

Terminal Relay / Relay Terminal Unit

PCRY series

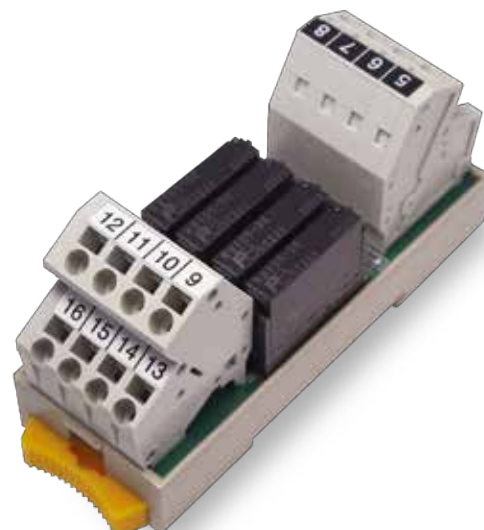
RoHS
compliant

Push-in

Spring-lock type 4-point Terminal Relay

PCRY-4FVIF (NPN: FUJI Electric Relay)

PCRP-4FVIF (PNP: FUJI Electric Relay)



Screw type 4-point Terminal Relay

PCRY□-4M1N (Panasonic Relay)

PCRY□-4F1 (FUJI Electric Relay)

Screw type 16-point Relay Terminal Unit

PCRY□-1H20-16□-FD

(NPN: FUJI Electric Relay)

PCRP-1H20-16A-FD

(PNP: FUJI Electric Relay)

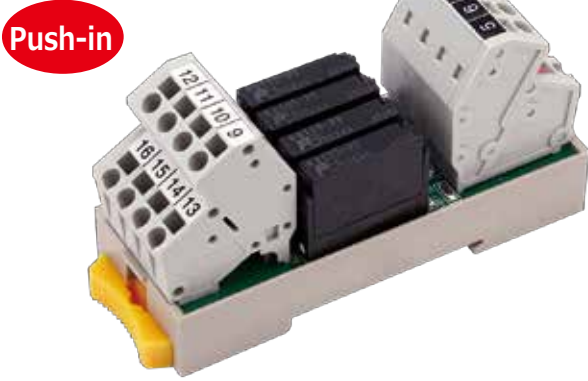


TERMINAL RELAY

PCRY-4FVIF, PCRP-4FVIF

Spring-lock type 4-point Terminal Relay

PCRY-4FVIF
PCRP-4FVIF

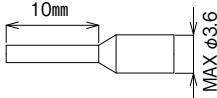
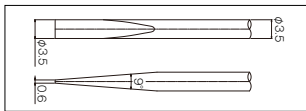
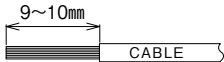
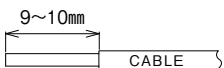


Feature

- NPN type and PNP type.
- W28.5×D78.8×H47.75
- Push-In type, so maintenancefree as no self-loosening by vibration.
- Coil surge absorbing diode.
- LED indicator light.
- Quick-mounting on DIN rail.

Part no.	Mounted relay	Weight
PCRY-4FVIF (NPN type)	RB105-DE (black) (FUJI ELECTRIC CO., LTD.)	61g
PCRP-4FVIF (PNP type)	RB105-DE (black) (FUJI ELECTRIC CO., LTD.)	61g

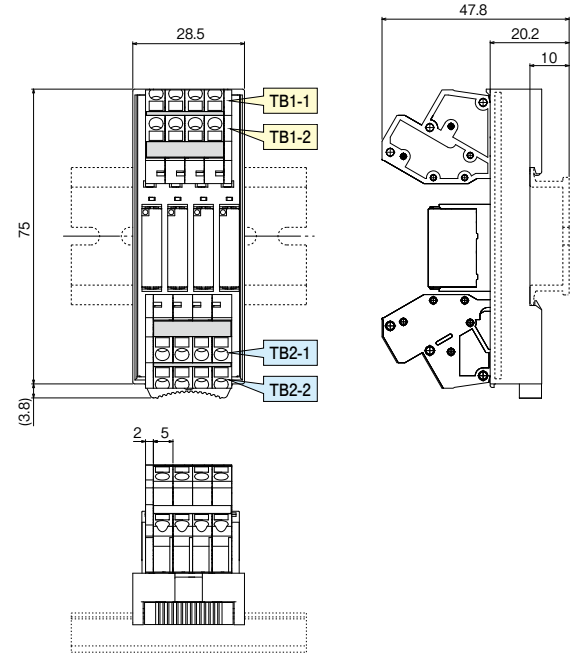
GENERAL SPECIFICATIONS/RATINGS

Item		PCRY-4FVIF, PCRP-4FVIF			
Input part rating (per relay)	Contact arrangement	1a×4			
	Rated input voltage	DC24V			
	Input current (When the rated voltage applied) (at 20℃)	11.4mA (including indication LED current)			
	Allowable input voltage range (-20℃~+55℃)	DC24V±10%			
Coil rating of relay itself (reference)	Mounted relay	RB105-DE			
	Operating voltage (Initial at 20℃)	70% or less of the rated voltage			
	Release Voltage (Initial at 20℃)	5% or more of the rated voltage			
	Coil resistance (±10%)	2880Ω			
Rated power consumption		200mW			
Output Ratings (per relay)	Contact data	Rated control capacity (resistive load)	5A 250V AC, 5A 30V DC		
		Max. switching power (Resistive load)	1250VA (AC) , 150W (DC)		
		Max. switching voltage	250V AC, 30V DC		
		Max. switching current	5A		
		Min. switching load (reference value)	0.1V DC, 0.1mA		
Other specifications	Insulation resistance		100MΩor more (Using DC500V megger)		
	Withstand voltage	Between the input and output	AC2000V /min		
		Between different poles (between relays)	AC1500V /min		
	Destructive vibration resistance		10~55Hz double amplitude 1mm		
	Functional vibration resistance		10~55Hz double amplitude 1mm		
	Destructive shock resistance		196m/s' or more (20G or more)		
	Functional shock resistance		98m/s' or more (10G or more)		
	Ambient temperature		-25℃~+55℃ (No freezing or condensing)		
	Ambient humidity		45%~85%		
LED color		Red			
Coil surge absorber		Diode			
Applicable wires	Ferrule	0.25mm ¹ ~0.75mm ¹ / AWG26~AWG18 (DIN46228-4)		Recommended tool: VT5-1 Weight: 43g ■ VT5-1 dimensions  ※If use screwdrivers other than the ones above, the screwdrivers comply with DIN5264.	
	Stranded	0.08mm ¹ ~1.25mm ¹ / MAX AWG28~AWG16			
	Solid	φ0.5~φ1.6			

