

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

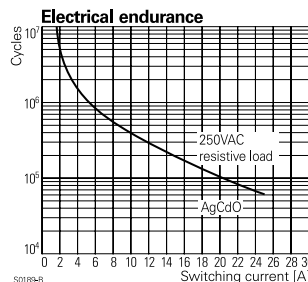
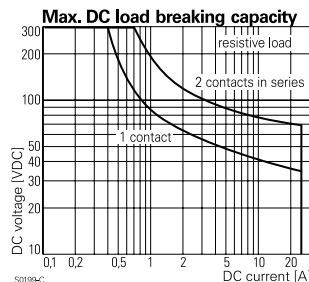
Contact Data

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
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Operative range, IEC 61810	2
Coil insulation system according UL	class 130 (B)

Coil versions, DC coil

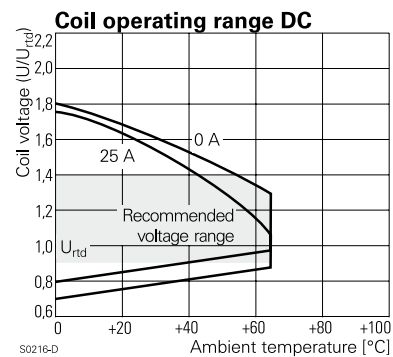
STD	LED bipolar	Coil code	PD ³⁾	LED+ PD ³⁾	Rated voltage VDC	Coil resistance $\Omega \pm 10\%$ ¹⁾²⁾	Rated power W
006	L06	0A6	LA6		6	32	1.1
012	L12	0B2	LB2		12	110	1.3
024	L24	0C4	LC4		24	475	1.2
048	L48	0E8	LE8		48	2000	1.2
060	L60	0G0	LG0		60	2850	1.3
110	M10	1B0	MB0		110	10000 ¹⁾	1.2
221	N21	2C1	NC1		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 voltage	Operate voltage	Release voltage	Coil resistance	Rated coil power
STD	LED		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

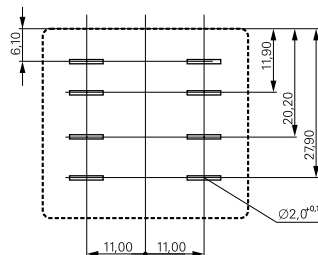
Other Data

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

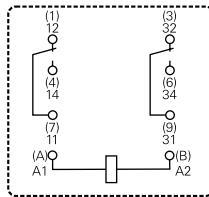
Ambient temperature	
DC coil	-45 to +65°C
AC coil	-45 to +45°C
16 A contact load	-45 to +70°C
Category of environmental protection	
IEC 61810	RTI - dust protected
Vibration resistance (functional)	
form A (NO)/form B (NC)	10/5g, 30 to 150Hz
Terminal type	quick-connect
Cover retention, pull/push force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

Terminal assignment

Bottom view on pins



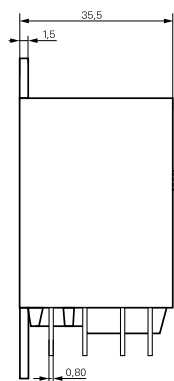
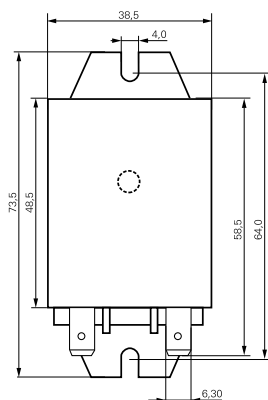
S0269-AG



S0269-AD

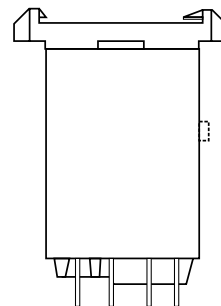
Dimensions

Cover with mounting brackets, 6.3mm quick connect terminals



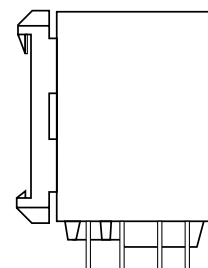
S0298-BC

Cover with DIN-snap-on attachment
horizontal



S0298-BD

vertical



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