

## Main Feature

1. 1 C/O & N/O & 1N/C Contact.
2. 4KV / 8 mm coil-contact.
3. Pinning: 3.2 and 5.0 mm
4. Especially suitable for resistive and inductive loads on N/O and N/C contacts.
5. Class-F (155°C).
6. In accordance with IEC 60335-1 and IEC 60730-1.

## Contact Rating

Load Type	EMR (D-3)	EMR (DM-5)	EMR (DB-5)
Rated Load (Resistive)	8A 250 VAC	8A 250 VAC	8A 250 VAC
	5A 30 VDC	5A 30 VDC	5A 30 VDC
Contact capacity	2 FLA/12 LRA 250 VAC	2 FLA/12 LRA 250 VAC	-
	1/8 HP 250 VAC	1/8 HP 250 VAC	-
	Pilot Duty C300	Pilot Duty C300	-
Max. Allowable Voltage	AC 380V	AC 380V	AC 380V
	DC120V	DC120V	DC120V
Max. Allowable Current	8A	8A	8A
Max. Allowable Power Force	2,000VA	2,000VA	2,000VA
	150W	150W	150W
Contact Material	Ag Alloy	Ag Alloy	Ag Alloy
Contact Form	SPST	SPDT	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 ..... 12mSec. 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 1.2×50μSec.)
- Insulation Resistance ..... 1,000MΩ 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 1.5 mm
  - Error Operation..... 10 to 55 Hz dual amplitude width 1.5 mm
- Shock:
  - Endurance .....1,000 m/S<sup>2</sup> .
  - Error Operation..... 100 m/S<sup>2</sup>.
- Life Expectancy:
  - Electrical ..... 10<sup>5</sup> Operations at Rated Resistive Load. (tested with flow solder type relay)
  - Mechanical..... 10<sup>7</sup> Operations at No load condition.
- Weight.....About 11.0 g.

## Safety Standard & Its File Number

- UL & 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	3	73	41	Abt. 0.22	EMR-D-3 80%Max EMR-DM(B)-5 75%Max	5% Minimum	135%
	5	44.2	113				
	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

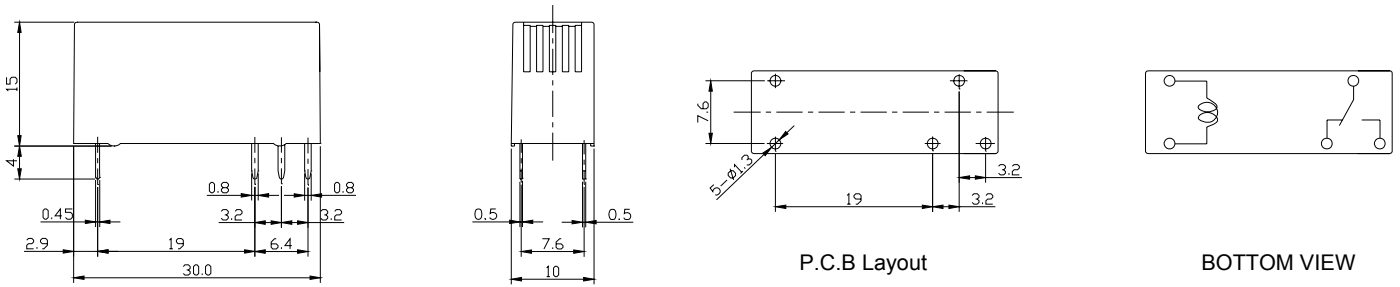
EMR	- 1	12	D	M	- 3	G		
							<b>Contact Material:</b>	<b>Nil:</b> AgNi <b>G:</b> AgNi, Gilded <b>O:</b> AgNi, Au Plated <b>N:</b> AgSnO <sub>2</sub> <b>S:</b> AgSnO <sub>2</sub> , Gilded <b>C:</b> AgCdO
							<b>Pinning Dimension:</b>	<b>3:</b> Pinning 3.2mm <b>5:</b> Pinning 5.0mm
							<b>Contact Form:</b>	<b>Nil:</b> One Form C <b>M:</b> One Form A <b>B:</b> One Form B(Pinning 3.2mm)
							<b>Coil Type:</b>	<b>D:</b> Standard DC Coil
							<b>Coil Voltage:</b>	<b>05:</b> 5V, <b>06:</b> 6V, <b>09:</b> 9V, <b>12:</b> 12V, <b>18:</b> 18V, <b>24:</b> 24V, <b>48:</b> 48V, <b>60:</b> 60V
							<b>Number of Pole:</b>	<b>1:</b> One Pole
							<b>Type:</b>	<b>EMR</b>

