

**Power Relay RM C/D**

- 1 pole 30/32 A, 1 form X, double make, NO or 1 form Z, double make + double break, NO + NC
- Switching capacity up to 12800VA
- DC or AC coil
- Push-to-test button
- Chassis mount

Typical applications  
Battery chargers, heating control.



**Approvals**

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

| Contact Data  | RMC                      | RMD               |
|---|--------------------------|-------------------|
| Contact arrangement                                   | 1 form Z,<br>1 NO + 1 NC | 1 form X,<br>1 NO |
| Rated voltage   | 400VAC                   |                   |
| Max. switching voltage                                | 440VAC                   |                   |
| Rated current   | 30A/32A (VDE)            |                   |
| Limiting making current, max. 20ms                    | 60A                      |                   |
| Switching power                                       | 12000VA                  |                   |
| Contact material                                      | AgNi 90/10               |                   |
| Contact style   | single bridging contact  |                   |
| Min. recommended contact load                         | 24VDC/100mA              |                   |
| Frequency of operation,<br>with/without load, DC coil | 360/6000h <sup>-1</sup>  |                   |
| Operate/release time max., DC coil                    | 20/20ms                  |                   |
| Bounce time max., form A/form B, DC coil              | 4/6ms                    |                   |

**Contact ratings**

| Type                 | Contact             | Load                                | Cycles             |
|----------------------|---------------------|-------------------------------------|--------------------|
| <b>EN 61810</b>      |                     |                                     |                    |
| RMC/D                | X of Z (NO)         |                                     |                    |
|                      | AgNi DC coil        | 32A, 400VAC res. 40°C               | 20x10 <sup>3</sup> |
| RMC                  | Y of Z (NC), AgNi   | 32A, 400VAC res. 40°C               | 10x10 <sup>3</sup> |
| RMC/D                | X of Z (NO)         |                                     |                    |
|                      | AgNi DC coil        | 30A, 400VAC res. 50°C               | 10x10 <sup>3</sup> |
| RMC/D                | X of Z (NO)         |                                     |                    |
|                      | AgNi AC coil        | 30A, 400VAC res. 40°C               | 10x10 <sup>3</sup> |
| <b>UL 508</b>        |                     |                                     |                    |
| RMC/D                | X/Y (NO/NC)         | 30 A, 277 VAC, general purpose 50°C | 10x10 <sup>3</sup> |
| RMC/D                | X/Y (NO/NC)         | 30 A, 415 VAC, resistive 50°C       | 10x10 <sup>3</sup> |
| RMC/D                | X (of Z / NO), AgNi | 120 VAC, 0,75 HP 50°C               | 10x10 <sup>3</sup> |
| RMC/D                | X/Y (NO/NC)         | 240 VAC, 2 HP 50°C                  | 6x10 <sup>3</sup>  |
| Mechanical endurance |                     |                                     |                    |
|                      | DC coil             | 10x10 <sup>6</sup> operations       |                    |
|                      | AC coil             | 10x10 <sup>6</sup> operations       |                    |

**Coil Data**

|                                     |                               |
|-------------------------------------|-------------------------------|
| Coil voltage range                  | 6 to 220 VDC<br>12 to 400 VAC |
| Operative range, IEC 61810          | 2                             |
| Coil insulation system according UL | class 130 (B)                 |

**Coil versions, DC coil**

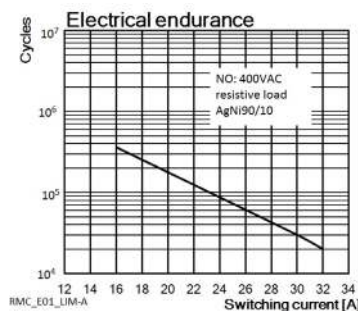
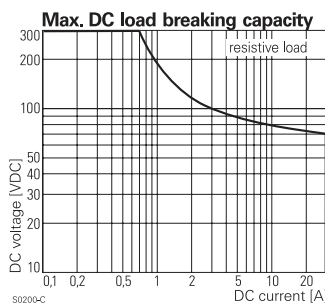
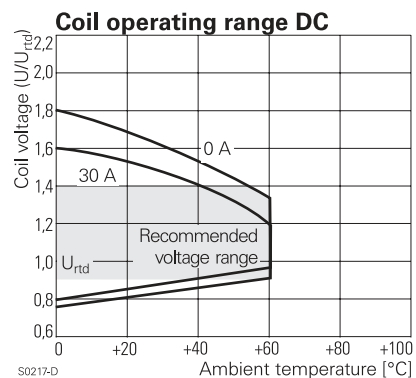
| STD | LED bipolar | Coil code | LED+ PD <sup>3)</sup> | LED- PD <sup>3)</sup> | Rated voltage VDC | Coil resistance Ω±10% <sup>1)2)</sup> | Rated coil power W |
|-----|-------------|-----------|-----------------------|-----------------------|-------------------|---------------------------------------|--------------------|
| 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 <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 ±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.



