

Power Relay RM 8

- 2 pole 25 A, 2 form C (2 CO) contacts
- DC or AC coil
- Mechanical indicator
- Push-to-test button
- Chassis or DIN rail mount

Typical applications
Cleaning equipment, heating and cooling equipment.



Approvals

VDE Cert. No. 40003144, UL E214025,
Technical data of approved types on request.

Contact Data

| | |
|--|-------------------------|
| Contact arrangement | 2 form C (CO) |
| Rated voltage | 400VAC |
| Max. switching voltage | 400VAC |
| Rated current | 25A |
| Limiting making current, 20ms max. | 60A |
| Switching power | 6000VA |
| Contact material | AgCdO, AgNi90/10 |
| Min. recommended contact load | 24VDC/100mA |
| Frequency of operation, with/without load, DC coil | 960/6000h ⁻¹ |
| Operate/release time max., DC coil | 15/10ms |
| Bounce time max., form A/form B, DC coil | 4/6ms |

Contact ratings

| Type | Contact | Load | Cycles |
|------------------|---------|-------------------------------------|--------------------|
| IEC 61810 | | | |
| RM8 | C (CO) | 25 A, 250 VAC, cosφ=1 35°C | 10x10 ³ |
| RM82 | C (CO) | 25 A, 250 VAC, cosφ=1 DC-coil, 65°C | 10x10 ³ |
| RM82 | C (CO) | 25 A, 250 VAC, cosφ=1 AC-coil, 40°C | 10x10 ³ |

UL 508

| | | | |
|------|-------------|---|--------------------|
| RM80 | A/B (NO/NC) | 25 A, 240 VAC, 1 phase per pole, general purpose 40°C | 6x10 ³ |
| RM8 | A/B (NO/NC) | 25 A, 415 VAC, resistive, 45°C | 10x10 ³ |
| RM82 | A/B (NO/NC) | 16 A, 415 VAC, resistive, 70°C | 30x10 ³ |
| RM82 | A/B (NO/NC) | 240 VAC, 1phase, 2HP, 50°C | 6x10 ³ |

Mechanical endurance 10x10⁶ operations

Coil Data

| | |
|-------------------------------------|----------------------------|
| Coil voltage range | 6 to 220VDC 6 to 400VAC |
| Operative range, IEC 61810 | 2 |
| Coil insulation system according UL | class 130 (B) |

Coil versions, DC coil

| STD | LED bipolar | Coil code PD ³⁾ | LED+ PD ³⁾ | Rated voltage VDC | Coil resistance Ω±10% ¹⁾²⁾ | Rated power W |
|-----|-------------|----------------------------|-----------------------|-------------------|---------------------------------------|---------------|
| 006 | L06 | 0A6 | LA6 | 6 | 32 | 1.1 |
| 012 | L12 | 0B2 | LB2 | 12 | 110 | 1.3 |
| 024 | L24 | 0C4 | LC4 | 24 | 475 | 1.2 |
| 048 | L48 | 0E8 | LE8 | 48 | 2000 | 1.2 |
| 060 | L60 | 0G0 | LG0 | 60 | 2850 | 1.3 |
| 110 | M10 | 1B0 | MB0 | 110 | 10000 ¹⁾ | 1.2 |
| 221 | N21 | 2C1 | NC1 | 220 | 40000 ²⁾ | 1.2 |

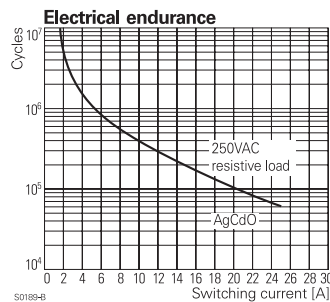
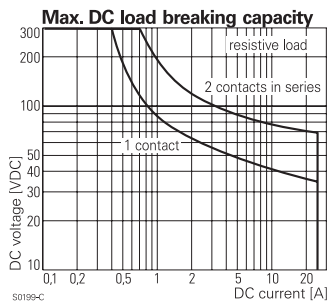
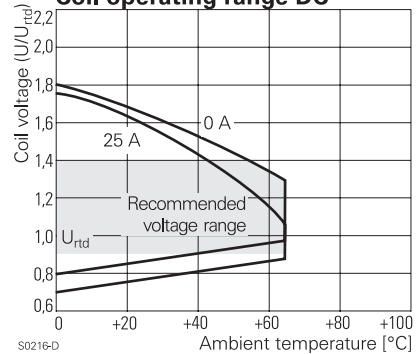
Operate voltage, DC coil 75% of rated coil voltage
Release voltage, DC coil 10% of rated coil voltage

1) Coil resistance ±12%, 2) Coil resistance ±15%.

3) Protection diode PD; standard polarity: +A1 / -A2.

