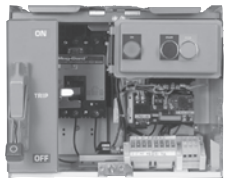
Section 17

Motor Control Centers



Model 6 Unit

Model 6 Motor Control Center

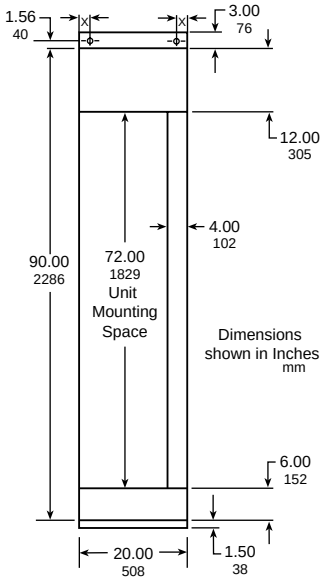
Overview

Designed and manufactured to tackle the toughest power and process control challenges, the Model 6 Motor Control Center features industry-finest innovations that provide unmatched performance, high reliability, and low maintenance. The Model 6 Motor Control Center has integrated industry-leading components into the smallest and most flexible footprint possible to meet your power, control, and automation needs. The Model 6 offers superior quality, increased uptime, and features that improve the protection of your personnel and facility from electrical safety hazards.

Model 6 Motor Control Center

Model 6 Structure Features

- Horizontal main bus uses captive splice bar assembly; allows splicing without removing units
- Horizontal bus is located at the top of the structure for easy installation, inspection and maintenance
- Available ampacity 600 A, 800 A, 1200 A, 2000 A, 2500 A, and 3200 A
- Sliding non-conductive horizontal bus barrier
- 300 A, 600 A, and 1200 A vertical bus
- Vertical bus openings on 3-inch centers
- Optional automatic vertical bus shutters are available
- Base mounting channel includes lever notches for ease of alignment
- Full depth vertical wireway available, either 4-inch or 9-inch width
- Vertical ground bus is standard



20-in. (508 mm)-wide Section with Standard Vertical Wireway

Model 6 Arc Resistant

The Model 6 Arc Resistant Enclosure provides reliable arc flash containment through passive technology and design and has been witnessed and verified by UL for design and performance to the ANSI/IEEE C37.20.7 standard. Most of the standard offer configurations and units are available, making the Model 6 Arc Resistant MCC the industry's most complete offer.

Certification and Validation:

- Tested and certified performance to the industry's Arc Resistant Standard (ANSI/IEEE C37.20.7)
- Internal arc testing validated and witnessed by UL
- Industry's highest MCC arc duration rating of 100 milliseconds (6 Cycles)

Technical Specifications and Highlights:

- Up to 65 kA at 600 VAC Rated
- Accessibility Type 2A
- Main bus up to 2000 A amps
- Optional insulated bus (Epoxy or Heat Shrink)
- Optional automatic bus shutters
- Optional exhaust plenums
- Reinforced enclosure: 12 gage steel doors and covers, additional fasteners and hinges
- Reinforced frame with additional internal supports
- Pathways inside the enclosure manage arc by-products and pressure
- iMCC remote monitoring and controlling
- MasterPact type LF (designed to limit arc energy) circuit breakers are available in upstream gear

Model 6 ArcBlok

The Square D™ brand Model 6 Low Voltage Motor Control Center (MCC) with ArcBlok™ by Schneider Electric™ is a game changer in electrical equipment protection and safety-related work practices. With ArcBlok arc isolation, the line side conductors are fully enclosed inside a cable vault, which has been tested for the ANSI/IEEE C37.20.7 requirements for arc containment. Not just a barrier, ArcBlok reduces the chance that an arc flash could occur and reduces and contains the arc energy if it does. Sensors inside the compartment continuously take thermal readings and communicate those to a mobile device, while maintenance personnel stand outside the arc flash zone to review.

Build features include:

- Steel barriers
- Lifting handles
- Bolts face outward for easy alignment
- Interior barriers separate phases
- Thermal sensors communicate data
- Absence of voltage tester
- Vents direct arc flash energy to minimize impact

Technical Details

- ArcBlok MCC: 100 kA at 208, 240 and 480 Vac; 50 kA at 600 Vac , up to 1200 A
- Line side testing was UL® witnessed in accordance with ANSI/IEEE C37.20.7-2017
- Model 6 MCCs are Listed to UL845 Standard and Certified to Canadian Standard C22.2 No. 254 and Mexican Standard NOM-003-SCFI-2014 (NMX-J-515-ANCE)
- PowerPact™ P Molded Case Circuit Breakers with ArcBlok Technology are Listed to the UL489 Standard and Certified to Canadian Standard C22.2 No. 5

