RK



2-pole solid state relays



Description

The RK series consists of 2-pole solid state relays contained in one housing with the possibility to control each pole independently (RKD2.. models) or both poles together (RK2.. models). Ratings for both versions go up to 600 VAC, 75 AAC per pole. The RK..C models have control termination through a 2.54mm pitch connector. Terminated cables to mate with the RK..C are available and have to be ordered separately. The RK..P models have control termination with a 5.08mm pitch plug connector. In this case, the control plug is shipped with the solid state relay.

Benefits

- **Space savings.** The RK series consists of two solid state relays contained in one housing having a product width of 45mm.
- **Fast installation.** The RK solid state relay is ready for mounting to panel chassis or heatsink as the backplate is equipped with a pre-attached thermal interface.
- **Easy wiring.** The RK..P models are equipped with a pluggable spring terminal for easy and fast wiring of control connections.
- Low equipment downtime. The output of each pole is protected against over-voltages with an integrated transil.
- Long lifetime. Wire bonding technology reduces thermal and mechanical stresses of the output chips allowing a larger number of operational cycles compared to other assembly technologies.
- **User friendly.** LED indication per pole for visual indication of control status.
- Food & Beverage certification conformance. The RK is certified for 100,000 cycle endurance test according to UL508.

Applications

Plastic extrusion machines, thermoforming machines, blow moulding machines, coffee machines, electrical ovens, vending machines, soldering ovens, dryers, climatic chambers, air handling units, plastic sealing machines, shrink tunnels, etc.

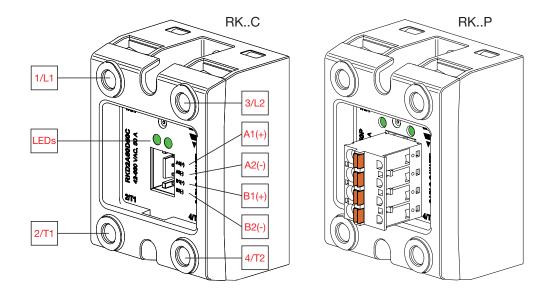


Main functions

- · 2-pole AC solid state relay with either independent control for each pole or common control.
- Zero cross or instant on switching.
- 4-32 VDC control voltage.



Structure



| Element | Component | Fund | ction | | | |
|---------|--------------------|-----------------------------|-------------------------------|--|--|--|
| Element | Component | RKD2 | RK2 | | | |
| 1/L1 | Power connection | Mains connec | tion for Pole A | | | |
| 2/T1 | Power connection | Load connect | ion for Pole A | | | |
| 3/L2 | Power connection | Mains connection for Pole B | | | | |
| 4/T2 | Power connection | Load connection for Pole B | | | | |
| A1(+) | Control connection | Control signal for Pole A | Control signal for Pole A & B | | | |
| A2(-) | Control connection | Ground for Pole A | Ground for Pole A & B | | | |
| B1(+) | Control connection | Control signal for Pole B | - | | | |
| B2(-) | Control connection | Ground for Pole B - | | | | |
| LEDs | LEDs indicators | LED ON when con | trol input is applied | | | |



Features

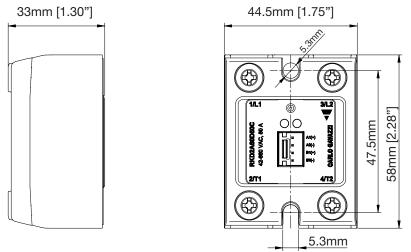


| Material | PA66, RAL7035 |
|----------------------|---|
| Weight | RKC: approx. 101 g RKD2P: approx. 106 g |
| weight | RK2P: approx. 100 g |
| Touch protection | IP 20 |
| Overvoltage category | III, 6 kV (1.2/50µs) rated impulse withstand voltage |
| Isolation | Input to output: 4000 Vrms Input and output to case: 4000 Vrms |
| LED indication | Continously ON Green LED when control input is applied |

Note: in the case of the RKD2 models, the two LED indications represent the control status of each independent control. In the case of the RK2 models, the two LEDs represent the status of the common control input and hence both LEDs are ON when the control input is applied to the RK2 and both LEDs are OFF when the control input is removed.



