

OMRON®

RELAYS

CONTENTS

GENERAL-PURPOSE & POWER RELAYS	1
Selection guide	2
Glossary	4
Technical information	5
General-purpose relays	7
Power relays	53
PC BOARD-USE RELAYS	67
Selection guide	68
Glossary	71
Technical information	72
PC board-use relays	73

Since all the models listed may not normally be marketed in your area,
please contact OMRON's distributor or sales representative for detailed information.

GENERAL-PURPOSE & POWER RELAYS

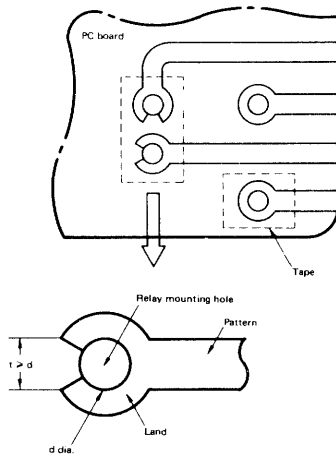
CONTENTS

SELECTION GUIDE	2
GLOSSARY	4
TECHNICAL INFORMATION	5
GENERAL-PURPOSE RELAYS	7
Model MY	7
Model LY	17
Model G2A	23
Model MK	29
Model MX	39
Model MHS	41
Model MA	47
POWER RELAYS	53
Model MM	53
Model MP	61
Model G2J	63
Model G4W	65

■ SOLDERING

● Manual Soldering

It is recommended that the PC relay be manually soldered after automatic soldering of other components to protect the relay contacts from excessive flux. When soldering, apply a soldering iron rated at 30 to 60W (tip temperature: 280 to 330° C) quickly (3 to 5sec) and firmly. Then, be sure to confirm that the relay operates normally. Process the PC board beforehand as shown below to prevent the relay mounting holes from being filled with solder and to facilitate subsequent manual soldering.



● Automatic dip soldering

1) Flux application

- Apply flux sparingly and evenly to prevent penetration of solder flux into the relay. In this case, adjust the position of flux level so that the upper surface of the PC board is not flooded with flux.
- Use an anti-corrosive rosin type flux.
- For flux solvent, use alcohol type which is less chemically reactive.
- Preheating process subsequent to flux application is effective to dry the applied flux, facilitate metal melting and prevent penetration of flux into the relay. However, when preheating the PC board, keep the temperature of the land side of the PC board to less than 80° C.

2) Soldering

- Dip the bottom of the PC board into molten solder for the shortest possible period (approx. 5sec) at a solder temperature of 240° C. In this case, be sure that the PC board is not flooded with solder.
- Use a solder conforming with H60 (Sn 60, Pb 40) or H63 (Sn 63, Pb 37) JIS Z 3282.

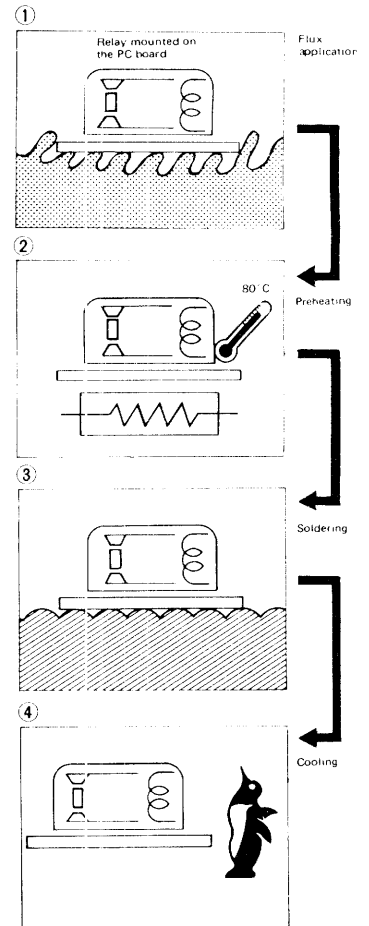
3) Cooling

Cool forcibly the PC board with fan, etc.

4) Cleaning

As much as possible, avoid cleaning the terminals. When cleaning for some reason or other, care should be taken to the following:

- Use alcohol for freon type solvents which are less chemically reactive. Note that use of other solvents may damage the plastic material used for the relay base, etc.
- Clean the soldered PC board pattern side only to prevent the flux-contaminated solvent from entering the relay.





OMRON

Cat. No. J01-E1-4

Standard Type

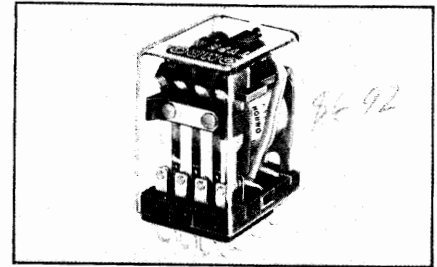
GENERAL-PURPOSE RELAY

Model **MY**

Wide-ranging Applications From Power To Sequence Controls

FEATURES

- Designed small, 1-, 2- and 3-pole types break 5A loads and 4-pole type, 3A.
- High reliability and long life
- Ultra high sensitivity with quick response
- High vibration/shock resistance
- Sealed or Lloyd listed type is also available



Mounting style	Terminal	Type Contact form	Standard		Twin contact		Operation indicator self-contained	Test button self-contained	Arc barrier equipped	High capacity	High sensitivity	Standard approved
			Unsealed	Sealed	Unsealed	Sealed						
Standard bracket mounting	Solder	SPDT	MY1	—	—	—	MY1N	MY1I	—	—	—	—
		DPDT	MY2	—	—	MY2Z	MY2N	MY2I	—	MY2-Y	—	MY2-US
		3PDT	MY3	—	—	—	MY3N	MY3I	MY3-3	—	MYC3	MY3-US
		4PDT	MY4	MYQ4	MY4Z	MYQ4Z	MY4N	MY4I	MY4-3	—	—	MY4-US
	P.C.B	SPDT	MY1-02	—	—	—	—	—	—	—	—	—
		DPDT	MY2-02	—	—	MY2Z-02	—	—	—	—	—	MY2-02-US
		3PDT	MY3-02	—	—	—	—	—	—	—	—	MY3-02-US
		4PDT	MY4-02	MYQ4-02	MY4Z-02	MYQ4Z-02	—	—	—	—	—	MY4-02-US
Upper mounting bracket	Solder	SPDT	MY1F	—	—	—	—	—	—	—	—	—
		DPDT	MY2F	—	—	MY2ZF	—	—	—	—	—	MY2F-US
		3DPT	MY3F	—	—	—	—	—	—	—	—	MY3F-US
		4PDT	MY4F	—	—	MY4ZF	—	—	—	—	—	MY4F-US
Lower mounting bracket	Solder	SPDT	MY1S	—	—	—	—	—	—	—	—	—
		DPDT	MY2S	—	—	MY2ZS	—	—	—	—	—	MY2S-US
		3PDT	MY3S	—	—	—	—	—	—	—	—	MY3S-US
		4PDT	MY4S	—	—	MY4ZS	—	—	—	—	—	MY4S-US

NOTE: Add suffix code "-G" to each model number when the mounting stud equipped type is required (ex. MY4-G).

OMRON

STANDARD TYPE

SPECIFICATIONS

COIL RATINGS

Rated voltage (V)	Rated current (mA)		Coil resistance (Ω)	Coil inductance (ref. value) (H)		Must operate voltage	Must dropout voltage	Maximum voltage	Power consumption (VA, W)
	50Hz	60Hz		Armature OFF	Armature ON				
						% of rated voltage			
AC	6	234	200	11	0.04	0.08	30 min	110	Approx. 1.2
	12	117	100	41	0.14	0.27			
	24	58.5	50	180	0.56	1.06			
	50	28.1	24	695	2.78	4.88			
	100	14.1	12	3,160	11.80	22.50			
	110	11.7	10	3,830	13.80	29.80			
	120	12.9	11	3,830	13.80	29.80			
	200	9.4	8	10,100	36.20	62.20			
DC	220	6.5	5.5	15,700	51.00	110.30	10 min	Approx. 0.9	
	240	7.2	6.1	15,700	51.00	110.30			
	6	150	40	0.17	0.33				
DC	12	75	160	0.73	1.37	10 min	Approx. 0.9		
	24	36.9	650	3.20	5.72				
	48	18.5	2,600	10.60	21.00				
	100	9.1	11,000	45.60	86.20				

NOTE: The rated current, coil resistance and inductance are measured at a coil temperature of 20 °C with tolerances of ±15%, ±20% for AC rated current and ±15% for DC rated current, and ±15% for rated coil resistance.

CONTACT RATINGS

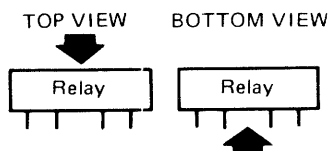
Type Load Item	Unsealed				Sealed	
	SPDT, DPDT, 3PDT		4PDT		4PDT	
	Resistive load (p.f.=1)	Inductive load (p.f.=0.4, =7msec)	Resistive load (p.f.=1)	Inductive load (p.f.=0.4, =7msec)	Resistive load (p.f.=1)	Inductive load (p.f.=0.4, =7msec)
Rated load	220 VAC 5A 24 VDC 5A	220 VAC 2A 24 VDC 2A	220 VAC 3A 24 VDC 3A	220 VAC 0.8A 24 VDC 1.5A	220 VAC 1A 24 VDC 1A	220 VAC 0.5A 24 VDC 0.5A
Carry current	5A		3A		1A	
Max. operating voltage	250 VAC, 125 VDC				250 VAC, 125 VDC	
Max. operating current	5A		3A		1A	
Max. switching capacity	1100VA 120W	440VA 48W	660VA 72W	176VA 36W	220VA 24W	110VA 12W
Minimum permissible load (ref. value)	5 VDC 1mA		1 VDC 1mA		1 VDC 1mA	

ACCESSORIES

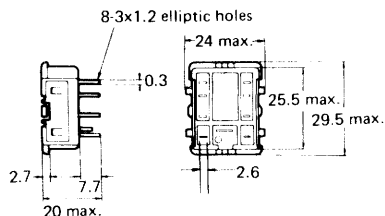
CONNECTING SOCKETS

Available types

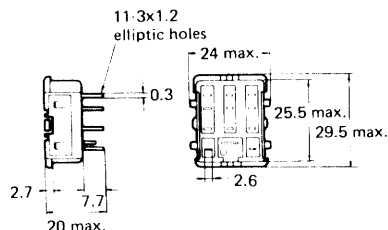
Relay	Socket	Back connecting socket		
		Solder terminal	Wire-wrap terminal	P.C. terminal
SPDT, DPDT	PYF08A	PY08	PY08QN(2)	PY08-0
3PDT	PYF11A	PY11	PY11QN(2)	PY11-0
4PDT	PYF14A	PY14	PY14QN(2)	PY14-0



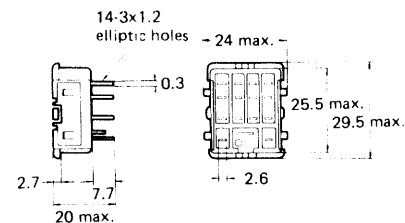
PY08



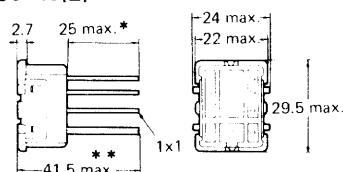
PY11



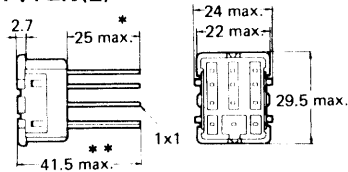
PY14



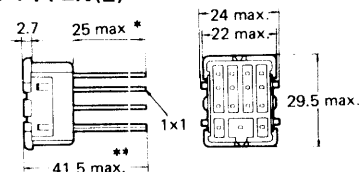
PY08QN(2)



PY11QN(2)

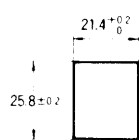


PY14QN(2)

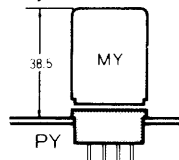


NOTE: With PY1QN2, dimension * should read as 20 max. and dimension ** 36.5 max.

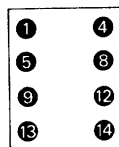
Panel cutout



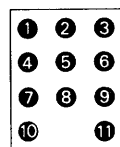
Mounting height of relay with socket



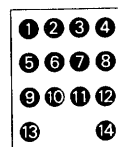
Terminal arrangement (Bottom view)



1-, 2-pole

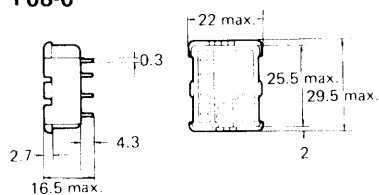


3-pole

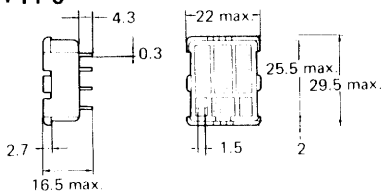


4-pole

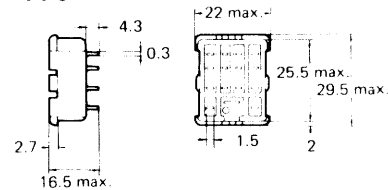
PY08-0



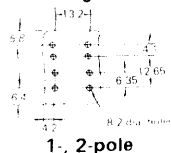
PY11-0



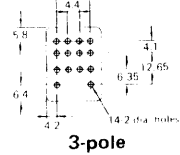
PY14-0



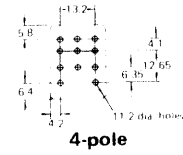
Mounting holes



1-, 2-pole



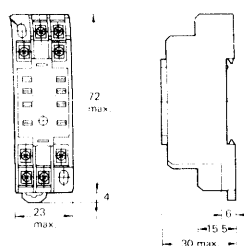
3-pole



4-pole

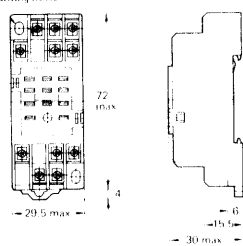
PYF08A

2.4 2x5 mounting holes



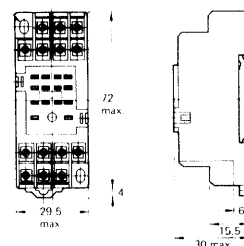
PYF11A

2.4 2x5 mounting holes

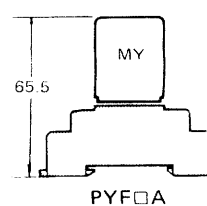


PYF14A

2.4 2x5 mounting holes

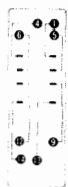


Mounting height of relay with socket

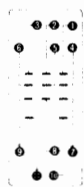


Terminal arrangement/mounting holes (Top view)

PYF08A



PYF11A



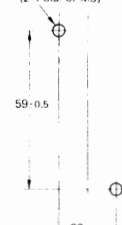
PYF14A



PYF08A

2.4.5 dia. or M4
(2.4 dia. or M3)

PYF11A/14A

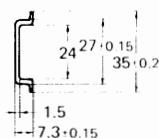
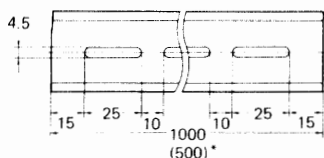
2.4.5 dia. or M4
(2.4 dia. or M3)

• RELAY HOLD-DOWN CLIPS

PYC-A1

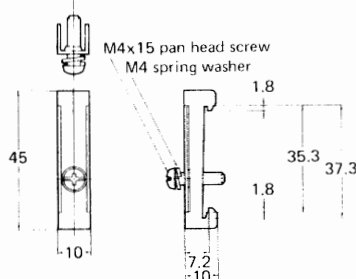
• SOCKET MOUNTING TRACK/END PLATE (for PYF□N)

PFP-100N



* Type PFP-50N (500mm wide) is also available.

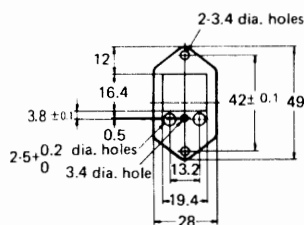
PFP-M



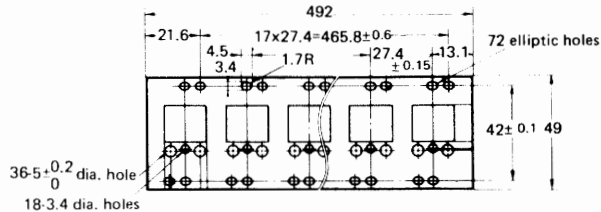
• RELAY MOUNTING PLATES (t = 1.6)

When mounting one or more relays having a mounting stud, use relay mounting plates.

MYP-1



MYP-18

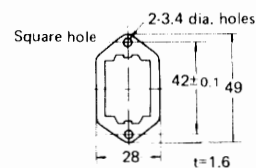


• SOCKET MOUNTING PLATES (t = 1.6)

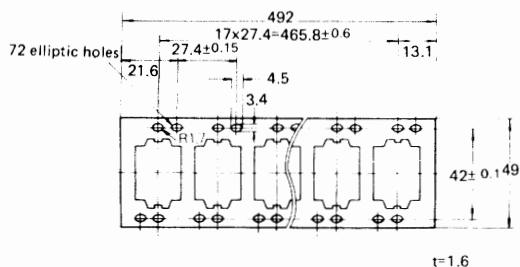
Type of socket mounting plate	For mounting 1-socket	For mounting 18 sockets	For mounting 36 sockets
Type of socket	PYP-1	PYP-18	PYP-36
PY08, PY11, PY14 PY08QN(2), PY11QN(2), PY14QN(2)			

NOTE: The Types PYP-18 and -36 may be cut to any desired length.

