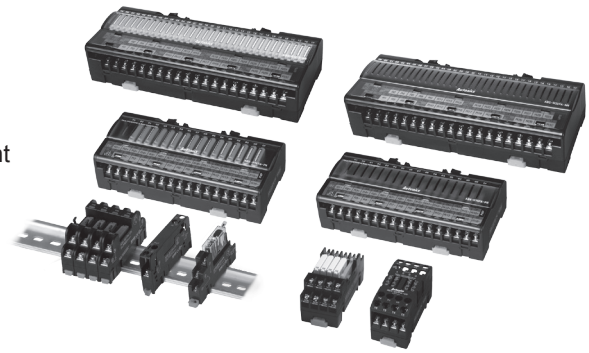
Relay terminal block

▣ Features



- ●Suitable to drive various loads using output signals of PLC
- ●Easy check for operation status and for cable break by adopting LED signal
- ●Selectable various types of relay for each load voltage and current
  - Easy relay replacement with relay removal lever (1-point relay terminal block)
- ●2 ways of mounting (DIN rail, mounting with screws)
- ●Available close mounting and easy expansion with concave-convex structure between terminals (1-point relay terminal block)

※ It is recommended for I/O cable to use Autonics CJ Series (connector transmission cable). Refer to C-1 page.

Please read "Caution for your safety" in operation manual before using this unit.

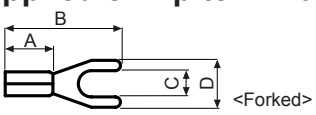
▣ Ordering information

AB S – H 16 PA – N N

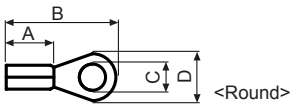
Varistor installation	N	Not installed
Input logic	C	Non-COM ※1
	N	NPN (COM+)
	P	PNP (COM-)
Relay type	TN	**T**AKAMISAWA (Fujitsu) **N**YP
	PA	MATSUSHITA (Panasonic) **PA**
	PQ	MATSUSHITA (Panasonic) **PQ**
	R6	OM**R**ON G**6**B
	PH	MATSUSHITA (**P**anasonic) A**H**N
	R2	OM**R**ON G**2**R
Number of relay points	01	01EA
	04	04EA
	16	16EA
	32	32EA
Connector type	S	Screw
	H	Hirose connector
Terminal type	S	Screw
Item	AB	Relay terminal block

※1: It is only for 1-point and 4-point models.
※This ordering information is only for reference. When selecting the model, refer to the specifications of each model.

▣ Applied crimp terminal



<Forked>



<Round>

(unit: mm)

◎ Rated load current 2/3A

	A	B	C	D	Applied wire
Forked	Min. 4.1	Max. 16.0	Min. 3.0	Max. 5.9	AWG 22-16 (0.30 to 1.25mm^2)
Round	Min. 4.1	Max. 16.0	Min. 3.0	Max. 5.9	

◎ Rated load current 5A, 10A

	A	B	C	D	Applied wire	
					Rated load current 5A	Rated load current 10A
Forked	Min. 4.1	Max. 16.0	Min. 3.0	Max. 7.0	AWG 19-14 (0.65 to 2.0mm^2)	AWG 17-14 (1.0 to 2.0mm^2)
Round	Min. 4.1	Max. 16.0	Min. 3.0	Max. 7.0		

※Use the UL cirtified crimpt terminal.

▣ Specifications

◎ Rated load current 2/3A

Model		ABS-S01PA-CN ABS-S01TN-CN	ABS-S04PA-CN ABS-S04TN-CN	ABS-H16PA-NN(PN) ABS-H16TN-NN(PN)	ABS-H32PA-NN(PN) ABS-H32TN-NN(PN)
Rated voltage		24VDC ±10%			
Rated load voltage & current※1		250VAC 3A, 30VDC 3A			250VAC 2A, 30VDC 2A (2A/1-point, 8A/1COM)
Current consumption	PA type	Max. 10.5mA※2		Max. 10.5mA※2/Max. 15.5mA※3	
	TN type	Max. 8.5mA※2		Max. 8.5mA※2/Max. 13.5mA※3	
Output type		1a contact relay output			
Applied relay model		PA: PA1a-24V [MATSUSHITA (Panasonic)], TN: NYP24W-K [TAKAMISAWA (Fujitsu)]			
Number of relay points		1-point	4-point	16-point	32-point(8-point/1COM)
Number of connector pins		—		20-pin	40-pin
Applied wire		AWG 22-16(0.30 to 1.25mm^2)			
Insulation resistance		Min. 1,000MΩ (at 500VDC megger)			
Dielectric strength	Between coil-contact	2,000VAC 50/60Hz for 1 min.			
	Between same contacts	1,000VAC 50/60Hz for 1 min.※4			
Vibration	Mechanical	0.75 mm amplitude at frequency of 10 to 55 Hz(for 1 min.) in each of X, Y, Z directions for 2 hours			
	Malfunction	0.75 mm amplitude at frequency of 10 to 55 Hz(for 1 min.) in each of X, Y, Z directions for 10 min.			
Shock	Mechanical	500 m/s^2 (approx. 50G) in each of X, Y, Z directions for 3 times			
	Malfunction	147 m/s^2(approx. 15G) in each of X, Y, Z directions for 3 times			
Environment	Ambient temp.	-15 to 55℃, storage : -25 to 65 ℃			
	Ambient humi.	35 to 85%RH, storage : 35 to 85%RH			
Material		CASE & BASE: PA6, TERMINAL PIN: Brass	CASE & BASE: MPPO, TERMINAL PIN: Brass	CASE: MPPO, BASE: PA66(G25%) TERMINAL PIN: Brass	
Tightening torque		0.5 to 0.6 N·m			
Accessory※5		—	Jumper Bar: 2EA (Model: JB-7.62-04)	Jumper Bar: 2EA(Model:JB-7.62-08)	—
Approval		CE UL※6	CE UL	CE UL※6	
Weight※7	PA type	Approx. 314.5g(approx. 21.5g)※8	Approx. 104g(approx. 68g)	Approx. 307g(approx. 224g)	Approx.438g(approx. 345g)
	TN type	Approx. 324.5g(approx. 22.2g)※8	Approx. 107g(approx. 71g)	Approx. 318g(approx. 235g)	Approx.463g(approx. 370g)