Dimensions





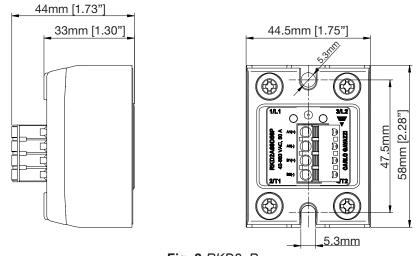


Fig. 2 RKD2..P

Performance



Outputs

| | RK2350 | RK6050 | RK2351 | RK6051 | RK2375 | RK6075 |
|---|---|----------|-----------|------------|----------|----------|
| | 24 - 265 | 42 - 660 | 24 - 265 | 42 - 660 | 24 - 265 | 42 - 660 |
| Operational voltage range, Ue | VAC | VAC | VAC | VAC | VAC | VAC |
| Max. operational current per pole ¹ : AC-51 rating | 50 AAC 75 AAC | | | | | |
| Max. operational current per pole ¹ : AC-53a rating | | | 12 / | AAC | | |
| Operational frequency range | | | 45 - 6 | 65 Hz | | |
| Blocking voltage | 600 Vp | 1200 Vp | 600 Vp | 1200 Vp | 600 Vp | 1200 Vp |
| Output protection | | | Integrate | ed transil | | |
| Latching voltage (across L-T) | | | ≤ 2 | 20V | | |
| Leakage current @ rated voltage | | | ≤ 3 r | nAAC | | |
| Minimum operational current | 250 n | nAAC | | 400 n | nAAC | |
| Repetitive overload current (t=1s) | < 125 | 5 AAC | < 130 | AAC | < 150 | AAC |
| Non-repetitive surge current (t=10ms) | 550 Ap 775 Ap 1400 Ap | | | | О Ар | |
| l²t for fusing (t=10ms), Minimum | 1500 A ² s 3000 A ² s 9800 A ² s | | | |) A²s | |
| Power factor ² | > 0.5 @ rated voltage | | | | | |
| Critical dV/dt (@ Tj init = 40°C) | 1000 V/µs | | | | | |
| Endurance testing acc. to UL508 | 100,000 cycles | | | | | |

Notes:

1. Max. rated current with suitable heatsink. Refer to heatsink selection tables.

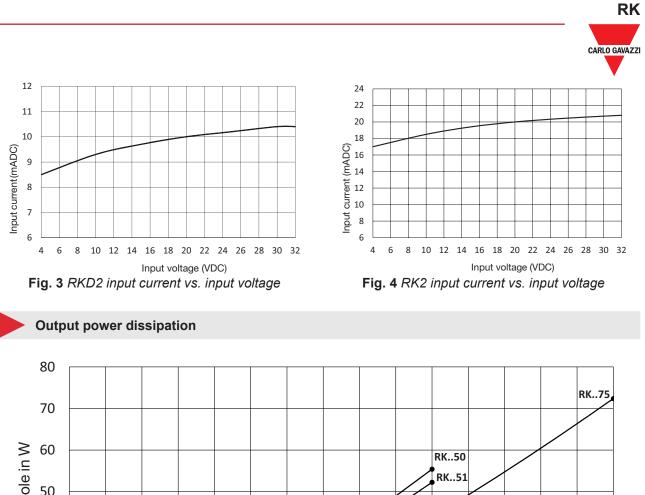
2. Transient voltages exceeding the SSR rated blocking voltage will cause the SSR output to switch ON even if control signal is OFF. This occurrence will last as long as the transient voltage level is higher than the specified blocking voltage of the SSR.

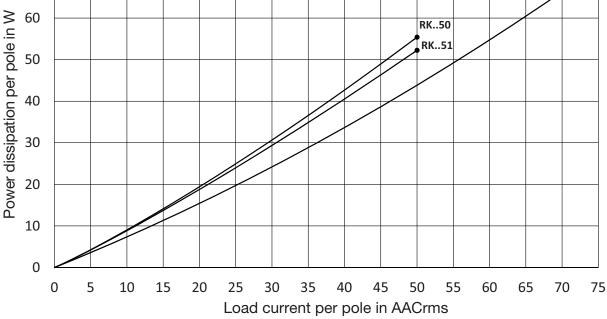


Inputs

| | RKD2 | RK2 | | | |
|--|---------------------------------|-----|--|--|--|
| Control voltage range: A1-A2, B1-B2 | 4 - 32 VDC | | | | |
| Pick-up voltage | 3.8 VDC | | | | |
| Drop-out voltage | 1.0 VDC | | | | |
| Maximum reverse voltage | 32 VDC | | | | |
| Max. response time pick-up | 1/2 cycle (RK A) 1 ms (RK B) | | | | |
| Response time drop-out | 1/2 cycle | | | | |
| Maximum input current | < 12 mA per pole < 24 mA | | | | |

