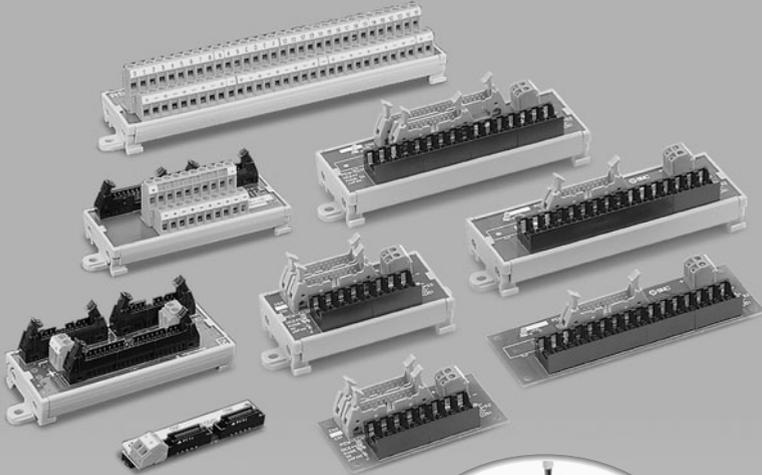
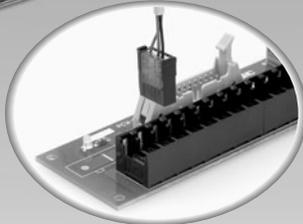


# PC Wiring System

## Series PCW



*e-con type is newly added!  
One-touch connection  
reduces wiring labor.*



### Branch unit offers commonality

- Branch unit separates each manufacturer's 32 point Input/Output (I/O) into 16 point common pin layout.
- Conversion to a common pin layout, allows connection of the pin to SMC manifold solenoid valves and other manufacturers' relay terminals without restriction.
- Power can be supplied to the PLC I/O unit.
- Compatible branch units are available for each PLC manufacturer's I/O.

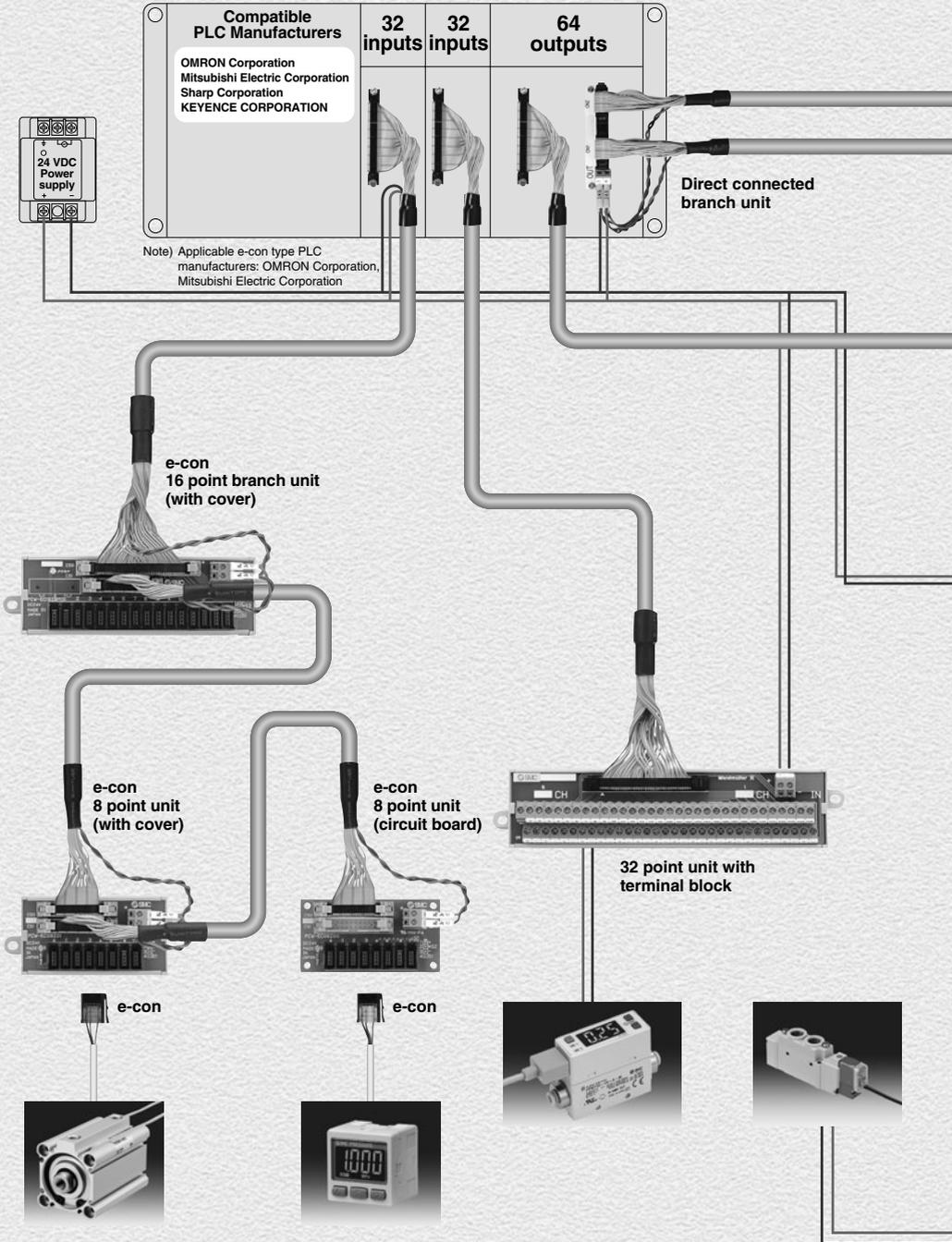
### Simple parallel wiring type

- Without time delay unlike serial transmission.
- Easy visual understanding at a glance, offering simple start-up, de-bug and trouble shooting maintenance.

### Improved wiring efficiency and ease of operation

- Dedicated cable reduces wiring-equivalent to a serial transmission system.
- One-touch type connector offers standardized wiring to prevent incorrect connection and vastly improved operational efficiency.

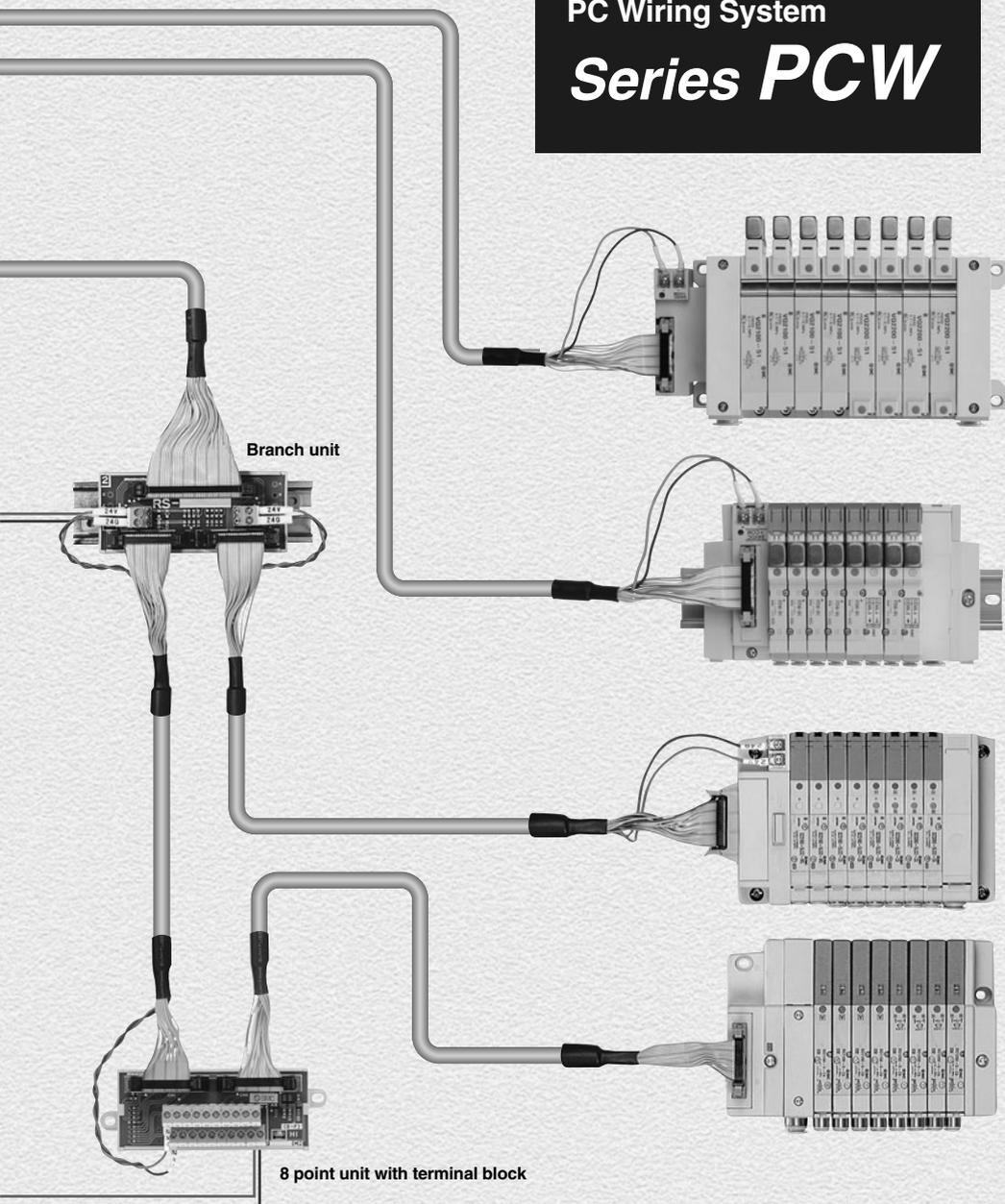
# A revolutionary new wiring system...



The PC wiring system simplifies wiring between a PLC and all types of connected equipment.

PC Wiring System

**Series PCW**



# Standardized pin layout

Once 32 point terminal block unit or branch unit is replaced, no further wiring/design is necessary.

**Company A's PLC I/O card**  
Connector pin assignment (pin layout)

+	+	-	-	2F	2E	2D	2C	2B	2A	29	28	27	26	25	24	23	22	21	20
+	+	-	-	1F	1E	1D	1C	1B	1A	19	18	17	16	15	14	13	12	11	10

**Change of PLC manufacturers**  
(Company A to Company B)

**Company B's PLC I/O card**  
Connector pin assignment (pin layout)

11	13	15	17	19	1B	1D	1F	+	+	21	23	25	27	29	2B	2D	2F	+	-
10	12	14	16	18	1A	1C	1E	+	-	20	22	24	26	28	2A	2C	2E	+	-

**General purpose terminal block unit**  
Terminal block layout

+	+	-	-	2F	2E	2D	2C	2B	2A	29	28	27	26	25	24	23	22	21	20
+	+	-	-	1F	1E	1D	1C	1B	1A	19	18	17	16	15	14	13	12	11	10

**Terminal block layout requires alteration.**

**General purpose terminal block unit**  
Terminal block layout

11	13	15	17	19	1B	1D	1F	+	+	21	23	25	27	29	2B	2D	2F	+	-
10	12	14	16	18	1A	1C	1E	+	-	20	22	24	26	28	2A	2C	2E	+	-

**Poor performance in maintenance.**  
Wiring must be redesigned again.

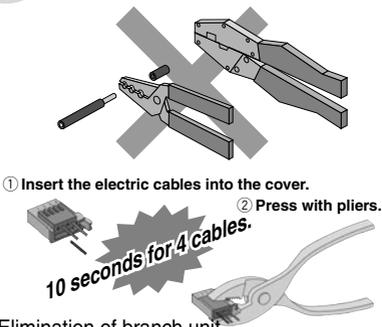
**PC wiring 32 point terminal block unit**  
Terminal block layout

10	11	12	13	14	15	16	17	18	19	1A	1B	1C	1D	1E	1F	20	21	22	23	24	25	26	27	28	29	2A	2B	2C	2D	2E	2F	
+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+

PC Wiring system brings common layout.