All figures are given for coil without pre-energization, at ambient temperature +23°C.

Coil operating range DC



Power Relay RM 8 (Continued)

Coil Data (continued)

Coil versions, AC coil

| Coil code | Rated voltage | Operate voltage | Release voltage | Coil resistance | Rated coil power | |
|-----------|---------------|-----------------|-----------------|-------------------------|----------------------|------------|
| STD | LED | 50/60Hz | 50/60Hz | $\Omega \pm 10\%^{(2)}$ | 50/60Hz | |
| | | VAC | VAC | VAC | VA | |
| 506 | R06 | 6 | 4.8/5.1 | 1.8 | 4.7 | 2.86/2.36 |
| 512 | R12 | 12 | 9.6/10.2 | 3.6 | 19.5 | 2.71/2.27 |
| 524 | R24 | 24 | 19.2/20.4 | 7.2 | 80 | 2.62/2.00 |
| 548 | R48 | 48 | 38.4/40.8 | 14.4 | 320 | 2.60/2.17 |
| 560 | R60 | 60 | 48.0/51.0 | 18.0 | 500 | 2.62/2.20 |
| 615 | S15 | 115 | 92.0/97.8 | 34.5 | 1850 | 2.65/2.22 |
| 730 | T30 | 230 | 184.0/195.5 | 69.0 | 7500 | 2.69/ 2.26 |
| 900 | V00 | 400 | 320.0/340.0 | 120.0 | 23500 ⁽²⁾ | 2.61/2.20 |

2) Coil resistance $\pm 15\%$.

All figures are given for coil without pre-energization, at ambient temperature +23°C.

Insulation Data

| | |
|------------------------------------|-----------------------|
| Initial dielectric strength | |
| between open contacts | 1500Vrms |
| between contact and coil | 2500Vrms |
| between adjacent contacts | 4000Vrms |
| Initial surge withstand voltage | |
| between contact and coil | 5000V(1.2/50 μ s) |
| between adjacent contacts | 6000V(1.2/50 μ s) |
| Clearance/creepage | |
| between contact and coil | $\geq 4.0/14.9$ mm |
| between adjacent contacts | $\geq 15.3/15.3$ mm |
| Material group of insulation parts | IIIa |

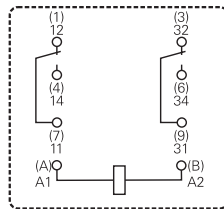
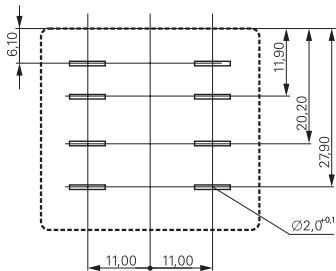
Other Data

Material compliance: EU RoHS/ELV, China RoHS, REACH, Halogen content refer to the Product Compliance Support Center at www.te.com/customer-support/rohssupportcenter

| | |
|--------------------------------------|----------------------|
| Ambient temperature | |
| for mounting/handling | -20 to +40°C |
| in operation | |
| DC coil | -40 to +65°C |
| AC coil | -40 to +40°C |
| 16 A contact load | -40 to +70°C |
| Category of environmental protection | |
| IEC 61810 | RT1 - dust protected |
| Vibration resistance (functional) | |
| form A (NO)/form B (NC) | 10/5g, 30 to 150Hz |
| Terminal type | quick-connect |
| Cover retention, pull/push force | 100/100N |
| Weight | 81g |
| Packaging unit | 10/25 pcs. |

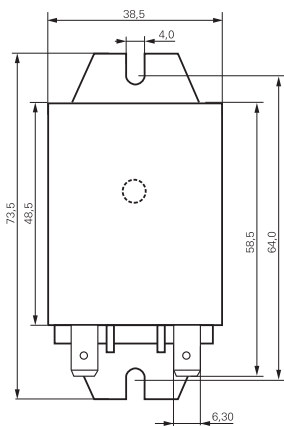
Terminal assignment

Bottom view on pins



Dimensions

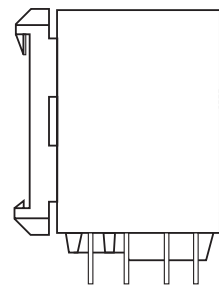
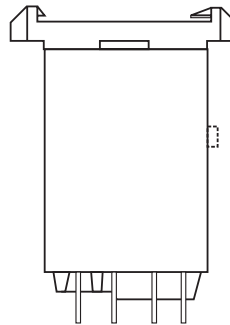
Cover with mounting brackets, 6.3mm quick connect terminals