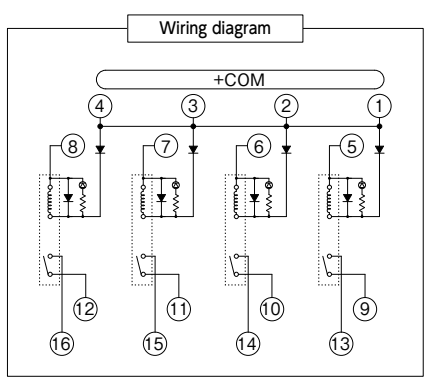
TERMINAL RELAY

PCRY-4FVIF, PCRP-4FVIF

Dimensions

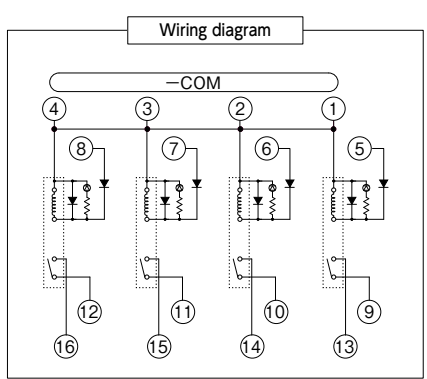


PCRY-4FVIF



Labels	
TB1-1	1 2 3 4
TB1-2	8 7 9 6
TB2-1	12 11 10 9
TB2-2	16 15 14 13

PCRP-4FVIF



Labels	
TB1-1	1 2 3 4
TB1-2	8 7 9 6
TB2-1	12 11 10 9
TB2-2	16 15 14 13

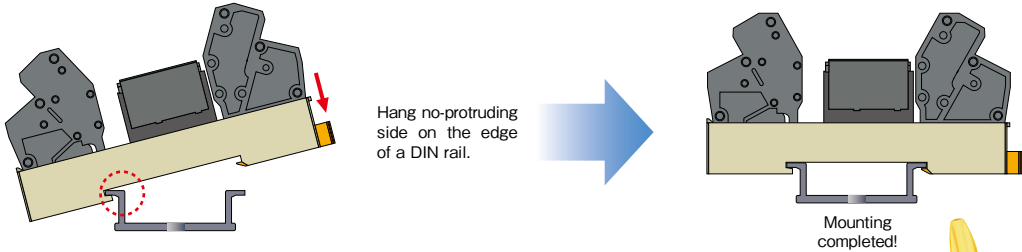
Accessories (※Sold Separately)

Removal tool	
Part no.	PCRY-F
Sales lot	1PC

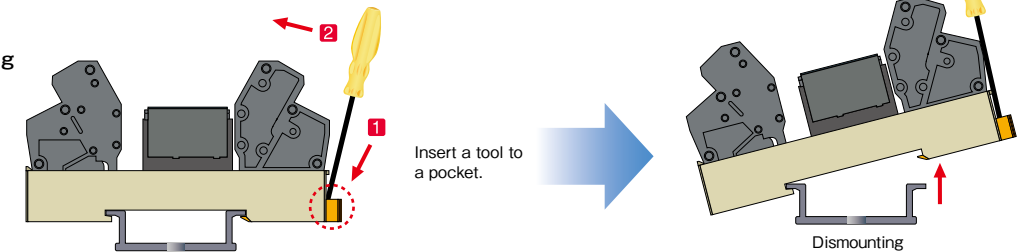


Mounting on DIN rail

Mounting



Dismounting



Proper Use

- Use dedicated removal tool (option) to replace relays.
- Make sure set relays properly after replacement and the first time use.
- Pay attention to a positive and negative polarity on the input side.
- Leave enough space among terminals to keep ambient temperature under 55°C.
- Do not disassemble, remodel or repair the product.
- Use an applicable screwdriver when connect and disconnect a standard conductor. For a solid conductor and conductor with ferrule, use a screw driver only for disconnection.

TERMINAL RELAY

PCRY□-4M1N, PCRY□-4F1

Screw type 4-point Terminal Relay

PCRY□-4M1N
PCRY□-4F1



Feature

- Dimensions: W31×D69.7(87)×H35.2
- Terminal cover, 2 pieces of short bars and 1pc of removal tool are included in package.
- Coil surge absorbing diode.
- LED indicator light.
- DIN rail mounting or direct mounting.

Part no.	Mounted relay	Weight
PCRY□-4M1N	APAN3124 (black) (Panasonic)	69g
PCRY□-4F1	RB105-DE (black) (FUJI ELECTRIC CO., LTD.)	69g

□=BLANK Can be used with only Y-type solderless terminal (Stock item)
□=R Can be used with either Y-type or round type terminal (BTO item)

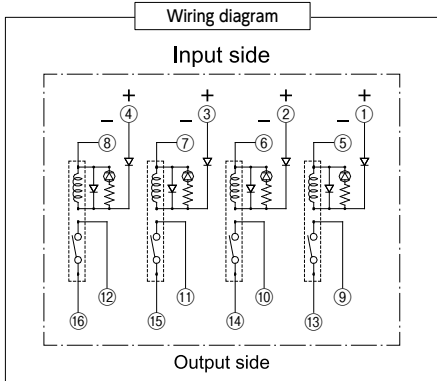
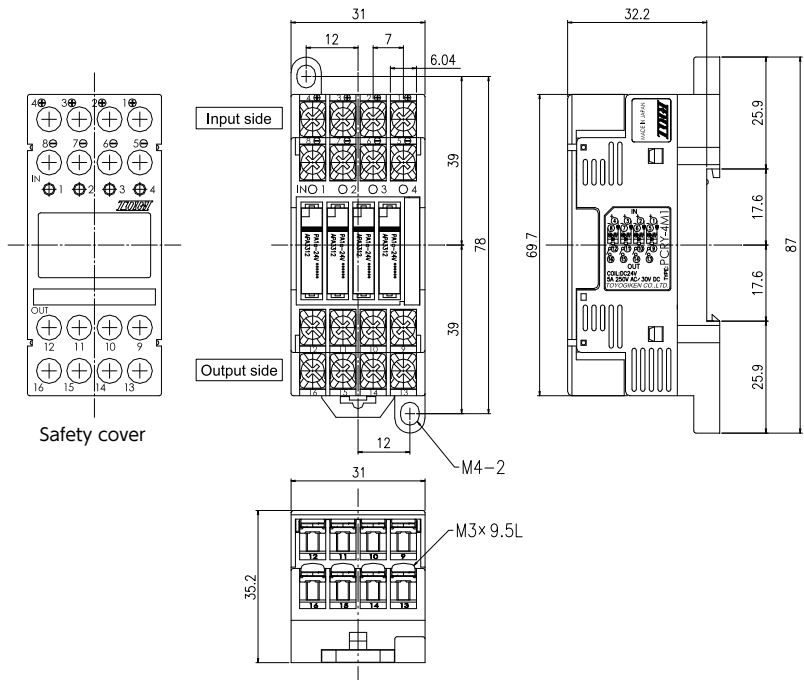
GENERAL SPECIFICATIONS/RATINGS

