Solid state relays PCB type, 1-phase

	AC output switching			DC output switching
Types	**RP1A - RP1B** 3/5/5.5 AAC	**RP..10** 10 AAC	**RAP** 3/5 AAC	**RP1D** 1/4/8 ADC
PCB mounting SSRs, AC and DC operating. Rated isolation voltage ≥4000 Vrms				
Dimensions H xWx D (mm)	25.4 x 43 x 10.5	37 x 43 x 22	25.4 x 43 x 10.5	25.4 x 43 x 10.5
Features	Standard AC switching SSR	With integral heatsink	LED indication High blocking voltage	DC switching SSR
Input specifications				
Control input range	3-32 VDC [RP1A23..] 3-32 VDC [RP1A40..] 4-32 VDC [RP1A48..] 15-32 VAC [RP1A23A6]	3-32 VDC [RP1A23..] 4-32 VDC [RP1A40..] 4-32 VDC [RP1A48..]	3.5-40 VDC [RAP40..] 4.5-40 VDC [RAP48..]	4.5 - 32 VDC
Max. input current	10 mA	10 mA	12 mA	15 mA
Output specifications				
Rated operational current				DC1: 1/4/8 ADC
AC 51 @ Ta=25°C	3 A [RP1...3] 5 A [RP1...5] 5.5 A [RP1...6]	10 A	3 A [RAP...A3] 5 A [RAP...A5]	
AC 53a @ Ta=25°C	2 A [RP1...3] 3 A [RP1...5] 5 A [RP1...6]	7 A	2.5 A [RAP...A3] 3 A [RAP...A5]	
Min. operational current	20 mA	10 mA	20 mA	1 mADC
Non rep. surge current (t=20 ms)	65 Ap [RP1...3] 80 Ap [RP1...5] 250 Ap [RP1...6]	250 Ap	60 Ap [RAP...A3] 90 Ap [RAP...A5]	
Off-state leakage current	≤ 1 mA	≤ 3 mA	≤ 1 mA	0.01 mADC
I^2t for fusing (t=10 ms)	20 A^2s [RP1...3] 50 A^2s [RP1...5] 340 A^2s [RP1...6]	340 A^2s	18 A^2s [RAP...A3] 40 A^2s [RAP...A5]	
Critical dV/dt off-state	250 V/µs [RP1...3] 500 V/µs [RP1...5] 500 V/µs [RP1...6]	1000 V/µs	100 V/µs	
General specifications				
Operational voltage range	12-265 Vrms [RP1A23..] 20-440 Vrms [RP1A40..] 20-530 Vrms [RP1A48..]	12-265 Vrms [RP1A23..] 20-440 Vrms [RP1A40..] 20-530 Vrms [RP1A48..]	10-440 Vrms[RAP40..] 20-530 Vrms[RAP48..]	1- 60 VDC [RP1D060...] 1 - 350 VDC [RP1D350...]
Blocking voltage	650 Vp [RP1A23..] 850 Vp [RP1A40..] 1000 Vp [RP1A48..]	650 Vp [RP1A23..] 850 Vp [RP1A40..] 1000 Vp [RP1A48..]	1000 Vp [RAP40..] 1200 Vp [RAP48..]	
Power factor	0.5	0.5	0.2	0.5
Operating temperature	-20°C to +70°C	-30°C to +80°C	-20°C to +70°C	-20°C to +80°C
Terminals	4 pins x Ø 0.1 mm	4 pins x Ø 0.1 mm	4 pins x Ø 0.1 mm	4 pins x Ø 0.1 mm
Approvals/Marks	CE - UR - cUR - VDE	CE - UR - cUR	CE - UR - CSA - VDE	CE - UR - cUR
References				
	3 A	10 A	3 A	1 A
	RP1A23D3	**RP1A23D10**	**RAP40A3**	**RP1D350D1**
	RP1A40D3	**RP1A40D10**	**RAP48A3**	
	RP1A48D3	**RP1A48D10**		4 A
	5 A		5 A	**RP1D060D4**
	RP1A23D5		**RAP40A5**	
	RP1A40D5		**RAP48A5**	8 A
	RP1A48D5			**RP1D060D8**
	5.5 A			
	RP1A23D6			
	RP1A23A6			
	RP1A40D6			
	RP1A48D6			

* Other options available on request: Instant-on switching (RP1B..), see Accessories for DIN-rail adaptor.

Solid state relays, 1-phase

Slimline - AC output switching

Types	RGS1A..KKE 25/50/75/90 AAC	RGS1A..KGE 50/90 AAC	RGS1A..MKE 25/50/90 AAC
Single phase, chassis mounting with LED for control status indication, IP20 protection, 45-65 Hz operating frequency, ≥ 4000 VACrms isolation voltage, 100 kArms short circuit current rating, certified motor ratings			
Dimensions (mm)	90 x 17.8 x 50.6	90 x 17.8 x 50.6	90 x 17.8 x 63.6
Features	17.8 mm wide solid state relay with integrated varistor on output, AC or DC control range, screw terminals with captivated clamp for power and control connections, E-type layout	17.8 mm wide solid state relay with integrated varistor on output, AC or DC control range, box clamp for power connections (up to 25 mm²/AWG3), screw for control connections, E-type layout	17.8 mm wide solid state relay with integrated varistor on output, AC or DC control range, screw terminals with captivated clamp for power connections and pluggable spring for control, E-type layout
Input specifications			
Control input range	3-32 VDC [RG.23D.] / 4-32 VDC [RG.60D.] 20-275 VAC, 24-190 VDC [RG..A.]	4-32 VDC [RG..D..] 20-275 VAC, 24-190 VDC [RG..A..]	3-32 VDC [RG..23D..], 4-32 VDC [RG..60D..] 20-275 VAC, 24-190 VDC [RG..A..]
Max. input current	11 mADC [RG..D.] 30 mAAC [RG..A.]	11 mADC [RG..D..] 30 mAAC [RG..A..]	11 mADC [RG..D..] 30 mAAC [RG..A..]
Output specifications			
Rated operational current AC-51 @ Ta=40°C	25 AAC [RG..25] / 50 AAC [RG..50/51] 75 AAC [RG..75] / 90 AAC [RG..90/91/92]	50 AAC [RG..50] 90 AAC [RG..92]	25 AAC [RG..25] / 50 AAC [RG..50] 90 AAC [RG..90/92]
AC-53a @ Ta=40°C	5 AAC [RG..25] / 10 AAC [RG..50/51] 14.8 AAC [RG..75] / 18 AAC [RG..90/91/92]	10 AAC [RG..50] 18 AAC [RG..92]	5 AAC [RG..25] / 10 AAC [RG..50] 18 AAC [RG..90/92]
Min. operational current	150 mAAC [RG..25] / 250 mAAC [RG..50/51] 400 mAAC [RG..75] / 500 mAAC [RG..90/91/92]	250 mAAC [RG..50] 500 mAAC [RG..92]	150 mAAC [RG..25] / 250 mAAC [RG..50] 500 mAAC [RG..90/92]
Non rep. surge current (t=10 ms)	325 Ap [RG..25] / 600 Ap [RG..50/51] 800 Ap [RG..75] / 1150 Ap [RG..90/91] 1900 Ap [RGS..92]	600 Ap [RG..50] 1900 Ap [RG..92]	325 Ap [RG..25] / 600 Ap [RG..50] 1150 Ap [RG..90] / 1900 Ap [RG..92]
Max. Off-state leak current	3 mAAC	3 mAAC	3 mAAC
I^2t for fusing (t=10 ms)	525 A^2s [RG..25] / 1800 A^2s [RG..50/51] 3200 A^2s [RG..75] / 6600 A^2s [RG..90/91] 18000 A^2s [RGS..92]	1800 A^2s [RG..50] 18000 A^2s [RG..92]	525 A^2s [RG..25] / 1800 A^2s [RG..50] 6600 A^2s [RG..90] / 18000 A^2s [RG..92]
Critical dV/dt (@ Tj init = 40°C)	1000 V/µs	1000 V/µs	1000 V/µs
General specifications			
Operational voltage range	24-240 VAC +10% [RG.23..] 42-600 VAC +10% [RG.60...] 42-690 VAC + 10% [RG..69..]*	42-600 VAC +10%	24-240 VAC +10% [RG..23..] 42-600 VAC +10% [RG..60..]
Blocking voltage	800 Vp [RG..23..] 1200 Vp [RG..60..] 1600 Vp [RG..60..51/91]	1200 Vp	800 Vp [RG..23..] 1200 Vp [RG..60..]
Power factor	≥ 0.5 at rated voltage	≥ 0.5 at rated voltage	≥ 0.5 at rated voltage
Operating temperature	-40°C to 80°C	-40°C to +80°C	-40°C to +80°C
Approvals/Marks	CE - cURus - CSA - VDE	CE - cURus - CSA - VDE	CE - cURus - CSA - VDE
References			
230 VAC, 800 Vp	25 AAC: **RGS1A23X25KKE**		25 AAC: **RGS1A23X25MKE**
	50 AAC: **RGS1A23X50KKE**		50 AAC: **RGS1A23X50MKE**
	75 AAC: **RGS1A23X75KKE**		
600 VAC, 1200 Vp	25 AAC: **RGS1A60X25KKE**		25 AAC: **RGS1A60X25MKE**
	50 AAC: **RGS1A60X50KKE**	50 AAC: **RGS1A60X50KGE**	50 AAC: **RGS1A60X50MKE**
	75 AAC: **RGS1A60X75KKE**		
	90 AAC: **RGS1A60X90KKE**		90 AAC: **RGS1A60X90MKE**
	90 AAC: **RGS1A60X92KKE**	90 AAC: **RGS1A60X92KGE**	90 AAC: **RGS1A60X92MKE**
600 VAC, 1600 Vp	50 AAC: **RGS1A60X51KKE**		
	90 AAC: **RGS1A60X91KKE**		
690 VAC, 1600 Vp	90 AAC: **RGS1A69X91KKE***		

X must be replaced with D for DC control 3-32 VDC, 4-32 VDC (for 600 VAC versions)
X must be replaced with A for AC control 20-275 VAC, 24-190 VDC
RGS1B.. models for Instant On (Random) switching are avaialable on request
*690VAC variants are CE marked only and do not include a varistor across the output

Solid state relays, 1-phase

Slimline - AC output switching

Types	RGS1A..MGE 50/90 AAC	RGS1A..KGU 20/30 AAC	RGS1A..DIN 10/12 AAC
Single phase, chassis mounting with LED for control status indication, IP20 protection, 45-65 Hz operating frequency, ≥ 4000 VACrms isolation voltage, 100 kArms short circuit current rating, certified motor ratings			
Dimensions (mm)	90 x 17.8 x 63.6	90 x 17.8 x 50.6	106 x 17.8 x 65
Features	17.8 mm wide solid state relay with integrated varistor on output, AC or DC control range, box clamps for power connections (25 mm² / AWG3) and pluggable spring for control, E-type layout	17.8 mm wide solid state relay with integrated varistor on output, AC or DC control range, box clamps for power and control connections, U-type layout	17.8 mm wide solid state relay mounted on DIN mountable module
Input specifications			
Control input range	4-32 VDC [RG..D..] 20-275 VAC, 24-190 VDC [RG..A..]	3-32 VDC [RG..23D..] 4-32 VDC [RG..60D..] 20-275 VAC, 24-190 VDC [RG..A..]	3-32 VDC [RG..23D..] 4-32 VDC [RG..60D..] 20-275 VAC, 24-190 VDC [RG..A..]
Max. input current	11 mADC [RG..D..] 30 mAAC [RG..A..]	11 mADC [RG..D..] 30 mAAC [RG..A..]	11 mADC [RG..D..] 30 mAAC [RG..A..]
Output specifications			
Rated operational current AC-51 @ Ta=40°C	50 AAC [RG..50] 90 AAC [RG..92]	20 AAC [RG..20] 30 AAC [RG..30]	10 AAC [RG..20/25..DIN] 12 AAC [RG..50/90..DIN]
AC-53a @ Ta=40°C	10 AAC [RG..50] 18 AAC [RG..92]	5 AAC [RG..20] 8 AAC [RG..30]	5 AAC [RG..20/25..DIN] 5 AAC [RG..50/90..DIN]
Min. operational current	250 mAAC [RG..50] 500 mAAC [RG..92]	150 mAAC [RG..20] 250 mAAC [RG..30]	150 mAAC [RG..20/25..DIN] 250 mAAC [RG..50..DIN] 400 mAAC [RG..90..DIN]
Non rep. surge current (t=10 ms)	600 Ap [RG..50] 1900 Ap [RG..92]	325 Ap [RG..20] 600 Ap [RG..30]	325 Ap [RG..20/25..DIN] 600 Ap [RG..50..DIN] 1150 Ap [RG..90..DIN]
Max. Off-state leak current	3 mAAC	3 mAAC	3 mAAC
I^2t for fusing (t=10 ms)	1800 A^2s [RG..50] 18000 A^2s [RG..92]	525 A^2s [RG..20] 1800 A^2s [RG..30]	525 A^2s [RG..20/25..DIN] 1800 A^2s [RG..50..DIN] 6600 A^2s [RG..90..DIN]
Critical dV/dt (@ Tj init=40°C)	1000 V/µs	1000 V/µs	1000 V/µs
General specifications			
Operational voltage range	42-600 VAC +10%	24-240 VAC +10% [RG..23..] 42-600 VAC +10% [RG..60...]	24-240 VAC +10% [RG..23..] 42-600 VAC +10% [RG..60..]
Blocking voltage	1200 Vp	800 Vp [RGS..23..] 1200 Vp [RGS..60..]	800 Vp [RG..23..] 1200 Vp [RG..60..]
Power factor	≥ 0.5 at rated voltage	≥ 0.5 at rated voltage	≥ 0.5 at rated voltage
Operating temperature	-40°C to +80°C	-40°C to +80°C	-40°C to +80°C
Approvals/Marks	CE - cURus - CSA - VDE	CE - cURus - CSA - VDE	CE - cURus - CSA - VDE
References			
230 VAC, 800 Vp, E-type			10 AAC: **RGS1A23X25KKEDIN** 12 AAC: **RGS1A23X50KKEDIN**
600 VAC, 1200 Vp, E-type	50 AAC: **RGS1A60X50MGE** 90 AAC: **RGS1A60X92MGE**		10 AAC: **RGS1A60X25KKEDIN** 12 AAC: **RGS1A60X50KKEDIN** 12 AAC: **RGS1A60D90KKEDIN**
230 VAC, 800 Vp, U-type		20 AAC: **RGS1A23X20KGU** 30 AAC: **RGS1A23X30KGU**	10 AAC: **RGS1A23D20KGUDIN**
600 VAC, 1200 Vp, U-type		20 AAC: **RGS1A60X20KGU** 30 AAC: **RGS1A60X30KGU**	

X must be replaced with D for DC control 3-32 VDC, 4-32 VDC (for 600 VAC versions)
X must be replaced with A for AC control 20-275 VAC, 24-190 VDC
RGS1B.. models for Instant On (Random) switching are available on request

Solid state relays, 1-phase

	Slimline - DC output switching	Slimline - AC output switching Integrated current measurement	
Types	**RGS1D..KKE** 15/25 ADC	**RGS1S..EP** 20/30/90 AAC	**RGS1S..UP** 65 AAC
Single phase, chassis mounting industrial relays with LED for control status indication and IP20 protection, Rated isolation voltage ≥4000 Vrms, 100 kArms Short Circuit Current Rating for AC switching versions			
Dimensions HxWxD (mm)	90 x 17.8 x 50.6	90 x 22.5 x 78	90 x 35.6 x 78
Features	17.8 mm wide solid state relay with IGBT output, integrated free wheeling diode, DC control voltage, screw terminals with captivated clamp, E-type layout	22.5 mm wide solid-state relay with thyristor output, integrated varistor, DC control, local or remote TEACH, detection of partial load failure (1/6), SSR and load malfunction, SSR overheat protection.	35 mm wide solid-state relay with thyristor output, integrated varistor, DC control, local or remote TEACH, detection of partial load failure (1/6), SSR and load malfunction, SSR overheat protection.
Input specifications			
Control input range	4.5-32 VDC	4-32 VDC	4-32 VDC
Max. input current	13.7 mADC	10 mADC at 24 VDC	10 mADC at 24 VDC
Supply voltage		24 VDC -15%, +20%	24 VDC -15%, +20%
Max. supply current		50 mADC	50 mADC
Alarm specifications			
Output type		NC PNP open collector max. 35 VDC / 50 mA	NC PNP open collector max. 35 VDC / 50 mA
Alarm Indication		Red LED (flash rate)	Red LED (flash rate)
Output specifications			
Rated operational current AC-51 @ Ta=40°C		20 AAC [RGS1S..20] 30 AAC [RGS1S..30 / 31] 90 AAC [RGS1S..92]	65 AAC
DC Rated operational current	15 ADC [RGS1D..15.] 25 ADC [RGS1D..25.]		
Minimum TEACH / operational current	20 mA	1.2 AAC [RGS1S..20/30/31] 5 AAC [RGS1S..92]	5 AAC
Minimum partial load current		0.2 AAC [RGS1S..20/30/31] 0.83 AAC [RGS1S..92]	0.83 AAC
Detectable partial load failure		>16.67% from current setpoint	>16.67% from current setpoint
Non rep. surge current (Itsm) (t=10 ms)	200 ADC [10µs]	325 Ap [RGS1S..20] - 600 Ap [RGS1S..30] 1150 Ap [RGS1S..31] - 1900 Ap [RGS1S..92]	1900 Ap
Max. Off-state leak current	1.5 mADC	3 mAAC	3 mAAC
I^2t for fusing (t=10 ms)		525 A^2s [RGS1S..20] - 1800 A^2s [RGS1S..30] 6600 A^2s [RGS1S..31] - 18000 A^2s [RGS1S..92]	18000 A^2s
Critical dV/dt (@ Tj init = 40°C)		1000 V/µs	1000 V/µs
General specifications			
Operational voltage range	24-1000 VDC [CE] 24-600 VDC [UL508]	42-600 VAC +10%	42-600 VAC +10%
Blocking voltage	1200 VDC	1200 Vp	1200 Vp
Power factor		≥ 0.9 at rated voltage	≥ 0.9 at rated voltage
Operating temperature	-40°C to +80°C	-25°C to +70°C	-25°C to +70°C
Approvals/Marks	CE - cURus - CSA	CE - cURus - CSA	CE - cURus - CSA
References			
1000 VDC	15 ADC: **RGS1D1000D15KKE** 25 ADC: **RGS1D1000D25KKE**		
600 VAC, 525 A^2s, E-type		20 AAC: **RGS1S60D20GKEP**	
600 VAC, 1800 A^2s, E-type		30 AAC: **RGS1S60D30GKEP**	
600 VAC, 6600 A^2s, E-type		30 AAC: **RGS1S60D31GKEP**	
600 VAC, 18000A^2s, E-type		90 AAC: **RGS1S60D92GGEP**	
600 VAC, 18000 A^2s, U-type			65 AAC: **RGS1S60D61GGUP**

KK = screws for control terminals, screws for power terminals
GK = box clamps for control terminals, screws for power terminals
GG = box clamps for control terminals, box clamps for power terminals

