC 22 A	DC 22 A
	400	400
	400	400
	20	20
	50	50
	20000	20000
	11500	11500
	4900	4900
	Yes	Yes
	10000	10000
	1500	1500
	1500	1500
	1500	1500
	1500	1500
	1500	1500
	1500	1500
	Yes	Yes
	8.1 x 7.3 x 4.7/ 205 x 185 x 120	
	8.1 x 7.3 x 4.7/ 205 x 185 x 120	
	10.1/4.6	
	10.8/4.9	
	150 kA rms	
	100 kA rms	
	25 kA rms	

INTERPACT™ INSE and INSJ Switches
UL Listed INTERPACT Switches



INTERPACT INSE 40 to 80 A Switches

		3P		4P	
Rating (A)		Catalog No.	List Price	Catalog No.	List Price
With Black Handle					
INSE80	40	28994	\$ 179	28995	\$ 193
	60	28996	207	28997	227
	80	28998	228	28999	261



INTERPACT INSJ 250 to 400 A Switches

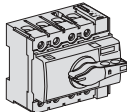
INSJ400	250	31118	375	31119	410
	400	31136	677	31137	800

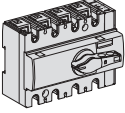
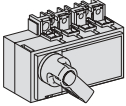
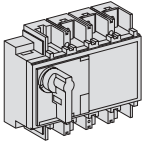
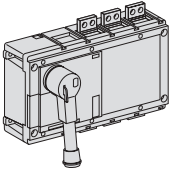
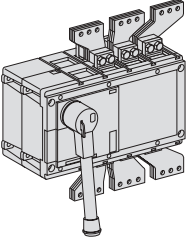
Scheduled for 3rd quarter 2004.
 Consult your nearest Square D/Schneider Electric sales office
 for availability.

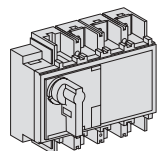
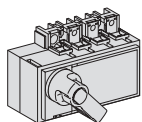
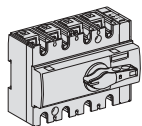
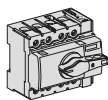
IEC 947-3 Rated INTERPACT™ Switches

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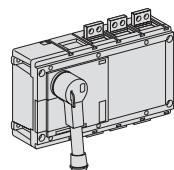
IEC 947-3 Rated INTERPACT Switches—Not UL Listed**Selection Table**

				INS40	INS63		INS80			
										
Ratings as per IEC 60947-1/IEC 60947-3 and EN 60947-1/EN 60947-3										
Number of poles				3, 4		3, 4		3, 4		
Conventional thermal current (A)		Ith	At 60°C	40		63		80		
Rated insulation level (V)		Ui	AC 50/60 Hz	690		690		690		
Impulse-withstand voltage (kV)		Uimp		8		8		8		
Rated operational voltage (V)		Ue	AC 50/60 Hz	500		500		500		
			DC	250		250		250		
Rated operational current (A)		le	AC 50/60 Hz	AC 22 A	AC 23 A	AC 22 A	AC 23 A	AC 22 A	AC 23 A	
			220/240 V	40	40	63	63	80	80	
			380/415 V	40	40	63	63	80	72	
			440/480 V	40	40	63	63	80	63	
			500 V	40	32	63	40	80	40	
			660/690 V							
			DC	DC 22 A	DC 23 A	DC 22 A	DC 23 A	DC 22 A	DC 23 A	
			125V (2P in series)	40	40	63	63	80	80	
			250 V (4P in series)	40	40	63	63	80	80	
Short-circuit making capacity (kA peak)		lcm	min. (Switch-disconnector alone)	15		15		15		
			max. (with upstream protection circuit breaker)	75		75		75		
Short-time withstand current (A RMS)		lcw	1 s	3000		3000		3000		
			3 s	1730		1730		1730		
			20 s	670		670		670		
Suitability for isolation				Yes		Yes		Yes		
Endurance (category A) (CO cycles)			Mechanical	20000		20000		20000		
			Electrical AC	AC22A 500 V	1500		1500		1500	
				AC22A 690 V	–		–		–	
				AC23A 440 V	1500		1500		1500	
				AC23A 500 V	1500		1500		1500	
				AC23A 690 V	–		–		–	
			Electrical DC	DC23A 250 V	1500		1500		1500	
Positive contact indication				Yes		Yes		Yes		
Dimensions and Weights										
Dimensions W x H x D (in./mm)			3P	3.2 x 3.5 x 2.5/ 81 x 90 x 62.5		3.2 x 3.5 x 2.5/ 81 x 90 x 62.5		3.2 x 3.5 x 2.5/ 81 x 90 x 62.5		
			4P	3.2 x 3.5 x 2.5/ 81 x 90 x 62.5		3.2 x 3.5 x 2.5/ 81 x 90 x 62.5		3.2 x 3.5 x 2.5/ 81 x 90 x 62.5		
Weight (lb/kg)			3P	1.10/0.5		1.10/0.5		1.10/0.5		
			4P	1.32/0.6		1.32/0.6		1.32/0.6		