	Item	PCRY□-4M1N	PCRY□-4F1
Input part rating (per relay)	Contact arrangement	1a×4	1a×4
	Rated input voltage	DC24V	DC24V
	Input current (When the rated voltage applied) (at 20°C)	7.6mA (Including indication LED current)	約11.4mA (Including indication LED current)
	Allowable input voltage range (-20°C~+55°C)	DC24V±10%	DC24V±10%
Coil rating of relay itself (reference)	Mounted relay	APAN3124	RB105-DE
	Operating voltage (Initial at 20°C)	70% or less of the rated voltage	70% or less of the rated voltage
	Release Voltage (Initial at 20°C)	5% or more of the rated voltage	5% or more of the rated voltage
	Coil resistance (±10%)	5236Ω	2880Ω
Output Ratings (per relay)	Rated power consumption	110mW	200mW
	Contact data	Rated control capacity (resistive load)	5A 250V AC, 5A 30V DC
		Max. switching power (Resistive load)	1250VA (AC), 150W (DC)
		Max. switching voltage	250V AC, 30V DC
		Max. switching current	5A
Other specifications	Withstand voltage	Between the input and output	AC2000V/min
		Between different poles (between relays)	AC1500V/min
	Destructive vibration resistance	10~55Hz double amplitude 1mm	
		Functional vibration resistance	10~55Hz double amplitude 1mm
	Destructive shock resistance	196m/s ² or more (20G or more)	
		Functional shock resistance	98m/s ² or more (10G or more)
	Ambient temperature	-25°C~+55°C (No freezing or condensing)	
		Ambient humidity	45%~85%
	LED indicator light color	Red	
		Coil surge absorber	Diode

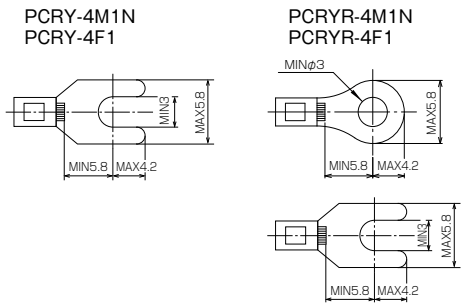
TERMINAL RELAY

PCRY□-4M1N, PCRY□-4F1

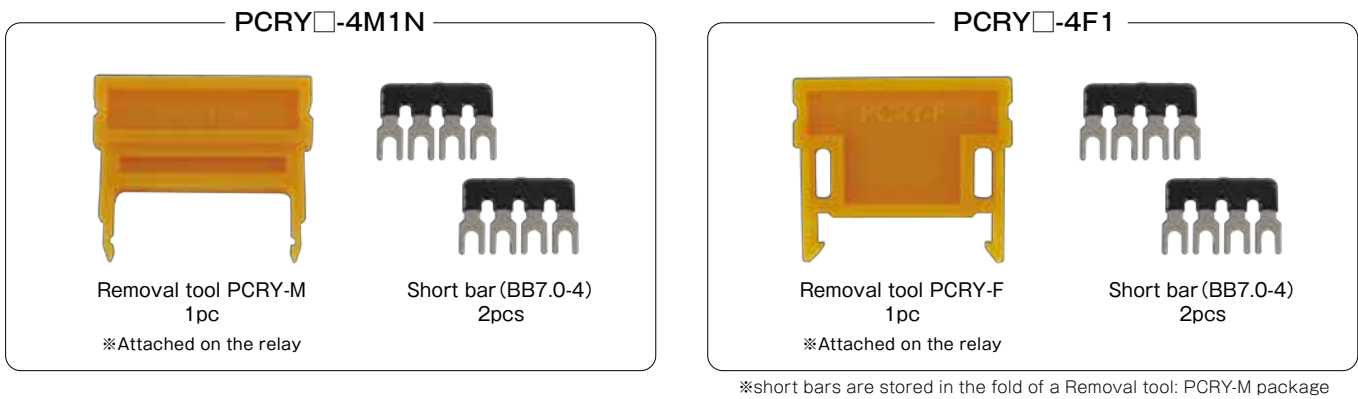
Dimensions



Applicable solderless terminals



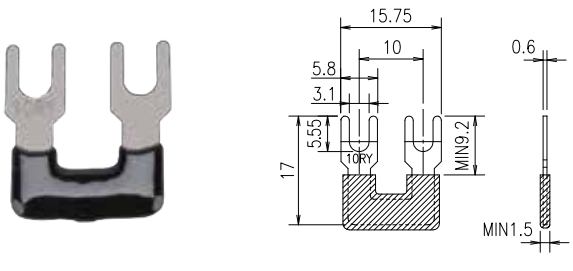
Accessories (Included in package)



Accessories (※Sold Separately) Short bar for connecting 2 terminals

※Part No. BB10RY-2 (※Sales lot: 10pcs)

Example of Use



Proper use

- Use dedicated removal tool (option) to replace relays.
- Make sure set relays properly after replacement and the first time use.
- Pay attention to a positive and negative polarity on the input side.
- Leave enough space among terminals to keep ambient temperature under 55°C.
- Do not disassemble, remodel or repair the product.

RELAY TERMINAL UNIT

PCRY□-1H20-16□-FD, PCRP-1H20-16A-FD

Screw type 16-point Relay Terminal Unit

PCRY□-1H20-16□-FD
PCRP-1H20-16A-FD



Feature

16 points output-only relay terminals.
Power relay and SSR in our standard product line.

- Relay terminal and I/O module of PLC are connected directly by a relay cable.
- LED indicator light.
- Coil surge absorbing diode
- DIN rail mounting or direct mounting.

