

# Power Relay RM 2/3/7

2 / 3 pole 10 / 16 A, DC- or AC-coil



### Features

- 2 C/O or 3 C/O contacts
- Switching capacity up to 6000 VA
- DC- or AC-coil
- Mechanical indicator
- Push-to-test-button
- Plug-in version, PCB terminals, chassis- or DIN-rail mount

### Applications

Elevator control, power supplies



Technical data of approved types on request

Contact data	RM 2	RM 3	RM 7
Configuration	2 C/O	3 C/O	3 C/O
Type of contact	single contact		
Rated current	16 A	10 A	16 A
Rated voltage / max.breaking voltage AC	380 Vac / 440 Vac		
Maximum breaking capacity AC	6000 VA	3800 VA	6000 VA
Make current	40 A	40 A	40 A
Contact material	AgCdO		

### Contact ratings

Type	Load	Standard
RM2	1hp, 240 Vac, per contact	UL 508
RM7	1.5hp, 240 Vac, 3-phase	UL 508
RM7	15 A, 250 Vac, per contact	UL 508
RM3	1 / 2hp, 240 Vac, per contact	UL 508
RM3	10 A, 240 Vac, per contact	UL 508

Coil data		RM 2	RM 3	RM 7
Nominal voltage	DC coil		6...220 Vdc	
	AC coil		6...400 Vac	
Nominal coil power	DC coil	1.2 W	1.2 W	1.6 W
	AC coil	2.3 VA	2.3 VA	2.8 VA

### Coil versions, DC-coil, RM2, RM3

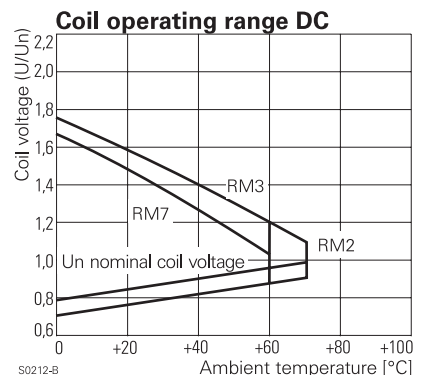
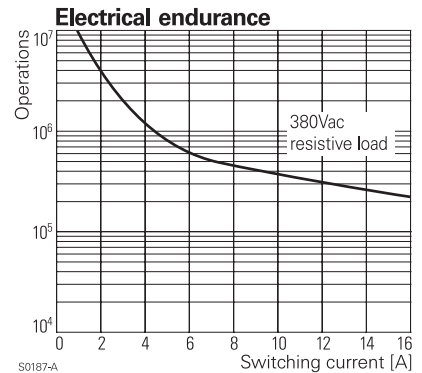
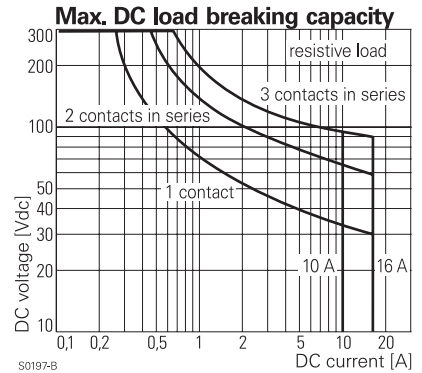
Coil code	Nominal voltage	Pull-in voltage	Release voltage	Coil resistance	Coil current
STD bipolar	Vdc	Vdc	Vdc	$\Omega$	mA
006	6	4.5	0.6	32±10%	187.5
012	12	9.0	1.2	110±10%	109.1
<b>024</b>	<b>24</b>	<b>18.0</b>	<b>2.4</b>	<b>475±10%</b>	<b>50.5</b>
048	48	36.0	4.8	2000±10%	24.0
060	60	45.0	6.0	2850±10%	21.1
110	110	82.5	11.0	10000±12%	11.0
221	220	165.0	22.0	40000±15%	5.5

### Coil versions, DC-coil, RM7

Coil code	Nominal voltage	Pull-in voltage	Release voltage	Coil resistance	Coil current
006	6	4.5	0.6	24±10%	250.0
012	12	9.0	1.2	86±10%	139.5
<b>024</b>	<b>24</b>	<b>18.0</b>	<b>2.4</b>	<b>345±10%</b>	<b>69.6</b>
048	48	36.0	4.8	1340±10%	35.8
060	60	45.0	6.0	2200±10%	27.3
110	110	82.5	11.0	7300±10%	15.1
221	220	165.0	22.0	30000±15%	7.3