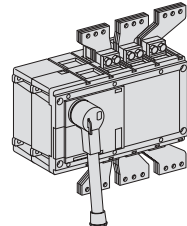
INS100		INS125		INS160		INS250		INS400		INS630		IN1000		IN1600		IN2500	
																	
3, 4		3, 4		3, 4		3, 4		3, 4		3, 4		3, 4		3, 4		3, 4	
100		125		160		250		400		630		1000		1600		2500	
750		750		750		750		750		750		690		690		690	
8		8		8		8		8		8		8		8		8	
690		690		690		690		690		690		690		690		690	
250		250		250		250		250		250		250		250		250	
AC 22 A	AC 23 A	AC 22 A	AC 23 A	AC 22 A	AC 23 A	AC 22 A	AC 23 A	AC 22 A	AC 23 A	AC 22 A	AC 23 A	AC 21 A	AC 22 A	AC 21 A	AC 22 A	AC 21 A	AC 22 A
100	100	125	125	160	160	250	250	400	400	630	500	1000	1000	1600	1600	2500	2500
100	100	125	125	160	160	250	250	400	400	630	500	1000	1000	1600	1600	2500	2500
100	100	125	125	160	160	250	250	400	400	630	500	1000	800	1600	1200	2500	–
100	100	125	125	160	160	250	250	400	400	630	500	1000	800	1600	1200	2500	–
100	63	125	80	160	100	250	250	400	400	630	500	1000	–	1600	–	2500	–
DC 22 A	DC 23 A	DC 22 A	DC 23 A	DC 22 A	DC 23 A	DC 22 A	DC 23 A	DC 22 A	DC 23 A	DC 22 A	DC 23 A	DC 22 A	DC 23 A	DC 22 A	DC 23 A	DC 21 A	DC 22 A
100	100	125	125	160	160	250	250	400	400	630	630	1000	1000	1600	1600	2500	–
100	100	125	125	160	160	250	250	400	400	630	630	1000	1000	1600	1600	2500	–
20		20		20		30		50		50		75		75		105	
154		154		154		330		330		330		176		105		105	
5500		5500		5500		8500		20000		20000		35000		35000		50000	
3175		3175		3175		4900		11500		11500		20000		20000		28000	
1230		1230		1230		2200		4900		4900		7800		7800		11000	
Yes		Yes		Yes		Yes		Yes		Yes		Yes		Yes		Yes	
15000		15000		15000		15000		10000		10000		3000		3000		3000	
1500		1500		1500		1500		1500		1500		500		500		500	
1500		1500		1500		1500		1500		1000		500		500		500	
1500		1500		1500		1500		1500		1500		–		–		–	
1500		1500		1500		1500		1500		1500		–		–		–	
1500		1500		1500		1500		1500		1500		–		–		–	
1500		1500		1500		1500		1500		1000		500		500		500 (DC 21 A)	
Yes		Yes		Yes		Yes		Yes		Yes		Yes		Yes		Yes	
3.9 x 5.3 x 2.5/ 100 x 135 x 62.5		3.9 x 5.3 x 2.5/ 100 x 135 x 62.5		3.9 x 5.3 x 2.5/ 100 x 135 x 62.5		5.4 x 5.5 x 3.4/ 136 x 140 x 86		8.1 x 7.3 x 4.7/ 205 x 185 x 120		8.1 x 7.3 x 4.7/ 205 x 185 x 120		11.8 x 13.4 x 4.6/ 300 x 340 x 118		11.8 x 13.4 x 4.6/ 300 x 340 x 118		17.3 x 13.4 x 7.9/ 440 x 340 x 200	
3.9 x 5.3 x 2.5/ 100 x 135 x 62.5		3.9 x 5.3 x 2.5/ 100 x 135 x 62.5		3.9 x 5.3 x 2.5/ 100 x 135 x 62.5		5.4 x 5.5 x 3.4/ 136 x 140 x 86		8.1 x 7.3 x 4.7/ 205 x 185 x 120		8.1 x 7.3 x 4.7/ 205 x 185 x 120		11.8 x 16.1 x 4.6/ 300 x 410 x 118		11.8 x 16.1 x 4.6/ 300 x 410 x 118		17.3 x 16.1 x 7.9/ 440 x 410 x 200	
1.76/0.8		1.76/0.8		1.76/0.8		4.4/2		10.1/4.6		10.1/4.6		26.5/12		33/15		77/35	
1.98/0.9		1.98/0.9		1.98/0.9		4.9/2.2		10.8/4.9		10.8/4.9		33/15		40/18		99/45	