◎ Rated load current 5A, 10A

Model		ABS-S01PQ-CN ABS-S01R6-CN	ABS-S01PH-CN	ABS-S01PH6-CN	ABS-S01PH5-CN	ABS-S01R2-CN	ABS-S01R26-CN	ABS-S01R25-CN
Rated voltage		24VDC ±10%	24VDC	100/110VAC	200/220VAC	24VDC	100/110VAC	200/220VAC
Rated load voltage & current※1		250VAC 5A, 30VDC 5A	250VAC 10A, 30VDC 10A※1					
Current consumption※2	PQ/R6 type	Max. 20mA	—					
	PH/R2 type	—	Max. 25mA	Max. 15mA	Max. 10mA	Max. 25mA	Max. 15mA	Max. 10mA
Output type		1a contact relay output	1c contact relay output					
Applied relay model		PQ: PQ1a-24V [MATSUSHITA(Panasonic)]	AHN12024 [MATSUSHITA (Panasonic)]	AHN110X0 [MATSUSHITA (Panasonic)]	AHN110Y0 [MATSUSHITA (Panasonic)]	G2R-1-S24VDC [OMRON]	G2R-1-S100/ (110)VAC [OMRON]	G2R-1-S200/ (220)VAC [OMRON]
		R6: G6B-1174P-FD-US [OMRON]						
Number of relay points		1-pin						
Applied wire		AWG19-14 (0.65 to 2.0mm^2)	AWG17-14(1.0 to 2.0mm^2)					
Insulation resistance		Min. 1,000MΩ (at 500VDC megger)						
Dielectric strength	Between coil-contact	4,000 VAC 50/60Hz for 1min.※4	5,000VAC 50/60Hz for 1 min.					
	Between same contacts	1,000VAC 50/60Hz for 1 min.※4	1,000VAC 50/60Hz for 1 min.					
Vibration	Mechanical	0.75 mm amplitude at frequency of 10 to 55 Hz(for 1 min.) in each of X, Y, Z directions for 2 hours	1.5 mm amplitude at frequency of 10 to 55 Hz(for 1 min.) in each of X, Y, Z directions for 2 hours					
	Malfunction	0.75 mm amplitude at frequency of 10 to 55 Hz(for 1 min.) in each of X, Y, Z directions for 10 min.	1.5 mm amplitude at frequency of 10 to 55 Hz(for 1 min.) in each of X, Y, Z directions for 10 min.					
Shock	Mechanical	1000 m/s^2(approx. 100G) in each of X, Y, Z directions for 3 times						
	Malfunction	100 m/s^2(approx. 10G) in each of X, Y, Z directions for 3 times						
Environment	Ambient temp.	-15 to 55℃, storage: -25 to 65℃						
	Ambient humi.	35 to 85%RH, storage: 35 to 85%RH						
Material		CASE & BASE: PA6, TERMINAL PIN: Brass	CASE, BASE : PBT, TERMINAL PIN : Brass, Phosphor bronze					
Tightening torque		0.7 to 0.8N·m						
Approval		CE UL※6						
Weight※7		PQ: Approx. 430g (approx. 31g), R6: Approx. 416g (approx. 30g)	Approx. 720g (approx. 53g)	Approx. 711g (approx. 52g)	Approx. 715g (approx. 52g)	Approx. 719g (approx. 53g)	Approx. 711g (approx. 52g)	Approx. 712g (approx. 52g)

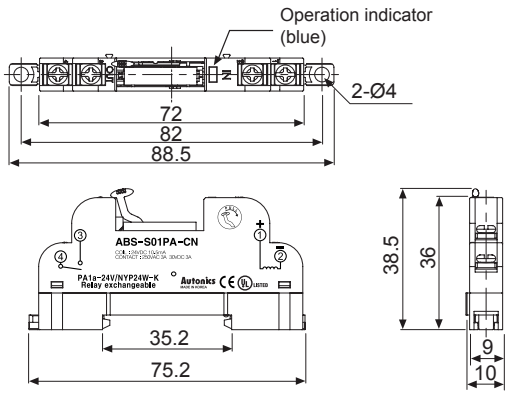
※1: Relay contact capacity for resistive load.
※2: The current consumption including LED current by one relay.
※3: The current consumption including power LED at '※1'.
※4: R6 type(OMRON relay) is 3,000VAC.TN type(Fujitsu relay) is 750VAC.
※5: ABS-H32□□-NN(PN) does not supply a Jumper bar.
※6: Except 30VDC of rated load voltage for UL.
※7: The weight is with packaging and the weight in parentheses is only unit weight.
※8: The weight of 1-point relays is per 10EA with packing and the weight of parenthesis is per 1EA.
※Environment resistance is rated at no freezing or condensation.

▣ Dimensions

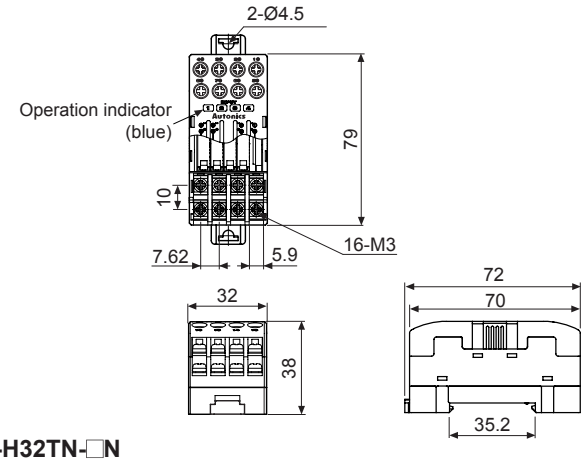
(unit: mm)