## Classification

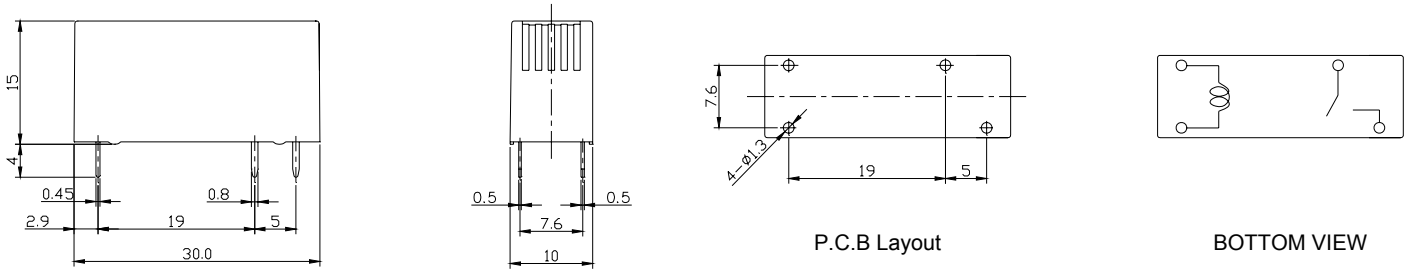
Model	EMR		
Coil Sensitivity	Standard DC Coil		
Contact Form	1C	1A	1B
Wash Tight Relay	EMR-1□□D-3□	EMR-1□□DM-5□	EMR-1□□DB-5□