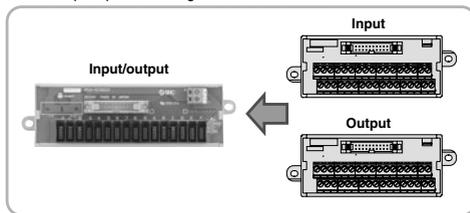
Input device (sensor)/  
output device  
(solenoid valve, etc.)  
to be connected.

## Adoption of e-con type eliminates the need for special tools and wire stripping.



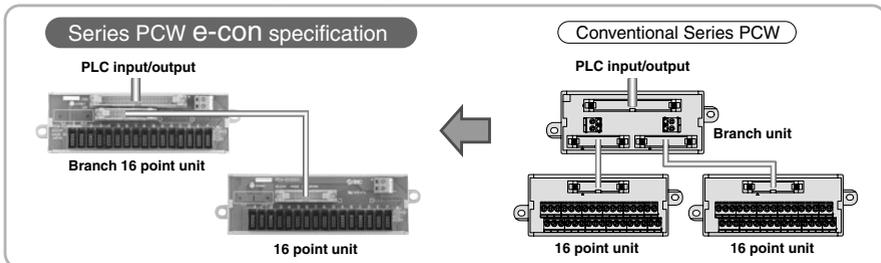
**[Promoted or evaluated by]**  
Mitsubishi Electric Corporation, OMRON Corporation, Fuji Electric Co., Ltd.,  
Keyence Corporation, SUNX, Anywire Corporation, NKE, Kuroda Precision  
Industries Ltd., 3M, AMP, SMC

Common unit can be used.  
Reduced spare parts enabling easier stock control.



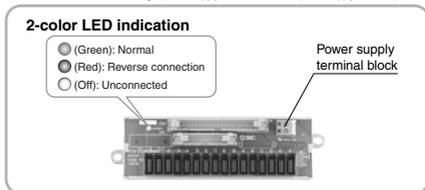
### Elimination of branch unit

The function of a branch unit is built-in a 16 point unit, allowing reduction of the number of units.

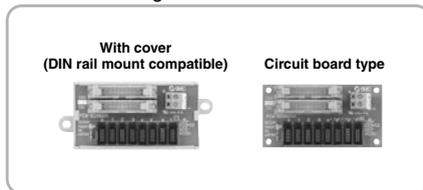


### Reverse connection detection function

Visual indication of incorrect wiring of power supply terminal block and power supply status is provided.

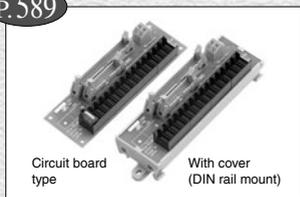


Each unit available with cover compatible with DIN rail mounting or as circuit board type.



# PC Wiring / Series PCW-EC (e-con Type)

P. 589



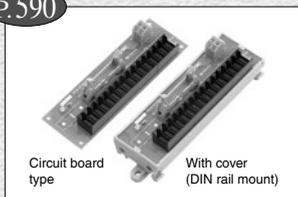
Circuit board type

With cover (DIN rail mount)

## 16 point branch I/O unit

Unit with e-con combines branch unit with 16 point unit.

P. 590



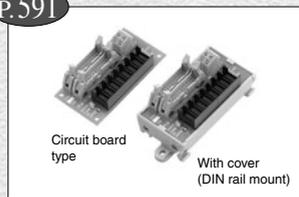
Circuit board type

With cover (DIN rail mount)

## 16 point I/O unit

16 point unit with e-con allows common models used for both I/O units.

P. 591



Circuit board type

With cover (DIN rail mount)

## 8 point I/O unit

8 point unit with e-con allows common models used for both I/O units. Can use two 8 point I/O units in a cascade connection.

# PC Wiring System / Series PCW

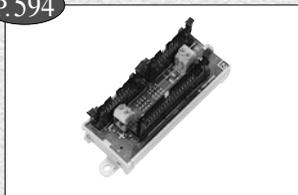
P. 593



## Branch unit: PLC direct connected type

Directly mounted on PLC I/O card.

P. 594



## Branch unit

Connected to PLC I/O card via connection cable.

P. 599



## 8 point branch unit

Separates two of 8 point I/O transmissions once those are separated from two of 16 point I/O by the branch unit.

P. 595



## 32 point I/O unit

Wired to PLC I/O card via connection cable and wires connecting equipment to the terminal blocks.

P. 596



## 32 point output reduced common unit

Wired to PLC I/O card via connection cable and wires connecting equipment to the terminal blocks. Products with cross-over common wires are available.

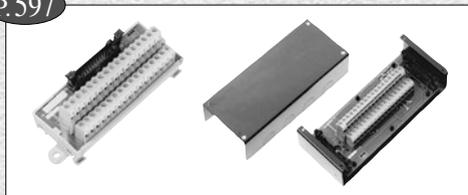
P. 598



## 16 point output reduced common unit

Wires two of 16 point I/O signals once separated by the branch unit to each connecting equipment via terminal block. Products with cross-over common wires are available.

P. 597



## 16 point I/O unit

Wires two of 16 point I/O signals once separated by the branch unit to each connecting equipment via terminal block. DIN rail mount type and box mount types are available.

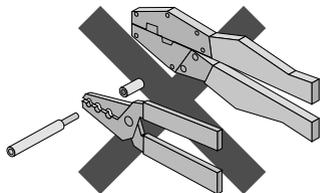
# PC Wiring System e-con Type Series **PCW-EC**

## Common Specifications

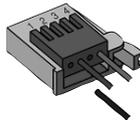


Rated voltage		24 VDC
Rated current	Power supply line	2 A
	Communication line	0.3 A
Insulation resistance		5 MΩ or more at 100 VDC
Withstand voltage		500 VAC
Impact resistance		500 m/s <sup>2</sup>
Terminal block specifications	Screw tightening torque (Phillips head screwdriver/flat head screwdriver)	0.4 to 0.6 Nm/0.4 to 0.7 Nm
	Wire stripping length (recommended)	7 mm
	Connecting wire size	AWG26 to 14 (0.13 to 2.5 mm <sup>2</sup> )
Input/output connector	CS0, CS1	Conforms to MIL-C-83503
	CN0 to CNF	e-con
Ambient temperature		-25 to 75°C

**e-con connector**  
No need for special tools  
and wire stripping.



- ① Insert the electric cables into the cover.



- ② Press with pliers.  
10 seconds for 4 cables.



## Weight

Model	Weight (g)
PCW-EC16ZBM00	47
PCW-EC16XBR00	
PCW-EC16YBR00	
PCW-EC16ZBM01	87
PCW-EC16XBR01	
PCW-EC16YBR01	
PCW-EC16Z00	38
PCW-EC16Z01	78
PCW-EC08Z00	31
PCW-EC08Z01	58

## Option (e-con Connector)

Model		AWG No.	Cross section of conductor	Finished O.D.	Cover color
1 pc.	10 pcs./pack				
ZS-28-C	ZS-28-C-P	AWG26 to 24	0.14 to 0.2 mm <sup>2</sup>	ø0.8 to ø1.0	Red
ZS-28-C-1	ZS-28-C-1P			ø1.0 to ø1.2	Yellow
ZS-28-C-2	ZS-28-C-2P			ø1.2 to ø1.6	Orange

Note) Applicability varies dependant on conductive construction, conductive material, and/or insulating material even resulting in inapplicable. Consult with SMC and manufacturer of connecting equipment.

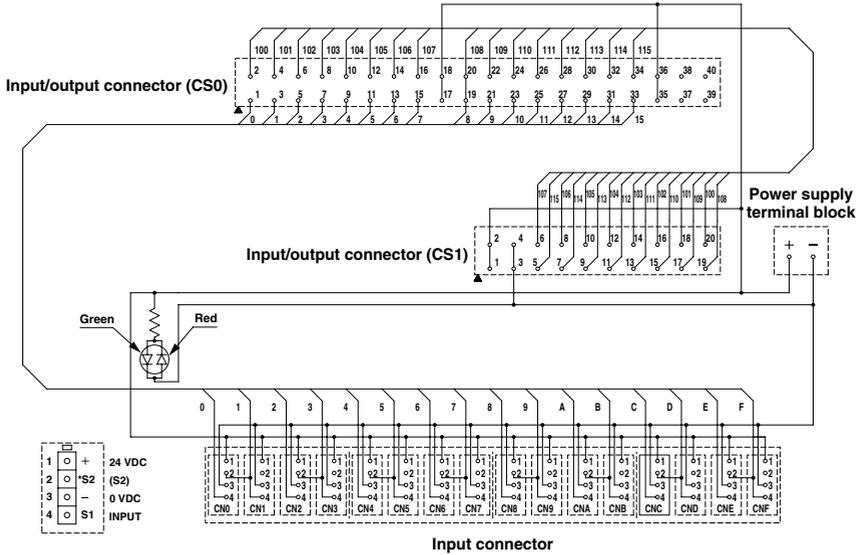


# Series PCW-EC

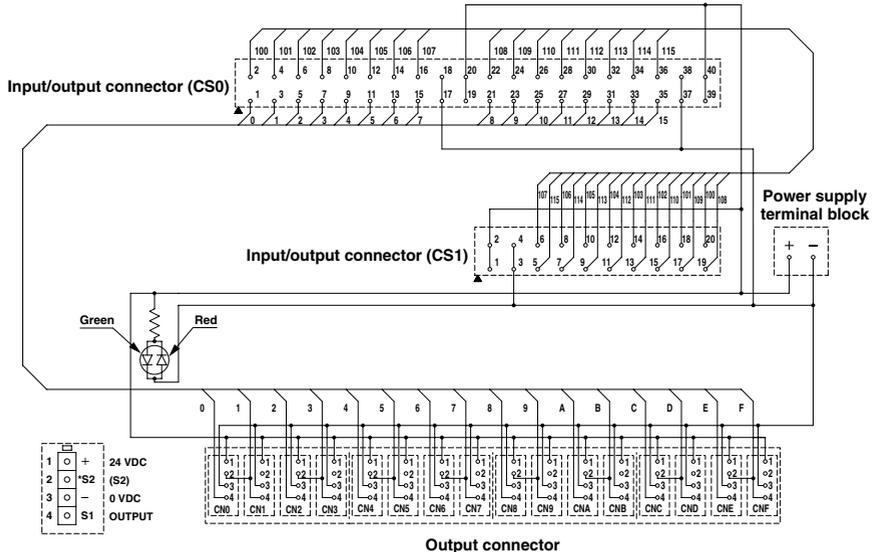
Consult with SMC for the manufacturers and models other than shown as the applicable PLC examples. Refer to page 603-1 for details such as pin number or layout.

