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Please note that the number of variants of Goodsky relay part numbers means that it is not possible to maintain stock of every one. If you are researching to replace just one relay on a component, say as a spare part for domestic equipment, you may need to contact the manufacturer of that equipment. Stock of Goodsky relays is maintained in the UK for those exact parts where there is a continuous demand within the UK.

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Important Note

The information shown in these documents is for guidance only. No liability is accepted for any errors or omissions. The designer or user is solely responsible for the safe and proper application of the parts, assemblies or equipment described.

EMR SERIES

For General Control & Home Appliance

Application : Control Board for Heating /
Temp Control on Boiler / Burner; etc.

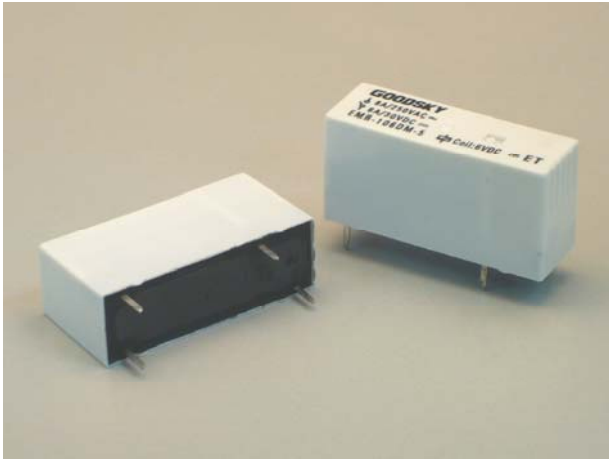
Features : ◆ Low Profile (30.0×10.0×10.5mm)
◆ EN 60335-1 Certificated
(Equal to VDE 0700)

Safety Standard : VDE, C-UL

RoHS Compliant

EMR性能比較表 (Performance Comparison List)

