

**Main Feature**

1. EZI Series Relays are designed for switching capacity by 12A to comply with industrial control system use.
2. Slim type and low profile (29.0 x 12.7 x 15.0) is developed to provide end users with more flexibility in PC Board design.
3. Low power consumption and both AC and DC coil available.
4. Proper insulation distance is equipped to ensure EZI will has a 5000VAC dielectric strength between contact and coil.
5. Complete protective construction from dust and soldering flux is designed. If required, plastic epoxy resin sealed type is available for washing procedure.
6. Contacts pin out width 5.0 mm.
7. In accordance with IEC 60335-1 and IEC 60730-1.
8. Halogen Free series is available.

**Contact Rating**

Load Type	EZI (DM/DB)	EZI (D)	EZI (AM/AB)	EZI (A)
Rated Load (Resistive)	12A 250VAC	12A 250VAC	12A 250VAC	12A 250VAC
	12A 30VDC	12A 30 VDC	12A 30VDC	12A 30VDC
Rated Carrying Current	12A	12A	12A	12A
Max. Allowable Voltage	AC: 250V	AC: 250V	AC: 250V	AC: 250V
	DC: 300V	DC: 300V	DC: 300V	DC: 300V
Max. Allowable Current	12A	12A	12A	12A
Max. Allowable Power Force	3,000VA	3,000VA	3,000VA	3,000VA
	360W	360W	360W	360W
Contact Material	Ag Alloy	Ag Alloy	Ag Alloy	Ag Alloy
Contact Form	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 Resistance ..... 100MΩ 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 ..... 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 15 g.

**Accessories & Sockets**

- PI-50BE.....See Page 175
- PI-50BE/3.....See Page 175
- PI-50-0 .....See Page 177

**Safety Standard & Its File Number**

- UL & C-UL.....E141060
- VDE.....40009648
- CQC.....02001002513

## Coil Specification (at 20 °C)

Coil Sensitivity	Nominal Voltage	Nominal Current (mA)		Coil Resistance (±10%)		Power Consumption (DC:W; AC:VA)		Pull-In Voltage	Drop-Out Voltage	Maximum Allowable Voltage
		50HZ	60HZ	50HZ	60HZ	50HZ	60HZ			
EZI 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						
EZI 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

EZI - 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<sub>2</sub>

S: AgSnO<sub>2</sub> 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

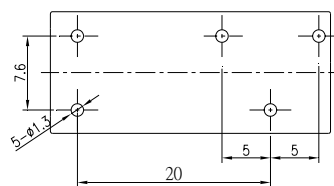
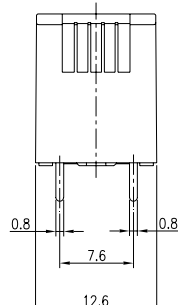
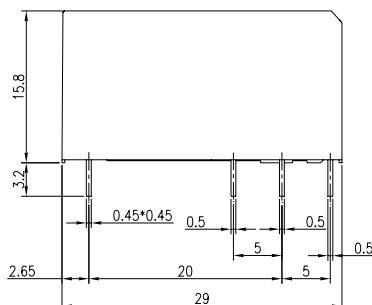
Type:

EZI

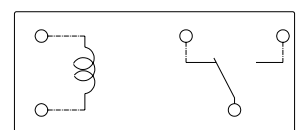
## Classification

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

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



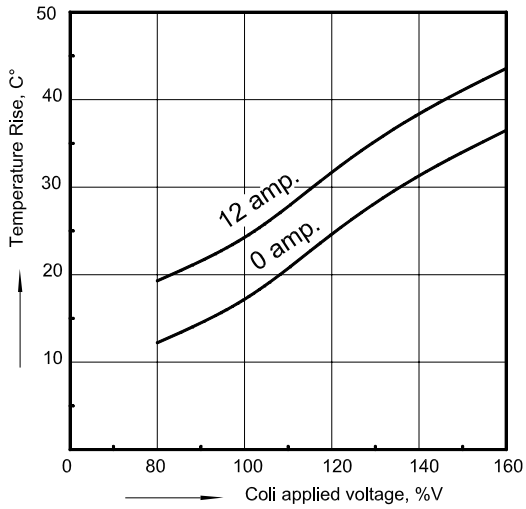
P.C.B. Layout



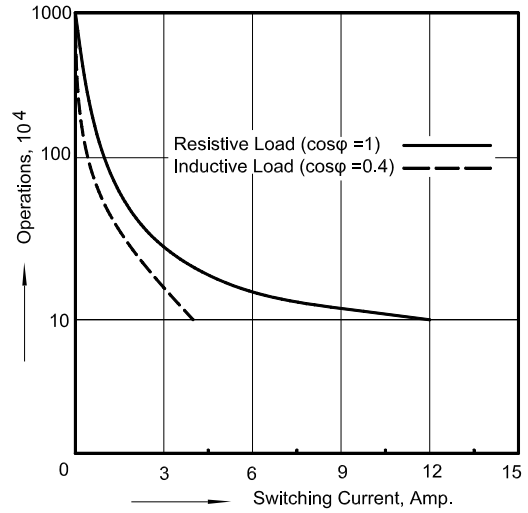
Bottom View

Reference Data

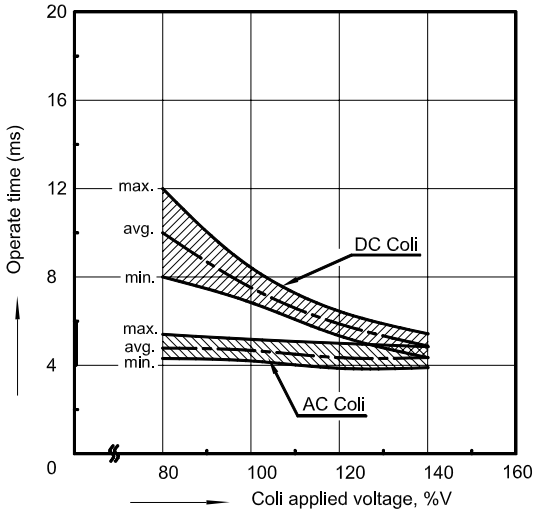
Temperature Rise (at 85°C)



Endurance



Operate time



Release time