◎ Rated load current 2/3A

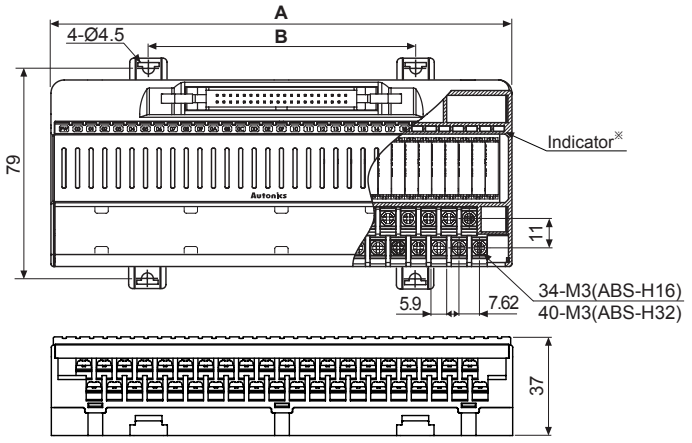
●ABS-S01PA-CN / ABS-S01TN-CN



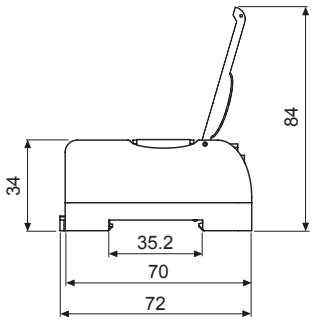
●ABS-S04PA-CN / ABS-S04TN-CN



●ABS-H16PA-□N / ABS-H16TN-□N ●ABS-H32PA-□N / ABS-H32TN-□N

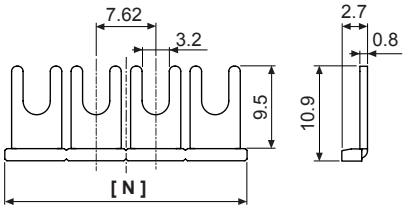


	ABS-H16 type	ABS-H32 type
A	140	173
B	70	100



※Indicator(PW: red LED, operation and disconnection: blue LED)

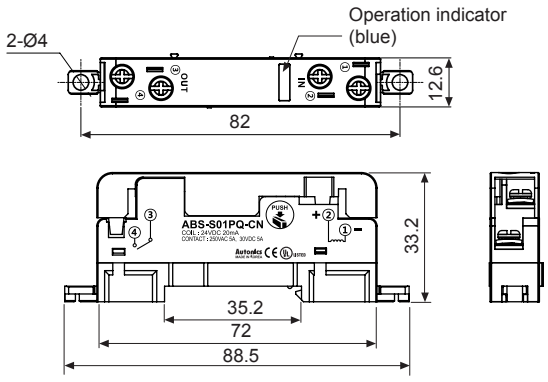
●Jumper Bar



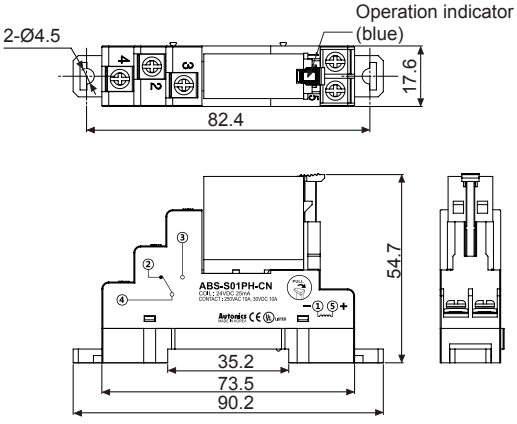
Model	JB-7.62-04	JB-7.62-08
Number of Jumper Bar pins	4EA	8EA
[**N**] size	29.5	60.0