Model 6

Model 6 Unit Features

- Metal operator handle, color coded for clear indication of disconnect position (including “Tripped”)
- Twin-handle cam mechanism standard on all plug-on units (except Compac™ 6)
- Rugged unit construction features solid rear sides and hinged bottom plates
- Forward tilted pull-apart control terminal blocks standard with NEMA Type B or C wiring
- Starter units available with Class 8536 Type S NEMA or D-Line IEC
- Available overload relays on starter include: melting alloy, Motor Logic™, and TeSys™ T
- Control station plate for pilot devices is mounted on front of unit
- Easily accessible control transformer
- Starter mounted on right-hand side of unit, adjacent to wireway, for ease of cable termination

Table 17.1: Available units include:

- Automation equipment
- Altivar™ AC drives
- Altistart™ soft starts
- Surge Protection Device (SPD) units
- PowerLogic™ circuit monitor and power meter
- Compac 6 starters and branch feeders
- Reduced voltage starters
- Distribution transformers and panelboards
- 3–inch accessory units
- Empty mounting units
- MasterPact™ drawout main circuit breakers
- Master terminal compartments
- Automatic transfer switches
- Full voltage non-reversing
- Full voltage reversing
- Circuit breaker branch feeders
- Fusible switch branch feeders
- Full voltage 2-speed
- Programmable logic controllers
- Incoming devices
- Tie breakers

Intelligent Motor Control Center—Model 6 iMCC

Maximize customer value with the industry’s most comprehensive energy and asset management capabilities.

Standard Architectures

SIMPLE, standardized network designs create consistency and familiarity, reduce changes, accelerate startup and commissioning, and ultimately drive efficiency in existing operations and future expansions.

Reduced Lead Times

FASTER quotations, drawings, pricing, submittals, and manufacturing allow for shorter cycle times and increased flexibility to make changes later in the project as designs mature and requirements change.

Ethernet Communications

OPEN protocols in Modbus™ TCP and EtherNet/IP eliminate expensive proprietary software, hardware, and services. Both protocols provide the speed, reliability, and network services to easily and efficiently manage the entire network. Ethernet-based networks easily integrate with business systems for management across the enterprise.

Integrated Wonderware Solution

COMPLETE Wonderware solution allows the end user to perform comprehensive asset and energy management through simple, organized, and role-based screens. Power and process data can be viewed in real time or in trended report, which increases user awareness and delivers actionable data. Local or remote configuration, monitoring, and control provides optimal flexibility. Maximizing uptime, slashing troubleshooting, and delivering true predictive maintenance strategies become a reality with all the right information at the right time. Seamless integration into enterprise-level Invensys-based SCADA/DCS systems will save countless hours of unnecessary programming, engineering, and troubleshooting during both startup and operation.

Merchandised Units (shipment in as low as 3 days)

Model 6 Industrial Package units (white) are available for ordering by catalog number. A listing of types available by quick shipment may be found on the following pages. This limited offering includes popular combinations of types and options. Catalog numbers consist of class number (8998), disconnect and device types, horsepower or ampacity ratings and options (for example, 8998SBA001XFTMA). See table below. All units are UL Listed.

Combination Starter Units Catalog Numbering System

Units rated as follows:

- Model 6 Industrial Package, 480 V, 60 Hz, NEMA 12 enclosure
- Type 1B wiring, 100,000 AIR rating, 1 N.O./1 N.C. auxiliary interlock on each contactor

Table 17.2: Numbering System *[1]*

First	Second	Third	Fourth	Fifth	Sixth	Seventh	Eighth
8998	S	B	A	005	A	FT	MA
Class	**Type**	**Disconnect**	**Device**	**Motor Hp**	**Pilot Device Function**	**Control Power**	**Overload Relay**
8998	S- Standard Size H- High Density (Compac 6) *[2]*	B- Circuit Breaker (PowerPact™ MCP) F- Fusible (Class R except Compac 6 Class J)	A-FVNR C-FVR *[3]*	001=1 hp 002=2 hp 003=3 hp 005=5 hp 007=7.5 hp 010=10 hp 015=15 hp *[3]* 025=25 hp *[3]* 040=40 hp *[3]* 050=50 hp *[3]* 060=60 hp *[3]* 075=75 hp *[3]* 100=100 hp *[3]*	X=None A=Start-Stop PB, On/Off Lights*[4]* C=HOA Sel.Switch, On/Off Lights *[2]*	FT- 480-120 V CPT*[5]* FS- 120 V Fused Separate Ctl w/intlk	MA-Melting Alloy (Thermal Units not Included) SS-Motor Logic SSOL

NOTE: For more information, contact your nearest Schneider Electric sales office.