Part No.	Type	Mounted relay-SSR	Weight
PCRY□-1H20-16A-FD	Power relay output (NPN type)	RB105-DE (black)	219g
PCRY□-1H20-16B-FD	SSR output (AC type)	RE0A-DE (red)	219g
PCRY□-1H20-16C-FD	SSR output (DC type)	RE0D-DE (red)	219g
PCRP-1H20-16A-FD	Power relay output (PNP type)	RB105-DE (black)	219g

□=BLANK Can be used with only Y-type solderless terminal (Stock item)
□=R Can be used with either Y-type or round type terminal (BTO item)

GENERAL SPECIFICATIONS

Applicable wire	1.25mm ² /MAX
Terminal screw	M3×8L
Tightening torque	1.0~1.2N·m
Insulation resistance	100M Ω or more (Using DC500V megger)
Withstand voltage	Between the input and output AC2000V/min Between different poles (between relays) AC2000V/min
Destructive vibration resistance	10~55Hz double amplitude 1mm
Functional vibration resistance	10~55Hz double amplitude 1mm
Destructive shock resistance	196m/s ² or more (20G or more)
Functional shock resistance	98m/s ² or more (10G or more)
Ambient temperature	-25°C~+55°C (No freezing or condensing)
Ambient humidity	45%~85%
LED indicator light color	Red
Coil surge absorber	Diode

Ratings (per relay)

Item		PCRY□-1H20-16A-FD, PCRP-1H20-16A-FD	
Input part rating (per relay)	Contact arrangement	1a×16	
	Rated input voltage	DC24V	
	Input current (When the rated voltage applied) (at 20℃)	11.4mA (Including indication LED current)	
	Allowable variation of rated input voltage (-20℃-+55℃)	DC24V±10%	
	Operating voltage (Initial at 20℃)	70% or less of the rated voltage	
	Release Voltage (Initial at 20℃)	5% or more of the rated voltage	
	RCoil resistance (±10%)	2880Ω	
Rated power consumption		200mW	
Output Ratings (per relay)	Contact data	Rated control capacity (resistive load)	2A 220V AC, 2A 24V DC
		Max. switching power (Resistive load)	440VA (AC) , 48W (DC)
		Max. switching voltage	220V AC, 24V DC
		Max. switching current	2A
		Min. switching load (reference value)	0.1V DC, 0.1mA

※Rated current of relay terminal will be 2A although the rated current of RB105-DE is 5A.

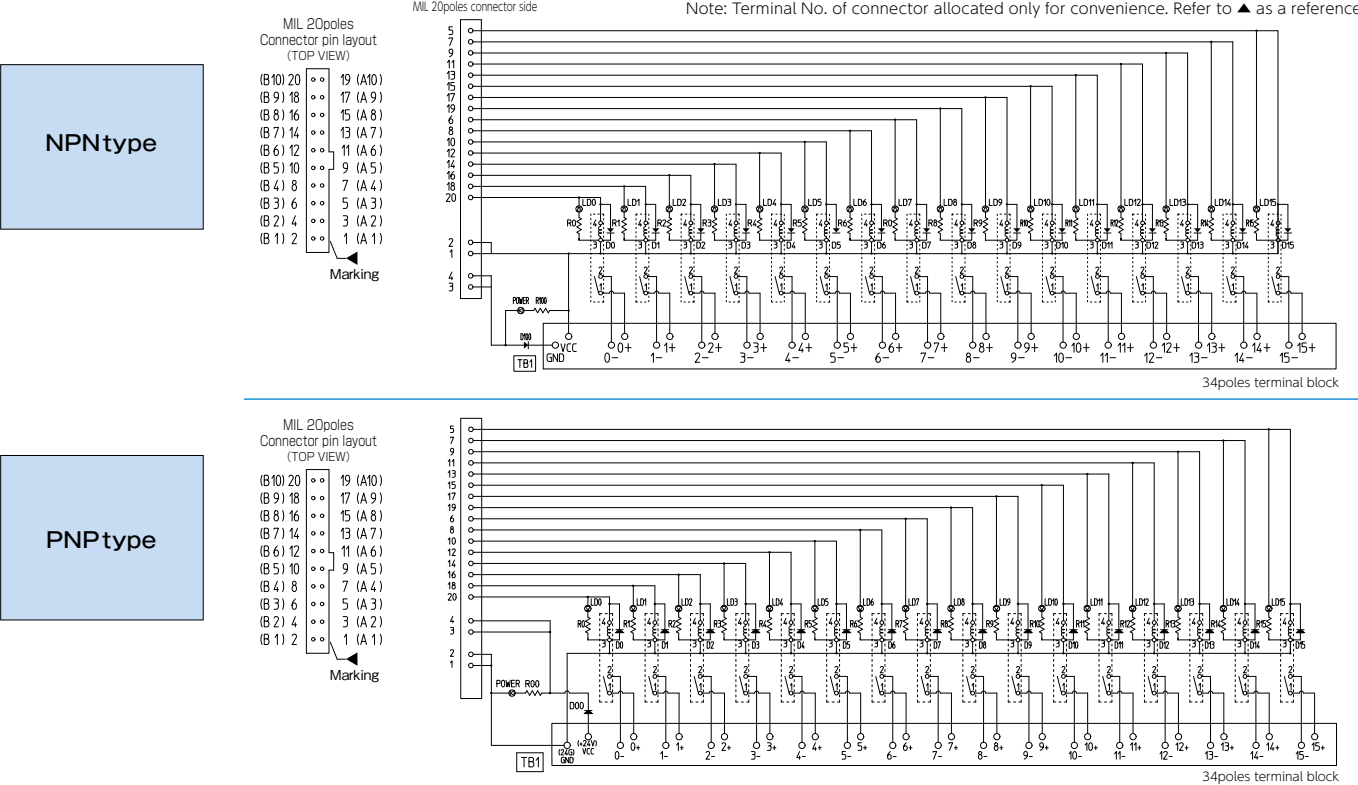
RELAY TERMINAL UNIT

PCRY□-1H20-16□-FD, PCRP-1H20-16A-FD

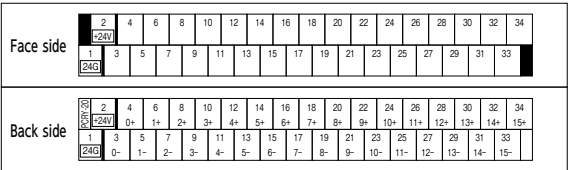
Ratings (per relay)

item		PCRY□-1H20-16B-FD	PCRY□-1H20-16C-FD
type		DC input - AC output	DC input - DC output
Input part rating (per relay)	Isolation method	Phototriac	Photocoupler
	Rated load voltage	DC24V	DC24V
	Operating load voltage range	DC16.8~26.4V	DC16.8~26.4V
	Operating Voltage (Pickup voltage)	70% Vn or less	70% Vn or less
	Release voltage (Dropout voltage)	10%Vn or more	10%Vn or more
	Input-impedance	Approx. 2.7K Ω	Approx. 2.7K Ω
Output Ratings (per relay)	Rated isolation voltage	250V	250V
	Rated load voltage	AC100~240V	DC24V
	Operating voltage range	AC70~250V	DC16.8~26.4V
	Rated frequency	50/60Hz	—
	Rated current (I _n)	0.3A	0.5A
	Leakage current at OFF state (max)	1mA or less	0.1mA or less
	Minimum load current	20mA	1mA
	Voltage drop at ON state (max)	1.6V or less	1V or less
	Zero-crossing function	—	—
	Surge-On current	15A (20ms 1shot)	3A (20ms 1shot)

