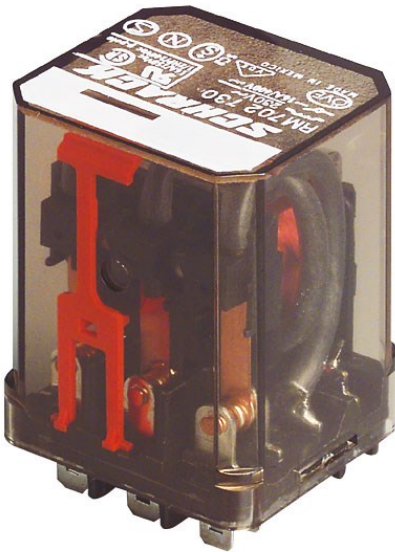


■ Data sheet: Power Relay RM 2/3/7



■ SCHRACK-INFO

- 2/3 pole 10/16A, 2 form C (CO) or 3 form C (CO) contacts
- Switching capacity up to 6000VA
- DC or AC coil
- Mechanical indicator
- Push-to-test button
- Plug-in version, PCB terminals, chassis- or DIN-rail mount

■ Technical data

| Insulation Data | RM2 | RM3 | RM7 |
|---|----------------------|----------------------|----------------------|
| Dielectric strength | | | |
| between open contacts | 1500V _{rms} | 1500V _{rms} | 1500V _{rms} |
| between contact and coil | 2500V _{rms} | 2500V _{rms} | 2500V _{rms} |
| between adjacent contacts | 2500V _{rms} | 2500V _{rms} | 2500V _{rms} |
| Clearance / creepage coil-contact circuit | | | |
| between contact and coil | ≥4.0/14.9mm | | |
| between adjacent contacts | ≥6.1/7.3mm | | |
| Material group of insulation parts | IIIa | | |