Note: control range below -25°C is 5.5 - 32 VDC







Heatsink selection

Thermal resistance [°C/W] of RK..50..

| | | Ambient temp. [°C] | | | | | |
|----------------------------------|------|--------------------|------|------|------|------|------|
| Load current per pole AC-51, [A] | 20 | 30 | 40 | 50 | 60 | 70 | 80 |
| 50 | 0.72 | 0.61 | 0.50 | 0.39 | 0.28 | 0.18 | - |
| 45 | 0.87 | 0.74 | 0.61 | 0.48 | 0.36 | 0.25 | 0.13 |
| 40 | 1.0 | 0.91 | 0.75 | 0.61 | 0.47 | 0.33 | 0.19 |
| 35 | 1.3 | 1.1 | 0.95 | 0.77 | 0.60 | 0.44 | 0.27 |
| 30 | 1.7 | 1.4 | 1.2 | 1.0 | 0.7 | 0.58 | 0.39 |
| 25 | 2.2 | 1.9 | 1.6 | 1.3 | 1.0 | 0.80 | 0.55 |
| 20 | 3.2 | 2.7 | 2.3 | 1.9 | 1.5 | 1.1 | 0.81 |
| 15 | 5.3 | 4.4 | 3.6 | 2.9 | 2.3 | 1.7 | 1.2 |
| 10 | 12.4 | 9.6 | 7.5 | 5.8 | 4.4 | 3.3 | 2.3 |
| 5 | nh | nh | nh | nh | 17.8 | 11.0 | 6.9 |

Thermal resistance [°C/W] of RK..51..

| | | Ambient temp. [°C] | | | | | |
|----------------------------------|------|--------------------|------|------|------|------|------|
| Load current per pole AC-51, [A] | 20 | 30 | 40 | 50 | 60 | 70 | 80 |
| 50 | 0.85 | 0.73 | 0.61 | 0.49 | 0.38 | 0.27 | 0.16 |
| 45 | 1.0 | 0.87 | 0.73 | 0.59 | 0.46 | 0.34 | 0.21 |
| 40 | 1.2 | 1.0 | 0.88 | 0.72 | 0.57 | 0.42 | 0.28 |
| 35 | 1.5 | 1.2 | 1.0 | 0.90 | 0.71 | 0.53 | 0.36 |
| 30 | 1.9 | 1.6 | 1.3 | 1.1 | 0.91 | 0.69 | 0.48 |
| 25 | 2.5 | 2.1 | 1.8 | 1.5 | 1.2 | 0.92 | 0.65 |
| 20 | 3.5 | 3.0 | 2.5 | 2.0 | 1.6 | 1.2 | 0.92 |
| 15 | 5.7 | 4.8 | 3.9 | 3.2 | 2.5 | 1.9 | 1.4 |
| 10 | 13.4 | 10.3 | 8.0 | 6.1 | 4.7 | 3.5 | 2.4 |
| 5 | nh | nh | nh | nh | 18.7 | 11.4 | 7.1 |

Thermal resistance [°C/W] of RK..75..