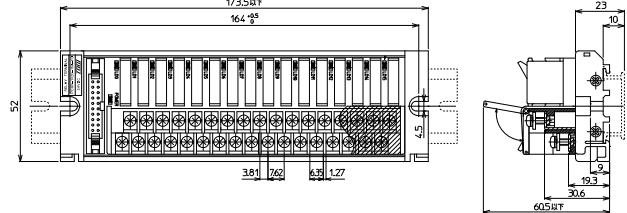
Wiring (TOP VIEW)



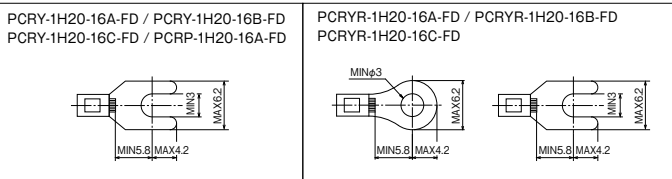
Terminal pin layout (Name plate)



Dimensions



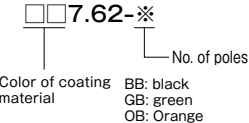
Applicable solderless terminals



Short bar (Common bar)

It is convenient when use a load wire as a common.
Insulation coating material color range: black, green and orange

Order format



No. of poles	2	4	6	8	10
L1	13.42	28.66	43.9	59.14	74.34
L2	12.24	27.48	42.72	57.96	73.16

Material: Brass/Ni coating material: PVC

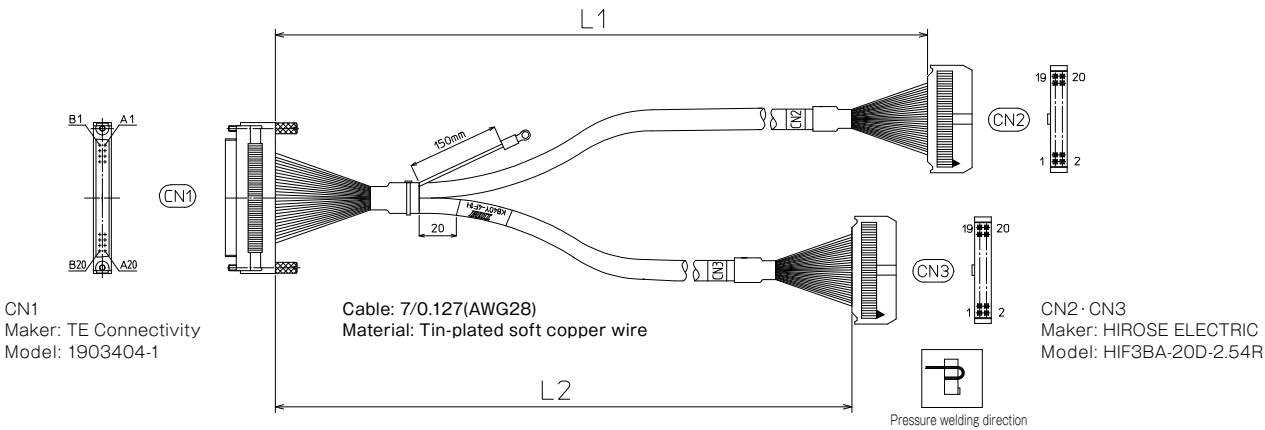
Order Format

B.T.O product

KB40Y-4F1H-①-②-11B

Applicable Relay Terminal Units PCRY□-1H20-16A-FD PCRP-1H20-16A-FD
PCRY□-1H20-16B-FD
PCRY□-1H20-16C-FD

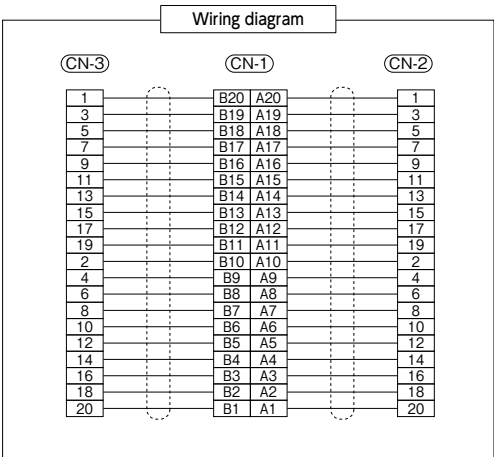
Order Format	①	②	Length (mm)		Weight (g)
			L1	L2	
KB40Y-4F1H-①-②-11B	100	75	1000	750	208
	150	125	1500	1250	301
	200	175	2000	1750	412
	300	275	3000	2750	611
	500	475	5000	4750	999



Comformity of relay terminal and PLC Module

Interface Cable	Relay Terminals	PLC Module
TOGI	PCRY□-1H20-16A-FD PCRY□-1H20-16B-FD PCRY□-1H20-16C-FD	OMRON
		CS1W-OD231
		CS1W-OD261
		CS1W-MD261 (OUT PUT)
		CJ1W-OD261
		CJ1W-OD261
		CJ1W-MD261 (OUT PUT)
		YOKOGAWA Electric
		F3YD32-1H
		F3YD32-1P
		F3YD64-1P
		HITACHI IES
		EH-YT32
		EH-YT64
	PCRP -1H20-16A-FD	YOKOGAWA Electric
		F3YD32-1R
		F3YD64-1R
		HITACHI IES
		EH-YTP32
		EH-YTP64

※For DC24V ONLY



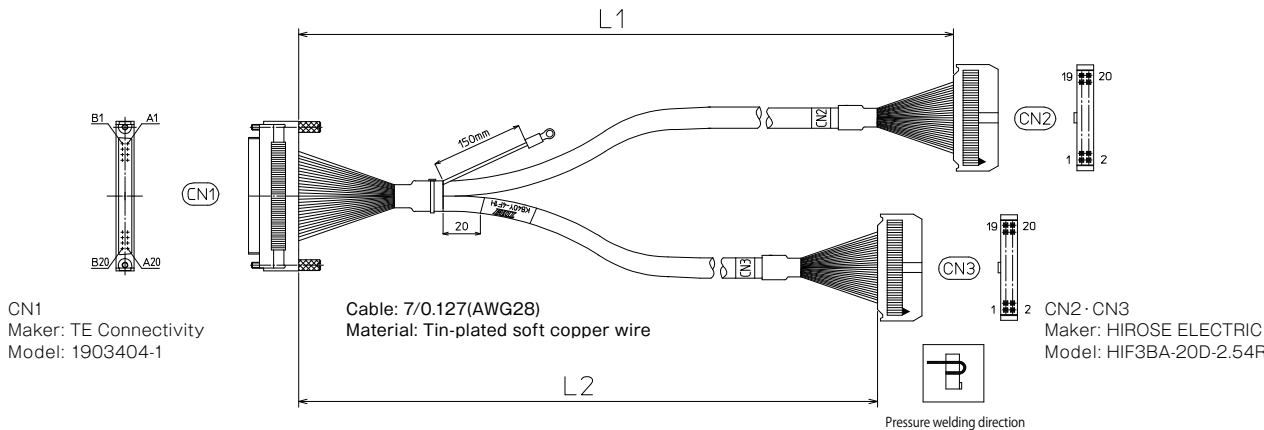
Order Format

B.T.O product

KB40Y-4F1H-①-②-12B

Applicable Relay Terminal Units PCRY□-1H20-16A-FD
PCRY□-1H20-16B-FD
PCRY□-1H20-16C-FD