All figures are given for coil without preenergization, at ambient temperature +20°C

\* Protection diode PD; standard polarity: +A1 / -A2



# Power Relay RM 2/3/7

2 / 3 pole 10 / 16 A, DC- or AC-coil

### Coil versions, AC-coil, RM2, RM3

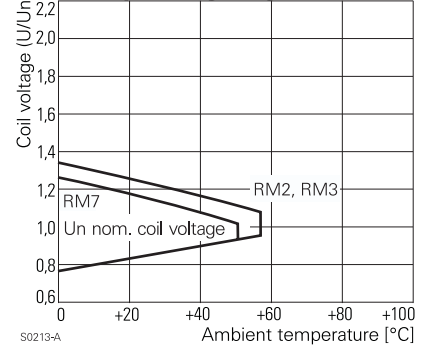
Coil code	LED	Nominal voltage Vac	Pull-in voltage Vac	Release voltage Vac	Coil resistance $\Omega$	Coil current mA
506	R06	6	4.8	2.4	5.3±10%	381.7
512	R12	12	9.6	4.8	24±10%	182.5
<b>524</b>	<b>R24</b>	<b>24</b>	<b>19.2</b>	<b>9.6</b>	<b>86±10%</b>	<b>94.2</b>
548	R48	48	38.4	19.2	345±10%	47.5
560	R60	60	48.0	24.0	544±10%	37.8
615	S15	115	92.0	46.0	2000±10%	20.6
<b>730</b>	<b>T30</b>	<b>230</b>	<b>184.0</b>	<b>92.0</b>	<b>8300±12%</b>	<b>10.1</b>
900	V00	400	320.0	160.0	27500±15%	5.8

### Coil versions, AC-coil, RM7

506	R06	6	4.8	2.4	4.7±10%	476.7
512	R12	12	9.6	4.8	19.5±10%	225.8
<b>524</b>	<b>R24</b>	<b>24</b>	<b>19.2</b>	<b>9.6</b>	<b>80±10%</b>	<b>109.2</b>
548	R48	48	38.4	19.2	320±10%	54.2
560	R60	60	48.0	24.0	500±10%	43.7
615	S15	115	92.0	46.0	1850±10%	23.0
<b>730</b>	<b>T30</b>	<b>230</b>	<b>184.0</b>	<b>92.0</b>	<b>7500±10%</b>	<b>11.7</b>
900	V00	400	320.0	160.0	23500±15%	6.5

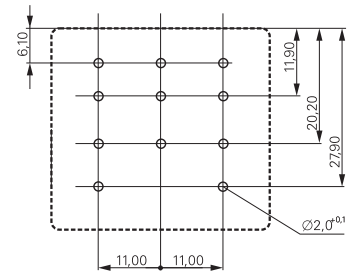
All figures are given for coil without preenergization, at ambient temperature +20°C

### Coil operating range AC



### PCB layout / terminal assignment

View on solder pins  
Dimensions in mm



S0269-AA

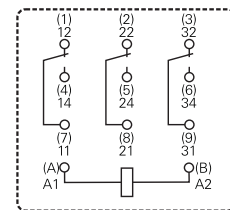
### Insulation

Dielectric strength	coil-contacts	2500 V <sub>rms</sub>
	open contact circuit	1500 V <sub>rms</sub>
	adjacent contacts	2500 V <sub>rms</sub>
Clearance / creepage	≥ 3.5 / 6 mm	
Insulation to VDE 0110b (2/79)	Insulation category / reference voltage C / 400 with fully isolated Faston connectors	

### Other data

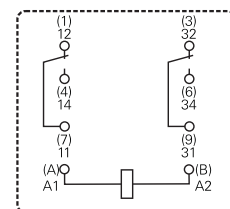
	RM 2	RM 3	RM 7
Ambient temperature DC-coil	-45...+70 °C	-45...+60 °C	-45...+60 °C
Ambient temperature AC-coil	-45...+55 °C	-45...+55 °C	-45...+50 °C
Mechanical life	>20x10 <sup>6</sup> operations		
Max. switching rate at rated- / minimum load	16 min <sup>-1</sup> / 100 min <sup>-1</sup>		
Operate- / release time	approx. 15 / 10 ms		
Bounce time	approx. 3 ms		
Vibration resistance N/O / N/C contact	>5 / 2 g	>5 / 2 g	>12 / 4 g
Category of protection (IEC 61810)	RT I - dust protected		
Relay weight	81 g		
Packaging unit	10 / 25 pcs.		
Accessories	see accessories RM		

