

Main Feature

1. Dielectric Strength up to 4,000VAC.
2. 8mm safety distance between coil and contact.
3. Two pinning types available: 3.2 and 5.0mm.
4. In accordance with IEC 60335-1 and IEC 60730-1.
5. Comply with RoHS and REACH regulations

Contact Rating

Load Type	EMR (D-3-1)	EMR (DM-5-1)	EMR (DB-5-1)
Rated Load (Resistive)	8A 250 VAC	8A 250 VAC	8A 250 VAC
	5A 30 VDC(U.L)	5A 30 VDC(U.L)	5A 30 VDC(U.L)
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	SPDT	SPST	SPST

Application

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

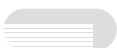
Performance (at Initial Value)

- 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/S²
 - Error Operation 100 m/S²
- Life Expectancy:
 - Electrical..... 10⁵ Operations at Rated Resistive Load
 - Mechanical 10⁷ Operations at No load condition
- Weight About 11.0 g

Safety Standard & 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-3-1 80%Max EMR-DM (B)-5-1 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

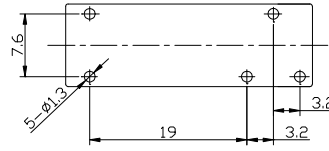
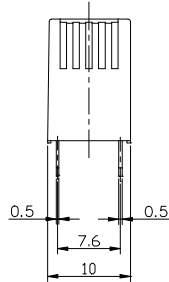
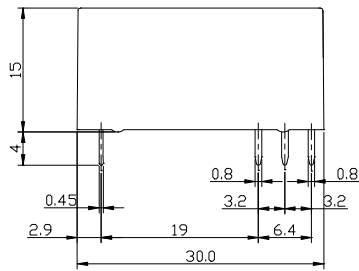
EMR	- 1	12	D	M	- 3	G	- 1	Model Identification:	Revised Construction
								Contact Material:	Nil: AgNi G: AgNi, Gilded O: AgNi, Au Plated N: AgSnO2 S: AgSnO2, Gilded
								Pinning Dimension:	3: Pinning 3.2mm 5: Pinning 5.0mm
								Contact Form:	Nil: One Form C (Pinning 3.2 mm) M: One Form A (Pinning 5.0 mm) B: One Form B (Pinning 5.0 mm)
								Coil Sensitivity:	D: Standard DC
								Coil Voltage:	03: 3V, 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		
Contact Form	1C	1A	1B
Wash Tight	EMR-1□□D-3□-1	EMR-1□□DM-5□-1	EMR-1□□DB-5□-1

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-3-1

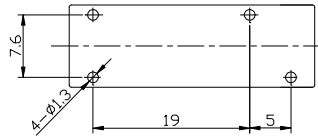
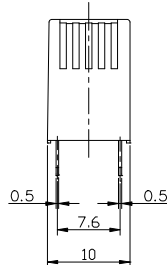
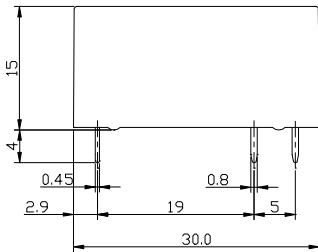


P.C.B Layout



BOTTOM VIEW

EMR-DM-5-1

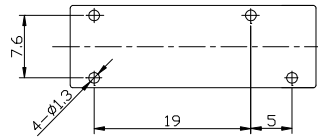
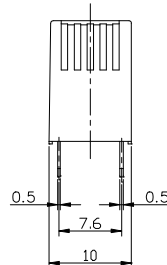
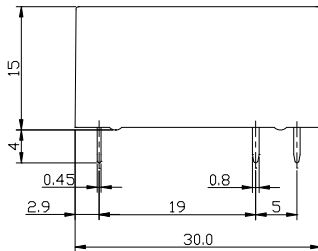


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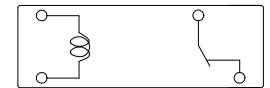


BOTTOM VIEW

EMR-DB-5-1



P.C.B Layout



BOTTOM VIEW

Reference Data