◎ Rated load current 5A, 10A

●ABS-S01PQ-CN / ABS-S01R6-CN



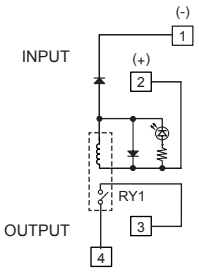
●ABS-S01PH□-CN / ABS-S01R2□-CN



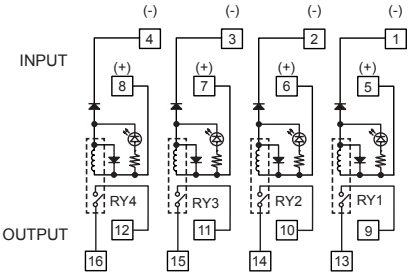
▣ Connections

◎ Rated load current 2/3A

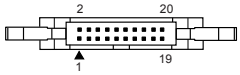
●ABS-S01PA-CN / ABS-S01TN-CN



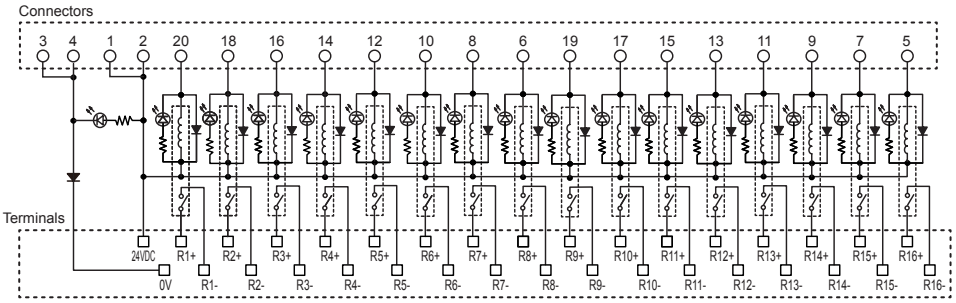
●ABS-S04PA-CN / ABS-S04TN-CN



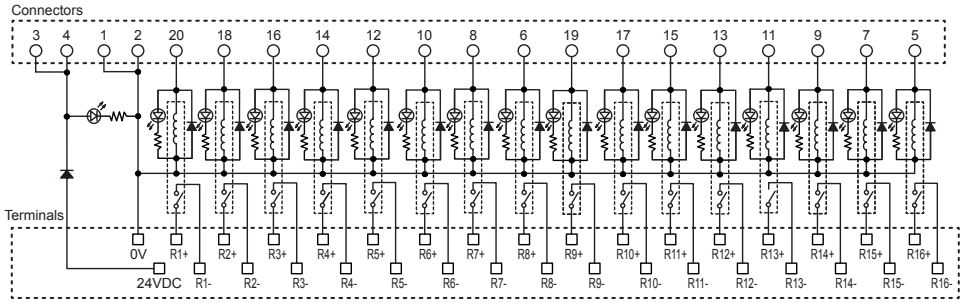
●ABS-H16□-NN



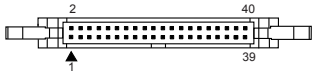
※Hirose connector socket model
: HIF3BA-20PA-2.54DSA



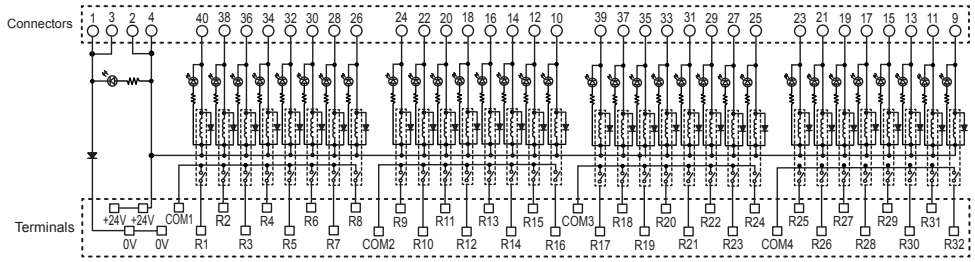
●ABS-H16□-PN



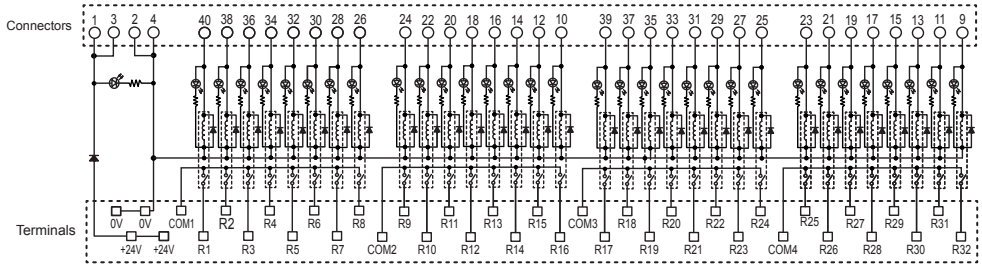
●ABS-H32□-NN



※Hirose connector socket model
: HIF3BA-40PA-2.54DSA



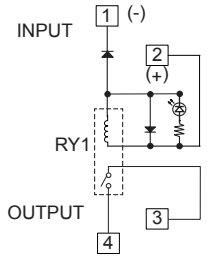
●ABS-H32□-PN



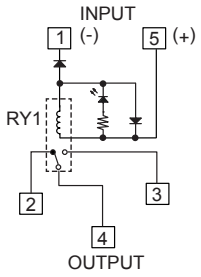
▣ Connections

◎ Rated load current 5A, 10A

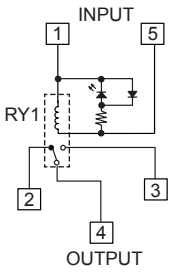
●ABS-S01PQ-CN
ABS-S01R6-CN



●ABS-S01PH-CN
ABS-S01R2-CN



●ABS-S01PH6-CN
ABS-S01PH5-CN
ABS-S01R26-CN
ABS-S01R25-CN



▣ How to replace relay

◎ Rated load current 2/3A

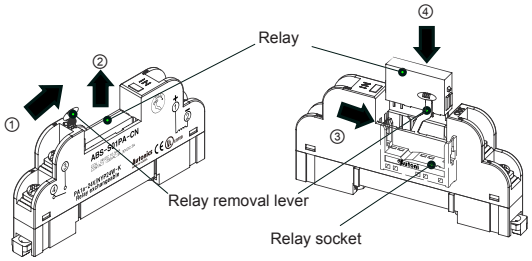
●ABS-S01PA-CN / ABS-S01TN-CN

1)Press the relay removal lever to the direction "①" and an inserted relay is come up.

2)Remove this relay and lift up the relay removal lever to the direction "②".

3)Check the relay socket position and insert a new relay to relay socket.

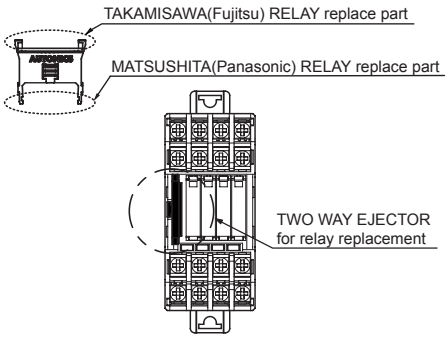
※If pressing the relay removal lever to right or left, this lever may be broken.