## Circuit Diagram

PCW-EC16XBR00 [Applicable PLC example: OMRON Corporation C200H-ID218]  
 PCW-EC16XBR01



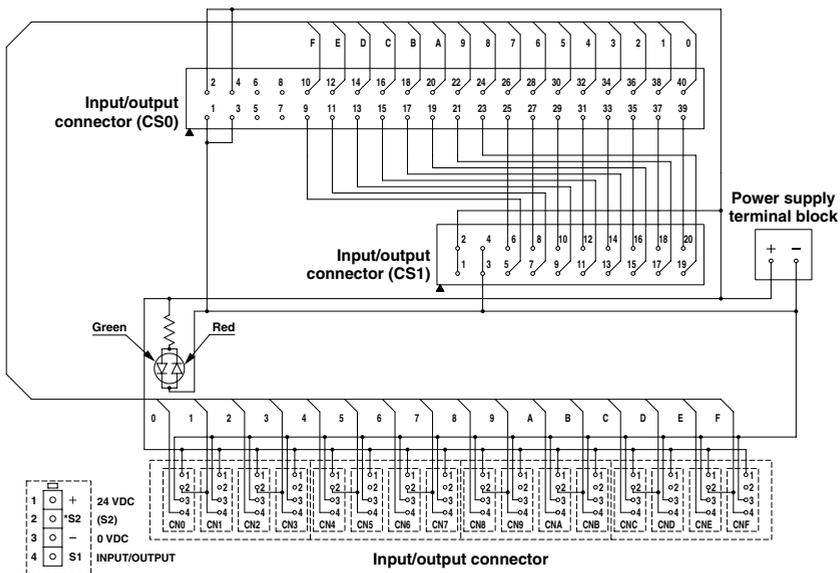
PCW-EC16YBR00 [Applicable PLC example: OMRON Corporation C200H-OD219]  
 PCW-EC16YBR01



**Circuit Diagram**

Consult with SMC for the manufacturers and models other than shown as the applicable PLC examples. Refer to page 603-1 for details such as pin number or layout.

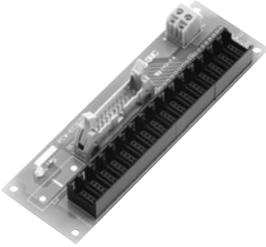
**PCW-EC16ZBM00**  
**PCW-EC16ZBM01** [Applicable PLC example: Mitsubishi Electric Corporation A1SX41, A1SY42]



# Series PCW-EC

# 16 Point Input/Output Unit

Circuit board type



With cover (DIN rail mount compatible)



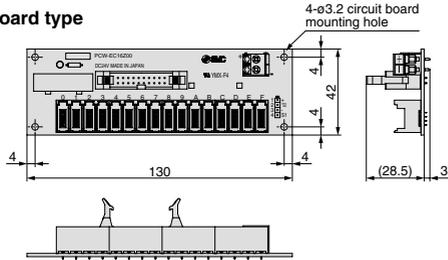
## Models

PCW-EC16Z00	Circuit board type
PCW-EC16Z01	With cover (DIN rail mount compatible)

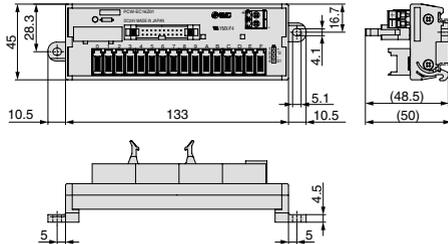
\* Refer to the figure below for the circuit diagram.

## Dimensions

Circuit board type

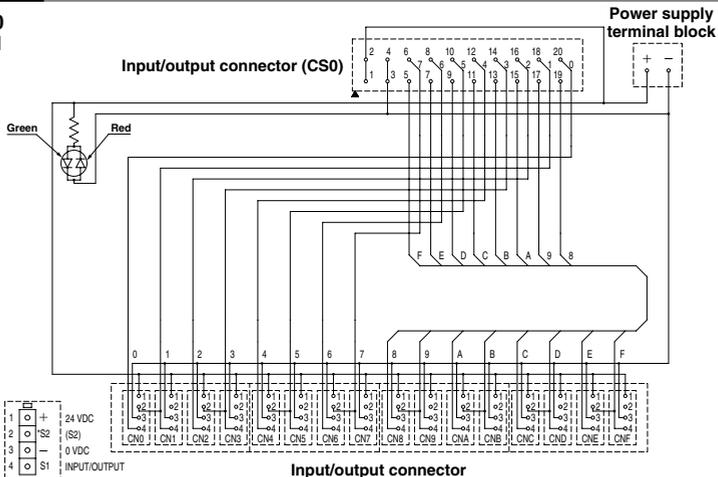


With cover (DIN rail mount compatible)



## Circuit Diagram

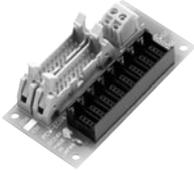
PCW-EC16Z00  
PCW-EC16Z01



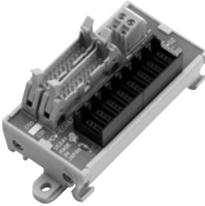
# Series PCW-EC

# 8 Point Input/Output Unit

Circuit board type



With cover (DIN rail mount compatible)



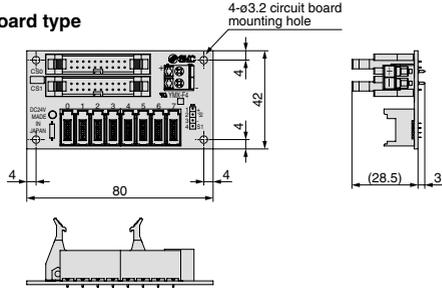
## Models

PCW-EC08Z00	Circuit board type
PCW-EC08Z01	With cover (DIN rail mount compatible)

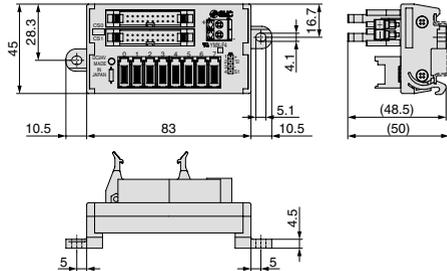
\* Refer to the figure below for the circuit diagram.

## Dimensions

Circuit board type

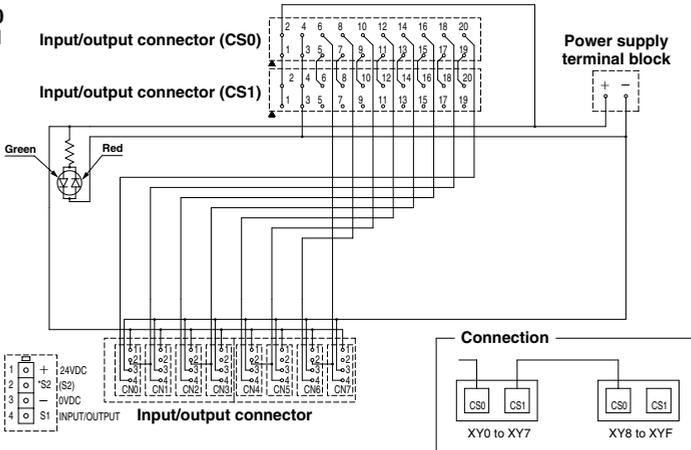


With cover (DIN rail mount compatible)



## Circuit Diagram

PCW-EC08Z00  
PCW-EC08Z01



# PC Wiring System

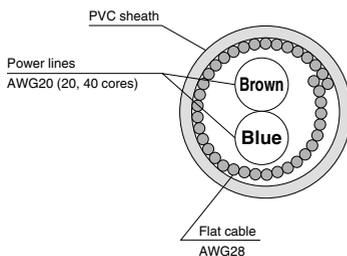
## Series *PCW*



### Common Specifications

Rated voltage		24 VDC	
Rated current	Power supply line	2 A	
	Communication line	0.3 A	
Insulation resistance		5 MΩ or more at 100 VDC	
Withstand voltage		0.5 kV	
Impact resistance		500 m/s <sup>2</sup>	
Terminal block	Screw tightening torque	Power terminal (Phillips screw driver/Flat head screw driver)	0.4 to 0.6 Nm/0.4 to 0.7 Nm
		I/O terminal (Phillips screw driver/Flat head screw driver)	0.5 to 0.6 Nm/0.5 to 0.7 Nm
	Wire stripping length (recommended)	Power terminal	7 mm
		I/O terminal	
Connecting wire size	Power terminal	AWG26 to 14 (0.13 to 2.5 mm <sup>2</sup> )	
	I/O terminal	AWG26 to 12 (0.13 to 4 mm <sup>2</sup> )	

### Cable Specifications



Model	With power lines		Without power lines		
	PCW-9930661H	PCW-9903491H	—		
Flat cable	20 cores	40 cores	20 cores	34 cores	40 cores
	AWG28 (7 wires/0.127 mm)				
Length	100 m roll		—		
Power lines	AWG20 (21 wires/0.18 mm)		—		
Sheath O.D.	10.3 mm	12.0 mm	8.7 mm	11.8 mm	13.0 mm

Note) The flat ribbon cable without power lines are not available from SMC.  
If required, please source locally from your preferred supplier.

# Branch Unit: PLC Direct Connected Type

## PLC connection



➔ PLC

Can be directly mounted on PLC.

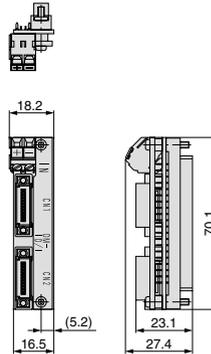


## Specifications

Weight	25 g
Ambient temperature	-25 to 55°C

Note) Since the PCW series specifications are included in the common specifications, also refer to the common specifications on page 592.

## Dimensions



## Models

Input	Output	Circuit diagram
<b>PCW-993104</b>	<b>PCW-993105</b>	Page 593-1
<b>PCW-993106</b> <small>Note 1)</small>	<b>PCW-993107</b> <small>Note 2)</small>	Page 593-2

Two pieces are required for 64 points of input/output.

Note 1) Combine one piece each of PCW-993106 and PCW-993108 (the PLC connection side connectors are reversed).

Note 2) Combine one piece each of PCW-993107 and PCW-993109 (the PLC connection side connectors are reversed).

## ⚠ Caution

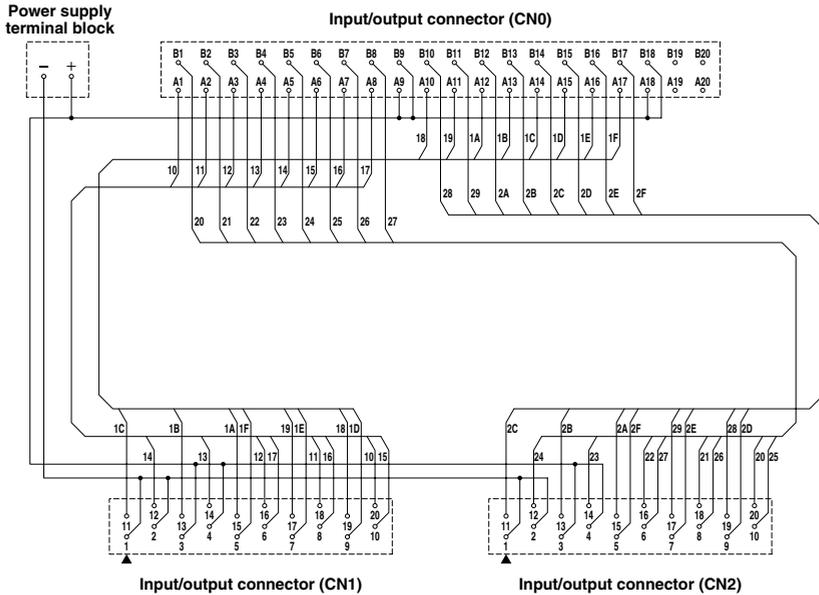
When removing a cable with connector, a PCW-04T puller is required.



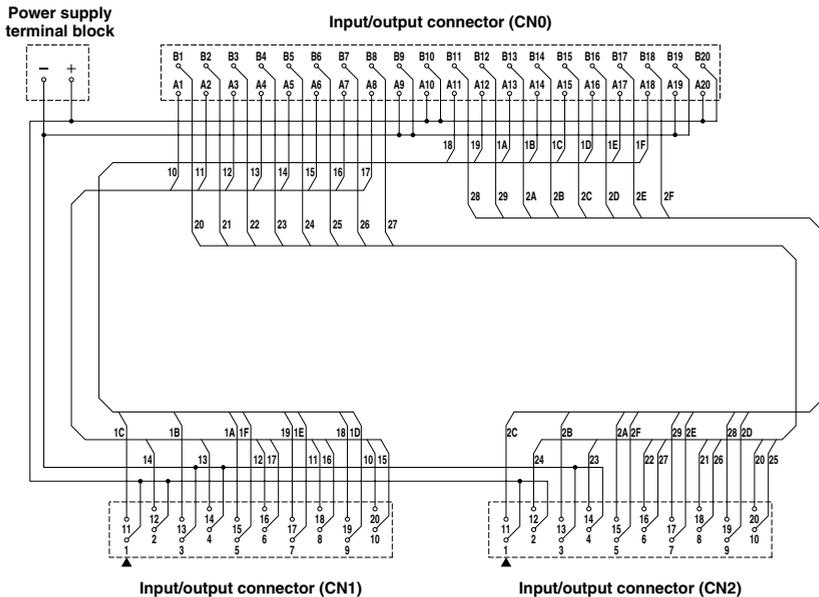
Consult with SMC for the manufacturers and models other than shown as the applicable PLC examples. Refer to page 603-1 for details such as pin number or layout.