[1] Complete Model 6 Motor Control Centers are available from the factory.
[2] Not available with FVR
[3] Not available with Compac 6
[4] Includes forward, reverse and stop push-buttons; and forward and reverse pilot lights with FVR starters
[5] Includes extra 50 VA CPT on Sz 1 FVNR (T1)

Combination Starters Units with Motor Circuit Protector Disconnects

Model 6 NEMA-rated FVNR combination starter units use PowerPact™ Motor Circuit Protectors.

Ratings: 480 V, NEMA 12, Type 1B-D wiring, 100,000 AIR. Units include 1 N.O./1 N.C. auxiliary contacts. Units with pilot devices use 22 mm type. Units without pilot devices include a station plate with knockouts for five 22 mm devices.

Thermal units are not included with melting alloy overloads.

Table 17.3: FVNR Combination Starter Units with Motor Circuit Protector Disconnects

Ratings			Control Transformer			Fused Separate Control		
			No Pilot Devices	Start-Stop PB, Red On/Green Off Lights	HOA Red On/Green Off Lights	No Pilot Devices	Start-Stop PB, Red On/Green Off Lights	HOA Red On/Green Off Lights
NEMA Size	Hp	Space (IN)	Catalog Number	Catalog Number	Catalog Number	Catalog Number	Catalog Number	Catalog Number
Full Voltage Non-Reversing (FVNR) Starters With Motor Circuit Protector Disconnect and Melting Alloy Overload Relay								
1	1	12	SBA001XFTMA	SBA001AFTMA	SBA001CFTMA	SBA001XFSMA	SBA001AFSMA	SBA001CFSMA
	2		SBA002XFTMA	SBA002AFTMA	SBA002CFTMA	SBA002XFSMA	SBA002AFSMA	SBA002CFSMA
	3		SBA003XFTMA	SBA003AFTMA	SBA003CFTMA	SBA003XFSMA	BA003AFSMA	SBA003CFSMA
	5		SBA005XFTMA	SBA005AFTMA	SBA005CFTMA	SBA005XFSMA	SBA005AFSMA	SBA005CFSMA
	7.5		SBA007XFTMA	SBA007AFTMA	SBA007CFTMA	SBA007XFSMA	SBA007AFSMA	SBA007CFSMA
	10		SBA010XFTMA	SBA010AFTMA	SBA010CFTMA	SBA010XFSMA	SBA010AFSMA	SBA010CFSMA
2	15	12	SBA015XFTMA	SBA015AFTMA	SBA015CFTMA	SBA015XFSMA	SBA015AFSMA	SBA015CFSMA
	25		SBA025XFTMA	SBA025AFTMA	SBA025CFTMA	SBA025XFSMA	SBA025AFSMA	SBA025CFSMA
3	40	18	SBA040XFTMA	SBA040AFTMA	SBA040CFTMA	SBA040XFSMA	SBA040AFSMA	SBA040CFSMA
	50		SBA050XFTMA	SBA050AFTMA	SBA050CFTMA	SBA050XFSMA	SBA050AFSMA	SBA050CFSMA
4	60	21	SBA060XFTMA	SBA060AFTMA	SBA060CFTMA	SBA060XFSMA	SBA060AFSMA	SBA060CFSMA
	75		SBA075XFTMA	SBA075AFTMA	SBA075CFTMA	SBA075XFSMA	SBA075AFSMA	SBA075CFSMA
	100		SBA100XFTMA	SBA100AFTMA	SBA100CFTMA	SBA100XFSMA	SBA100AFSMA	SBA100CFSMA
Full Voltage Non-Reversing (FVNR) Starters With Motor Circuit Protector Disconnect and Solid State Overload Relay (Motor Logic™)								
1	1	12	SBA001XFTSS	SBA001AFTSS	SBA001CFTSS	SBA001XFSSS	SBA001AFSSS	SBA001CFSSS
	2		SBA002XFTSS	SBA002AFTSS	SBA002CFTSS	SBA002XFSSS	SBA002AFSSS	SBA002CFSSS
	3		SBA003XFTSS	SBA003AFTSS	SBA003CFTSS	SBA003XFSSS	SBA003AFSSS	SBA003CFSSS
	5		SBA005XFTSS	SBA005AFTSS	SBA005CFTSS	SBA005XFSSS	SBA005AFSSS	SBA005CFSSS
	7.5		SBA007XFTSS	SBA007AFTSS	SBA007CFTSS	SBA007XFSSS	SBA007AFSSS	SBA007CFSSS
	10		SBA010XFTSS	SBA010AFTSS	SBA010CFTSS	SBA010XFSSS	SBA010AFSSS	SBA010CFSSS
2	15	12	SBA015XFTSS	SBA015AFTSS	SBA015CFTSS	SBA015XFSSS	SBA015AFSSS	SBA015CFSSS
	25		SBA025XFTSS	SBA025AFTSS	SBA025CFTSS	SBA025XFSSS	SBA025AFSSS	SBA025CFSSS
3	40	18	SBA040XFTSS	SBA040AFTSS	SBA040CFTSS	SBA040XFSSS	SBA040AFSSS	SBA040CFSSS
	50		SBA050XFTSS	SBA050AFTSS	SBA050CFTSS	SBA050XFSSS	SBA050AFSSS	SBA050CFSSS
4	60	21	SBA060XFTSS	SBA060AFTSS	SBA060CFTSS	SBA060XFSSS	SBA060AFSSS	SBA060CFSSS
	75		SBA075XFTSS	SBA075AFTSS	SBA075CFTSS	SBA075XFSSS	SBA075AFSSS	SBA075CFSSS
	100		SBA100XFTSS	SBA100AFTSS	SBA100CFTSS	SBA100XFSSS	SBA100AFSSS	SBA100CFSSS