●ABS-S04PA-CN / ABS-S04TN-CN
●ABS-H16PA-□N / ABS-H16TN-□N
●ABS-H32PA-□N / ABS-H32TN-□N

• Two-way ejector position for relay replacement

< Two-way ejector >



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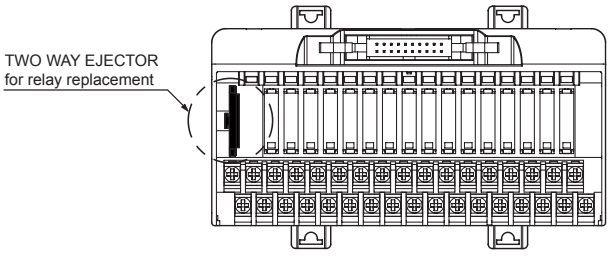
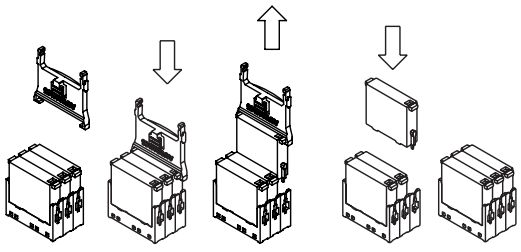


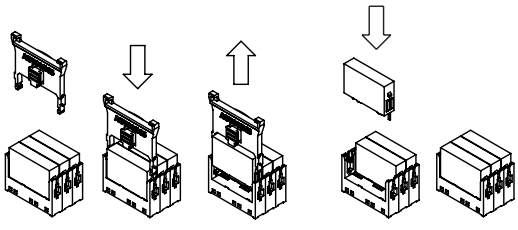
< ABS-H16 / ABS-H32 type >

• Insertion/Removal of TAKAMISAWA(Fujitsu) relay



< Relay removal > < Relay insertion >

• Insertion/Removal of MATSUSHITA(Panasonic) relay



< Relay removal > < Relay insertion >

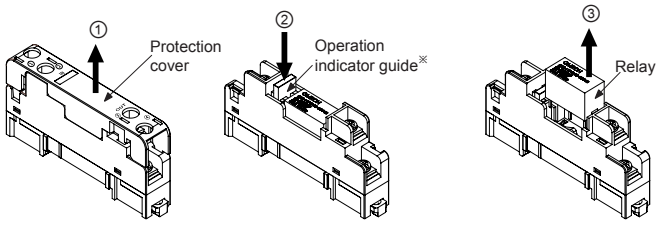
※Relay socket can be used both TAKAMISAWA(Fujitsu) relay, NYP24W-K, and MATSUSHITA(Panasonic) relay, PA1a-24V.

▣ How to replace relay

◎ Rated load current 5A, 10A

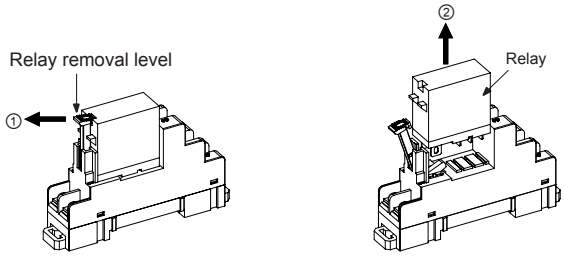
●ABS-S01PQ-CN / ABS-S01R6-CN

1)Pull the protection cover to the direction "①".
2)Press the operation indicator guide to the direction "②" and remove the relay to the direction "③".
3)Insert a new relay to the case.



●ABS-S01PH□-CN / ABS-S01R2□-CN

1) Pull the relay removal lever to the direction "①". Remove this relay and lift up to the direction "②".
2) Insert a new relay to the case.



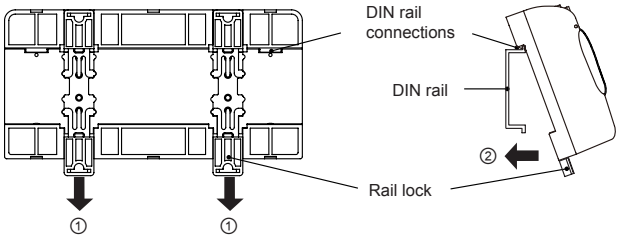
▣ Installations

※The appearance of each mode is different by relay-point.

◎ Mounting to and Removing from DIN rail

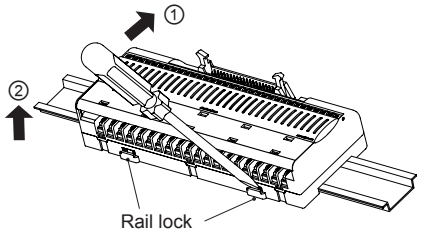
●Mounting

1) Push the rail locks to the direction "①".
2)Hook DIN rail connection onto DIN rail.
3)Push the unit down to the direction "②" and then push up the rail locks to the unit body.



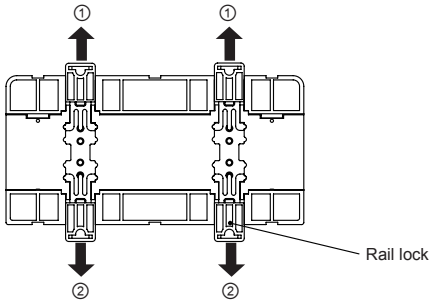
●Removing

1)Insert a screwdrive into holes of rail lock and pull the lock out to the direction "①".
2)Removing the unit by pulling to the direction "②".



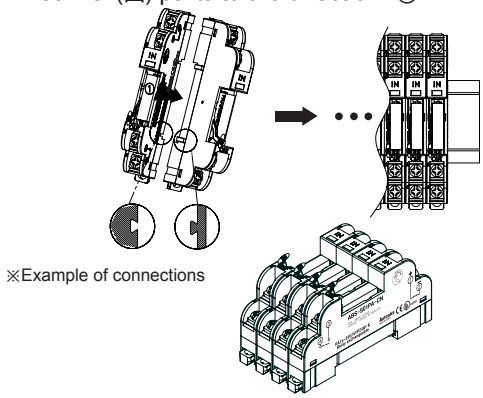
◎ Mounting with screws

1)This unit is able to mount on the panel with rail locks.
2) Push the rail locks to the direction "①, ②".
3)It is recommended to use M4×15mm of spring washer screws and to use flat washers which are diameter Ø6. The tightening torque should be 0.7 to 1.0 N·m.



◎ Connection between units (1-point relay terminal block)

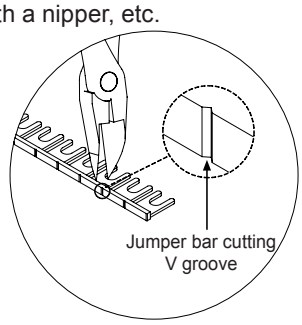
Connect between units with concave(凹) and convex(凸) parts to the direction "①".