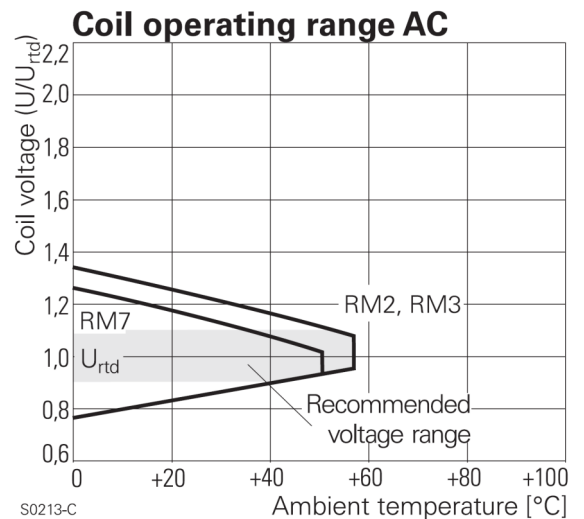
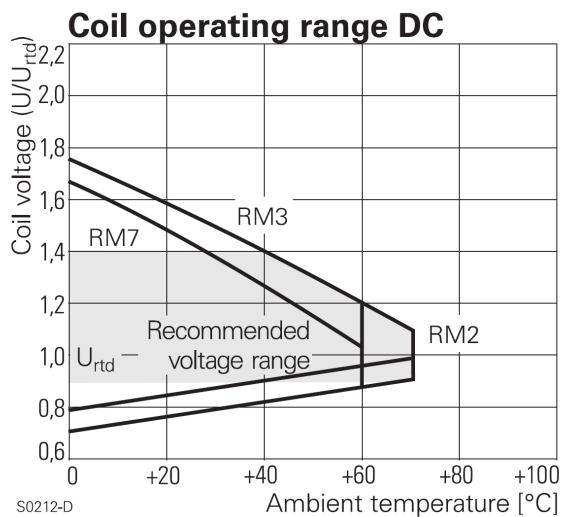
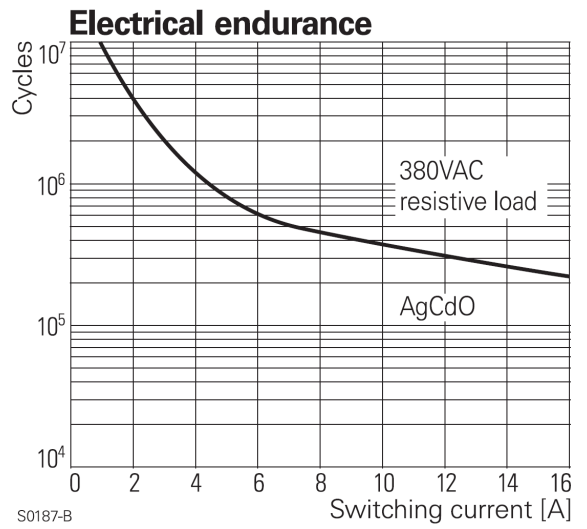
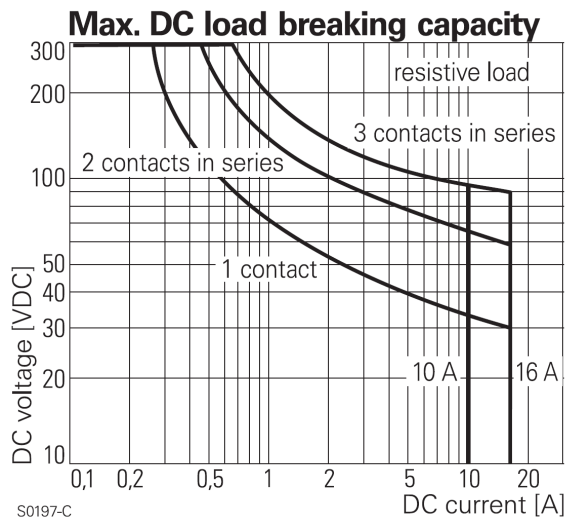
| | | | |
|---|---------------------------------|------------------|------------------|
| Initial surge withstand voltage | | | |
| between contact and coil | 5000V | 4000V | 4000V |
| Other Data | RM2 | RM3 | RM7 |
| Ambient temperature for mounting/handling in operation | -20 to 40 °C | | |
| DC-Coil | -40 to 70 °C | -40 to 70 °C | -40 to 60 °C |
| AC-Coil | -40 to 60 °C | -40 to 55 °C | -40 to 50 °C |
| Cold storage, IEC 60068-2-1 | 16h/-40°C | | |
| Dry heat, IEC 60068-2-1 | 16h/+85°C | | |
| Category of environmental protection (IEC 61810) | RTI- dust protected | | |
| Vibration resistance (functional) form A(NO) form B(NC) | 5g/2g | 5g/2g | 12g/4g |
| Terminal type | PCB-THT, PLUG-IN, quick-connect | | |
| Cover retention, pull/push force | 100/100N | | |
| Weight | 81g | | |
| Resistance to soldering heat THT IEC 60068-2-20 | 270°C/10s | | |
| Packaging unit | 10/25 pcs. | | |
| Contact Data | RM2 | RM3 | RM7 |
| Contact arrangement | 2 form C 2 CO | 3 form C 3 CO | 3 form C 3 CO |
| Rated voltage/Max. switching voltage | 400/440V AC | | |
| Rated current | 16A | 10A | 16A |
| Limiting making current, max. 20ms | 40A | 40A | 40A |
| Switching power | 6000VA | 3800VA | 6000VA |
| Contact material | AgNi90/10 | | |
| Min. recommended contact load | 24VDC/100mA | | |
| Frequency of operation, with/without load | 960/6000h ⁻¹ | | |
| Operate/release time max., DC coil | 15/10ms | | |
| Bounce time max., DC coil, form A/form B | 4/10ms | | |
| Mechanical endurance | | | |
| DC- coil | 20x10 ⁶ operations | | |