Table 17.4: FVR Combination Starter Units with Motor Circuit Protector Disconnects

Ratings			Control Transformer		Fused Separate Control	
			No Pilot Devices	Forward-Rev.-Stop PB, Forward/Reverse Lights	No Pilot Devices	Forward-Rev.-Stop PB, Forward/Reverse Lights
NEMA Size	Hp	Space (IN)	Catalog Number	Catalog Number	Catalog Number	Catalog Number
Full Voltage Reversing (FVR) Starters With Motor Circuit Protector Disconnect and Melting Alloy Overload Relay						
1	1	18	SBC001XFTMA	SBC001AFTMA	SBC001XFSMA	SBC001AFSMA
	2		SBC002XFTMA	SBC002AFTMA	SBC002XFSMA	SBC002AFSMA
	3		SBC003XFTMA	SBC003AFTMA	SBC003XFSMA	SBC003AFSMA
	5		SBC005XFTMA	SBC005AFTMA	SBC005XFSMA	SBC005AFSMA
	7.5		SBC007XFTMA	SBC007AFTMA	SBC007XFSMA	SBC007AFSMA
	10		SBC010XFTMA	SBC010AFTMA	SBC010XFSMA	SBC010AFSMA
2	15	18	SBC015XFTMA	SBC015AFTMA	SBC015XFSMA	SBC015AFSMA
	25		SBC025XFTMA	SBC025AFTMA	SBC025XFSMA	SBC025AFSMA
3	40	27	SBC040XFTMA	SBC040AFTMA	SBC040XFSMA	SBC040AFSMA
	50		SBC050XFTMA	SBC050AFTMA	SBC050XFSMA	SBC050AFSMA
4	60	33	SBC060XFTMA	SBC060AFTMA	SBC060XFSMA	SBC060AFSMA
	75		SBC075XFTMA	SBC075AFTMA	SBC075XFSMA	SBC075AFSMA
	100		SBC100XFTMA	SBC100AFTMA	SBC100XFSMA	SBC100AFSMA
Full Voltage Reversing (FVR) Starters With Motor Circuit Protector Disconnect and Solid State Overload Relay (Motor Logic)						
1	1	18	SBC001XFTSS	SBC001AFTSS	SBC001XFSSS	SBC001AFSSS
	2		SBC002XFTSS	SBC002AFTSS	SBC002XFSSS	SBC002AFSSS
	3		SBC003XFTSS	SBC003AFTSS	SBC003XFSSS	SBC003AFSSS
	5		SBC005XFTSS	SBC005AFTSS	SBC005XFSSS	SBC005AFSSS
	7.5		SBC007XFTSS	SBC007AFTSS	SBC007XFSSS	SBC007AFSSS
	10		SBC010XFTSS	SBC010AFTSS	SBC010XFSSS	SBC010AFSSS
2	15	18	SBC015XFTSS	SBC015AFTSS	SBC015XFSSS	SBC015AFSSS
	25		SBC025XFTSS	SBC025AFTSS	SBC025XFSSS	SBC025AFSSS
3	40	27	SBC040XFTSS	SBC040AFTSS	SBC040XFSSS	SBC040AFSSS
	50		SBC050XFTSS	SBC050AFTSS	SBC050XFSSS	SBC050AFSSS
4	60	33	SBC060XFTSS	SBC060AFTSS	SBC060XFSSS	SBC060AFSSS
	75		SBC075XFTSS	SBC075AFTSS	SBC075XFSSS	SBC075AFSSS
	100		SBC100XFTSS	SBC100AFTSS	SBC100XFSSS	SBC100AFSSS

Combination Starter Units with Fusible Switch Disconnects

Model 6 NEMA-rated FVNR combination starter units listed below use fusible switches with Class R fuse clips (fuses not included).