## Circuit Diagram

### PCW-993104 [Applicable PLC example: OMRON Corporation C200H-ID218]



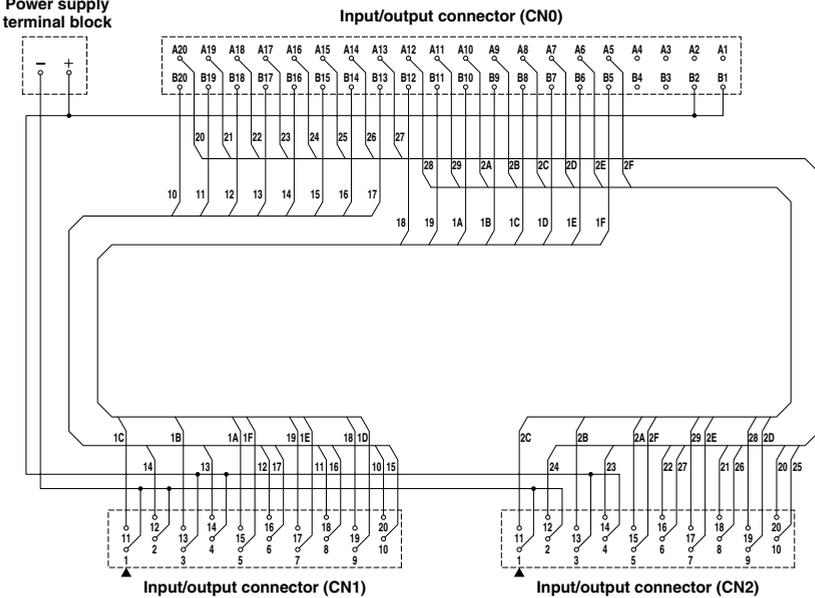
### PCW-993105 [Applicable PLC example: OMRON Corporation C200H-OD219]



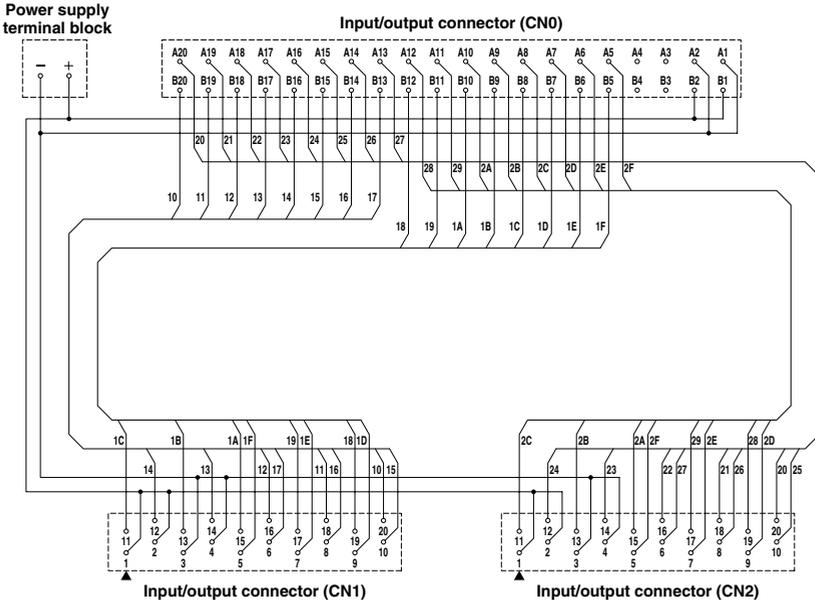
**Circuit Diagram**

Consult with SMC for the manufacturers and models other than shown as the applicable PLC examples. Refer to page 603-1 for details such as pin number or layout.

**PCW-993106 [Applicable PLC example: Mitsubishi Electric Corporation A1SX42]**

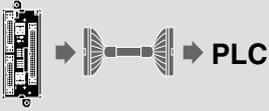


**PCW-993107 [Applicable PLC example: Mitsubishi Electric Corporation A1SY42]**

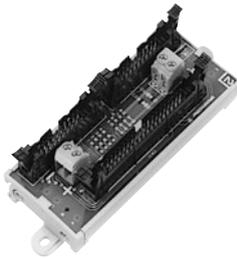


# Branch Unit: DIN Rail Mount Type

## PLC connection



Connected to PLC via connection cable.



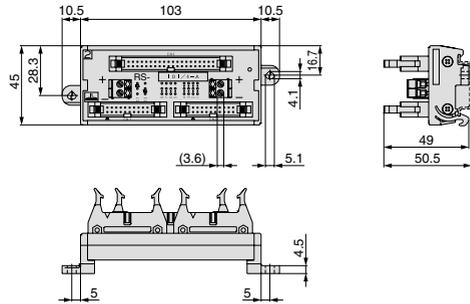
\* Refer to page 601 for the junction cable part number.

## Specifications

<b>Weight</b>	80 g
<b>Ambient temperature</b>	-25 to 80°C

Note) Since the PCW series specifications are included in the common specifications, also refer to the common specifications on page 592.

## Dimensions



## Models

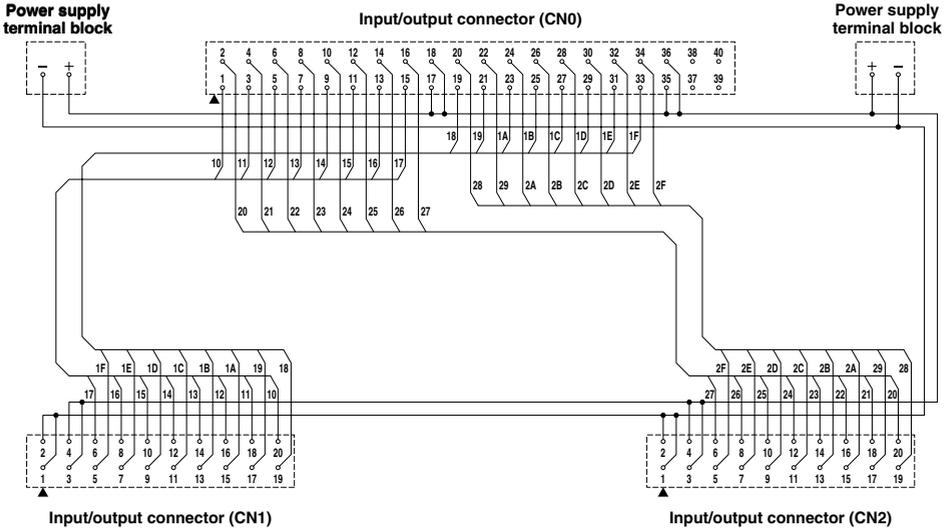
Input	Output	Circuit diagram
PCW-993023A	PCW-993033A	Page 594-1
PCW-993015A	PCW-993017A	Page 594-2
PCW-993139A	PCW-993140A	Page 594-3

Two pieces are required for 64 points of input/output.

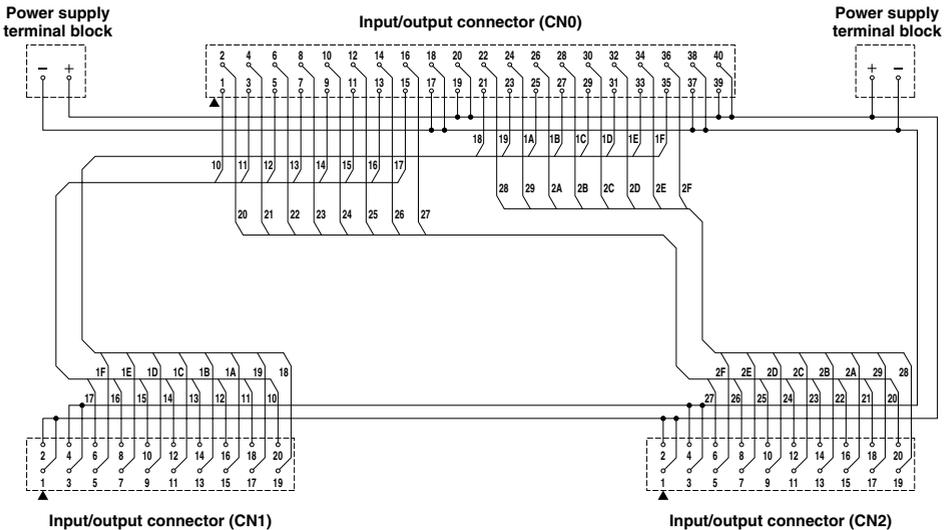
**Circuit Diagram**

Consult with SMC for the manufacturers and models other than shown as the applicable PLC examples. Refer to page 603-1 for details such as pin number or layout.

**PCW-993023A [Applicable PLC example: OMRON Corporation C200H-ID219]**



**PCW-993033A [Applicable PLC example: OMRON Corporation C200H-OD218]**

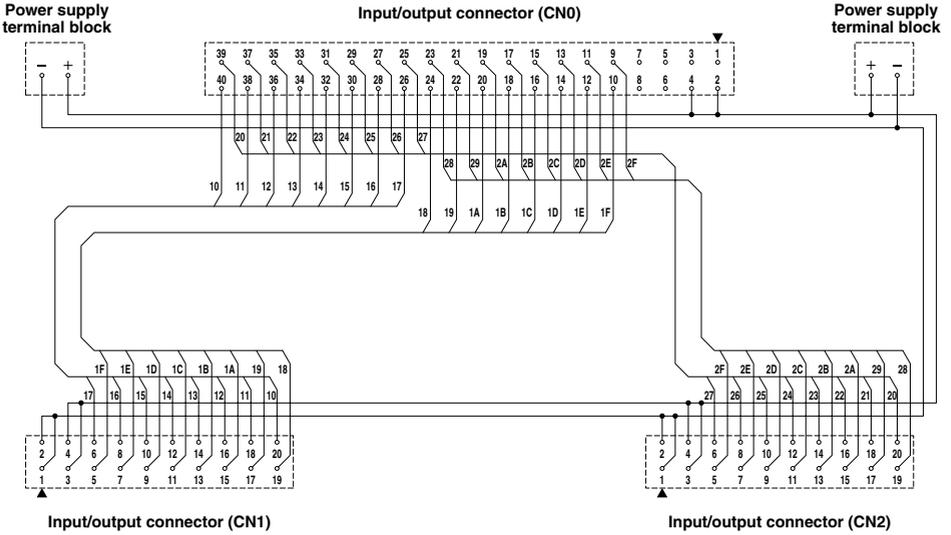


# Series PCW

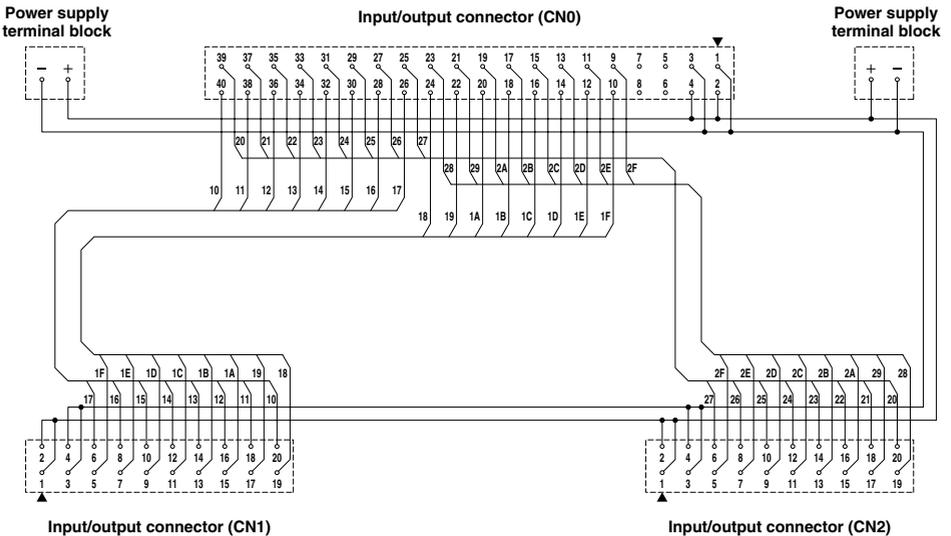
## Circuit Diagram

Consult with SMC for the manufacturers and models other than shown as the applicable PLC examples. Refer to page 603-1 for details such as pin number or layout.