| Contact ratings | | | |
|----------------------|-------------|--|---------------------|
| Type | Contact | Load | Cycles |
| IEC 61810 | | | |
| RM20 | C(CO) | 16A, 400VAC, $\cos\varphi=1$, 35°C | 100x10 ³ |
| RM22 | C(CO) | 16A, 400VAC, $\cos\varphi=1$, DC-coil, 70°C | 50x10 ³ |
| RM22 | C(CO) | 16A, 400VAC, $\cos\varphi=1$, AC-coil, 60°C | 100x10 ³ |
| RM3 | C(CO) | 16A, 400VAC, $\cos\varphi=1$, 35°C | 100x10 ³ |
| RM70 | C(CO) | 16A, 400VAC, $\cos\varphi=1$, 35°C | 100x10 ³ |
| RM70 | C(CO) | 16A, 400VAC, $\cos\varphi=1$, 50°C | 50x10 ³ |
| UL 508 | | | |
| RM2 | A(NO) | 16A, 277VAC, general purpose, 70°C | 30x10 ³ |
| RM2 | A(NO) | 16A, 240VAC, 1HP, 70°C | 6.050 |
| RM2 | A(NO) | 16A, 415VAC, resistive, 70°C | 100x10 ³ |
| RM3 | C(NO) | 10A, 415VAC, resistive, DC-coil, 70°C | 100x10 ³ |
| RM3 | C(NO) | 10A, 415VAC, resistive, AC-coil, 55°C | 100x10 ³ |
| RM3 | A(NO)/B(NC) | 10A, 277VAC, gen.purp., DC-coil, 70°C | 30x10 ³ |
| RM3 | A(NO)/B(NC) | 10A, 277VAC, gen.purp., AC-coil, 55°C | 30x10 ³ |
| RM7 | A(NO) | 16A, 415VAC, resistive, 50°C | 100x10 ³ |
| RM7 | A(NO)/B(NC) | 16A, 277VAC, general purpose, 50°C | 30x10 ³ |
| RM72 | A(NO) | 250VAC/1.5HP(3ph.)DC-coil, 70°C | 10x10 ³ |
| RM72 | A(NO) | 28VDC/16A general purpose, 40°C | 6x10 ³ |
| IEC 60947-5-1 | | | |
| RM72 | A(NO) | 16A, AC-15 400VAC/5A, same pol., 25°C | 6.050 |

| Coil Data | |
|-------------------------------------|---------------------------|
| Coil voltage range | |
| DC-Coil | 6 to 220 VDC |
| Operative range, IEC 61810 | 2 |
| Coil insulation system according UL | class 130(B) |
| Operate voltage, DC coil | 75% of rated coil voltage |
| Release voltage, DC coil | 10% of rated coil voltage |

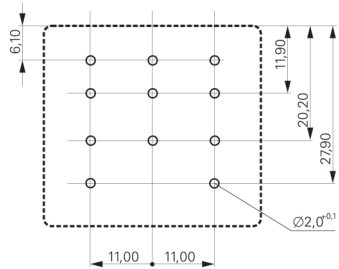
| Coil version, DC coil | | | | | | |
|---|-------------|-------------------------|------------------------|--|---------------------|--------------------|
| Coil code | | | | Rated voltage VDC | Coil resistance | Rated coil power W |
| STD | LED bipolar | PD ³⁾ | LED + PD ³⁾ | | | |
| Coil versions, DC coil, RM2, RM3 | | | | | | |
| 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 |
| Coil versions, DC coil, RM7 | | | | | | |
| 006 | L06 | 0A6 | LA6 | 6 | 24 | 1.5 |
| 012 | L12 | 0B2 | LB2 | 12 | 86 | 1.7 |
| 024 | L24 | 0C4 | LC4 | 24 | 345 | 1.7 |
| 048 | L48 | 0E8 | LE8 | 48 | 1340 | 1.7 |
| 60 | L60 | 0G0 | LG0 | 60 | 2200 | 1.6 |
| 110 | M10 | 1B0 | MB0 | 110 | 7300 | 1.7 |
| 221 | N21 | 2C1 | NC1 | 220 | 30000 ²⁾ | 1.6 |
| 1) Coil resistance ±12% | | 2) Coil resistance ±15% | | 3) Protection diode PD; standard polarity: +A1 / -A2 | | |