### 3 C/O contacts



S0269-AB

### 2 C/O contacts



S0269-AD

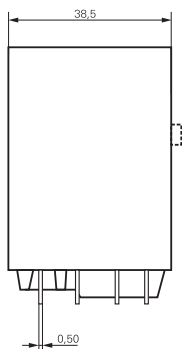
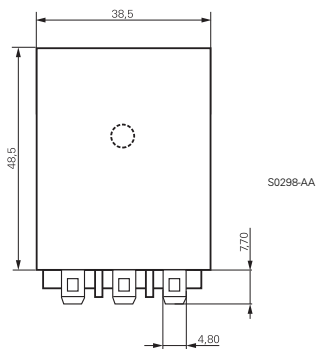
# Power Relay RM 2/3/7

2 / 3 pole 10 / 16 A, DC- or AC-coil

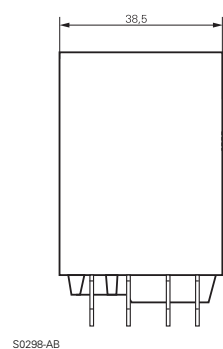
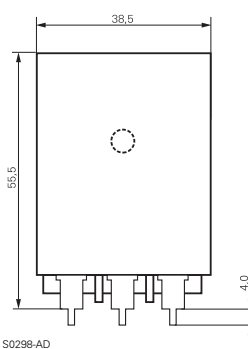
## Dimensions

Dimensions in mm

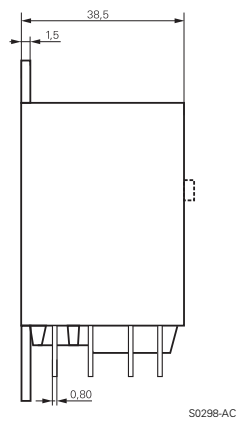
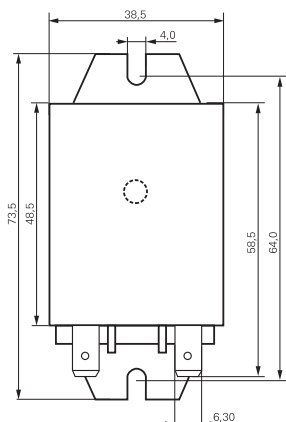
Plain cover, plug-in version



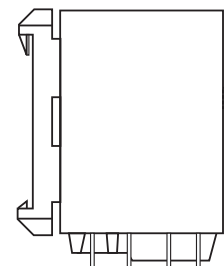
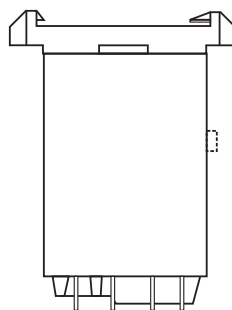
PCB version



Cover with mounting brackets, 6.3 mm Faston (4.8 mm available)



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



## Product key

Type	RM							
Contacts	2 2 C/O contacts, 16 A		7 3 C/O contacts, 16 A					
	3 3 C/O contacts, 10 A							
Version	0 without test button		3 with test button					
Enclosure	2 plain cover, 4.8mm Faston terminals 3 cover with mounting brackets, 4.8mm Faston terminals 5 cover with mounting brackets, 6.3mm Faston terminals 7 PCB version 8 cover with DIN-snap-on attachment, horizontal, 6.3mm Faston terminals 9 cover with DIN-snap-on attachment, vertical, 6.3mm Faston terminals							
Coil	Coil code: please refer to coil versions table, preferred types in bold print							