Solid state relays, 1-phase

Types	Slimline - Soft start switching RGS1P..K.. 50 AAC	Slimline - Soft start switching RGS1P..K.. 90 AAC	Slimline - Proportional switching controllers RGS1P..AA.. / V.. 50 AAC	Slimline - Proportional switching controllers RGS1P..AA.. / V.. 90 AAC
Single phase, chassis mounting industrial relays with integrated overvoltage protection, LED for control and load status indication, IP20 protection, Rated isolation voltage ≥4000 Vrms, 100 kArms Short Circuit Current Rating				
Dimensions HxWxD (mm)	90 x 35.8 x 51	90 x 35.8 x 51	90 x 35.8 x 51	90 x 35.8 x 51
Features	DC control input solid state relay with soft starting feature for short wave infrared heaters.	DC control input solid state relay with soft starting feature for short wave infrared heaters.	Analog input (current or voltage), selectable modes for output switching - Phase angle, Full cycle distributed firing, Advanced full cycle and soft starting	Analog input (current or voltage), selectable modes for output switching - Phase angle, Full cycle distributed firing, Advanced full cycle and soft starting
Supply specifications				
Supply voltage	24 VDC -15%, +20% 24 VAC -15%, +15%	24 VDC -15%, +20% 24 VAC -15%, +15%	24 VDC -15%, +20% (RG..V..ED) 24 VAC -15%, +15% (RG..V..ED) 90-250 VAC (RG..V..EA)	24 VDC -15%, +20% (RG..V..ED) 24 VAC -15%, +15% (RG..V..ED) 90-250 VAC (RG..V..EA)
Max. supply current	30 mA	30 mA	30 mA (RG..V..ED) 14 mA (RG..V..EA)	30 mA (RG..V..ED) 14 mA (RG..V..EA)
Control specifications				
Control input range	19.2 - 28.8 VDC	19.2 - 28.8 VDC	4-20 mA (RG..AA..) 0-10V, 0-5V, 1-5V, POT (RG..V..)	4-20mA (RG..AA..) 0-10V, 0-5V, 1-5V, POT (RG..V..)
Input impedance	100 kΩ	100 kΩ	500 Ω (RG..AA..) 100 kΩ (RG..V..)	500 Ω (RG..AA..) 100 kΩ (RG..V..)
Output specifications				
Rated operational current AC-51 @ 40°C	50 AAC	90 AAC	50 AAC	90 AAC
Minimum operational current	250 mAAC	500 mAAC	250 mAAC	500 mAAC
Non rep. surge current (Itsm) (t=10 ms)	600 Ap	1900 Ap	600 Ap	1900 Ap
I^2t for fusing (t=10 ms)	1800 A^2s	18000 A^2s	1800 A^2s	18000 A^2s
Max. Off-state leakage current	5 mAAC	5 mAAC	5 mAAC	5 mAAC
Critical dV/dt (@ Tj init = 40°C)	1000 V/µs	1000 V/µs	1000 V/µs	1000 V/µs
General specifications				
Operational voltage range	85 - 265 VAC (RGS1P23..) 190 - 550 VAC (RGS1P48..) 410 - 660 VAC (RGS1P60..)	85 - 265 VAC (RGS1P23..) 190 - 550 VAC (RGS1P48..) 410 - 660 VAC (RGS1P60..)	85 - 265 VAC (RGS1P23..) 190 - 550 VAC (RGS1P48..) 410 - 660 VAC (RGS1P60..)	85 - 265 VAC (RGS1P23..) 190 - 550 VAC (RGS1P48..) 410 - 660 VAC (RGS1P60..)
Blocking voltage	800 V_P (RGS1P23..) 1200 V_P (RGS1P48..) 1200 V_P (RGS1P60..)	800 V_P (RGS1P23..) 1200 V_P (RGS1P48..) 1200 V_P (RGS1P60..)	800 V_P (RGS1P23..) 1200 V_P (RGS1P48..) 1200 V_P (RGS1P60..)	800 V_P (RGS1P23..) 1200 V_P (RGS1P48..) 1200 V_P (RGS1P60..)
Power factor	> 0.7	> 0.7	> 0.7	> 0.7
Terminals	Screw with captive clamp	Box clamp	Screw with captive clamp	Box clamp
Operating temperature	-40°C to +70°C	-40°C to +70°C	-40°C to +70°C	-40°C to +70°C
Approvals/Marks	CE - cURus - CSA	CE - cURus - CSA	CE - cURus - CSA	CE - cURus - CSA
References				
External supply 24 VDC/AC				
Operational output 85 - 265 VAC	**RGS1P23K50ED**	**RGS1P23K92ED**		
Operational output 190 - 550 VAC	**RGS1P48K50ED**	**RGS1P48K92ED**		
Operational output 410 - 660 VAC	**RGS1P60K50ED**	**RGS1P60K92ED**		
Control input				
4-20 mA			**RGS1PxxAA50E**	**RGS1PxxAA92E**
0-10 VDC, 0-5 VDC, 1-5 VDC, POT				
External supply 24 VDC/AC			**RGS1PxxV50ED**	**RGS1PxxV92ED**
External supply 90-250 VAC			**RGS1PxxV50EA**	**RGS1PxxV92EA**

xx = 23 for operational voltage range 85 - 265 VAC
xx = 48 for operational voltage range 190 - 550 VAC
xx = 60 for operational voltage range 410 - 660 VAC

Solid state relays, 1-phase

Industrial housing - AC output switching

Types	RF1A 25 AAC	RS1A 10/25/40 AAC	RAM1A 25/50/75/100/125 AAC	RAM1A..G 25/50/100/125 AAC
Single phase, chassis mounting, industrial relays with LED status indication and IP 20 protection. AC operating frequency range 45-65 Hz. Rated isolation voltage ≥4000 Vrms				
Dimensions HxWxD (mm)	36 x 21 x 24	58.2 x 44.8 x 28.8	58.2 x 44.8 x 28.8	58.2 x 44.8 x 28.8
Features	Zero Cross or Instant ON, Built-in transil, VDE, Glow wire acc. to IEC/EN 60335-1	Zero Cross, Ideal for Ohmic loads	Zero Cross or Instant ON, Built-in snubber, VDE	Zero Cross, Built-in varistor, VDE, Glow wire acc. to IEC/EN 60335-1
Input specifications				
Control input range	4.25 - 9 VDC [RF1A..L] 9 - 18 VDC [RF1A..M] 18 -28.8 VDC [RF1A..D]	3-32 VDC [RS1A23D] 4-32 VDC [RS1A.....D] 18-36 VAC/DC [RS1A...LA] 80-130 VAC [RS1A..A1-] 200-260 VAC [RS1A..A2-] 360-440 VAC [RS1A..A4-]	3-32 VDC [RAM1A23D..] 4-32 VDC [RAM1A60D..] 20-280 VAC / 22-48 VDC [RAM1A..A.]	3-32 VDC [RAM1A23D..] 4-32 VDC [RAM1A60D..] 20-280 VAC / 22-48 VDC [RAM1A..A.]
Max. input current	15 mA [RF1A..L] 12 mA [RF1A..M] 12.5 mA [RF1A..D]	12 mA [RS1A..D] 15 mA [RS1A..LA] 13 mA [RS1A. . . .A1- /A2- /A4-]	12 mA [RAM1A..D.] 20 mA [RAM1A..A.]	12 mA [RAM1A..D.] 20 mA [RAM1A..A.]
Output specifications				
		RS1A..10 / 25 / 40	RAM1A..25 /50 /75 /100 /125	RAM1A..25/50/51/100/125
Rated operational current				
AC 51 @ Ta=25°C	25 AAC	10 / 25 / 40 AAC	25 /50 /75 /100 /125 AAC	25 /50 /50 /100 /125 AAC
AC 53a @ Ta=25°C			5 /15 /17 /20 /30 AAC	5 /15 /15 /20 /30 AAC
Min. operational current	150 mAAC	150 / 150 / 250 mAAC	150 /250 /400 /400 /500 mAAC	150 /250 /400 /400 /500 mAAC
Non rep. surge current (t=10 ms)	325 A_P	100 / 325 / 600 A_P	325 /600 /800 /1150 /1900 A_P	325 /600 /800 /1150 /1900 A_P
Off-state leakage current	< 3 mA	< 3 mA	< 3 mA	< 3 mA
I^2t for fusing (t=10 ms)	525 A^2s	50 / 525 / 1800 A^2s	525 /1800 /3200 /6600 /18000 A^2s	525 /1800 /3200 /6600 /18000 A^2s
Critical dV/dt	1000 V/µs	500 V/µs	1000 V/µs	1000 V/µs
General specifications				
Operational voltage range	24 - 280 VAC	42-265 VAC [RS1A23..] 42-440 VAC [RS1A40..] 42-530 VAC [RS1A48..]	24-265 VAC [RAM1A23..] 42-660 VAC [RAM1A60..] 42-760 VAC [RAM1A69..]	24-265 VAC [RAM1A23..] 42-660 VAC [RAM1A60..]
Blocking voltage	600V_P	650 V_P [RS1A23..] 850 V_P [RS1A40..] 1200 V_P [RS1A48..]	650 V_P [RAM1A23..] 1200 V_P [RAM1A60..] 1600 V_P [RAM1A69..]	650 V_P [RAM1A23..] 1200 V_P [RAM1A60..]
Power factor	≥ 0.9	≥ 0.95	≥ 0.5	≥ 0.5
Operating temperature	-30°C to +80°C	-20°C to +70°C	-40°C to +80°C	-40°C to +80°C
Terminals	FASTONS	Screw type with clamp	Screw type with clamp	Screw type with clamp
Approvals/Marks	CE - UR - CSA - VDE	CE - UR - CSA	CE - UR - CSA - CCC - VDE*	CE - UR - CSA - CCC - VDE
References				
	25 AAC	10 / 25 / 40 AAC	25 / 50 / 75 / 100 / 125 AAC	25 / 50 / 100 / 125 AAC
230 VAC	**RF1A23L25**	**RS1A23X10** (X = D, LA only)	**RAM1A23DYY**	**RAM1A23DYYG**
	RF1A23M25	**RS1A23X25**	**RAM1A23AYY**	**RAM1A23AYYG**
	RF1A23D25	**RS1A23X40**		
400 VAC		**RS1A40X10** (X = D, LA only)		
		RS1A40X25		
		RS1A40X40		
480 VAC		**RS1A48X10** (X = D, LA only)		
		RS1A48X25 (X = D, LA only)		
		RS1A48X40 (X = D, LA only)		
600 VAC			**RAM1A60DYY**	**RAM1A60DYYG**
			RAM1A60AYY	**RAM1A60AYYG**
690 VAC			**RAM1A69DYY**	
			RAM1A69AYY	

RF1B.., RAM1B.. Instant On switching versions available on request.
* 690 VAC CE marked only.

X = D for DC control = 3-32VDC (RS1A23..), 4-32VDC (RS1A40.., RS1A48..)
X = LA for AC control = 18-36VAC/DC
X = A1- for AC control = 80-130VAC (not availble for RS1A40..)
X = A2- for AC control = 200-260VAC
X = A4- for AC control = 360-440VAC
YY = 25 for 25AAC
YY = 50 for 50AAC
YY = 51 for 50AAC high I^2t (RAM1A60..G only)
YY = 75 for 75AAC
YY = 100 for 100AAC (not available for RAM1A23..G)
YY = 125 for 125AAC (not available for RAM1A23..G)

Solid state relays, 1-phase

	Industrial housing zero/instant ON switching	Industrial housing peak switching	Industrial housing phase angle switching
Types	**RM1A** 25/50/75/100 AAC	**RM1C** 25/50/75/100 AAC	**RM1E** 25/50/100 AAC
Single phase, chassis mounting, industrial relays with LED status indication and IP20 protection AC operating frequency range 45-65 Hz. Rated isolation voltage ≥ 4000 Vrms			
Dimensions HxWxD (mm)	58.2 x 44.8 x 28.8	58.2 x 44.8 x 28.8	58.2 x 44.8 x 28.8
Features	Zero Cross or Instant ON, Built-in varistor	Ideal for transformers	Analog Phase-angle control
Input specifications			
Control input range	3-32 VDC [RM1A23D.] 4-32 VDC [RM1A60D.] 20-280 VAC/22-48 VDC [RM1A..A.] 4.25-36 VDC/4.25-27 VAC [RM1A..M.]	4.25-32 VDC	4-20 mA [RM1E..AA..] 0-10 VDC [RM1E..V..]
Max. input current	12mA [RM1A..D.] 20mA [RM1A..A.] 18mA [RM1A..M.]	18 mA	0.15 mA [RM1E..V..]
Supply voltage range			24 VDC [RM1E..V..]
Max. supply input current			20 mA [RM1E..V..]
Output specifications			
	RM1A..25 / 50 / 75 / 100	RM1C..25 / 50 / 75 / 100	RM1E..25 / 50 / 100
Rated operational current			
AC 51 @ Ta=25°C	25 / 50 / 75 / 100 AAC	25 / 50 / 75 / 100 AAC	25 / 50 / 100 AAC
AC 53a @ Ta=25°C	5 / 15 / 20 / 30 AAC		5 / 15 / 20 AAC
AC 56a @ Ta=25°C		10 / 20 / 25 / 30 AAC	
Min. operational current	150 / 250 / 400 / 500 mAAC	150 / 250 / 400 / 500 mAAC	150 / 250 / 400 mAAC
Non rep. surge current (t=10 ms)	325 / 600 / 1150 / 1900 A_P	325 / 600 / 1150 / 1900 A_P	325 / 600 / 1150 A_P
Off-state leakage current	< 3 mA	< 3 mA	< 3 mA
I^2t for fusing (t=10 ms)	525 / 1800 / 6600 / 18000 A^2s	525 / 1800 / 6600 / 18000 A^2s	525 / 1800 / 6600 A^2s
General specifications			
Operational voltage range	24-265 VAC [RM1A23..] 42-440 VAC [RM1A40..] 42-530 VAC [RM1A48..] 42-660 VAC [RM1A60..]	100-440 VAC [RM1C40D.] 340-660 VAC [RM1C60D.]	90-280 VAC [RM1E23AA..] 340-460 VAC [RM1E40AA..] 200-550 VAC [RM1E48AA..] 410-660 VAC [RM1E60AA..] 90-265 VAC [RM1E23V..] 200-550 VAC [RM1E48V..] 410-660 VAC [RM1E60V..]
Blocking voltage	650 V_P [RM1A23..] 850 V_P [RM1A40..] 1200 V_P [RM1A48..] 1400 V_P [RM1A60..]	850 V_P [RM1C40D..] 1400 V_P [RM1C60D..]	650 V_P [RM1E23..] 850 V_P [RM1E40..] 1200 V_P [RM1E48..] 1400 V_P [RM1E60..]
Power factor	≥ 0.5	≥ 0.5	≥ 0.75
Operating temperature	-20°C to +70°C	-30°C to +80°C	-20°C to +70°C
Terminals	Screw type with clamp	Screw type with clamp	Screw type with clamp
Approvals/Marks	CE - UR - CSA - CCC	CE - UR - CSA	CE - UR - CSA
References 1-phase:			
	25 / 50 / 75 / 100 AAC	25 / 50 / 75 / 100 AAC	25 / 50 / 100 AAC
230 Vrms	**RM1A23XYY**		**RM1E23X25** (X = AA or V)
			RM1E23X50 (X = AA or V)
			RM1E23X100 (X = AA or V)
400 Vrms	**RM1A40XYY**	**RM1C40D25**	**RM1E40AA25**
		RM1C40D50	**RM1E40AA50**
		RM1C40D75	**RM1E40AA100**
480 Vrms	**RM1A48XYY**		**RM1E48X25** (X = AA or V)
			RM1E48X50 (X = AA or V)
			RM1E48X100 (X = AA or V)
600 Vrms	**RM1A60XYY**	**RM1C60D25**	**RM1E60X25** (X = AA or V)
		RM1C60D50	**RM1E60X50** (X = AA or V)
		RM1C60D100	**RM1E60X100** (X = AA or V)

RM1B.. Instant On switching versions available on request

X = D for DC control = 3-32VDC (RM1A23..), 4-32VDC (RM1A40.., RM1A48.., RM1A60..)
X = A for AC control = 20-280VAC / 22-48VDC

X = M for low AC control = 4.25-36VDC / 4.25-27VAC
YY = 25 for 25 AAC
YY = 50 for 50 AAC

YY = 75 for 75 AAC
YY = 100 for 100 AAC

Solid state relays, 1-phase

	Industrial housing AC output switching			Industrial housing DC switching
Types	**RA** 25/50/90/110 AAC	**RA Sense** 25/50/90/110 AAC	**RA Low Noise** 10/25 AAC	**RD** 1/5 ADC
Single Phase relays, chassis mounting, variants with special functions 2 Phase industrial relays				
Dimensions HxWxD (mm)	58.2 x 44.8 x 28.8	58.2 x 44.8 x 28.8	58.2 x 44.8 x 28.8	58.2 x 44.8 x 28.8
Features	General purpose	Detects supply and load failure	Complies with EN55022	Ideal for DC valve coils
Input Specifications				
Control input range	3-32 VDC [RA..D..] 10-90 VAC / DC [RA..LA..] 90-280 VAC / DC [RA..HA..]	7-32 VDC	3-32 VDC	3-32 VDC
Max. input current	22 mA [RA..D..] 17 mA [RA..LA..] 6.5 mA [RA..HA..]	4 mA	32 mA	32 mA
Control supply		20-32 VDC (40 mA)		
Alarm output PNP NPN		VCC - 2 VDC (100 mA) 2 VDC (100 mA)		
Output Specifications				
Rated operational current				
AC 51 @ Ta=25°C	25 / 50 / 90 /110 AAC	25 / 50 / 90 / 110 AAC	10 / 25 AAC	DC1: 1A / 5A
AC 53a @ Ta=25°C	5/15/ 20/30 AAC			
Min. operational current	20 mA	200 mArms	2 Arms	1 mA
Non rep. surge current (t=10 ms)	325 Ap [RA..25.] 600 Ap [RA.50.] 1150 Ap [RA..90.] 1900 Ap [RA.110.]	325 Ap [RA..25..S] 600 Ap [RA..50..S] 1150 Ap [RA..90..S] 1900 Ap [RA..110..S]	90 Ap, t=20 ms [RA..10..L] 200 Ap, t=20 ms [RA..25..L]	
Off-state leakage current	< 3 mA	< 6 mArms	< 1 mArms	< 1 mA
I^2t for fusing (t=10 ms)	<525 A^2s [RA..25.] <1800 A^2s [RA..50.] <6600 A^2s [RA..90.] <18000 A^2s [RA..110.]	525 A^2s [RA..25..S] 1800A^2s [RA..50..S] 6600 A^2s [RA..90..S] 18000 A^2s [RA..110..S]	120 A^2s [RA..10..L] 200 A^2s [RA..25..L]	
General specifications				
Operational voltage range	24-280 Vrms [RA24.06..] 42-480 Vrms [RA44.08..] 42-530 Vrms [RA48.12..] 24-690 Vrms [RA60.16..]	60-140 Vrms [RA12..S] 170-250 Vrms [RA23..S] 150-440 Vrms [RA40..S] 180-530 Vrms [RA48..S]	180-265 Vrms [RA24..L] 340-530 Vrms [RA40..L]	3-60 VDC [RD0605..D] 3-200 VDC [RD2001..D] 3-350 VDC [RD3501..D]
Blocking voltage	<650 Vp [RA24.06..] <850 Vp [RA44.08..] <1200 Vp [RA48.12..] <1600 Vp [RA60.16..]	650 Vp [RA12..S] 650 Vp [RA23..S] 1000 Vp [RA40..S] 1200 Vp [RA48..S]	650 Vp [RA24..L] 850 Vp [RA40..L]	
Power factor	≥ 0.5	≥ 0.5	1	
Operating temperature	-20°C to +70°C	-20°C to +70°C	-20°C to +70°C	-20°C to +70°C
Terminals	Screw type with clamp	Screw / 5 way plug	Screw type with clamp	Screw type with clamp
Approvals/Marks	CE - UR - CSA	CE - UR - CSA	CE - UR - CSA - VDE	CE - CSA
References				
	25 / 50 / 90 / 110 AAC	25 / 50 / 90 / 110 AAC	10 / 25 AAC	1 / 5 ADC
120 Vrms		**RA12..06..S**		
230 Vrms	**RA24..-D..**	**RA23..06..S**	**RA2410-D06L**	200 VDC: **RD2001-D**
	RA24..LA..		**RA2425-D06L**	350 VDC: **RD3501-D**
	RA24..HA..			
400 Vrms	**RA44..-D..**	**RA40..10..S**	**RA4010-D08L**	60 VDC: **RD0605-D**
	RA44..LA..		**RA4025-D08L**	
	RA44..HA..			
480 Vrms	**RA48..-D..**	**RA48..12..S**		
	RA48..LA..			
	RA48..HA..			
600 Vrms	**RA60..-D..**			

CARLO GAVAZZI Automation Components. Specifications are subject to change without notice. Illustrations are for example only.