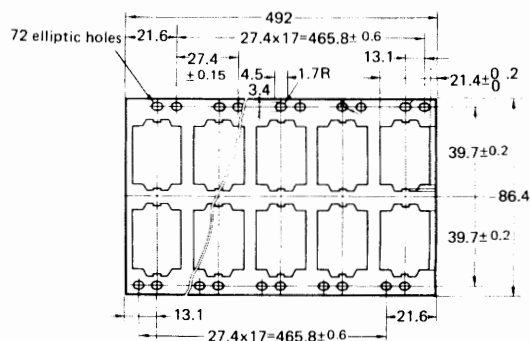
PYP-1



PYP-18



PYP-36



TWIN CONTACT TYPE

SPECIFICATIONS

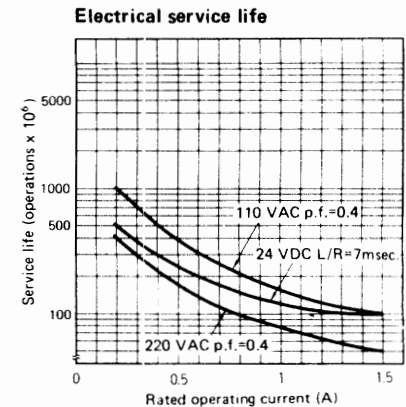
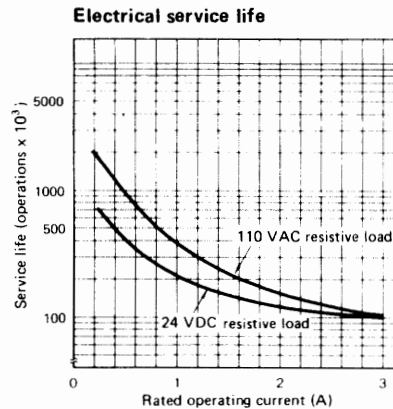
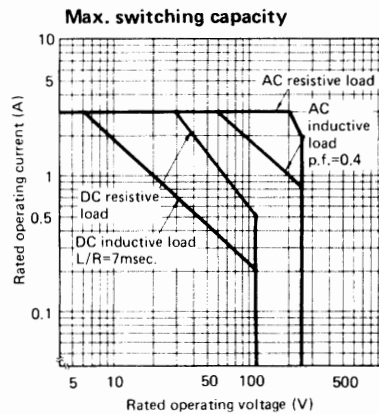
Same as the Standard Type with the following exceptions.

CONTACT RATING

Minimum permissible load (reference value):
1 VAC 100 μ A

CHARACTERISTIC DATA

MY4Z



DIMENSIONS

Same as the Standard Type.

OPERATION INDICATOR SELF-CONTAINED TYPE

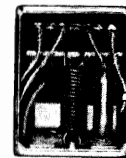
SPECIFICATIONS

Same as the Standard Type with the following exceptions.

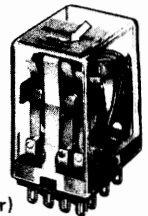
COIL RATINGS

6, 12, 24, 50 VAC	LED indicator
6, 12, 24, 48 VDC	
100, 110, 120, 200, 220 and 240 VAC	Neon lamp indicator
100 VDC	

With the LED indicator type, the rated current is approximately 10mA higher than the Standard Type.



MY□N
(with operation indicator lamp)

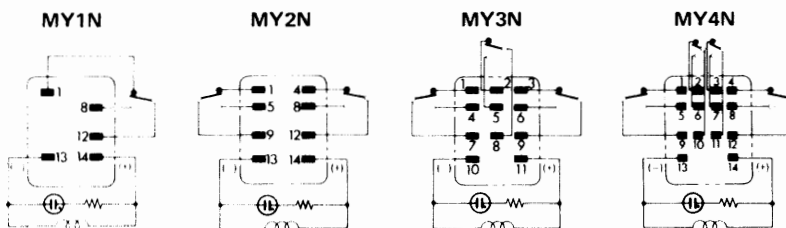


MY4N2
(with mechanical operation indicator)

DIMENSIONS

Same as the Standard Type with the following exceptions.

Terminal arrangement (Bottom view)

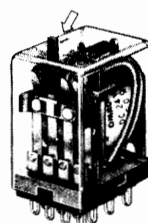


NOTE: The above terminal arrangements apply to the neon lamp indicator type.

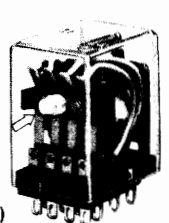
TEST BUTTON SELF-CONTAINED TYPE

SPECIFICATIONS

Same as the Standard Type.



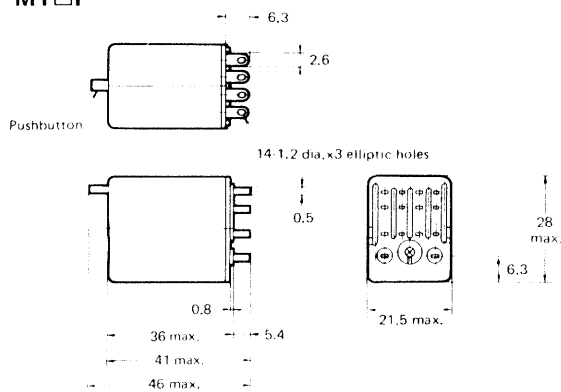
MY□I
(with built-in test button on the top of the case)



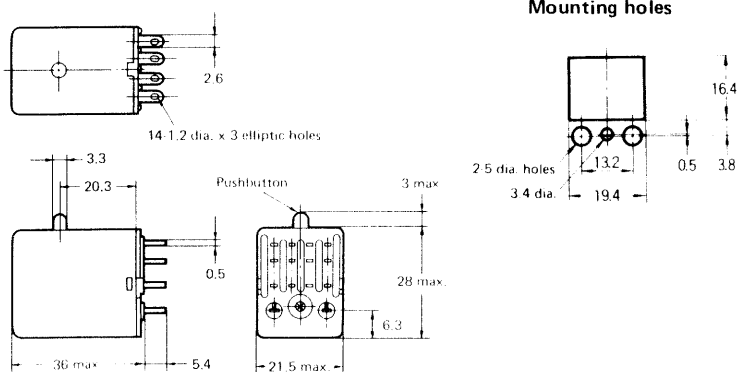
MY□I2
(with built-in test button on the front part of the case)

DIMENSIONS

MY□I



MY□I2



HIGH SENSITIVITY TYPE

SPECIFICATIONS

Same as the Standard Type with the following exceptions.

COIL RATINGS

Power rating				
Rated voltage	Rated current	Coil resistance	Max. voltage	Power consumption
24 VDC	36.9mA	650Ω	110% of rated voltage	900mW

NOTE: Rated coil current and coil resistance are measured at a coil temperature of 20°C.

Input rating			
Input voltage range	Operate voltage	Release voltage	Power consumption
2 to 12V	2V max.	1V min.	0.5 to 52mW

NOTE: Operate and release voltages are measured with the rated voltage applied to the power supply.

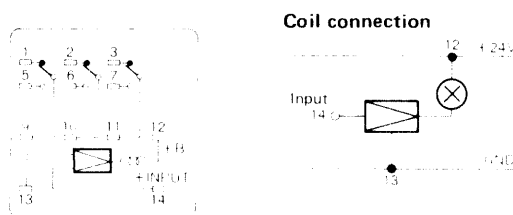
CONTACT RATINGS

Item	Load	
	Resistive load (p.f.=1)	Inductive load (p.f.=0.4, L/R=7msec)
Rated load	220 VAC 3A 24 VDC 3A	220 VAC 0.8A 24 VDC 1.5A
Carry current	3A	
Max. operating voltage	250 VAC 125 VDC	
Max. operating current	3A	
Max. switching capacity	660VA 72W	176VA 36W
Minimum permissible load (ref. value)	1 VDC 1mA	

DIMENSIONS

Same as the Standard Type with the following exceptions.

CONNECTION



CHARACTERISTICS

Service life	Mechanically: 100,000,000 operations min.
	Electrically: 200,000 operations min. (under rated load)

HIGH CAPACITY TYPE

SPECIFICATIONS

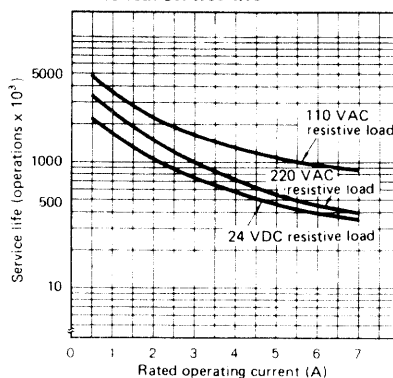
Same as the Standard Type with the following exception.

CONTACT RATINGS

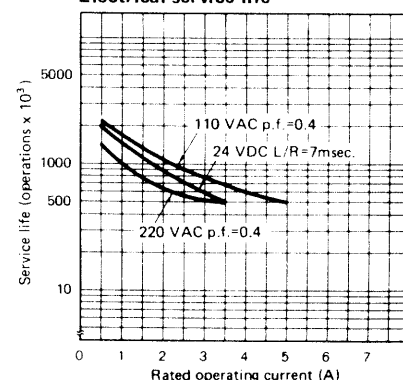
Item	Load	
	Resistive load (p.f.=1)	Inductive load (p.f.=0.4, L/R=7msec)
Rated load	220 VAC 7A 24 VDC 7A	220 VAC 3.5A 24 VDC 3.5A
Carry current	7A	
Max. operating voltage	250 VAC; 125 VDC	
Min. operating current	7A	
Max. switching capacity	1,540VA 168W	770VA 84W

CHARACTERISTIC DATA

MY2-Y Electrical service life



Electrical service life



ARC BARRIER EQUIPPED TYPE

MY□-3 incorporates an arc barrier which serves to prevent shorts due to arcing and to permit use in circuits where the relay may be subject to potential differences developed between two juxtaposed contacts.

■ SPECIFICATIONS/DIMENSIONS

Same as the Standard Type.



Arc barrier equipped type

STANDARD APPROVED TYPE

When placing your order for UL, CSA and SEV approved versions, please indicate "UL," "CSA" or "SEV" as desired in addition to the model number.

■ SPECIFICATIONS /DIMENSIONS

Same as the Standard Type with the following exceptions.

● RATINGS

UL recognized type (File No. E41515)

Type	Contact form	Coil ratings	Contact ratings
MY	DPDT 3PDT	6 to 240 VAC 6 to 120 VDC	5A 120 VAC/28 VDC (resistive load) 5A 240 VAC (inductive load)
	4PDT		3A 120 VAC (inductive load) 1.5A 240 VAC (inductive load) 3A 28 VDC (resistive load) 0.2A 120 VDC (resistive load)

CSA certified type (File No. LR31928)

Type	Contact form	Coil ratings	Contact ratings
MY	DPDT 3PDT	6 to 240 VAC 6 to 120 VAC	5A 240 VAC (inductive load) 5A 28 VDC (resistive load)
	4PDT		3A 240 VAC (inductive load) 3A 28 VDC (resistive load)

SEV listed type [File No. D7 91/63 (2- & 4-pole), D7 91/91 (3-pole)]

Type	Contact form	Coil ratings	Contact ratings
MY	DPDT 3PDT 4PDT	6 to 220 VAC 6 to 110 VDC	3A 110 VAC 1.5A 250 VAC 3A 30 VDC (resistive load)

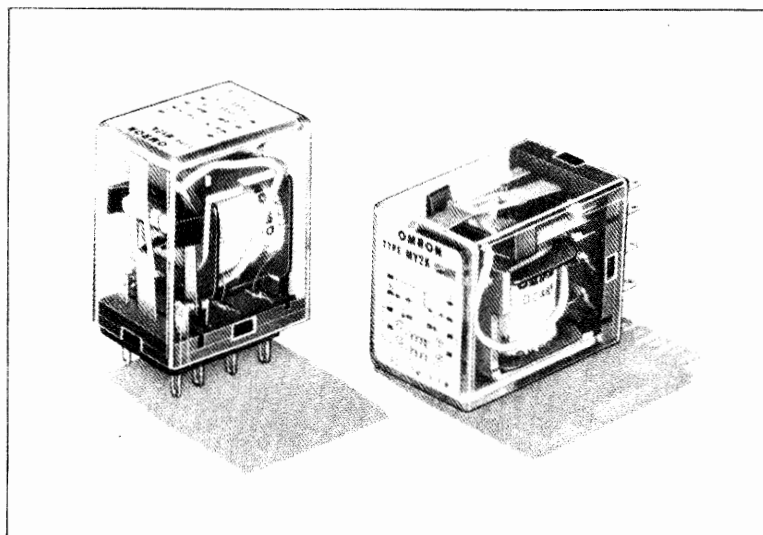
Lloyd listed type (File No. KOB-204524)

Type	Contact form	Coil ratings	Contact ratings
MY	DPDT	6 to 240 VAC 6 to 120 VDC	2A 200 VAC (inductive load) 2A 30 VDC (resistive load)
	4PDT		1.5A 115 VAC, 0.8A 200 VAC (inductive load) 1.5A 30 VDC (resistive load)

Magnetic Latching Relay Ideal for Memory Circuit

FEATURES

- Changes due to aging are negligible, because of use of special magnetic materials, thus ensuring long continuous holding time.
- Little change in characteristics such as contact follow, contact pressure, etc. and long life.
- High vibration and shock resistance.
- Built-in operation indicator for easy relay operation monitoring.



AVAILABLE TYPES

Terminal Contact form	Plug-in	P.C.B.
DPDT	MY2K	MY2K-02

OMRON

SPECIFICATIONS

COIL RATINGS

Rated voltage (V)		Set coil				Reset coil				Must set voltage	Must reset voltage	Maximum voltage	Power consumption (VA, W)			
		Rated current (mA)		Coil resistance (Ω)	Coil inductance (ref. value) (H)	Rated current (mA)		Coil resistance (Ω)	Coil inductance (ref. value) (H)				Armature ON	% of rated voltage	Set coil	Reset coil
		50Hz	60Hz			50Hz	60Hz									
AC	6	146	142	13		68	32									
	12	57	56	72		39	130									
	24	27.4	26.4	320		18.6	550									
	50	14	13.4	1,400		3.5	3,000									
	100	7.1	6.9	5,400		3.5	3,000									
	110	7.8	7.6	5,400		3.8	3,000									
	120	5.8	5.6	8,300		3.5	3,000									
DC	6	230		26		100	60									
	12	110		110		50	235									
	24	52		470		25	940									

NOTES: 1. The rated current and coil resistance are measured at a coil temperature of 20°C with tolerances of +15%, -20% for AC rated current and ±15% for DC rated current, and ±15% for rated coil resistance.

2. The rated current and performance characteristics are measured at a coil temperature of 5 to 35°C.

CONTACT RATINGS

Item	Load	Resistive load (p.f.=1)	Inductive load (p.f.=0.4, L/R=7msec)
Rated load		220 VAC 3A 24 VDC 3A	220 VAC 0.8A 24 VDC 1.5A
Carry current		3A	
Max. operating voltage		250 VAC 125 VDC	
Max. operating current		3A	3A
Max. switching capacity		660VA, 72W	180VA, 36W
Minimum permissible load (reference value)		1 VDC 1mA	

● CHARACTERISTICS

Contact resistance	50mΩ max.
Operate (Set) time	AC: 30msec max. DC: 15msec max.
Release (Reset) time	AC: 30msec max. DC: 15msec max.
Operating frequency	Mechanically: 18,000 operations/hour Under rated load: 1,800 operations/hour
Insulation resistance	100MΩ min. (at 500 VDC)
Dielectric strength	1,500 VAC, 50/60Hz for 1 minute (1,000 VAC between non-continuous contacts, and between set and reset coils)
Vibration	Mechanical durability: 10 to 55Hz; 1.0mm double amplitude Malfunction durability: 10 to 55Hz; 1.0mm double amplitude
Shock	Mechanical durability: 1,000m/s ² (approx. 100G's) Malfunction durability: 200m/s ² (approx. 20G's)
Ambient temperature	Operating: -10 to +40°C
Humidity	45 to 85% RH
Service life	Mechanically: 100,000,000 operations min. (at operating frequency of 18,000 operations/hour) Electrically: See "CHARACTERISTIC DATA."
Weight	Approx. 30g

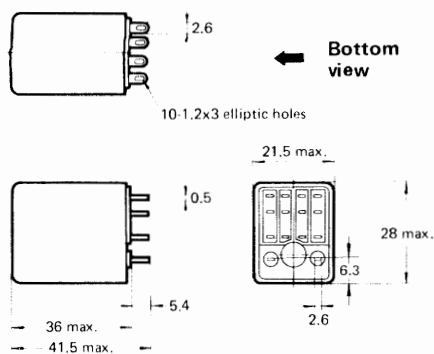
NOTE: The data shown above are of initial value.

● CHARACTERISTIC DATA

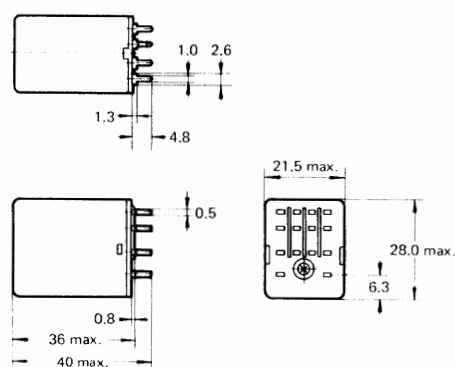
Same as the Standard Type.

■ DIMENSIONS

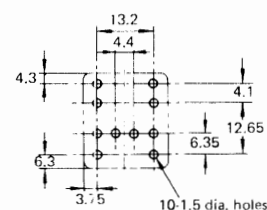
MY2K



MY2K-02



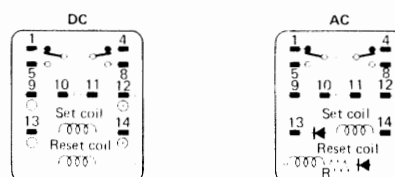
Mounting holes



■ ACCESSORY

Same as the Standard Type.

Terminal arrangement/Internal connection (Bottom view)



NOTES:

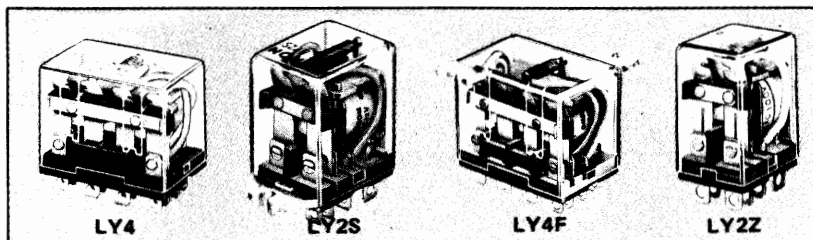
1. R is a resistor for ampere-turn compensation, and is incorporated in the relays rated at 50 VAC or above.
2. Pay attention to the polarity of the set and reset coils, as incorrect connection of positive and negative terminals will result in malfunctioning of the relay.

NOTE: ALL DIMENSIONS SHOWN IN THIS CATALOG ARE IN UNITS OF MILLIMETERS.
To convert millimeters into inches multiply by 0.03937. To convert grams into ounces multiply by 0.03527.