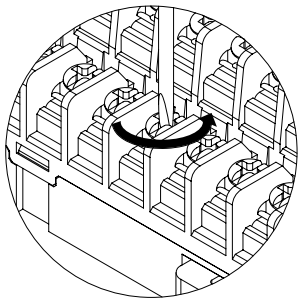
※Example of connections

▣ How to install jumper bar (4, 16, 32-point relay terminal)

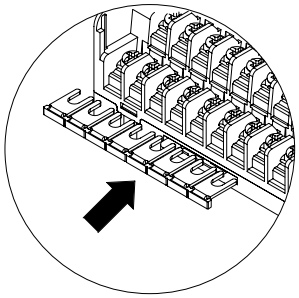
1)Cut a jumper bar for the desired length to fit cutting V groove with a nipper, etc.



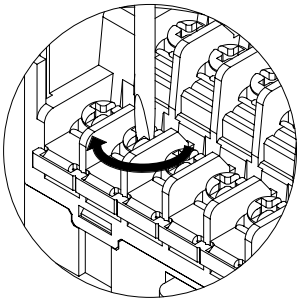
2)Unfasten the terminal screws for common.



3)Put jumper bar under the unfastend terminal screws.



4)Tighten all of screws upside the jumper bar.

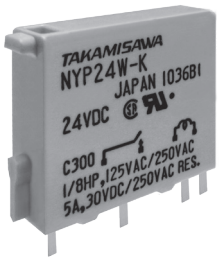


▣ Caution for using

1. Use the product within the rated specifications for operating temperature and humidity.
2. Check voltage fluctuations in the power supply within the rated range.
3. When connecting PLC or other controllers, check the polarity of power and COMMON before wiring.
4. Power wire should be used for each rated load current. Use proper crimp terminals for the terminals.
   2, 3A: AWG 22-16(0.30 to 1.25mm^2), 5A: AWG19-14(0.65 to 2.0mm^2), 10A: AWG17-14(1.0 to 2.0mm^2)
5. Turn OFF the power supply before wiring or removing connectors.
6. Do not touch the unit immediately after the load power is supplied or cut. It may cause burn by high temperature.
7. Do not touch the unit when screw is released. It may cause malfunction or burnout.
8. Turn OFF the power supply before replacing relays.
9. Do not apply the excessive power to the removal lever when removing a relay.
10. In case of 24VDC signal input, isolated and limited voltage/current or Class2 source should be provided for power supply. (except 3A 1-point, 5A 1-point of the rated load current)
10. Do not use this unit at below places.
    ① Place where there is severe vibration or impact
    ② Place where strong alkalis or acids are used
    ③ Place where there are direct ray of the sun
    ④ Place where strong magnetic field or electric noise are generated
11. Installation environment
    ① It shall be used indoor.
    ② Altitude max. 2,000m
    ③ Pollution Degree 2
    ④ Installation Category II

TAKAMISAWA(Fujitsu) Power relay 1 POLE-5A NYP24W-K

▣ Features



- ●Slim type with 5 mm thickness
- ●Low power consumption and high sensitivity

▣ Coil ratings

Relay model	Rated voltage	Must operate voltage	Must release voltage	Rated current	Coil resistance	Power consumption
NYP24W-K	24 VDC	16.1 V	2.4 V	5 mA	4,800 Ω	120 mW

※All values in the table are measured at 20 ℃ with a tolerance of ±10%.

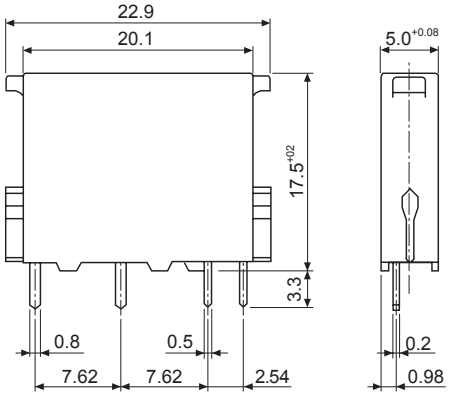
▣ Contact ratings

Manufacture			**T**AKAMISAWA(Fujitsu)	
Model			**NYP24W-K**	
Contact	Arrangement		1 Form A (SPST-1a)	
	Material		Gold overlay silver alloy	
	Resistance(initial)		30 mΩ (6 VDC 1A)	
Rating	Rating(resistive)		3 A 250 VAC	3 A 30 VDC
	Max. switching power		750 VA	90 W
	Min. switching capacity		5 VDC 1 mA	
	Max. switching voltage		270 VAC	150 VDC
	Max. switching currrnt		5 A	
Electrical characteristics	Insulation resistance		Min. 1,000 MΩ (at 500 VDC megger)	
	Dielectric strength	Coil and Contacts	3,000 VAC 50/60 Hz for 1 min.	
		Open contacts	750 VAC 50/60 Hz for 1 min.	
	Surge voltage		5,080 V	
	Operate time		Max. 10 ms	
	Release time		Max. 5 ms	
Mechanical characteristics	Vibration	Mechanical	5.0 mm amplitude at frequency of 10 to 55 Hz(for 1 min.) in each of X, Y, Z directions for 1 hour	
		Malfunction	1.5 mm amplitude at frequency of 10 to 55 Hz(for 1 min.) in each of X, Y, Z directions for 10 min.	
	Shock	Mechanical	1000 m/s^2 (100 G) in each of X, Y, Z directions for 3 times	
		Malfunction	100 m/s^2 (10 G) in each of X, Y, Z directions for 3 times	
Life expectancy	Mechanical		Min. 20,000,000 operations (at 180 times/min)	
	Electrical※1		Min. 100,000 operations(3A 250VAC, 30VDC resistive load)	
Environment	Ambient temperature		-40 to 90 ℃	
	Ambient humidity		35 to 80%RH	
Unit weight			Approx. 3.5 g	

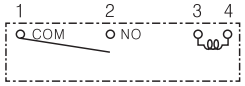
※1: 50,000 operations: min. 5 A 250 VAC, 5 A 30 VDC resistive load (per 20 times/min)
※Environment resistance is rated at no freezing or condensation.