品牌 Supplier		GOODSKY	TYCO(Schrack)		Tyco(Siemens)	Fujitsh/Takamisawa	HONGFA	Relpol	
型號 Item		EMR	RY II	MSR(V23061)	T75	JS	JQX-68F	RW96	
Coil Type		DVC	DVC	DVC	DVC	DVC	DVC	DVC	
接點部 Contact Specs	開關型式 Contact Configuration	1a ,1b,1c	1a ,1b	1a, 1b	1a ,1C	1a ,1C	1a ,1C	1a ,1b,1c	
	接點材質 Contact Material	AgSnO2	AgNiO 15% / AgSnO ₂ / AgCdO	AgSnO ₂ / AgCdO / AgNiO 15%	AgCdO	AgCdO	AgSnO2	AgCdO / AgSnO ₂	
	接點規格 Contact Rating	8A /250VAC 5A 30VDC	8A /28VDC 0.28A /250VDC 6(4)A /250VAC	8A /250 VAC 10A /250 VAC 5A /250VAC	8A / 250VAC 10A / 240VAC	8A /250VAC 8A 24VDC	8A /250VAC 8A 30VDC	8A /250AV 8A 24VDC	
	最大流通電流 Max. Allowable Current	8A	8A	A,B 8A / C,D 10A	10A	10A	10A	8A	
	最大承受電壓 Max. Allowable Voltage	380VAC / 120 VDC	240 / 400 VAC	200 / 400 VAC	380VAC	400VAC /250 VDC	440VAC / 125VDC	400VAC /250 VDC	
線圈部 Coil Specs	額定電壓 Nominal Voltage	5,6,9,12,18,24,48,60 VDC	5,12,24,48 VDC	5,6,9,12,18,24,48,60 VDC	3,5,6,9,12,18,24,48,60 VDC	5,6,9,12,18,24,48,60 VDC	5,6,9,12,18,24,48,60 VDC	5,6,9,12,18,24,48 VDC	
	動作電壓 Pull-In Voltage %	80%	70%	70%	70%	70%	70%	70%	
	開放電壓 Drop-Out Voltage %	5%	10%	10%	10%	10%	10%	10%	
	額定消耗功率 Power Consumption	0.22W	0.22W	0.22W	0.23W	0.22-0.29W	-	0.3W	
	最大承受電壓 Maximum Allowable Voltage	135%	-	-	225%	-	-	-	
性能 Performance	接點阻抗 Contact Resistance	100mΩ	-	-	-	100mΩ	-	100mΩ	
	動作時間 Operate Time	12ms	7ms	6ms	6ms	10ms	15ms	10ms	
	開放時間 Release Time	8ms	3ms	2.5ms	2.5ms	5ms	8ms	5ms	
	最大開閉頻率 Max. On/Off Switching:	機械 Mechanical	300 / Min	1200 /Min	1200 /Min	1200 /Min	-	-	-
		電氣 Electrical	6 / Min	6 / Min	6 / Min	-	-	-	-
	耐電壓(AC) Dielectric Strength	I/O	4000V	5000V	4000V	4000V	5000V	5000V	4000V
		O/O	1000V	1000V	1000V	1000V	1000V	1000V	1000V
	振動 Vibration	耐久 Endurance	100m/S2	20 / 5g	20 / 5g	-	10-55Hz 1.65mm	100m/S ²	10-500HZ
		誤動作 Error Operation	100m/S2	100g	100g	-	10-55Hz 3.3mm	1,000m/S ²	
	壽命 Life Expectancy	機械 Mechanical	1x10 ⁷	30x10 ⁵	10x10 ⁵	1x10 ⁵	2x10 ⁷	1x10 ⁷	2x10 ⁷
		電氣 Electrical	1x10 ⁵	30x10 ⁴	1x10 ⁵	1x10 ⁵	1x10 ⁵	1x10 ⁵	1x10 ⁵
	使用環境溫度 Temperature Range		-40-85℃	-40-70℃	-40-85℃	-40-85℃	-40-85℃	-40-85℃	-40-85℃
	使用環境濕度 Humidity Range		40-85%RH	-	-	Max 85%RH	-	-	35-85%RH
重量 Weight		11g	8g	11g	11g	8g	8.2g	11g	
安全規格 Safety Standard		VDE, CUL	VDE / C-UL	VDE / C-UL	VDE, UL, CSA, SEMIKO SEV	UL / CSA / VDE / SEMKO	UL, CUR, VDE,FIMKO	-	
寸法 Dimension	外型尺寸 Dimension	30x10x10.5	28.5x12.1x12.3	30x10x15	30x10x15	29x10x12.5	28.5x10.1x12.3	28x10x16.2	
端腳外型 Terminal Type	直Pin(DIP)	V	V	V	V	V	V	V	
	90°Pin(SMD)	-	-	-	-	-	-	-	



Main Feature

1. 1 C/O & 1 N/O & 1 N/C Contact.
2. 4KV / 8 mm coil-contact.
3. Pinning: 3.2 and 5.0 mm.
4. Protection class II.
5. Especially suitable for resistive and inductive loads on N/O and N/C contacts.



Contact Rating

Load Type	EMR (DM)	EMR (D)
Rated Load (Resistive)	8A 250VAC	8A 250VAC
	5A 30VDC	5A 30VDC
Max. Allowable Voltage	AC 380V	AC 380V
	DC 120V	DC 120V
Max. Allowable Current	8A	8A
Max. Allowable Power Force	2,000VA	2,000VA
	150W	150W
Contact Material	Ag Alloy	Ag Alloy
Contact Form	SPST	SPDT

Application

Heating Control, Interface Technology, Domestic Appliances, and Timer, Temperature Control.

Performance (at Initial Value)

- Contact Resistance 100 mΩ Max. @1A,6VDC
- Operate Time..... 12 mSec. Max.
- Release Time 4 mSec. Max.
- Dielectric Strength:
 - Between Coil & Contact 4,000VAC at 50/60 Hz for one minute.
 - Between Contacts 1,000VAC at 50/60 Hz for one minute.
- Surge Strength 10,000V (between coil & Contact 1.2x50μSec.)
- Insulation Resistance 1,000 MegaΩ Min. at 500VDC.
- Max. On/Off Switching:
 - Electrical..... 6 Cycles per Minute.
 - Mechanical 300 Cycles per Minute.
- Temperature Range..... -40~85°C
- Humidity Range..... 45~85% RH.