| | | Ambient temp. [°C] | | | | | |
|----------------------------------|------|--------------------|------|------|------|------|------|
| Load current per pole AC-51, [A] | 20 | 30 | 40 | 50 | 60 | 70 | 80 |
| 75 | 0.53 | 0.45 | 0.38 | 0.30 | 0.23 | 0.15 | - |
| 67.5 | 0.64 | 0.55 | 0.46 | 0.37 | 0.28 | 0.20 | 0.12 |
| 60 | 0.78 | 0.67 | 0.56 | 0.46 | 0.36 | 0.26 | 0.16 |
| 52.5 | 0.96 | 0.83 | 0.70 | 0.58 | 0.45 | 0.34 | 0.22 |
| 45 | 1.2 | 1.0 | 0.89 | 0.74 | 0.59 | 0.44 | 0.30 |
| 37.5 | 1.5 | 1.3 | 1.1 | 0.97 | 0.78 | 0.60 | 0.42 |
| 30 | 2.2 | 1.9 | 1.6 | 1.3 | 1.0 | 0.83 | 0.60 |
| 22.5 | 3.4 | 2.9 | 2.4 | 2.0 | 1.6 | 1.2 | 0.91 |
| 15 | 6.5 | 5.4 | 4.4 | 3.5 | 2.8 | 2.1 | 1.5 |
| 7.5 | nh | nh | 16.0 | 11.3 | 8.1 | 5.7 | 3.9 |

Notes:

• The indicated thermal resistance values are applicable only for the RK with the pre-attached thermal interface.

• 'nh' means no heatsink necessary. The SSR should still be tightened to a surface to ensure optimal thermal dissipation.



Applications

Thermal stress will reduce the lifetime of the solid state relay. It is hence necessary to select an appropriate heatsink to ensure that the maximum junction temperature of the solid state relay is not exceeded. Surrounding temperature, load current and duty cycle have to be taken into account. The Heatsink Selection tables as well as the Online Heatsink Selector tool on http://productselection.net/heatsink/heatsinkselector.php?LANG=UK provide indications of the heatsink size necessary to avoid thermal overload.

Further checks can be done in the application by verification of the heatsink temperature. The maximum allowed heatsink temperature can be calculated as follows:

$$T_h = T_j - (2 * P_d * R_{thjs 2-poles}) \text{ or } T_h = T_j - (P_d * R_{thjs 1-pole})$$

Where,

 $T_h = max.$ heatsink temperature $T_j = max.$ junction temperature $P_d = output power dissipation per pole$ $R_{thjs} = thermal resistance junction to heatsink (including thermal interface), <math>R_{thjs 1-pole} = 2 * R_{thjs 2-poles}$

Example 1: load current through the two poles is identical.

SSR utilised is the RKD2A60D50P with a load current of 40Arms per pole. The maximum heatsink temperature shall not exceed:

 $T_{h} = T_{j} - (2 * P_{d} * R_{thjs 2-poles})$

 $T_{h} = 120^{\circ}C - (2 * 43W * 0.25^{\circ}C/W)$

 $T_{h} = 98.5^{\circ}C$

Example 2: load current through the two poles is different.

SSR utilised is the RKD2A60D50P with a load current of 40Arms through pole 1 and 10Arms through pole 2. In this case, since the load current through the two poles differ, each pole has to be calculated separately ($R_{thjs 2-poles}$ cannot be utilised). The max. heatsink temperature is the lower heatsink temperature obtained when the calculation is done for each pole independently.

$$T_h = T_j - (P_d * R_{thjs 1-pole})$$

 $T_{hoole1} = 120^{\circ}C - (43W * 0.5^{\circ}C/W) = 98.5^{\circ}C$

$$T_{h} = T_{j} - (P_{d} * R_{this 1-pole})$$

 $T_{\text{hnole}2} = 120^{\circ}\text{C} - (9\text{W} * 0.5^{\circ}\text{C/W}) = 115.5^{\circ}\text{C}$

Hence, in this case the max. heatsink temperature shall not exceed 98.5°C.





| | RK50 | RK51 | RK75 | |
|--|--|---------------------------------------|---|--|
| Operating temperature | _4 | 40°C to 80°C (-40°F to 176°F | F) | |
| Storage temperature | -4 | 0°C to 100°C (-40°F to 212° | F) | |
| Max. junction temperature | < 120°C (248°F) < 115°C (239°F) | | | |
| Junction to heatsink thermal resistance, R _{thjs} (including pre-attached thermal interface) | 2-poles: 0.25 °C/W 1-pole: 0.5 °C/W | 2-poles: 0.2 °C/W 1-pole: 0.4 °C/W | 2-poles: 0.16 °C/W 1-pole: 0.32 °C/W | |

Note: the indicated thermal resistance R_{thjs} (2-poles) is applicable when both poles are utilised. If only one of the poles is used, the applicable R_{thjs} is the R_{thjs} indicated for 1-pole.

