General Purpose Relay

- Exceptionally reliable general purpose relay.
- Long life (minimum 100,000 electrical operations) assured by silver contacts.
- Built-in operation indicator (mechanical, LED), diode surge suppression, Varistor surge suppression.
- The contact operation can be easily checked by mechanical indicator and/or push-to-test button options.
- Conforms to CENELEC standards.
- VDE approved versions available.







Ordering Information

To Order: Select the part number and add the desired coil voltage rating (e.g., MK3P5-S-AC120).

Туре	Terminal	Coil	Contact form	Model		
				Mechanical indicator	Mechanical indicator & push-to-test button	
Standard	Plug-in	AC/DC	DPDT	MK2P-I	MK2P-S	
			3PDT	MK3P-5-I	MK3P-5-S	
LED indicator			DPDT	MK2PN-I	MK2PN-S	
			3PDT	MK3PN-5-I	MK3PN-5-S	
LED indicator and diode		DC	DPDT	MK2PND-I	MK2PND-S	
			3PDT	MK3PND-5-I	MK3PND-5-S	
LED indicator and varistor		AC	DPDT	MK2PNV-I	MK2PNV-S	
			3PDT	MK3PNV-5-I	MK3PNV-5-S	
Diode		DC	DPDT	MK2PD-I	MK2PD-S	
			3PDT	MK3PD-5-I	MK3PD-5-S	
Varistor		AC	DPDT	MK2PV-I	MK2PV-S	
			3PDT	MK3PV-5-I	MK3PV-5-S	

Note: 1. Reverse polarity versions available on DC coil types. Consult your OMRON representative for further information.

■ Accessories (Order separately)

To Order: Select the appropriate part numbers for sockets, clips, and mounting tracks (if required) from the available types chart.

Track Mounted Sockets

Relay type		Model				
	Socket	Relay hold-down clip	Mounting track/end plate			
SPDT DPDT	PF083A-E	PFC-A1	PFP-100N or PFP-50N and PFP-M (end plate)			
3PDT	PF113A-E	PFC-A1	PFP-100N or PFP-50N and PFP-M (end plate)			

^{2.} VDE approved versions are available. Consult your OMRON representative for further information.

■ Accessories (continued)

Back Connecting Sockets

Relay type	Model				
	Socket	Relay hold-down clip			
SPDT	PL08	PLC-E			
DPDT	PLE08-0	PLC-10			
	PL08-Q	PLC-E			
3PDT	PL11	PLC-E			
	PLE11-0	PLC-10			
	PL11-Q	PLC-E			

Specifications

■ Contact Data

Load	F	Inductive load (p.f. = 0.4)				
	2 Pole	3 Pole				
Rated load	10 A at 250 VAC 10 A at 28 VDC	10 A at 120 VAC 10 A at 28 VDC 10 A at 250 VAC	7 A at 250 VAC			
Contact material	Ag	Ag				
Carry current	10 A	10 A				
Max. operating voltage	250 VAC, 250 VDC	250 VAC, 250 VDC				
Max. operating current	10 A	10 A				
Max. switching capacity	2,500 VA 280 W	, , , , , , , , , , , , , , , , , , , ,				
Min. permissible load	10 mA at 1 VDC		•			

■ Coil Data

AC

Rated voltage (VAC)	Rated current (mA) (at 60 Hz)	Coil resistance (Ω)	Coil inductance (Ref. value) (H)		Pick-up voltage	Dropout voltage	Maximum voltage	Power consumption
			Armature OFF	Armature ON	%	of rated volta	ige	(mW)
6	360	3.9	0.0423	0.0201	80% max.	30% min.	110% max.	Approx.
12	180	16.3	0.3270	0.1666	Approx. 2.7 VA	(at 60 Hz) 25% min. (at 50 Hz)		2.3 VA (at 60 Hz) Approx. 2.7 VA (at 50 Hz)
24	88.0	68.0	0.6940	0.3760				
50	39.0	338	3.195	1.530				
110	21.0	1240	13.45	7.32				
120	18.0	1578	15.04	7.19				,
220	11.0	5090	49.73	27.02				
240	9.2	6737	58.62	32.07				

DC

Rated voltage	Rated current (mA)	urrent (mA) resistance		Coil inductance (Ref. value) (H)		Dropout voltage	Maximum voltage	Power consumption
(VDC) (at 60 Hz)		(Ω) Armature OFF		Armature ON	% of rated voltage			(mW)
6	255	23.5	0.206	0.106	80% max.	15% min.	110% max.	Approx.
12	126	95	0.963	0.449	Approx. 2.7 VA			1.5 W
24	56	430	4.915	2.478				
48	29.5	1630	16.685	10.487				
110	15.1	7300	80.2	42.6				

- Note: 1. The rated current and coil resistance are measured at a coil temperature of 23°C (73°F) with a tolerance of ±15% for DC rated current and +15%, -20% for AC rated current.
 - 2. The rated current is reference value.
 - 3. Performance characteristic data are measured at a coil temperature of 23°C (73°F).
 - 4. For models with the LED indicator built-in, add an LED current of approximately 0 thru 5 mA to the rated current.