| Coil version, AC coil | | | | | | |
|---|-----|------------------------------------|-----------------------------------|-----------------------------------|--|-----------------------------------|
| Coil code | | Rated voltage VAC | Operate voltage 50/60Hz VAC | Release voltage 50/60Hz VAC | Coil resistance W±10% ¹⁾²⁾ | Rated coil power 50/60Hz VA |
| STD | LED | | | | | |
| Coil version, AC- coil, RM2, RM3 | | | | | | |
| 506 | R06 | 6 | 4.8/5.1 | 1.8 | 5.3 | 2.29/1.98 |
| 512 | R12 | 12 | 9.6/10.2 | 3.6 | 24 | 2.19/1.86 |
| 524 | R24 | 24 | 19.2/20.4 | 7.2 | 86 | 2.26/1.95 |
| 548 | R48 | 48 | 38.4/40.8 | 14.4 | 345 | 2.28/1.97 |
| 560 | R60 | 60 | 48.0/51.0 | 18.0 | 544 | 2.27/1.96 |
| 615 | S15 | 115 | 92.0/97.8 | 34.5 | 2000 | 2.37/2.00 |
| 730 | T30 | 230 | 184.0/195.5 | 69.0 | 8300 ¹⁾ | 2.32/1.96 |
| 900 | V00 | 400 | 320.0/340.0 | 120.0 | 27500 ²⁾ | 2.31/1.96 |
| Coil version, AC- coil, RM7 | | | | | | |
| 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 |
| ¹⁾ Coil resistance ±12% | | ²⁾ Coil resistance ±15% | | | | |



