



Main Feature

1. EML Series Relays are designed for switching capacity by 16A to comply with industrial control system use.
2. Slim type and low profile (29.0 x 12.6 x 15.7 mm) is developed to provide more flexibility on PCB design.
3. 1 N/O contact with a tungsten pre-made contact.
4. Proper insulation distance in place to ensure EML a 5000VAC dielectric strength between contact and coil.
5. Complete protection structure against dust and Soldering flux is implemented. If required, plastic epoxy resin sealed type is available for washing procedure.
6. 1 pole 16A, 1 NO contact (W pre-mark contact + AgSnO₂). 165A/20ms inrush peak current.

Contact Rating

Load Type	EML(DM)
Rated Load (Resistive)	16A 250VAC
Rated Carrying Current	16A
Max. Allowable Voltage	AC 400V
Max. Allowable Current	16A
Max. Allowable Power Force	4000VA
Contact Material	R: Ag Alloy, L: W
Contact Capacity	Tungsten Load : 3000VA/230VAC
Contact Form	SPST

Application

Lamp Control, Audio Equipments, Home Appliance and other Controlling Equipments...etc.

Performance (at Initial Value)

- Contact Resistance 100mΩ Max.@1A,6VDC
- Contact Rating (resistive load)
- Operate Time..... 8 mSec. Max.
- Release Time 3 mSec. Max.
- Dielectric Strength:
 - Between Coil & Contact.....5000VAC at 50/60Hz for one minute.
 - Between Contacts 1000VAC at 50/60Hz for one minute.
- Surge Strength10,000V (between coil & contact 1.2x50uSec.)
- Insulation Resistance100MΩ Min. at 500VDC.
- Max. On/Off Switching:
 - Electrical..... 6 Cycles per Minute.
 - Mechanical 300 Cycles per Minute.

- Vibration :
 - Endurance10 to 55Hz dual amplitude width 1.5 mm.
 - Error Operation10 to 55Hz dual amplitude width 1.5 mm.
- Humidity Range..... 45~85%RH.
- Temperature Range..... -40~85°C
- Coil Temperature Rise..... 45°C Max.
- Shock:
 - Endurance1,000 m/S²
 - Error Operation.....100 m/S²
- Life Expectancy :
 - Mechanical.....5x10⁶ Operations at No Load condition.
 - Electrical.....1x10⁵ Operations at Rated Resistive Load.
 - 1.2x10⁴ Operations at Rated Resistive Load.
- Contact Material Ag Alloy, W.
- Weight About 12.5 g.

Safety Standard & Its File Number

- NIL

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)
EML DC Coil	5	80	63	Abt. 0.40	70% Maximum	10% Minimum	130%
	6	67	90				
	9	44	203				
	12	33	360				
	18	22	810				
	24	17	1440				
	48	8	5760				
	60	7	9000				

Ordering Information

EML - SH - 1 12 D M

Contact Material:

R: AgSnO₂, L: W

Contact Form:

M: One Form A

Coil Type:

D: Standard DC Coil

Coil Voltage:

05: 5V ,06: 6V , 09: 9V, 12: 12V, 24: 24V, 48: 48V, 60: 60V

Number of Pole:

1: One Pole

Type of Sealing:

SS: RT II Flux Proofed Relays

SH: RT III Wash Tight Relays

Type:

EML

Classification

Model	EML
Coil Sensitivity	DC Coil
Contact Form	1A
Flow Solder Type	EML-SS-1 <input type="checkbox"/> DM
Plastic Sealed Type	EML-SH-1 <input type="checkbox"/> DM

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

EML-SS/SH