Solid state relays, 2-poles / 3-phase

	Industrial housing AC output switching		Industrial housing 3-phase switching
Types	**RA2A** 25/40 AAC	**RA2A..C** 25/40 AAC	**RZ3A** 25/55/75 AAC
Single phase and 3 phase industrial relays			
Dimensions HxWxD (mm)	57.8 x 44.5 x 31.7	57.8 x 44.5 x 34.8	74 x 103 x 41
Features	Two independent poles, RA2A..M for inductive loads	Two independent poles, faston terminals for power, pin connectors for control	3-phase switching
Input specifications			
Control input range	4.5-32 VDC	4.5-32 VDC	4-32 VDC [RZ3A..D.] 24-275 Vrms [RZ3A..A.]
Max. input current	2 x 10 mA	2x 10 mA	23 / 15 mA
Output specifications			
Rated operational current			
AC 51 @ Ta=25°C	25 / 40 AAC per pole	25 / 40 AAC per pole	25 / 55 / 75 AAC
AC 53a @ Ta=25°C	5 / 15 AAC per pole [RA2A..M]		5 / 15 / 20 AAC
Min. operational current	150 mArms [RA2A…25] 250 mArms [RA2A…40]	150 mArms [RA2A…25C] 250 mArms [RA2A…40C]	150 mArms [RZ3..25] 250 mArms [RZ3..55] 400 mArms [RZ3..75]
Non rep. surge current (t=10 ms)	325 Ap [RA2A..25] 600 Ap [RA2A..40] 325 Ap [RA2A..25M] 600 Ap [RA2A..40M]	325 Ap [RA2A…25C] 600 Ap [RA2A…40C]	325 Ap [RZ3A..25..] 600 Ap [RZ3A..55..] 1150 Ap [RZ3A..75..]
Off-state leakage current	< 3 mArms	<3 mArms	< 3 mA
I^2t for fusing (t=10 ms)	525 A^2s [RA2A..25] 1800 A^2s [RA2A..40] 525 A^2s [RA2A..25M] 1800A^2s [RA2A..40M]	525 A^2s [RA2A..25C] 1800 A^2s [RA2A..40C]	525 A^2s [RZ3A..25..] 1800 A^2s [RZ3A..55..] 6600 A^2s [RZ3A..75..]
General specifications			
Operational voltage range	24-265 Vrms [RA2A23..] 42-440 Vrms [RA2A40..] 42-530 Vrms [RA2A48..] 42-660 Vrms [RA2A60..]	24-265 Vrms [RA2A23..] 42-660 Vrms [RA2A60..]	24-440 Vrms [RZ3A40.] 42-530 Vrms [RZ3A48.] 42-660 Vrms [RZ3A60.]
Blocking voltage	650 Vp [RA2A23..] 850 Vp [RA2A40..] 1200 Vp [RA2A48..] 1200 Vp [RA2A60..]	650 Vp [RA2A23..] 1200 Vp [RA2A60..]	<850 Vp [RZ3A40..] <1200 Vp [RZ3A48..] <1600 Vp [RZ3A60..]
Power factor	≥0.95 [RA2A...] ≥0.50 [RA2A...M]	≥ 0.95 at rated voltage	
Operating temperature	-20°C to +70°C	-20°C to +70°C	-30°C to +80°C
Terminals	FASTONS 6.35 mm	FASTONS 6.35 mm / 4 way plug	Screw type with clamp
Approvals/Marks	CE - UR - CSA	CE - cURus	CE - UR - CSA
References			
	25 / 40 AAC per pole	25 / 40 AAC per pole	25 / 55 / 75 AAC per pole
230 Vrms	**RA2A23..**	**RA2A23D..C**	
	RA2A23..M		
400 Vrms	**RA2A40..**		**RZ3A40D..***
	RA2A40..M		**RZ3A40A..***
480 Vrms	**RA2A48..**		**RZ3A48D..***
	RA2A48..M		**RZ3A48A..***
600 Vrms	**RA2A60..**	**RA2A60D..C**	**RZ3A60D..***
	RA2A60..M		**RZ3A60A..***

* Add suffix 'P' for additional integrated Over Temperature Protection

Solid state relays, 1 / 3-phase

AC output switching - Hybrid relays for DIN rail mounting

Types	RMD1H 20 AAC	RMD2H 30/40 AAC	RMD3H 30/40 AAC
Hybrid relays. AC operating frequency range 45-65 Hz.			
Dimensions HxWxD (mm)	81 x 17.5 x 67.2	97 x 140.7 x 50.7	97 x 140.7 x 50.7
Features	Hybrid relay	2 pole switching hybrid relay	3 pole switching hybrid relay
Input specifications			
Control input range	4-32 VDC [RMD....D20] 24-275 VAC [RMD....A20]	24 VAC/DC +10/-15% [RMD2..LA..] 120 VAC/DC +10/-15% [RMD2..MA..] 240 VAC/DC +10/-15% [RMD2..HA..]	24 VAC/DC +10/-15% [RMD3..LA..] 120 VAC/DC +10/-15% [RMD3..MA..] 240 VAC/DC +10/-15% [RMD3..HA..]
Max. input current	5 mA [RMD..D20] 3 mA [RMD..A20]	400 mA	400 mA
Output specifications			
Rated operational current			
AC 51 @ Ta=25°C	20 AAC	30 AAC [RMD2..30] 40 AAC [RMD2..40]	30 AAC [RMD3..30] 40 AAC [RMD3..40]
Min. operational current	100 mA	150 mA	150 mA
General specifications			
Operational voltage range	195-253 Vrms	240 VAC -15% /+10% [RMD..24..] 277 VAC -15% /+10% [RMD..48..]	240 VAC -15% /+10% [RMD..24..] 277 VAC -15% /+10% [RMD..48..] 480 VAC + N [RMD..48..]
Power factor	≥ 0.9	≥ 0.9 at rated voltage	≥ 0.9 at rated voltage
Operating temperature	-5°C to +55°C	0°C to 70°C	0°C to 70°C
Terminals	Box clamp	Input 6.35 mm FASTON, Output screw	Input 6.35 mm FASTON, Output screw
Approvals/Marks	CE - cURus	CE - cURus	CE - cURus
References			
	20 AAC	30 AAC	30 AAC
	RMD1H23D20	**RMD2H24LA30**	**RMD3H24LA30**
	RMD1H23A20	**RMD2H24MA30**	**RMD3H24MA30**
		RMD2H24HA30	**RMD3H24HA30**
		40 AAC	**RMD3H48LA30**
		RMD2H24LA40	**RMD3H48MA30**
		RMD2H24MA40	**RMD3H48HA30**
		RMD2H24HA40	40 AAC
			RMD3H24LA40
			RMD3H24MA40
			RMD3H24HA40
			RMD3H48LA40
			RMD3H48MA40
			RMD3H48HA40

Solid state contactors, 1-phase

Ready for use design - DIN rail mounting, AC output switching

Types	RGC/RGH1A..15KKE 20 AAC	RGC1A..25KKE 25 AAC	RGC/RGH1A..30KKE 30 AAC
Single phase, semiconductor contactors with integrated heatsink, LED indication and IP20 protection, AC operating frequency 45-65 Hz, Rated isolation voltage ≥4000 Vrms, 100 kArms Short Circuit Current Rating, Motor ratings according to UL508			
Dimensions HxWxD (mm)	110 x 17.8 x 103.5	110 x 17.8 x 103.5	110 x 22.5 x 141
Features	17.8 mm wide solid state contactor, integrated output varistor, DC or AC control voltage, screw terminals for power and control, E-type layout	17.8 mm wide solid state contactor, integrated output varistor, DC or AC control voltage, screw terminals for power and control, E-type layout	22.5 mm wide solid state contactor, integrated output varistor, DC or AC control voltage, screw terminals for power and control, E-type layout
Input specifications			
Input Specifications	3-32 VDC [RG.23D.] 4-32 VDC [RG.60D.] 20-275 VAC, 24-190 VDC [RG..A.]	3-32 VDC [RG.23D.] 4-32 VDC [RG.60D.] 20-275 VAC, 24-190 VDC [RG..A.]	3-32 VDC [RG.23D.] 4-32 VDC [RG.60D.] 20-275 VAC, 24-190 VDC [RG..A.]
Max. input current	11 mADC [RG..D.] 30 mAAC [RG..A.]	11 mADC [RG..D.] 30 mAAC [RG..A.]	11 mADC [RG..D.] 30 mAAC [RG..A.]
Output specifications			
Rated operational current AC 51 @ Ta=40°C	20 AAC	25 AAC	30 AAC
AC 53a @ Ta=40°C	5 AAC	5 AAC	8 AAC [RGC..30.] 10 AAC [RGH..31.]
Min. operational current	150 mA [RGC..15.] 400 mA [RGH..15.]	250 mA	250 mA [RGC..30.] 400 mA [RGH..31.]
Non rep. surge current (t=10 ms)	325 Ap [RGC..15.] 1150 Ap [RGH..15.]	600 Ap	600 Ap [RGC..30.] 1150 Ap [RGH..31.]
Off-state leakage current	3 mAAC	3 mAAC	3 mAAC
I^2t for fusing (t=10 ms)	525 A^2s [RGC..15.] 6600 A^2s [RGH..15.]	1800 A^2s	1800 A^2s [RGC..30.] 6600 A^2s [RGH..31.]
Critical dV/dt (@ Tj init=40°C)	1000 V/µs	1000 V/µs	1000 V/µs
General specifications			
Operational voltage range	24-240 VAC +10% [RG.23..] 42-600 VAC +10% [RG.60..]	24-240 VAC +10% [RG.23..] 42-600 VAC +10% [RG.60..]	24-240 VAC +10% [RG.23..] 42-600 VAC +10% [RG.60..]
Blocking voltage	800 Vp [RGC.23.] 1200 Vp [RGC.60.] 1600 Vp [RGH.60.]	800 Vp [RGC.23.] 1200 Vp [RGC.60.]	800 Vp [RGC.23.] 1200 Vp [RGC.60.] 1600 Vp [RGH.60.]
Power factor	≥ 0.5 at rated voltage	≥ 0.5 at rated voltage	≥ 0.5 at rated voltage
Operating temperature	-40°C to +80°C	-40°C to +80°C	-40°C to +80°C
Approvals/Marks	CE - cULus - VDE - GL [RGC..15.]	CE - cULus - VDE - GL	CE - cULus - VDE - GL [RGC..30.]
References			
DC control voltage			
230 VAC, 800 Vp	**RGC1A23D15KKE**	**RGC1A23D25KKE**	**RGC1A23D30KKE**
600 VAC, 1200 Vp	**RGC1A60D15KKE**	**RGC1A60D25KKE**	**RGC1A60D30KKE**
600 VAC, 1600 Vp, 6600 A^2s	**RGH1A60D15KKE**		**RGH1A60D31KKE**
AC/DC control voltage			
230 VAC, 800 Vp	**RGC1A23A15KKE**	**RGC1A23A25KKE**	**RGC1A23A30KKE**
600 VAC, 1200 Vp	**RGC1A60A15KKE**	**RGC1A60A25KKE**	**RGC1A60A30KKE**
600 VAC, 1600 Vp, 6600 A^2s	**RGH1A60A15KKE**		**RGH1A60A31KKE**

Instant On (Random) Switching available on request (RGC1B60D...)

Solid state contactors, 1-phase

Ready for use design - DIN rail mounting, AC output switching

Types	RGC/RGH1A..15MKE 20 AAC	RGC1A..25MKE 25 AAC	RGC/RGH1A..30MKE 30 AAC
Single phase, semiconductor contactors with integrated heatsink, LED indication and IP20 protection, AC operating frequency 45-65 Hz, Rated isolation voltage ≥ 4000 Vrms, 100 kArms Short Circuit Current Rating, Motor ratings according to UL508			
Dimensions HxWxD (mm)	110 x 17.8 x 114.5	110 x 17.8 x 114.5	110 x 22.5 x 152
Features	17.8 mm wide solid state contactor, integrated varistor for overvoltage protection, DC or AC control voltage range, screw terminals with captivated clamp for power terminals and spring plug for control, E-type layout	17.8 mm wide solid state contactor, integrated varistor for overvoltage protection, DC or AC control voltage range, screw terminals with captivated clamp for power terminals and spring plug for control, E-type layout	22.5 mm wide solid state contactor, integrated varistor for overvoltage protection, DC or AC control voltage range, screw terminals with captivated clamp for power terminals and spring plug for control, E-type layout
Input specifications			
Control input range	3-32 VDC [RG.23D.] / 4-32 VDC [RG.60D.] 20-275 VAC, 24-190 VDC [RG..A.]	3-32 VDC [RG.23D.] / 4-32 VDC [RG.60D.] 20-275 VAC, 24-190 VDC [RG..A.]	3-32 VDC [RG.23D.] / 4-32 VDC [RG.60D.] 20-275 VAC, 24-190 VDC [RG..A.]
Max. input current	11 mADC [RG..D.] 30 mAAC [RG..A.]	11 mADC [RG..D.] 30 mAAC [RG..A.]	11 mADC [RG..D.] 30 mAAC [RG..A.]
Output specifications			
Rated operational current			
AC 51 @ Ta=40°C	20 AAC	25 AAC	30 AAC
AC 53a @ Ta=40°C	5 AAC	5 AAC	8 AAC [RGC..30.] 10 AAC [RGH..31.]
Min. operational current	150 mA [RGC..15.] 400 mA [RGH..15.]	250 mA	250 mA [RGC..30.] 400 mA [RGH..31.]
Non rep. surge current (t=10 ms)	325 Ap [RGC...15..] 1150 Ap [RGH...15..]	600 Ap	600 Ap [RGC..30.] 1150 Ap [RGH..31.]
Off-state leakage current	3 mAAC	3 mAAC	3 mAAC
I^2t for fusing (t=10 ms)	525 A^2s [RGC..15.] 6600 A^2s [RGH..15.]	1800 A^2s	1800 A^2s [RGC..30.] 6600 A^2s [RGH..31.]
Critical dV/dt (@Tj init=40°C)	1000 V/µs	1000 V/µs	1000 V/µs
General specifications			
Operational voltage range	24-240 VAC +10% [RG.23..] 42-600 VAC +10% [RG.60..]	24-240 VAC +10% [RG.23..] 42-600 VAC +10% [RG.60..]	24-240 VAC +10% [RG.23..] 42-600 VAC +10% [RG.60..]
Blocking voltage	800 Vp [RGC.23.] 1200 Vp [RGC.60.] 1600 Vp [RGH.60.]	800 Vp [RGC.23.] 1200 Vp [RGC.60.]	800 Vp [RGC.23.] 1200 Vp [RGC.60.] 1600 Vp [RGH.60.]
Power factor	≥ 0.5 at rated voltage	≥ 0.5 at rated voltage	≥ 0.5 at rated voltage
Operating temperature	-40°C to +80°C	-40°C to +80°C	-40°C to +80°C
Approvals/Marks	CE - cULus - VDE - GL [RGC..15.]	CE - cULus - VDE - GL	CE - cULus - VDE - GL [RGC..30.]
References			
DC control voltage			
230 VAC, 800 Vp	**RGC1A23D15MKE**	**RGC1A23D25MKE**	**RGC1A23D30MKE**
600 VAC, 1200 Vp	**RGC1A60D15MKE**	**RGC1A60D25MKE**	**RGC1A60D30MKE**
600 VAC, 1600 Vp,6600 A^2s	**RGH1A60D15MKE**		**RGH1A60D31MKE**
AC/DC control voltage			
230 VAC, 800 Vp	**RGC1A23A15MKE**	**RGC1A23A25MKE**	**RGC1A23A30MKE**
600 VAC, 1200 Vp	**RGC1A60A15MKE**	**RGC1A60A25MKE**	**RGC1A60A30MKE**
600 VAC, 1600 Vp,6600 A^2s	**RGH1A60A15MKE**		**RGH1A60A31MKE**

Instant On (Random) Switching available on request (RGC1B60D...)

Solid state contactors, 1-phase

Ready for use design - DIN rail mounting, AC output switching

Types	RGC1A..15KGU 20 AAC	RGC1A..25KGU 25 AAC	RGC1A..30KGU 30 AAC
Single phase, semiconductor contactors with integrated heatsink, LED indication and IP20 protection, AC operating frequency 45-65 Hz, Rated isolation voltage ≥ 4000 Vrms, 100 kArms Short Circuit Current Rating, Motor ratings according to UL508			
Dimensions HxWxD (mm)	110 x 17.8 x 103.5	110 x 17.8 x 103.5	110 x 22.5 x 141
Features	17.8 mm wide solid state contactor, integrated varistor for overvoltage protection, DC or AC control voltage range, screw terminals with captivated clamp for connection of control terminals and box clamps for power terminals, U-type layout	17.8 mm wide solid state contactor, integrated varistor for overvoltage protection, DC or AC control voltage range, screw terminals with captivated clamp for connection of control terminals and box clamps for power terminals, U-type layout	22.5 mm wide solid state contactor, integrated varistor for overvoltage protection, DC or AC control voltage range, screw terminals with captivated clamp for connection of control terminals and box clamps for power terminals, U-type layout
Input specifications			
Control input range	3-32 VDC [RG.23D.] 4-32 VDC [RG.60D.] 20-275 VAC, 24-190 VDC [RG..A.]	3-32 VDC [RG.23D.] 4-32 VDC [RG.60D.] 20-275 VAC, 24-190 VDC [RG..A.]	3-32 VDC [RG.23D.] 4-32 VDC [RG.60D.] 20-275 VAC, 24-190 VDC [RG..A.]
Max. input current	11 mADC [RG..D.] 30 mAAC [RG..A.]	11 mADC [RG..D.] 30 mAAC [RG..A.]	11 mADC [RG..D.] 30 mAAC [RG..A.]
Output specifications			
Rated operational current			
AC 51 @ Ta=40°C	20 AAC	25 AAC	30 AAC
AC 53a @ Ta=40°C	5 AAC	5 AAC	8 AAC
Min. operational current	150 mA	250 mA	250 mA
Non rep. surge current (t=10 ms)	325 Ap	600 Ap	600 Ap
Off-state leakage current	3 mAAC	3 mAAC	3 mAAC
I^2t for fusing (t=10 ms)	525 A^2s	1800 A^2s	1800 A^2s
Critical dV/dt (@ Tj init = 40°C)	1000 V/µs	1000 V/µs	1000 V/µs
General specifications			
Operational voltage range	24-240 VAC +10% [RG.23..] 42-600 VAC +10% [RG.60..]	24-240 VAC +10% [RG.23..] 42-600 VAC +10% [RG.60..]	24-240 VAC +10% [RG.23..] 42-600 VAC +10% [RG.60..]
Blocking voltage	800 Vp [RGC.23.] 1200 Vp [RGC.60.]	800 Vp [RGC.23.] 1200 Vp [RGC.60.]	800 Vp [RGC.23.] 1200 Vp [RGC.60.]
Power factor	≥ 0.5 at rated voltage	≥ 0.5 at rated voltage	≥ 0.5 at rated voltage
Operating temperature	-40°C to +80°C	-40°C to +80°C	-40°C to +80°C
Approvals/Marks	CE - cULus - VDE - GL	CE - cULus - VDE - GL	CE - cULus - VDE - GL
References			
DC control voltage			
230 VAC, 800 Vp	**RGC1A23D15KGU**	**RGC1A23D25KGU**	**RGC1A23D30KGU**
600 VAC, 1200 Vp	**RGC1A60D15KGU**	**RGC1A60D25KGU**	**RGC1A60D30KGU**
AC/DC control voltage			
230 VAC, 800 Vp	**RGC1A23A15KGU**	**RGC1A23A25KGU**	**RGC1A23A30KGU**
600 VAC, 1200 Vp	**RGC1A60A15KGU**	**RGC1A60A20KGU**	**RGC1A60A30KGU**

Instant On (Random) Switching available on request (RGC1B60D...)