Ratings: 480 V, NEMA 12, Type 1B-D wiring, 100,000 AIR. Units include 1 N.O./1 N.C. auxiliary contacts. Units with pilot devices use 22 mm type. Units without pilot devices include a station plate with knockouts for five 22 mm devices.

Thermal units are not included with melting alloy overloads.

Table 17.5: FVNR Combination Starter Units with Fusible Switch Disconnects

Ratings			Control Transformer			Fused Separate Control		
			No Pilot Devices	Start-Stop PB, Red On/Green Off Lights	HOA Red On/Green Off Lights	No Pilot Devices	Start-Stop PB, Red On/Green Off Lights	HOA Red On/Green Off Lights
NEMA Size	Hp	Space (IN)	Catalog No.	Catalog No.	Catalog No.	Catalog No.	Catalog No.	Catalog No.
Full Voltage Non-Reversing (FVNR) Starters With Fusible Switch Disconnect and Melting Alloy Overload Relay								
1	1	12	SFA001XFTMA	SFA001AFTMA	SFA001CFTMA	SFA001XFSMA	SFA001AFSMA	SFA001CFSMA
	2		SFA002XFTMA	SFA002AFTMA	SFA002CFTMA	SFA002XFSMA	SFA002AFSMA	SFA002CFSMA
	3		SFA003XFTMA	SFA003AFTMA	SFA003CFTMA	SFA003XFSMA	SFA003AFSMA	SFA003CFSMA
	5		SFA005XFTMA	SFA005AFTMA	SFA005CFTMA	SFA005XFSMA	SFA005AFSMA	SFA005CFSMA
	7.5		SFA007XFTMA	SFA007AFTMA	SFA007CFTMA	SFA007XFSMA	SFA007AFSMA	SFA007CFSMA
	10		SFA010XFTMA	SFA010AFTMA	SFA010CFTMA	SFA010XFSMA	SFA010AFSMA	SFA010CFSMA
2	15	12	SFA015XFTMA	SFA015AFTMA	SFA015CFTMA	SFA015XFSMA	SFA015AFSMA	SFA015CFSMA
	25		SFA025XFTMA	SFA025AFTMA	SFA025CFTMA	SFA025XFSMA	SFA025AFSMA	SFA025CFSMA
3	40	18	SFA040XFTMA	SFA040AFTMA	SFA040CFTMA	SFA040XFSMA	SFA040AFSMA	SFA040CFSMA
	50		SFA050XFTMA	SFA050AFTMA	SFA050CFTMA	SFA050XFSMA	SFA050AFSMA	SFA050CFSMA
4	60	30	SFA060XFTMA	SFA060AFTMA	SFA060CFTMA	SFA060XFSMA	SFA060AFSMA	SFA060CFSMA
	75		SFA075XFTMA	SFA075AFTMA	SFA075CFTMA	SFA075XFSMA	SFA075AFSMA	SFA075CFSMA
	100		SFA100XFTMA	SFA100AFTMA	SFA100CFTMA	SFA100XFSMA	SFA100AFSMA	SFA100CFSMA
Full Voltage Non-Reversing (FVNR) Starters With Fusible Switch Disconnect and Solid State Overload Relay (Motor Logic™)								
1	1	12	SFA001XFTSS	SFA001AFTSS	SFA001CFTSS	SFA001XFSSS	SFA001AFSSS	SFA001CFSSS
	2		SFA002XFTSS	SFA002AFTSS	SFA002CFTSS	SFA002XFSSS	SFA002AFSSS	SFA002CFSSS
	3		SFA003XFTSS	SFA003AFTSS	SFA003CFTSS	SFA003XFSSS	SFA003AFSSS	SFA003CFSSS
	5		SFA005XFTSS	SFA005AFTSS	SFA005CFTSS	SFA005XFSSS	SFA005AFSSS	SFA005CFSSS
	7.5		SFA007XFTSS	SFA007AFTSS	SFA007CFTSS	SFA007XFSSS	SFA007AFSSS	SFA007CFSSS
	10		SFA010XFTSS	SFA010AFTSS	SFA010CFTSS	SFA010XFSSS	SFA010AFSSS	SFA010CFSSS
2	15	12	SFA015XFTSS	SFA015AFTSS	SFA015CFTSS	SFA015XFSSS	SFA015AFSSS	SFA015CFSSS
	25		SFA025XFTSS	SFA025AFTSS	SFA025CFTSS	SFA025XFSSS	SFA025AFSSS	SFA025CFSSS
3	40	18	SFA040XFTSS	SFA040AFTSS	SFA040CFTSS	SFA040XFSSS	SFA040AFSSS	SFA040CFSSS
	50		SFA050XFTSS	SFA050AFTSS	SFA050CFTSS	SFA050XFSSS	SFA050AFSSS	SFA050CFSSS
4	60	30	SFA060XFTSS	SFA060AFTSS	SFA060CFTSS	SFA060XFSSS	SFA060AFSSS	SFA060CFSSS
	75		SFA075XFTSS	SFA075AFTSS	SFA075CFTSS	SFA075XFSSS	SFA075AFSSS	SFA075CFSSS
	100		SFA100XFTSS	SFA100AFTSS	SFA100CFTSS	SFA100XFSSS	SFA100AFSSS	SFA100CFSSS