Small, General-purpose 10A Relay For Various Applications

FEATURES

- High shock and vibration resistance (20G's and 0 to 6g)
- High contact deposition resistance with silver cadmium (Ag-CdO) contacts
- Arc barrier equipped for interpole arcing prevention
- High dielectric strength (2,000 VAC) with armature insulation base and terminal base made of diallyphthalate resin
- Lloyd listed type is also available.



AVAILABLE TYPES

Mounting style	Terminal	Type	Standard	Twin contact	Operation indicator self-contained	Test button self-contained	Standard approved
		Contact form					
Standard bracket mounting	Solder	SPDT	LY1	—	LY1N	LY1I2	LY1-US
		DPDT	LY2	LY2Z	LY2N	LY2I2	LY2-US
		3PDT	LY3	—	LY3N	LY3I2	LY3-US
		4PDT	LY4	LY4Z	LY4N	LY4I2	LY4-US
	P.C.B.	SPDT	LY1-0	—	—	—	LY1-0-US
		DPDT	LY2-0	LY2Z-0	—	—	LY2-0-US
		3PDT	LY3-0	—	—	—	LY3-0-US
		4PDT	LY4-0	LY4Z-0	—	—	LY4-0-US
Upper mounting bracket	Solder	SPDT	LY1F	—	—	—	LY1F-US
		DPDT	LY2F	LY2ZF	—	—	LY2F-US
		3PDT	LY3F	—	—	—	LY3F-US
		4PDT	LY4F	LY4ZF	—	—	LY4F-US
Lower mounting bracket	Solder	SPDT	LY1S	—	—	—	LY1S-US
		DPDT	LY2S	LY2ZS	—	—	LY2S-US
		3PDT	LY3S	—	—	—	LY3S-US
		4PDT	LY4S	LY4ZS	—	—	LY4S-US

OMRON

STANDARD TYPE

SPECIFICATIONS

COIL RATINGS

Rated voltage (V)		Rated current (mA)						Coil resistance (Ω)			Coil inductance (ref. value) (H)						Must operate voltage	Must dropout voltage	Maximum voltage	Power consumption (VA, W)		
		SPDT,DPDT		3PDT		4PDT					SPDT,DPDT		3PDT		4PDT					SPDT, DPDT	3PDT	4PDT
		50Hz	60Hz	50Hz	60Hz	50Hz	60Hz	SPDT, DPDT	3PDT	4PDT	Armature OFF	Armature ON	Armature OFF	Armature ON	Armature OFF	Armature ON						
AC	6	234	200	310	270	386	330	10.5	6.7	5	0.04	0.08	0.03	0.05	0.02	0.04	85 max.	30 min.	110	Approx. 1.2	Approx. 1.6	Approx. 1.95
	12	117	100	159	134	199	170	41	24	20	0.14	0.27	0.12	0.21	0.10	0.17						
	24	58.5	50	80	67	93.6	80	180	100	78	0.56	1.06	0.44	0.79	0.38	0.67						
	50	28.0	24	38	33	46.8	40	695	410	350	2.78	4.88	2.24	3.87	1.74	2.88						
	100	14.1	12	19.6	16.9	23.4	20	3,160	1,720	1,600	13.3	22.5	8.4	14.1	7.68	13.2						
	110	11.7	10	16	13.6	19.6	16.8	3,830	2,300	2,200	13.8	29.8	11	20.1	9.3	19						
	120	12.9	11	17.3	14.8	19.0	16.4	3,830	2,300	2,200	13.8	29.8	11	20.1	9.3	19						
	200	9.4	8	9.5	8.3	11.7	10	10,100	6,800	6,500	36.2	62.2	31.8	53.9	30.2	51.1						
DC	220	6.5	5.5	9.9	8.5	10.6	9.1	10,100	8,650	6,900	51.0	110.3	33.4	63.7	31	60.8	85 max.	10 min.	110	Approx. 0.9	Approx. 1.4	Approx. 1.5
	240	7.2	6.1	9.4	8	11.0	9.5	16,000	10,400	9,000	51.0	110.3	38.6	74.6	33.2	63.4						
	6	150		234		240		40	25.7	25	0.16	0.33	0.11	0.21	0.09	0.21						
	12	75		112		120		160	107	100	0.73	1.37	0.45	0.98	0.39	0.84						
DC	24	36.9		58.6		69		650	410	350	3.20	5.72	1.89	3.87	1.41	2.91	85 max.	10 min.	110	Approx. 0.9	Approx. 1.4	Approx. 1.5
	48	18.5		28.2		30		2,600	1,700	1,600	10.6	21.0	8.53	13.9	6.39	13.6						
	100	9.1		14.7		15		11,000	6,800	6,900	45.6	86.2	29.6	54.3	32	63.7						

NOTE: The rated current, coil resistance and inductance are measured at coil temperature of 20°C with tolerances of +15%, -20% for AC rated current and ±15% for DC rated current, and ±15% for rated coil resistance.

CONTACT RATINGS

Type Item		SPDT		DPDT, 3PDT, 4PDT	
		Resistive load (p.f.=1)	Inductive load (p.f.=0.4, L/R=7ms.)	Resistive load (p.f.=1)	Inductive load (p.f.=0.4, L/R=7ms.)
Rated load		110 VAC 15A 24 VDC 15A	110 VAC 10A 24 VDC 7A	110 VAC 10A 24 VDC 10A	110 VAC 7.5A 24 VDC 5A
Carry current		15A		10A	
Max. operating voltage		250 VAC 125 VDC			
Max. operating current		15A		10A	
Max. switching capacity		1,700VA 360W	1,100VA 170W	1,100VA 240W	830VA 120W
Minimum permissible load (ref. value)		5 VDC 100mA			

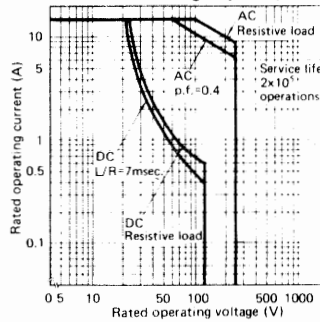
● CHARACTERISTICS

Contact resistance	50mΩ max.
Operate time	25msec. max.
Release time	25msec. max.
Operating frequency	Mechanically: 18,000 operations/hour Under rated load: 1,800 operations/hour
Insulation resistance	100MΩ min. (at 500 VDC)
Dielectric strength	2,000 VAC, 50/60Hz for 1 minute (1,000 VAC, 50/60Hz for 1 minute between non-continuous contacts)
Vibration	Mechanical durability: 10 to 55Hz; 1.0mm double amplitude Malfunction durability: 10 to 55Hz; 1.0mm double amplitude
Shock	Mechanical durability: 1,000m/sec ² (Approx. 100G's) Malfunction durability: 200m/sec ² (Approx. 20G's)
Ambient temperature	Operating: -5 to 40°C
Humidity	45 to 85% RH
Service life	Mechanically: AC: 50,000,000 operations min. (at operating frequency of 18,000 operations/hour) DC: 100,000,000 operations min. (at operating frequency of 18,000 operations/hour) Electrically: See "CHARACTERISTIC DATA."
Weight	SPDT, DPDT: Approx. 40g, 3PDT: Approx. 50g, 4PDT: Approx. 70g

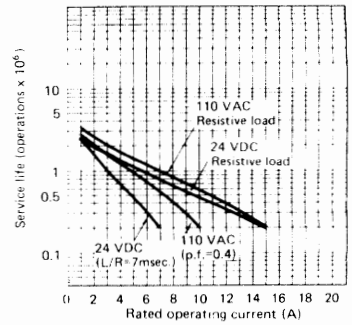
NOTE: The data shown above are of initial value.

● CHARACTERISTIC DATA

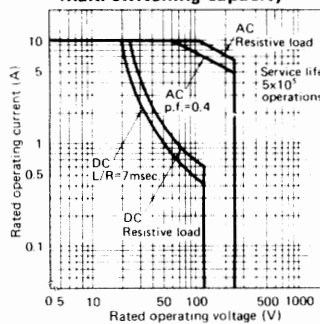
LY1 Max. switching capacity



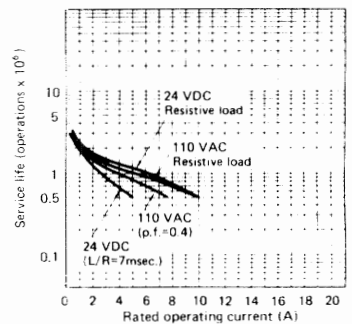
Electrical service life



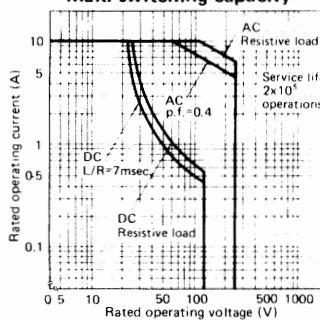
LY2 Max. switching capacity



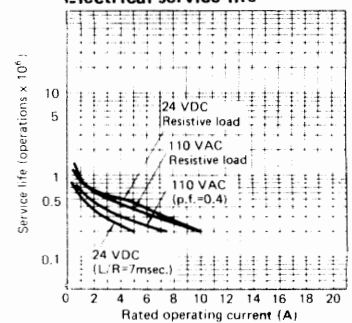
Electrical service life



LY3, LY4 Max. switching capacity

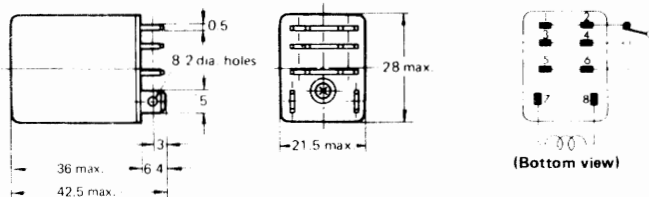


Electrical service life

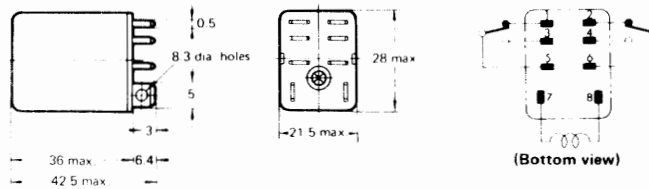


■ DIMENSIONS

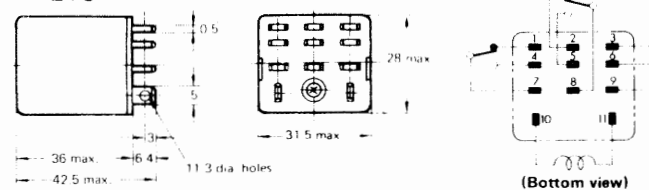
● LY1



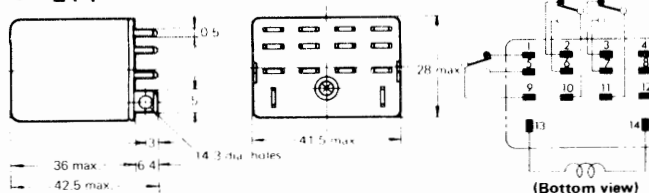
● LY2



● LY3

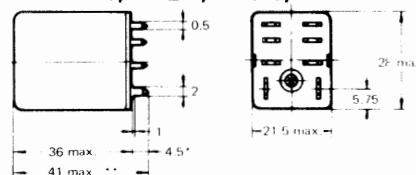


● LY4



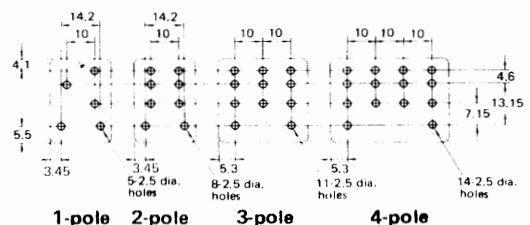
NOTE: When mounting LY1, LY2, LY3 or LY4, use the connecting socket shown in ACCESSORIES.

● LY1-0, LY2-0, LY3-0, LY4-0

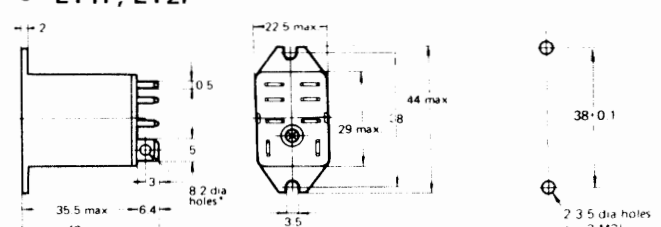


NOTE: The above drawing shows LY2-0. With LY1-0, dimensions * should read as 6.4 and dimension ** as 4.2.

Mounting holes (Bottom view) for LY1-0, LY2-0, LY3-0, LY4-0

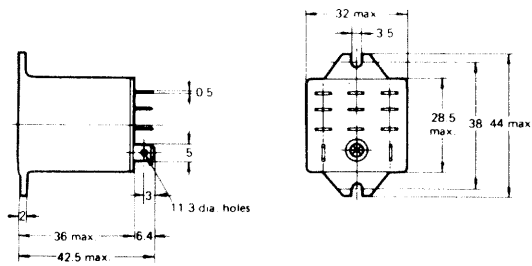


● LY1F, LY2F

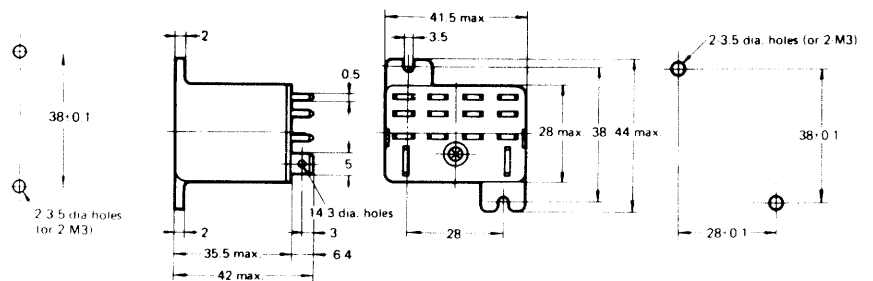


NOTE: The above drawing shows LY1F. With LY2F, dimension * should read as 8.3 dia. holes.

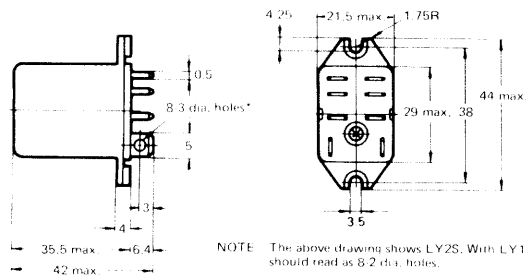
• LY3F



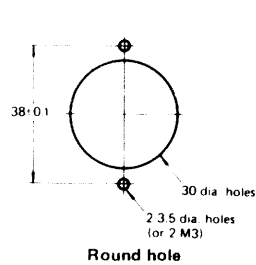
• LY4F



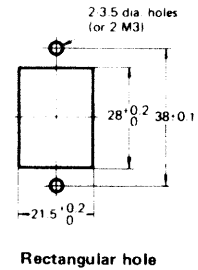
• LY1S, LY2S



NOTE: The above drawing shows LY2S. With LY1S, dimension * should read as 8.2 dia. holes.

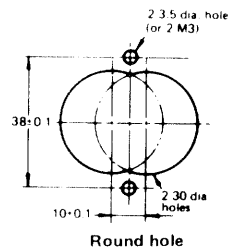
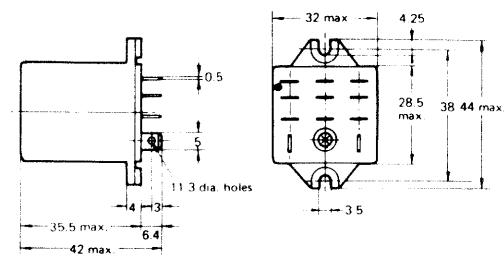


Round hole

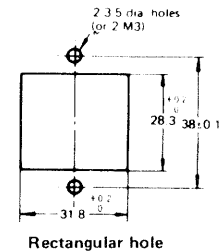


Rectangular hole

• LY3S

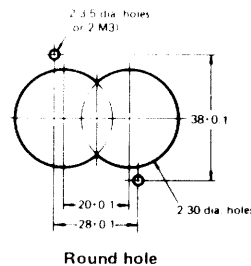
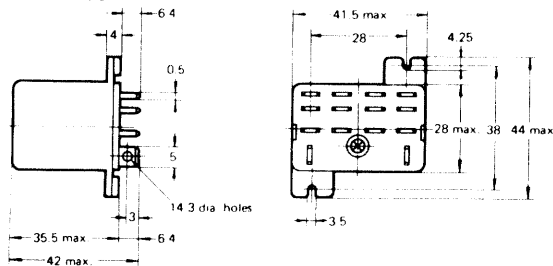


Round hole

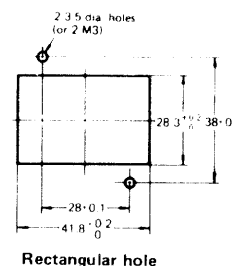


Rectangular hole

• LY4S



Round hole



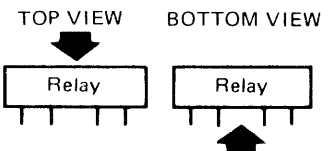
Rectangular hole

■ ACCESSORIES

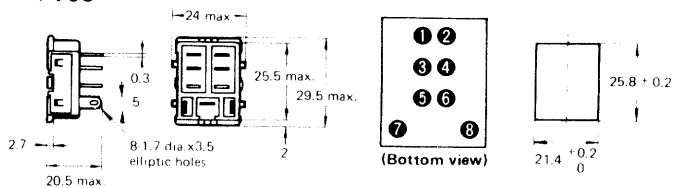
• CONNECTING SOCKETS

Available types

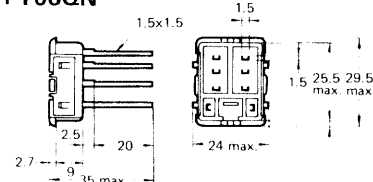
Relay \ Sockets	Track mounted socket	Back connecting socket		
		Solder terminal	Wire-wrap terminal	P.C. terminal
SPDT, DPDT	PTF08A	PT08	PT08QN	PT08-0
3PDT	PTF11A	PT11	PT11QN	PT11-0
4PDT	PTF14A	PT14	PT14QN	PT14-0



PT08

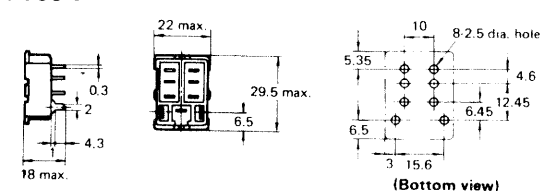


PT08QN



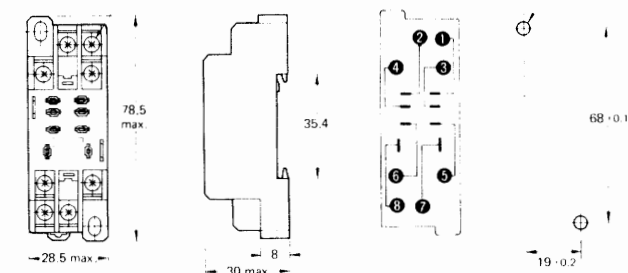
Panel cut-out and terminal arrangement are the same as the Type PT08.