Compatibility and conformity

| Standard compliance | EN/IEC 60947-4-3 | | |
|-----------------------------------|--|--|--|
| Approvals | | | |
| Electromagnetic compatibility (I | EMC) - immunity | | |
| Electrostatic discharge (ESD) | EN/IEC 61000-4-2 8 kV air discharge, 4 kV contact (PC1) | | |
| Radiated radio frequency | EN/IEC 61000-4-3 10 V/m, from 80 MHz to 1 GHz (PC1) 10 V/m, from 1.4 to 2 GHz (PC1) 3 V/m, from 2 to 2.7 GHz (PC1) | | |
| Electrical fast transient (burst) | EN/IEC 61000-4-4 Output: 2 kV, 5 kHz (PC2) Input: 1 kV, 5 kHz (PC2) | | |
| Conducted radio frequency | EN/IEC 61000-4-6 10V/m, from 0.15 to 80 MHz (PC1) | | |
| Electrical surge | EN/IEC 61000-4-5 Output, line to line: 1 kV (PC2) Output, line to earth: 2 kV (PC2) Input, line to line: 500 V (PC2) Input, line to earth: 500 V (PC2) | | |
| Voltage dips | EN/IEC 61000-4-11 0% for 0.5, 1 cycle (PC2) 40% for 10 cycles (PC2) 70% for 25 cycles (PC2) 80% for 250 cycles (PC2) | | |
| Voltage Interruptions | EN/IEC 61000-4-11 0% for 5000ms (PC2) | | |

| Electromagnetic compatibility (EMC) - emissions | | |
|---|--|--|
| Radio interference field emis- | EN/IEC 55011 | |
| sion (radiated) | Class A: from 30 to 1000 MHz | |
| Dadia interference voltage | EN/IEC 55011 | |
| Radio interference voltage | Class A: from 0.15 to 30 MHz | |
| emissions (conducted) | (External filter may be required - refer to Filtering section) | |

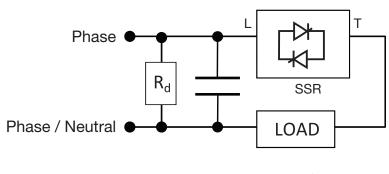


Note:

- Performance Criteria 1 (PC1): no degradation of performance or loss of function is allowed when the product is operated as intended.
- Performance Criteria 2 (PC2): during the test, degradation of performance or partial loss of function is allowed. However when the test is complete the product should return operating as intended by itself.
- Performance Criteria 3 (PC3): temporary loss of function is allowed, provided the function can be restored by manual operation of the controls.
- Control input lines must be installed together to maintain products' susceptability to Radio Frequency interference.
- Use of AC solid state relays may, according to the application and the load current, cause conducted radio interferences. Use of mains filters may be necessary for cases where the user must meet E.M.C requirements. The capacitor values given inside the filtering specification tables should be taken only as indications, the filter attenuation will depend on the final application.



Filter connection diagram (per pole)



 $R_d = 1M\Omega, 0.5W$



| Part number | Suggested filter for EN 55011 Class A compliance (per pole) | Maximum heater current [AAC] |
|--------------|---|------------------------------|
| | no filter needed | 9 |
| RK(D)2A23D50 | 150nF / 275V / X1 | 25 |
| | 330nF / 275V / X1 | 50 |
| | no filter needed | 10 |
| RK(D)2A23D51 | 150nF / 275V / X1 | 25 |
| | 330nF / 275V / X1 | 50 |
| | no filter needed | 7.5 |
| RK(D)2A60D50 | 150nF / 760V / X1 | 25 |
| | 330nF / 760V / X1 | 40 |
| | no filter needed | 5 |
| RK(D)2A60D51 | 220nF / 760V / X1 | 30 |
| | 220nF / 760V / X1 | 40 |
| | no filter needed | 5 |
| RK(D)2A60D75 | 330nF / 760V / X1 | 25 |
| | 470nF / 760V / X1 | 40 |
| RK(D)2RC0DE0 | 220nF / 760V / X1 | 25 |
| RK(D)2B60D50 | 330nF / 760V / X1 | 40 |
| RK(D)2RC0D75 | 330nF / 760V / X1 | 25 |
| RK(D)2B60D75 | 470nF / 760V / X1 | 40 |

For class B compliance contact your Carlo Gavazzi representative.



