

# 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

F0163-A

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

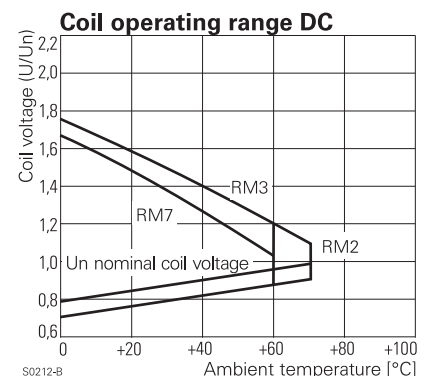
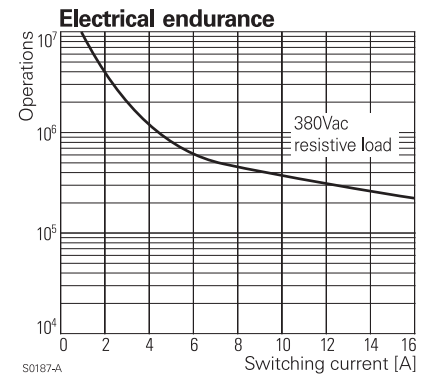
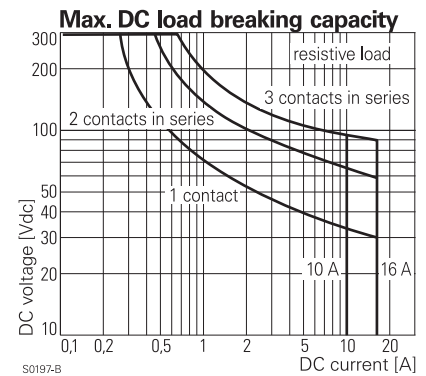
Coil code	Nominal voltage Vdc	Pull-in voltage Vdc	Release voltage Vdc	Coil resistance $\Omega$	Coil current mA
STD bipolar					
006 L06 OA6 LA6	6	4.5	0.6	32±10%	187.5
012 L12 OB2 LB2	12	9.0	1.2	110±10%	109.1
<b>024 L24 OC4 LC4</b>	<b>24</b>	<b>18.0</b>	<b>2.4</b>	<b>475±10%</b>	<b>50.5</b>
048 L48 OE8 LE8	48	36.0	4.8	2000±10%	24.0
060 L60 OG0 LG0	60	45.0	6.0	2850±10%	21.1
110 M10 1B0 MB0	110	82.5	11.0	10000±12%	11.0
221 N21 2C1 NC1	220	165.0	22.0	40000±15%	5.5

## Coil versions, DC-coil, RM7

006 L06 OA6 LA6	6	4.5	0.6	24±10%	250.0
012 L12 OB2 LB2	12	9.0	1.2	86±10%	139.5
<b>024 L24 OC4 LC4</b>	<b>24</b>	<b>18.0</b>	<b>2.4</b>	<b>345±10%</b>	<b>69.6</b>
048 L48 OE8 LE8	48	36.0	4.8	1340±10%	35.8
060 L60 OG0 LG0	60	45.0	6.0	2200±10%	27.3
110 M10 1B0 MB0	110	82.5	11.0	7300±10%	15.1
221 N21 2C1 NC1	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

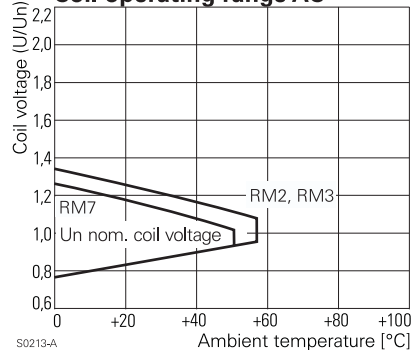
Coil code	LED	Nominal voltage Vac	Pull-in voltage Vac	Release voltage Vac	Coil resistance $\Omega$	Coil current mA
506	R06	6	4.8	2.4	$5.3 \pm 10\%$	381.7
512	R12	12	9.6	4.8	$24 \pm 10\%$	182.5
<b>524</b>	<b>R24</b>	<b>24</b>	<b>19.2</b>	<b>9.6</b>	<b><math>86 \pm 10\%</math></b>	<b>94.2</b>
548	R48	48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

## Coil versions, AC-coil, RM7

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

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

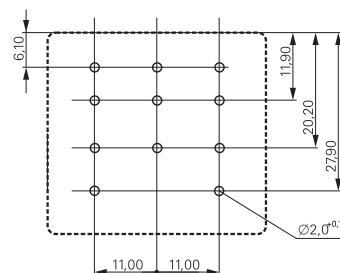
## Coil operating range AC



S0213-A

## PCB layout / terminal assignment

View on solder pins  
Dimensions in mm



S0269-AA

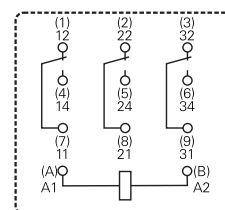
## Insulation

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

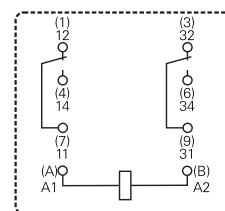
	RM 2	RM 3	RM 7
Ambient temperature DC-coil	-45...+70 °C	-45...+60 °C	-45...+60 °C
AC-coil	-45...+55 °C	-45...+55 °C	-45...+50 °C
Mechanical life	>20x10 <sup>6</sup> operations		
Max. switching rate at rated- / minimum load	16 min <sup>-1</sup> / 100 min <sup>-1</sup>		
Operate- / release time	approx. 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