Solid state contactors, 1-phase

Ready for use design - DIN rail mounting, AC output switching

Types	RG..40/41/42KGE 40/43 AAC	RG..40/41/42MGE 40/43 AAC	RG..60/62KGE 60/65 AAC	RGC1A..62MGE 65 AAC
Single phase, semiconductor contactors with integrated heatsink, LED indication and IP20 protection, AC operating frequency 45-65 Hz, Rated isolation voltage ≥ 4000 Vrms, 100 kArms Short Circuit Current Rating, Motor ratings according to UL508				
Dimensions HxWxD (mm)	110 x 35.6 x 141	110 x 35.6 x 152	110 x 69.1 x 141	110 x 69.1 x 152
Features	35 mm wide solid state contactor, integrated varistor, DC or AC control voltage, screw terminals for control, box clamp for power terminals, E-type layout	35 mm wide solid state contactor, integrated varistor, DC or AC control voltage, spring plug for control, box clamp for power terminals, E-type layout	70 mm wide solid state contactor, integrated varistor, DC or AC control voltage, screw terminals for control, box clamp for power terminals, E-type layout	70 mm wide solid state contactor, integrated varistor, DC or AC control voltage, spring plug for control, box clamp for power terminals, E-type layout
Input specifications				
Control input range	3-32 VDC [RG..23D..] 4-32 VDC [RG..60D..] 20-275 VAC, 24-190 VDC [RG..A..]	3-32 VDC [RG..23D..] 4-32 VDC [RG..60D..] 20-275 VAC, 24-190 VDC [RG..A..]	60 / 65 AAC [RGC..60/62], 60 AAC [RGH..60]	3-32 VDC [RG..23D..] 4-32 VDC [RG..60D..] 20-275 VAC, 24-190 VDC [RG..A..]
Max. input current	11 mADC [RG..D..] 30 mAAC [RG..A..]	11 mADC [RG..D..] 30 mAAC [RG..A..]	11 mADC [RG..D..] 30 mAAC [RG..A..]	11 mADC [RG..D..] 30 mAAC [RG..A..]
Output specifications				
Rated operational current AC 51 @ Ta=40°C	40 / 43 AAC [RGC..40/42], 40 AAC [RGH..40/41]	40 / 43 AAC [RGC..40/42], 40 AAC [RGH..41]	60 / 65 AAC [RGC..60/62], 60 AAC [RGH..60]	65 AAC [RGC..62]
AC 53a @ Ta=40°C	13 / 16 AAC [RGC..40/42], 10 / 13 AAC [RGH..40/41]	13 / 16 AAC [RGC..40/42], 13 AAC [RGH..41]	14.8 / 20 AAC [RGC..60/62], 18 AAC [RGH..60]	20 AAC [RGC..62]
Min. operational current	400 / 500 mAAC [RGC..40/42], 250 / 400 mAAC [RGH..40/41]	400 / 500 mAAC [RGC..40/42], 400 mAAC [RGH..41]	400 / 500 mAAC [RGC..60/62], 400 mAAC [RGH..60]	500 mAAC [RGC..62]
Non rep. surge current (t=10 ms)	800 / 1900 A_P [RGC..40/42], 600 / 1150 A_P [RGH..40/41]	800 / 1900 A_P [RGC..40/42], 1150 A_P [RGH..41]	800 / 1900 A_P [RGC..60/62], 1150 A_P [RGH..60]	1900 A_P [RGC..62]
Off-state leakage current	3 mAAC	3 mAAC	3 mAAC	3 mAAC
I^2t for fusing (t=10 ms)	3200 / 18000 A^2s [RGC..40/42], 1800 / 6600 A^2s [RGH..40/41]	3200 / 18000 A^2s [RGC..40/42], 6600 A^2s [RGH..41]	3200 / 18000 A^2s [RGC..60/62], 6600 A^2s [RGH..60]	18000 A^2s [RGC..62]
Critical dV/dt (@Tj init=40°C)	1000 V/µs	1000 V/µs	1000 V/µs	1000 V/µs
General specifications				
Operational voltage range	24-240 VAC +10% [RG..23..] 42-600 VAC +10% [RG..60..] 42-690 VAC +10% [RG..69..]*	24-240 VAC +10% [RG..23..] 42-600 VAC +10% [RG..60..]	24-240 VAC +10% [RG..23..] 42-600 VAC +10% [RG..60..] 42-690 VAC +10% [RG..69..]*	24-240 VAC +10% [RG..23..] 42-600 VAC +10% [RG..60..]
Blocking voltage	800 V_P [RGC..23..] 1200 V_P [RGC..60..] 1600 V_P [RGH..60/69..]	800 V_P [RGC..23..] 1200 V_P [RGC..60..] 1600 V_P [RGH..60..]	800 V_P [RGC..23..] 1200 V_P [RGC..60..] 1600 V_P [RGH..60/69..]	800 V_P [RGC..23..] 1200 V_P [RGC..60..]
Power factor	≥ 0.5 at rated voltage	≥ 0.5 at rated voltage	≥ 0.5 at rated voltage	≥ 0.5 at rated voltage
Operating temperature	-40°C to +80°C	-40°C to +80°C	-40°C to +80°C	-40°C to +80°C
Approvals/Marks	CE - cULus - VDE	CE - cULus - VDE	CE - cULus - VDE	CE - cULus - VDE
References				
230 VAC, 800 Vp, 3200 A^2s	40 AAC: **RGC1A23X40KGE**	40 AAC: **RGC1A23X40MGE**	60 AAC: **RGC1A23X60KGE**	
230 VAC, 800 Vp, 18000 A^2s	43 AAC: **RGC1A23X42KGE**	43 AAC: **RGC1A23X42MGE**	65 AAC: **RGC1A23X62KGE**	65 AAC: **RGC1A23X62MGE**
600 VAC, 1200 Vp, 3200 A^2s	40 AAC: **RGC1A60X40KGE**	40 AAC: **RGC1A60X40MGE**	60 AAC: **RGC1A60X60KGE**	
600 VAC, 1200 Vp, 18000 A^2s	43 AAC: **RGC1A60X42KGE**	43 AAC: **RGC1A60X42MGE**	65 AAC: **RGC1A60X62KGE**	65 AAC: **RGC1A60X62MGE**
600 VAC, 1600 Vp, 1800 A^2s	40 AAC: **RGH1A60X40KGE**			
600 VAC, 1600 Vp, 6600 A^2s	40 AAC: **RGH1A60X41KGE**	40 AAC: **RGH1A60X41MGE**	60 AAC: **RGH1A60X60KGE**	
690 VAC, 1600 Vp, 6600 A^2s	40 AAC: **RGH1A69X41KGE***		60 AAC: **RGH1A69X60KGE***	

X must be replaced with D for DC control 3-32 VDC, 4-32 VDC (for 600 VAC versions)
X must be replaced with A for AC control 20-275 VAC, 24-190 VDC
RGC1B.. models for Instant On (Random) switching are available on request
*690VAC variants are CE marked only and do not include a varistor across the output

Solid state contactors, 1-phase

Ready for use design - DIN rail mounting

	AC output switching		DC output switching
Types	**RG..40/42KGU** 40/43 AAC	**RG..60/62KGU** 60/65 AAC	**RGC1D1000D15KKE** 15 ADC
Single phase, semiconductor contactirs with integrated heatsink, LED indication and IP20 protection, Rated isolation voltage ≥ 4000 Vrms, 100 kArms short circuit current rating and Motor ratings according to UL508 for AC Output Switching			
Dimensions HxWxD (mm)	110 x 35.6 x 141	110 x 69.1 x 141	110 x 17.8 x 141
Features	35 mm wide solid state contactor, integrated varistor, DC or AC control voltage, screw terminals for control, box clamp for power terminals, U-type layout	70 mm wide solid state contactor, integrated varistor, DC or AC control voltage, screw terminals for control, box clamp for power terminals, U-type layout	17.8 mm wide solid state contactor for DC switching with integrated free wheeling diode, DC control, screw terminals for power and control, E-type layout
Input specifications			
Control input range	3-32 VDC [RG..23D..] 4-32 VDC [RG..60D..] 20-275 VAC, 24-190 VDC [RG..A..]	3-32 VDC [RG..23D..] 4-32 VDC [RG..60D..] 20-275 VAC, 24-190 VDC [RG..A..]	4.5-32 VDC
Max. input current	11 mADC [RG..D..] 30 mAAC [RG..A..]	11 mADC [RG..D..] 30 mAAC [RG..A..]	13.7 mADC
Output specifications			
Rated operational current			
AC-51 @ Ta = 40°C	40/43 AAC [RGC..40/42] 40 AAC [RGH..41]	60 / 65 AAC [RGC..60/62], 60 AAC [RGH..60]	
AC-53a @ Ta = 40°C	13/16 AAC [RGC..40/42] 13 AAC [RGH..41]	14.8 / 20 AAC [RGC..60/62], 18 AAC [RGH..60]	
DC 1 @ 60°C			8 ADC
Min. operational current	400 / 500 mAAC [RGC..40/42], 400 mAAC [RGH..41]	400 / 500 mAAC [RGC..60/62], 400 mAAC [RGH..60]	20 mADC
Non rep. surge current (t=10 ms)	800 / 1900 Ap [RGC..40/42], 1150 Ap [RGH..41]	800 / 1900 Ap [RGC..60/62], 1150 Ap [RGH..60]	200 ADC (10us)
Off-state leakage current	3 mAAC	3 mAAC	3 mAAC
I^2t for fusing (t=10 ms)	3200 / 18000 A^2s [RGC..40/42], 6600 A^2s [RGH..41]	3200 / 18000 A^2s [RGC..60/62], 6600 A^2s [RGH..60]	1.5 mADC
Critical dV/dt (@ Tj init= 40°C)	1000 V/µs	1000 V/µs	1000 V/µs
General specifications			
Operational voltage range	24-240 VAC +10% [RG..23..] 42-600 VAC +10% [RG..60..] 42-690 VAC +10% [RG..69..]*	24-240 VAC +10% [RG..23..] 42-600 VAC +10% [RG..60..] 42-690 VAC +10% [RG..69..]*	24-1000 VDC [CE] 24-600 VDC [UL508]
Blocking voltage	800 Vp [RGC..23..] 1200 Vp [RGC..60..] 1600 Vp [RGH..60/69..]	800 Vp [RGC..23..] 1200 Vp [RGC..60..] 1600 Vp [RGH..60/69..]	1200 Vp
Power factor	≥ 0.5 at rated voltage	≥ 0.5 at rated voltage	
Operating temperature	-40°C to +80°C	-40°C to +80°C	-40°C to +80°C
Approvals/Marks	CE - cULus - VDE	CE - cULus - VDE	CE - cULus
References			
230 VAC, 800 Vp, 3200 A^2s	40 AAC: **RGC1A23X40KGU**	60 AAC: **RGC1A23X60KGU**	
230 VAC, 800 Vp, 18000 A^2s	43 AAC: **RGC1A23X42KGU**	65 AAC: **RGC1A23X62KGU**	
600 VAC, 1200 Vp, 3200 A^2s	40 AAC: **RGC1A60X40KGU**	60 AAC: **RGC1A60X60KGU**	
600 VAC, 1200 Vp, 18000 A^2s	43 AAC: **RGC1A60X42KGU**	65 AAC: **RGC1A60X62KGU**	
600 VAC, 1600 Vp, 6600 A^2s	40 AAC: **RGH1A60X41KGU**	60 AAC: **RGH1A60X60KGU**	
690 VAC, 1600 Vp, 6600 A^2s	40 AAC: **RGH1A69X41KGU***	60 AAC: **RGH1A69X60KGU***	
1000 VDC			15 ADC: **RGC1D1000D15KKE**

X must be replaced with D for DC control 3-32 VDC, 4-32 VDC (for 600 VAC versions). X must be replaced with A for AC control 20-275 VAC, 24-190 VDC
RGC1B.. models for Instant On (Random) switching are available on request
*690VAC variants are CE marked only and do not include a varistor across the output

Solid state contactors, 1-phase

Ready for use design - DIN rail mounting
AC output switching with integrated over temperature protection

Types	RGC1A..25GKEP 25 AAC	RGC1A..30GKEP 30 AAC	RGC1A..40/42GG.P 40/43 AAC
Single phase, semiconductor contactors with integrated heatsink, LED indication and IP 20 protection, AC operating frequency 45-65 Hz, Rated isolation voltage ≥4000 Vrms, 100 kArms Short Circuit Current Rating, Motor ratings according to UL508			
Dimensions HxWxD (mm)	110 x 22.5 x 130	110 x 22.5 x 168	110x 35.6 x 168
Features	22.5 mm wide solid state contactor, integrated varistor for overvoltage protection and integrated over temperature for protection against over heating, screw terminals with captivated clamp for connection of power terminals and box clamps for control terminals	22.5 mm wide solid state contactor, integrated varistor for overvoltage protection and integrated over temperature for protection against over heating, screw terminals with captivated clamp for connection of power terminals and box clamps for control terminals	35 mm wide solid state contactor, integrated varistor for overvoltage protection and integrated over temperature for protection against over heating, box clamps for connection of power and control terminals
Input specifications			
Control input range	5-32 VDC [RG.D.] 20-275 VAC, 24-190 VDC [RG..A.]	5-32 VDC [RG.D.] 20-275 VAC, 24-190 VDC [RG..A.]	5-32 VDC [RG.D.] 20-275 VAC, 24-190 VDC [RG..A.]
Max. input current	24 mADC [RG..D.] 35 mAAC [RG..A.]	24 mADC [RG..D.] 35 mAAC [RG..A.]	24 mADC [RG..D.] 35 mAAC [RG..A.]
Supply voltage			
Rated supply voltage	24 VDC -15%, +20%	24 VDC -15%, +20%	24 VDC -15%, +20%
Max. current rating	50 mADC	50 mADC	50 mADC
Over temperature alarm			
Alarm output	PNP open collector normally closed, max. 24 VDC / 50 mA [RGC.D.P]	PNP open collector normally closed, max. 24 VDC / 50 mA [RGC.D.P]	PNP open collector normally closed, max. 24 VDC / 50 mA [RGC.D.P]
	Potential free normally closed, max. 24 VDC / 50 mA [RGC.A.P]	Potential free normally closed, max. 24 VDC / 50 mA [RGC.A.P]	Potential free normally closed, max. 24 VDC / 50 mA [RGC.A.P]
Output specifications			
Rated operational current			
AC 51 @ Ta=40°C	25 AAC	30 AAC	40 AAC [RGC..40], 43 AAC [RGC..42]
AC 53a @ Ta=40°C	5 AAC	8 AAC	13 AAC [RGC..40], 16 AAC [RGC..42]
Min. operational current	250 mA	250 mA	400 mAAC [RGC..40], 500 mAAC [RGC..42]
Non rep. surge current (t=10 ms)	600 A_P	600 A_P	800 A_P [RGC..40] 1900 A_P [RGC..42]
Off-state leakage current	3 mAAC	3 mAAC	3 mAAC
I^2t for fusing (t=10 ms)	1800 A^2s	1800 A^2s	3200 A^2s [RGC..40], 18000 A^2s [RGC..42]
Critical dV/dt off-state (@ Tj init = 40°C)	1000 V/µs	1000 V/µs	1000 V/µs
General specifications			
Operational voltage range	24-240 VAC +10% [RG.23..] 42-600 VAC +10% [RG.60..]	24-240 VAC +10% [RG.23..] 42-600 VAC +10% [RG.60..]	24-240 VAC +10% [RG.23..] 42-600 VAC +10% [RG.60..]
Blocking voltage	800 V_P [RGC.23.] 1200 V_P [RGC.60.]	800 V_P [RGC.23.] 1200 V_P [RGC.60.]	1200 V_P
Power factor	≥ 0.5 at rated voltage	≥ 0.5 at rated voltage	≥ 0.5 at rated voltage
Operating temperature	-40°C to +70°C	-40°C to +70°C	-40°C to +70°C
Approvals/Marks	CE - cULus - VDE	CE - cULus - VDE	CE - cULus - VDE
References			
DC control voltage			
230 VAC, 800 Vp		30 AAC: **RGC1A23D30GKEP**	
600 VAC, 1200 Vp	25 AAC: **RGC1A60D25GKEP**	30 AAC: **RGC1A60D30GKEP**	40 AAC: **RGC1A60D40GGXP**
600 VAC, 1200 Vp, high I^2t			43 AAC: **RGC1A60D42GGXP**
AC/DC control voltage			
600 VAC, 1200 Vp	25 AAC: **RGC1A60A25GKEP**	30 AAC: **RGC1A60A30GKEP**	40 AAC: **RGC1A60A40GGXP**
600 VAC, 1200 Vp, high I^2t			43 AAC: **RGC1A60A42GGXP**

X must be replaced with the following depending on the connection configuration required
Configuration X: E = E-type U = U-type

Solid state contactors, 1-phase

	Ready for use design - DIN rail mounting, AC output switching		
	Integrated over temperature protection		Integrated fuse
Types	**RGC1A..60/62GG.P** 60/65 AAC	**RGC1A..90/92GG.P** 85 AAC	**RGC1F** 20/30/40 AAC
Single phase, semiconductor contactors with integrated heatsink, LED indication and IP20 protection, AC operating frequency 45-65Hz, Rated isolation voltage ≥4000Vrms, 100kArms Short Circuit Current Rating, Motor ratings according to UL508			
Dimensions HxWxD (mm)	110 x 69.1 x 168	126 x 69.1 x 168 (with fan)	110 x 35.6 x 168
Features	70 mm wide solid state contactor, integrated varistor for overvoltage protection and integrated over temperature for protection against over heating, box clamps for connection of power & control terminals	70 mm wide solid state contactor with attached fan, integrated varistor for overvoltage protection and integrated over temperature for protection against over heating, box clamps for connection of power & control terminals	35 mm wide solid state contactor with integrated fuse, additional monitoring features available with RGC1FS.. for SSR, load & fuse failure detection, integrated varistor for overvoltage protection, DC control voltage range, box clamps for connection of power & control terminals
Input specifications			
Control input range	5-32 VDC [RG.D.] 20-275 VAC, 24-190 VDC [RG..A.]	5-32 VDC [RG.D.] 20-275 VAC, 24-190 VDC [RG..A.]	3-32 VDC [RGC1F..23.] 4.5-32 VDC [RGC1F..60.]
Max. input current	23 mADC [RG..D.]/35 mAAC [RG..A.]	23 mADC [RG..D.] / 35 mAAC [RG..A.]	12 mAC
Supply voltage			
Rated supply voltage	24 VDC -15%, +20%	24 VDC -15%, +20%	24 VDC -15%, +20%
Max. current rating	50 mADC	50 mADC (fan rating 24 VDC / 50 mA)	80 mADC
Over temperature alarm			
Alarm output	PNP open collector normally closed, max. 24 VDC / 50 mA [RGC.D.P]	PNP open collector normally closed, max. 24 VDC / 50 mA [RGC.D.P]	PNP open collector normally closed, max. 24 VDC / 50 mA [RGC1FS..]
	Potential free normally closed, max. 24 VDC / 50 mA [RGC.A.P]	Potential free normally closed, max. 24 VDC / 50 mA [RGC.A.P]	
Output specifications			
Rated operational current			
AC 51 @ Ta=40°C	60 AAC [RGC..60] 65 AAC [RGC..62]	85 AAC	20 AAC [RGC1F..20.]/30 AAC [RGC1F..30.]/40 AAC [RGC1F..40.]
AC 53a @ Ta=40°C	14.8 AAC [RGC..60] 20 AAC [RGC..62]	18 AAC [RGC..90] 20 AAC [RGC..92]	4.7 AAC [RGC1F..20.]/6 AAC [RGC1F..30.] / 8 AAC [RGC1F..40.]
Min. operational current	400 mA [RGC..60] 500 mA [RGC..62]	400 mA [RGC..90] 500 mA [RGC..92]	200 mA
Non rep. surge current (Itsm) (t=10 ms)	800 Ap [RGC..60] 1900 Ap [RGC..62]	1150 Ap [RGC..90] 1900 Ap [RGC..92]	Integrated fuse
Off-state leakage current	3 mAAC	3 mAAC	
I^2t for fusing (t=10 ms)	3200 A^2s [RGC..60] 18000 A^2s [RGC..62]	6600 A^2s [RGC..90] 18000 A^2s [RGC..92]	Fuse - 740A^2s [RGC1F..20..] Fuse - 1400A^2s [RGC1F..30..] Fuse - 3100A^2s [RGC1F..40..]
Critical dV/dt off-state (@ Tj init = 40°C)	1000 V/µs	1000 V/µs	1000 V/µs
General specifications			
Operational voltage range	42-600 VAC +10% [RG.60...]	24-240 VAC +10% [RG.23..] 42-600 VAC +10% [RG.60..]	24-240 VAC +10% [RG.23..] 42-600 VAC +10% [RG.60..]
Blocking voltage	1200 Vp	800 Vp [RGC.23.]/1200 Vp [RGC.60.]	1200 Vp
Power factor	≥ 0.5 at rated voltage	≥ 0.5 at rated voltage	≥ 0.5 at rated voltage
Operating temperature	-40°C to +70°C	-40°C to +70°C	-40°C to +70°C
Approvals/Marks	CE - cULus - VDE	CE - cULus - VDE	CE - cULus (up to 30 AAC)
References			
DC control voltage			
230 VAC, 800 Vp		85 AAC: **RGC1A23D90GGXP**	20 AAC: **RGC1FY23D20GGE**
			30 AAC: **RGC1FY23D30GGE**
			40 AAC: **RGC1FY23D40GGE**
600 VAC, 1200 Vp	60 AAC: **RGC1A60D60GGXP**	85 AAC: **RGC1A60D90GGXP**	20 AAC: **RGC1FY60D20GGE**
	65 AAC: **RGC1A60D62GGXP**	85 AAC: **RGC1A60D92GGXP**	30 AAC: **RGC1FY60D30GGE**
			40 AAC: **RGC1FY60D40GGE**
AC/DC control voltage			
600 VAC, 1200 Vp	60 AAC: **RGC1A60A60GGXP**	85 AAC: **RGC1A60A90GGXP**	
	65 AAC: **RGC1A60A62GGXP**	85 AAC: **RGC1A60A92GGXP**	