### PCW-993015A [Applicable PLC example: Mitsubishi Electric Corporation A1SX42]



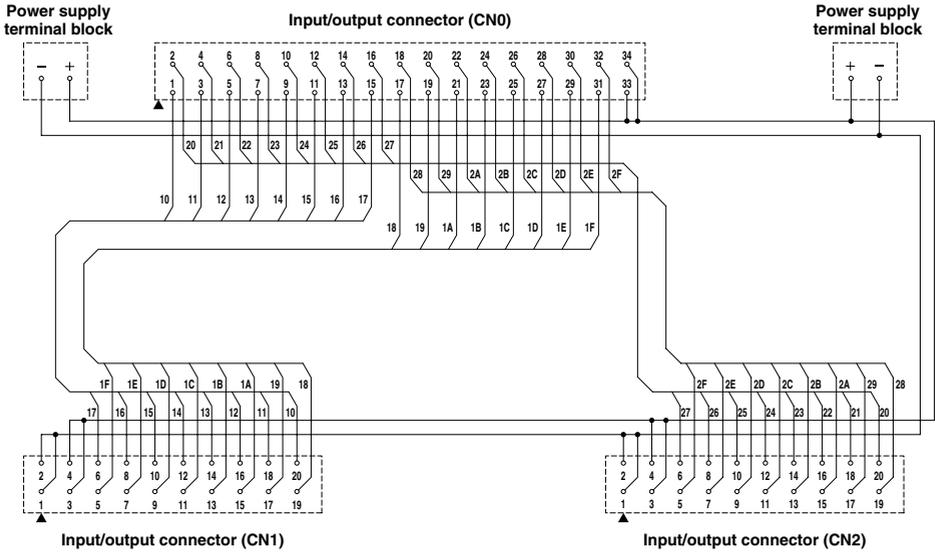
### PCW-993017A [Applicable PLC example: Mitsubishi Electric Corporation A1SY42]



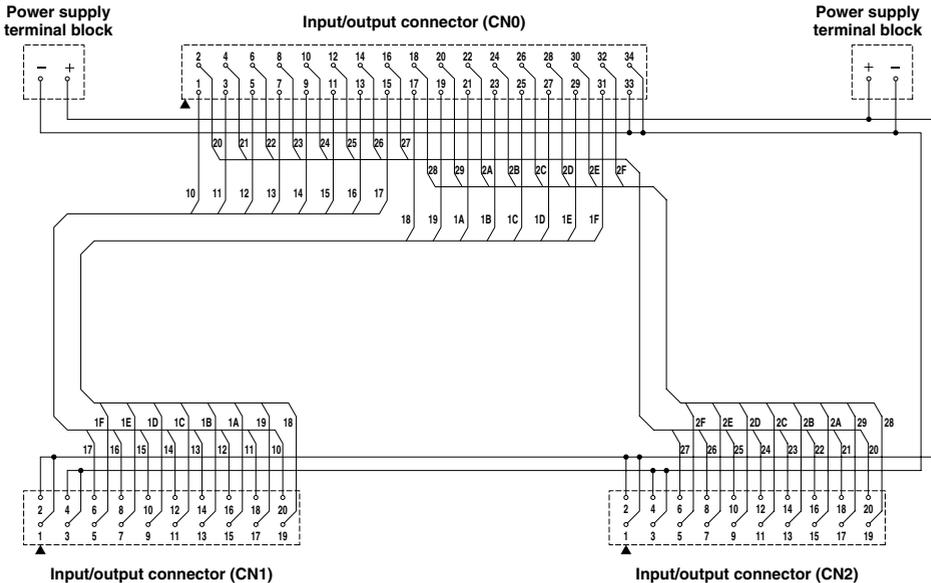
**Circuit Diagram**

Consult with SMC for the manufacturers and models other than shown as the applicable PLC examples. Refer to page 603-1 for details such as pin number or layout.

**PCW-993139A [Applicable PLC example: Keyence Corporation KZ-C32X]**



**PCW-993140A [Applicable PLC example: Keyence Corporation KZ-C32T]**

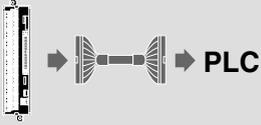




# Series PCW

# 32 Point Input/Output Unit

## PLC connection



Connected to PLC via connection cable.



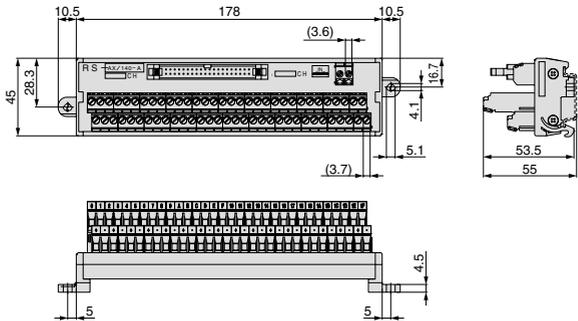
\* Refer to page 601 for the junction cable part number.

## Specifications

<b>Weight</b>	210 g
<b>Ambient temperature</b>	-25 to 55°C

Note) Since the PCW series specifications are included in the common specifications, also refer to the common specifications on page 592.

## Dimensions



## Models

Input	Output	Circuit diagram
PCW-990344A	PCW-990345A	Page 595-1
PCW-993157A	PCW-993158A	Page 595-2
PCW-993161A	PCW-993162A	Page 595-3

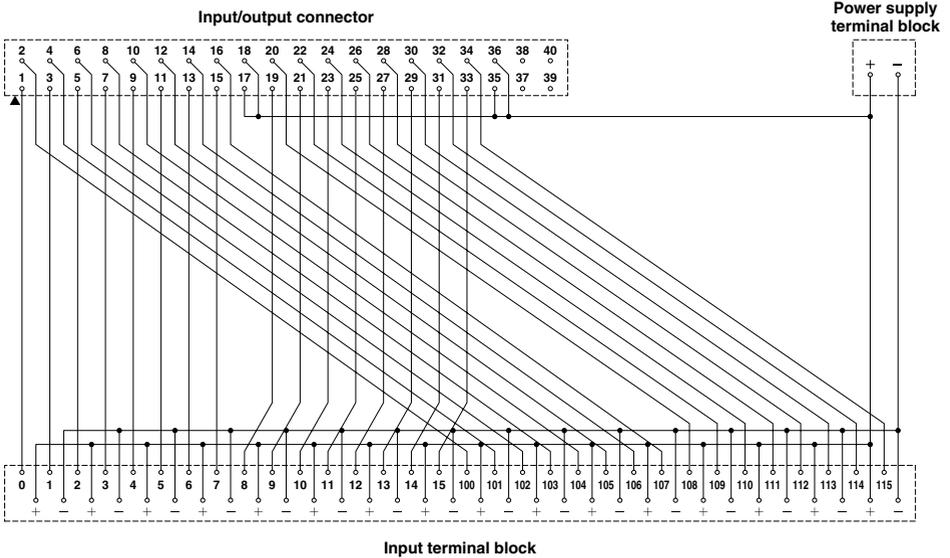
Two pieces are required for 64 points of input/output.

# Series PCW

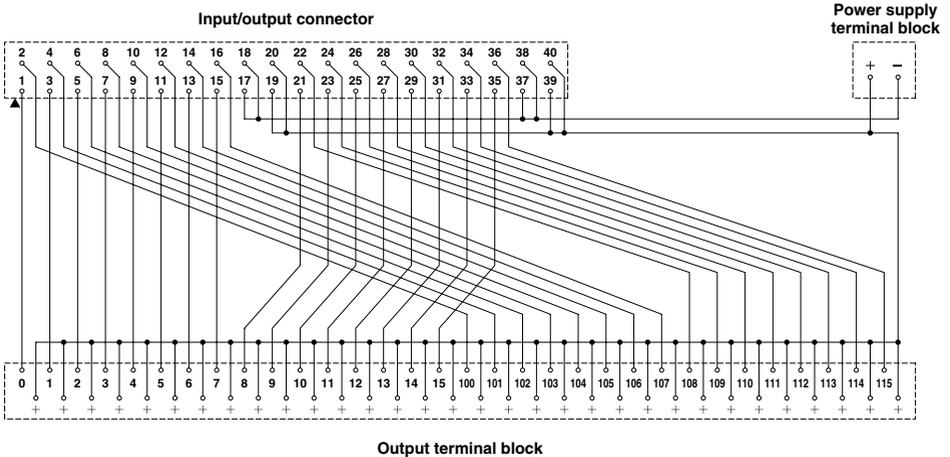
## Circuit Diagram

Consult with SMC for the manufacturers and models other than shown as the applicable PLC examples. Refer to page 603-1 for details such as pin number or layout.