Environmental

| Relative humidity | 95% non-condensing @ 75°C |
|---|---|
| Pollution degree | 2 (non-conductive pollution with possibilities of condensation) |
| Installation altitude | 0-1000m. Above 1000m derate linearly by 1% of FLC per 100m up to a maximum of 2000m |
| Vibration resistance | 5g per axis (2-100Hz, IEC60068-2-6, EN 50155, EN 61373) |
| Impact resistance | 15/11 g/ms (EN 50155, EN 61373) |
| RoHS (2011/65/EU) | Compliant |
| UL flammability rating (hous- ing) | UL 94 V0 |
| Glow wire ignition temperature, Glow wire flammability index | Conforms to EN 60335-1 requirements |

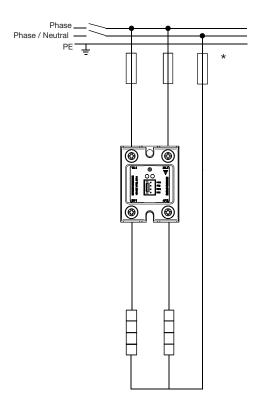
Short circuit protection, co-ordination type 2 (per pole)

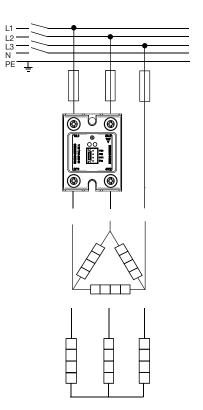
| | Prospective short | (Mersen) Ferraz Shawmut | | Siba | | Voltage |
|----------|----------------------------|-------------------------|---|----------------------------------|---------------------------------------|---------|
| Part No. | circuit current [kArms] | Max fuse size [A] | Part number | Max fuse size [A] Part number | | [VAC] |
| RK50 | 10 | 50 | gR (GRC) 22x58 FR22UD69V50T Holder: CMS22xI | 50 | 50 142 06.50 Holder: 51 060 05.xS | 600 |
| RK51 | 10 | 63 | gR (GRC) 22x58 FR22UD69V63T Holder: CMS22xI | 63 | 50 142 06.63 Holder: 51 060 05.xS | 600 |
| RK75 | 10 | 80 | gR (GRC) 22x58 FR22GR69V80T Holder: CMS22xI | 100 | 50 142 06.100 Holder: 51 060 05.xS | 600 |

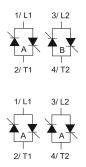
Where 'x' in Holder reference signifies the no. of poles



Connection Diagrams







*depends on system requirements

Control input A (A1-A2) activates pole L1-T1 and control input B (B1-B2) activates pole L2-T2 for the RKD2..

Control input A (A1-A2) activates both pole L1-T1 and pole L2-T2 for the RK2..

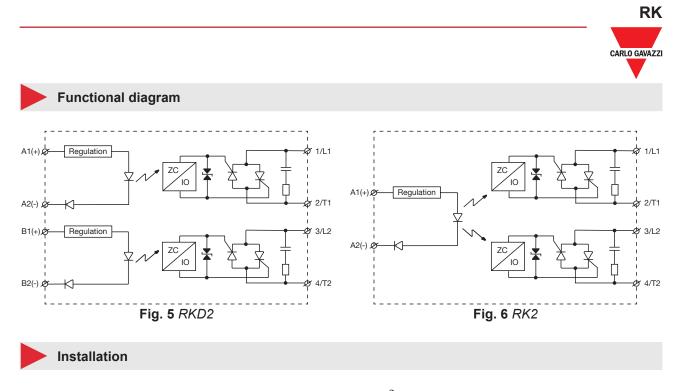




Fig. 7 Peel off liner before mounting on the panel chassis or heatsink.

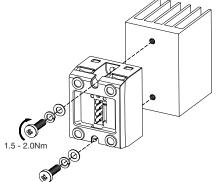


Fig. 8 Tighten screws alternately to max. 0.5 Nm and then continue to max. 2.0 Nm.