IEC 947-3 Rated INTERPACT Switches—Not UL Listed**INTERPACT INS40 to INS630 Switches**

COMPLETE DEVICE		3P		4P	
	Rating (A)	Catalog No.	List Price	Catalog No.	List Price
With Black Handle					
INS40	40	28900	\$ 179	28901	\$ 193
INS63	63	28902	207	28903	227
INS80	80	28904	228	28905	261
INS100	100	28908	293	28909	327
INS125	125	28910	319	28911	351
INS160	160	28912	357	28913	385
INS250	250	31106	375	31107	410
INS400	400	31110	677	31111	800
INS630	630	31114	1090	31115	1261
With Red Handle and Yellow Front					
INS40	40	28916	187	28917	203
INS63	63	28918	217	28919	238
INS80	80	28920	246	28921	274
INS100	100	28924	308	28925	343
INS125	125	28926	335	28927	369
INS160	160	28928	375	28929	404
INS250	250	31126	393	31127	427
INS400	400	31130	677	31131	800
INS630	630	31134	1090	31135	1261

**INTERPACT IN1000 to IN2500 Switches**

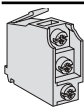
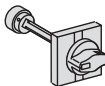
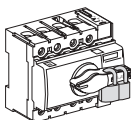
IN1000	1000	47775	2615	47751	3007
IN1600	1600	47776	3359	47851	3863
IN2500	2500	47777	6510	47855	7487



Additional information:

■ Catalog no. ART25605

Accessories

Electrical Accessories	Auxiliary Switch			Catalog No.	List Price	
	1 OF / CAF / CAO (indifferently)			INS40 to INS160	29450 \$ 198	
	1 OF / CAF / CAO (low level)			INS40 to INS160	29452 248	
	1 early make/early break switch (depending on mounting)			IN1000 to IN2500	42906 90	
	2 auxiliary switches			IN1000 to IN2500	47757 107	
Conversion Accessories for Extended Rotary Handle						
	Front Handle	With black handle	INS40 to INS160	28941	158	
			INS250	31050	128	
			INS400/630	31052	174	
		With red handle and yellow bezel	INS40 to INS160	28942	158	
			INS250	31051	128	
			INS400/630	31053	174	
	IN1000 to IN2500			47753	99	
	Side Handle	With black handle	INS40 to INS160	28943	79	
			INS250	31057	105	
			With red handle and yellow bezel	INS40 to INS160	28944	79
		INS250			31058	105
		Spare handle	Black handle	INS250	31082	74
				INS400/630	31084	83
	Red handle		INS250	31803	74	
INS400/630			31085	83		
Locks, Interlocking						
Handle Lock						
	By up to 3 padlocks			Built-in		
	By key lock (in "open" or "closed" position) for IN1000 to IN2500					
	1 key lock	Ronis 135.500	41940	97		
		Profalux KS5B24D4Z	42888	97		
Door Interlock in "Closed" Position (for devices with extended rotary handle)						
IN1000 to IN2500			47754	39		
Mechanical Interlocking						
INS40 to INS160 (for devices with extended rotary handle)			28953	234		
INS250 (for devices with direct or extended rotary handle)			31073	423		
INS400/630 (for devices with direct or extended rotary handle)			31074	423		
Key Locks Interlocking						
IN1000 to IN2500		Ronis 135.500	41950	122		
1 set of 2 key locks (1 key only)		Profalux KS5B24D4Z	42878	122		