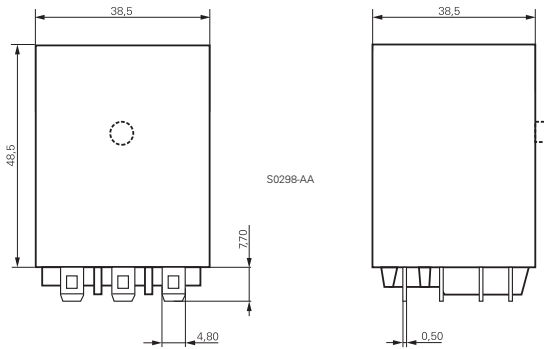
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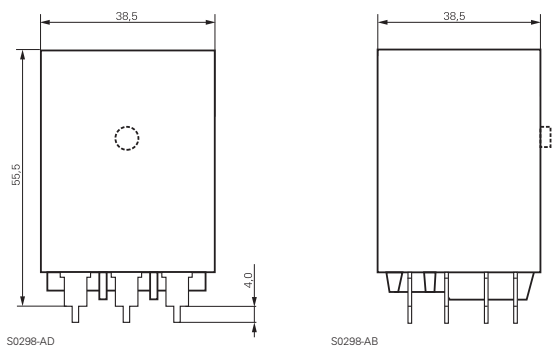
## Dimensions

Dimensions in mm

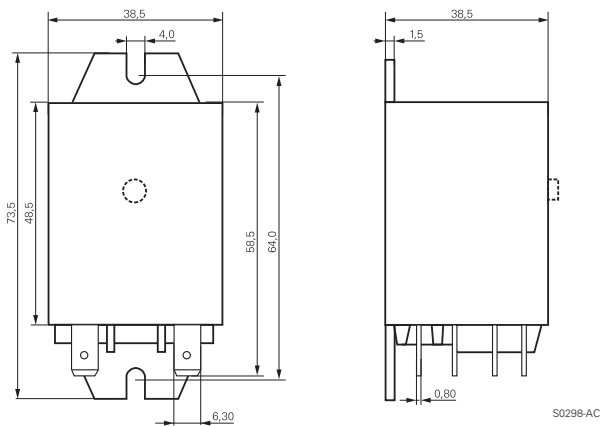
Plain cover, plug-in version



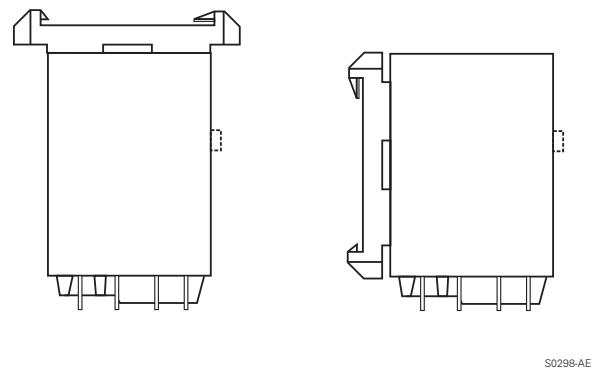
PCB version



Cover with mounting brackets, FASTON 250 (187 available)



Cover with DIN-snap-on attachment (FASTON 250 only)  
horizontal vertical



## Product key

Type

Contacts

**2** 2 C/O contacts, 16 A

**3** 3 C/O contacts, 10 A

**7** 3 C/O contacts, 16 A

Version

**0** without test button

**3** with test button

Enclosure

**2** plain cover, AMP-Faston 187

**3** cover with mounting brackets, AMP-Faston 187

**5** cover with mounting brackets, AMP-Faston 250

**7** PCB version

**8** cover with DIN-snap-on attachment, horizontal, AMP-Faston 250

**9** cover with DIN-snap-on attachment, vertical, AMP-Faston 250

Coil

Coil code: please refer to coil versions table, preferred types in bold print

AMP-Faston 187 = 4.8 x 0.5 mm

AMP-Faston 250 = 6.3 x 0.8 mm



# 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 AMP 187	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 AMP 187	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 AMP 250	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 AMP 187	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 AMP 187	DC-coil	24 Vdc	3-1393107-5
RM233615				AC-coil	115 Vac	4-1393146-2
RM235024			mounting brackets AMP 250	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 AMP 187	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 AMP 187	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 AMP250	AC-coil	230 Vac	6-1393107-1
RM338730			DIN horizontal		230 Vac	7-1393148-7
RM339730			DIN vertical		230 Vac	6-1393107-2
RM702024	3 C/O contacts 16 A	without test button	plain cover AMP 187	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 AMP 250	DC-coil	24 Vdc	9-1393146-6
RM705524				AC-coil	24 Vac	9-1393146-7
RM705615					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 AMP 250	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 AMP 187	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 AMP 250	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	DC-coil	24 Vdc	2-1393844-0
RM738730			horizontal	AC-coil	230 Vac	2-1393147-2
RM739024			DIN-snap-on	DC-coil	24 Vdc	4-1393149-5
RM739730			vertical	AC-coil	230 Vac	2-1393844-2