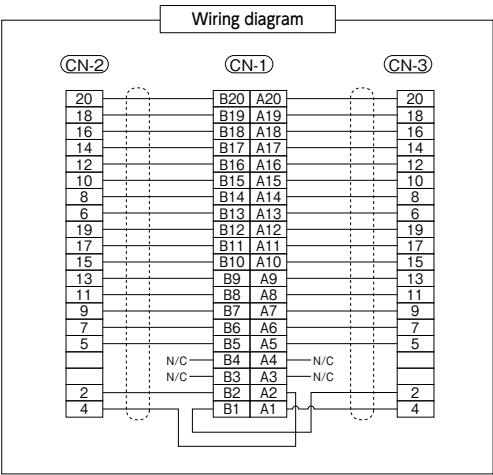
Order Format	①	②	Length (mm)		Weight (g)
			L1	L2	
KB40Y-4F1H-①-②-12B	100	75	1000	750	208
	150	125	1500	1250	301
	200	175	2000	1750	412
	300	275	3000	2750	611
	500	475	5000	4750	999



Comformity of relay terminal and PLC Module

Interface Cable	Relay Terminals	PLC Module
TOGI	PCRY□-1H20-16A-FD PCRY□-1H20-16B-FD PCRY□-1H20-16C-FD	MITSUBISHI Electric
		QY41P
		QY42P
		QH42P (OUT PUT)
		QX41Y41P (OUT PUT)
		LY41NT1P
		LY42NT1P
		LH42C4NT1P (OUT PUT)
		RY41NT2P
		RY42NT2P
		RH42C4NT2P (OUT PUT)
		FUJI Electric
		NP1Y32T09P1
		NP1Y64T09P1

※For DC24V ONLY



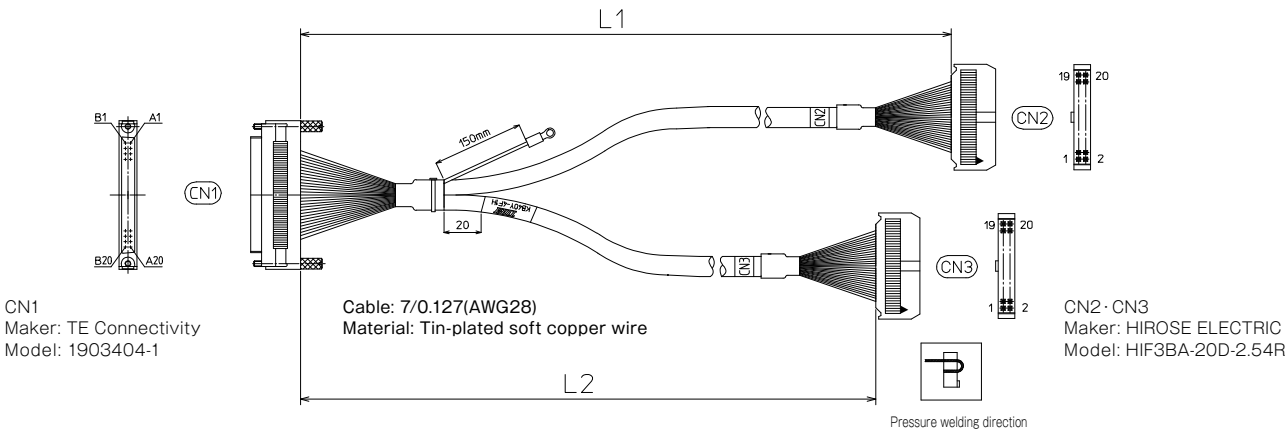
Order Format

B.T.O product

KB40Y-4F1H-①-②-13B

Applicable Relay Terminal Units PCRP-1H20-16A-FD

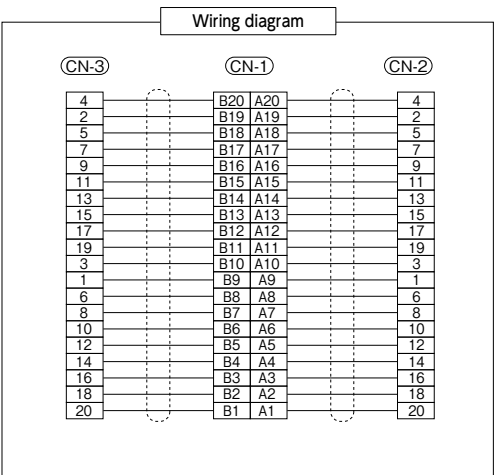
Order Format	①	②	Length (mm)		Weight (g)
			L1	L2	
KB40Y-4F1H-①-②-13B	100	75	1000	750	208
	150	125	1500	1250	301
	200	175	2000	1750	412
	300	275	3000	2750	611
	500	475	5000	4750	999



Comformity of relay terminal and PLC Module

Interface Cable	Relay Terminals	PLC Module
TOGI		OMRON
KB40Y-4F1H-①-②-13B	PCRP-1H20-16A-FD	CS1W-OD232
		CS1W-OD262
		CS1W-MD262 (OUT PUT)