Continued on next page

Accessories—Continued

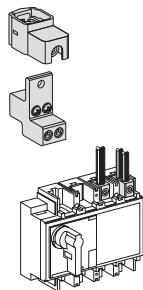
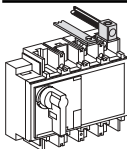
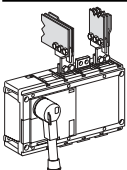
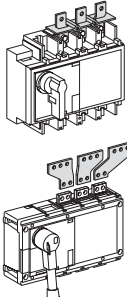
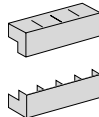
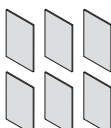
					Catalog No.	List Price	
Connection Accessories 	Cable Connection			INS40 to INS80	1 cable, 2.5–50mm²	Standard	
				INS100 to INS160	1 cable, 95mm²	(Set of 3) (Set of 4)	28947 28948
	INS100 to INS160	Distribution lugs for (2) 25 + (2) 16mm²	(Set of 3) (Set of 4)	28949 28950	197 264		
	INS250	95mm² to 185mm²	(Set of 3)	29259	75		
	INS400/630	1 cable 300mm²	(Set of 3)	32479	95		
		2 cables 240mm²	(Set of 3)	32481	126		
Rear Connections							
				INS250	(Set of 2)	29236	70
				INS400/630	(Set of 2)	32476	174
Angular Terminal Extensions (Long Terminal Covers are Mandatory)							
				INS250 (supplied with 2 phase barriers)	(Set of 3)	29261	46.20
				INS400/630 (supplied with 2 phase barriers)	(Set of 3)	32484	101
Additional Edgewise Pads for Bars							
				IN1000	(Set of 2)	47758	365
				IN1600	(Set of 2)	47858	729
Spreaders							
	INS400/630			3P	(Set of 3)	32492	195
				4P	(Set of 4)	32493	259
	IN1000			3P	(Set of 3)	47760	417
				4P	(Set of 4)	47761	549
	IN1600			3P	(Set of 3)	47760	417
				4P	(Set of 4)	47761	549
	IN2500				Supplied		No charge
Terminal Shields							
	INS40 to INS80			3P/4P	Long (1 pair)	28957	47.30
	INS100 to INS160			3P/4P	Long (1 pair)	28958	57
	INS250			3P/4P	Long (1 pair)	29324	86
	INS250			3P/4P	Short (1 pair)	29322	79
	INS400/630			3P/4P	Short (1 pair)	32563	107
	INS400/630			3P/4P	Long (1 pair)	32565	146
Phase Barriers							
	INS100 to INS160			3P/4P	(6 pieces)	28959	41
	IN1000/IN1600			3P/4P	(kit for 3P/4P)	47756	323
	IN2500			3P/4P	(kit for 3P/4P)	47860	372

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VIGIREX™ Ground-fault Relays

UL 1053 Listed VIGIREX Ground-fault Relays

Selection Table

VIGIREX Ground-fault Relays

Electrical Characteristics			
IΔn residual operating current	Selector 1		
Time delay (ms)			
Device tests	Local		
	Automatic		
Reset			
Local indication	Insulation fault or detection circuit failure indicator light		
Output contacts	Fault contacts	Number	
		Contact type	Changeover (SPDT)
	Rating	AC p.f. = 0.7	380 V
			220 V
		DC L/R = 0 s	220 V
			120 V
			48 V
			24 V
Max. consumption	12 to 48 Vdc		
	110 to 130 Vac and 220 to 240 Vac		
Control voltage operating range	AC		
	DC		

Toroids

Toroids to be used ①

Dimensions and Weights

Dimensions H x W x D (in./mm)

Weight (lb/kg) RH-P7

Used in conjunction with a standard Merlin Gerin toroid (type A or OA), this type of relay trips the associated switching device, after the selected time delay, when it detects a residual current above 80% of the setting for operating current (IΔn).

Characteristics

- Green LED indicates presence of control voltage; or normal operation
- Red LED indicates the trip threshold has been exceeded; failure of the detection circuit (connecting cable and toroid), or other malfunction is detected.