X and Y must be replaced with the following depending on the version required

Configuration	X:	E = E-type	U = U-type
Version	Y:	A = fuse only	S = fuse + monitoring

Solid state contactors, 1-phase

Ready for use design - AC output switching, Integrated current measurement

Types	RGC1S..20/30/31GKEP 23/30 AAC	RGC1S..25GKEP 25 AAC	RGC1S..26GGEP 25 AAC
Single phase, semiconductor contactors with integrated current measurement, E-type configuration, LED indication and IP20 protection, AC operating frequency 45-65 Hz, Rated isolation voltage ≥ 4000 Vrms, 100 kArms Short Circuit Current Rating			
Dimensions HxWxD (mm)	110 x 22.5 x 163	110 x 22.5 x 126	110 x 22.5 x 126
Features	22.5 mm wide solid state contactor, integrated varistor, DC control, local or remote TEACH, detection of partial load failure (1/6), SSR and load malfunction, SSR overheat protection	22.5 mm wide solid state contactor, integrated varistor, DC control, local or remote TEACH, detection of partial load failure (1/6), SSR and load malfunction, SSR overheat protection	22.5 mm wide solid state contactor, integrated varistor, DC control, local or remote TEACH, detection of partial load failure (1/6), SSR and load malfunction, SSR overheat protection
Input specifications			
Control input range	4-32 VDC	4-32 VDC	4-32 VDC
Max. input current	10 mADC at 24 VDC	10 mADC at 24 VDC	10 mADC at 24 VDC
Supply voltage			
Rated supply voltage	24 VDC -15%, +20%	24 VDC -15%, +20%	24 VDC -15%, +20%
Max. current rating	50 mADC	50 mADC	50 mADC
Alarm specifications			
Output type	NC PNP open collector max. 35 VDC/50 mA	NC PNP open collector max. 35 VDC/50 mA	NC PNP open collector max. 35 VDC/50 mA
Alarm Indication	Red LED (flash rate)	Red LED (flash rate)	Red LED (flash rate)
Output specifications			
Rated operational current			
AC 51 @ Ta=40°C	23 AAC [RGC1S..20] 30 AAC [RGC1S..30] 30 AAC [RGC1S..31]	25 AAC	25 AAC
Minimum TEACH / operational current	1.2 AAC	1.2 AAC	1.2 AAC
Minimum partial load current	0.2 AAC	0.2 AAC	0.2 AAC
Detectable partial load failure	>16.67% from current setpoint	>16.67% from current setpoint	>16.67% from current setpoint
Non. rep. surge current Itsm (t=10ms)	325 Ap [RGC1S..20] 600 Ap [RGC1S..30] 1150 Ap [RGC1S..31]	600 Ap	1900 Ap
Max. off state leakage current	3 mAAC	3 mAAC	3 mAAC
I^2t for fusing (t=10ms)	525 A^2s [RGC1S..20] 1800 A^2s [RGC1S..30] 6600 A^2s [RGC1S..31]	1800 A^2s	18000 A^2s
Critical dV/dt (@ Tj init = 40°C)	1000 V/µs	1000 V/µs	1000 V/µs
General specifications			
Operational voltage range	42-600 VAC +10%	42-600 VAC +10%	42-600 VAC +10%
Blocking voltage	1200 Vp	1200 Vp	1200 Vp
Power factor	≥ 0.9 at rated voltage	≥ 0.9 at rated voltage	≥ 0.9 at rated voltage
Operating temperature	-25°C to +70°C	-25°C to +70°C	-25°C to +70°C
Approvals/Marks	CE - cULus	CE - cULus	CE - cULus
References			
600 VAC, 1200 Vp, 525A^2s	23 AAC: **RGC1S60D20GKEP**		
600 VAC, 1200 Vp, 1800A^2s	30 AAC: **RGC1S60D30GKEP**	25 AAC: **RGC1S60D25GKEP**	
600 VAC, 1200 Vp, 6600A^2s	30 AAC: **RGC1S60D31GKEP**		
600 VAC, 1200 Vp, 18000A^2s			25 AAC: **RGC1S60D26GGEP**

GK = screws for control terminals, box clamps for power terminals
GG = box clamps for control terminals, box clamps for power terminals

Solid state contactors, 1-phase

Ready for use design - AC output switching, Integrated current measurement

Types	RGC1S..41GG.P 43 AAC	RGC1S..61GG.P 65 AAC	RGC1S..90GGEP 85 AAC
Single phase, semiconductor contactors with integrated heatsink, LED indication and IP20 protection, AC operating frequency 45-65Hz, Rated isolation voltage ≥4000Vrms, 100kArms Short Circuit Current Rating, Motor ratings according to UL508			
Dimensions HxWxD (mm)	110 x 35.6x 163	110 x 69.1 x 163	126 x 69.1 x 163 (with fan)
Features	35mm wide solid-state contactor, integrated varistor, DC control, local or remote TEACH, detection of partial load failure (1/6), SSR and load malfunction, SSR overheat protection	70mm wide solid-state contactor, integrated varistor, DC control, local or remote TEACH, detection of partial load failure (1/6), SSR and load malfunction, SSR overheat protection	70mm wide solid-state contactor with, integrated varistor, DC control, local or remote TEACH, detection of partial load failure (1/6), SSR and load malfunction, SSR overheat protection
Input specifications			
Control input range	4-32 VDC	4-32 VDC	4-32 VDC
Max. input current	10 mADC at 24 VDC	10 mADC at 24 VDC	10 mADC at 24 VDC
Supply voltage			
Supply Voltage	24 VDC -15%, +20%	24 VDC -15%, +20%	24 VDC -15%, +20%
Max. current rating	50 mADC	50 mADC	50 mADC (fan rating 24 VDC / 50 mA)
Alarm specifications			
Output type	NC PNP open collector max. 35 VDC / 50 mA	NC PNP open collector max. 35 VDC / 50 mA	NC PNP open collector max. 35 VDC / 50 mA
Alarm Indication	Red LED (flash rate)	Red LED (flash rate)	Red LED (flash rate)
Output specifications			
Rated operational current			
AC 51 @ Ta=40°C	43 AAC	65 AAC	85 AAC
Minimum TEACH / operational current	1.2 AAC	5 AAC	5 AAC
Minimum partial load current	0.2 AAC	0.83 AAC	0.83 AAC
Detectable partial load failure	>16.67% from current setpoint	>16.67% from current setpoint	>16.67% from current setpoint
Non. rep. surge current Itsm (t=10ms)	1900 Ap	1900 Ap	1900 Ap
Max. off state leakage current	3 mAAC	3 mAAC	3 mAAC
I2t for fusing (t=10 ms)	18000 A^2s	18000 A^2s	18000 A^2s
Critical dV/dt (@ Tj init = 40°C)	1000 V/µs	1000 V/µs	1000 V/µs
General specifications			
Operational voltage range	42-600 VAC +10%	42-600 VAC +10%	42-600 VAC +10%
Blocking voltage	1200 Vp	1200 Vp	1200 Vp
Power factor	≥ 0.9 at rated voltage	≥ 0.9 at rated voltage	≥ 0.9 at rated voltage
Operating temperature	-25°C to +70°C	-25°C to +70°C	-25°C to +70°C
Approvals/Marks	CE - cULus	CE - cULus	CE - cULus
References			
600 VAC, 1200 Vp, E-type	43 AAC: **RGC1S60D41GGEP**	65 AAC: **RGC1S60D61GGEP**	85 AAC: **RGC1S60D90GGEP**
600 VAC, 1200 Vp, U-type	43 AAC: **RGC1S60D41GGUP**	65 AAC: **RGC1S60D61GGUP**	

GG = box clamps for control terminals, box clamps for power terminals

Solid state contactors, 1-phase

Ready for use design - DIN rail mounting
Soft start switching

Types	RGC1P..K.. 30 AAC	RGC1P..K.. 43 AAC	RGC1P..K.. 63 AAC
Single phase, solid state relay with integrated heatsink, with integrated overvoltage protection, LED for control and load staus indication, IP20 protection, Rated isolation voltage ≥4000 Vrms, 100 kArms Short Circuit Current Rating			
Dimensions HxWxD (mm)	110 x 35.8 x 104	110 x 35.8 x 104	110 x 72 x 126
Features	DC control input solid state contactor with soft starting feature for short wave infrared heaters.	DC control input solid state contactor with soft starting feature for short wave infrared heaters.	DC control input solid state contactor with soft starting feature for short wave infrared heaters.
Supply specifications			
Supply voltage	24 VDC -15%, +20% 24 VAC -15%, +15%	24 VDC -15%, +20% 24 VAC -15%, +15%	24 VDC -15%, +20% 24 VAC -15%, +15%
Max. supply current	30 mA	30 mA	30 mA
Control specifications			
Control input	19.2 - 28.8 VDC	19.2 - 28.8 VDC	19.2 - 28.8 VDC
Input impedance	100 kΩ	100 kΩ	100 kΩ
Output specifications			
Rated operational current AC-51 @ 40°C	30 AAC	43 AAC	63 AAC
Minimum operational current	250 mAAC	500 mAAC	500 mAAC
Non rep. surge current (Itsm) (t=10 ms)	600 Ap	1900 Ap	1900 Ap
I^2t for fusing (t=10 ms)	1800 A^2s	18000 A^2s	18000 A^2s
Max. Off-state leakage current	5 mAAC	5 mAAC	5 mAAC
Critical dV/dt (@ Tj init = 40°C)	1000 V/µs	1000 V/µs	1000 V/µs
General specifications			
Operational voltage range	85 - 265 VAC (RGC1P23..) 190 - 550 VAC (RGC1P48..) 410 - 660 VAC (RGC1P60..)	85 - 265 VAC (RGC1P23..) 190 - 550 VAC (RGC1P48..) 410 - 660 VAC (RGC1P60..)	85 - 265 VAC (RGC1P23..) 190 - 550 VAC (RGC1P48..) 410 - 660 VAC (RGC1P60..)
Blocking voltage	800 V_P (RGC1P23..) 1200 V_P (RGC1P48..) 1200 V_P (RGC1P60..)	800 V_P (RGC1P23..) 1200 V_P (RGC1P48..) 1200 V_P (RGC1P60..)	800 V_P (RGC1P23..) 1200 V_P (RGC1P48..) 1200 V_P (RGC1P60..)
Power factor	> 0.7	> 0.7	> 0.7
Terminals	Screw with captive clamp	Box clamp	Box clamp
Operating temperature	-40°C to +70°C	-40°C to +70°C	-40°C to +70°C
Approvals/Marks	CE - UL - cUL	CE - UL - cUL	CE - UL - cUL
References			
External supply 24 VDC/AC			
Operational output 85 - 265VAC	**RGC1P23K30ED**	**RGC1P23K42ED**	**RGC1P23K62ED**
Operational output 190 - 550VAC	**RGC1P48K30ED**	**RGC1P48K42ED**	**RGC1P48K62ED**
Operational output 410 - 660VAC	**RGC1P60K30ED**	**RGC1P60K42ED**	**RGC1P60K62ED**

Solid state contactors, 1-phase

Ready for use design - DIN rail mounting
Proportional switching controllers

Types	RGC1P..AA.. / V.. 12 AAC	RGC1P..AA.. / V.. 30 AAC	RGC1P..AA.. / V.. 43 AAC	RGC1P..AA.. / V.. 50 / 63 AAC
Single phase, solid state relay with integrated heatsink, with integrated overvoltage protection, LED for control and load staus indication, IP20 protection, Rated isolation voltage ≥4000 Vrms, 100 kArms Short Circuit Current Rating				
Dimensions HxWxD (mm)	106 x 35.8 x 65	110 x 35.8 x 104	110 x 35.8 x 104	110 x 72 x 126
Features	Analog input (current or voltage), selectable modes for output switching - Phase angle, Full cycle distributed firing, Advanced full cycle and soft starting	Analog input (current or voltage), selectable modes for output switching - Phase angle, Full cycle distributed firing, Advanced full cycle and soft starting	Analog input (current or voltage), selectable modes for output switching - Phase angle, Full cycle distributed firing, Advanced full cycle and soft starting	Analog input (current or voltage), selectable modes for output switching - Phase angle, Full cycle distributed firing, Advanced full cycle and soft starting
Supply specifications				
Supply voltage	24 VDC -15%, +20% (RG..V..ED) 24 VAC -15%, +15% (RG..V..ED) 90-250 VAC (RG..V..EA)	24 VDC -15%, +20% (RG..V..ED) 24 VAC -15%, +15% (RG..V..ED) 90-250 VAC (RG..V..EA)	24 VDC -15%, +20% (RG..V..ED) 24 VAC -15%, +15% (RG..V..ED) 90-250 VAC (RG..V..EA)	24 VDC -15%, +20% (RG..V..ED) 24 VAC -15%, +15% (RG..V..ED) 90-250 VAC (RG..V..EA)
Max. supply current	30 mA (RG..V..ED) 14 mA (RG..V..EA)	30 mA (RG..V..ED) 14 mA (RG..V..EA)	30 mA (RG..V..ED) 14 mA (RG..V..EA)	30 mA (RG..V..ED) 14 mA (RG..V..EA)
Control specifications				
Control input range	4-20 mA (RG..AA..) 0-10 V, 0-5 V, 1-5 V, POT (RG..V..)	4-20 mA (RG..AA..) 0-10 V, 0-5 V, 1-5 V, POT (RG..V..)	4-20 mA (RG..AA..) 0-10 V, 0-5 V, 1-5 V, POT (RG..V..)	4-20 mA (RG..AA..) 0-10 V, 0-5 V, 1-5 V, POT (RG..V..)
Input impedance	500 Ω (RG..AA..) 100 kΩ (RG..V..)	500 Ω (RG..AA..) 100 kΩ (RG..V..)	500 Ω (RG..AA..) 100 kΩ (RG..V..)	500 Ω (RG..AA..) 100 kΩ (RG..V..)
Output specifications				
Rated operational current AC-51 @ 40°C	15 AAC	30 AAC	43 AAC	50 AAC (RG..50) 63 AAC (RG..62)
Minimum operational current	250 mAAC	250 mAAC	500 mAAC	500 mAAC
Non rep. surge current (Itsm) (t=10 ms)	600 Ap	600 Ap	1900 Ap	800 Ap (RG..50) 1900 Ap (RG..62)
I^2t for fusing (t=10 ms)	1800 A^2s	1800 A^2s	18000 A^2s	3200 A^2s (RG..50) 18000 A^2s (RG..62)
Max. Off-state leakage current	5 mAAC	5 mAAC	5 mAAC	5 mAAC
Critical dV/dt (@ Tj init = 40°C)	1000 V/µs	1000 V/µs	1000 V/µs	1000 V/µs
General specifications				
Operational voltage range	85 - 265 VAC (RGC1P23..) 190 - 550 VAC (RGC1P48..)	85 - 265 VAC (RGC1P23..) 190 - 550 VAC (RGC1P48..) 410 - 660 VAC (RGC1P60..)	85 - 265 VAC (RGC1P23..) 190 - 550 VAC (RGC1P48..) 410 - 660 VAC (RGC1P60..)	85 - 265 VAC (RGC1P23..) 190 - 550 VAC (RGC1P48..) 410 - 660 VAC (RGC1P60..)
Blocking voltage	800 V_P (RGC1P23..) 1200 V_P (RGC1P48..)	800 V_P (RGC1P23..) 1200 V_P (RGC1P48..) 1200 V_P (RGC1P60..)	800 V_P (RGC1P23..) 1200 V_P (RGC1P48..) 1200 V_P (RGC1P60..)	800 V_P (RGC1P23..) 1200 V_P (RGC1P48..) 1200 V_P (RGC1P60..)
Power factor	> 0.7	> 0.7	> 0.7	> 0.7
Terminals	Screw with captive clamp	Screw with captive clamp	Box clamp	Box clamp
Operating temperature	-40°C to +70°C	-40°C to +70°C	-40°C to +70°C	-40°C to +70°C
Approvals/Marks	CE - UL - cUL	CE - UL - cUL	CE - UL - cUL	CE - UL - cUL
References				
Control input				
4-20mA	**RGC1PyyAA12E**	**RGC1PxxAA30E**	**RGC1PxxAA42E**	50 AAC: **RGC1PyyAA50E** 63 AAC: **RGC1PxxAA62E**
0-10VDC, 0-5VDC, 1-5VDC, POT				
External supply 24 VDC/AC	**RGC1PyyV12ED**	**RGC1PxxV30ED**	**RGC1PxxV42ED**	50 AAC: **RGC1PyyV50ED** 63 AAC: **RGC1PxxV62ED**
External supply 90-250VAC	**RGC1PyyV12EA**	**RGC1PxxV30EA**	**RGC1PxxV42EA**	63 AAC: **RGC1PxxV62EA**

xx = 23 for operational voltage range 85 - 265 VAC
48 for operational voltage range 190 - 550 VAC
60 for operational voltage range 410 - 660 VAC
yy = 23 for operational voltage range 85 - 265 VAC
48 for operational voltage range 190 - 550 VAC