**Power Relay RM C/D (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         | $\Omega \pm 10\%^{12)}$ | 50/60Hz          |
|           | VAC           | VAC             | VAC             |                         | VA               |

**Coil versions, AC-coil, RMC, RMD**

|     |     |     |             |       |                     |            |
|-----|-----|-----|-------------|-------|---------------------|------------|
| 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**

|                                    | RMC                    | RMD      |
|------------------------------------|------------------------|----------|
| Initial dielectric strength        |                        |          |
| between open contacts              | 1500Vrms               | 2000Vrms |
| between contact and coil           | 2500Vrms               | 2500Vrms |
| Initial surge withstand voltage    |                        |          |
| between contact and coil           | 6000V (1.2/50 $\mu$ s) |          |
| Clearance/creepage                 |                        |          |
| between contact and coil           | $\geq 4.0/14.9$ mm     |          |
| Material group of insulation parts | IIIa                   |          |

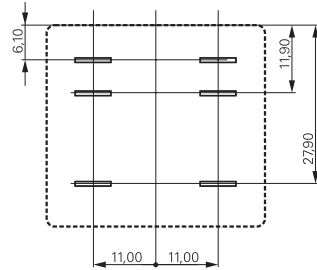
**Other Data**

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)

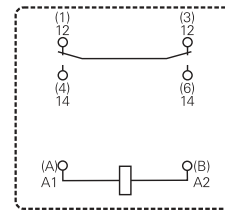
|   |                          |
|---|--------------------------|
| Ambient temperature                                       |                          |
| for mounting/handling                                     | -20 to +40°C             |
| in operation  |                          |
| DC coil   | -40 to +60°C             |
| AC coil   | -40 to +40°C             |
| Mounting distance   | > 50mm                   |
| Cold storage, IEC 60068-2-1                               | Test Aa (-40°C/16h)      |
| Dry heat, IEC 60068-2-2                                   | Test B (+85°C/16h)       |
| Damp heat cyclic, IEC 60068-2-30, Db, Variant 1           | 12/12h +25/55°C 2 cycles |
| Category of environmental protection IEC 61810            | RT1 - dust protected     |
| Vibration resistance (functional) form A (NO)/form B (NC) | 10/5 g, 30 to 150Hz      |
| Terminal type   | quick connect (QC)       |
| Cover retention   |                          |
| pull force  | 100N                     |
| push force  | 100N                     |
| Weight  | 81g                      |
| Packaging unit  | 10 pcs.                  |

**Terminal assignment**

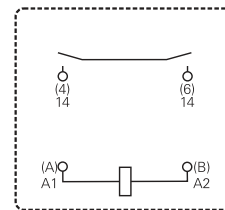
Bottom view on pins



1 form Z contact (1 NO + 1 NC), RMC



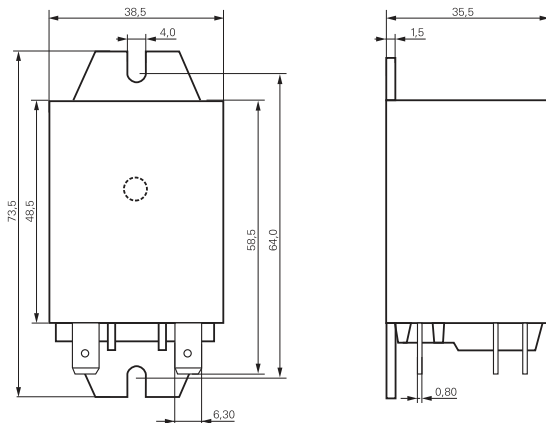
1 form X contact (1 NO), RMD



**Dimensions**

Dimensions in mm

Cover with mounting brackets, 6.3mm quick connect terminals



**Power Relay RM C/D** (Continued)

|  |  |  |          |          |          |            |
|--|--|--|----------|----------|----------|------------|
| <b>Product code structure</b>  |  | Typical product code   |          |          |          |            |
|  |  | <b>RM</b>  | <b>D</b> | <b>2</b> | <b>5</b> | <b>730</b> |
| <b>Type</b>  |  |  |          |          |          |            |
| RM Power Relay RMC/D   |  |  |          |          |          |            |
| <b>Contact arrangement</b>   |  |  |          |          |          |            |
| <b>C</b> 1 form Z (1 NO + 1 NC), 30A (32A at AgNi versions with DC coil)                         |  |  |          |          |          |            |
| <b>D</b> 1 form X (1 NO), 30A (32A at AgNi versions with DC coil)                                |  |  |          |          |          |            |
| <b>Version</b>   |  |  |          |          |          |            |
| <b>0</b> Discontinued: AgCdO, without test button <sup>1)</sup>                                  |  | <b>3</b> Discontinued: AgCdO, with test button <sup>1)</sup> |          |          |          |            |
| <b>2</b> AgNi90/10, without test button  |  | <b>7</b> AgNi90/10, with test button                         |          |          |          |            |
| <b>Enclosure</b>   |  |  |          |          |          |            |
| <b>5</b> Cover with mounting brackets, 6.3mm quick connect terminals                             |  |  |          |          |          |            |
| <b>9</b> Cover with DIN-snap-on attachment, vertical, 6.3mm quick connect terminals (on request) |  |  |          |          |          |            |
| <b>Coil</b>  |  |  |          |          |          |            |
| Coil code: please refer to coil versions table   |  |  |          |          |          |            |

1) AgCdO contacts are discontinued and replaced with AgNi contacts (see PCN E-18-003016)

| Product code | Contacts     | Cont. material | Version     | Enclosure         | Coil    | Coil   | Part number |
|--------------|--------------|----------------|-------------|-------------------|---------|--------|-------------|
| RMC25024     | 1 form Z,    | AgNi           | Without     | Mounting brackets | DC-coil | 24VDC  | 5-1415546-6 |
| RMC25048     | 1 NO + 1 NC  | AgNi           | test button | quick c. 6.3 mm   | DC-coil | 48VAC  | 5-1415546-7 |
| RMC25730     | Contacts     | AgNi           |             |                   | AC-coil | 230VAC | 5-1415544-9 |
| RMD25012     | 1 form X     | AgNi           |             |                   | AC-coil | 12VDC  | 5-1415546-8 |
| RMD25024     | 1 NO contact | AgNi           |             |                   | DC-coil | 24VDC  | 5-1415546-9 |
| RMD25730     |              | AgNi           |             |                   | DC-coil | 230VAC | 6-1415544-0 |