Table 17.6: FVR Combination Starter Units with Fusible Switch Disconnects

Ratings			Control Transformer		Fused Separate Control	
			No Pilot Devices	Forward-Rev.-Stop PB, Forward/Reverse Lights	No Pilot Devices	Forward-Rev.-Stop PB, Forward/Reverse Lights
NEMA Size	Hp	Space (IN)	Catalog No.	Catalog No.	Catalog No.	Catalog No.
Full Voltage Reversing (FVR) Starters With Fusible Switch Disconnect and Melting Alloy Overload Relay						
1	1	18	SFC001XFTMA	SFC001AFTMA	SFC001XFSMA	SFC001AFSMA
	2		SFC002XFTMA	SFC002AFTMA	SFC002XFSMA	SFC002AFSMA
	3		SFC003XFTMA	SFC003AFTMA	SFC003XFSMA	SFC003AFSMA
	5		SFC005XFTMA	SFC005AFTMA	SFC005XFSMA	SFC005AFSMA
	7.5		SFC007XFTMA	SFC007AFTMA	SFC007XFSMA	SFC007AFSMA
	10		SFC010XFTMA	SFC010AFTMA	SFC010XFSMA	SFC010AFSMA
2	15	18	SFC015XFTMA	SFC015AFTMA	SFC015XFSMA	SFC015AFSMA
	25		SFC025XFTMA	SFC025AFTMA	SFC025XFSMA	SFC025AFSMA
3	40	27	SFC040XFTMA	SFC040AFTMA	SFC040XFSMA	SFC040AFSMA
	50		SFC050XFTMA	SFC050AFTMA	SFC050XFSMA	SFC050AFSMA
4	60	39	SFC060XFTMA	SFC060AFTMA	SFC060XFSMA	SFC060AFSMA
	75		SFC075XFTMA	SFC075AFTMA	SFC075XFSMA	SFC075AFSMA
	100		SFC100XFTMA	SFC100AFTMA	SFC100XFSMA	SFC100AFSMA
)Full Voltage Reversing (FVR) Starters with Fusible Switch Disconnect and Solid State Overload Relay (Motor Logic						
1	1	18	SFC001XFTSS	SFC001AFTSS	SFC001XFSSS	SFC001AFSSS
	2		SFC002XFTSS	SFC002AFTSS	SFC002XFSSS	SFC002AFSSS
	3		SFC003XFTSS	SFC003AFTSS	SFC003XFSSS	SFC003AFSSS
	5		SFC005XFTSS	SFC005AFTSS	SFC005XFSSS	SFC005AFSSS
	7.5		SFC007XFTSS	SFC007AFTSS	SFC007XFSSS	SFC007AFSSS
	10		SFC010XFTSS	SFC010AFTSS	SFC010XFSSS	SFC010AFSSS
2	15	18	SFC015XFTSS	SFC015AFTSS	SFC015XFSSS	SFC015AFSSS
	25		SFC025XFTSS	SFC025AFTSS	SFC025XFSSS	SFC025AFSSS
3	40	27	SFC040XFTSS	SFC040AFTSS	SFC040XFSSS	SFC040AFSSS
	50		SFC050XFTSS	SFC050AFTSS	SFC050XFSSS	SFC050AFSSS
4	60	39	SFC060XFTSS	SFC060AFTSS	SFC060XFSSS	SFC060AFSSS
	75		SFC075XFTSS	SFC075AFTSS	SFC075XFSSS	SFC075AFSSS
	100		SFC100XFTSS	SFC100AFTSS	SFC100XFSSS	SFC100AFSSS

Compac™ 6 Combination Starter Units with Motor Circuit Protector Disconnects

NEMA-rated Compac 6, half-height FVNR combination starters use TeSys BV4 Motor Circuit Protectors.