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

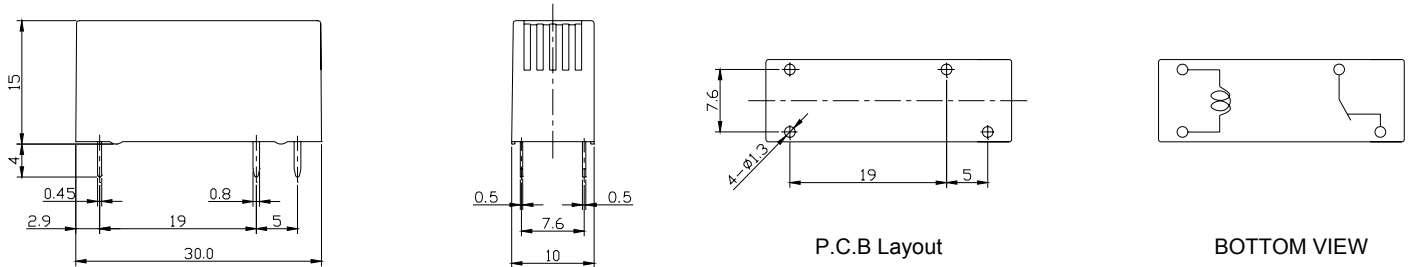
## EMR-D-3



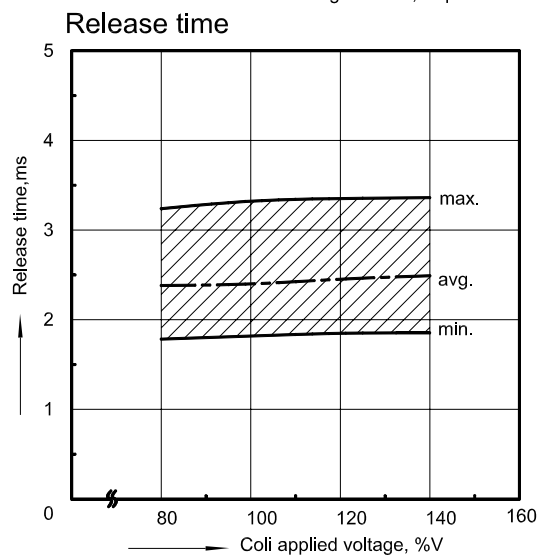
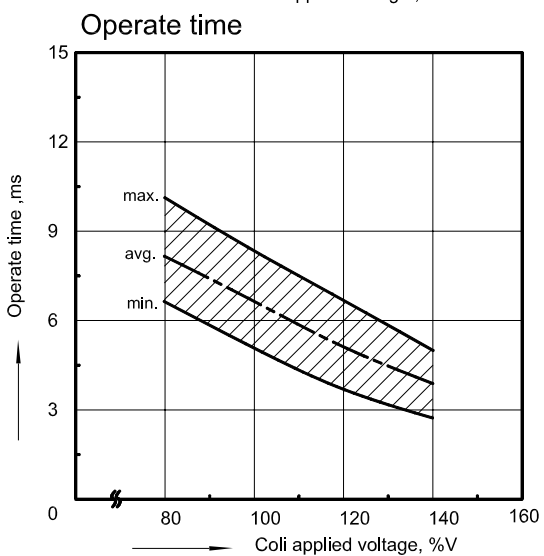
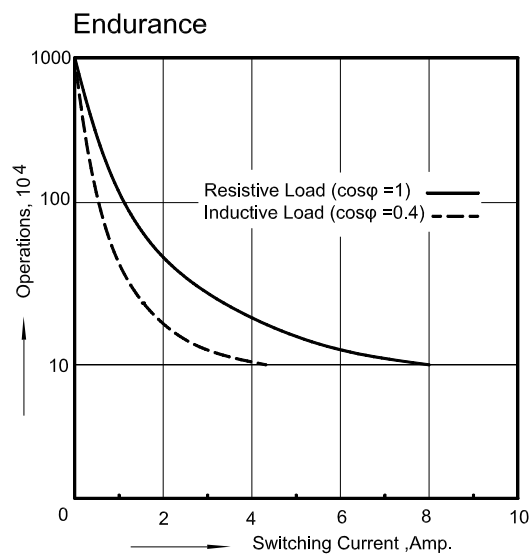
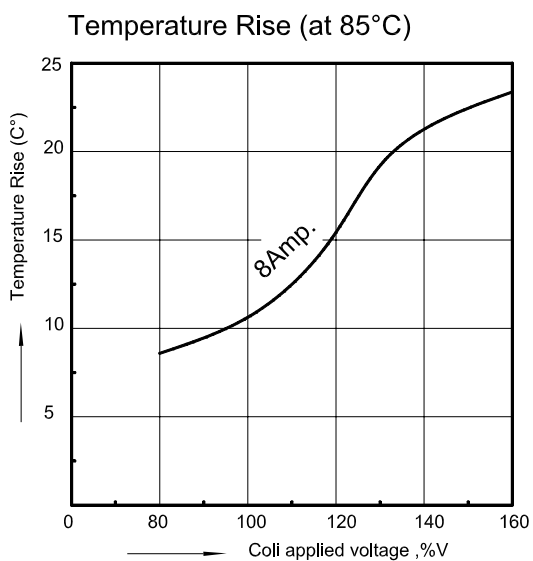
## EMR-DM-5