Advantages

- Protection can be adapted to any installation;
- Vertical coordination possible over a number of levels;
- Can be used with an alarm threshold to provide a warning of a non-critical degradation of the insulation, leaving time to carry out preventive maintenance;
- Control voltage alarm via fail-safe contact

Installation

- Live part in a disconnectable, insulating molded case, 72 mm wide, with lockable transparent cover;
- Horizontal or vertical flush or surface mounting on a symmetrical rail; also panel mounting
- Connection by tunnel terminals.

Refer to Instruction Bulletin: 48049-546-01 (DIN mounted) or 48049-547-01 (panel-mounted)

① By shielded wire or toroid plugged into relay for TA30 and PA50—maximum lengths: refer to catalog 1518066AH

	RH10	RH21	RH99
			
			
	300 mA, 100 mA, 300 mA, 500 mA, or 1 A	30 mA or 300 mA (2 settings)	30 mA, 100 mA, 300 mA, 500 mA, 1 A, 3 A, 5 A, 10 A, 30 A
	Instantaneous	Instantaneous for 30mA; instantaneous or 60ms for 300mA	9 user-selected time delays: Instantaneous, 60ms, 150ms, 250ms, 310ms, 500ms, 800ms, 1 sec, 4.5 sec
	Electronic + indicator light + contact		
	Detection circuit		Some models auto-reset
	Local, and remote		
	By indicator light with latching		
	One standard	one standard	One standard
	Latched	Latched	Latched or non-latched
	3 A	3 A	
	5 A	5 A	
	0.45 A	0.45 A	
	0.65 A	0.65 A	
	2.5 A	2.5 A	
	10 A	10 A	
	4W	4W	
	4 VA	4 VA	
	55 to 110%		
	55 to 120%		
	TA30, PA50, IA80, MA120, SA200, GA300, POA, GOA		
	3.2 x 2.8 x 2.6/81 x RHM 63 x 65.5	RHP 2.8 x 2.8 x 3.1/72x72x78	
	0.9/0.4	0.7/0.3	

VIGIREX™ Ground-fault Relays

UL1053 Listed DIN-Mounted Vigirex RH__M Ground-fault Relays



VIGIREX RH10M Ground-fault Relay with Fixed Sensitivity

Sensitivity: Fixed; dependent on model
Reset: Manual
Latched FAULT output contact: N.O. or N.C.; also ON (operational) status contact
Test: With or without trip of equipment

Time Delay	Control Voltage	Sensitivity	Catalog No.	List Price
Instantaneous	12–24 Vac/12–48 Vdc	30 mA	56300	\$ 1325
		100 mA	56302	1325
		300 mA	56305	1325
		500 mA	56306	1325
		1 A	56307	1325
	110–130 Vac	30 mA	56320	1325
		100 mA	56322	1325
		300 mA	56325	1325
		500 mA	56326	1325
		1 A	56327	1325
	220–240 Vac	30 mA	56330	1325
		100 mA	56332	1325
		300 mA	56335	1325
		500 mA	56336	1325
		1 A	56337	1325



VIGIREX RH21M Ground-fault Relay with Three Settings

Sensitivity: adjustable to 30 mA or 300 mA
Reset: Manual
Latched FAULT output contact: N.O. or N.C.; also ON (operational) status contact
Test: With or without trip of equipment

Instantaneous at 30 mA; Instantaneous or 60 mSec at 300 mA (3 settings)	12–24 Vac/12–48 Vdc	30 mA or	56360	1575
	110–130 Vac	300 mA	56362	1575
	220–240 Vac	2 settings)	56363	1575



VIGIREX RH99M with Nine Adjustable Sensitivity and Time Delay Settings

Manual Reset

Sensitivity: Adjustable
Time Delay: Adjustable
Latched FAULT output contact: N.O. or N.C.; also ON (operational) status contact
Test: With or without trip of equipment

Adjustable from Instantaneous to 4.5 Sec (9 settings)	12–24 Vac/12–48 Vdc	Adjustable from	56370	1800
	110–130 Vac	30 mA to 30 A	56372	1800
	220–240 Vac	(9 settings)	56373	1800

Automatic Reset

Sensitivity: Adjustable
Time Delay: Adjustable
Non-Latched FAULT output contact: N.O. or N.C.; also ON (operational) status contact
Test: With or without trip of equipment