Ratings: 480 V, NEMA 12, Type 1B-D wiring, 100,000 AIR. Units include 1 N.O./1 N.C. auxiliary contacts. Units with pilot devices use 22 mm type.

Units without pilot devices include a station plate with knockouts for four 22 mm devices. Thermal units are not included with melting alloy overloads.

Table 17.7: Compac 6 Combination Starter Units with Motor Circuit Protector Disconnects

Ratings			Control Transformer			Fused Separate Control		
			No Pilot Devices	Start-Stop PB, Red On/Green Off Lights	HOA, Red On/Green Off Lights	No Pilot Devices	Start-Stop PB, Red On/Green Off Lights	HOA, Red On/Green Off Lights
NEMA Size	Hp	Space (IN)	Catalog No.	Catalog No.	Catalog No.	Catalog No.	Catalog No.	Catalog No.
Full Voltage Non-Reversing (FVNR) Starters With Motor Circuit Protector Disconnect and Melting Alloy Overload Relay								
1	1	6	HBA001XFTMA	HBA001AFTMA	HBA001CFTMA	HBA001XFSMA	HBA001AFSMA	HBA001CFSMA
	2		HBA002XFTMA	HBA002AFTMA	HBA002CFTMA	HBA002XFSMA	HBA002AFSMA	HBA002CFSMA
	3		HBA003XFTMA	HBA003AFTMA	HBA003CFTMA	HBA003XFSMA	HBA003AFSMA	HBA003CFSMA
	5		HBA005XFTMA	HBA005AFTMA	HBA005CFTMA	HBA005XFSMA	HBA005AFSMA	HBA005CFSMA
	7.5		HBA007XFTMA	HBA007AFTMA	HBA007CFTMA	HBA007XFSMA	HBA007AFSMA	HBA007CFSMA
	10		HBA010XFTMA	HBA010AFTMA	HBA010CFTMA	HBA010XFSMA	HBA010AFSMA	HBA010CFSMA
Full Voltage Non-Reversing (FVNR) Starters With Motor Circuit Protector Disconnect and Solid State Overload Relay (Motor Logic™)								
1	1	6	HBA001XFTSS	HBA001AFTSS	HBA001CFTSS	HBA001XFSSS	HBA001AFSSS	HBA001CFSSS
	2		HBA002XFTSS	HBA002AFTSS	HBA002CFTSS	HBA002XFSSS	HBA002AFSSS	HBA002CFSSS
	3		HBA003XFTSS	HBA003AFTSS	HBA003CFTSS	HBA003XFSSS	HBA003AFSSS	HBA003CFSSS
	5		HBA005XFTSS	HBA005AFTSS	HBA005CFTSS	HBA005XFSSS	HBA005AFSSS	HBA005CFSSS
	7.5		HBA007XFTSS	HBA007AFTSS	HBA007CFTSS	HBA007XFSSS	HBA007AFSSS	HBA007CFSSS
	10		HBA010XFTSS	HBA010AFTSS	HBA010CFTSS	HBA010XFSSS	HBA010AFSSS	HBA010CFSSS

Compac™ 6 Combination Starter Units with Fusible Switch Disconnects

NEMA-rated Compac 6, half-height FVNR combination starters listed below use fusible switches with Class J fuse clips (fuses not included).

Ratings: 480 V, NEMA 12, Type 1B-D wiring, 100,000 AIR. Units include 1 N.O./1 N.C. auxiliary contacts.

Units with pilot devices use 22 mm type. Units without pilot devices include a station plate with knockouts for four 22 mm devices. Thermal units are not included with melting alloy overloads.