※For DC24V ONLY



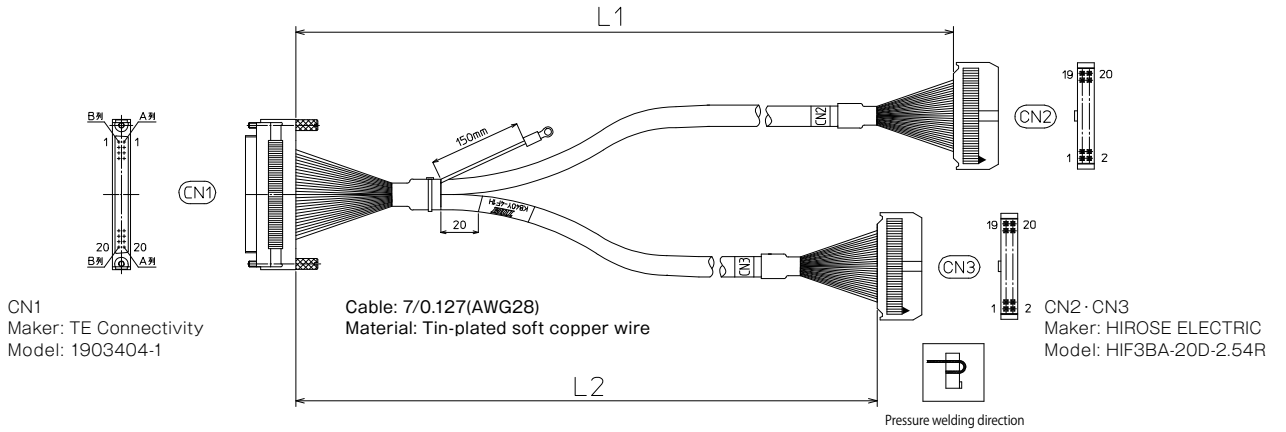
Order Format

B.T.O product

KB40Y-4F1H-①-②-14B

Applicable Relay Terminal Units PCRP-1H20-16A-FD

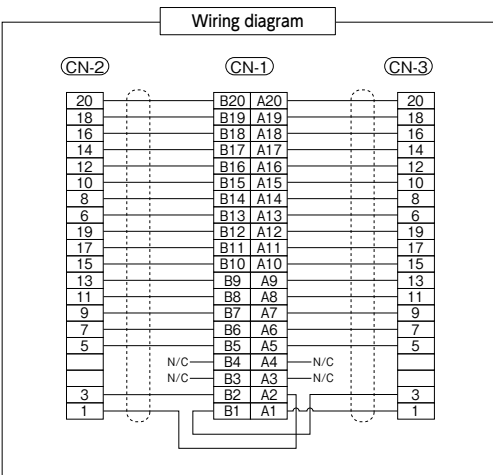
Order Format	①	②	Length (mm)		Weight (g)
			L1	L2	
KB40Y-4F1H-①-②-14B	100	75	1000	750	208
	150	125	1500	1250	301
	200	175	2000	1750	412
	300	275	3000	2750	611
	500	475	5000	4750	999



Comformity of relay terminal and PLC Module

Interface Cable	Relay Terminals	PLC Module
TOGI		MITSUBISHI Electric
KB40Y-4F1H-①-②-14B	PCRP-1H20-16A-FD	QY82P
		LY41PT1P
		LY42PT1P
		LH42C4PT1P (OUT PUT)
		RY41PT1P
		LY42NT1P
		FUJI Electric
		NP1Y32U09P1
		NP1Y64U09P1
		NP1W6406U (OUT PUT)

※For DC24V ONLY



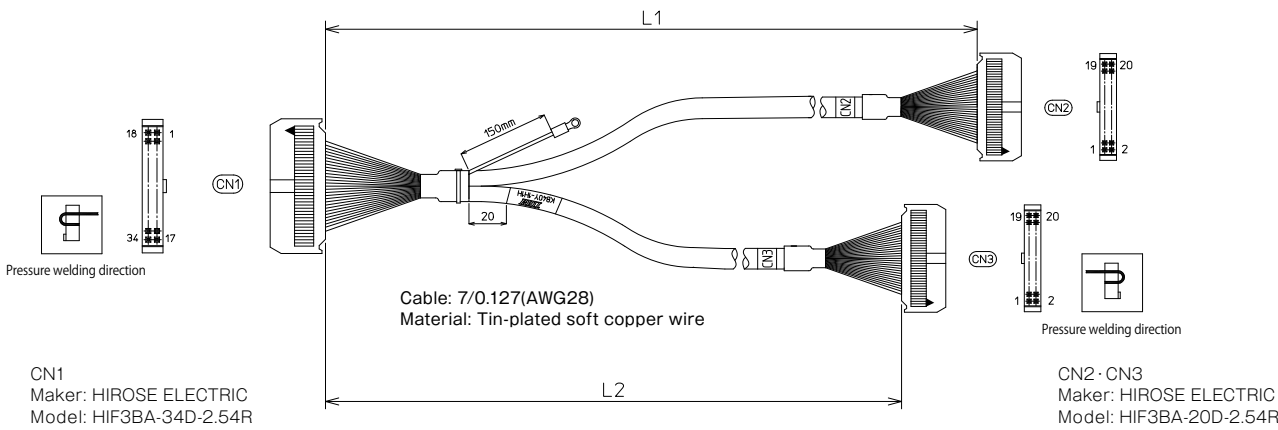
Order Format

B.T.O product

KB34Y-1H1H-①-②-15B

Applicable Relay Terminal Units PCRY□-1H20-16A-FD PCRP-1H20-16A-FD
PCRY□-1H20-16B-FD
PCRY□-1H20-16C-FD

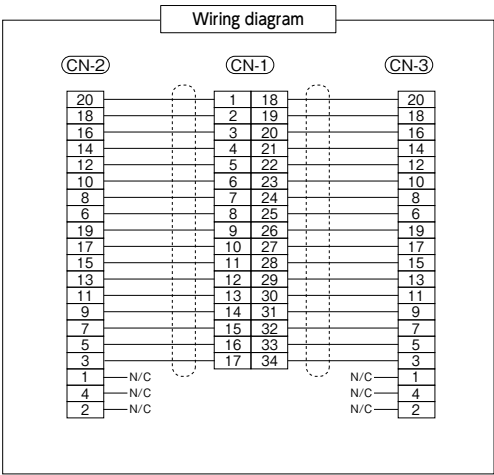
Order Format	①	②	Length (mm)		Weight (g)
			L1	L2	
KB34Y-1H1H-①-②-15B	100	75	1000	750	196
	150	125	1500	1250	289
	200	175	2000	1750	400
	300	275	3000	2750	599
	500	475	5000	4750	987



Comformity of relay terminal and PLC Module

Interface Cable	Relay Terminals	PLC Module
KB34Y-1H1H-①-②-15B	TOGI	KEYENCE
		KV-NC32ET
		KV-NC32EXT (OUT PUT)
		KV-C32TA
		KV-C64TA
		KV-C32TC/TD
		KV-C64TC/TD
		KV-C32XTD (OUT PUT)
	PCRP-1H20-16A-FD	KEYENCE
		KV-C32TCP
		KV-C64TCP

※For DC24V ONLY



ACCESSORIES

Replacement Relays

	Model No.	Maker	Sales lot
	RB105-DE (BLACK)	FUJI Electric	1
	RE0A-DE (RED)	FUJI Electric	1
	RE0D-DE (RED)	FUJI Electric	1
	APAN3124 (BLACK)	Panasonic	1