PT08-0

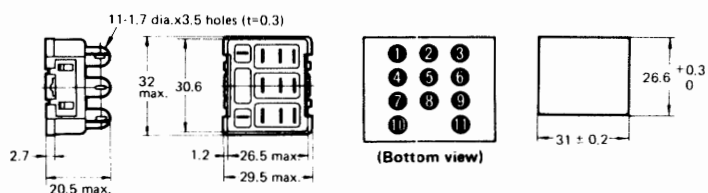


Terminal arrangement is the same as the Type PT08.

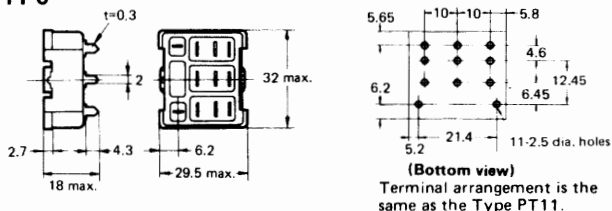
PTF08A

8 M3.5x8
sems screw

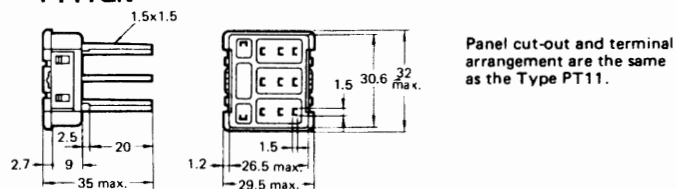
PT11



PT11-0

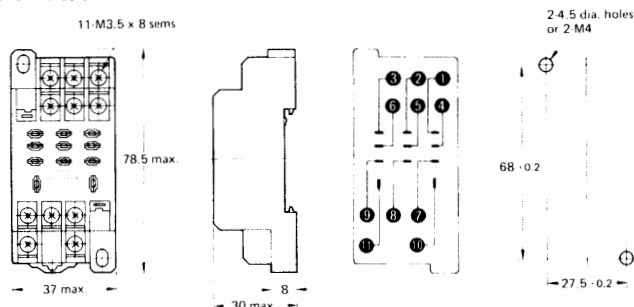


PT11QN

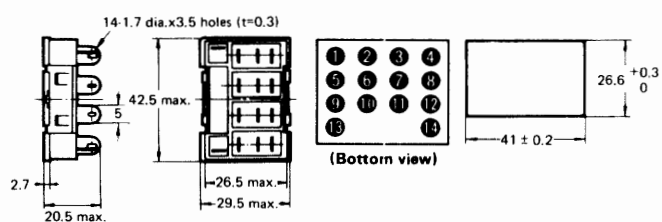
Panel cut-out and terminal
arrangement are the same
as the Type PT11.

PTF11A

11 M3.5 x 8 sems

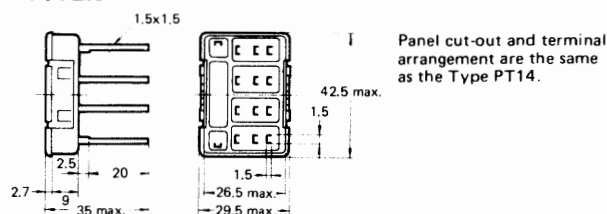


PT14

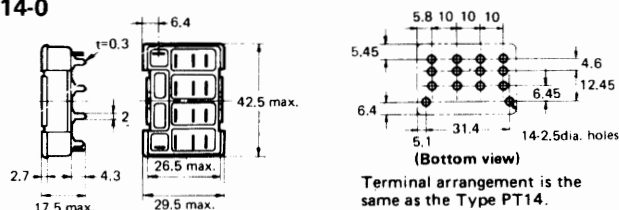


PT14QN

1.5x1.5

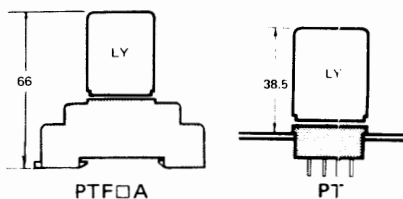
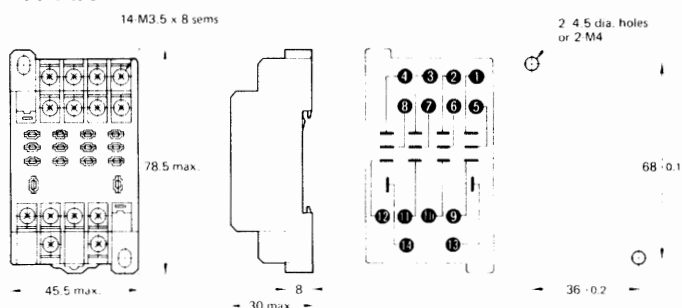


PT14-0

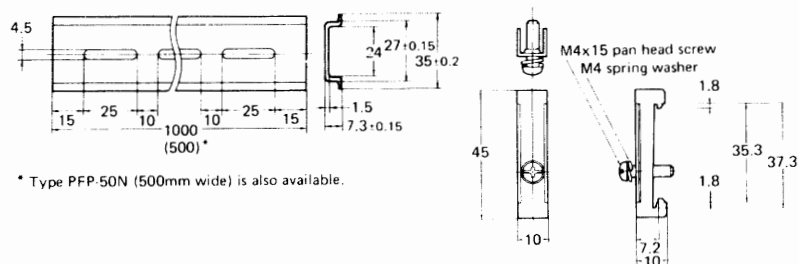


PTF14A

14 M3.5 x 8 sems



● SOCKET MOUNTING TRACK/END PLATE (for PTF□N)

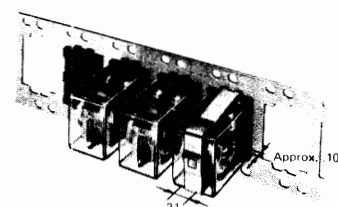


* Type PFP-50N (500mm wide) is also available.

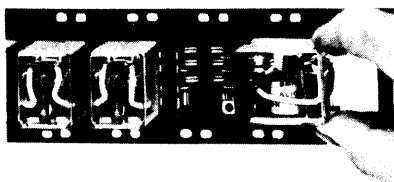
● RELAY HOLD-DOWN CLIPS

PYC-A1

PYC-S

(Applicable to Types PYP-1 and
PYP-18 socket mounting plates only.)

● SOCKET MOUNTING PLATES (t = 1.6)

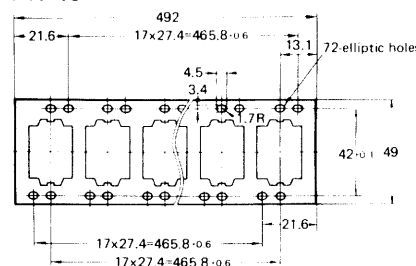


Available types

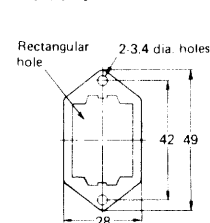
No. of sockets Type of socket	1	10	12	18
PT08 PT08QN	PYP-1	—	—	PYP-18
PT11 PT11QN	PTP-1-3	—	PTP-12	—
PT14 PT14QN	PTP-1	PTP-10	—	—

NOTE: The Types PYP-18, PTP-12 and PTP-10 may be cut to any desired length.

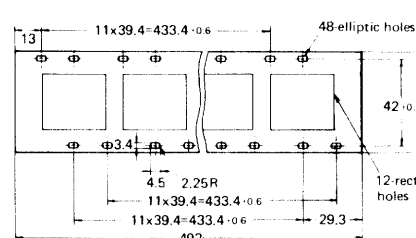
PYP-18



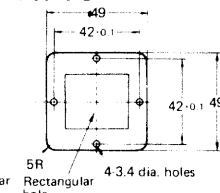
PYP-1



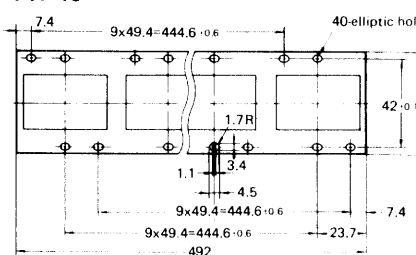
PTP-12



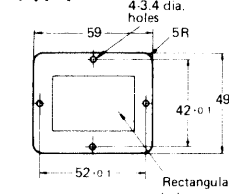
PTP-1-3



PTP-10



PTP-1



TWIN CONTACT TYPE

■ SPECIFICATIONS

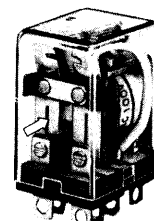
Same as the Standard Type with the following exceptions.

● CONTACT RATINGS

Type	DPDT, 4PDT	
	Resistive load (p.f.=1)	Inductive load (p.f.=0.4, L/R=7ms.)
Item		
Rated load	110 VAC 5A 24 VDC 5A	110 VAC 4A 24 VDC 4A
Carry current	7A	
Max. operating voltage	250 VAC 125 VDC	
Max. operating current	7A	
Max. switching capacity	550VA 120W	440VA 100W
Minimum applicable load	1 VDC 10mA (ref. value)	

● CHARACTERISTICS

Service life	Mechanically: Same as the Standard Type. Electrically: See "CHARACTERISTIC DATA."
--------------	--

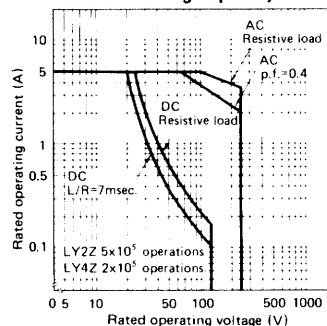


LY□Z

● CHARACTERISTIC DATA

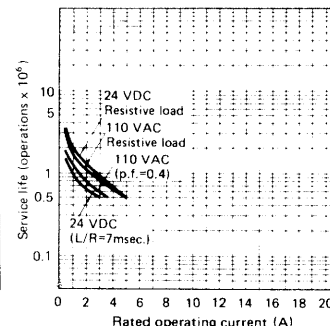
LY2Z, LY4Z

Max. switching capacity



LY2Z

Electrical service life



■ DIMENSIONS

Same as the Standard Type.

OPERATION INDICATOR SELF-CONTAINED TYPE

■ SPECIFICATIONS

Same as the Standard Type with the following exception.

● COIL RATINGS

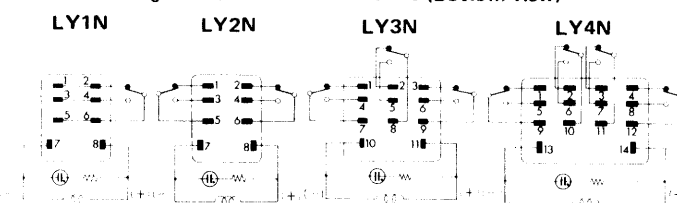
6, 12, 24, 50 VAC 6, 12, 24, 48 VDC	LED indicator
100, 110, 120, 200, 220, 240 VAC 100 VDC	Neon lamp indicator

With the LED indicator type, the rated current is approximately 5mA higher than the Standard Type.

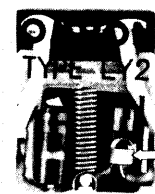
■ DIMENSIONS

Same as the Standard Type with the following exceptions.

Terminal arrangement/Internal connections (Bottom view)



Pay special attention to the polarities when the DC type is used.

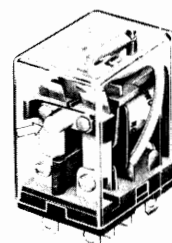


LY□N

TEST BUTTON SELF-CONTAINED TYPE

SPECIFICATIONS

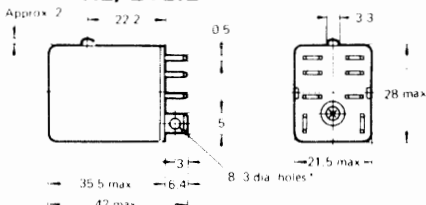
Same as the Standard Type.



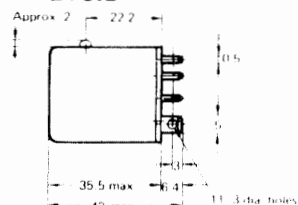
LY□12

DIMENSIONS (The terminal arrangement and internal connection are the same as the Standard Type.)

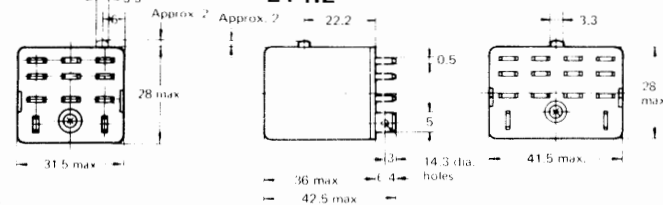
• LY112, LY212



• LY312



• LY412



NOTE: Type LY112 has the same dimensions and appearance as Type LY212 shown above, except that dimension * is 2 dia.

STANDARD APPROVED TYPE

When placing your order for standard approved versions, please indicate "UL," "CSA," etc. as desired in addition to the model number.

SPECIFICATIONS/DIMENSIONS

Same as the Standard Type with the following exceptions.

• RATINGS

UL recognized type (File No. E41515)

Type	Contact form	Coil ratings	Contact ratings
LY	SPDT	6 to 240 VAC 6 to 120 VDC	15A 240 VAC (inductive load) 15A 28 VDC (resistive load) TV-5
	DPDT		12A 240 VAC (inductive load) 10A 28 VDC (resistive load) TV-3
	3PDT 4PDT		10A 240 VAC (inductive load) 10A 28 VDC (resistive load)

SEV listed type [File No. D7 91/82 (2- & 4-pole), D 91/204a (1- & 3-pole)]

Type	Contact form	Coil ratings	Contact ratings
LY	SPDT	6 to 220 VAC 6 to 100 VDC	15A 220 VAC (resistive load) 15A 24 VDC (resistive load)
	DPDT		10A 220 VAC (resistive load) 10A 24 VDC (resistive load)
	3PDT		
	4PDT		

CSA certified type (File No. LR31928)

Type	Contact form	Coil ratings	Contact ratings
LY	SPDT	6 to 240 VAC 6 to 120 VDC	10A 240 VAC (inductive load) 15A 28 VDC (resistive load) TV-5
	DPDT		13A 28 VDC (resistive load) 10A 240 VDC (inductive load) 1/3 HP 120 VAC (motor load)
	3PDT 4PDT		10A 240 VAC (inductive load) 10A 28 VDC (resistive load)

Lloyd listed type (File No. KOB-204523)

Type	Contact form	Coil ratings	Contact ratings
LY	DPDT 4PDT	6 to 240 VAC 6 to 110 VAC	7.5A 230 VAC (inductive load) 5A 24 VDC (resistive load)

VDE approved type [File No. 9903 (SPDT, DPDT & 3PDT), File No. 9947 (4PDT)]

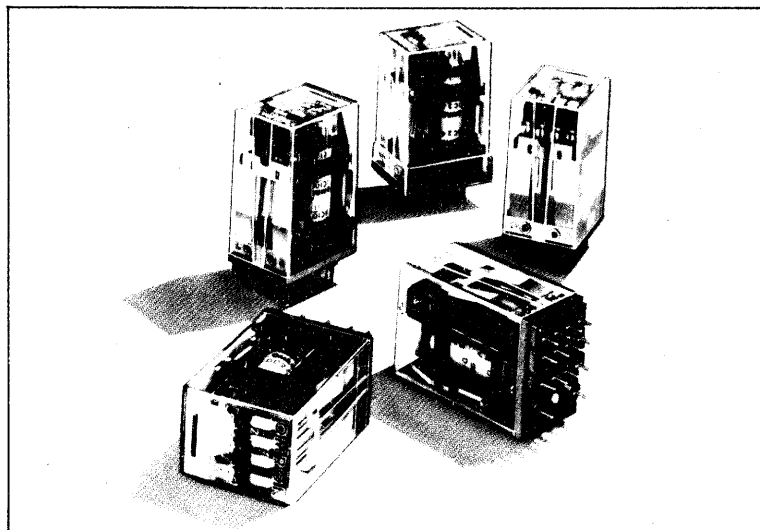
Type	Contact form	Coil ratings	Contact ratings
LY	SPDT DPDT 3PDT	6, 12, 24, 50, 110 and 220 VAC and 6, 12, 24, 48 and 110 VDC	10A 220 VAC (resistive load) 10A 28 VDC (resistive load) 7A 220 VAC (inductive load) 7A 28 VDC (inductive load)
	4PDT		7A 220 VAC (resistive load) 7A 28 VDC (resistive load) 4A 220 VAC (inductive load) 4A 28 VDC (inductive load)

NOTE: ALL DIMENSIONS SHOWN IN THIS CATALOG ARE IN UNITS OF MILLIMETERS.
To convert millimeters into inches multiply by 0.03937. To convert grams into ounces multiply by 0.03527.

Sequence Control Relay with High Contact Reliability

FEATURES

- Employment of the card lift-off system ensures extended service life and stable performance.
- Complete with make-before-break (MBB) contacts.
- Mounting interchangeability with OMRON Model MY series relays.
- Operation indicator permits at-a-glance monitoring of the relay operation.
- Sealed type is also available.



AVAILABLE TYPES

Terminal	Type Contact form	Standard	Sealed	Make-before break contact	Arc barrier equipped	Diode self-contained	Operation indicator self-contained	Standard approved
Solder	4PDT	G2A-432A	G2A-434A	G2A-4L32A	G2A-432AY	G2A-432A-D*	G2A-432A-N G2A-432A-N1*	G2A-432A-US G2A-434A-US G2A-4L32A-US G2A-432AY-US
P.C.B.		G2A-4321P	G2A-4341P	G2A-4L321P	G2A-4321PY	G2A-4321P-D*	—	G2A-4321P-US G2A-4341P-US G2A-4L321P-US G2A-4321PY-US

NOTES: 1. * The diode self-contained type and G2A-432A-N1 are available with DC coil rating only.
2. Plastic sealed relays and latching relays developed as series products from Model G2A are also available on request.