Table 17.8: Compac 6 Combination Starter Units with Fusible Switch Disconnects

Ratings			Control Transformer			Fused Separate Control		
			No Pilot Devices	Start-Stop PB, Red On/Green Off Lights	HOA, Red On/Green Off Lights	No Pilot Devices	Start-Stop PB, Red On/Green Off Lights	HOA, Red On/Green Off Lights
NEMA Size	Hp	Space (IN)	Catalog No.	Catalog No.	Catalog No.	Catalog No.	Catalog No.	Catalog No.
Full Voltage Non-Reversing (FVNR) Starters with Fusible Switch Disconnect and Melting Alloy Overload Relay								
1	1	6	HFA001XFTMA	HFA001AFTMA	HFA001CFTMA	HFA001XFSMA	HFA001AFSMA	HFA001CFSMA
	2		HFA002XFTMA	HFA002AFTMA	HFA002CFTMA	HFA002XFSMA	HFA002AFSMA	HFA002CFSMA
	3		HFA003XFTMA	HFA003AFTMA	HFA003CFTMA	HFA003XFSMA	HFA003AFSMA	HFA003CFSMA
	5		HFA005XFTMA	HFA005AFTMA	HFA005CFTMA	HFA005XFSMA	HFA005AFSMA	HFA005CFSMA
	7.5		HFA007XFTMA	HFA007AFTMA	HFA007CFTMA	HFA007XFSMA	HFA007AFSMA	HFA007CFSMA
	10		HFA010XFTMA	HFA010AFTMA	HFA010CFTMA	HFA010XFSMA	HFA010AFSMA	HFA010CFSMA
Full Voltage Non-Reversing (FVNR) Starters With Fusible Switch Disconnect and Solid State Overload Relay (Motor Logic)								
1	1	6	HFA001XFTSS	HFA001AFTSS	HFA001CFTSS	HFA001XFSSS	HFA001AFSSS	HFA001CFSSS
	2		HFA002XFTSS	HFA002AFTSS	HFA002CFTSS	HFA002XFSSS	HFA002AFSSS	HFA002CFSSS
	3		HFA003XFTSS	HFA003AFTSS	HFA003CFTSS	HFA003XFSSS	HFA003AFSSS	HFA003CFSSS
	5		HFA005XFTSS	HFA005AFTSS	HFA005CFTSS	HFA005XFSSS	HFA005AFSSS	HFA005CFSSS
	7.5		HFA007XFTSS	HFA007AFTSS	HFA007CFTSS	HFA007XFSSS	HFA007AFSSS	HFA007CFSSS
	10		HFA010XFTSS	HFA010AFTSS	HFA010CFTSS	HFA010XFSSS	HFA010AFSSS	HFA010CFSSS

Units rated as follows:

- 480 V, 60 Hz, NEMA Type 12 Enclosure, Industrial Package
- Short Circuit rating: 100,000 AIR

Circuit Breaker Branch Feeder Units

Table 17.9: Circuit Breaker Branch Feeder Units

First Position	Second Position	Third Position	Fourth Position	Fifth Position	
8998	S	B	F	015	
Class	**Type**	**Disconnect**	**Device**	**Feeder Amps**	
8998	S- Standard Size H- Compac™ 6	B- Breaker (Thermal-Mag)	F- Feeder	015 020 030 040 050 060 070	080 100 125 150 200 250
Amps	**Breaker Frame**	**Space (IN)**	**Catalog No.**		
15	HL	6	HBF015		
20			HBF020		
30			HBF030		
40			HBF040		
50			HBF050		
60			HBF060		
70			HBF070		
80			HBF080		
100			HBF100		
125			HBF125		
150			HBF150		
200	JL		HBF200		
250			HBF250		
15	HL	12	SBF015		
20			SBF020		
30			SBF030		
40			SBF040		
50			SBF050		
60			SBF060		
70			SBF070		
80			SBF080		
100			SBF100		
125			SBF125		
150			SBF150		
200	JL	18	SBF200		
250			SBF250		

Fusible Branch Feeder Units

Table 17.10: Fusible Branch Feeder Units

First Position	Second Position	Third Position	Fourth Position	Fifth Position
8998	S	F	F	015
Class	**Type**	**Disconnect**	**Device**	**Feeder Amps**
8998	S- Standard Size H- Compac 6	F- Fusible *[1]*	F- Feeder	030 060 100 200 *[2]*
Amps	**Fuse Clips**	**Space (IN)**	**Catalog No.**	
30 60	Class J	6 (Compac 6)	HFF030 HFF060	
100			HFF100	
30 60	Class R	12	SFF030 SFF060	
100			SFF100	
200		24	SFF200	

Model 6 Blank Doors

These doors may be used to cover an unused space in the MCC. A blank door will be required when placing a new unit in an existing space that is larger than the new unit.

Table 17.11: Model 6 Blank Doors

Catalog Number	Description
8998CP03	3–Inch High Blank Cover Plate
8998CP06	6–Inch High Blank Door
8998CP09	9–Inch High Blank Door
8998CP12	12–Inch High Blank Door
8998CP15	15–Inch High Blank Door
8998CP18	18–Inch High Blank Door
8998CP24	24–Inch High Blank Door

[1] Class R except Compac 6, fuses not included. Compac 6 units accept Class J fuses.
[2] Not available with Compac 6.