Adjustable from instantaneous to 4.5 Sec (9 settings)	12–24 Vac/12–48 Vdc	Adjustable from	56390	1800
	110–130 Vac	30 mA to 30 A	56392	1800
	220–240 Vac	(9 settings)	56393	1800

UL1053 Listed Panel-Mounted Vigirex RH__P Ground-fault Relays**VIGIREX RH10P Ground-fault Relay with Fixed Sensitivity**

Sensitivity: Fixed; dependent on model

Reset: Manual

Latched FAULT output contact: N.O. or N.C.; also ON (operational) status contact

Test: With or without trip of equipment

Time Delay	Control Voltage	Sensitivity	Catalog No.	List Price
Instantaneous	12–24 Vac/12–48 Vdc	30 mA	56400	\$ 1375
		100 mA	56402	1375
		300 mA	56405	1375
		500 mA	56406	1375
		1 A	56407	1375
	110–130 Vac	30 mA	56420	1375
		100 mA	56422	1375
		300 mA	56425	1375
		500 mA	56426	1375
		1 A	56427	1375
	220–240 Vac	30 mA	56430	1375
		100 mA	56432	1375
		300 mA	56435	1375
		500 mA	56436	1375
		1 A	56437	1375

**VIGIREX RH21P Ground-fault Relay with Three Settings**

Sensitivity: adjustable to 30 mA or 300 mA

Reset: Manual

Latched FAULT output contact: N.O. or N.C.; also ON (operational) status contact

Test: With or without trip of equipment

Instantaneous at 30 mA; Instantaneous or 60 mSec at 300 mA (3 settings)	12–24 Vac/12–48 Vdc	30 mA or	56460	1625
	110–130 Vac	300 mA	56462	1625
	220–240 Vac	2 settings)	56463	1625

**VIGIREX RH99P Ground-fault Relay with Nine Settings****Manual Reset**

Sensitivity: Adjustable

Time Delay: Adjustable

Latched FAULT output contact: N.O. or N.C.; also ON (operational) status contact

Test: With or without trip of equipment

Adjustable from Instantaneous to 4.5 Sec (9 settings)	12–24 Vac/12–48 Vdc	Adjustable from	56470	1875
	110–130 Vac	30 mA to 30 A	56472	1875
	220–240 Vac	(9 settings)	56473	1875

Automatic Reset

Sensitivity: Adjustable

Time Delay: Adjustable

Non-Latched FAULT output contact: N.O. or N.C.; also ON (operational) status contact

Test: With or without trip of equipment

Adjustable from instantaneous to 4.5 Sec (9 settings)	12–24 Vac/12–48 Vdc	Adjustable from	56490	1875
	110–130 Vac	30 mA to 30 A	56492	1875
	220–240 Vac	(9 settings)	56493	1875

Sensors

	Type	Current (A)	Inside Diameter (in./mm)	Catalog No.	List Price
Closed Toroid, Type A					
	TA30	65	1.2/30	50437	\$ 250
	PA50	85	2.0/50	50438	325
	IA80	160	3.2/80	50439	410
	MA120	250	4.7/120	50440	555
	SA200	400	7.9/200	50441	835
	GA300	630	11.8/300	50442	1530
Opening Toroid, Type OAa					
	POA①	85	1.8/46	50485	1145
	GOA①	250	4.3/110	50486	2010
Rectangular Sensors					
	280 x 115	1600	11x4.5 (280x115)	56053	3555
	470 x 160	4000	18.5x6.3 (470x160)	56054	4725

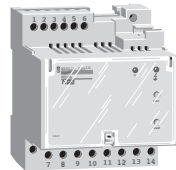
① Not UL Recognized.