Solid state contactors, 1-phase

	AC output switching - MODBUS RTU	AC output switching - System monitoring
Types	**RJ1P MB** 50 AAC	**RN1S Sense** 30/50 AAC
Semiconductor contactors with integrated heatsink. AC operating frequency range 45-65 Hz. Rated isolation voltage ≥4000 Vrms		 
Dimensions HxWxD (mm)	103 x 45 x 122	120 x 45 x 110 (30 A) 120 x 90 x 110 (50 A)
Features	SSR with fieldbus communication interface	High precision economy switching
Control specifications		
Control input range	2-wire Modbus RTU	7-32 VDC
Max. input current		4 mA
Control supply		20-32 VDC (≤ 40 mA)
Alarm output		PNP : VCC - 2 VDC (≤ 100 mA) / NPN: 2 VDC @ (≤ 100 mA)
Output specifications		
Rated operational current		
AC 51 @ Ta=25°C	50 AACrms	30 Arms [RN1S...30..] 50 Arms [RN1S...50..]
AC 51 @ Ta=40°C	40 AACrms	30 Arms [RN1S...30..] 50 Arms [RN1S...50..]
AC 53a @ Ta=25°C		6 Arms [RN1S...30..] 12 Arms [RN1S...50..]
Min. operational current	500 mAACrms	200 mArms
Non-repet. surge current (t=10 ms)	1900 Ap	325 Ap [RN1S..30..] 600 Ap [RN1S..50..]
Off-state leakage current	< 3 mArms	< 6 mAAC
I^2t for fusing (t=10 ms)	18000 A^2s	525 A^2s [RN1S..30..] 1800 A^2s [RN1S..50..]
On state voltage drop	1.6 Vrms	
Critical dV/dt off-state	1000 V/µs	500 V/µs
General specifications		
Operational voltage range	90-265 VAC [RJ1P23..] 200-500 VAC [RJ1P48..] 410-660 VAC [RJ1P60..]	120-265 VAC [RN1S23..] 150-440 VAC [RN1S40..] 180-530 VAC [RN1S48..]
Blocking voltage	650Vp [RJ1P23..] 1200 Vp [RJ1P48..] 1200Vp [RJ1P60..]	800 Vp [RN1S23..] 1000 Vp [RN1S40..] 1200 Vp [RN1S48..]
Power factor	≥ 0.9	≥ 0.5
Operating temperature	-30°C - +70°C	-20°C - +70°C
Terminals	Box clamp	Box clamp
Approvals/Marks	CE - UR - cUR	CE - UR - CSA
References		
230 VAC	**RJ1P23MBT50EBC**	30 AAC: **RN1S23H30NO**
	RJ1P23MBT50ECS	30 AAC: **RN1S23H30PO**
	RJ1P23MBT50ECV	50 AAC: **RN1S23H50NO**
		50 AAC: **RN1S23H50PO**
400 VAC		30 AAC: **RN1S40H30NO**
		30 AAC: **RN1S40H30PO**
		50 AAC: **RN1S40H50NO**
		50 AAC: **RN1S40H50PO**
480 VAC	**RJ1P48MBT50EBC**	30 AAC: **RN1S48H30NO**
	RJ1P48MBT50ECS	30 AAC: **RN1S48H30PO**
	RJ1P48MBT50ECV	50 AAC: **RN1S48H50NO**
		50 AAC: **RN1S48H50PO**
600 VAC	**RJ1P60MBT50EBC**	
	RJ1P60MBT50ECS	
	RJ1P60MBT50ECVW	

Solid state contactors, 45mm, 3-phase

	DIN rail mounting - AC output switching, 2 + 1 poles	DIN rail mounting - AC output switching, 3 poles
Types	**RGCM2A..20..** 20 AAC	**RGCM3A..15..** 15 AAC
Semiconductor contactors with integrated heatsink. AC operating frequency range 45-65 Hz. Rated isolation voltage ≥4000 Vrms		
Dimensions HxWxD (mm)	105 x 45 x 105	105 x 45 x 105
Features	45 mm solid state contactor, enclosed heatsink, integrated varistors for over-voltage protection, 5 kArms SCCR, screw with clamp for power connection	45 mm solid state contactor, enclosed heatsink, integrated varistors for over-voltage protection, 5 kArms SCCR, screw with clamp for power connection
Control specifications		
Control input range	5-32 VDC [RGC..D.] 20-275 VAC, 24-190 VDC [RGC..A.]	5-32 VDC [RGC..D.] 20-275 VAC, 24-190 VDC [RGC..A.]
Input current @ max. control voltage	31.5 mADC [RG..D.] 19 mAAC [RG..A.]	31.5 mADC [RG..D.] 19 mAAC [RG..A.]
Output specifications		
Rated operational current AC-51 @ Ta = 40°C	20 AAC	15.5 AAC
AC-53a @ Ta = 40°C	7.6 AAC	5.8 AAC
Motor rating	3 kW @ 400 VAC 5 HP @ 600 VAC	2.2 kW @ 400 VAC 3 HP @ 600 VAC
Minimum operational current	250 mAAC	250 mAAC
Non. rep. surge current Itsm (t=10ms)	600 Ap	600 Ap
I^2t for fusing (t=10ms)	1800 A^2s	1800 A^2s
Off-state leakage current	3 mAAC	3 mAAC
Critical dV/dt (@ Tj init=40°C)	1000 V/us	1000 V/us
General specifications		
Operational voltage range	42-600 VAC +10%	42-220 VAC + 10% [RG..22.] 42-600 VAC +10% [RG..60.]
Blocking voltage	1200 Vp	800 Vp [RG..22.] 1200 Vp [RG..60.]
Power factor	≥ 0.5 at rated voltage	≥ 0.5 at rated voltage
Operating temperature	-40°C to +70°C	-40°C to +70°C
Approvals / Marks	CE - cULus	CE - cULus
References		
DC control voltage		
220 VAC, 800 Vp		**RGCM3A22D15GKE**
600 VAC, 1200 Vp	**RGCM2A60D20GKE**	**RGCM3A60D15GKE**
AC control voltage		
220 VAC, 800 Vp		**RGCM3A22A15GKE**
600 VAC, 1200 Vp	**RGCM2A60A20GKE**	**RGCM3A60A15GKE**

Solid state contactors, 3-phase

DIN rail mounting - AC output switching, 2 + 1 poles

Types	RGC2A..10.. 10 AAC	RGC2A..25.. 27 AAC	RGC2A..40.. 40 AAC	RGC2A..75..F 75 AAC
Semiconductor contactors with integrated heatsink, AC operating frequency range 45-65 Hz. Rated isolation voltage 4000 Vrms				
Dimensions HxWxD (mm)	106 x 54 x 65	110 x 54 x 103	110 x 72 x 126	141 x 72 x 141 (with fan)
Features	54 mm solid state contactor, integrated varistors for over-voltage protection, 100 kArms SCCR, screw with clamp for power connection	54 mm solid state contactor, integrated varistors for over-voltage protection, 100 kArms SCCR, screw with clamp for power connection	72 mm solid state contactor, integrated varistors for over-voltage protection, 100 kArms SCCR, box clamp for power connection	72 mm solid state contactor, integrated overheat protection with EMR alarm output, 100 kArms SCCR, box clamp for power connection
Input specifications				
Control input range	5-32 VDC [RGC..D.] 20-275 VAC, 24-190 VDC [RGC..A.]	5-32 VDC [RGC..D.] 20-275 VAC, 24-190 VDC [RGC..A.]	5-32 VDC [RGC..D.] 20-275 VAC, 24-190 VDC [RGC..A.]	5-32 VDC [RG..D..DF] 5-32 VDC [RG..D..AF] 20-275 VAC [RG..A..AF]
Input current @ max. control voltage	31.5 mADC [RG..D.] 19 mAAC [RG..A.]	31.5 mADC [RG..D.] 19 mAAC [RG..A.]	31.5 mADC [RG..D.] 19 mAAC [RG..A.]	12.5 mADC [RG..D..DF] 5.5 mADC [RG..D..AF] 4.3 mAAC [RG..A..AF]
External supply voltage				24 VDC [RG..D..DF] 90-250 VAC [RG..D..AF] 90-250 VAC [RG..A..AF]
Max. supply current				150 mADC [RG..D..DF] 80 mADC [RG..D..AF] 80 mAAC [RG..A..AF]
Alarm specifications				
Alarm output				EMR: 2 A 230 VAC / 30 VDC
Alarm condition				Over Temperature
Output specifications				
Rated operational current AC-51 @ Ta = 40°C	10 AAC	27 AAC	40 AAC	75 AAC
AC-53a @ Ta = 40°C	5 AAC	11.5 AAC	16.5 AAC	28 AAC
Motor rating	1.5 kW @ 400 VAC 3 HP @ 600 VAC VAC	5.5 kW @ 400 VAC 10 HP @ 600 VAC	7.5 kW @ 400 VAC 15 HP @ 600 VAC	11 kW @ 400 VAC 25 HP @ 600 VAC
Minimum operational current	250 mAAC	250 mAAC	400 mAAC	500 mAAC
Non. rep. surge current Itsm (t=10ms)	600 Ap	600 Ap	1150 Ap	1750 Ap
I^2t for fusing (t=10ms)	1800 A^2s	1800 A^2s	6600 A^2s	15000 A^2s
General specifications				
Operational voltage range	42-600 VAC +10%	42-220 VAC +10% [RG..22.] 42-600 VAC +10% [RG..60.]	42-600 VAC +10%	42-600 VAC +10%
Blocking voltage	1200 Vp	800 Vp [RG..22.] 1200 Vp [RG..60.]	1200 Vp	1200 Vp
Power factor	≥ 0.5 at rated voltage	≥ 0.5 at rated voltage	≥ 0.5 at rated voltage	≥ 0.5 at rated voltage
Operating temperature	-40°C to +80°C	-40°C to +80°C	-40°C to +80°C	-40°C to +70°C [RG...DF] -40°C to +60°C [RG…AF]
Approvals / Marks	CE - cULus - VDE	CE - cULus	CE - cULus	CE - cULus
References				
DC control voltage				
220 VAC, 800 Vp		**RGC2A22D25KKE**		
600 VAC, 1200 Vp	**RGC2A60D10KKE**	**RGC2A60D25KKE**	**RGC2A60D40KGE**	
AC/DC control voltage				
220 VAC, 800 Vp		**RGC2A22A25KKE**		
600 VAC, 1200 Vp	**RGC2A60A10KKE**	**RGC2A60A25KKE**	**RGC2A60A40KGE**	
DC control voltage, DC external supply				**RGC2A60D75GGEDF**
DC control voltage, AC external supply				**RGC2A60D75GGEAF**
AC control voltage, AC external supply				**RGC2A60A75GGEAF**

Solid state contactors, 3-phase

DIN rail mounting - AC output switching with monitoring, 2 + 1 poles

Types	RGC2A..25..M 27 AAC	RGC2A..40..M 40 AAC	RGC2A..75..FM 75 AAC
Semiconductor contactors with integrated heatsink, AC operating frequency 45-65 Hz. Rated isolation voltage output to heatsink of 4000 Vrms, 100 kArms Short Circuit Current Rating			
Dimensions HxWxD (mm)	110 x 54 x 118	110 x 72 x 141	141 x 72 x 141 (with fan)
Features	54 mm solid state contactor, EMR alarm output and electronic auxiliary output, screw with clamp for power connection	72 mm solid state contactor, EMR alarm output and electronic auxiliary output, box clamp for power connection	72 mm solid state contactor, EMR alarm output and electronic auxiliary output, box clamp for power connection
Input specifications			
Control input range	5-32 VDC [RG..D..DM] 5-32 VDC [RG..D..AM] 20-275 VAC [RG..A..AM]	5-32 VDC [RG..D..DM] 5-32 VDC [RG..D..AM] 20-275 VAC [RG..A..AM]	5-32 VDC [RG..D..DFM] 5-32 VDC [RG..D..AFM] 20-275 VAC [RG..A..AFM]
Control current @ max. control voltage	12.5 mADC [RG..D..DM] 5.5 mADC [RG..D..AM] 4.3 mAAC [RG..A..AM]	12.5 mADC [RG..D..DM] 5.5 mADC [RG..D..AM] 4.3 mAAC [RG..A..AM]	12.5 mADC [RG..D..DFM] 5.5 mADC [RG..D..AFM] 4.3 mAAC [RG..A..AFM]
External supply voltage	24 VDC [RG..D..DM] 90-250 VAC [RG..D..AM] 90-250 VAC [RG..A..AM]	24 VDC [RG..D..DM] 90-250 VAC [RG..D..AM] 90-250 VAC [RG..A..AM]	24 VDC [RG..D..DFM] 90-250 VAC [RG..D..AFM] 90-250 VAC [RG..A..AFM]
Max. supply current	60 mADC [RG..D..DM] 60 mAAC [RG..D..AM] 60 mAAC [RG..A..AM]	60 mADC [RG..D..DM] 60 mAAC [RG..D..AM] 60 mAAC [RG..A..AM]	150 mADC [RG..D..DFM] 80 mAAC [RG..D..AFM] 80 mAAC [RG..A..AFM]
Alarm specifications			
Alarm output	EMR; 2 A 250 VAC / 30 VDC	EMR; 2 A 250 VAC / 30 VDC	EMR; 2 A 250 VAC / 30 VDC
Alarm condition	Mains loss, Load loss, SSR open cct., SSR short cct., SSR over temperature	Mains loss, Load loss, SSR open cct., SSR short cct., SSR over temperature	Mains loss, Load loss, SSR open cct., SSR short cct., SSR over temperature
Output specifications			
Rated operational current AC-51 @ Ta = 40oC	27 AAC	40 AAC	75 AAC
Minimum operational current	250 mAAC	400 mAAC	500 mAAC
Non. rep. surge current Itsm (t=10ms)	600 Ap	1150 Ap	1750 Ap
I^2t for fusing (t=10ms)	1800 A^2s	6600 A^2s	15000 A^2s
Off-state leakage current	3 mAAC	3 mAAC	3 mAAC
General specifications			
Operational voltage range	90-600 VAC +10%	90-600 VAC +10%	90-600 VAC +10%
Blocking voltage	1200 Vp	1200 Vp	1200 Vp
Operating temperature	-40°C to +80°C [RG...DM] -40°C to +60°C [RG…AM]	-40°C to +80°C [RG...DM] -40°C to +60°C [RG…AM]	-40°C to +70°C [RG...DFM] -40°C to +60°C [RG…AFM]
Approvals / Marks	CE - cULus	CE - cULus	CE - cULus
References			
600 VAC, 1200 Vp			
DC control voltage, DC external supply	**RGC2A60D25GKEDM**	**RGC2A60D40GGEDM**	**RGC2A60D75GGEDFM**
DC control voltage, AC external supply	**RGC2A60D25GKEAM**	**RGC2A60D40GGEAM**	**RGC2A60D75GGEAFM**
AC control voltage, AC external supply	**RGC2A60A25GKEAM**	**RGC2A60A40GGEAM**	**RGC2A60A75GGEAFM**

Solid state contactors, 3-phase

DIN rail mounting - AC output switching, 3 poles

Types	RGC3A..10.. 10 AAC	RGC3A..20.. 20 AAC	RGC3A..25.. / 30.. 28/30 AAC
Semiconductor contactors with integrated heatsink, AC operating frequency 45-65 Hz. Rated isolation voltage output to heatsink of 4000 Vrms			
Dimensions HxWxD (mm)	110 x 54 x 63.5	110 x 54 x 103	110 x 72 x 126
Features	54 mm solid state contactor, integrated varistors for over-voltage protection, 100 kArms SCCR, screw with clamp for power connection	54 mm solid state contactor, integrated varistors for over-voltage protection, 100 kArms SCCR, screw with clamp for power connection	72 mm solid state contactor, integrated varistors for over-voltage protection, 100 kArms SCCR, screw with clamp or box clamp for power connection
Input specifications			
Control input range	5-32 VDC [RGC..D.] 20-275 VAC, 24-190 VDC [RGC..A.]	5-32 VDC [RGC..D.] 20-275 VAC, 24-190 VDC [RGC..A.]	5-32 VDC [RGC..D.] 20-275 VAC, 24-190 VDC [RGC..A.]
Input current @ max. control voltage	31.5 mADC [RG..D.] 19 mAAC [RG..A.]	31.5 mADC [RG..D.] 19 mAAC [RG..A.]	31.5 mADC [RG..D.] 19 mAAC [RG..A.]
Output specifications			
Rated operational current AC-51 @ Ta = 40°C	10 AAC	20 AAC	28 AAC [RGC3..25] 30 AAC [RGC3..30]
AC-53a @ Ta = 40°C	5 AAC	10 AAC	11 AAC [RGC3..25] 14 AAC [RGC3..30]
Motor rating	1.5 kW @ 400 VAC 3 HP @ 600 VAC	4 kW @ 400 VAC 10 HP @ 600 VAC	4 kW @ 400 VAC [RGC3..25] 5.5 kW @ 400 VAC [RGC3..30] 10 HP @ 600 VAC [RGC3..25] 15 HP @ 600 VAC [RGC3..30]
Minimum operational current	250 mAAC	250 mAAC	250 mAAC [RGC3..25] 400 mAAC [RGC3..30]
Non. rep. surge current Itsm (t=10ms)	600 Ap	600 Ap	600 Ap [RGC3..25] 1150 Ap [RGC3..30]
I^2t for fusing (t=10ms)	1800 A^2s	1800 A^2s	1800 A^2s [RGC3..25] 6600 A^2s [RGC3..30]
Off-state leakage current	3 mAAC	3 mAAC	3 mAAC
Critical dV/dt (@ Tj init=40°C)	1000 V/us	1000 V/us	1000 V/us
General specifications			
Operational voltage range	42-220 VAC + 10% [RG..22.] 42-600 VAC +10% [RG..60.]	42-220 VAC + 10% [RG..22.] 42-600 VAC +10% [RG..60.]	42-600 VAC +10%
Blocking voltage	800 Vp [RG..22.] 1200 Vp [RG..60.]	800 Vp [RG..22.] 1200 Vp [RG..60.]	1200 Vp
Power factor	≥ 0.5 at rated voltage	≥ 0.5 at rated voltage	≥ 0.5 at rated voltage
Operating temperature	-40°C to +80°C	-40°C to +80°C	-40°C to +80°C
Approvals/Marks	CE - cULus - VDE	CE - cULus	CE - cULus
References			
DC control voltage			
220 VAC, 800 Vp	**RGC3A22D10KKE**	**RGC3A22D20KKE**	
600 VAC, 1200 Vp	**RGC3A60D10KKE**	**RGC3A60D20KKE**	28 AAC: **RGC3A60D25KKE**
			30 AAC: **RGC3A60D30KGE**
AC/DC control voltage			
220 VAC, 800 Vp	**RGC3A22A10KKE**	**RGC3A22A20KKE**	
600 VAC, 1200 Vp	**RGC3A60A10KKE**	**RGC3A60A20KKE**	28 AAC: **RGC3A60A25KKE**
			30 AAC: **RGC3A60A30KGE**

Solid state contactors, 3-phase

DIN rail mounting - AC output switching, 3 poles

Types	RGC3A..40..F 42 AAC	RGC3A..65..F 66 AAC
Semiconductor contactors with integrated heatsink, AC operating frequency 45-65 Hz. Rated isolation voltage output to heatsink of 4000 Vrms, 100 kArms Short Circuit Current Rating		
Dimensions HxWxD (mm)	135 x 54 x 118 (with fan)	141 x 72 x 141 (with fan)
Features	54 mm solid state contactor + fan, integrated overheat protection with EMR alarm output, box clamp for power connection	72 mm solid state contactor + fan, integrated overheat protection with EMR alarm output, box clamp for power connection
Input specifications		
Control input range	5-32 VDC [RG..D..DF] 20-275 VAC [RG..A..AF]	5-32 VDC [RG..D..DF] 5-32 VDC [RG..D..AF] 20-275 VAC [RG..A..AF]
Input current @ max. control voltage	12.5 mADC [RG..D..DF] 4.3 mAAC [RG..A..AF]	12.5 mADC [RG..D..DF] 5.5 mADC [RG..D..AF] 4.3 mAAC [RG..A..AF]
External supply voltage	24 VDC [RG..D..DF] 90-250 VAC [RG..A..AF]	24 VDC [RG..D..DF] 90-250 VAC [RG..D..AF] 90-250 VAC [RG..A..AF]
Max. supply current	150 mADC [RG..D..DF] 80 mAAC [RG..A..AF]	150 mADC [RG..D..DF] 80 mAAC [RG..D..AF] 80 mAAC [RG..A..AF]
Alarm specifications		
Alarm output	EMR; 2 A 250 VAC / 30 VDC	EMR; 2 A 250 VAC / 30 VDC
Alarm condition	Over Temperature	Over Temperature
Output specifications		
Rated operational current AC-51 @ Ta = 40°C	42 AAC	66 AAC
AC-53a @ Ta = 40°C	17 AAC	25 AAC
Motor rating	7.5 kW @ 400 VAC 15 HP @ 600 VAC	11 kW @ 400 VAC 25 HP @ 600 VAC
Minimum operational current	400 mAAC	500 mAAC
Non. rep. surge current Itsm (t=10ms)	1150 Ap	1750 Ap
I^2t for fusing (t=10ms)	6600 A^2s	15000 A^2s
Off-state leakage current	3 mAAC	3 mAAC
Critical dV/dt (@ Tj init=40°C)	1000 V/us	1000 V/us
General specifications		
Operational voltage range	42-600 VAC +10%	42-600 VAC +10%
Blocking voltage	1200 Vp	1200 Vp
Power factor	≥ 0.5 at rated voltage	≥ 0.5 at rated voltage
Operating temperature	-40°C to +70°C [RGC..D..DF] -40°C to +60°C [RGC..A..AF]	-40°C to +70°C [RGC..DF] -40°C to +60°C [RGC..AF]
Approvals / Marks	CE - cULus	CE - cULus
References		
600 VAC, 1200 Vp		
DC control voltage, DC external supply	**RGC3A60D40GGEDF**	**RGC3A60D65GGEDF**
DC control voltage, AC external supply		**RGC3A60D65GGEAF**
AC control voltage, AC external supply	**RGC3A60A40GGEAF**	**RGC3A60A65GGEAF**

