RM805524 Product Details

RM805524

TE Internal Number: 2-1393147-9

Active

Industrial Relays (General Purpose)

Converted to EU RoHS but not ELV Compliant

(Statement of Compliance)

Product Highlights:

- RM8 Series
- Contact - Current Class = 20A to 30A Class, Greater Than 16A
- Contact - Rated Current = 25 A
- Terminal Type = Quick Connect
- Contact - Arrangement = 2 Form C (CO)

Documentation & Additional Information

Product Drawings:
- None Available

Catalog Pages/Data Sheets:
- Power Relay RM8 (PDF, English)

Product Specifications:
- None Available

Application Specifications:
- None Available

Instruction Sheets:
- None Available

CAD Files:
- None Available

Additional Information:
- Product Line Information

Related Products:
- Tooling

Product Features (Please use the Product Drawing for all design activity)

Product Type Features:
- Series = RM8
- Terminal Type = Quick Connect

Electrical Characteristics:
- Contact - Current Class = 20A to 30A Class, Greater Than 16A
- Contact - Rated Current (A) = 25
- Contact - Limiting Continuous Current (A) = 25
- Contact - Limiting Making Current (A) = 60
- Contact - Limiting Breaking Current (A) = 25
- Insulation - Initial Dielectric Between Coil/Contact Class = 1500V to 2500VA Class
- Insulation - Initial Dielectric Between Open Contacts (V rms) = 2500
- Insulation - Initial Dielectric Between Contacts and Coil (V rms) = 2500
- Contact - Rated Voltage (VAC) = 400
- Contact - Switching Voltage Max. (VAC) = 400
- Contact - Limiting Short-Time Current (A) = 25
- Contact - Switching Recommended Load, Min. = 100mA at 24V
- Coil - Rated Voltage (VAC) = 24
- Coil - Resistance (Ω) = 86
- Coil - Rated Power, AC (VA) = 2.00
- Coil - Rated Power Class = 2.0VA to 3.0VA Class
- Insulation - Initial Dielectric Between Adjacent Contacts (V rms) = 4000
- Insulation - Creepage Class = >8mm Class
- Insulation - Clearance Class = 2.5mm to 4mm Class
- Insulation - Special Features = 5000V Initial Surge Withstand Voltage between Contacts and Coil

Dimensions:
- Mechanical - Length Class = 35mm to 40mm Class
- Length (mm [in]) = 38.50 [1.515]
- Mechanical - Width Class = 30mm to 40mm Class
- Width (mm [in]) = 35.50 [1.398]

Body Features:
- Mount Type = Bracket
- Weight (g [oz]) = 81.00 [2.859]

Contact Features:
- Contact Material = AgCdO
- Contact - Number of Poles = 2

Configuration Features:
- Contact - Arrangement = 2 Form C (CO)
- Coil - Magnetic System = Monostable, AC
- Coil - Special Features = UL Coil Insulation Class B

Industry Standards:
- RoHS/ELV Compliance = RoHS/Not ELV Compliant
- Lead Free Solder Processes = Not relevant for lead free process
- RoHS/ELV Compliance History = Converted to comply with RoHS not ELV directives
- Approved/Registered Standards = VDE, cULus

Environmental:
- Environmental - Category of Protection = RTI
- Environmental - Ambient Temperature, Max. (°C [°F]) = 40 [104]
- Environmental - Ambient Temperature Class = 0 to 50°C Class

Packaging Features:
- Packaging Method = Tray

Other:
- Brand = Schrack
- Additional Features = Mechanical Indicator

• Mechanical - Height Class = 40mm to 50mm Class • Height (mm [in]) = 48.50 [1.909] • Insulation - Clearance Between Contact and Coil (mm [in]) = 4 [0.157] • Insulation - Creepage Between Contact and Coil (mm [in]) = 14.9 [0.587]	

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**

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Typical applications
Cleaning equipment, heating and cooling equipment

Approvals

VDE REG.-Nr. 40003144, UL E214025,
Technical data of approved types on request

Contact Data

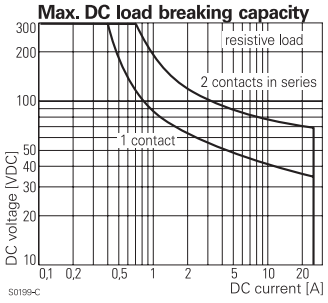
Contact arrangement	2 form C (CO)
Rated voltage	400VAC
Max. switching voltage	400VAC
Rated current	25A
Limiting making current, 20ms max.	60A
Switching power	6000VA
Contact material	AgCdO, AgNi90/10
Min. recommended contact load	24VDC/100mA
Frequency of operation, with/without load, DC coil	960/6000h^{-1}
Operate/release time max., DC coil	15/10ms
Bounce time max., form A/form B, DC coil	4/6ms