### PCW-990344A [Applicable PLC example: OMRON Corporation C200H-ID219]



### PCW-990345A [Applicable PLC example: OMRON Corporation C200H-OD218]



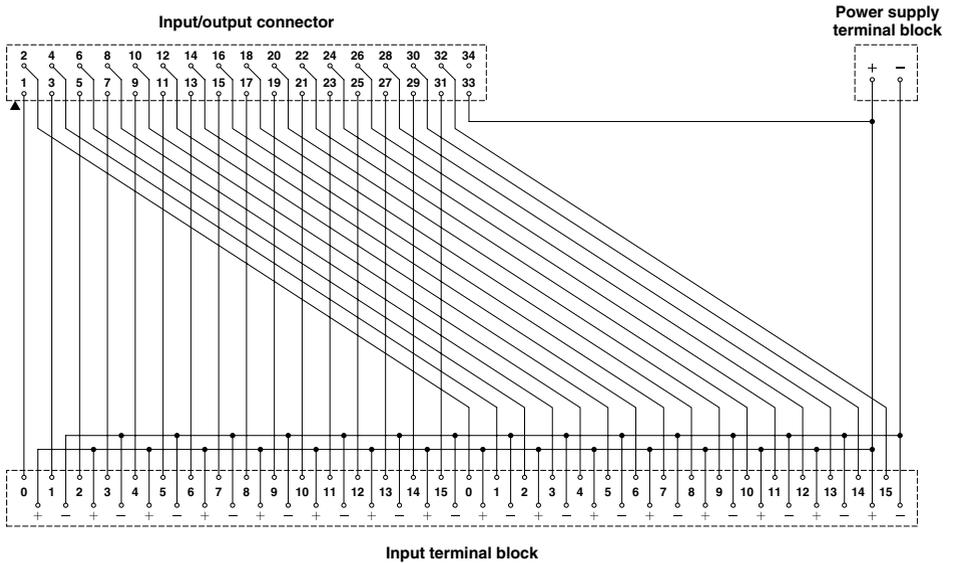


# Series PCW

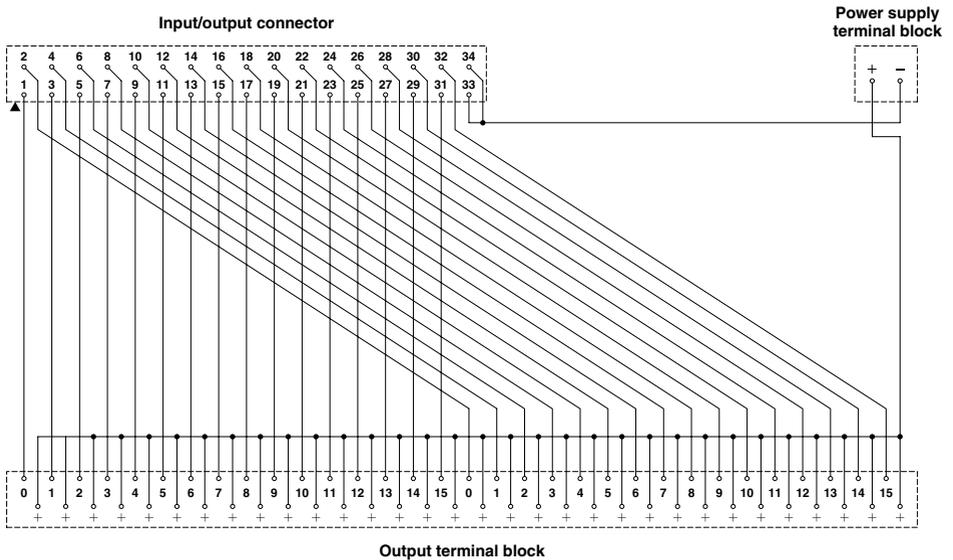
Consult with SMC for the manufacturers and models other than shown as the applicable PLC examples. Refer to page 603-1 for details such as pin number or layout.

## Circuit Diagram

### PCW-993161A [Applicable PLC example: Keyence Corporation KZ-C32X]



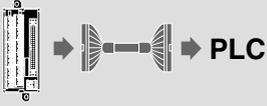
### PCW-993162A [Applicable PLC example: Keyence Corporation KZ-C32T]



# Series PCW

# 32 Point Output Reduced Common Unit

## PLC connection



Connected to PLC via connection cable.



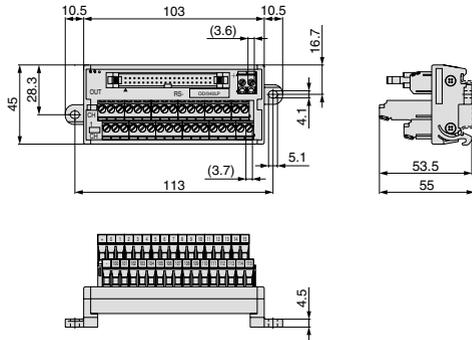
\* Refer to page 601 for the junction cable part number.

## Specifications

<b>Weight</b>	130 g
<b>Ambient temperature</b>	-25 to 55°C

Note) Since the PCW series specifications are included in the common specifications, also refer to the common specifications on page 592.

## Dimensions



## Models

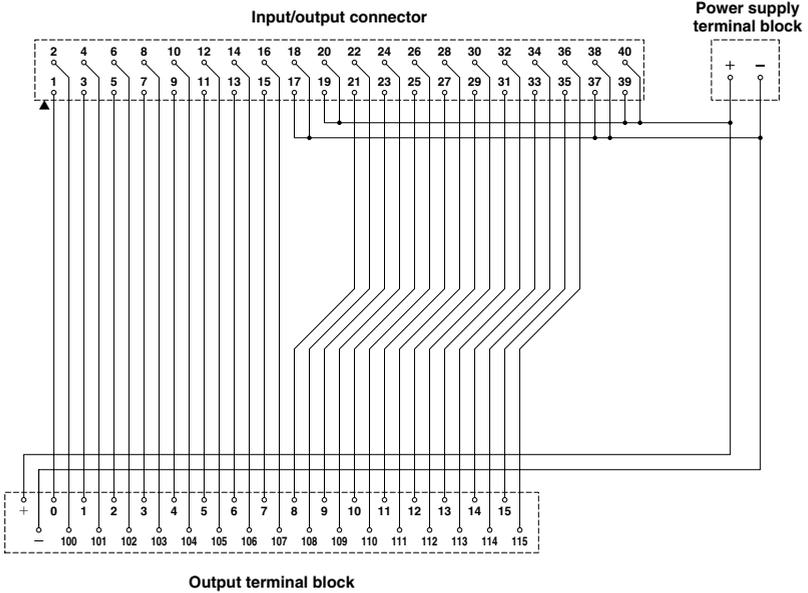
Output	Circuit diagram
<b>PCW-993193</b>	Page 596-1
<b>PCW-993194</b>	Page 596-1
<b>PCW-993225</b>	Page 596-2

Two pieces are required for 64 points of input/output.

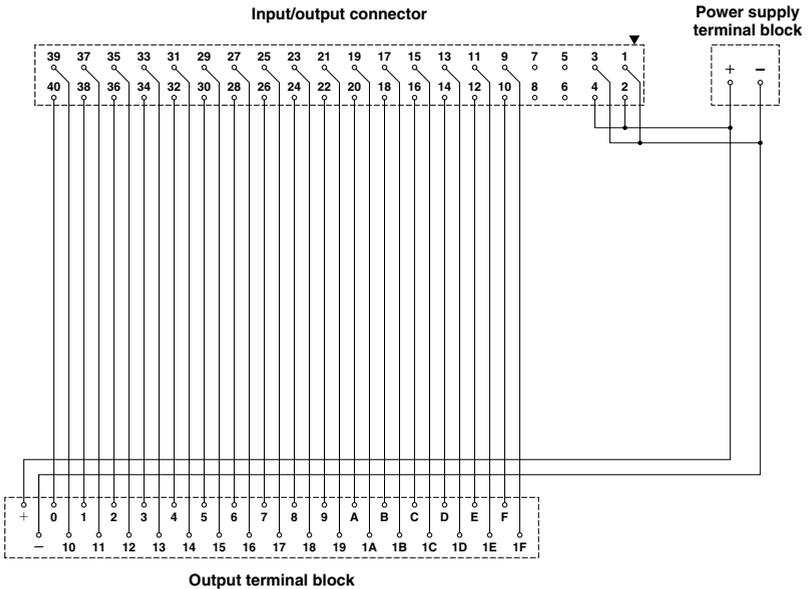
## Circuit Diagram

Consult with SMC for the manufacturers and models other than shown as the applicable PLC examples. Refer to page 603-1 for details such as pin number or layout.

### PCW-993193 [Applicable PLC example: OMRON Corporation C200H-OD218]



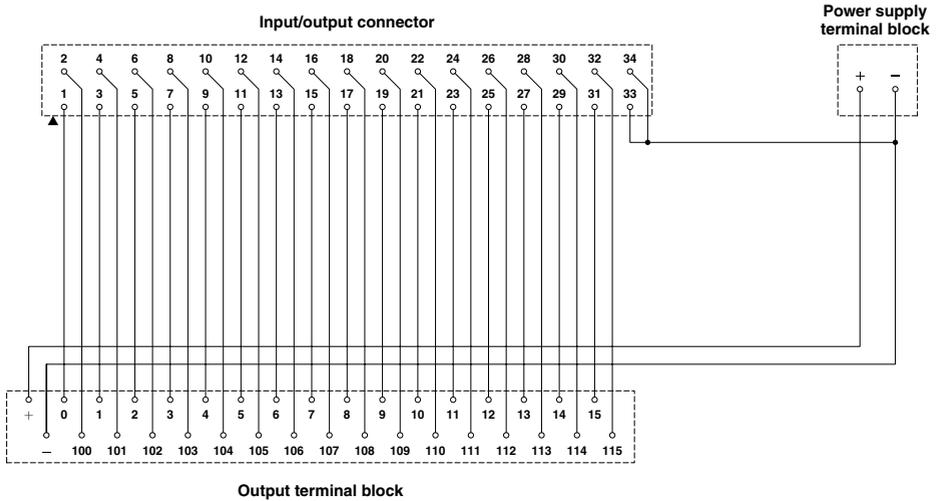
### PCW-993194 [Applicable PLC example: Mitsubishi Electric Corporation A1SY42]



**Circuit Diagram**

Consult with SMC for the manufacturers and models other than shown as the applicable PLC examples. Refer to page 603-1 for details such as pin number or layout.

**PCW-993225 [Applicable PLC example: Keyence Corporation KZ-C32T]**





Series **PCW**

# 16 Point Input/Output Unit

## Terminal Block: DIN Rail Mount Type



### Models

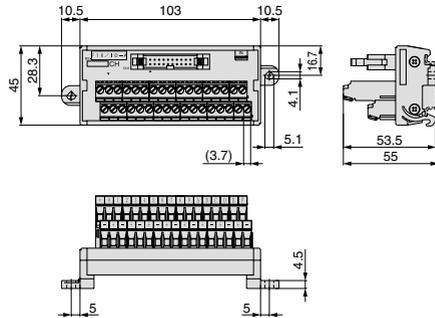
Input	<b>PCW-993051A</b>	Circuit diagram
Output	<b>PCW-993052A</b>	Page 597-2

### Specifications

<b>Weight</b>	125 g
<b>Ambient temperature</b>	-25 to 80°C

Note) Since the PCW series specifications are included in the common specifications, also refer to the common specifications on page 592.

### Dimensions



## Terminal Block: Box Mount Type



### Models

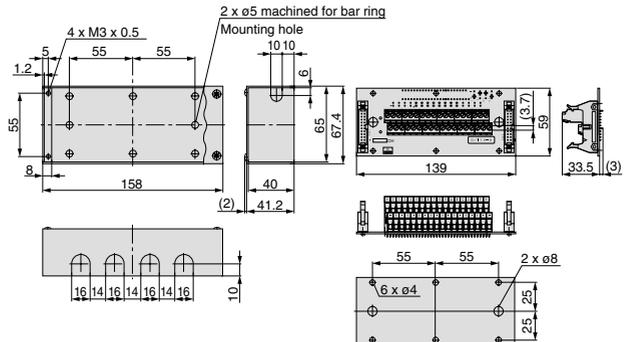
Input	<b>PCW-993055A</b>	Circuit diagram
Output	<b>PCW-993056A</b>	Page 597-2

### Specifications

<b>Weight</b>	480 g
<b>Ambient temperature</b>	-25 to 80°C

Note) Since the PCW series specifications are included in the common specifications, also refer to the common specifications on page 592.

