

## Main Feature

1. Low power consumption; AC/DC coil available.
2. Proper insulation distance with 5,000VAC dielectric strength.
3. UL Class F insulation available.
4. In accordance with IEC 60335-1 and IEC 60730-1.
5. Halogen Free series available.
6. Comply with RoHS and REACH regulations

## Contact Rating

Load Type	EMI(DM/DB)	EMI(D)	EMI(AM/AB)	EMI(A)	EMI(FM/FB)	EMI(F)
Rated Load (Resistive)	8A 250VAC	8A 250VAC	8A 250VAC	8A 250VAC	8A 250VAC	8A 250VAC
	8A 30VDC	8A 30VDC	8A 30VDC	8A 30VDC	8A 30VDC	8A 30VDC
Contact Capacity	-	-	-	-	1/2HP 250VAC	1/2HP 250VAC
	-	-	-	-	Pilot Duty R300	Pilot Duty R300
Rated Carrying Current	8A	8A	8A	8A	8A	8A
Max. Allowable Voltage	AC 250V	AC 250V	AC 250V	AC 250V	AC 250V	AC 250V
	DC 300V	DC 300V	DC 300V	DC 300V	DC 300V	DC 300V
Max. Allowable Current	8A	8A	8A	8A	8A	8A
Max. Allowable Power Force	2,000VA	2,000VA	2,000VA	2,000VA	2,000VA	2,000VA
	240W	240W	240W	240W	240W	240W
Contact Material	Ag Alloy	Ag Alloy	Ag Alloy	Ag Alloy	Ag Alloy	Ag Alloy
Contact Form	DPST	DPDT	DPST	DPDT	DPST	DPDT

Max Allowable Voltage: 300VDC @0.2A

## Application

Cooking Appliance, Audio Equipment, Domestic Appliance and Controlling Equipment...etc.

## Performance (at Initial Value)

- Contact Resistance.....100 mΩ Max. @1A,6VDC
- Operate Time.....10 mSec. Max. (DC coil only)
- Release Time.....5 mSec. Max. (DC coil only)
- Dielectric Strength:
  - Between Coil & Contact..... 5,000VAC 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 ..... 100MΩ Min at 500VDC
- Max. On/Off Switching:
  - Electrical..... 20 Cycles per Minute
  - Mechanical ..... 300 Cycles per Minute
- Temperature Range ..... -40~+85 °C
- Humidity Range ..... 45~85% RH.
- Coil Temperature Rise ..... 30 °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
  - Mechanical ..... 10<sup>7</sup> Operations at No load condition
- Weight ..... About 12.5 g

## Accessories & Sockets

- PI-50BE ..... See Page 179
- PI-50BE/3 ..... See Page 179
- PI-50-0..... See Page 181

## Safety Standard & File Number

- UL & C-UL.....E141060
- TÜV.....R50008958
- VDE.....40009648
- CQC.....02001002511

# EMI-2P

## Coil Specification (at 20 °C)

Coil Sensitivity	Nominal Voltage (VAC/VDC)	Nominal Current (mA)		Coil Resistance ( $\Omega \pm 10\%$ )	Power Consumption (DC: W; AC: VA)		Pull-In Voltage	Drop-Out Voltage	Maximum Allowable Voltage
		50HZ	60HZ		50HZ	60HZ			
EMI DC Coil	6	66.7		90	Abt. 0.40		80% Maximum	5% Minimum	130%
	9	44.6		202					
	12	33.3		360					
	15	26.6		560					
	18	22.3		810					
	24	16.7		1,440					
	48	8.7		5,520					
	60	8.2		7,340					
	110	4.1		26,530					
EMI AC Coil	24	29.75	25.35	350	0.71	0.61	15% Minimum		
	115	7.65	6.3	8,100	0.88	0.73			
	230	3.42	2.72	32,500	0.79	0.63			

## Ordering Information

EMI - SS - 2 12 F M I F

**Insulation System:** Nil: Standard Class  
F: Class F

**Contact Material:** Nil: AgNi  
N: AgSnO<sub>2</sub>  
I: AgSnO<sub>2</sub>+In (New Structure)  
J: AgSnO<sub>2</sub>+In Glided (New Structure)  
S: AgSnO<sub>2</sub> Gilded

**Contact Form:** Nil: Form C  
M: Form A  
B: Form B

**Type:** F: New Structure DC Coil, Pinning 5.0mm, 8A  
D: Standard DC Coil  
A: Standard AC Coil

**Coil Voltage:** VDC (06: 6V, 09: 9V, 12: 12V, 15: 15V, 18: 18V, 24: 24V, 48: 48V, 60: 60V, 110: 110V)  
VAC (24: 24V, 115: 115V, 230: 230V)

**Number of Pole:** 2: Two Poles

**Type of Sealing:** SS: RT II Flux Proofed  
SH: RT III Wash Tight

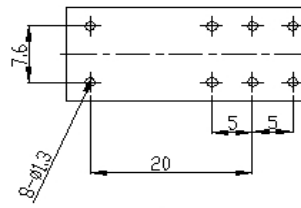
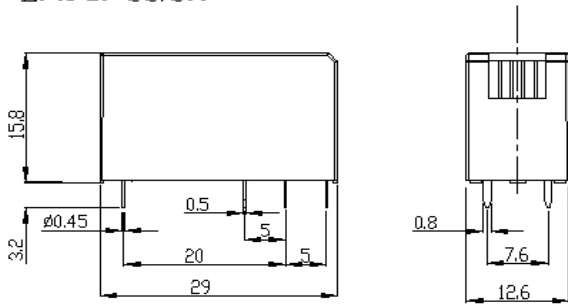
**Model Name:** EMI