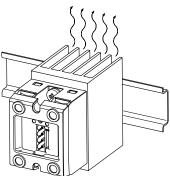


Fig. 9 Mount heatsink with fins in the vertical orientation to guarantee the best possible airflow through the heatsink.



Connection specifications

| | 1/L1, 2/T1, 3/L2, 4/T2 (RKC, RKP) | | A1, A2, B1, B2 (RKP) |
|---|--|--|---------------------------------------|
| | | | |
| Mounting screws (SSR to heatsink) | (refer to SRV | M5, not provided with SSR VKITM5X10MM in the Refere | nces section) |
| Mounting torque (SSR to heatsink) | 1.5 - 2.0 Nm (13.3 - 17.7 lb-in) | |) |
| Conductors | Use 75°C copper (Cu) conductors | | Use 60/75°C copper (Cu) conductors |
| Stripping length | 12 mm | | 8-9 mm |
| Connection type | M4 screw with captivated washer | | Spring |
| No. of positions | - | | 4 (RKD2) 2 (RK2) |
| Wire entry | | - | Тор |
| Rigid (solid & stranded) UR/CSA rated data | 2 x 2.5 6.0 mm² 2 x 14 10 AWG | 1 x 2.5 6.0 mm ² 1 x 14 10 AWG | 0.5 2.5 mm² 26 12 AWG |
| Flexible with or without end sleeve | 2 x 1.0 2.5 mm ² 2 x 2.5 6.0 mm ² 2 x 18 14 AWG 2 x 14 10 AWG | | 0.5 2.5 mm² 26 12 AWG |
| Flexible with end sleeve using TWIN ferrules | - | | 0.5 1.0 mm ² |
| Torque specifications | Pozidrive bit 2 (PZ2) UL: 2.0 Nm (17.7 lb-in) IEC: 1.5 - 2.0 Nm (13.3 - 17.7 lb-in) | | - |
| Aperture for termination lug | 12.5 mm, lug thickness | - | |

Control termination

| RKC | RKD2 | RK2 | |
|-----------------|--|-----|--|
| Connection type | 4 pins, pitch 2.54mm square pin 0.64' 2 pins, pitch 2.54mm square p with integrated lockable connector with integrated lockable connector | | |
| Mating options | CT100F24-4-C, CT100F24-2-C from ITW Pancon | | |
| Accessories | RCK4-100-1, RCK2-100-1 terminated cable | | |

| RKP | RKD2 | RK2 | |
|-----------------|--|-----|--|
| Connection type | 4-way, 4-positions, pitch 5.08mm for plug- gable terminal4-way, 2-positions, pitch 5.08mm f gable terminal | | |
| Mating options | Plug provided with SSR; Other options noted in section Screw plugs, Spring plugs | | |
| Accessories | Plugs also available as Accessories: RK4MT for RKD2, RK2MT for RK2 | | |



Screw plugs

| Cable entry | Тор | Left | Right | Twin, sides |
|--------------------------------------|--------------------------------------|---------------------------------------|---------------------------------------|---------------------------------------|
| | | | | |
| Manufacturer | Phoenix Contact | | | |
| Model | 4 positions: MSTBT 2,5/ 4-ST-5,08 | 4 positions: MVSTBW 2,5/ 4-ST-5,08 | 4 positions: MVSTBR 2,5/ 4-ST-5,08 | 4 positions: TVMSTB 2,5/ 4-ST-5,08 |
| Model | 2 positions: MSTBT 2,5/ 2-ST-5,08 | 2 positions: MVSTBW 2,5/ 2-ST-5,08 | 2 positions: MVSTBR 2,5/ 2-ST-5,08 | 2 positions: TVMSTB 2,5/ 2-ST-5,08 |
| Reference | 4 positions: 1780002 | 4 positions: 1792773 | 4 positions: 1792265 | 4 positions: 1719024 |
| Reference | 2 positions: 1779987 | 2 positions: 1792757 | 2 positions: 1792249 | 2 positions: 1719008 |
| Wire range | 0.25 - 2.5 mm ² | | | |
| Screw | M3 | | | |
| Stripping length | pping length 7 mm | | | |
| Tightening torque | 0.5 - 0.6 Nm | | | |
| Product depth with mounted connector | 37.2 mm | 45.0 mm 44. | | 44.7 mm |