- Coil Temperature Rise 40°C Max.
- Vibration :
 - Endurance 10 to 55 Hz dual amplitude width 1.5mm.
 - Error Operation..... 10 to 55 Hz dual amplitude width 1.5mm.
- Shock:
 - Endurance 1,000 m/S².
 - Error Operation..... 100 m/S².
- Life Expectancy:
 - Electrical 10⁵ Operations at Rated Resistive Load. (tested with flow solder type relay)
 - Mechanical 10⁷ Operations at No load condition.
- Weight about 11.0 g.

Safety Standard & Its File Number

- C-UL E141060
- VDE 40016958

Coil Specification (at 20 °C)

Coil Sensitivity	Nominal Voltage (VDC)	Nominal Current (mA)	Coil Resistance ($\Omega \pm 10\%$)	Power Consumption (W)	Pull-In Voltage (VDC)	Drop-Out Voltage (VDC)	Maximum Allowable Voltage (VDC)
EMR	5	44.2	113	Abt. 0.22	EMR-D-3 80%Max EMR-DM(B)-5(3) 75%Max	5% Minimum	135%
	6	36.6	164				
	9	24.4	368				
	12	18.3	650				
	18	12.2	1,475				
	24	9.2	2,620				
	48	5.2	9,210				
	60	3.7	16,364				

Ordering Information

EMR - 1 12 D M - 3 G F

Type of Sealing

Nil : RT III wash tight relays

F : RT II flux proofed relays

Contact Material:

Nil: AgNi

G: AgNi, Gilded

O: AgNi, Au Plated

N: AgSnO₂

S: AgSnO₂, Gilded

Pinning Dimension:

3: Pinning 3.2mm

5: Pinning 5.0mm

Contact Form:

Nil: One Form C

M: One Form A

B: One Form B(Pinning 3.2mm)

Coil Type:

D: Standard DC Coil

Coil Voltage:

05: 5V, 06: 6V, 09: 9V, 12: 12V

18: 18V, 24: 24V, 48: 48V, 60: 60V

Number of Pole:

1: One Pole

Type:

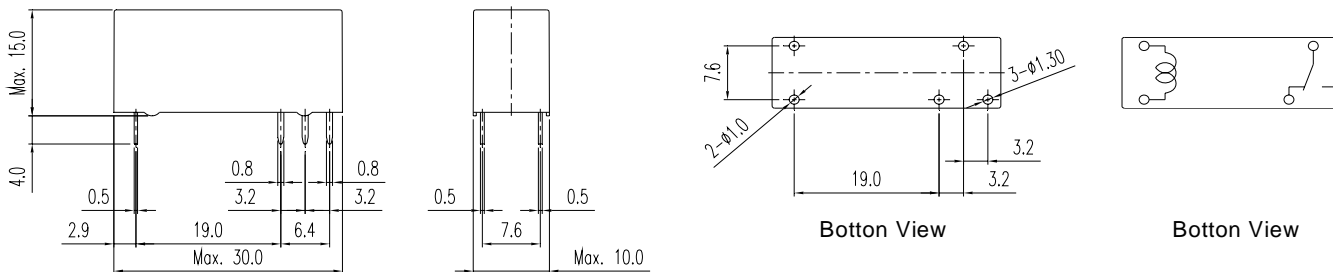
EMR

Classification

Model	EMR		
Coil Sensitivity	Standard DC Coil		
Contact Form	1C	1A	1B
Flux Proofed Relay	EMR-1□□D-3□F	EMR-1□□DM-5□F	EMR-1□□DB-3□F
Wash Tight Relay	EMR-1□□D-3□	EMR-1□□DM-5□	EMR-1□□DB-3□

Dimension ($\leq 5\text{mm} \pm 0.2\text{mm}$, $> 5\text{mm} \pm 0.3\text{mm}$, the tolerance of PCB thru hole: $+0.1\text{mm}$)

EMR-D-3



EMR-DM-5/EMR-DB-5