SPECIFICATIONS

STANDARD TYPE

COIL RATINGS

Rated voltage (V)	Rated current (mA)		Coil resist- ance (Ω)	Coil inductance (ref. value) (H)		Must operate voltage % of rated voltage	Must drop- out voltage % of rated voltage	Maxi- mum voltage	Power con- sump- tion (VA, W)
	50Hz	60Hz		Arma- ture OFF	Arma- ture ON				
AC	6	295	233	8.9	0.048	0.065	30 min. 80 max.	110	Approx. 1.4
	12	148	117	34	0.166	0.257			
	24	73	58	136	0.691	1.04			
	50	35	28	530	3.08	4.53			
	100	17.7	14	2,200	12.42	18			
	110	21.4	16.8	2,200	12.38	16.4			
	120	17.8	14	2,900	14.3	21.4			
	200	8.7	7	8,800	42.2	72			
	220	10.8	8.4	8,800	41.8	65.5			
	240	7.9	6.2	12,000	65.5	97.7			
DC	6	176	34	0.14	0.26	10 min.			Approx. 1.1
	12	88	136	0.6	1.0				
	24	45	530	2.7	4.6				
	48	22	2,200	11	19				
	100	11.4	8,800	43	73				

NOTE: The rated current, coil resistance and inductance are measured at a coil temperature of 20°C with tolerances of +15%, -20%.

CHARACTERISTICS

Contact resistance	100mΩ max.
Operate time	15msec max.
Release time	15msec max.
Operating frequency	Mechanically: 18,000 operations/hour Electrically: 1,800 operations/hour (under rated load)
Insulation resistance	100MΩ min. (at 500 VDC)
Dielectric strength	1,500 VAC, 50/60Hz for 1 minute (700 VAC between non-continuous contacts)
Vibration	Mechanical durability: 10 to 55Hz, 1.5mm double amplitude Malfunction durability: 10 to 55Hz, 1.0mm double amplitude
Shock	Mechanical durability: 1,000m/sec ² (approx. 10G's) Malfunction durability: 100m/sec ² (approx. 10G's)
Ambient temperature	Operating: -10 to +40°C
Humidity	45 to 85% RH
Service life	Mechanically: 100,000,000 operations min. (at operating frequency of 18,000 operations/hour) Electrically: See "CHARACTERISTIC DATA."
Weight	Approx. 38g

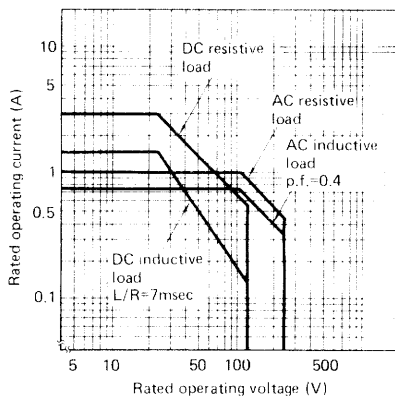
NOTE: The data shown are of initial value.

CONTACT RATINGS

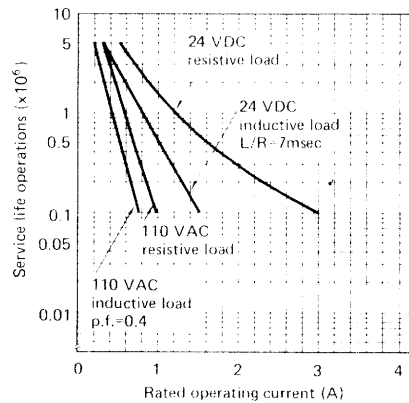
Load	Resistive load (p.f.=1)	Inductive load (p.f.=0.4, L/R=7msec)
Item		
Rated load	110 VAC 0.3A 24 VDC 0.5A	110 VAC 0.2A 24 VDC 0.3A
Carry current	3A	
Max. operat- ing voltage	250 VAC 125 VDC	
Max. operat- ing current	AC 1A DC 3A	AC 0.75A DC 1.5A
Max. switch- ing capacity	110VA 70W	80VA 36W
Minimum permissible load	0.1 VDC 1mA (ref. value)	

CHARACTERISTIC DATA

Max. switching capacity

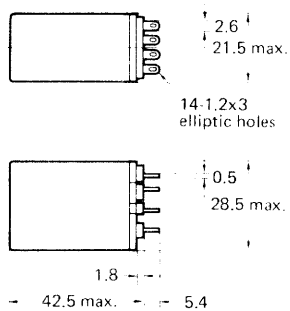


Electrical service life

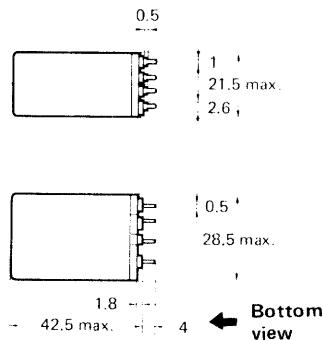


DIMENSIONS

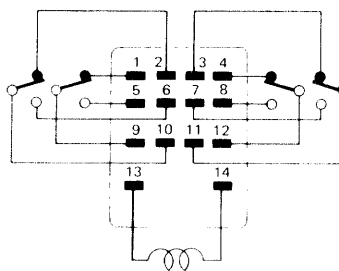
G2A-432A



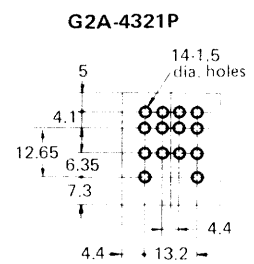
G2A-4321P



Terminal arrangement (Bottom view)

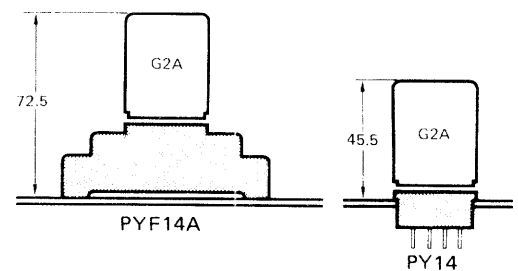


Mounting holes (Bottom view)



NOTE: When mounting G2A 432A, use the connecting socket shown in ACCESSORIES.

Mounting height of relay with socket



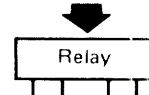
ACCESSORIES

CONNECTING SOCKETS

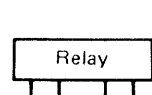
Available types

Relay	Socket	Track mounted socket	Back connecting socket		
			Solder terminal	Wire-wrap terminal	P.C. terminal
4PDT		PYF14A	PY14	PY14QN(2)	PY14-0

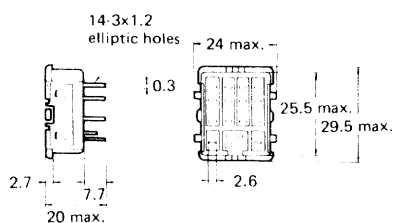
TOP VIEW



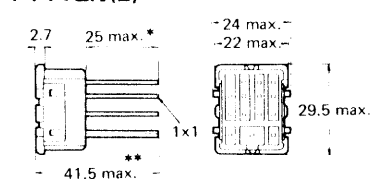
BOTTOM VIEW



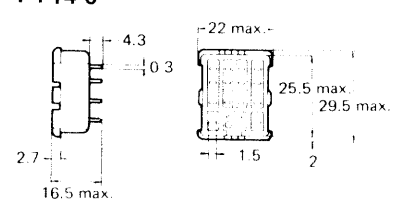
PY14



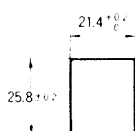
PY14QN(2)



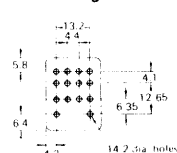
PY14-0



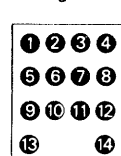
Panel cutout



Mounting holes



Terminal arrangement

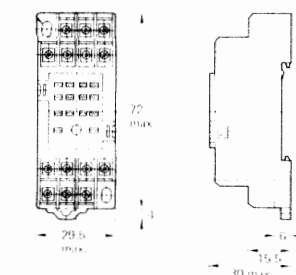


PYF14A

Terminal arrangement
(Top view)

Mounting holes

2.4 dia. mounting holes

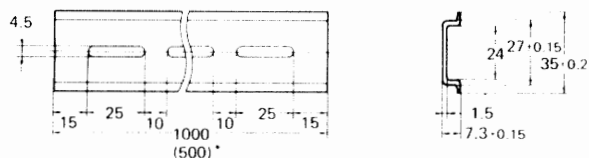
2.4 dia. or M4
(2.4 dia. or M3)

59-0.5

22-0.2

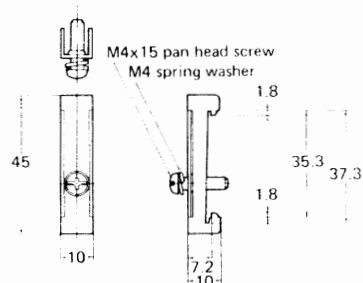
- SOCKET MOUNTING TRACK/END PLATE (for PYF14N)

PFP-100N



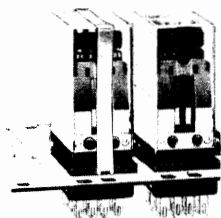
* Type PFP-50N (500mm wide) is also available.

PFP-M



- RELAY HOLD-DOWN CLIPS

PYC-A2 PYC-2
(For socket mounting plate)

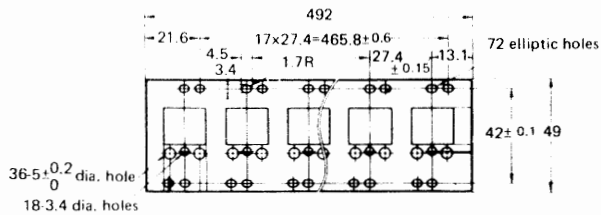
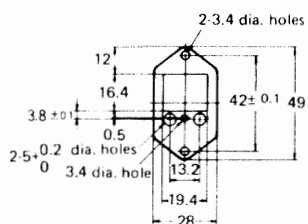


- RELAY MOUNTING PLATES (t = 1.6)

When mounting one or more relays having a mounting stud, use relay mounting plates.

MYP-1

MYP-18

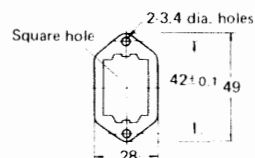


- SOCKET MOUNTING PLATES (t = 1.6)

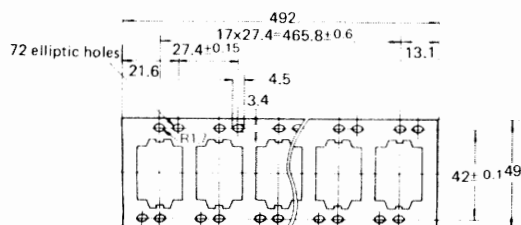
Type of socket mounting plate	For mounting 1-socket	For mounting 18 sockets	For mounting 36 sockets
Type of socket			
PY14, PY14-Y2, PY14QN(2), PY14QN(2)-Y2	PYP-1	PYP-18	PYP-36

Note: The Types PYP18 and -36 may be cut to any desired length.

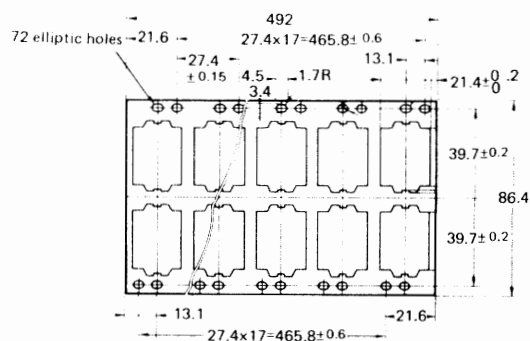
PYP-1



PYP-18



PYP-36



SEALED TYPE

SPECIFICATIONS

Same as the Standard Type with the following exception.

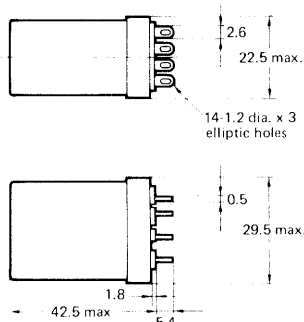
CONTACT RATINGS

Carry current: 2A
 Max. operating current: AC 0.7A/DC 2A (resistive load)
 AC 0.5A/DC 1A (inductive load)
 Max. switching capacity: 80VA/50W (resistive load)
 55VA/25W (inductive load)

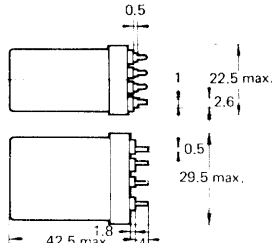
DIMENSIONS

Same as the Standard Type with the following exception.

G2A-434A



G2A-4341P



MAKE-BEFORE-BREAK CONTACT TYPE

SPECIFICATIONS

Same as the Standard Type with the following exception.

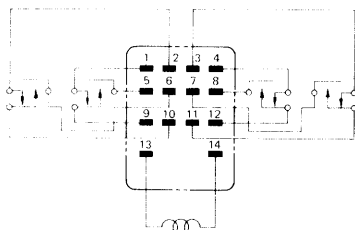
CHARACTERISTICS

Dielectric strength: 500 VAC 50/60Hz for 1 minute between non-continuous contacts

DIMENSIONS

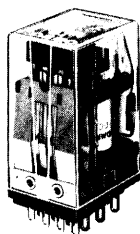
Same as the Standard Type with the following exception.

Terminal arrangement (Bottom view)



DIODE SELF-CONTAINED TYPE

The Diode Self-contained Type relay is equipped with a diode to absorb a counterelectromotive force generated upon coil de-energization. When designing a circuit with this type of relay, pay particular attention to the release time of the relay which is longer than that of the Standard Type, and to the polarity of the diode as well.



SPECIFICATIONS

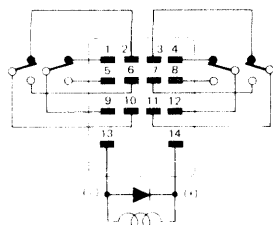
Same as the Standard Type with the following exception.

CHARACTERISTICS

Release time: 30msec max.

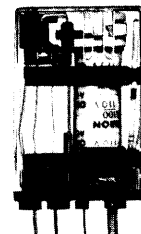
DIMENSIONS

Terminal arrangement (Bottom view)



ARC BARRIER EQUIPPED TYPE

The Arc Barrier Equipped Type relay is designed for use in circuits requiring measures to prevent short circuits between contacts of different phases due to arcing, or for use in circuits having a potential difference between contacts. When this type of relay is used in circuits having a potential difference between contacts, be sure to limit the switching capacity of the relay to half the rated load.



SPECIFICATIONS/DIMENSIONS

Same as the Standard Type.

OPERATION INDICATOR SELF-CONTAINED TYPE

SPECIFICATIONS

Same as the Standard Type with the following exception.

COIL RATINGS

6, 12, 24, 50 VAC	LED indicator
6, 12, 24, 48 VDC	
100/110, 120, 200/220, 240 VAC	Neon lamp indicator
100, 110 VDC	

With the LED indicator type, the rated current is approximately 4mA higher than the Standard Type.

CHARACTERISTICS

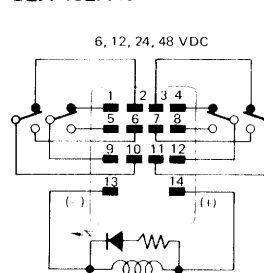
Release time: G2A-□-N1: 30msec max.

DIMENSIONS

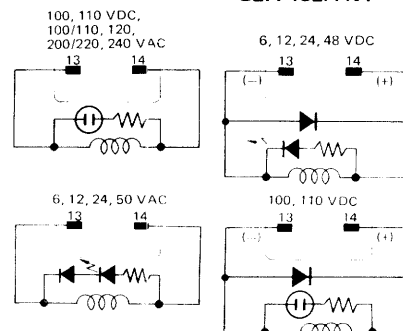
Same as the Standard Type with the following exception.

Terminal arrangement (Bottom view)

G2A-432A-N



G2A-432A-N1



STANDARD APPROVED TYPE

When placing your order for UL approved version, please indicate "UL" in addition to the model number.

SPECIFICATIONS/DIMENSIONS

Same as the Standard Type with the following exceptions.

RATINGS

UL recognized type (File No. E41515)

Type	Contact form	Coil ratings	Contact ratings
G2A	4PDT	6 to 120 VAC 6 to 120 VDC	1A 120 VAC (inductive load) 1A 30 VDC (inductive load)

Latching Type

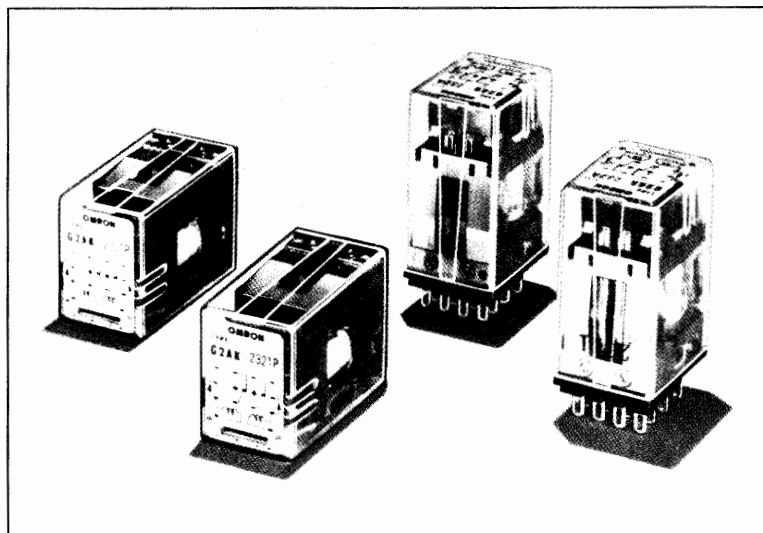
GENERAL-PURPOSE RELAY

Model **G2A**

Magnetic Latching Relay Ideal for Memory Circuit

FEATURES

- Terminals are provided at respective points connecting diodes to the set and reset coils, thus permitting the built-in diodes to be used for surge suppression through external connection.
- Latching ability little affected by aging, and excellent resistance to vibration and shock.
- Built-in operation indicator for easy relay operation monitoring.
- Sealed type also available.
- Same outline dimensions as Model G2A standard type.