Edition: 07/2003

Rights to change data / design reserved

# Power Relay RM 2/3/7

2 / 3 pole 10 / 16 A, DC- or AC-coil

Product key	Contacts	Version	Enclosure	Coil	Coil	Part number
RM202024	2 C/O contacts 16 A	without test button	plain cover 4.8mm Faston	DC-coil	24 Vdc	8-1393149-2
RM202524				AC-coil	24 Vac	1-1393146-9
RM202615					115 Vac	2-1393146-0
RM202730					230 Vac	1-1393148-4
RM203024			mounting brackets 4.8mm Faston	DC-coil	24 Vdc	1-1393148-6
RM203524				AC-coil	24 Vac	2-1393146-5
RM203615					115 Vac	2-1393146-6
RM203730					230 Vac	2-1393146-8
RM205024			mounting brackets 6.3mm Faston	DC-coil	24 Vdc	2-1393146-9
RM205524				AC-coil	24 Vac	3-1393146-0
RM205615					115 Vac	3-1393146-1
RM205730					230 Vac	3-1393146-2
RM207024			PCB version	DC-coil	24 Vdc	3-1393146-3
RM207615				AC-coil	115 Vac	8-1393149-5
RM207730					230 Vac	3-1393146-4
RM208024			DIN-snap-on horizontal	DC-coil	24 Vdc	3-1393146-5
RM208730				AC-coil	230 Vac	8-1393149-6
RM209730			DIN vertical		230 Vac	3-1393146-6
RM232024		with test button	plain cover 4.8mm Faston	DC-coil	24 Vdc	3-1393146-8
RM232524				AC-coil	24 Vac	3-1393146-9
RM232615					115 Vac	4-1393146-0
RM232730					230 Vac	3-1393107-4
RM233024			mounting brackets 4.8mm Faston	DC-coil	24 Vdc	3-1393107-5
RM233615				AC-coil	115 Vac	4-1393146-2
RM235024			mounting brackets 6.3mm Faston	DC-coil	24 Vdc	8-1393149-8
RM235730				AC-coil	230 Vac	4-1393146-5
RM239730			DIN vertical		230 Vac	4-1393148-7
RM302024	3 C/O contacts 10 A	without test button	plain cover 4.8mm Faston	DC-coil	24 Vdc	8-1393149-9
RM302524				AC-coil	24 Vac	5-1393146-3
RM302615					115 Vac	5-1393146-4
RM302730					230 Vac	5-1419150-3
RM303024				DC-coil	24 Vdc	6-1393148-4
RM303615				AC-coil	115 Vac	5-1393146-5
RM303730					230 Vac	5-1393146-7
RM307024			PCB version	DC-coil	24 Vdc	7-1393148-2
RM307730				AC-coil	230 Vac	5-1393146-9
RM332024		with test button	mounting brackets 4.8mm Faston	DC-coil	24 Vdc	9-1393149-2
RM332524				AC-coil	24 Vac	9-1393149-3
RM332730					230 Vac	9-1393149-4
RM333024				DC-coil	24 Vdc	9-1393149-6
RM335730			mount. Br. 6.3 F. DIN horizontal	AC-coil	230 Vac	6-1393107-1
RM338730				DIN vertical		230 Vac
RM339730					230 Vac	6-1393107-2
RM702024	3 C/O contacts 16 A	without test button	plain cover 4.8mm Faston	DC-coil	24 Vdc	8-1393146-5
RM702524				AC-coil	24 Vac	0-1393844-9
RM702615					115 Vac	1-1393844-0
RM702730					230 Vac	1-1393844-1
RM703024				DC-coil	24 Vdc	1-1393844-2
RM703524				AC-coil	24 Vac	9-1393146-1
RM703615					115 Vac	9-1393146-2
RM703730					230 Vac	9-1393146-4
RM705024			mounting brackets 6.3mm Faston	DC-coil	24 Vdc	9-1393146-6
RM705524				AC-coil	24 Vac	9-1393146-7
RM705615				AC-coil	115 Vac	1-1393844-4
RM705730					230 Vac	1-1393844-5
RM707024			PCB version	DC-coil	24 Vdc	9-1393146-8
RM707524				AC-coil	24 Vac	0-1393147-1
RM707730					230 Vac	0-1393147-2
RM708024			DIN-snap-on 6.3mm Faston	DC-coil	24 Vdc	0-1393147-4
RM708730						230 Vac
RM709024				DC-coil	24 Vdc	2-1393149-2
RM709730				AC-coil	230 Vac	0-1393147-5
RM732024		with test button	mounting brackets 4.8mm Faston	DC-coil	24 Vdc	1-1393844-7
RM732524				AC-coil	24 Vac	1-1393147-0
RM732615					115 Vac	1-1393147-1
RM732730					230 Vac	1-1393844-8
RM733730					230 Vac	1-1393147-5
RM735024			mounting brackets 6.3mm Faston	DC-coil	24 Vdc	3-1393149-6
RM735524				AC-coil	24 Vac	3-1393149-7
RM735730					230 Vac	4-1393149-1
RM737730			PCB version		230 Vac	2-1393147-0
RM738024			DIN-snap-on horizontal	DC-coil	24 Vdc	2-1393844-0
RM738730				AC-coil	230 Vac	2-1393147-2
RM739024			DIN-snap-on vertical	DC-coil	24 Vdc	4-1393149-5
RM739730				AC-coil	230 Vac	2-1393844-2

Edition: 07/2003

Rights to change data / design reserved