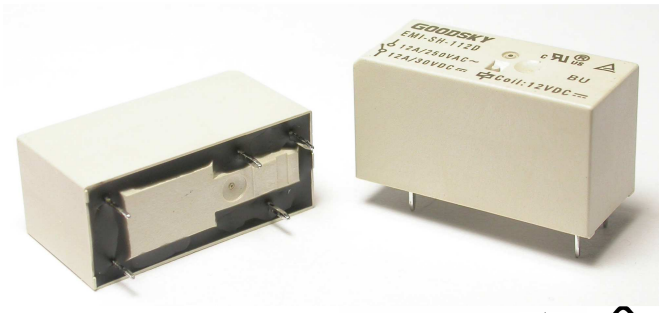
EMI-1P



Main Feature

1. Slim size with 12A rated loaded.
2. Low power consumption and both AC and DC coil available.
3. Proper insulation distance with 5,000VAC dielectric strength.
4. Class F insulation system.
5. In accordance with IEC 60335-1 and IEC 60730-1.
6. Halogen Free series available.

Contact Rating

Load Type	EMI-1P (DM)	EMI-1P (DB)	EMI-1P (D)	EMI-1P (AM/AB)	EMI-1P (A)
Rated Load (Resistive)	12A 277VAC	12A 250VAC	12A 250VAC	12A 250VAC	12A 250VAC
	12A 30VDC	12A 30VDC	12A 30VDC	12A 30VDC	12A 30VDC
Rated Carrying Current	12A	12A	12A	12A	12A
Max. Allowable Voltage	AC 277V	AC 250V	AC 250V	AC 250V	AC 250V
	DC 300V	DC 300V	DC 300V	DC 300V	DC 300V
Max. Allowable Current	12A	12A	12A	12A	12A
Max. Allowable Power Force	3,324VA	3,000VA	3,000VA	3,000VA	3,000VA
	360W	360W	360W	360W	360W
Contact Material	Ag Alloy	Ag Alloy	Ag Alloy	Ag Alloy	Ag Alloy
Contact Form	SPST	SPST	SPDT	SPST	SPDT

Max Allowable Voltage: 300VDC@0.3A

Application

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

Performance (at Initial Value)

- Contact Resistance ..... 100 mΩ Max. @1A,6VDC
- Operate Time ..... 12mSec. Max.
- Release Time ..... 8 mSec. Max.
- 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 Strength ..... 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^2.
  - Error Operation ..... 100 m/S^2.
- Life Expectancy:
  - Electrical ..... 10^5 Operations at Rated Resistive Load.
  - Mechanical ..... 10^7 Operations at No load condition.
- Weight ..... About 12.5 g.

Accessories & Sockets

- PI-35BE ..... See Page 177
- PI-35BE/3 ..... See Page 177
- PI-35-0 ..... See Page 179

Safety Standard & File Number

- UL & C-UL……..E141060
- TÜV ……R3-50006688
- VDE……40009648
- CQC……..02001002512

Coil Specification (at 20 °C)

Coil Sensitivity	Nominal Voltage (VAC/VDC)	Nominal Current (mA)		Coil Resistance (Ω±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		30% 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

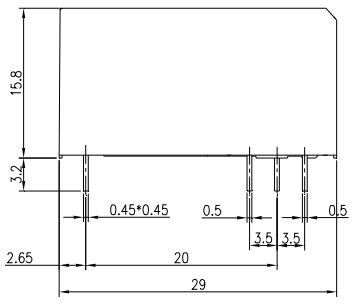
EMI - SS - 1 12 D M - G F

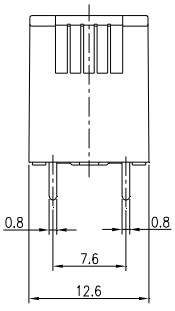
Insulation System:	**Nil:** Standard Class **F:** F Class
Contact Material	**Nil:** AgNi **G:** AgNi Gilded **O:** AgNi Plated **N:** $AgSnO_2$ **S:** $AgSnO_2$ Gilded **C:** AgCdO
Contact Form:	**Nil:** One Form C **M:** One Form A **B:** One Form B
Coil Type:	**D:** DC Coil **A:** AC Coil
Coil Voltage:	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:	**1:** One Pole
Type of Sealing:	**SS:** RT II Flux Proofed Relays **SH:** RT III Wash Tight Relays
Type:	**EMI**