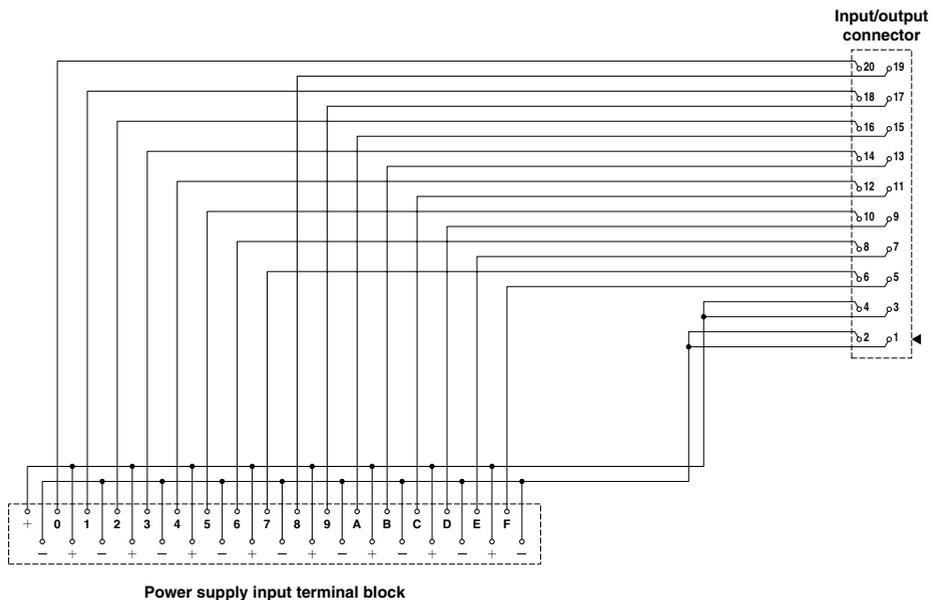
### Dimensions



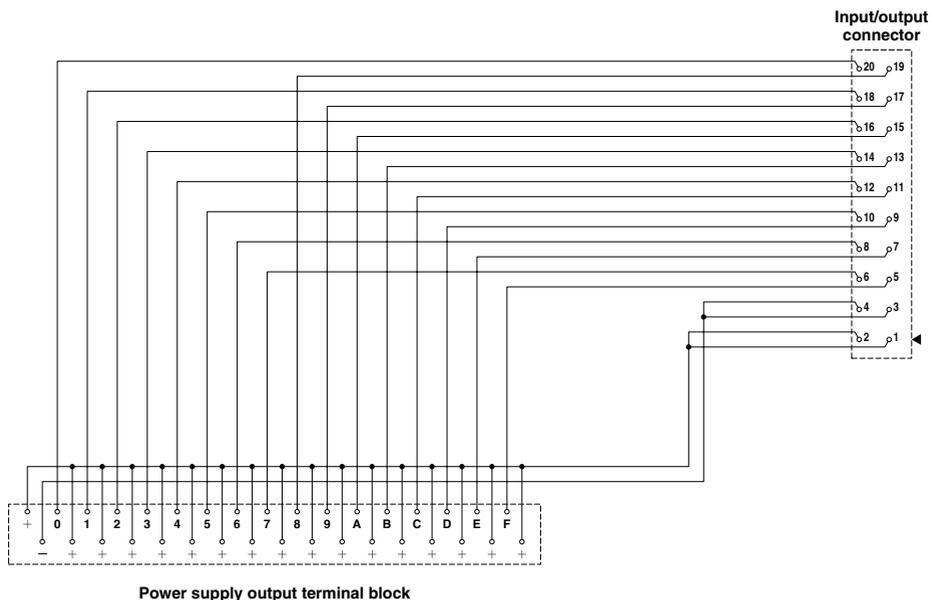
# Series PCW

## Circuit Diagram

PCW-993051A

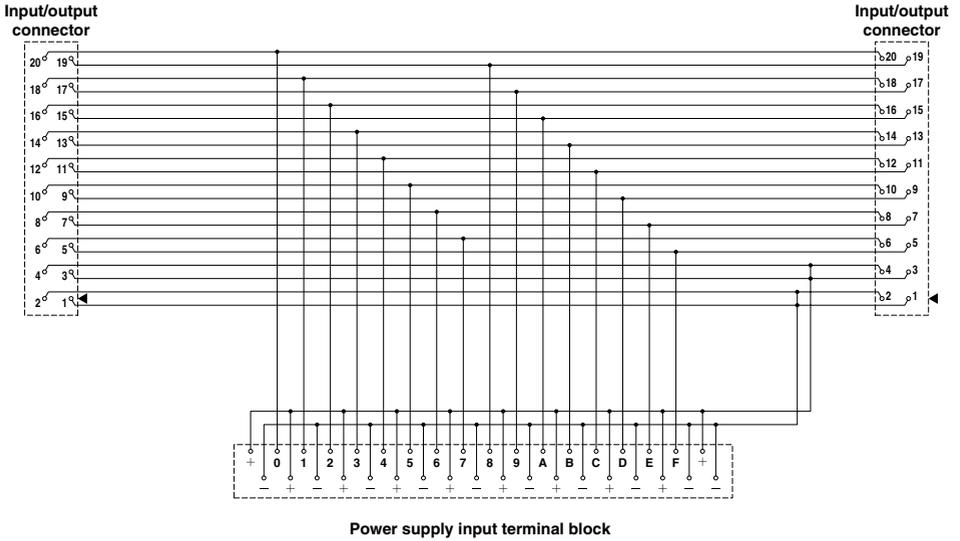


PCW-993052A

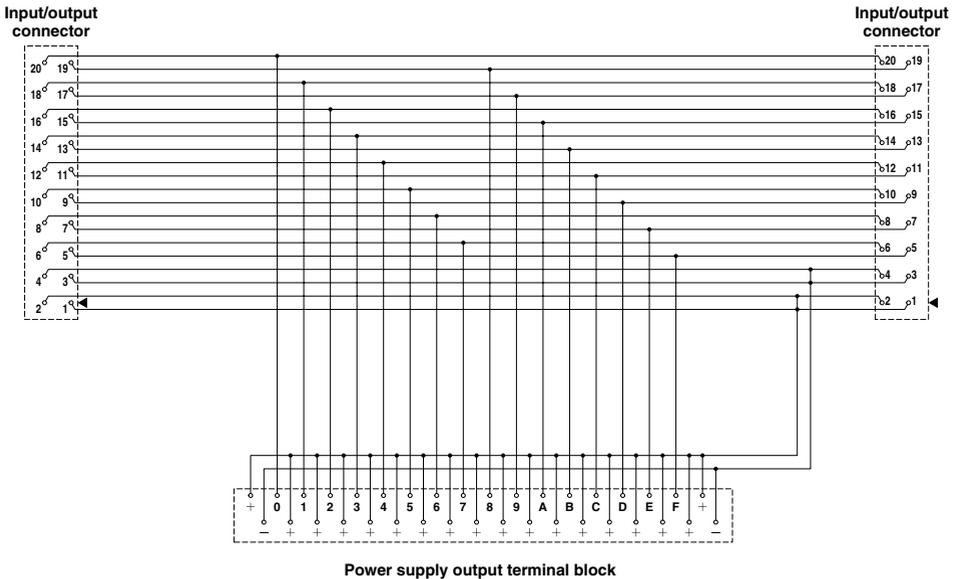


## Circuit Diagram

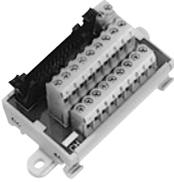
### PCW-993055A



### PCW-993056A



# 16 Point Output Reduced Common Unit



## Model

Output	PCW-993195
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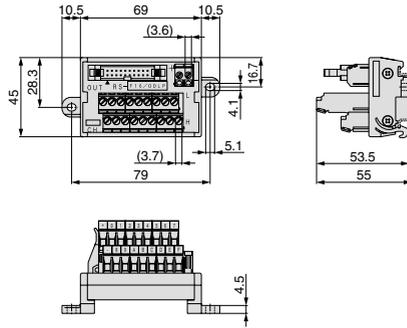
\* Refer to the figure below about the circuit diagram.

## Specifications

Weight	80 g
Ambient temperature	-25 to 80°C

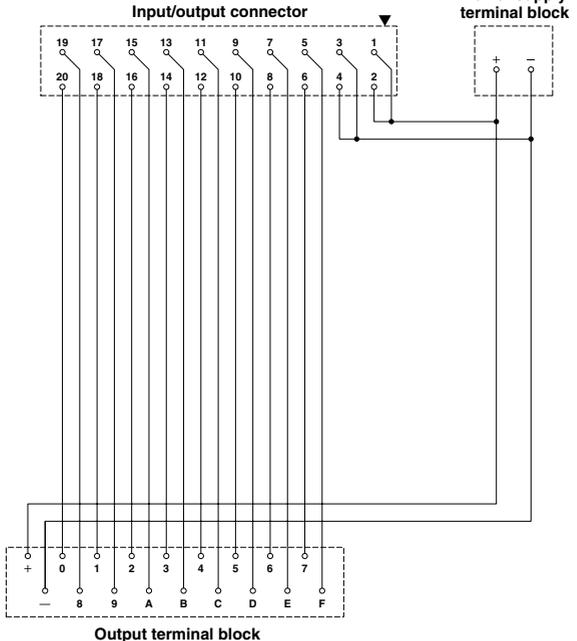
Note) Since the PCW series specifications are included in the common specifications, also refer to the common specifications on page 592.

## Dimensions



## Circuit Diagram

PCW-993195



Series PCW

# 8 Point Branch Unit



## Models

Input	PCW-2K0072501
Output	PCW-2K0072502

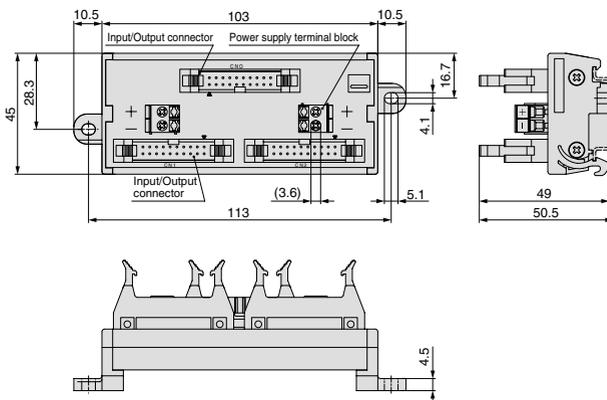
\* Refer to the figure below about the circuit diagram.

## Specifications

Weight	80 g
Ambient temperature	-25 to 80°C

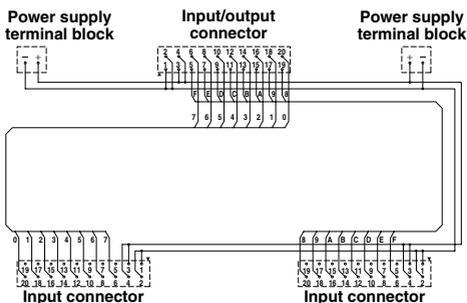
Note) Since the PCW series specifications are included in the common specifications, also refer to the common specifications on page 592.

## Dimensions

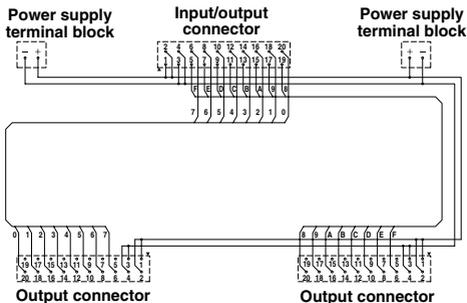


## Circuit Diagram

PCW-2K0072501



PCW-2K0072502





# Series PCW PC Wiring System

# Connector Cable

## For Connection of PLC Input/Output Card to PCW Unit

- PLC input/output card to PCW branch unit
- PLC input/output card to PCW 32 point unit

PCW-02 - 005

### • Power supply line

Symbol	Power supply line
Nil	Yes
N	No

### • Lead wire length

Symbol	Lead wire length
005	0.5 m
010	1 m
015	1.5 m
020	2 m
030	3 m
050	5 m

Contact your SMC sales representative regarding connector cables with lead wire lengths other than those in the table above.

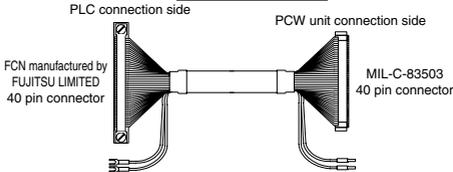
### • Specifications

Symbol	Specifications
02	Standard specifications
05	For connection of PCW unit compatible with KEYENCE CORP. PLC I/O card (KZ-C32X, KZ-C32T)

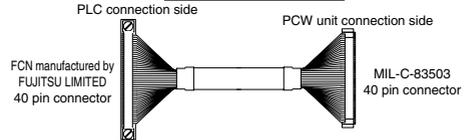
## Dimensions

### Series PCW-02

#### With power lines

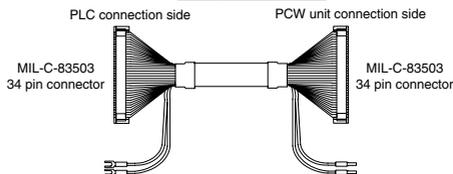


#### Without power lines

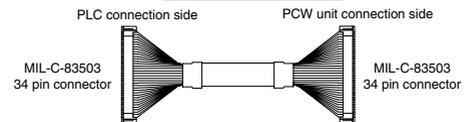


### Series PCW-05

#### With power lines



#### Without power lines



# Connector Cable

**Branch Unit:  
Connection of PLC Direct Connecting Type  
to PCW Unit**

- Branch unit: Connection of PLC direct connecting type to PCW 16 point unit
- Branch unit: Connection of PLC direct connecting type to PCW 8 point unit

PCW - 04   - 005

• Lead wire length

Symbol	Lead wire length
005	0.5 m
010	1 m
015	1.5 m
020	2 m
030	3 m
050	5 m

Contact your SMC sales representative regarding connector cables with lead wire lengths other than those in the table above.

