

גלובל אלקטריק הנדסת חשמל בע''מ

BIR Impulse Relays Manual

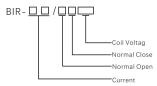
1 Applicable scope

BIR series impulse relay coils are triggered by impulses and the contacts are closed. The product has two stable mechanical positions, and the contacts will open temporarily with the next impulse. Each received impulse will reverse the position of the contact and can be controlled by an unlimited number of buttons. And has the characteristics of zero power consumption.

Impulse relay can be used to control the lighting circuit through the button. The circuit consists of incandescent lamps, halogen lamps, etc. (resistive load); fluorescent lamps, discharge lamps, etc. (inductive load).

Conform to standard: EN/IEC 60669-2-2

2 Type and Meaning



(eg.BIR-16/10 AC12V, Itis16A, 1NO, 12V AC current coil voltage)

3 Product specification

	0.10	Control Voltage	Circuit Discours
Contactor Model	Rated Current	(V)(50Hz)	Circuit Diagram
BIR-16/10	16A	(-)(]- A1 - F230V- A2
BIR-16/20	16A		1 13 A1
BIR-16/11	16A		$\int_{2}^{1} \int_{4}^{3} \frac{ A1 }{ E230V- A2 }$
BIR-16/1C	16A	AC24V/DC12V	A1
BIR-16/30	16A	AC48V/DC24V	1 A1 3 5 F230V- 2 A2 4 5
BIR-16/21	16A	7.0407700247	1 1 A1 F230V- 1 F230V- 1 6
BIR-16/40	16A	AC110V/DC48V];]3 A1
BIR-16/31	16A	AC230V/DC110V	1 3 A1 5 7 239V- 2 4 A2 6 8
BIR-16/22	16A		13 A1 5 7 12 12 12 12 12 12 12 12 12 12 12 12 12
BIR-16/2C	16A		1 A1 5 F230- 6 8

4 Normal working conditions and installation conditions

Operating temperature	-5℃~+60℃
Storage temperature	-40°C~+70°C
Environmental protection category	Dust type
Overvoltage category	
Installation site	Do not install naked, need to install in the distribution box



5 Main parameter and technical performance

5.1 Contact parameters

Contact form	1P
Initial contact resistance	$100 m\Omega$
Contact material	Silver alloy
Contact load (resistance)	IV
Maximum switching voltage	250VAC/125VDC
Maximum switching current	16A
Maximum switching power	4000VA 448W
Electrical life	1×10 ⁵ cycles
Mechanical life	1×10 ⁶ cycles

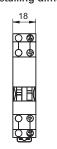
5.2 Performance, characteristic parameters

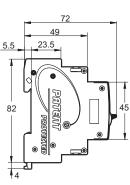
		100mΩ (500VDC)
Dielectric Strength	Contact between coils	4000VAC
	Disconnect between contacts	1500VAC
Actuation time		≤20ms
Shock (stability)		Accelerated speed 100m/s2, pulse duration 11ms
Shake		Double-amplitude 1mm, (10~55)Hz
Way to install		Guide rail type
Overall size (mm)		86×72×18

5.3 Coil parameters

Pulse voltage duration	≥50ms(recommend200ms)
Voltage range	85%~110%

6 Outline overall and installing dimensions





7 Wiring diagram and sequence diagram