IEC Rated VIGIREX™ Ground-fault Relays

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IEC Rated VIGIREX Ground-fault Relays—Not UL Listed

Selection Table

VIGIREX Ground-fault Relays				RH10A	
					
Electrical Characteristics					
IΔn residual operating current	Selector 1			30 mA or 300 mA	
	Selector 2				
Time delay (ms)				Instantaneous	
Alarm pre-trip	Threshold			—	
	Delay			—	
Device tests	Local			Electronic + indicator light + contact	
	Automatic			Detection circuit	
Reset				Local, and remote by disconnecting the auxiliary power supply	
Local indication	Insulation fault or detection circuit failure indicator light			By indicator light with latching	
	Alarm			—	
Output contacts	Fault contacts	Number		2: one standard + one fail-safe	
		Contact type	Changeover (SPDT)	Latched	
	Pre-trip contact	Number		—	
		Contact type	Changeover (SPDT)	—	
	Rating	AC p.f. = 0.7	380 V	3 A	
			220 V	5 A	
		DC L/R = 0 s	220 V	0.45 A	
			120 V	0.65 A	
			48 V	2.5 A	
			24 V	10 A	
Max. consumption	48 to 240 Vac and 48 to 300 Vdc			4 VA	
	380 to 480 Vac			5 VA/3 W	
Control voltage operating range	AC		–15% / + 10%		
	DC		±20%		
Toroids					
Toroids to be used ①				Type A, OA	
Dimensions and Weights					
Dimensions H x W x D (in./mm)				3.2 x 2.8 x 2.6/81 x 72 x 65.5	
Weight (lb/kg)				0.9/0.4	

Used in conjunction with a standard Merlin Gerin toroid (type A or OA), this type of relay trips the associated switching device, after the selected time delay, when it detects a residual current above the set residual operating current (I Δ n/2).

Characteristics

- Green LED indicates presence of control voltage;
- Red LED indicates the trip threshold has been exceeded;
- Orange LED indicates the alarm threshold has been exceeded (AP);
- Failure of the detection circuit (connecting cable and toroid) trips the circuit breaker.

Advantages

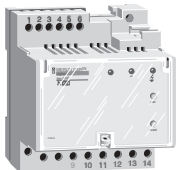
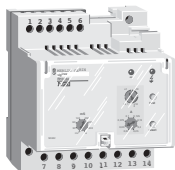
- Protection can be adapted to any installation;
- Vertical coordination possible over a number of levels;
- An alarm threshold provides a warning of a non-critical degradation of the insulation, leaving time to carry out preventive maintenance;
- Control voltage alarm via fail-safe contact

Installation

- Live part in a disconnectable, insulating molded case, eight 9mm modules wide, with sealable transparent cover;
- Horizontal or vertical flush or surface mounting on a symmetrical rail;
- Connection by tunnel terminals for wire sizes:
 - 1.5mm² for terminals 1 to 6.
 - 2.5mm² for terminals 7 to 14.

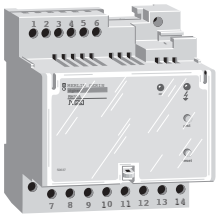
Refer to catalog no.: AC0480EN

① By shielded wire or toroid plugged into relay for TA30 and PA50—maximum lengths: refer to catalog AC0480EN

RH10AP		RH328A		RH328AP	
					
300 mA or 1 A		30, 50, 75, 100, 125, 150, 200, 250 mA			
		x 1: 30 to 250 mA x 10: 300 mA to 2.5 A x 100: 3 A to 25 A x 1000: 30 A to 250 A			
Instantaneous		0, 50, 90, 140, 250, 350, 500, 1000			
Auto. set to half the residual operating current		—		Auto. set to half the residual operating current	
200 ms		—		200 ms	
Electronic + indicator light + contact					
Detection circuit					
Local, and remote by disconnecting the auxiliary power supply					
By indicator light with latching					
By indicator light without latching		—		By indicator light without latching	
One standard		2: one standard + one fail-safe		One standard	
Latched					
One fail-safe		—		One fail-safe	
Non-latched		—		Non-latched	
3 A		3 A			
5 A		5 A			
0.45 A		0.45 A			
0.65 A		0.65 A			
2.5 A		2.5 A			
10 A		10 A			
—		4 VA		—	
5 VA/3 W		5 VA/3 W			
–15% / + 10%		–15% / + 10%			
—		±20%		—	
Type A, OA					
3.2 x 2.8 x 2.6/81 x 72 x 65.5		3.2 x 2.8 x 2.6/81 x 72 x 65.5			
0.9/0.4		0.9/0.4			

VIGIREX™ Ground-fault Relays

IEC Rated VIGIREX Ground-fault Relays —Not UL Listed



VIGIREX RH10A Ground-fault Relay

Sensitivity: 30 or 300 mA (non UL Listed)
Instantaneous
Output contacts: one standard + one fail-safe fault switch (latched)