AVAILABLE TYPES

Contact form	Terminal	Plug-in	P.C.B.
	Classification		
DPDT	Standard type	G2AK-232A	G2AK-2321P
	Arc barrier equipped type	G2AK-232AY	G2AK-2321PY
	Sealed type	G2AK-234A	G2AK-2341P

OMRON

STANDARD TYPE

SPECIFICATIONS

COIL RATINGS

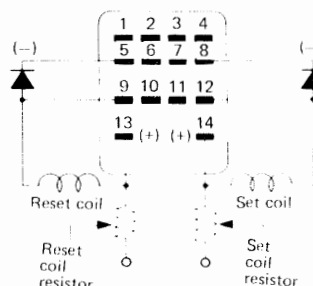
Rated voltage (V)		Set coil				Reset coil				Must set voltage	Must reset voltage	Maximum voltage	Power consumption (VA, W)		
		Rated current (mA)		Coil resistance (Ω)	Coil inductance (ref. value) (H)	Rated current (mA)		Coil resistance (Ω)	Coil inductance (ref. value) (H)				% of rated voltage	Set coil	Reset coil
		50Hz	60Hz			50Hz	60Hz								
AC	6	308	300	6.5	0.04	72	70	32	0.06	80 max.	80 max.	110 max.	Approx. 1.6 to 2.0	Approx. 0.5 to 1.2	
	12	162	158	28	0.148	40	39	125	0.18						
	24	66	64	145	0.720	22.6	22	460	0.568						
	50	34	33	590	2.90	11.3	11	1,900	2.46						
	100	19	18.5	2,150	10.7	12.3	12	3,600	4.40						
DC	*6	360		14	0.0267	160		32	0.00501				Approx. 2.0 to 2.2	Approx. 1.0 to 1.2	
	12	170		65	0.125	85		125	0.0195						
	24	85		270	0.536	50		460	0.0681						
	48	44	1,050	2.04	24		1,900	0.292							

- NOTES: 1. The rated current and coil resistance are measured at a coil temperature of 20°C with tolerances of +15%, -20% for rated current and ±15% for coil resistance.
2. Performance characteristic data are measured at a coil temperature of 5 to 35°C.
3. Peak reverse voltage of the built-in diode is 600V.
4. To the set coil rated at 6 VDC, 5-minute rating is applied. When a diode is connected in series with the set coil, continuous rating is applicable.
5. Rated voltage can be expanded by connecting the following external resistors to the set and reset coils, respectively.

Rated voltage (V)	External resistor			
	Set coil		Reset coil	
	Resistance (kΩ)	Capacity (W min.)	Resistance (kΩ)	Capacity (W min.)
AC	110	0.27	0.5	0.39
	200	2.7	5	8.2
	220	3.3	6	9.1
DC	100	1.1	10	2.0
				6

NOTE: Be sure to use external resistors having tolerances of ±10% max.

Connecting method



● CONTACT RATINGS

Item	Load	Resistive load (p.f.=1)	Inductive load (p.f.=0.4, L/R=7msec)
Rated load		110 VAC 0.3A 24 VDC 0.5A	110 VAC 0.2A 24 VDC 0.3A
Carry current		3A	
Max. operating voltage		250 VAC 125 VDC	
Max. operating current		AC 1A DC 3A	AC 0.75A DC 1.5A
Max. switching capacity		110VA 70W	80VA 36W
Minimum permissible load		0.1 VDC 1mA (reference value)	

● CHARACTERISTIC DATA

Same as the Standard Type.

● CHARACTERISTICS

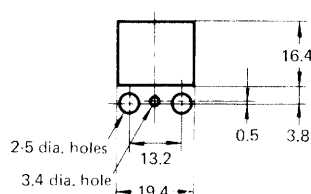
Contact resistance	100mΩ max.
Operate (Set) time	AC: 25msec max. DC: 15msec max.
Release (Reset) time	AC: 25msec max. DC: 15msec max.
Operating frequency	Mechanically: 18,000 operations/hour Under rated load: 1,800 operations/hour
Insulation resistance	100MΩ min. (at 500 VDC)
Dielectric strength	1,500 VAC, 50/60Hz for 1 minute (700 VAC between non-continuous contacts; 1,000 VAC between set and reset coils)
Vibration	Mechanical durability: 10 to 55Hz; 1.5mm double amplitude Malfunction durability: 10 to 55Hz; 1.0mm double amplitude (Contact malfunction) Malfunction durability: 10 to 55Hz; 3.0mm double amplitude (Armature malfunction, threshold value of set state)
Shock	Mechanical durability: 1,000m/s ² (approx. 100G's) Malfunction durability: 100m/s ² (approx. 10G's) (Contact malfunction) Malfunction durability: 300m/s ² (approx. 30G's) (Armature malfunction, threshold value of set state)
Ambient temperature	Operating: -10 to +40°C
Humidity	45 to 85% RH
Service life	Mechanically: 100,000,000 operations min. Electrically: See "CHARACTERISTIC DATA."
Weight	Approx. 38.5g

NOTE: The data shown above are of initial value.

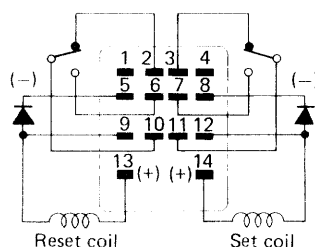
■ DIMENSIONS/ACCESSORIES

Same as the Standard Type with the following exceptions.

Mounting holes (G2AK-232A)



Terminal arrangement (Bottom view)



NOTE:
Terminals are provided at respective points connecting diodes to the set and reset coils, respectively. The built-in diodes may be used for surge suppression through external connection.

WITH ARC VARRIER TYPE

The Arc Barrier Equipped Type relay is designed for use in circuits requiring measures to prevent short circuits between contacts of different phases due to arcing, or for use in circuits having a potential difference between contacts.

When this type of relay is used in circuits having a potential difference between contacts, be sure to limit the switching capacity of the relay to half the rated load.

■ SPECIFICATIONS/DIMENSIONS

Same as the Standard Type.

SEALED TYPE

The Sealed Type is of hermetically sealed construction, which assures stable performance under adverse environmental conditions where moisture, dust or corrosive gases exist.

■ SPECIFICATION/DIMENSIONS

Same as the Sealed Type of the Standard Type.

NOTE: ALL DIMENSIONS SHOWN IN THIS CATALOG ARE IN UNITS OF MILLIMETERS.
To convert millimeters into inches multiply by 0.03937. To convert grams into ounces multiply by 0.03527.

Standard Type

GENERAL-PURPOSE RELAY

Model MK

Best-selling Power Relay

FEATURES

- Breaks relatively large load currents despite small size
- Easy mounting and wiring with simple operation
- Long life (5,000,000 mechanical operations min.)
- Wide variety
- Lloyd listed

AVAILABLE TYPES

Construction	Terminal	Type Contact form	Standard	Twin contact	Operation indicator self-contained	Arc barrier equipped	High capacity	Standard approved
Open type	Solder	SPDT	MK1	—	—	—	MK115	MK105, MK110E
		DPDT	MK2	—	—	—	—	MK205, MK210E
		3PDT	MK3	—	—	—	—	MK305, MK310E
	P.C.B	SPDT	MK1-0	—	—	—	—	—
		DPDT	MK2-0	—	—	—	—	—
		3PDT	MK3-0	—	—	—	—	—
Covered type	Plug-in	SPDT	MK1P*	—	—	—	MK115P	MK1P-US, MK1PE-US, MK1P5-US, MK1PE5-US
		DPDT	MK2P*	MK2ZP	MK2PA MK2PN	—	—	MK2P(2)-US, MK2PE(2)-US, MK2ZP-US, MK2ZP2-US, MK2ZP5-US
		3PDT	MK3P*	MK3ZP	MK3PA MK3PN	MK3LP	—	MK3P-US, MK3PE-US, MK3ZP-US, MK3P2-US, MK3PE2-US, MK3ZP2-US, MK3P5-US, MK3PE5-US, MK3ZP5-US
	Solder	SPDT	MK1CS	—	—	—	—	—
		DPDT	MK2CS	—	—	—	—	—
		3PDT	MK3CS	—	—	—	—	—

NOTE: * Special internal connection versions, MK1P-5 (1 pole), MK2P-2 (2 poles), MK3P-2 and MK3P-5 (3 poles) are available upon request.

OMRON

STANDARD TYPE

SPECIFICATIONS

COIL RATINGS

Rated voltage (V)	Item	Rated current (mA)		Coil resistance (Ω)	Coil inductance (ref. value) (H)		Must operate voltage	Must dropout voltage	Maximum voltage	Power consumption (VA, W)
		50Hz	60Hz		Armature OFF	Armature ON				
AC	6	404	360	5.3	0.028	0.041	80 max.	30 min.	110	Approx. 2.3
	12	202	180	21.5	0.115	0.165				
	24	98	88	88	0.422	0.678				
	50	43.6	39	390	1.95	3.2				
	100	25.8	23	1,510	7.87	10.7				
	110	23.5	21	1,620	7.89	13.1				
	120	20.2	18	2,300	10.5	16.4				
	200	12	10.7	6,200	30.5	46.2				
	220	12.3	11	7,100	30.8	49.0				
	240	10.3	9.2	9,300	33.0	63.9				
DC	6	255	23.5	23.5	0.14	0.23	80 max.	10 min.	110	Approx. 1.5
	12	126	95	95	0.56	0.87				
	24	56	430	430	2.82	4.46				
	48	29.5	1,630	1,630	10.99	16.52				
	100	14.7	6,800	6,800	41.46	66.34				
	200	14.7	6,800+6.8kΩ	6,800+6.8kΩ	—	—				
	240	14.7	6,800+6.8kΩ	6,800+6.8kΩ	—	—				

NOTES: 1. For 200 VDC applications, 100 VDC relay is supplied with a fixed 6.8kΩ, 30W resistor. Be sure to connect the resistor in series with the coil.

2. The rated current, coil resistance and inductance are measured at a coil temperature of 20°C with tolerances of ±20%.

● CONTACT RATINGS

Type Load Item	MK1(P), MK2(P)		MK3(P)	
	Resistive load (p.f.=1)	Inductive load (p.f.=0.4; L/R =7msec)	Resistive load (p.f.=1)	Inductive load (p.f.=0.4; L/R =7msec)
Rated load	220 VAC 7.5(5)A 24 VDC 5(3)A	220 VAC 3(2)A 24 VDC 4(2.5)A	220 VAC 5(3)A 24 VDC 3(2)A	220 VAC 2(1.2)A 24 VDC 2.5(1.5)A
Carry current	7.5(5)A		5(3)A	
Max. operating voltage	500 VAC 250 VDC			
Max. operating current	7.5(5)A		5(3)A	
Max. switching capacity	1,700 (1,000)VA 120(72)W	660 (440)VA 96(60)W	1,100 (660)VA 72(48)W	440 (260)VA 60(35)W
Minimum permissible load	1 VDC 10mA			

NOTE: The values in () apply to the covered type relays.

● CHARACTERISTICS

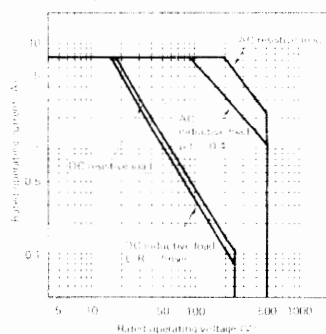
Item	Type	Open type	Covered type
Contact resistance		25mΩ max.	50mΩ max.
Operate time		AC: 20msec max. DC: 30msec max.	
Release time		20msec max.	
Operating frequency		Mechanically: 18,000 operations/hour Electrically: 1,800 operations/hour (under rated load)	
Insulation resistance		100MΩ min. (a: 500 VDC)	
Dielectric strength		1,500 VAC, 50/60Hz for 1 minute (1,000 VAC between the same poles)	
Vibration		Mechanical durability: 10 to 55Hz; 1.5mm double amplitude Malfunction durability: 10 to 55Hz; 1.0mm double amplitude	
Shock		Mechanical durability: 1,000m/sec ² (approx. 100G's) Malfunction durability: 100m/sec ² (approx. 10G's)	
Ambient temperature		Operating: -10 to +40°C	
Humidity		45 to 85% RH	
Service life		Mechanically: 5,000,000 operations min. (at operating frequency of 18,000 operations/hour) Electrically: See "CHARACTERISTIC DATA."	
Weight		Approx. 85g	

NOTE: The data shown are of initial value.

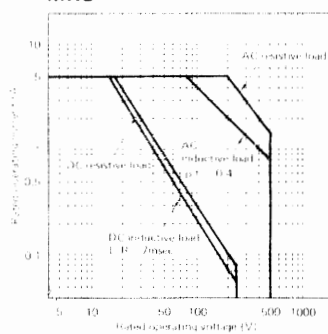
● CHARACTERISTIC DATA

Maximum switching capacity

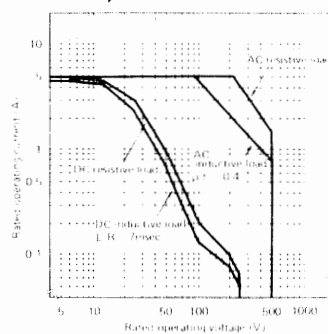
MK1, MK2



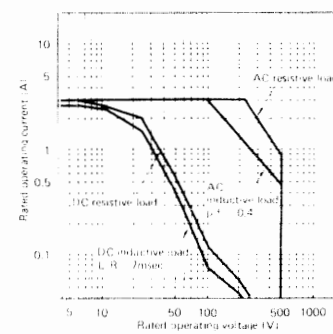
MK3



MK1P, MK2P

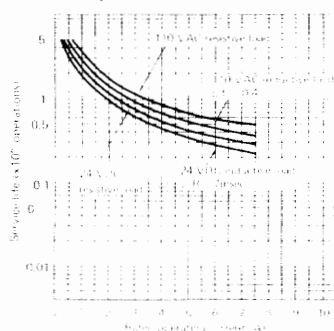


MK3P

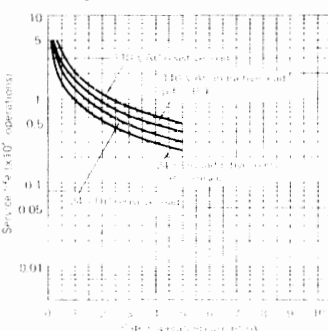


Electrical service life

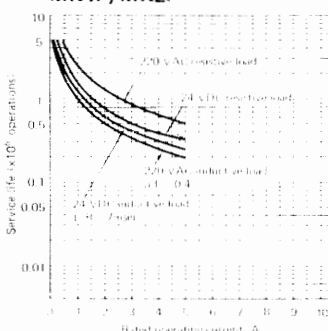
MK1, MK2



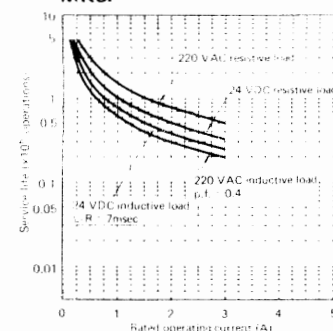
MK3



MK1P, MK2P

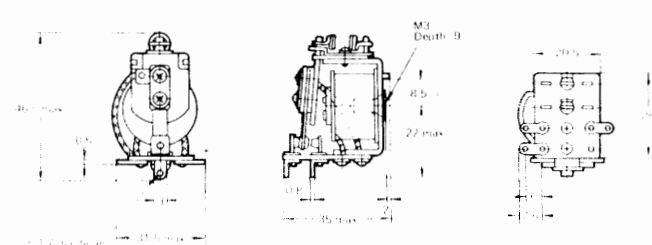


MK3P

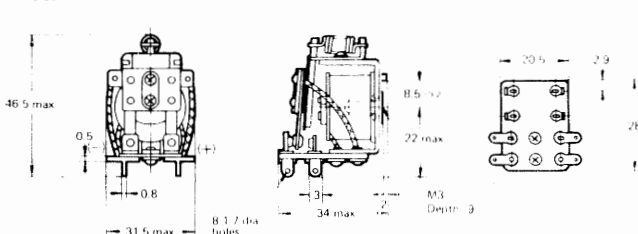


■ DIMENSIONS

MK1



MK2



OPERATION INDICATOR SELF-CONTAINED TYPE

SPECIFICATIONS/DIMENSIONS

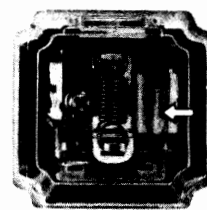
Same as the Standard Type with the following exceptions.

COIL RATINGS (MK□PN)

Item	Rated voltage (V)	Rated current (mA)		Coil resistance (Ω)	Power consumption (VA, W)
		50Hz	60Hz		
AC	6	420	385	5.3	Approx. 2.4
	12	220	195	21.5	
	24	110	100	88	
	50	64	60	390	
	100	25.8	23	1,510	
	110	23.5	21	1,620	
	120	20.2	18	2,300	
	200	12	10.7	6,200	
	220	12.3	11.0	7,100	
	240	10.3	9.2	9,300	
DC	6	315		23.5	Approx. 2
	12	160		95	
	24	84		430	
	48	41.5		1,630	Approx. 1.5
	100	14.7		6,800	
	200	14.7		6,800+6.8kΩ	



MK□PA



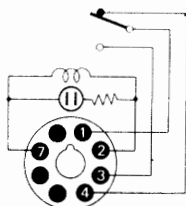
MK□PN

(with operation indicating mechanism) (with operation indicator lamp)

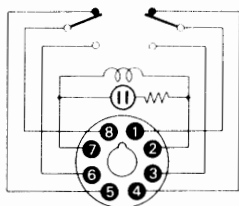
- NOTES: 1. The rated current, coil resistance and inductance are measured at a coil temperature of 20°C with tolerances of ±20%.
2. For 200 VDC applications, 100 VDC relay is supplied with a fixed 6.8kΩ, 30W resistor. Be sure to connect the resistor in series with the coil.