## EMR-DB-5



Reference Data



# EMR Performance Comparison List

Supplier		GOODSKY	TYCO(Schrack)		Tyco(Siemens)	Fujitsh/Takamisawa	HONGFA	Relpol	
Item		EMR	RY II	MSR(V23061)	T75	JS	JQX-68F	RW96	
Coil Type		DVC	DVC	DVC	DVC	DVC	DVC	DVC	
Contact Specs	Contact Configuration	1a ,1b,1c	1a ,1b	1a, 1b	1a ,1C	1a ,1C	1a ,1C	1a ,1b,1c	
	Contact Material	AgSnO2	AgNiO 15% / AgSnO <sub>2</sub> / AgCdO	AgSnO <sub>2</sub> / AgCdO / AgNiO 15%	AgCdO	AgCdO	AgSnO2	AgCdO / AgSnO <sub>2</sub>	
	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	
	Max. Allowable Current	8A	8A	A,B 8A / C,D 10A	10A	10A	10A	8A	
	Max. Allowable Voltage	380VAC / 120 VDC	240 / 400 VAC	200 / 400 VAC	380VAC	400VAC /250 VDC	440VAC / 125VDC	400VAC /250 VDC	
Coil Specs	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	
	Pull-In Voltage %	80%	70%	70%	70%	70%	70%	70%	
	Drop-Out Voltage %	5%	10%	10%	10%	10%	10%	10%	
	Power Consumption	0.22W	0.22W	0.22W	0.23W	0.22-0.29W	-	0.3W	
	Maximum Allowable Voltage	135%	-	-	225%	-	-	-	
Performance	Contact Resistance	100mΩ	-	-	-	100mΩ	-	100mΩ	
	Operate Time	12ms	7ms	6ms	6ms	10ms	15ms	10ms	
	Release Time	8ms	3ms	2.5ms	2.5ms	5ms	8ms	5ms	
	Max. On/Off Switching:	Mechanical	300 / Min	1200 /Min	1200 /Min	1200 /Min	-	-	-
		Electrical	6 / Min	6 / Min	6 / Min	-	-	-	-
	(AC) Dielectric Strength	I/O	4000V	5000V	4000V	4000V	5000V	5000V	4000V
		O/O	1000V	1000V	1000V	1000V	1000V	1000V	1000V
	Vibration	Endurance	100m/S2	20 / 5g	20 / 5g	-	10-55Hz 1.65mm	100m/S <sup>2</sup>	10-500HZ
		Error Operation	100m/S2	100g	100g	-	10-55Hz 3.3mm	1,000m/S <sup>2</sup>	
	Life Expectancy	Mechanical	1x10 <sup>7</sup>	30x10 <sup>5</sup>	10x10 <sup>5</sup>	1x10 <sup>5</sup>	2x10 <sup>7</sup>	1x10 <sup>7</sup>	2x10 <sup>7</sup>
		Electrical	1x10 <sup>5</sup>	30x10 <sup>4</sup>	1x10 <sup>5</sup>	1x10 <sup>5</sup>	1x10 <sup>5</sup>	1x10 <sup>5</sup>	1x10 <sup>5</sup>
	Temperature Range		-40-85°C	-40-70°C	-40-85°C	-40-85°C	-40-85°C	-40-85°C	-40-85°C
	Humidity Range		40-85%RH	-	-	Max 85%RH	-	-	35-85%RH
	Weight		11g	8g	11g	11g	8g	8.2g	11g
Safety Standard		VDE, CUL	VDE / C-UL	VDE / C-UL	VDE, UL, CSA, SEMIKO SEV	UL / CSA / VDE / SEMKO	UL, CUR, VDE,FIMKO	-	
Dimension	Dimension	30x10x10.5	28.5x12.1x12.3	30x10x15	30x10x15	29x10x12.5	28.5x10.1x12.3	28x10x16.2	
Terminal Type	Pin(DIP)	V	V	V	V	V	V	V	
	90°Pin(SMD)	-	-	-	-	-	-	-	

поставщик: "ООО КОНТАКТ"  
тел./ф.: (8634)369-333

web: <http://kontakt-t.ru>  
e-mail: [kontakt-t@mail.ru](mailto:kontakt-t@mail.ru)