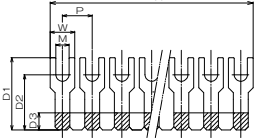
Short bar (Common bar) For PCRY□-1H20-16□-FD, PCRP-1H20-16A-FD



Order Format

SB7.62-□
No. of poles

Dimensions



P	Part No.	No. of poles	A	Dimensions	Rated current	Sales lot
7.62mm	SB7.62-2	2	13.42	W:5.8 t: 0.5 M:3.1 D1:17 D2:13 D3:4	15A	50
	-10	10	74.34			50
	-20	20	150.58			50
	-40	40	302.98			50

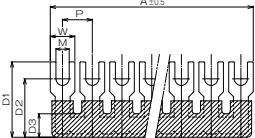
Withstand voltage: AC1500V/min
Material terminal: Brass (Ni plating)



Order Format

□B7.62-□
No. of poles
B=BLACK
G=GREEN
O=ORANGE

Dimensions


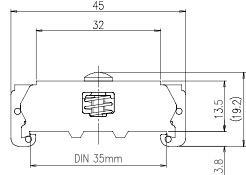

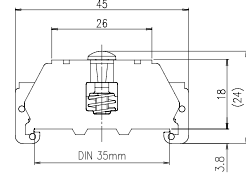

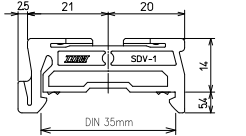


P	Part No.	No. of poles	A	Dimensions	Rated current	Sales lot
7.62mm	□B7.62-2	2	13.42	W:5.8 t: 0.5 M:3.1 D1:18 D2:14 D3:5	15A	50
	-4	4	28.66			50
	-6	6	43.9			50
	-8	8	59.14			50
	-10	10	74.34			50
	-40	40	302.98			50


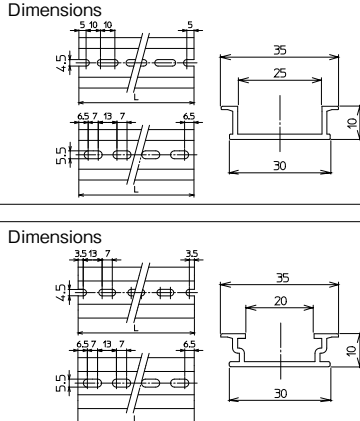

Withstand voltage: AC1500V/min
Material terminal: Brass (Ni plating) Insulation part: PVC

ACCESSORIES

Stopper

	Model No.	Dimensions	Sales lot
	GTY13		100
	GTY18		50
	SDV-1		50

Rail For 35mm Mounting Rail


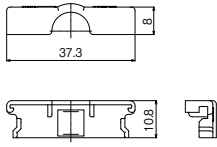
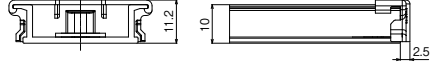
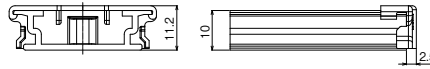

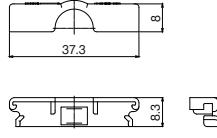
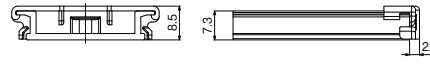
	DAV4 (hole width:4.5)	Length (L)	Order format	Sales lot	
		1000mm	DAV4-1000	100	
	DAV5 (hole width:5.5)	2000mm	DAV4-2000	50	
		Length (L)	Order format	Sales lot	
	DAS4 (hole width:4.5)	1000mm	DAV5-1000	100	
		2000mm	DAV5-2000	50	
	DAS5 (hole width:5.5)	1000mm	DAS4-1000	100	
		2000mm	DAS4-2000	50	

Rail-Endcap

For 35mm Mounting Rail



Features : Preventing injury by a cutting plane of a mountin rail
Material : modified PPE (UL94V-0)
Color : Black

Part No.	Dimension (mm)	TOGI Mounting Rail		Dimension of Mounting Rail (mm)	Sales lot
		Height	Model No.		
DIN35-10CA 		10mm	DAV 	10 pcs/pack	
			DAS 		
DIN35-7.5CA 		7.3mm	DMS 		
		7.5mm	Can be used with TH 35-7.5 rail (IEC 60715 / DIN 46277-3)		

WARNING & CAUTION

Safe Use of Terminal Relay and Relay Terminal Unit

Please read through the following before wiring works and maintenance.

- Always turn OFF the power supply before wiring. Electrical shock may occur.
- Do not exceed the ratings. Doing so may damage or burn out the product.
- Do not bend a wire past its natural bending radius or pull on it with excessive force. Doing so may cause the wire disconnection. Do not place excessive force on a product. Doing so may damage or deform the product and result in contact failure.
- Do not use the products in locations where corrosive or flammable gases may be present, or in locations subject to high temperature or humidity. Doing so may damage the Terminal Block due to contact failure or corrosion.
- Do not use the product submersed in oil or water, or in locations continuously subject to splashes of oil or water. Doing so may result in oil or water entering and damaging the product .
- Do not use or keep the product under the following conditions:
 - ◆ Subject to severe temperature changes.
 - ◆ Subject to high humidity or condensation.
 - ◆ Subject to severe vibration or shock.
 - ◆ Where direct rays of the sun strike.
 - ◆ Where sea breeze may be present.
- Do not touch the product with wet hands.
- Use applicable tools for works.
- Mount the product on a IEC rail securely and fix it with stoppers on the both ends.

Installation and Wiring

- Use wires that are suited to the load current and voltage. Otherwise, excessive heat generated by the wires may cause burning or may cause the wire covering to melt, possibly leading to electric shock.
- Do not use wires with a damaged outer covering. it may result in electric shock or ground leakage.it may result in electric shock or ground leakage.
- Do not wire any wiring in the same duct or conduit as power or high-tension lines. Inductive noise may damage the I/O Relay Terminal or cause it to malfunction.
- Do not apply a voltage or current that exceeds the rating to any terminal. Doing so may result in failure or burning.
- Do not use a deforming Short Bars. Doing so may result in damage, malfunction, or deterioration of performance characteristics.
- Do not drop products.

※Change of the specifications and discontinuation of the product may occur without announcement.

CAUTION for safety

- For your safety, please read this catalogue carefully before use of product.
- Products on this catalog may limit purpose and place of use, and also may require regular maintenance. Please confirm with your distributor or the maker directly.
- For your safety, all electrical wiring must be done by a qualified electrician.

BEFORE PURCHASE

- Product designs and specs may change without notice.
- Product color may slightly differ from this catalog.
- Please contact us for the product details and drawings.



Please contact our technical support team for product inquiries.

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