Solid state contactors, 3-phase

DIN rail mounting - AC output switching with monitoring, 3 poles

Types	RGC3A..20..M 20 AAC	RGC3A..25/30..M 28/30 AAC	RGC3A..65..FM 66 AAC
Semiconductor contactors with integrated heatsink, AC operating frequency 45-65 Hz. Rated isolation voltage output to heatsink of 4000 Vrms, 100 kArms SCCR			
Dimensions HxWxD (mm)	110 x 54 x 118	110 x 72 x 141	141 x 72 x 141 (with fan)
Features	54 mm solid state contactor, EMR alarm output and electronic auxiliary output, screw with clamp for power connection	72 mm solid state contactor, EMR alarm output and electronic auxiliary output, screw with clamp or box clamp for power connection	72 mm solid state contactor + fan, EMR alarm output and electronic auxiliary output, box clamp for power connection
Input specifications			
Control input range	5-32 VDC [RG..D..DM] 5-32 VDC [RG..D..AM] 20-275 VAC [RG..A..AM]	5-32 VDC [RG..D..DM] 5-32 VDC [RG..D..AM] 20-275 VAC [RG..A..AM]	5-32 VDC [RG..D..DFM] 5-32 VDC [RG..D..AFM] 20-275 VAC [RG..A..AFM]
Control current @ max. control voltage	12.5 mADC [RG..D..DM] 5.5 mADC [RG..D..AM] 4.3 mAAC [RG..A..AM]	12.5 mADC [RG..D..DM] 5.5 mADC [RG..D..AM] 4.3 mAAC [RG..A..AM]	12.5 mADC [RG..D..DFM] 5.5 mADC [RG..D..AFM] 4.3 mAAC [RG..A..AFM]
External supply voltage	24 VDC [RG..D..DM] 90-250 VAC [RG..D..AM] 90-250 VAC [RG..A..AM]	24 VDC [RG..D..DM] 90-250 VAC [RG..D..AM] 90-250 VAC [RG..A..AM]	24 VDC [RG..D..DFM] 90-250 VAC [RG..D..AFM] 90-250 VAC [RG..A..AFM]
Max. supply current	60 mADC [RG..D..DM] 60 mAAC [RG..D..AM] 60 mAAC [RG..A..AM]	60 mADC [RG..D..DM] 60 mAAC [RG..D..AM] 60 mAAC [RG..A..AM]	150 mADC [RG..D..DFM] 80 mAAC [RG..D..AFM] 80 mAAC [RG..A..AFM]
Alarm specifications			
Alarm output	EMR; 2 A 250 VAC / 30 VDC	EMR; 2 A 250 VAC / 30 VDC	EMR; 2 A 250 VAC / 30 VDC
Alarm condition	Mains loss, Load loss, SSR open cct., SSR short cct., SSR over temperature	Mains loss, Load loss, SSR open cct., SSR short cct., SSR over temperature	Mains loss, Load loss, SSR open cct., SSR short cct., SSR over temperature
Output specifications			
Rated operational current AC-51 @ Ta = 40°C	20 AAC	28 AAC [RGC3..25] 30 AAC [RGC3..30]	66 AAC
Minimum operational current	250 mAAC	250 mAAC [RGC3..25] 400 mAAC [RGC3..30]	500 mAAC
Non. rep. surge current Itsm (t=10ms)	600 Ap	600 Ap [RGC3..25] 1150 Ap [RGC3..30]	1750 Ap
Off-state leakage current	3 mAAC	3 mAAC	3 mAAC
I^2t for fusing (t=10ms)	1800 A^2s	1800 A^2s [RGC3..25] 6600A^2s [RGC3..30]	15000 A^2s
Critical dV/dt (@ Tj init=40°C)	1000 V/us	1000 V/us	1000 V/us
General specifications			
Operational voltage range	90-600 VAC +10%	90-600 VAC +10%	90-600 VAC +10%
Blocking voltage	1200 Vp	1200 Vp	1200 Vp
Operating temperature	-40°C to +80°C [RG...DM] -40°C to +60°C [RG…AM]	-40°C to +80°C [RG...DM] -40°C to +60°C [RG…AM]	-40°C to +70°C [RG...DFM] -40°C to +60°C [RG…AFM]
Approvals / Marks	CE - cULus	CE - cULus	CE - cULus
References			
DC control voltage, DC external supply	**RGC3A60D20GKEDM**	28AAC: **RGC3A60D25GKEDM**	**RGC3A60D65GGEDFM**
		30AAC: **RGC3A60D30GGEDM**	
DC control voltage, AC external supply	**RGC3A60D20GKEAM**	28AAC: **RGC3A60D25GKEAM**	**RGC3A60D65GGEAFM**
		30AAC: **RGC3A60D30GGEAM**	
AC control voltage, AC external supply	**RGC3A60A20GKEAM**	28AAC: **RGC3A60A25GKEAM**	**RGC3A60A65GGEAFM**
		30AAC: **RGC3A60A30GGEAM**	

Solid state contactors, 3-phase

4-20 mA Proportional controllers, 2 + 1 poles

Types	RGC2P60AA15C1 15 AAC	RGC2P60AA25C1 27 AAC	RGC2P60AA40C1 40 AAC
3-phase semiconductor proportional controllers with integrated heatsink, AC operating frequency range 45-65 Hz. Rated isolation voltage 4000 Vrms, 100 kArms short circuit current rating			
Dimensions HxWxD (mm)	110 x 54 x 103	110 x 54 x 103	110 x 72 x 126
Features	54 mm solid state contactor with integrated varistors for over-voltage protection, screw with clamp for power connection	54 mm solid state contactor with integrated varistors for over-voltage protection, screw with clamp for power connection	72 mm solid state contactor, integrated varistors for over-voltage protection, box clamp for power connection
Input specifications			
Control input	4-20 mADC	4-20 mADC	4-20 mADC
Voltage drop	<10 VDC @ 20 mADC	<10 VDC @ 20 mADC	<10 VDC @ 20 mADC
Types			
Switching mode	1 Full Cycle [RGC..C1..]	1 Full Cycle [RGC..C1..]	1 Full Cycle [RGC..C1..]
Output specifications			
Rated operational current AC-51 @ Ta = 40°C	15 AAC	27 AAC	40 AAC
Minimum operational current	500 mAAC	500 mAAC	500 mAAC
Non. rep. surge current Itsm (t=10ms)	600 Ap	600 Ap	1150 Ap
I^2t for fusing (t=10ms)	1800 A^2s	1800 A^2s	6600 A^2s
Off-state leakage current	5 mAAC	5 mAAC	5 mAAC
Critical dV/dt (@ Tj init=40°C)	1000 V/us	1000 V/us	1000 V/us
General specifications			
Operational voltage range	180-600 VAC +10%	180-600 VAC +10%	180-600 VAC +10%
Blocking voltage	1200 Vp	1200 Vp	1200 Vp
Power factor	≥ 0.7 at rated voltage	≥ 0.7 at rated voltage	≥ 0.7 at rated voltage
Operating temperature	-40°C to +70°C	-40°C to +70°C	-40°C to +70°C
Approvals / Marks	CE - cULus	CE - cULus	CE - cULus
References			
Control Input:	**4-20 mADC**	**4-20 mADC**	**4-20 mADC**
1 Full Cycle	**RGC2P60AA15C1**	**RGC2P60AA25C1**	**RGC2P60AA40C1**

Solid state contactors, 3-phase

Proportional controllers with monitoring, 2 + 1 poles

Types	RGC2P..25..M 27 AAC	RGC2P..40..M 40 AAC	RGC2P..75..FM 75 AAC
Semiconductor contactors with integrated heatsink, AC operating frequency 45-65 Hz. Rated isolation voltage output to heatsink of 4000 Vrms, 100 kArms short circuit current rating			
Dimensions HxWxD (mm)	110 x 54 x 118	110 x 72 x 141	141 x 72 x 141 (with fan)
Features	54 mm solid state contactor with integrated varistors for over-voltage protection, system monitoring, screw with clamp for power connection	72 mm solid state contactor with integrated varistors for over-voltage protection, system monitoring, box clamp for power connection	72 mm solid state contactor with fan and system monitoring, integrated varistors for over-voltage protection, box clamp for power connection
Input specifications			
Control input	0-20, 4-20, 12-20 mADC [RGC..I..] 0-10, 0-5, 1-5 VDC [RGC..V..] External potentiometer [RGC..V..]	0-20, 4-20, 12-20 mADC [RGC..I..] 0-10, 0-5, 1-5 VDC [RGC..V..] External potentiometer [RGC..V..]	0-20, 4-20, 12-20 mADC [RGC..I..] 0-10, 0-5, 1-5 VDC [RGC..V..] External potentiometer [RGC..V..]
Input impedance	<250 ohms [RGC..I..] 100k ohms [RGC..V..]	<250 ohms [RGC..I..] 100k ohms [RGC..V..]	<250 ohms [RGC..I..] 100k ohms [RGC..V..]
External supply voltage	24 VDC/AC	24 VDC/AC	24 VDC/AC [RGC..DFM] 90-250 VAC [RGC..AFM]
Max. supply current	90 mADC/AC	90 mADC/AC	175 mADC/AC [RGC..DFM] 60 mAAC [RGC..AFM]
Alarm specifications			
Alarm output	EMR; 2 A 250 VAC / 30 VDC	EMR; 2 A 250 VAC / 30 VDC	EMR; 2 A 250 VAC / 30 VDC
Alarm condition	Mains loss, Load loss, SSR open cct., SSR short cct., SSR over temperature	Mains loss, Load loss, SSR open cct., SSR short cct., SSR over temperature	Mains loss, Load loss, SSR open cct., SSR short cct., SSR over temperature
Types			
Switching mode	1 Full Cycle [RGC..C1..] 4 Full Cycles [RGC..C4..]	1 Full Cycle [RGC..C1..] 4 Full Cycles [RGC..C4..]	1 Full Cycle [RGC..C1..] 4 Full Cycles [RGC..C4..]
Output specifications			
Rated operational current AC-51 @ Ta = 40°C	27 AAC	40 AAC	75 AAC
Minimum operational current	500 mAAC	500 mAAC	500 mAAC
Non. rep. surge current Itsm (t=10ms)	600 Ap	1150 Ap	1750 Ap
I^2t for fusing (t=10ms)	1800 A^2s	6600 A^2s	15000 A^2s
Off-state leakage current	5 mAAC	5 mAAC	5 mAAC
Critical dV/dt (@ Tj init=40°C)	1000 V/us	1000 V/us	1000 V/us
General specifications			
Operational voltage range	180-600 VAC +10%	180-600 VAC +10%	180-600 VAC +10%
Blocking voltage	1200 Vp	1200 Vp	1200 Vp
Power factor	≥ 0.7 at rated voltage	≥ 0.7 at rated voltage	≥ 0.7 at rated voltage
Operating temperature	-40°C to +70°C max. +60°C for 24 VAC supply	-40°C to +70°C max. +60°C for 24 VAC supply	-40°C to +70°C max. +60°C for 24 VAC supply
Approvals / Marks	CE - cULus	CE - cULus	CE - cULus
References			
Control Input:	**0-20, 4-20, 12-20 mADC**	**0-20, 4-20, 12-20 mADC**	**0-20, 4-20, 12-20 mADC**
1 Full Cycle, DC external supply	**RGC2P60I25C1DM**	**RGC2P60I40C1DM**	**RGC2P60I75C1DFM**
1 Full Cycle, AC external supply			**RGC2P60I75C1AFM**
4 Full Cycles, DC external supply	**RGC2P60I25C4DM**	**RGC2P60I40C4DM**	**RGC2P60I75C4DFM**
4 Full Cycles, AC external supply			**RGC2P60I75C4AFM**
Control Input:	**0-10, 0-5, 1-5 VDC, Pot**	**0-10, 0-5, 1-5 VDC, Pot**	**0-10, 0-5, 1-5 VDC, Pot**
1 Full Cycle, DC external supply	**RGC2P60V25C1DM**	**RGC2P60V40C1DM**	**RGC2P60V75C1DFM**
1 Full Cycle, AC external supply			**RGC2P60V75C1AFM**

Solid state contactors, 3-phase

4-20 mA Proportional controllers, 3 poles

Types	RGC3P60AA20.. 20 AAC	RGC3P60AA30.. 30 AAC
3-phase semiconductor proportional controllers with integrated heatsink, AC operating frequency range 45-65 Hz. Rated isolation voltage 4000 Vrms, 100 kArms short circuit current rating		
Dimensions HxWxD (mm)	110 x 54 x 103	110 x 72 x 126
Features	54 mm solid state contactor with integrated varistors for over-voltage protection, screw with clamp for power connection	72 mm solid state contactor, integrated varistors for over-voltage protection, box clamp for power connection
Input specifications		
Control input	4-20 mADC	4-20 mADC
Voltage drop	<10 VDC @ 20 mADC	<10 VDC @ 20 mADC
Types		
Switching mode	Phase Angle [RGC..E] 1 Full Cycle [RGC..C1]	Phase Angle [RGC..E] 1 Full Cycle [RGC..C1]
Output specifications		
Rated operational current AC-51 @ Ta = 40°C	20 AAC	30 AAC
Minimum operational current	500 mAAC	500 mAAC
Non. rep. surge current Itsm (t=10ms)	600 Ap	1150 Ap
I^2t for fusing (t=10ms)	1800 A^2s	6600 A^2s
Off-state leakage current	5 mAAC	5 mAAC
Critical dV/dt (@ Tj init=40°C)	1000 V/us	1000 V/us
General specifications		
Operational voltage range	180-600 VAC +10%	180-600 VAC +10%
Blocking voltage	1200 Vp	1200 Vp
Power factor	≥ 0.7 at rated voltage	≥ 0.7 at rated voltage
Operating temperature	-40°C to +70°C	-40°C to +70°C
Approvals / Marks	CE - cULus	CE - cULus
References		
Control Input:	**4-20 mADC**	**4-20 mADC**
Phase Angle	**RGC3P60AA20E**	**RGC3P60AA30E**
1 Full Cycle	**RGC3P60AA20C1**	**RGC3P60AA30C1**

Solid state contactors, 3-phase

Proportional controllers with monitoring, 3 poles

Types	RGC3P..20..EP RGC3P..20..M 20 AAC	RGC3P..30..EP RGC3P..30..M 30 AAC	RGC3P..65..EFP RGC3P..65..FM 66 AAC
Semiconductor contactors with integrated heatsink, AC operating frequency 45-65 Hz. Rated isolation voltage output to heatsink of 4000 Vrms, 100 kArms short circuit current rating			
Dimensions HxWxD (mm)	110 x 54 x 118	110 x 72 x 141	141 x 72 x 141 (with fan)
Features	54 mm solid state contactor with integrated varistors for over-voltage protection, system monitoring, screw with clamp for power connection	72 mm solid state contactor with integrated varistors for over-voltage protection, system monitoring, box clamp for power connection	72 mm solid state contactor with fan and system monitoring, integrated varistors for over-voltage protection, box clamp for power connection
Input specifications			
Control input	0-20, 4-20, 12-20 mADC [RGC..I..] 0-10, 0-5, 1-5 VDC [RGC..V..] External potentiometer [RGC..V..]	0-20, 4-20, 12-20 mADC [RGC..I..] 0-10, 0-5, 1-5 VDC [RGC..V..] External potentiometer [RGC..V..]	0-20, 4-20, 12-20 mADC [RGC..I..] 0-10, 0-5, 1-5 VDC [RGC..V..] External potentiometer [RGC..V..]
Input impedance	<250 ohms [RGC..I..] 100k ohms [RGC..V..]	<250 ohms [RGC..I..] 100k ohms [RGC..V..]	<250 ohms [RGC..I..] 100k ohms [RGC..V..]
External supply voltage	24 VDC/AC [RGC..DM] 90-250 VAC [RGC..AM]	24 VDC/AC [RGC..DM] 90-250 VAC [RGC..AM]	24 VDC/AC [RGC..DFM] 90-250 VAC [RGC..AFM]
Max. supply current	90 mADC/AC [RGC..DM] 30 mAAC [RGC..AM]	90 mADC/AC [RGC..DM] 30 mAAC [RGC..AM]	175 mADC/AC [RGC..DFM] 60 mAAC [RGC..AFM]
Alarm specifications			
Alarm output	EMR; 2A 250 VAC / 30 VDC	EMR; 2A 250 VAC / 30 VDC	EMR; 2A 250 VAC / 30 VDC
Alarm condition	Mains loss, Load loss, SSR open cct., SSR short cct., SSR over temperature	Mains loss, Load loss, SSR open cct., SSR short cct., SSR over temperature	Mains loss, Load loss, SSR open cct., SSR short cct., SSR over temperature
Types			
Switching mode	Phase Angle [RGC..E..] 1 Full Cycle [RGC..C1..] 4 Full Cycles [RGC..C4..] 16 Full Cycles [RGC..C16..] Softstart [RGC..S..]	Phase Angle [RGC..E..] 1 Full Cycle [RGC..C1..] 4 Full Cycles [RGC..C4..] 16 Full Cycles [RGC..C16..] Softstart [RGC..S..]	Phase Angle [RGC..E..] 1 Full Cycle [RGC..C1..] 4 Full Cycles [RGC..C4..] 16 Full Cycles [RGC..C16..] Softstart [RGC..S..]
Output specifications			
Rated operational current AC-51 @ Ta = 40°C	20 AAC	30 AAC	66 AAC
Minimum operational current	500 mAAC	500 mAAC	500 mAAC
Non. rep. surge current Itsm (t=10ms)	600 Ap	1150 Ap	1750 Ap
I^2t for fusing (t=10ms)	1800 A^2s	6600 A^2s	15000 A^2s
Off-state leakage current	5 mAAC	5 mAAC	5 mAAC
Critical dV/dt (@ Tj init = 40°C)	1000 V/us	1000 V/us	1000 V/us
General specifications			
Operational voltage range	180-600 VAC +10%	180-600 VAC +10%	180-600 VAC +10%
Blocking voltage	1200 Vp	1200 Vp	1200 Vp
Power factor	≥ 0.7 at rated voltage	≥ 0.7 at rated voltage	≥ 0.7 at rated voltage
Operating temperature	-40°C to +70°C max. +60°C for 24 VAC supply	-40°C to +70°C max. +60°C for 24 VAC supply	-40°C to +70°C max. +60°C for 24 VAC supply
Approvals / Marks	CE - cULus	CE - cULus	CE - cULus
References			
Phase Angle, DC external supply	**RGC3P60Y20EDP**	**RGC3P60Y30EDP**	**RGC3P60Y65EDFP**
Phase Angle, AC external supply		**RGC3P60Y30EAP**	**RGC3P60Y65EAFP**
X Full Cycle, DC external supply	**RGC3P60Y20CXDM (X = 1/4/16)**	**RGC3P60Y30CXDM** (X = 1/4/16)	**RGC3P60Y65CXDFM** (X = 1/4/16)
X Full Cycle, AC external supply		**RGC3P60Y30CXAM** (X= 1/4/16)	**RGC3P60Y65CXAFM** (X = 1/4/16)
Softstart + 16 Full Cycles, DC external supply	**RGC3P60V20S16DM**	**RGC3P60V30S16DM**	**RGC3P60V65S16DFM**
Digitial Control Input (5-10VDC):	**5-10VDC**	**5-10VDC**	**5-10VDC**
Softstart + ON/OFF, DC external supply	**RGC3P60V20SDM**	**RGC3P60V30SDM**	**RGC3P60V65SDFM**

