

## 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,<br>with/without load, DC coil | 960/6000h <sup>-1</sup> |
| 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             |
|------------------|-------------|----------------------------------------------------------|--------------------|
| <b>IEC 61810</b> |             |                                                          |                    |
| RM8              | C (CO)      | 25 A, 250 VAC, $\cos\phi=1$ 35°C                         | 10x10 <sup>3</sup> |
| RM82             | C (CO)      | 25 A, 250 VAC, $\cos\phi=1$ DC-coil, 65°C                | 10x10 <sup>3</sup> |
| <b>UL 508</b>    |             |                                                          |                    |
| RM80             | A/B (NO/NC) | 25 A, 240 VAC, 1 phase per pole,<br>general purpose 40°C | 6x10 <sup>3</sup>  |
| RM8              | A/B (NO/NC) | 25 A, 415 VAC, resistive, 45°C                           | 10x10 <sup>3</sup> |
| RM82             | A/B (NO/NC) | 16 A, 415 VAC, resistive, 70°C                           | 30x10 <sup>3</sup> |
| RM82             | A/B (NO/NC) | 240 VAC, 1phase, 2HP, 50°C                               | 6x10 <sup>3</sup>  |

Mechanical endurance 10x10<sup>6</sup> 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<br>bipolar | Coil code<br>PD <sup>3)</sup> | LED+<br>PD <sup>3)</sup> | Rated<br>voltage<br>VDC | Coil<br>resistance<br>$\Omega \pm 10\%^{(1)(2)}$ | Rated coil<br>power<br>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 <sup>(1)</sup>                             | 1.2                      |
| 221 | N21            | 2C1                           | NC1                      | 220                     | 40000 <sup>(2)</sup>                             | 1.2                      |

Operate voltage, DC coil 75% of rated coil voltage

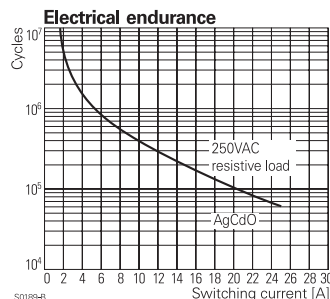
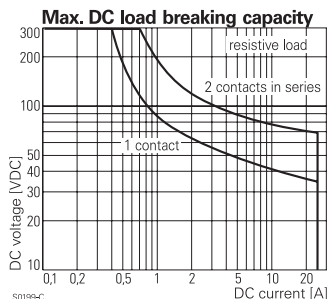
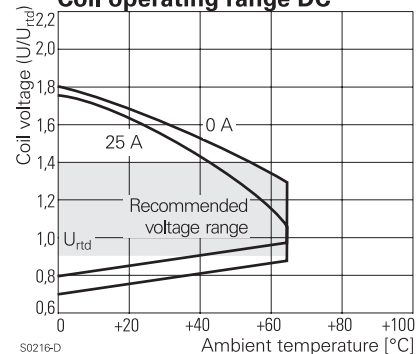
Release voltage, DC coil 10% of rated coil voltage

1) Coil resistance  $\pm 12\%$ , 2) Coil resistance  $\pm 15\%$ .

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   | VAC           | 50/60Hz         | 50/60Hz         | $\Omega \pm 10\%^{(2)}$ | 50/60Hz 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 <sup>(2)</sup>    | 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 $\mu$ s) |
| between adjacent contacts          | 6000V(1.2/50 $\mu$ 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                  |

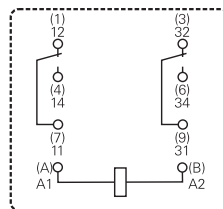
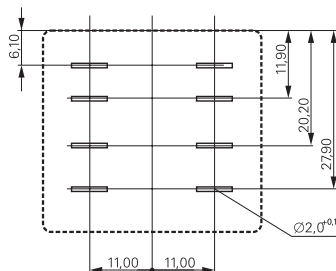
**Other Data**

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

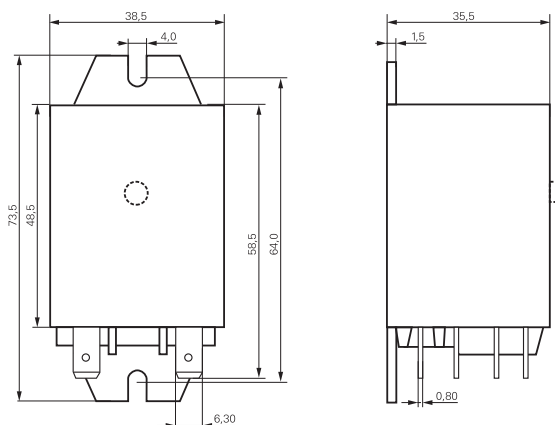
**Terminal assignment**

Bottom view on pins



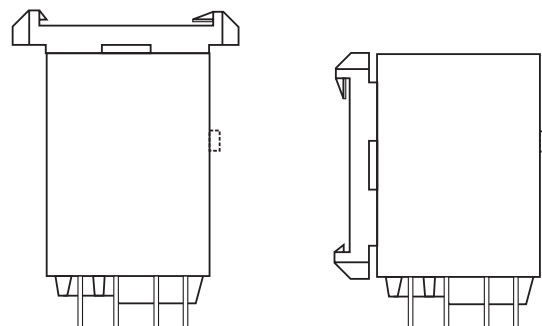
**Dimensions**

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**

|                                                |                                                                              |
|------------------------------------------------|------------------------------------------------------------------------------|
| <b>Type</b>                                    |                                                                              |
| RM Power relay RM8                             |                                                                              |
| <b>Contact configuration</b>                   |                                                                              |
| 8 2 form C contacts (2 CO), 25A                |                                                                              |
| <b>Version</b>                                 |                                                                              |
| 0                                              | AgCdO, without test button                                                   |
| 3                                              | AgCdO, with test button                                                      |
| 2                                              | AgNi90/10, without test button                                               |
| 7                                              | AgNi90/10, with test button                                                  |
| <b>Enclosure</b>                               |                                                                              |
| 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   |
| <b>Coil</b>                                    |                                                                              |
| Coil code: please refer to coil versions table |                                                                              |

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