

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



F0165-B



Approvals

VDE REG.-Nr. 40003144, cULus E214025,
approvals for AgNi contacts in preparation
Technical data of approved types on request

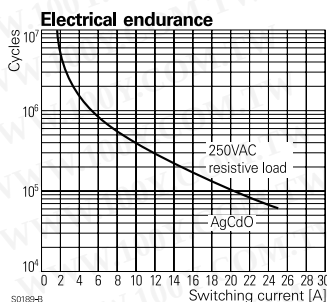
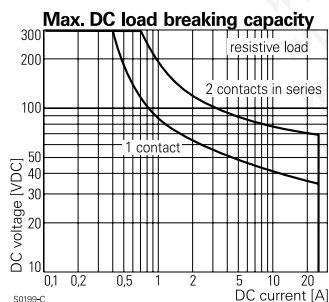
Contact Data

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

Mechanical endurance 10x10⁶ 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 bipolar	Coil code	Rated voltage VDC	Coil resistance $\Omega \pm 10\%$ ¹⁾²⁾	Rated coil power W
006	L06	0A6	6	32	1.1
012	L12	0B2	12	110	1.3
024	L24	0C4	24	475	1.2
048	L48	0E8	48	2000	1.2
060	L60	0G0	60	2850	1.3
110	M10	1B0	110	10000 ¹⁾	1.2
221	N21	2C1	220	40000 ²⁾	1.2

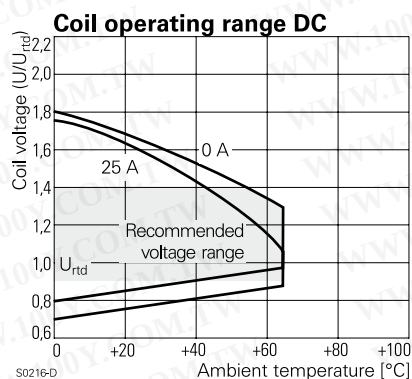
Operate voltage, DC coil 75% of rated coil voltage

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



Power Relay RM 8 (Continued)

Coil Data (continued)

Coil versions, AC coil

Coil code		Rated	Operate	Release	Coil	Rated coil
STD	LED	voltage	voltage	voltage	resistance	power
		50/60Hz	50/60Hz	50/60Hz		50/60Hz
		VAC	VAC	VAC	$\Omega \pm 10\%^{1)2)}$	VA
506	R06	6	4.8/5.1	2.4	4.7	2.86/2.36
512	R12	12	9.6/10.2	4.8	19.5	2.71/2.27
524	R24	24	19.2/20.4	9.6	80	2.62/2.00
548	R48	48	38.4/40.8	19.2	320	2.60/2.17
560	R60	60	48.0/51.0	24.0	500	2.62/2.20
615	S15	115	92.0/97.8	46.0	1850	2.65/2.22
730	T30	230	184.0/195.5	92.0	7500	2.69/ 2.26
900	V00	400	320.0/340.0	160.0	23500 ²⁾	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 μ s)
between adjacent contacts	6000V(1.2/50 μ 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

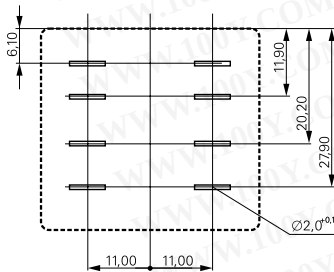
Other Data

Material compliance: EU RoHS/ELV, China RoHS, REACH, Halogen content refer to the Product Compliance Support Center at www.tycoelectronics.com/customer-support/rohssupportcenter

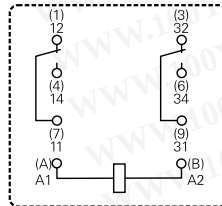
Ambient temperature	
DC coil	-45 to +65°C
AC coil	-45 to +45°C
16 A contact load	-45 to +70°C
Category of environmental protection	
IEC 61810	RTI - dust protected
Vibration resistance (functional)	
form A (NO)/form B (NC)	10/5g, 30 to 150Hz
Terminal type	quick-connect
Cover retention, pull/push force	100/100N
Weight	81g
Packaging unit	10/25 pcs.

Terminal assignment

Bottom view on pins



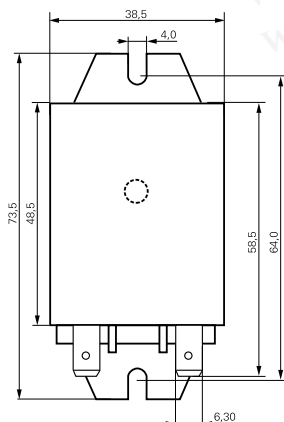
S0269-AG



S0269-AD

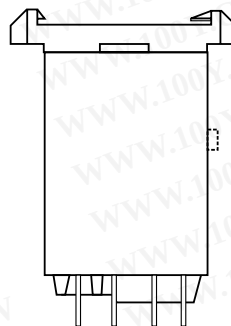
Dimensions

Cover with mounting brackets, 6.3mm quick connect terminals

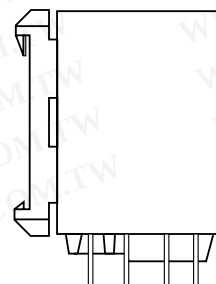


S0298-BC

Cover with DIN-snap-on attachment
horizontal vertical



S0298-BD



S0298-BE

Power Relay RM 8 (Continued)

Product code structure

Typical product code **RM 8 0 9 024**

Type

RM Power relay RM8

Contact configuration

8 2 form C contacts (2 CO), 25A

Version

0 AgCdO, without test button **3** AgCdO, with test button
2 AgNi90/10, without test button **7** AgNi90/10, with test button

Enclosure

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

Coil

Coil code: please refer to coil versions table

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