Y = 'I' for 0-20 mA, 4-20 mA or 12-20 mA or 'V' for 0-10 V, 0-5 V, 1-5 V or pot

45 mm Solid state contactors for motor switching, 3-phase

Ready for use design - DIN rail mounting

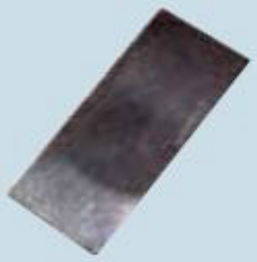
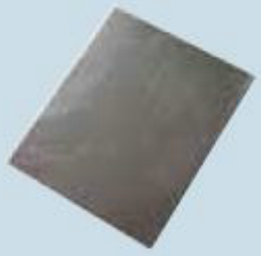
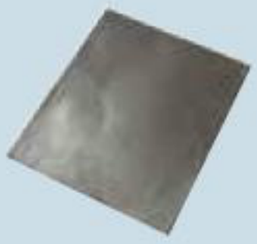
Types	REC2B 4 kW	REC3B 3 kW	REC2R 3 kW
Semiconductor contactors with integrated heatsink. AC operating frequency range 45-65 Hz. Rated isolation voltage ≥ 4000 Vrms			
Dimensions HxWxD (mm)	105 x 45 x 99.4	105 x 45 x 99.4	105 x 45 x 99.4
Features	2ph switching Electronic motor contactor	3ph switching Electronic motor contactor	2ph switching Electronic motor contactor for reversing
Control specifications			
Control input range	15-32 VDC [REC..D] 90-253 VAC [REC..A]	15-32 VDC [REC..D] 90-253 VAC [REC..A]	15-32 VDC [REC..D] 90-253 VAC [REC..A]
Max. input current	10 mADC [REC..D] 15 mAAC [REC..A]	10 mADC [REC..D] 15 mAAC [REC..A]	10 mADC [REC..D] 15 mAAC [REC..A]
Output specifications			
Rated operational current AC53a @ Ta= 40°C, 400 VAC	6.2 AAC [REC2B..20] 7.6 AAC [REC2B..30] 9.2 AAC [REC2B..40]	5.8 AAC [REC3B.20] 5.8 AAC [REC3B.21] 7.6 AAC [REC3B.30]	6.2 AAC [REC2R..20] 7.6 AAC [REC2R..30]
Motor Rating @ 400 VAC UL508/IEC60947-4-2 @40°C	3HP / 2.2 kW [REC2B.20] 3HP / 3.0 kW [REC2B.30] 3HP / 4.0 kW [REC2B.40]	2HP / 2.2 kW [REC3B.20] 2HP / 2.2 kW [REC3B.21] 3HP / 3.0 kW [REC3B.30]	3HP / 2.2 kW [REC2R.20] 3HP / 3.0 kW [REC2R.30]
Min. operational current	150 mA [RECB.20]	150 mA [REC3B..20]	150 mA [REC2R..20]
Non repet. surge current (Itsm) (t=10 ms)	325 Ap [REC2B.20] 600 Ap [REC2B.30] 800 Ap [REC2B.40]	325 Ap [REC3B48..20] 600 Ap [REC3B60..20] 600 Ap [REC3..21] 800 Ap [REC3..30]	600 Ap
Max. Off-state leak current	< 3 mAAC	< 3 mAAC	< 3 mAAC
I^2t for fusing (t=10 ms)	525 A^2s [REC2.20] 525 A^2s [REC2.48..30] 1800 A^2s [REC2.60..30] 3200 A^2s [REC2.40]	525A^2s [REC3B48..20] 1800 A^2s [REC3B60..20] 1800 A^2s [REC3..21] 3200 A^2s [REC3.40]	1800 A^2s
Critical dV/dt (@ Tj init=40°C)	1000 V/µs	1000 V/µs	1000 V/µs
General specifications			
Operational voltage range	48 - 530 VAC [REC..48..] 48 - 600 VAC [REC..60..]	48 - 530 VAC [REC..48..] 48 - 600 VAC [REC..60..]	48 - 530 VAC [REC..48..] 48 - 600 VAC [REC..60..]
Blocking voltage	1200 Vp [REC..48..] 1600 Vp [REC..60..]	1200 Vp [REC..48..] 1600 Vp [REC..60..]	1200 Vp [REC..48..] 1600 Vp [REC..60..]
Power factor	≥ 0.5 at rated voltage	≥ 0.5 at rated voltage	≥ 0.5 at rated voltage
Operating temperature	-25°C to +60°C	-25°C to +60°C	-25°C to +60°C
Terminals	input screw/spring, output screw	input screw/spring, output screw	input screw/spring, output screw
Approvals/Marks	CE - cULus	CE - cULus	CE - cULus
References			
	2.2 kW	2.2 kW	2.2 kW
	REC2B48D20GKE	**REC3B48D20GKE**	**REC2R48D20GKE**
	REC2B48A20GKE	**REC3B48A20GKE**	**REC2R48A20GKE**
	3.0 kW	**REC3B60D20GKE**	3.0 kW
	REC2B48D30GKE	**REC3B60A20GKE**	**REC2R48D30GKE**
	REC2B48A30GKE	2.2 kW (high Itsm)	**REC2R48A30GKE**
	REC2B60D30GKE	**REC3B48D21GKE**	**REC2R60D30GKE**
	REC2B60A30GKE	3.0 kW	**REC2R60A30GKE**
	4.0 kW	**REC3B48D30GKE**	
	REC2B48D40GKE	**REC3B48A30GKE**	
	REC2B48A40GKE		

Solid state relays accessories

General accessories

Types	RPM1	RPM1P	RPM1V	RPM2
				
Dimensions HxWxD (mm)	84 x 12.5 x 42	84 x 12.5 x 42	84 x 12.5 x 42	82 x 25 x 39
Description	Din-rail adaptor for PCB relays. (Relay excluded)	Din-rail adaptor with sockets for plug-in PCB relays. (Relay excluded)	DIN-rail adaptor for PCB relays with LED and varistor across output terminals. (Relay excluded)	Din-rail adaptor for PCB relays with an operational voltage ≥ 230 V. (Relay excluded)
Pack Quantity	1	1	1	2
References				
	RPM1	**RPM1P** (no LED)	**RPM1V**	**RPM2**
		RPM1PD (with LED)		
Selection guide for SSR assemblies*				
	RP...M1	**RP...M1P** (no LED)	**RP...M1V**	**RP...M2**
		RP...M1PD (with LED)		

Types	DIN Adaptor	DIN Adaptor RG	Protection cover RM/RA	Tamper Proof Cover
				
Dimensions HxWxD (mm)	81 x 44 x 13.5	106 x 17.8 x 14	58 x 45 x 9 / 26	59 x 45 x 25.5
Description	DIN-rail adaptor for 1-phase SSR & heatsink assemblies. Integrated in heastink kits.	DIN-rail adaptor for RGS relays.	Clip-on IP20 protection Cover	Tamper proof protection cover for RGS1P, RGC1P
Pack Quantity	1	1	20 (RMIP20) / 25 (BBR..)	5
References				
	RHS00	**RGS1DIN**	**RMIP20** (for RM, RS, RAM series)	**RGTMP**
			BBR (for RA, RD series)	
			BBR-S (for RA..S series)	
Selection guide for SSR assemblies*				
	R...H8	**RGS...DIN**		

Types	Thermal paste	Thermal pad Slim SSRs	Thermal Pad RM, RA	Thermal pad RZ3
				
Dimensions HxWxD (mm)		34.6 x 14 x 0.13 (RG) 21 x 19 x 0.13 (RF)	42 x 35 x 0.25	70 x 77 x 0.25
Description	2 ml syringe silicon based thermal compound	Thermal pad for RG and RF series	Graphite thermal pad for RA, RD, RM, RAM, RS series	Graphite thermal pad for RZ3 series
Pack Quantity	1	10	50	10
References				
	HTS02S	**RGHT** (for RG series)	**KK071CUT**	**RZHT**
		RFHT (for RF series)		

* Conditions may apply. Please ask your Sales representative for further details.

Solid state relays accessories

Terminal Adaptors

Types	RM fork terminal	RM fork terminal IP20	RM FASTON terminals	RM spacers
				
Dimensions HxWxD (mm)	35 x 16.5 x 25	35 x 16.5 x 29	4.8 / 6.3	M3 x 12
Description	RM, RS, RAM terminal adaptor for 16 mm² and 35 mm² cable	RM, RS, RAM terminal adaptor for 35 mm² cable, IP20	Screw FASTON terminals, flat or 45° angled for output (6.3 mm) and input (4.8 mm) RM, RS, RAM terminals	Standoff spacer for RM, RS, RAM series M3 control terminals
Pack Quantity	10	10	20	20
References				
	RM625FK (16 mm²)	**RM635FKP**	**RM48F0** (4.8 mm, flat)	**RMSP03**
	RM635FK (35 mm²)		**RM48F4** (4.8 mm, 45°)	
			RM63F0 (6.3 mm, flat)	
			RM63F4 (6.3 mm, 45°)	

Types	RG plug terminals	RG plug terminals	Overload Relay Adaptor	Varistors
				
Description	2 pole spring loaded plug terminal, 2.5 mm² for RG series	3 way, 2 pole box clamp plug terminal, 2.5 mm² for RGCM3 series	Overload Relay Adaptor for REC and RGCM3 series	Surge / transient voltage protection for SSRs
Pack Quantity	10	10	5	10
References				
	RGM25	**RG3G25**	**REC3ADAPTOR**	275 V: **RV02** 420 V: **RV04**
				510 V: **RV05** 625 V: **RV06**
				680 V: **RV07**

Types	Cables	Fans	Screw Kits	Temperature limit switches
				
Dimensions HxWxD (mm)		40 x 40 x 20 (RHSF40) 60 x 60 x 20 (RHSF60) 120 x 120 x 38 (RHS301F)		6.5 x 5.5 x 3
Description	Cable for RM1E...V, RA2A..C and RA...S models with one-end terminated with a female plug for mounting on the SSR	RHSF40-24 to be mounted with RHS45C, RHS45B, RHS540, RHS542 RHSF60-24/240 to be mounted with RHS90A, RHS112A, RHS703 RHS301F115/230 to be mounted with RHS301 incl. bracket	Screw kits for assembling SSRs to heatsinks. M5 x 10 mm to be used with RA, RD, RM, RAM, RS and RZ3 series. M4 x 15 mm used for RHS38AD heatsink. M5 x 23 / 30 mm to be used with RG series.	Temperature limit switches that may be fitted in the RZ3 housing between SSR and heatsink
	1	1	20	1
References				
	RCS3-100-1 [RM1E..V]	**RHSF40-24** (24 VDC)	**SRWKITM5X10MM**	**UP62-70**
	RCS4-100-1 [RA2A..C]	**RHSF60-24** (24 VDC)	**SRWKITM4X15MM**	**UP62-80**
	RCS4-400-1 [RA2A..C]	**RHSF60-230** (240 VAC)	**SRWKITM5X23MM**	**UP62-90**
	RCS5-200-1 [RA..S]	**RHS301F115** (115 VAC)	**SRWKITM5X30MM**	
		RHS301F230 (230 VAC)		

Solid state relays accessories

DIN mount heatsinks for solid state relays

Types	RHS300	RHS37A	RHS10015
			
Dimensions HxWxD (mm) (SSR not included)	105 x 82 x 20	18 x 110 x 52	100 x 82 x 29
Description	Heatsink for 1x 3-phase RZ3 series	Heatsink for 1x 1-phase RG series	Heatsink for max. 2x 1-phase RA, RD, RM, RAM, RS series
Thermal resistance**			
Without fan	5.40°C/W (>30 W)	4.00°C/W (>20 W)	4.00°C/W (>30 W)
With fan	Not available	Not available	Not available
Selection guide for heatsink assemblies*			
Without fan	**R...H1**	**R...H51**	**R...H47**
With fan	Not available	Not available	Not available

Types	RHS100	RHS45C	RHS52A
			
Dimensions HxWxD (mm) (SSR not included)	44 x 82 x 48	45 x 103 x 55	22.5 x 110 x 90
Description	Heatsink for 1x 1-phase RA, RD, RM, RAM, RS series	Heatsink for 1x 1-phase RA, RD, RM, RAM, RS series	Heatsink for 1x 1-phase RG series
Thermal resistance**			
Without fan	3.10°C/W (>25 W)	2.20°C/W (>45 W)	2.00°C/W (>45 W)
With fan	Not available	Not Available	Not Available
Selection guide for heatsink assemblies*			
Without fan	**R...H0**	**R...H15**	**R...H61**
With fan	Not available	Not available	Not available

Types	RHS45B	RHS54..	RHS703..
			
Dimensions HxWxD (mm) (SSR not included)	45 x 103 x 80	54 x 110 x 51 54 x 135 x 51 (with fan)	72 x 110 x 75 72 x 141 x 75 (with fan)
Description	Heatsink for 1x 1-phase RA, RD, RM, RAM, RS series	Heatsink for max. 3x 1-phase RG series, 1x 1-phase RA, RD, RM, RAM, RS series: RHS540 (no fan) RHS540F40-24 (24 VDC fan) Heatsink for max. 2x 1-phase RG series: RHS542 (no fan) RHS542F40-24 (24 VDC fan)	Heatsink for max. 3x 1-phase RG series, 1x 1-phase RA, RD, RM, RAM, RS series: RHS703 (no fan) RHS703F60-24 (24 VDC fan) RHS703F60-230 (240 VAC fan)
Thermal resistance**			
Without fan	1.85°C/W (>50 W)	1.85°C/W (>60 W)	1.10°C/W (>60 W)
With fan	Not Available	0.65°C/W	0.37°C/W
Selection guide for heatsink assemblies*			
Without fan	**R...H5**	**R...H65** [RHS540] **R...H66** [RHS542]	**R...H75** [RHS703]
With fan	Not available	**R...H67** [RHS540F40-24] **R...H68** [RHS542F40-24]	**R...H76** [RHS703F60-24] **R...H77** [RHS703F60-230]

* Conditions may apply. Please ask your Sales representative for further details.
** Refer to specific heatsink datasheet for further details on heatsink characteristics and assemblies.

Solid state relays accessories

DIN mount heatsinks for solid state relays

Types	RHS90A	RHS301..	RHS112A..
			
Dimensions HxWxD (mm) (SSR not included)	90 x 103 x 80	119 x 82 x 94 124 x 146 x 122 (with fan)	112 x 103 x 80 112 x 120 x 80 (with fan)
Description	Heatsink for 1x 1-phase RA, RD, RM, RAM, RS series	Heatsink for 1x 3-phase RZ3, 2x 1-phase RA, RD, RM, RAM, RS series: RHS301 [no fan] RHS301F115C [115 VAC fan] RHS301F230C [230 VAC fan]	Heatsink for 1x 3-phase RZ3, 2x 1-phase RA, RD, RM, RAM, RS series: RHS112A [no fan] RHS112AF60-24 [24 VDC fan] RHS112AF60-230 [230 VAC fan]
Thermal resistance**			
Without fan	0.97°C/W (>60 W)	0.82°C/W (> 80W)	0.76°C/W (>100 W)
With fan	Not Available	0.28°C/W	0.35°C/W
Selection guide for heatsink assemblies*			
Without fan	**R...H16**	**R...H2** [RHS301]	**R...H17**
With fan	Not available	**R...H10** [RHS301F115C] **R...H12** [RHS301F230C]	**R...H18** [RHS112AF60-24] **R...H52** [RHS112AF60-230]

Types	RHS11267DIND	RHS28009F80-24P	RHS28011F80-24P
			
Dimensions HxWxD (mm) (SSR not included)	119 x 125 x 94	280 x 87 x 122	280 x 87 x 122
Description	Heatsink for 1x 3-phase RZ3 series, max 3x 1-phase RG series, 2x 1-phase RA, RD, RM, RAM, RS series	Heatsink for max. 9x 1-phase RG series or 4x 1-phase RA, RD, RM, RAM, RS series with integrated fan and overtemperature protection	Heatsink for max. 11x 1-phase RG series or 3x 1-phase RA, RD, RM, RAM, RS series with integrated fan and overtemperature protection
Thermal resistance**			
Without fan	0.54°C/W (>150 W)	Not available	Not available
With fan	Not available	0.12°C/W (24 VDC)	0.12°C/W (24 VDC)
Selection guide for heatsink assemblies*			
Without fan	**R...H78D**	Not available	Not available
With fan	Not available	**R...H41**	**R...H44**

Thru wall mount heatsinks for solid state relays

Types	RHS38ARFD	RHS10025D	RHS16225D
			
Dimensions HxWxD (mm) (SSR not included)	46 x 76 x 33	100 x 100 x 25	162 x 100 x 25
Description	Heatsink for 1x 1-phase RF series	Heatsink for max. 3x 1-phase RG series, 1x 1-phase RA, RD, RM, RAM, RS series	Heatsink for 1x 3-phase RZ3 series, max. 3x 1-phase RA, RD, RM, RAM, RS and RG series
Thermal resistance**			
Without fan	2.85°C/W (>40 W)	1.85°C/W (>60 W)	1.30°C/W (>90 W)
With fan	Not Available	Not Available	Not Available
Selection guide for heatsink assemblies*			
Without fan	**R..H53**	**R...H49**	**R...H55**
With fan	Not Available	Not Available	Not Available

* Conditions may apply. Please ask your Sales representative for further details.
** Refer to specific heatsink datasheet for further details on heatsink characteristics and assemblies.

Solid state relays accessories

Thru wall mount heatsinks for solid state relays

Types	RHS16225LD	RHS11267D	RHS30040D
			
Dimensions HxWxD (mm) (SSR not included)	162 x 250 x 25	112 x 125 x 67	300 x 200 x 40
Description	Heatsink for 1x 3-phase RZ3 series, max. 3x 1-phase RA, RD, RM, RAM, RS and RG series	Heatsink for max. 3x 1-phase RG series or 1x 1-phase RA, RD, RM, RAM, RS series	Heatsink for max. 12x 1-phase RG series or 8x 1-phase RA, RD, RM, RAM, RS series
Thermal resistance**			
Without fan	0.84°C/W (>120 W)	0.54°C/W (>150 W)	0.40°C/W (>180 W)
With fan	Not Available	Not Available	Not Available
Selection guide for heatsink assemblies*			
Without fan	**R...H55L**	**R...H78**	**R...H57**
With fan	Not Available	Not Available	Not Available

Panel mount heatsinks for solid state relays

Types	RHS5050..	RHS38A..	RHS5840D
			
Dimensions HxWxD (mm) (SSR not included)	80 x 50 x 51	46 x 76 x 33	81 x 100 x 40
Description	**RHS5050D**: Heatsink for 1x 1-phase RA, RD, RM, RAM, RS series **RHS5050RFD**: Heatsink for 1x 1-phase RF series	**RHS38AD**: Heatsink for 1x 1-phase RA, RD, RM, RAM, RS series **RHS38ARFD**: Heatsink for 1x 1-phase RF series	Heatsink for max. 3x 1-phase RG series, 1x 1-phase RA, RD, RM, RAM, RS series
Thermal resistance**			
Without fan	3.50°C/W (>25 W)	2.85°C/W (>40 W)	1.80°C/W (>60 W)
With fan	Not available	Not available	Not available
Selection guide for heatsink assemblies*			
Without fan	**R...H60**	**R...H53**	**R...H48**
With fan	Not available	Not available	Not available

Types	RHS10067D	RHS10067LD	RHS320
			
Dimensions HxWxD (mm) (SSR not included)	121 x 76 x 67	121 x 140 x 67	240 x 100 x 93
Description	Heatsink for 1x 1-phase RA, RD, RM, RAM, RS series	Heatsink for 2x 1-phase RA, RD, RM, RAM, RS and RG series	Heatsink for 1x 3-phase RZ3 series, max. 3x 1-phase RA, RD, RM, RAM, RS and RG series
Thermal resistance**			
Without fan	1.70°C/W (>20 W)	0.88°C/W (>80 W)	0.40°C/W (>120 W)
With fan	Not available	Not available	Not available
Selection guide for heatsink assemblies*			
Without fan	**R...H58**	**R...H58L**	**R...H13**
With fan	Not available	Not available	Not available

* Conditions may apply. Please ask your Sales representative for further details.
** Refer to specific heatsink datasheet for further details on heatsink characteristics and assemblies.