FORWARD RELAYS



 $14 \times 9 \times 5$

us E158859 🛕 R50044271

Features

• DIL pitch terminals. High sensitivity :0.14W or 0.10W nominal power.

- Conforms to FCC Part 681.5kV surge and dielectric 1000VAC.
- Monostable, single or double coil latching relay .
- Application for telecommunication equipment, office equipment, security alarm systems, measuring instruments, medical monitoring equipment, audio visual equipment, flight simulator, sensor control.

Ordering Information

$ \underline{\mathbf{P}} \ \underline{\mathbf{L}} \ \underline{12} \ \underline{\mathbf{W}}$			
1 2 3 4			
1 Part number: P	3 Coil rated voltage(V): DC:3,4.5,5,6,9,12,24		
2 Operating function: NIL: Single Side Stable: L:1 Coil Latching; K:2 Coil Latching	4 Contact material: NIL: AgPd; W: AgNi		

Contact Data

Contact B				
Contact Arra	ngement	2C(DPDT(E	B-M)) (Bifurcated Crossbar)	
Contact Material		AgPd(Au p	lated) AgNi(Au plated)	
Contact Rating (Resistive)		1A,2A/30VI	DC; 0.5A/125VAC	
Max. Switchi	ing Power	60W	62.5VA	Min. Switching Load: 0.01mA/10mV(Reference Value)
Max. Switchi	ng Voltage	g Voltage 220VDC 250VAC		Max. Switching Current:2A
Contact Res	sistance	≪ 50m Ω		Item 4.12 of IEC 61810-7
Operation Electrical 2×10^{5} (DC AgPd); 1×10^{5} (DC A			Item 4.30 of IEC 61810-7	
	Mechanical	1×10 ⁸		Item 4.31 of IEC 61810-7

CAUTION:

Relays previously tested or used above 10mA resistive at 6V maximum (DC or peak AC) open circuit are not recommended for subsequent use in low level applications.

Coil Parameter

Dash		Coil voltage VDC		Coil resistance	Pick-up voltage VDC(max)	Drop-out voltage VDC(min) (10% of rated voltage)	Coil power W	Operate time ms	Release time ms
numbers	Rated	Max.	$\Omega \pm 10\%$		(75%of rated voltage)				
P-003	3	7.5	64.3		2.25	0.3	0.14		
P-004	4.5	11.25		144.6	3.38	0.45	0.14		
P-005	5	12.5		178	3.75	0.5	0.14		
P-006	6	15.0		257	4.50	0.6	0.14	Approx.2	Approx.1
P-009	9	22.5		579	6.75	0.9	0.14		
P-012	12	30.0		1028	9.00	1.2	0.14		
P-024	24	48.0		2880	18.0	2.4	0.20		
1 Coil Latch	1 Coil Latching		Set	Reset(Max)		Set	Reset		
PL-003	3	8.7	90		2.25	-2.25	0.10		
PL-004	4.5	13.0		202.5	3.38	-3.38	0.10		
PL-005	5	14.5	250		3.75	-3.75	0.10		
PL-006	6	17.4		360	4.50	-4.50	0.10	Approx.2	Approx.2
PL-009	9	26.1		810	6.75	-6.75	0.10		
PL-012	12	34.8		1440	9.00	-9.00	0.10		
PL-024	24	57.6		3840	18.0	-18.0	0.15		
2 Coil Latch	2 Coil Latching Set Coil Reset Coil		Set	Reset(Max)		Set	Reset		
PK-003	3	6	45	45	2.25	2.25	0.20		
PK-004	4.5	9	101	101	3.38	3.38	0.20		
PK-005	5	10	125	125	3.75	3.75	0.20		
PK-006	6	12	180	180	4.50	4.50	0.20	Approx.2	Approx.2
PK-009	9	18	405	405	6.75	6.75	0.20		
PK-012 PK-024	12 24	24 36	720 1920	720	9.00 18.0	9.00 18.0	0.20 0.30		
F IX=024	24	50	1320	1920	10.0	10.0	0.30		

CAUTION: 1.The use of any coil voltageless than the rated coil voltage will compromise the operation of the relay. 2.Pickup and release(reset) voltage are fortest purposes only and are not to be used as design criteria. 3.When latching relays are installed in equipment, the set and reset coil should not be powered simultaneously.Coil should not be pulsed with less than the nominal coil voltage and pulse width should be a minimum of three times the specified operate time of the relay. If these conditions are not followed, it is possible for the relay to be in the magnetically neutral position.

Characteristics

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Electrostatic Capacitance		
Between Open Contacts	Approx.0.4pF	Item 4.41 of IEC 61810-7
Between Coil & Contacts	Approx.0.9pF	Item 4.41 of IEC 61810-7
Between Contact Poles	Approx.0.2pF	Item 4.41 of IEC 61810-7
Insulation Resistance	1000M Ω min(at 500VDC) Item 4.11 of IEC 61810-7	
Dielectric Strength		
Between Open Contacts	1000VAC 1min	
Between Coil & Contacts	1000VAC 1min	Item 4.9 of IEC 61810-7
Between Contact Poles	1000VAC 1min	
Surge Withstand Voltage		
Between Open Contacts	1500V	
Between Coil & Contacts	1500V	FCC68
Between Contact Poles	2500V	
Shock Resistance	Functional:490m/s ² 11ms; Destructive:980 m/s ² 6ms	Item 4.26 of IEC 61810-7
Vibration Resistance	10Hz~55Hz Double amplitude Functional:3mm Destructive:5mm	Item 4.28 of IEC 61810-7
Terminals Strength	5N	Item 4.24 of IEC 61810-7
Temperature Range	-40°C~70°C(-40° F~158° F)	
Mass	Approx. 1.5g	Item 4.7 of IEC 61810-7

Safety Approvals

Safety approval	UL&CUR	TÜV
Load	1A,2A/30VDC; 0.5A/125VAC	1A/30VDC; 0.5A/125VAC