▣ Dimensions

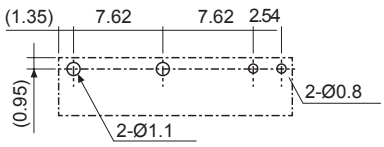
(unit: mm)



●Circuit diagram (bottom view)



●PCB pattern



MATSUSHITA(Panasonic) Power relay 1 POLE-5A PA1a-24V

▣ Features

- ●Slim type with 5mm thickness
- ●Excellent durability resistance against vibration and shock

▣ Coil ratings

Relay model	Rated voltage	Must operate voltage	Must release voltage	Rated current	Coil resistance	Power consumption
PA1a-24V	24 VDC	70% max. of rated voltage	5% min. of Rated voltage	7.5 mA	3,200 Ω	180 mW

※All values in the table are measured at 20 ℃ with a tolerance of ±10%.

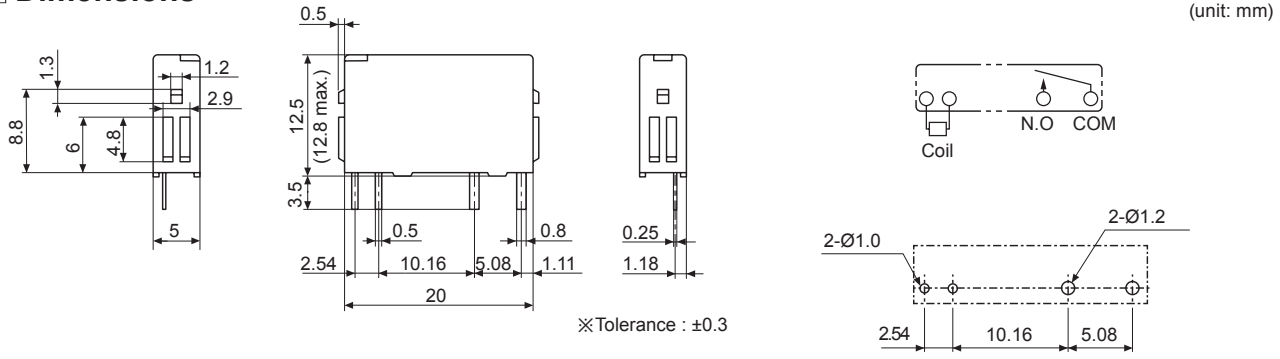
▣ Contact ratings

Manufacture			MATSUSHITA(Panasonic)	
Model			**PA1a-24V**	
Contact	Arrangement		1 Form A (SPST-1a)	
	Material		Au-clad AgNi type	
	Resistance(initial)		30 mΩ (6 VDC 1A)	
Rating	Rating(resistive)		5 A 250 VAC	5 A 30 VDC
	Max. switching power		1,250 VA	150 W
	Min. switching capacity		100 mVDC 100 uA	
	Max. switching voltage		250 VAC	110 VDC
	Max. switching currrnt		5 A	
Electrical characteristics	Insulation resistance		Min. 1,000 MΩ (at 500 VDC megger)	
	Dielectric strength	Coil and Contacts	2,000 VAC 50/60 Hz for 1 min.	
		Open contacts	1,000 VAC 50/60 Hz for 1 min.	
	Surge voltage		4,000 V	
	Operate time		Max. 10 ms	
	Release time		Max. 5 ms	
Mechanical characteristics	Vibration	Mechanical	3.5 mm amplitude at frequency of 10 to 55 Hz(for 1 min.) in each of X, Y, Z directions for 1 hour	
		Malfunction	2.5 mm amplitude at frequency of 10 to 55 Hz(for 1 min.) in each of X, Y, Z directions for 10 min.	
	Shock	Mechanical	980 m/s^2 (100 G) in each of X,Y,Z directions for 3 times	
		Malfunction	147 m/s^2 (15 G) in each of X,Y,Z directions for 3 times	
Life expectancy	Mechanical		Min. 20,000,000 operations (at 180 times/min)	
	Electrical※1		Min. 100,000 operations (3 A 250 VAC, 30 VDC resistive load)	
Environment	Ambient temperature		-40 to 70 ℃	
	Ambient humidity		5 to 85%RH	
Unit weight			Approx. 3 g	

※1: 50,000 operations: min.5A 250VAC, 5A 30VDC resistive load (per 20 times/min)
※Environment resistance is rated at no freezing or condensation.

▣ Dimensions

(unit: mm)



MATSUSHITA(Panasonic) Power relay 1 POLE-5A PQ1a-24V

▣ Features

- ●Slim type
- ●Excellent durability resistance against vibration and shock

▣ Coil ratings

Relay model	Rated voltage	Must operate voltage	Must release voltage	Rated current	Coil resistance	Power consumption
PQ1a-24V	24 VDC	75% max. of rated voltage	5% min. of rated voltage	8.3 mA	2,880 Ω	200 mW

※All values in the table are measured at 20 ℃ with a tolerance of ±10%.