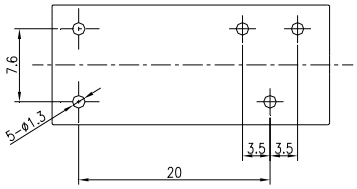
Classification

Model	EMI – 1P					
Coil Sensitivity	DC Coil			AC Coil		
Contact Form	1C	1A	1B	1C	1A	1B
Flux Proofed Relay	EMI-SS-1□□□D	EMI -SS-1□□□DM	EMI -SS-1□□□DB	EMI -SS-1□□□A	EMI -SS-1□□□AM	EMI -SS-1□□□AB
Wash Tight Relay	EMI-SH-1□□□D	EMI -SH-1□□□DM	EMI -SH-1□□□DB	EMI -SH-1□□□A	EMI -SH-1□□□AM	EMI -SH-1□□□AB

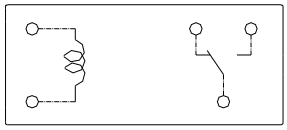
Dimension (≦ 5mm± 0.2mm, > 5mm ± 0.3mm, the tolerance of PCB thru hole: +0.1mm)







P.C.B. Layout

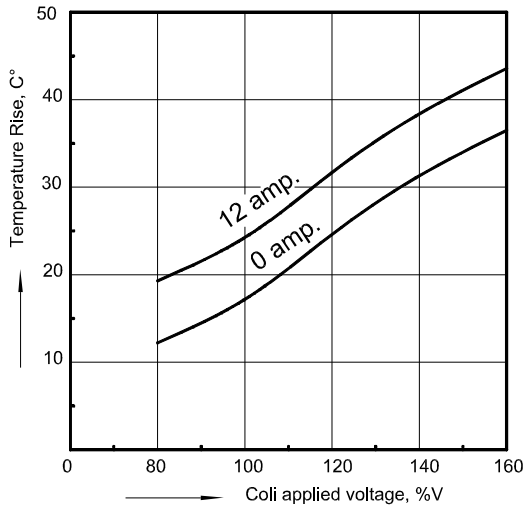


Bottom View

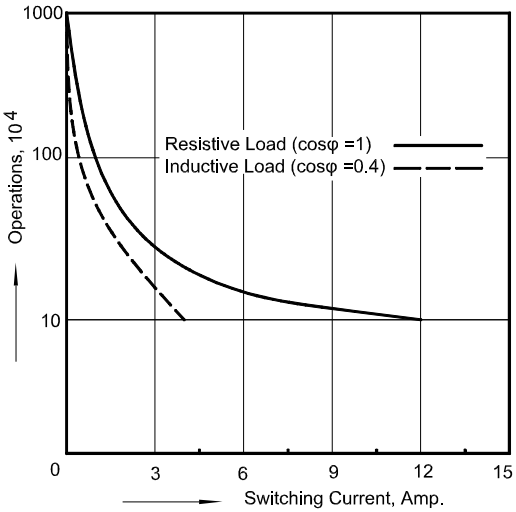
EMP-1P

Reference Data

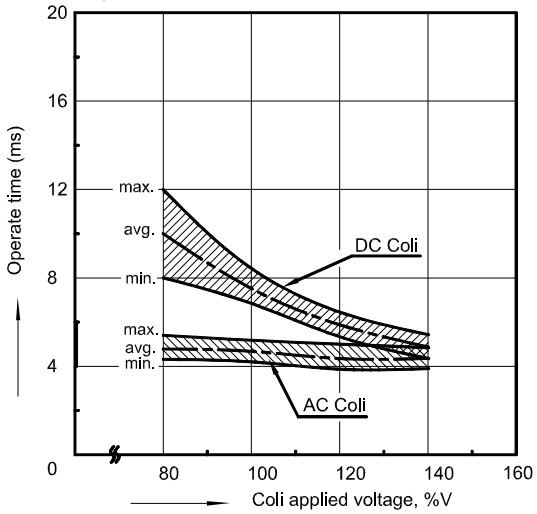
Temperature Rise (at 85°C)



Endurance



Operate time



Release time