Terminal layout/Internal connections (Bottom view)

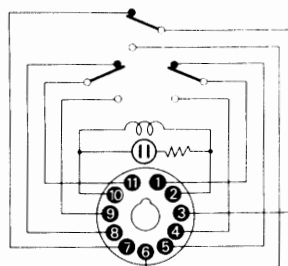
MK1PN



MK2PN



MK3PN



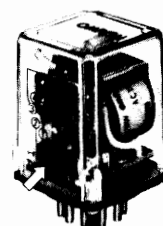
ARC BARRIER EQUIPPED TYPE

SPECIFICATIONS/DIMENSIONS

Same as the Standard Type with the following exceptions.

CONTACT RATINGS

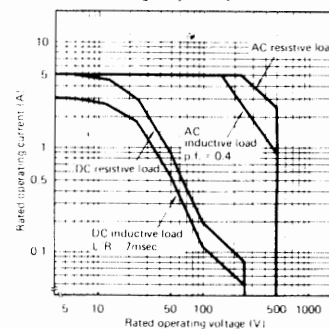
Item	Type	MK3LP	
	Load	Resistive load (p.f.=1)	Inductive load (p.f.=0.4; L/R=7msec)
Rated load		220 VAC 5A 24 VDC 3A	220 VAC 3A 24 VDC 1.8A
Carry current		5A	
Max. operating voltage		500 VAC 250 VDC	
Max. operating current		5A	
Max. switching capacity		1,100VA 72W	660VA 42W
Minimum permissible load		1 VDC 10mA	



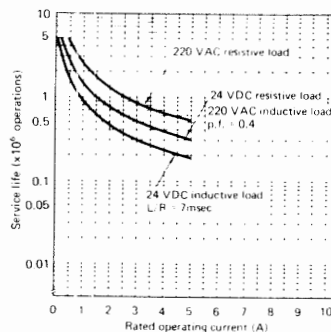
MK3LP

CHARACTERISTIC DATA

Max. switching capacity



Electrical service life



COIL RATINGS

Same as the Twin Contact Type MK3Z(P)

HIGH CAPACITY TYPE

SPECIFICATIONS

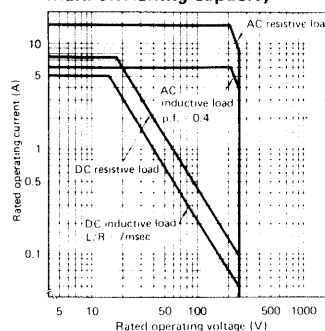
Same as the Standard Type with the following exceptions.

CONTACT RATINGS

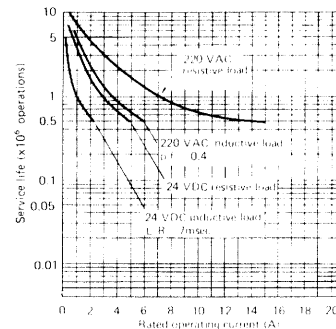
Item	Type	MK115(P)	
	Load	Resistive load (p.f.=1)	Inductive load (p.f.=0.4; L/R =7msec)
Rated load		220 VAC 15A 24 VDC 3A	220 VAC 6A 24 VDC 2.4A
Carry current		15A	
Max. operating voltage		250 VAC 250 VDC	
Max. operating current		15A	
Max. switching capacity		3,300VA 72W	1,400VA 60W

CHARACTERISTIC DATA

Max. switching capacity

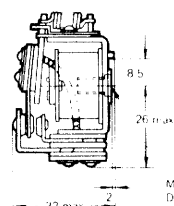
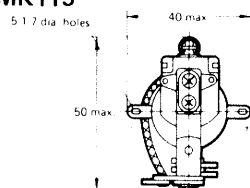


Electrical service life



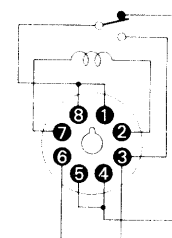
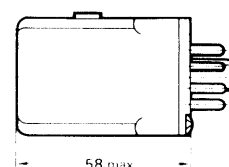
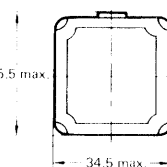
DIMENSIONS

MK115



Mount the relay in the same manner as the Standard Type.

MK115P



When mounting the relay, use PF083, P3D-08T or PL08 connecting socket. See page 4 for the connecting sockets.

STANDARD APPROVED TYPE

When placing your order for UL and CSA approved versions, please indicate "UL" or "CSA" as desired in addition to the model number.

SPECIFICATIONS

Same as the Standard Type with the following exceptions.

RATINGS

UL recognized type (File No. 41515)

Type	Coil rating	Contact material	Contact rating
Standard type	6 to 260 VAC 6 to 130 VDC (240 VAC max. 110 VDC max.)	Aq	5A 230 VAC or 5A 28 VDC, resistive load (5A 120 VAC or 5A 28 VDC resistive load)
		AqCdO	10A 230 VAC or 10A 28 VDC resistive load (10A 120 VAC or 10A 28 VDC resistive load)
Two contact type*	6 to 260 VAC 6 to 130 VDC	Movable contact: Aq-Ni(10%) Stationary contact: Aq	3A 230 VAC 3A 28 VDC resistive load

NOTE * Gold-plated contacts types are available upon request.

CSA listed type (File No. LR24825)

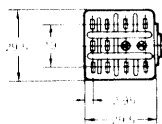
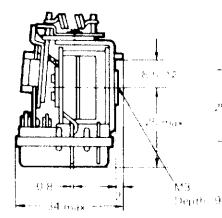
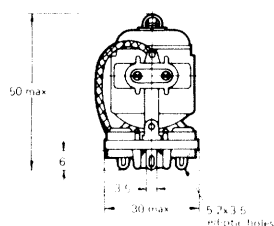
Type	Coil rating	Contact material	Contact rating
Standard type	6 to 260 VAC 6 to 130 VDC (240 VAC max. 110 VDC max.)	Ag	5A 230 VAC or 5A 28 VDC, resistive load (5A 120 VAC or 5A 28 VDC resistive load)
		AqCdO	10A 230 VAC or 10A 28 VDC resistive load (10A 120 VAC or 10A 28 VDC resistive load)

SEV listed type (File No. D7 91/32)

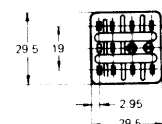
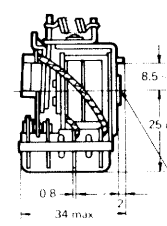
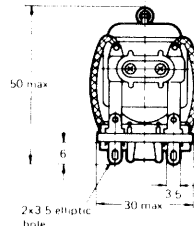
Type	Coil rating	Contact material	Contact rating
Standard type	6 to 220 VAC 6 to 110 VDC	Ag	5A 250 VAC (resistive load)

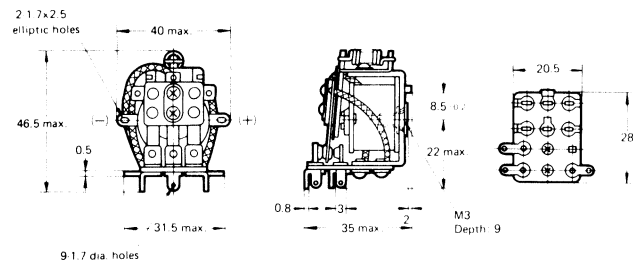
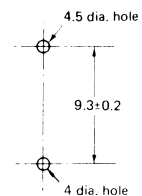
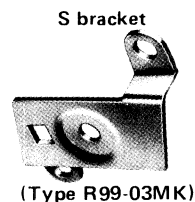
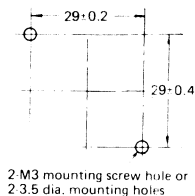
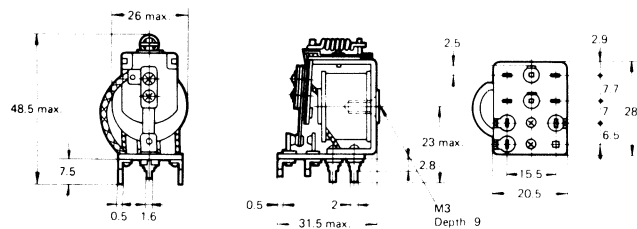
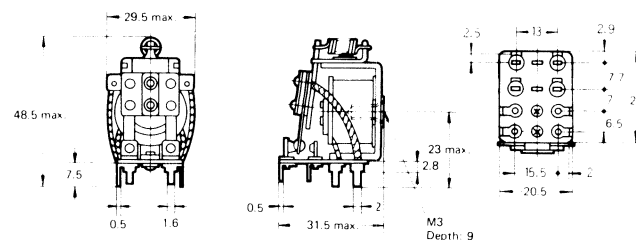
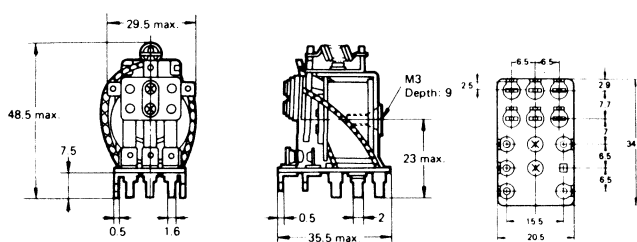
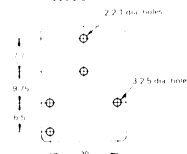
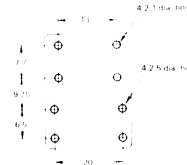
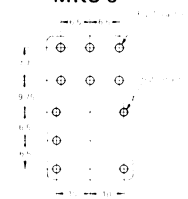
DIMENSIONS

MK105, MK110E

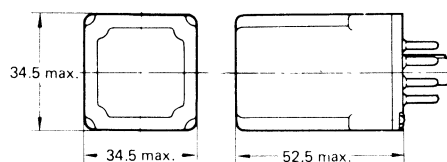


MK205, MK210E

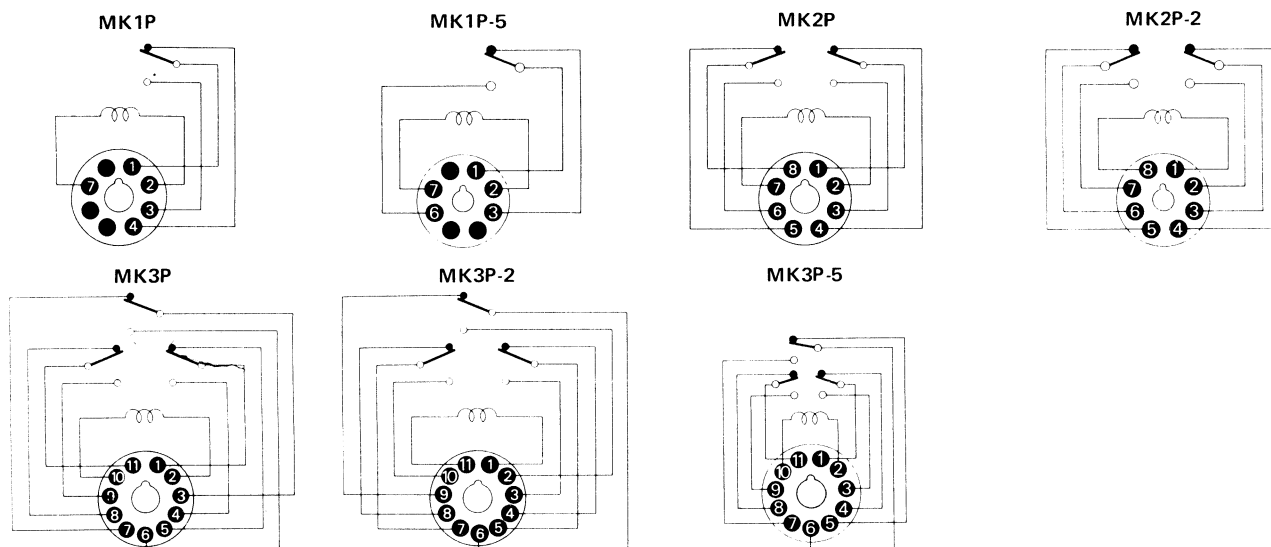
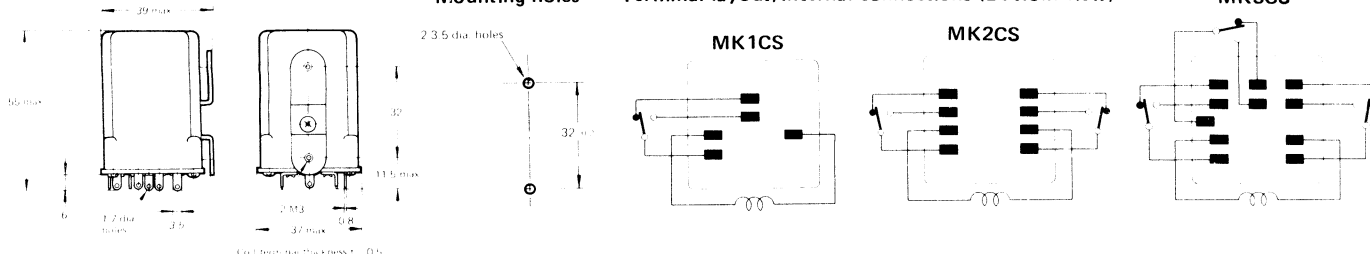


MK3**Mounting holes for MK1, MK2 and MK3****Without S bracket****With S bracket****MK1-0****MK2-0****MK3-0****Mounting holes****MK1-0****MK2-0****MK3-0**

(Bottom view)

**MK1P, MK2P, MK3P,
MK1P-5, MK2P-2, MK3P-2, MK3P-5**

NOTE: MK1P-5, MK2P-2, MK3P-2 and MK3P-5 are special internal connection versions of MK1P, MK2P and MK3P respectively.

Terminal layout/Internal connections (Bottom view)**MK1CS, MK2CS, MK3CS****Mounting holes****Terminal layout/Internal connections (Bottom view)****MK3CS**

Latching Type

GENERAL-PURPOSE RELAY

Model **MK**

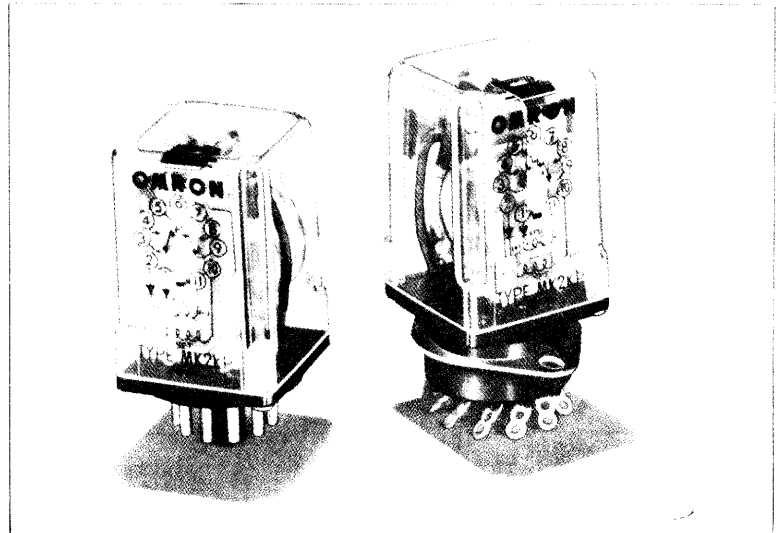
Magnetic Latching Relay
Ideal for Memory Circuit

■ FEATURES

- Changes due to aging are negligible, because of use of special magnetic materials, thus ensuring long continuous holding time.
- Little change in characteristic such as contact follow, contact pressure, etc. and long life.
- High vibration and shock resistance.
- Built-in operation indicator for easy relay operation monitoring.

■ AVAILABLE TYPES

Contact form	Terminal	Plug-in
	DPDT	MK2KP



OMRON

■ SPECIFICATIONS

• COIL RATINGS

Item		Set coil			Reset coil			Must set voltage	Must reset voltage	Maximum voltage	Power consumption (VA, W)	
		Rated , current (mA)	Coil resistance (Ω)	Coil inductance (ref. value) (H)	Rated current (mA)	Coil resistance (Ω)	Coil inductance (ref. value) (H)				Set coil	Reset coil
				Armature ON			Armature OFF					
AC	6	286	4.8	0.05	29	78	0.16	80 max.	80 max.	110	Approx. 1.5 to 2	Approx. 0.1 to 0.7
	12	128	25	0.22	14.4	325	0.59					
	24	66	105	0.88	10.8	965	1.09					
	50	31	410	3.93	3.2	8,450	5.03					
	100	17.8	1,670	13.4	3.6	13,350	13.8					
	110	19.6	1,670	13.5	4	13,350	15.1					
	120	19	1,900	15.1	3.6	14,400	16.7					
	200	9.8	6,200	48.9	3.2	27,350	29.2					
	220	10.6	6,200	49.8	3.5	32,400	35.3					
	240	10.4	7,400	54.9	2.8	35,100	53.2					
DC	6	390	13	0.056	92.5	65	0.013				Approx. 2.3 to 2.7	Approx. 0.5 to 1.2
	12	205	52	0.23	50	240	0.05					
	24	110	210	0.90	27.1	1,050	0.20					
	48	48.5	990	4.13	23.4	2,050	0.20					
	100	24	4,160	16.5	10.3	9,740	1.25					
	110	28	4,160	16.5	13	9,740	1.25					

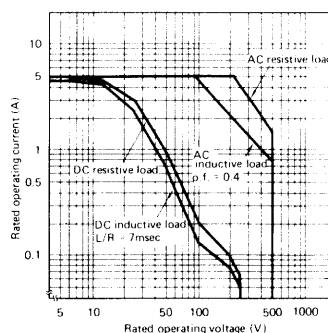
- NOTES: 1. The rated current and coil resistance are measured at a coil temperature of 20°C with tolerances of +15%, -20%, and +15% for rated coil resistance.
2. The rated current and performance characteristics are measured at a coil temperature of 5 to 35°C.
3. Peak reverse voltage of the built-in diode is 400V (600V for 200 VAC coil).