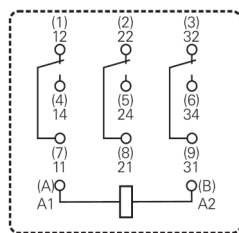
PCB layout / terminal assignment

Bottom view on pins



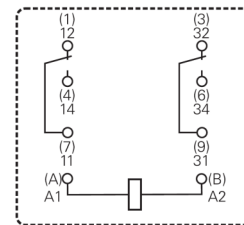
S0269-AA

3 form C (CO) contacts



S0269-AB

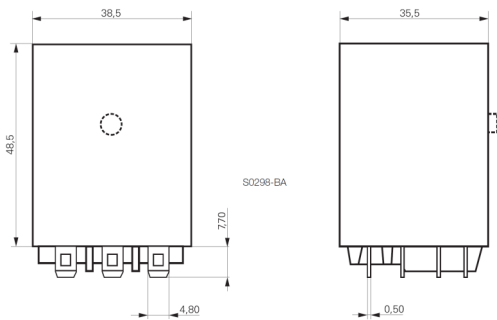
2 form C (CO) contacts



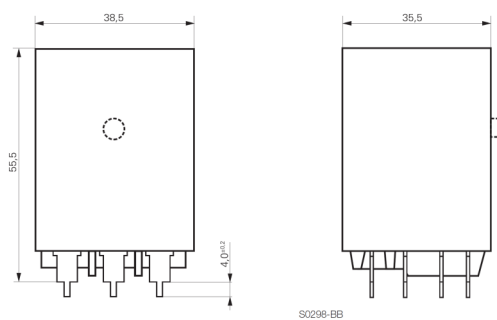
S0269-AD

Dimensions

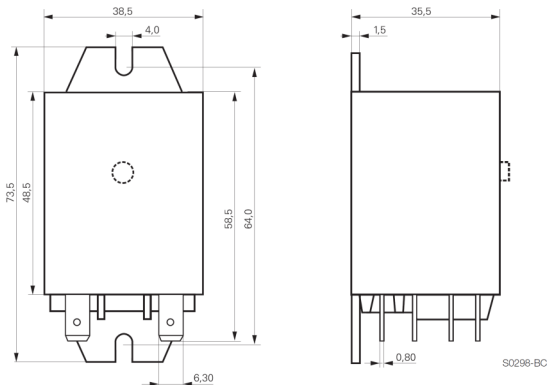
Plain cover, plug-in version



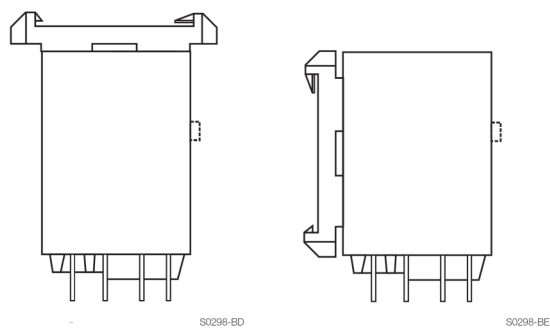
PCB version



Cover with mounting brackets, 6.3mm quick connect (4.8mm available)



Cover with DIN-snap-on attachment (6.3mm quick connect only)
horizontal vertical



| | | | | | | | | | | |
|-------------------------------|---|--|--|--|--|----|---|---|---|-----|
| Product code structure | Typical product code | | | | | RM | 7 | 2 | 2 | 730 |
| Type | RMPower Relay RM 2/3/7 | | | | | | | | | |
| Contact configuration | 2 2 form C contacts (2 CO contacts) 16A | | 7 7 form C contacts (3 CO contacts), 16A | | | | | | | |
| | 3 3 form C contacts (3 CO contacts). 10A | | | | | | | | | |
| Version | 2 AgNi90/10, without test button | | 7 AgNi90/10, with test button | | | | | | | |
| Enclosure | 2 Plain cover, 4.8mm quick connect terminals 3 Cover with mounting brackets, 4.8mm quick connect terminals 5 Cover with mounting brackets, 6.3mm quick connect terminals 7 PCB version 8 Cover with DIN-snap-on attachment, horizontal, 6.3mm quick connect terminals 9 Cover with DIN-snap-on attachment, vertical. 6.3 quick connect terminals | | | | | | | | | |
| Coil | Coil code: please refer to coil versions table | | | | | | | | | |

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

| DESCRIPTION | ORDER NR. |
|--|------------|
| Power Relay 3 C/O 24VDC 16A, plain cover, AMP Faston 187 | RM722024-- |
| Power Relay 3 C/O 12VDC 16A, plain cover, AMP Faston 187 | RM772012-- |
| Power Relay 3 C/O 24VDC 16A, plain cover, AMP Faston 187 | RM772024-- |
| Power Relay 3 C/O 60VDC 16A, plain cover, AMP Faston 187 | RM772060-- |
| Power Relay 3 C/O 24VAC 16A, plain cover, AMP Faston 187 | RM772524-- |
| Power Relay 3 C/O 230VAC 16A, plain cover, Faston 187 | RM772730-- |
| Power Relay 3 C/O 400VAC 16A, plain cover, Faston 187 | RM772900-- |
| Power Relay 3 C/O 230VAC 16A, mounting bracket | RM775730-- |
| Power Relay 3 C/O 24VDC 16A, horizontal, AMP Faston 250 | RM778024-- |
| Power Relay 3 C/O 230VAC 16A, horizontal, AMP Faston 250 | RM778730-- |
| Power Relay 3 C/O 230VAC 16A, vertical, AMP Faston 250 | RM779730-- |
| Socket with screw type terminaly black 11-pole | RM78705--- |