Sensitivity IΔn = 30 mA		Volts (V)	Catalog No.	List Price
Control voltage (V)	AC 50/60 Hz	48	50733	\$ 1213
		115/127	50732	1213
		230	50734	1213
		400	50638	1213
		440/480	50639	1297
	DC	48/120	50733	1213
Sensitivity IΔn = 300 mA				
Control voltage (V)	AC 50/60 Hz	48	50736	1213
		115/127	50735	1213
		230	50737	1213
		400	50641	1213
		440/480	50642	1297
	DC	48/120	50736	1213

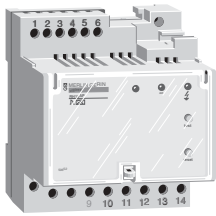


VIGIREX RH328A Ground-fault Relay

Sensitivity: 30 mA to 250 A (non UL Listed)
Delay: Instantaneous to 1000 ms
Output contacts: one standard + one fail-safe fault switch (latched or non-latched)

One Standard Latched + One Fail Safe Latched Fault Switch			Catalog No.	List Price
Control voltage (V)	AC 50/60 Hz	48	50743	\$ 1896
		115/127	50742	1896
		230	50744	1896
		400	50653	1896
		440/480	50654	1980
		500/525	50655	1980
	DC	12	50661	1980
		24	50662	1980
		48/120	50743	1896
One Standard Non-latched + One Fail Safe Non-latched Fault Switch				
Control voltage (V)	AC 50/60 Hz	48	50746	2064
		115/127	50745	2064
		230	50747	2064
		400	50657	2064
		440/480	50658	2148
	DC	48/120	50746	2064

Additional information:
■ Catalog no. AC0480EN



VIGIREX RH10AP Ground-fault Relay

Sensitivity: 300 mA or 1 A (non UL Listed)

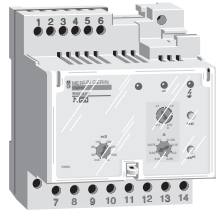
AC 50/60/400 Hz

Delay: 200 ms

Output contacts: one standard fault switch latched + one pre-trip switch (fail safe–non latched)

Sensitivity $I_{\Delta n} = 300 \text{ mA}$		Volts (V)	Catalog No.	List Price
Control voltage (V)	AC 50/60 Hz	230	50663	\$ 1802
		400	50664	1802
		440/480	50665	1886

Sensitivity $I_{\Delta n} = 1 \text{ A}$		Volts (V)	Catalog No.	List Price
Control voltage (V)	AC 50/60 Hz	230	50666	1802
		400	50667	1802
		440/480	50668	1886



VIGIREX RH328AP Ground-fault Relay

Sensitivity: 30 mA to 250 A (non UL Listed)

Delay: Instantaneous to 1000 ms

Output contacts: One standard fault switch (latched or non-latched) + one pre-trip switch (fail safe, non-latched)

One standard latched fault switch + one fail safe, non-latched pre-trip switch

One Standard Latched Fault Switch + One Fail Safe Non-latched Pre-trip Switch				
Control voltage (V)	AC 50/60 Hz	230	50679	\$ 2485
		400	50680	2485
		440/480	50681	2569
		500/525	50682	2569

One Standard Non-latched Fault Switch + One Fail Safe Non-latched Pre-trip Switch				
Control voltage (V)	AC 50/60 Hz	230	50683	2064
		400	50684	2064
		440/480	50685	2148
		500/525	50686	2148

Sensors

		Current	Diameter (in./mm)		
Closed Toroid, Type A					
	TA	65	1.2/30	50437	250
	PA	85	2.0/50	50438	325
	IA	160	3.2/80	50439	410
	MA	250	4.7/120	50440	555
	SA	400	7.9/200	50441	835
	GA	630	11.8/300	50442	1530
Opening Toroid, Type OA					
	POA	85	1.8/46	50485	1145
	GOA	250	4.3/110	50486	2010
Rectangular Sensors					
		1600	11x4.5 (280x115)	56053	3555
		4000	18.5x6.3 (470x160)	56054	4725

Additional information:

■ Catalog no. AC0480EN

Schneider Electric USA
3700 6th St. SW
Cedar Rapids, IA 52404
1-888 Square D
(1-888-778-2733)
www.us.SquareD.com

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