CONTACT RATINGS

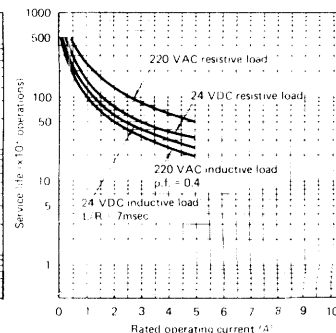
Item	Load	Resistive load (p.f.=1)	Inductive load (p.f.=0.4, L/R=7msec)
Rated load		220 VAC 5A 24 VDC 3A	220 VAC 2A 24 VDC 2.5A
Carry current		5A	
Max. operating voltage		500 VAC 250 VDC	
Max. operating current		5A	AC 5A DC 4.6A
Max. switching capacity		1,100VA, 80W	440VA, 60W
Minimum permissible load		1 VDC 1mA (reference value)	

CHARACTERISTIC DATA

Maximum switching capacity MK2KP



Electrical service life MK2KP

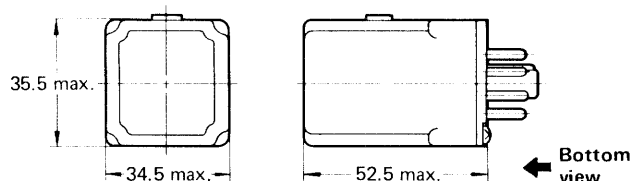


CHARACTERISTICS

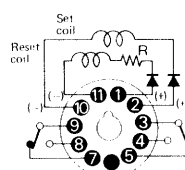
Contact resistance	50m Ω max.
Operate time	25msec max.
Release time	30msec max.
Operating frequency	Mechanically: 1,800 operations/hour Under rated load: 1,800 operations/hour
Insulation resistance	100M Ω min. (at 500 VDC)
Dielectric strength	1,500 VAC, 50/60Hz for 1 minute (1,000 VAC between contacts of the same polarity and between set and reset coils)
Vibration	Mechanical durability: 10 to 55Hz; 1.5mm double amplitude Malfunction durability: 10 to 55Hz; 1.0mm double amplitude
Shock	Mechanical durability: 500m/sec ² (approx. 50G's) Malfunction durability: 100m/sec ² (approx. 10G's)
Ambient temperature	Operating: -10 to +40°C
Humidity	45 to 85% RH
Service life	Mechanically: 5,000,000 operations min. (at operating frequency of 1,800 operations/hour) Electrically: See "CHARACTERISTIC DATA."
Weight	Approx. 85g

NOTE: The data shown above are of initial value.

DIMENSIONS



Terminal layout/Internal connections (Bottom view)



NOTES:

1. R is a resistor for ampere-turn compensation, and is incorporated in the relays rated at 50 VAC or above and 48 VDC or above.
2. Pay attention to the polarity of the set and reset coils, as incorrect connection of positive and negative terminals will result in malfunctioning of the relay.

ACCESSORY

Same as the Standard Type.

NOTE: ALL DIMENSIONS SHOWN IN THIS CATALOG ARE IN UNITS OF MILLIMETERS.
To convert millimeters into inches multiply by 0.03937. To convert grams into ounces multiply by 0.03527.

OMRON GENERAL-PURPOSE RELAY

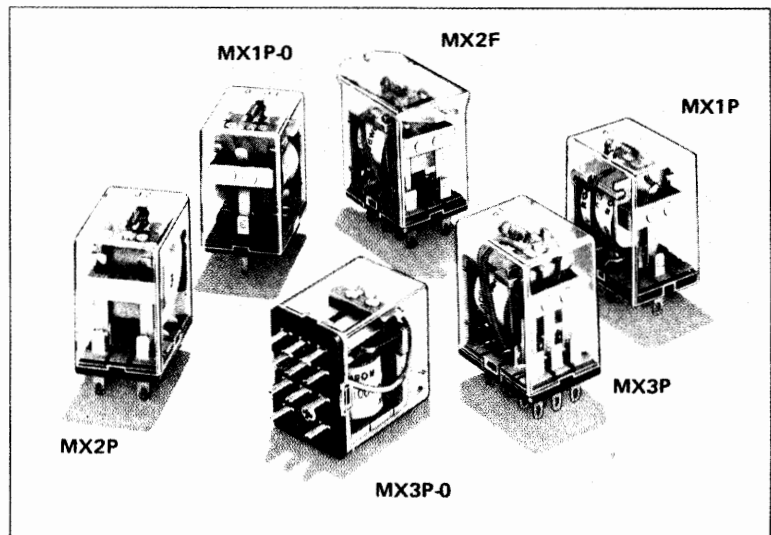
Cat. No. J07-E1-3

Model **MX**

Miniature, High-performance Relay

FEATURES

- Hinge type relay
- Large contact capacity (2A 110 VAC or 24 VDC)
- Widely applicable to fields requiring high reliability



AVAILABLE TYPES

Mounting style	Standard bracket mounting		Upper mounting bracket
	Solder	P.C.B.	Solder
Contact form			
SPDT	MX1P	MX1P-0	MX1F
DPDT	MX2P	MX2P-0	MX2F
3PDT	MX3P	MX3P-0	MX3F

SPECIFICATIONS

OMRON

COIL RATINGS

Rated voltage (V)		Rated current (mA)		Coil resistance (Ω)	Coil inductance (ref. value) (H)		Must operate voltage	Must dropout voltage	Maximum voltage	Power consumption (VA, W)
		50Hz	60Hz		Armature OFF	Armature ON				
AC	6	218	190	14	0.033	0.075	80 max.	30 min.	110	Approx. 1.0
	12	115	100	52	0.13	0.28				
	24	49.5	43	250	0.68	1.49				
	50	27.0	23.5	1,040	2.2	4.9				
	100	12.5	10.5	3,900	10	23				
	110	10.7	12.1	3,900	10	23				
120	10.8	9.2	5,750	13.5	30					
DC	6	193.5		31	0.067	0.160		10 min.		Approx. 1.2
	12	96		125	0.279	0.699				
	24	48		500	1.08	2.66				
	48	24		2,000	4.22	9.57				

NOTE: The rated current, coil resistance and inductance are measured at a coil temperature of 20 °C with tolerances of +15%, -20% for AC rated current and +15% for DC rated current, and +15% for rated coil resistance.

CONTACT RATINGS

Type	1-, 2-pole		3-pole	
	Resistive load (p.f.=1)	Inductive load (p.f.=0.4, L/R=7msec)	Resistive load (p.f.=1)	Inductive load (p.f.=0.4, L/R=7msec)
Item				
Rated load	110 VAC 2A 24 VDC 2A	110 VAC 1.2A 24 VDC 1.2A	110 VAC 1.5A 24 VDC 1.5A	110 VAC 1A 24 VDC 1A
Carry current	2A			
Max. operating voltage	125 VAC; 125 VDC			
Max. operating current	2A		1.5A	
Max. switching capacity	220VA 48W	140VA 40W	165VA 36W	115VA 30W
Minimum permissible load	1 VDC 1mA (ref. value)			

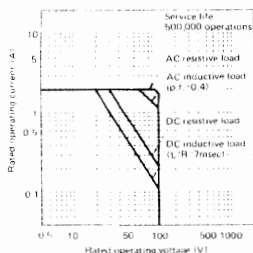
CHARACTERISTICS

Type		1-pole	2-, 3-pole
Item			
Contact resistance		50mΩ max.	
Operate time		AC: 20msec max. DC: 15msec max.	
Release time		AC: 20msec max. DC: 15msec max.	
Operating frequency		Mechanically: 18,000 operations/hour; Electrically: 1,800 operations/hour (under rated load)	
Insulation resistance		100MΩ min. (at 500 VDC)	
Dielectric strength		1,000 VAC, 50/60Hz for 1 minute (750 VAC between non-continuous contacts)	
Vibration		Mechanical and malfunction durability: 10 to 55Hz; 1.5mm double amplitude	
Shock		Mechanical durability: 1,000m/sec ² (approx. 100G's) Malfunction durability: 100m/sec ² (approx. 10G's)	
Ambient temperature		Operating: -10 to +40 °C (without frost formation)	
Humidity		45 to 85% RH	
Service life	Mechanically	1,000,000 operations min. (at operating frequency of 18,000 operations/hour)	5,000,000 operations min. (at operating frequency of 18,000 operations min.)
	Electrically	See "CHARACTERISTIC DATA."	
Weight		Approx. 17g	

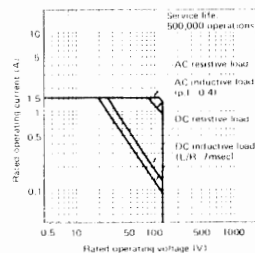
NOTE: The data shown are of initial value.

CHARACTERISTIC DATA

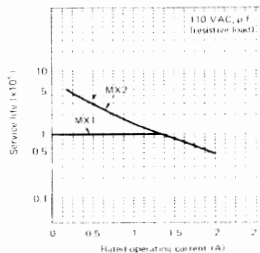
Maximum switching capacity MX1□, MX2□



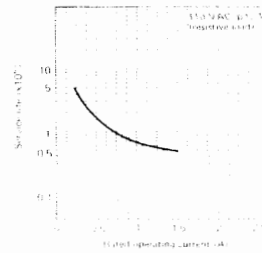
MX3□



Electrical service life MX1□, MX2□

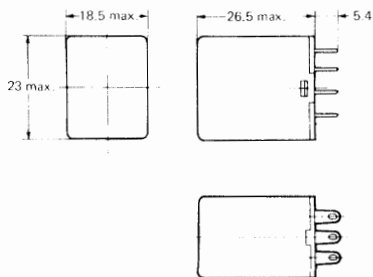


MX3□

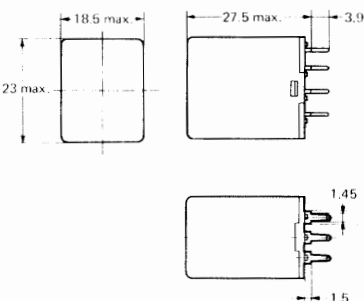


DIMENSIONS

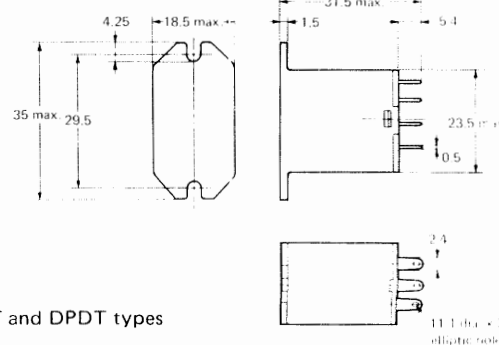
MX1P, MX2P, MX3P



MX1P-0, MX2P-0, MX3P-0

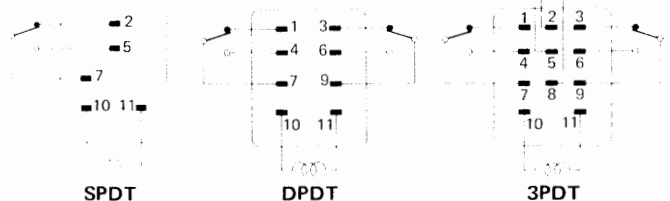


MX1F, MX2F, MX3F

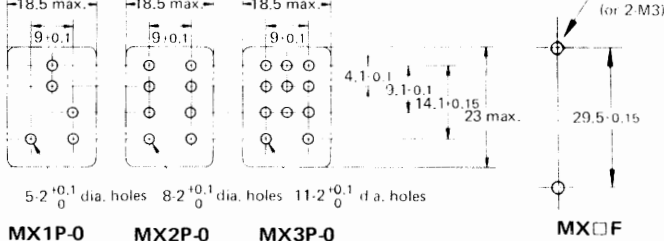


NOTE: The above dimensioned drawings show the 3PDT type. The dimensions of the SPDT and DPDT types are identical to those of the 3PDT type.

Terminal arrangement (Bottom view)



Mounting holes



ACCESSORIES

CONNECTING SOCKETS

Available types

Socket	Solder terminals	P.C. terminals
Relay		
MX1P	PX05	PX05-0
MX2P	PX08	PX08-0
MX3P	PX11	PX11-0

PX05, PX08, PX11



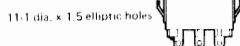
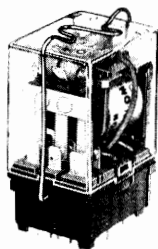
PX05-0, PX08-0, PX11-0



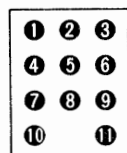
NOTE: The dimensioned drawings on the left show PX11-0. The dimensions of PX08-0 are identical to those of PX11-0.

RELAY HOLD-DOWN CLIP

PXC

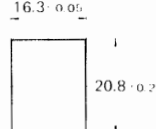


Terminal arrangement



(Bottom view)

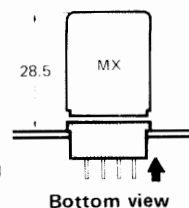
Panel cutout



NOTES:

1. Panel thickness: 1 to 2mm
2. When a number of relays are to be mounted in line, be sure to provide a minimum space of 9mm between two juxtaposed relays.
3. Mounting holes for PX□-0 connecting sockets are the same as those shown for MX□P-0 above.

Mounting height of relay with socket



Bottom view

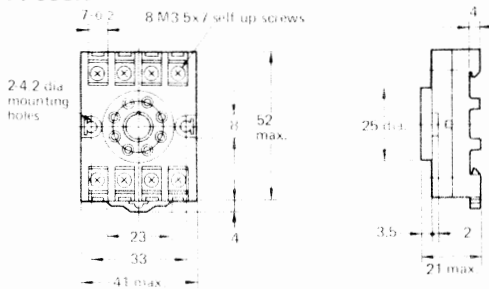
NOTE: ALL DIMENSIONS SHOWN IN THIS CATALOG ARE IN UNITS OF MILLIMETERS.
To convert millimeters into inches multiply by 0.03937. To convert grams into ounces multiply by 0.03527.

ACCESSORIES

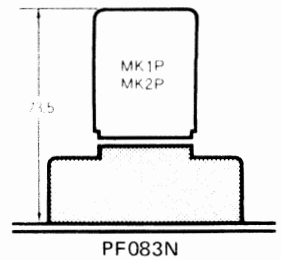
CONNECTING SOCKETS

Track Mounted Sockets

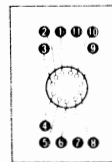
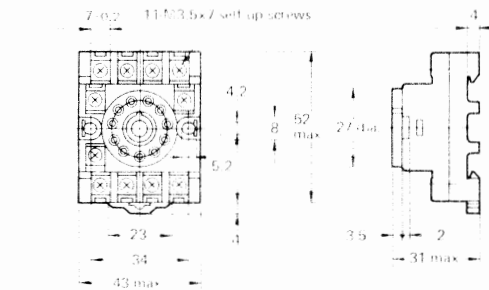
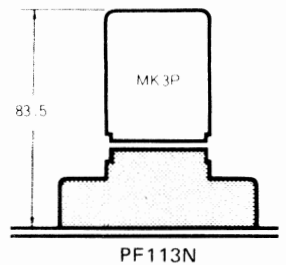
PF083N

Terminal arrangement
(Top view)

Mounting hole

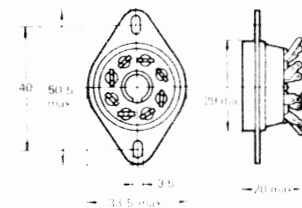
2 M4 mounting screw holes
or 2.4 dia. mounting holes33^{+0.2}Mounting height of
relay with socket

PF113N

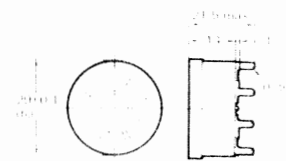
2 M4 mounting screw holes
or 2.4 dia. mounting holes34.8^{+0.2}

Back Connecting Sockets

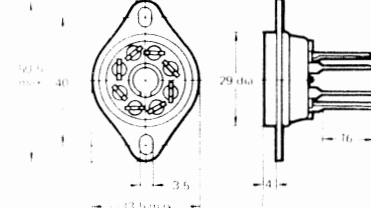
PL08



PLE08-0



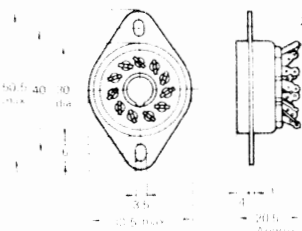
PL08-Q



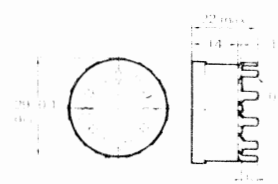
PL08, PL11, P3D

2.35 dia. mounting holes
or 2 M3 mounting screw holes

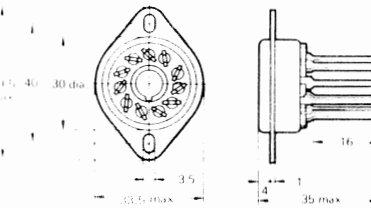
PL11



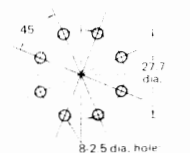
PLE11-0



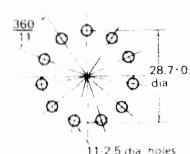
PL11-Q



PLE08-0

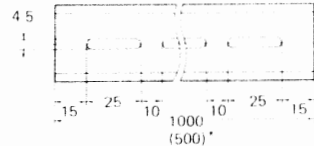


PLE11-0



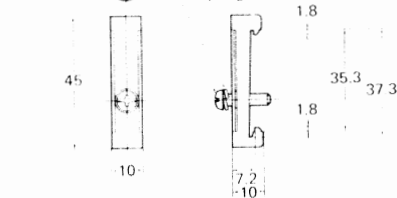
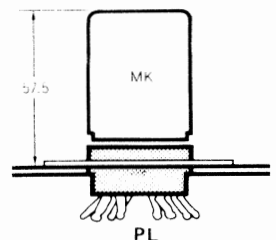
SOCKET MOUNTING TRACK/END PLATE (for PF083N, PF113N)

PFP-100N



* Type PFP 50N (500mm wide) is also available

PFP-M

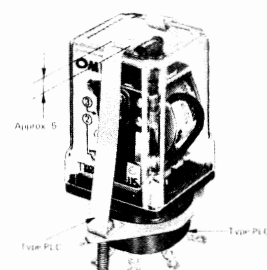
M4x15 pan head screw
M4 spring washer

RELAY HOLD-DOWN CLIP

Relay	MK1P MK2P (Including -Z and -US)	MK3P (Including -US)	MK3ZP MK3LP	MK115P
Socket				
PL08(Q)	PLC	—	—	PLC-3
PL11(Q)	—	PLC	PLC-1	—
PF083N	PFC-N1 (PFC-1)	—	—	PFC-N5 (PFC-5)
PF113N	—	PFC-N1 (PFC-1)	PFC-N1 (PFC-1)	—
PLE08-0	PLC-10	—	—	—
PLE11-0	—	PLC-10	—	—

NOTE: When the Type PF□□□N socket is used as the front mounting socket, be sure to use the relay hold-down clip shown in ().

PLC



PFC-N1