Contact ratings

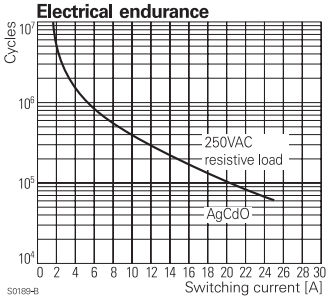
Type	Contact	Load	Cycles
IEC 61810			
RM8	C (CO)	25 A, 250 VAC, cosφ=1 35°C	10x10^3
UL 508			
RM80	A/B (NO/NC)	25 A, 240 VAC, 1 phase per pole, general purpose 40°C	6x10^3
RM8	A/B (NO/NC)	25 A, 415 VAC, resistive, AC-Coil 45°C	10x10^3
RM80	A/B (NO/NC)	25 A, 415 VAC, resistive, DC-Coil 50°C	10x10^3
RM82	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 10x10^6 operations

Max. DC load breaking capacity



Electrical endurance



Coil Data

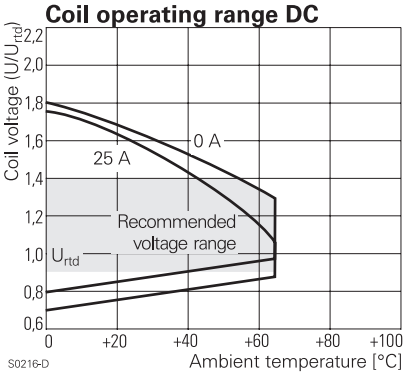
Coil voltage range	6 to 220VDC 6 to 400VAC
Operative range, IEC 61810	2
Coil insulation system according UL	class 130 (B)

Coil versions, DC coil

STD	LED bipolar	Coil code PD[3]	LED+ PD[3]	Rated voltage VDC	Coil resistance Ω±10%[1)2)]	Rated coil 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 ±12%, 2) Coil resistance ±15%
3) Protection diode PD; standard polarity: +A1 / -A2
All figures are given for coil without pre-energization, at ambient temperature +23°C

Coil operating range DC



Power Relay RM 8 (Continued)

Coil Data (continued)

Coil versions, AC coil

Coil code STD	Coil code LED	Rated voltage VAC	Operate voltage 50/60Hz VAC	Release voltage 50/60Hz VAC	Coil resistance Ω±10%[1)2)]	Rated coil power 50/60Hz VA
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

2) Coil resistance ±15%

All figures are given for coil without pre-energization, at ambient temperature +23°C

Insulation Data

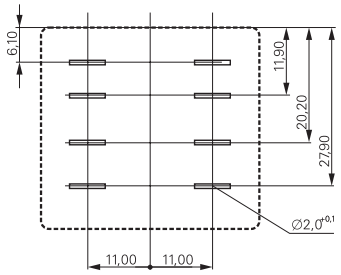
Initial dielectric strength	
between open contacts	1500Vrms
between contact and coil	2500Vrms
between adjacent contacts	4000Vrms
Initial surge withstand voltage	
between contact and coil	5000V(1.2/50µs)
between adjacent contacts	6000V(1.2/50µs)
Clearance/creepage	
between contact and coil	≥4.0/14.9mm
between adjacent contacts	≥15.3/15.3mm
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.te.com/customersupport/rohssupportcenter
Ambient temperature	
DC coil	-45 to +65°C
AC coil	-45 to +40°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



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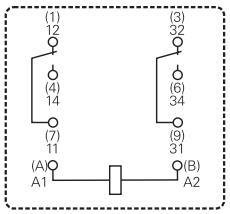

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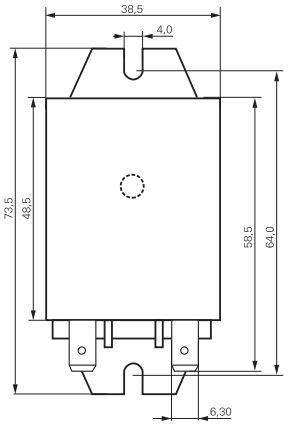
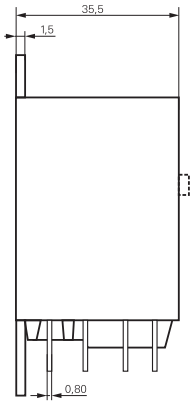
Dimensions

Cover with mounting brackets, 6.3mm quick connect terminals





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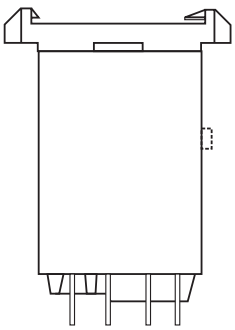
Cover with DIN-snap-on attachement

horizontal



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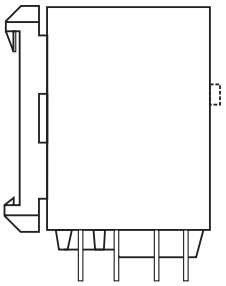
vertical



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04-2011, Rev. 0411
www.te.com

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
2 AgNi90/10, without test button
3 AgCdO, with 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