• Power supply lines

Symbol	Power supply lines
Nil	Yes
N	No

**Branch Unit:  
Connection of PLC Direct Connecting Type  
to Manifold Solenoid Valves**

- Branch unit: Connection of PLC direct connecting type to manifold solenoid valves

PCW - 04 V - 005

• Lead wire length

Symbol	Lead wire length
005	0.5 m
010	1 m
015	1.5 m
020	2 m
030	3 m
050	5 m

Contact your SMC sales representative regarding connector cables with lead wire lengths other than those in the table above.

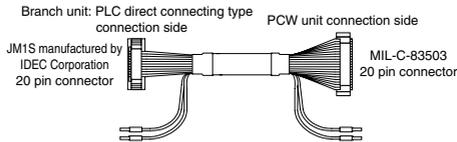
• Power supply lines

Symbol	Power supply lines	Applicable manifold solenoid valve kit
V	Yes	G kit
N	No	J kit

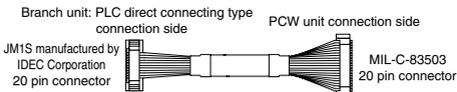
Refer to "Best Pneumatics No. 1" for details regarding applicable manifold solenoid valves.

## Dimensions

**With power lines**

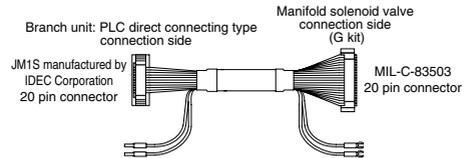


**Without power lines**

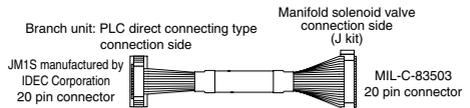


## Dimensions

**With power lines**



**Without power lines**



# Connector Cable

## Connection of PCW Unit to PCW Unit

- Connection of PCW branch unit to PCW 16 point unit
- Connection of PCW branch unit to PCW 8 point unit
- Connection of PCW 8 point unit to PCW 8 point unit

PCW - 01  - 005

• Lead wire length

Symbol	Lead wire length
005	0.5 m
010	1 m
015	1.5 m
020	2 m
030	3 m
050	5 m

Contact your SMC sales representative regarding connector cables with lead wire lengths other than those in the table above.

• Power supply lines

Symbol	Power supply lines
Nll	Yes
N	No

## Connection of PCW Unit to Manifold Solenoid Valves

- Connection of PCW branch unit to manifold solenoid valves
- Connection of PCW 8 point unit to manifold solenoid valves

PCW - 01  - 005

• Lead wire length

Symbol	Lead wire length
005	0.5 m
010	1 m
015	1.5 m
020	2 m
030	3 m
050	5 m

Contact your SMC sales representative regarding connector cables with lead wire lengths other than those in the table above.

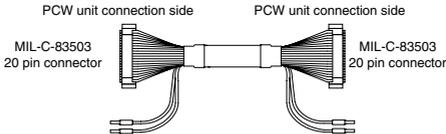
• Power supply lines

Symbol	Power supply lines	Applicable manifold solenoid valve kit
V	Yes	G kit
N	No	J kit

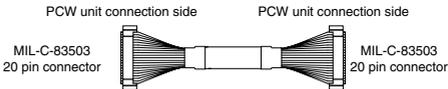
Refer to "Best Pneumatics No. 1" for details regarding applicable manifold solenoid valves.

## Dimensions

### With power lines

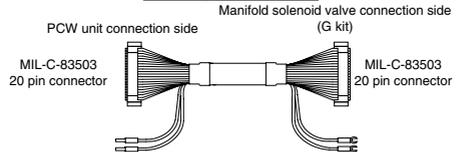


### Without power lines

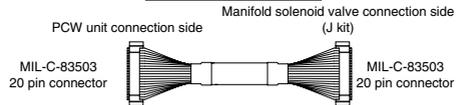


## Dimensions

### With power lines



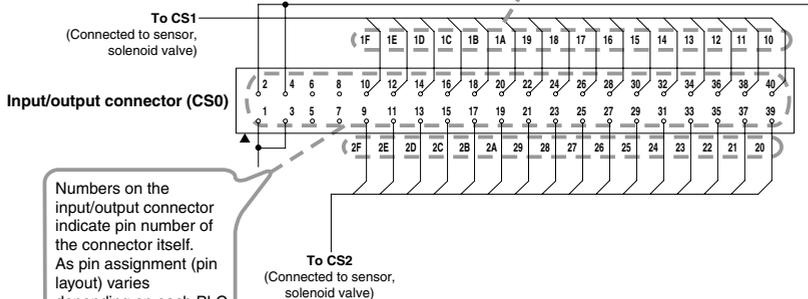
### Without power lines



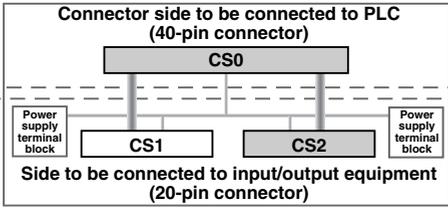
# Circuit Diagram Instructions

These are indicating addresses on the PLC I/O card. However indications vary dependant on each PLC, in this catalog, our common indications are as follows:

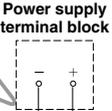
- 15 ▶ 6th point address out of 32 point
- 1F ▶ 16th point address out of 32 point



Numbers on the input/output connector indicate pin number of the connector itself. As pin assignment (pin layout) varies depending on each PLC I/O card, refer to the Circuit Diagram of this product and pin assignment of PLC I/O card when selecting.

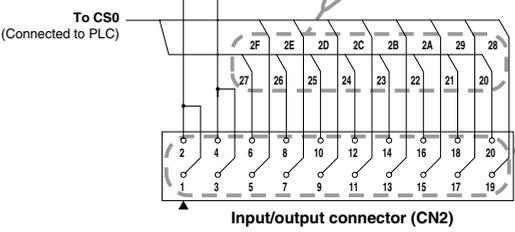


To wire the power supply: Connect 24V to (+) and 24G to (-) using the power cable and connector, or alternatively wire using your own cable. This connection offers 24 VDC power supply to each equipment.



These are indicating addresses on the PLC I/O card. However indications vary dependant on each PLC, in this catalog, our common indications are as follows:

- 25 ▶ 22nd address out of 32
- 2F ▶ 16th address out of 32



You can use this by connecting to the PCW unit together with the input/output unit, or by directly connecting to the manifold solenoid valve.



## Series PCW

# PC Wiring System Precautions 1

Be sure to read before handling. Refer to back page 1 for Safety Instructions.

### Operation

#### Warning

1. This product is intended for use in general FA equipment. Avoid using this product in machinery or equipment which directly affects human lives or where malfunction or failure can cause extended damage.
2. Do not disassemble this product for repair or rebuilding.

### Mounting, Adjustment & Wiring

#### Caution

1. Do not drop or bump.

Do not drop, bump or apply excessive impacts (500 m/s<sup>2</sup> or more) during handling. The PC wiring system unit can be damaged and connected equipment may malfunction.

2. Be careful of incorrect wiring.

Incorrect wiring may result in damage to connected equipment. The power supply will be short circuited if inputs and outputs are connected incorrectly for the 8 point/16 point input/output units following a branch unit.

3. Do not wire with power lines or high voltage lines.

To prevent the intrusion of noise and surge from power and high voltage lines into signal lines, perform wiring for the PC wiring system separately (separate conduits) from power lines and high voltage lines.

4. Confirm proper insulation of wiring.

Faulty insulation (crossed wiring, insulation defects between terminals, etc.) may result in damage to connected equipment, due to the application of excessive voltage or current flowing to the equipment.

5. Tighten screws with the proper tightening torque.

If tightened beyond the tightening torque range, the terminal block and screws may be damaged.

6. Avoid subjecting cables to repeated bending or pulling forces.

Wiring installations which result in repeated bending stress and pulling force on cables can cause broken wires.

7. Note that the disposition of I/O addresses differs for each PLC manufacturer.

General purpose label sets (applicable to all manufacturers) are included, which can be cut as needed and inserted into the terminal label holders.

8. Operate within the rated current.

The maximum current capacity for the power supply line on circuit boards of all units is 2.0 A. If the current passing through units such as the branch unit and input/output unit exceeds 2.0 A, connect the power supply line to the same power supply terminal and do not allow current to pass through the circuit board.

### Design & Selection

#### Caution

1. Confirm the specifications.

Use properly after confirming the specifications. Operation outside the range of specifications (voltage, ambient temperature, impact, etc.) can cause damage, malfunction or fire.

2. Ensure sufficient clearance for maintenance activities.

When designing an application, be sure to allow sufficient clearance for maintenance and inspections.

### Operating Environment

#### Caution

1. Absolutely do not use in an atmosphere with explosive gas.

The PC wiring system is not an explosion-proof construction. Never use in an atmosphere with an explosive gas since this may cause a serious explosion.

2. Do not use in an environment with temperature cycles.

Temperature cycles other than found with normal temperature changes may adversely affect the PC wiring system unit.

3. Do not use in an area where surges are generated.

If there are devices or equipment that generate large surges (magnetic lifter, high-frequency induction furnace, motor, etc.) near the connected equipment or PC wiring system unit, the connected equipment may deteriorate or be damaged. Consider appropriate measures for any source of power surges and take care with crossed lines.

4. Keep wire scraps and other extraneous material from getting inside this product.

This can cause fire, failure or malfunction, etc. Keep wire scraps and other extraneous material from getting inside this product.

5. Use with consideration for an operating environment with a protective structure.

Avoid using the PC wiring system unit where water or oil is splashed.

### Maintenance & Inspection

#### Caution

1. To prevent unintended malfunctioning, perform maintenance regularly.

Unintended malfunctioning and misoperation may result in an inability to ensure safety.

2. Do not touch the terminals or internal boards when current is being supplied.

Touching terminals or internal boards when current is being supplied may result in malfunctioning or damage with the PC wiring system unit or connected equipment, or electric shock.



## Series PCW

# PC Wiring System Precautions 2

Be sure to read before handling. Refer to back page 1 for Safety Instructions.

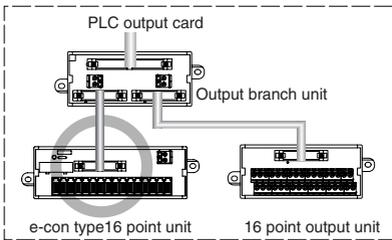
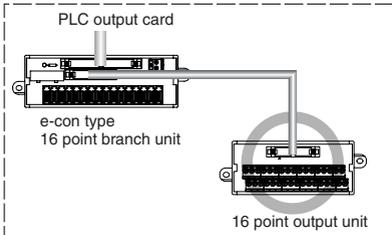
### Design & Selection

## ⚠ Warning

1. Only the output specification unit can be selected when combining each unit of Series PCW and Series PCW-EC.

Please note: If an input specification unit is used, this may cause damage and/or possible burnout of any connected equipment.

#### When used for PLC output card



#### When used for PLC input card