## Classification

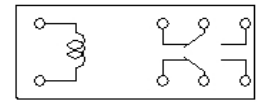
Model	EMI - 2P					
	DC Coil			AC Coil		
Contact Form	2C	2A	2B	2C	2A	2B
Flux Proofed	EMI-SS-2□□□D	EMI-SS-2□□□DM	EMI-SS-2□□□DB	EMI-SS-2□□□A	EMI-SS-2□□□AM	EMI-SS-2□□□AB
Flux Proofed- New	EMI-SS-2□□□F	EMI-SS-2□□□FM	EMI-SS-2□□□FB	-	-	-
Wash Tight	EMI-SH-2□□□D	EMI-SH-2□□□DM	EMI-SH-2□□□DB	EMI-SH-2□□□A	EMI-SH-2□□□AM	EMI-SH-2□□□AB
Wash Tight- New	EMI-SH-2□□□F	EMI-SH-2□□□FM	EMI-SH-2□□□FB	-	-	-

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

EMI-2P-SS/SH

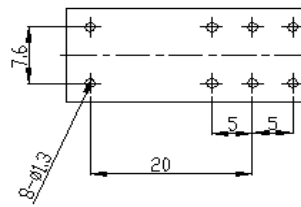
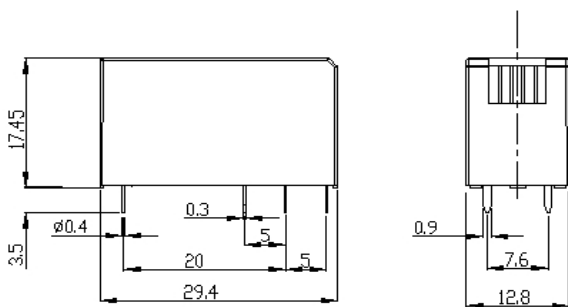


P.C.B. Layout

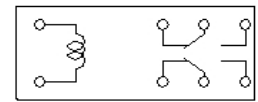


Bottom View

EMI-2P-SS/SH (New Structure DC Coil)



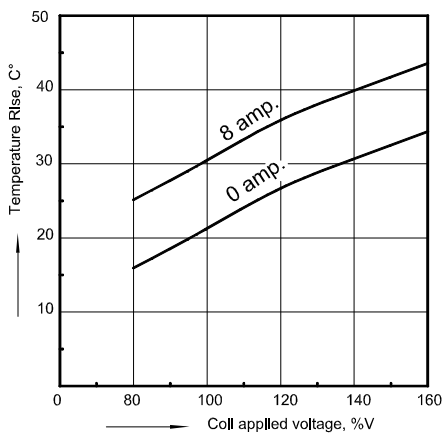
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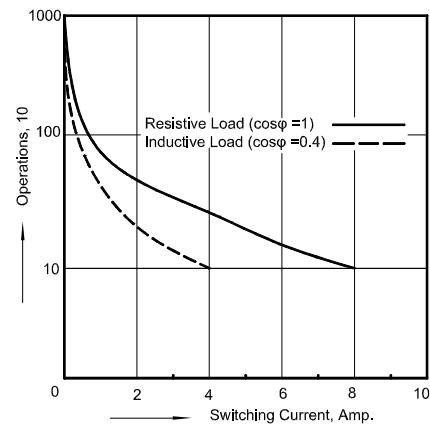
Bottom View

## Reference Data

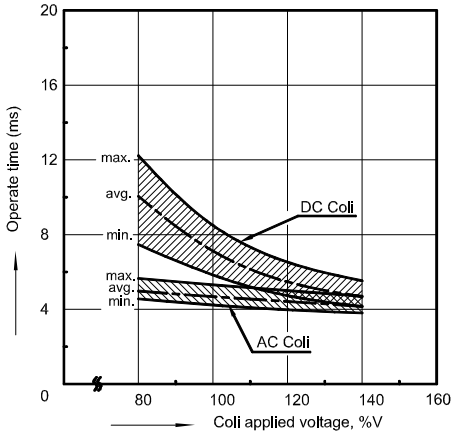
Temperature Rise (at 85°C)



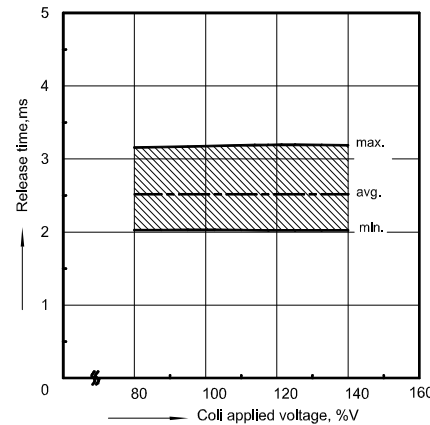
Endurance



Operate time



Release time



V.01EU