| Cable entry | Тор | Twin, top | |
|---|--|------------------------------------|--|
| | | | |
| Manufacturer | Phoenix Contact | | |
| Model | 4 positions: FRONT-MSTB 2,5/ 4-ST- 5,08 | 4 positions: TMSTBP 2,5/ 4-ST-5,08 | |
| Model | 2 positions: FRONT-MSTB 2,5/ 2-ST- 5,08 | 2 positions: TMSTBP 2,5/ 2-ST-5,08 | |
| Reference | 4 positions: 1777303 | 4 positions: 1853036 | |
| Reference | 2 positions: 17773280 | 2 positions: 1853010 | |
| Wire range | 0.25 - 2.5 mm ² | | |
| Screw | M2.5 | M3 | |
| Stripping length | 10 mm | 7 mm | |
| Tightening torque | 0.5 - 0.6 Nm | | |
| Product depth with mounted con- nector | 46.5 mm | 40.5 mm | |





| Cable entry | Тор | Left | Right | Twin, top |
|--------------------------------------|-------------------------------------|--------------------------------------|--------------------------------------|-------------------------------------|
| | | | | |
| Manufacturer | Phoenix Contact | | | |
| Model | 4 positions: FKCT 2,5/ 4-ST-5,08 | 4 positions: FKCVW 2,5/ 4-ST-5,08 | 4 positions: FKCVR 2,5/ 4-ST-5,08 | 4 positions: TFKC 2,5/ 4-ST-5,08 |
| Model | 2 positions: FKCT 2,5/ 2-ST-5,08 | 2 positions: FKCVW 2,5/ 2-ST-5,08 | 2 positions: FKCVR 2,5/ 2-ST-5,08 | 2 positions: TFKC 2,5/ 2-ST-5,08 |
| Reference | 4 positions: 1902136 | 4 positions: 1873676 | 4 positions: 1873977 | 4 positions: 1962626 |
| Reference | 2 positions: 1902110 | 2 positions: 1873650 | 2 positions: 1873951 | 2 positions: 1962600 |
| Wire range | 0.25 - 2.5 mm ² | | | |
| Stripping length | 10 mm | | | |
| Product depth with mounted connector | 44.6 mm | 45.6 mm | 45.6 mm | 44.7 mm |



References

Further reading

| Information | Where to find it |
|-------------------------------|---|
| Online heatsink selector tool | http://www.productselection.net/heatsink/heatsinkSelector.php?LANG=UK |

CARLO GAVAZZI compatible components

| Purpose | Component name/code | Notes |
|------------------------------|-----------------------|--|
| Control Plugs | RK4MT, RK2MT | Spring plugs for RKP, packing qty: 10 pcs |
| Cables | RCK4-100-1 RCK2-100-1 | Cable accessory for RKC |
| Heatsinks | RHS | Heatsinks and fans |
| Phase change thermal pad | RKHT | Packing qty: 10 pcs |
| Screws kits for SSR mounting | SRWKITM5X10MM | Packing qty: 20 pcs |
| Fork terminals | RM635FK, RM635FKP | Packing qty: 10 pcs |
| Touch protection covers | RKIP20 | Packing qty: 10 pcs |



Order code

Enter the code entering the corresponding option instead of lacksquare

| Code | Option | Description | Notes |
|------|--------|--|----------------|
| R | - | | |
| K | | | |
| | D | Dual control (independent control for each pole) | |
| | | Common control for the two poles | |
| 2 | - | | |
| | Α | Switching mode: zero cross (ZC) | |
| | В | Switching mode: instant on (IO) | For RK60 only |
| | 23 | Rated voltage: 230 VAC (24-265 VAC) 50/60 Hz | For RKD2A only |
| 60 | 60 | Rated voltage: 600 VAC (42-660 VAC) 50/60 Hz | |
| D | - | | |
| | 50 | Rated current / pole (with heatsink): 50 AAC | |
| | 51 | Rated current / pole (with heatsink): 50 AAC high I ² t | For RKA only |
| | 75 | Rated current / pole (with heatsink): 75 AAC | For RK60 only |
| | С | Control termination: 2.54 mm pitch connector pins | |
| | Р | Control termination: 5.08 mm pitch plug connector | |





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