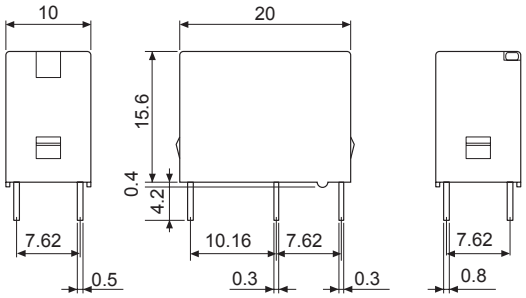
▣ Contact ratings

Manufacture			MATSUSHITA(Panasonic)	
Model			**PQ1a-24V**	
Contact	Arrangement		1 Form A (SPST-1a)	
	Material		Au-clad AgNi type	
	Resistance(initial)		50 mΩ (6 VDC 1 A)	
Rating	Rating(resistive)		5 A 250 VAC	5 A 30 VDC
	Max. switching power(resistive)		1,250 VA	150 W
	Max. switching voltage		250 VAC	110 VDC
	Max. switching currrnt		5 A	
Electrical character-istics	Insulation resistance(initial)		Min. 1,000 MΩ (at 500 VDC megger)	
	Dielectric strength	Coil and Contacts	4,000 VAC 50/60 Hz for 1 min.	
		Open contacts	1,000 VAC 50/60 Hz for 1 min.	
	Surge voltage		8,000 V	
	Operate time(rated voltage)		Max. 20 ms	
	Release time(rated voltage)		Max. 10 ms	
Mechanical character-istics	Vibration	Mechanical	3.5 mm amplitude at frequency of 10 to 55 Hz(for 1 min.) in each of X, Y, Z directions for 1 hour	
		Malfunction	2.0 mm amplitude at frequency of 10 to 55 Hz(for 1 min.) in each of X, Y, Z directions for 10 min.	
	Shock	Mechanical	980 m/s^2 (100 G) in each of X,Y,Z directions for 3 times	
		Malfunction	294 m/s^2 (15G) in each of X,Y,Z directions for 3 times	
Life expectancy	Mechanical		Min.20,000,000 operations (at 180 times/min)	
	Electrical※1		Min. 100,000 operations (5 A 250 VAC, 30 VDC resistive load)	
Environment	Ambient temperature		-40 to 70 ℃	
	Ambient humidity		5 to 85%RH	
Unit weight			Approx. 7 g	

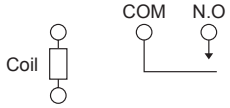
※1: 20 times per 1 minute
※Environment resistance is rated at no freezing or condensation.

▣ Dimensions

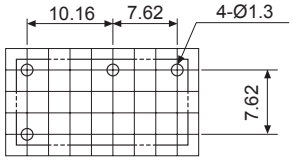
(unit: mm)



●Circuit diagram (bottom view)



●PCB pattern



※Tolerance : ±0.2(below 1 mm), ±0.3(over 1 mm to below 5 mm), ±0.4(over 5 mm)

※Tolerance: ±0.1

MATSUSHITA(Panasonic) Power relay Plug-in type 1 Form C

▣ Features

- ●Slim size
- ●High capacity, high reliability

▣ Coil ratings

Relay model	Rated voltage	Must operate voltage	Must release voltage	Rated current		Power consumption	
AHN12024	24VDC	70% max. of rated voltage	15% min. of Rated voltage	22mA		0.53W	
AHN110X0	100/110VAC	80% max. of rated voltage	30% min. of Rated voltage	50Hz	60Hz	50Hz	60Hz
				11/13mA	9/10.6mA	1.1 to 1.4VA	0.9 to 1.2VA
AHN110Y0	200/220VAC	80% max. of rated voltage	30% min. of Rated voltage	50Hz	60Hz	50Hz	60Hz
				5.5/6.5mA	4.5/5.3mA	1.1 to 1.4VA	0.9 to 1.2VA

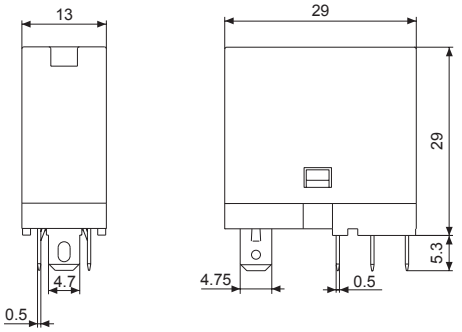
▣ Contact ratings

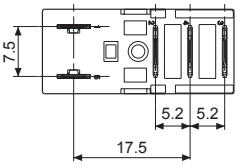
Manufacture			MATSUSHITA(Panasonic)		
Model			**AHN12024**	**AHN110X0**	**AHN110Y0**
Contact	Arrangement		1 Form C		
	Material		$AgSnO_2$ type		
	Resistance(initial)		Max. 100mΩ (6VDC 1A)		
Rating	Rating(resistive)		10A 250VAC, 10A 30VDC		
	Min. switching capacity (resistive)		4,000VA, 300W		
	Max. switching voltage		250VAC, 30VDC		
	Max. switching currrnt		16A (for AC load), 10A (for DC load)		
Electrical characteristics	Insulation resistance(initial)		Min. 1,000MΩ (at 500VDC megger)		
	Dielectric strength	Coil and Contacts	5,000VAC 50/60Hz for 1 min.		
		Open contacts	1,000VAC 50/60Hz for 1 min.		
	Operate time		Max. 15ms		
	Release time		Max. 5ms		
Mechanical characteristics	Vibration	Mechanical	1.5mm amplitude at frequency of 10 to 55Hz(for 1 min.) in each of X,Y,Z directions for 1 hour		
		Malfunction	1.5mm amplitude at frequency of 10 to 55Hz(for 1 min.) in each of X,Y,Z directions for 10 minutes		
	Shock	Mechanical	1000m/s^2(approx. 100G) in each of X, Y, Z directions for 3 times		
		Malfunction	100m/s^2(approx. 10G) in each of X, Y, Z directions for 3 times		
Life expectancy	Mechanical		Min. 20,000,000 operations (at 300 times/min)	Min. 10,000,000 operations(at 300 times/min)	
	Electrical		Min. 100,000 operations (at 20 times/min)		
Environment	Ambient temperature		-40 to 70℃		
	Ambient humidity		5 to 85%RH		
Unit weight			Approx. 19g		

※Environment resistance is rated at no freezing or condensation.

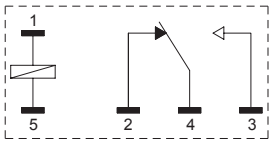
▣ Dimensions

(unit: mm)





●PCB pattern



※Tolerance : ±0.1(below 1 mm),
±0.2(over 1 mm to below 3 mm),
±0.3(over 3 mm)