Cover with DIN-snap-on attachment

horizontal

vertical



Power Relay RM 8 (Continued)

| | | | | | | | | | | | | | | |
|-------------------------------|---|-----------|-----------------------------|----------|----------|------------|---|---|---|--|---|--|---|-----------------------------|
| Product code structure | Typical product code | RM | 8 | 0 | 9 | 024 | | | | | | | | |
| Type | RM Power relay RM8 | | | | | | | | | | | | | |
| Contact configuration | 8 2 form C contacts (2 CO), 25A | | | | | | | | | | | | | |
| Version | <table border="0"> <tr> <td>0</td><td>AgCdO, without test button</td> <td>3</td><td>AgCdO, with test button</td> </tr> <tr> <td>2</td><td>AgNi90/10, without test button</td> <td>7</td><td>AgNi90/10, with test button</td> </tr> </table> | | | | | | 0 | AgCdO, without test button | 3 | AgCdO, with test button | 2 | AgNi90/10, without test button | 7 | AgNi90/10, with test button |
| 0 | AgCdO, without test button | 3 | AgCdO, with test button | | | | | | | | | | | |
| 2 | AgNi90/10, without test button | 7 | AgNi90/10, with test button | | | | | | | | | | | |
| Enclosure | <table border="0"> <tr> <td>5</td><td>cover with mounting brackets, 6.3mm quick connect terminals</td> </tr> <tr> <td>8</td><td>cover with DIN-snap-on attachment, horizontal, 6.3mm quick connect terminals</td> </tr> <tr> <td>9</td><td>cover with DIN-snap-on attachment, vertical, 6.3mm quick connect terminals</td> </tr> </table> | | | | | | 5 | cover with mounting brackets, 6.3mm quick connect terminals | 8 | cover with DIN-snap-on attachment, horizontal, 6.3mm quick connect terminals | 9 | cover with DIN-snap-on attachment, vertical, 6.3mm quick connect terminals | | |
| 5 | cover with mounting brackets, 6.3mm quick connect terminals | | | | | | | | | | | | | |
| 8 | cover with DIN-snap-on attachment, horizontal, 6.3mm quick connect terminals | | | | | | | | | | | | | |
| 9 | cover with DIN-snap-on attachment, vertical, 6.3mm quick connect terminals | | | | | | | | | | | | | |
| Coil | Coil code: please refer to coil versions table | | | | | | | | | | | | | |

| Product code | Contacts | Cont. material | Version | Enclosure | Coil | Coil | Part number |
|--------------|---------------|----------------|-------------|-------------------|---------|--------|-------------|
| RM805024 | 2 form C, | AgCdO | Without | Mounting brackets | DC-coil | 24VDC | 2-1393844-7 |
| RM825024 | 2 CO contacts | AgNi | test button | quick c. 6.3 mm | | | 7-1415544-3 |
| RM805524 | 25 A | AgCdO | | | AC-coil | 24VAC | 2-1393147-9 |
| RM805615 | | AgCdO | | | | 115VAC | 3-1393147-1 |
| RM805730 | | AgCdO | | | | 230VAC | 3-1393147-3 |
| RM825730 | | AgNi | | | | | 5-1415544-8 |
| RM808024 | | AgCdO | | DIN-snap-on | DC-coil | 24VDC | 2-1393844-9 |
| RM808524 | | AgCdO | | horizontal | AC-coil | 24VAC | 3-1393147-7 |
| RM808730 | | AgCdO | | | | 230VAC | 5-1393149-7 |
| RM809024 | | AgCdO | | DIN-snap-on | DC-coil | 24VDC | 5-1393149-8 |
| RM809615 | | AgCdO | | vertical | AC-coil | 115VAC | 3-1393147-8 |
| RM809730 | | AgCdO | | | | 230VAC | 3-1393147-9 |
| RM835024 | | AgCdO | With | mounting brackets | DC-coil | 24VDC | 4-1393147-1 |
| RM835524 | | AgCdO | test button | quick c. 6.3 mm | AC-coil | 24VAC | 4-1393147-3 |
| RM835615 | | AgCdO | | | | 115VAC | 4-1393147-4 |
| RM835730 | | AgCdO | | | | 230VAC | 4-1393147-6 |
| RM838024 | | AgCdO | | DIN-snap-on | DC-coil | 24VDC | 4-1393147-8 |
| RM838524 | | AgCdO | | horizontal | AC-coil | 24VAC | 5-1393147-0 |
| RM838730 | | AgCdO | | | | 230VAC | 5-1393147-1 |
| RM839024 | | AgCdO | | DIN-snap-on | DC-coil | 24VDC | 5-1393147-4 |
| RM839524 | | AgCdO | | vertical | AC-coil | 24VAC | 5-1393147-5 |
| RM839730 | | AgCdO | | | | 230VAC | 5-1393147-6 |