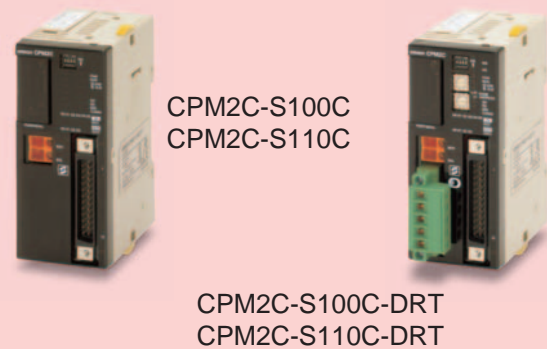


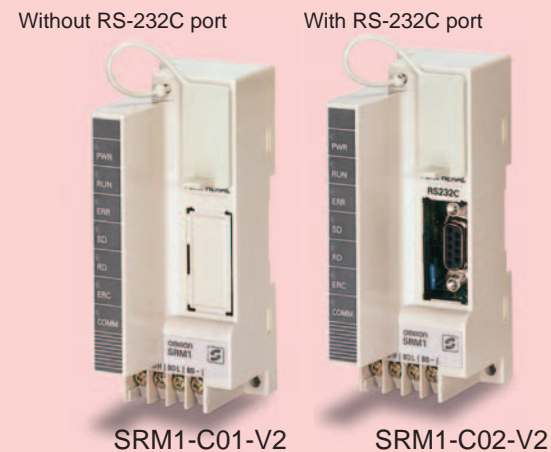
CompoBus/S Products

Master Units

CPU Units with CompoBus/S Master
Programmable Slaves



CompoBus/S Master Control Units



CompoBus/S Master Units

Master Unit with 256 points



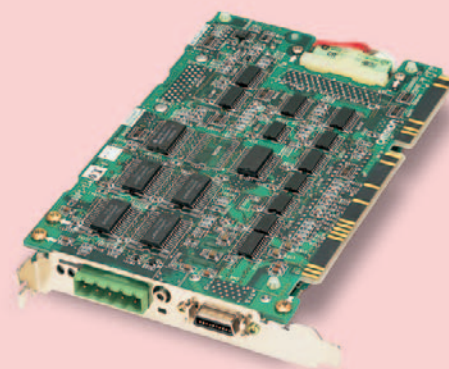
C200HW-SRM21-V1

Master Unit with 128 points



CQM1-SRM21-V1

SYSMAC Board with CompoBus/S Master Functions



C200PC-ISA 3-SRM

Slave Units

I/O Link Units

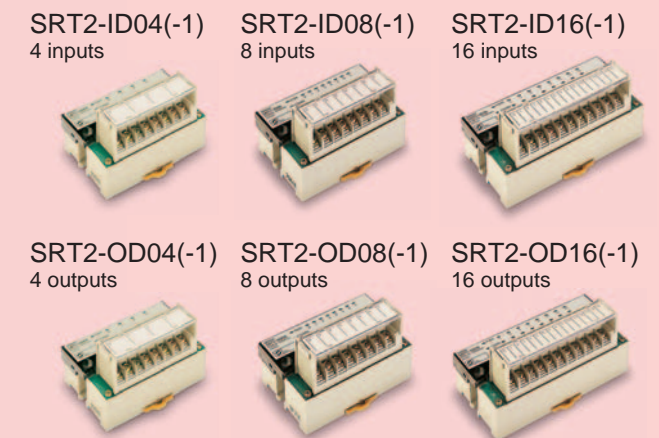


CPM2C-SRT21



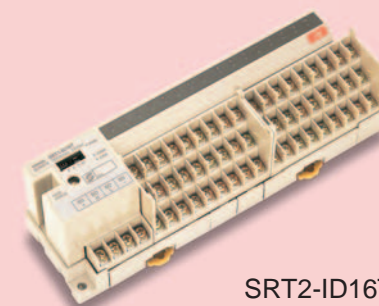
CPM1A-SRT21

Transistor Remote I/O Terminals (NPN/PNP Output)



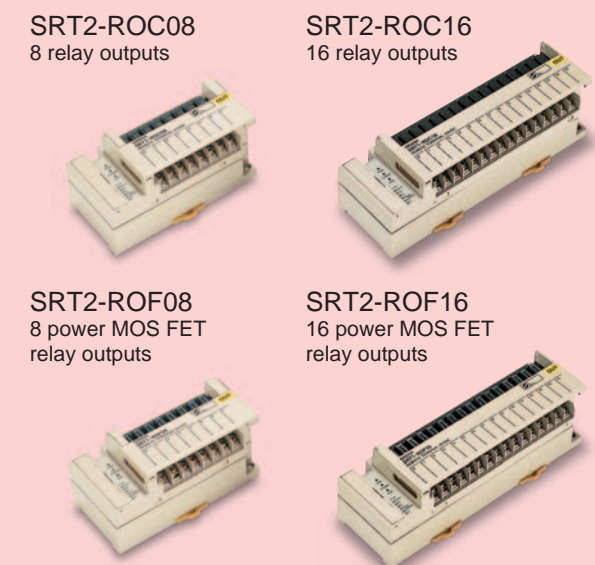
Note: SRT2-□□□□ indicates NPN models and SRT2-□□□□-1 indicates PNP models.

Transistor Remote I/O Terminals with 3-tier Terminal Block



SRT2-ID16T(-1)

Relay-mounted Remote I/O Terminals



Transistor Remote I/O Terminals with Connectors



SRT2-□D32ML(-1)
32 I/O points



SRT2-V□D08S(-1)
8 I/O points

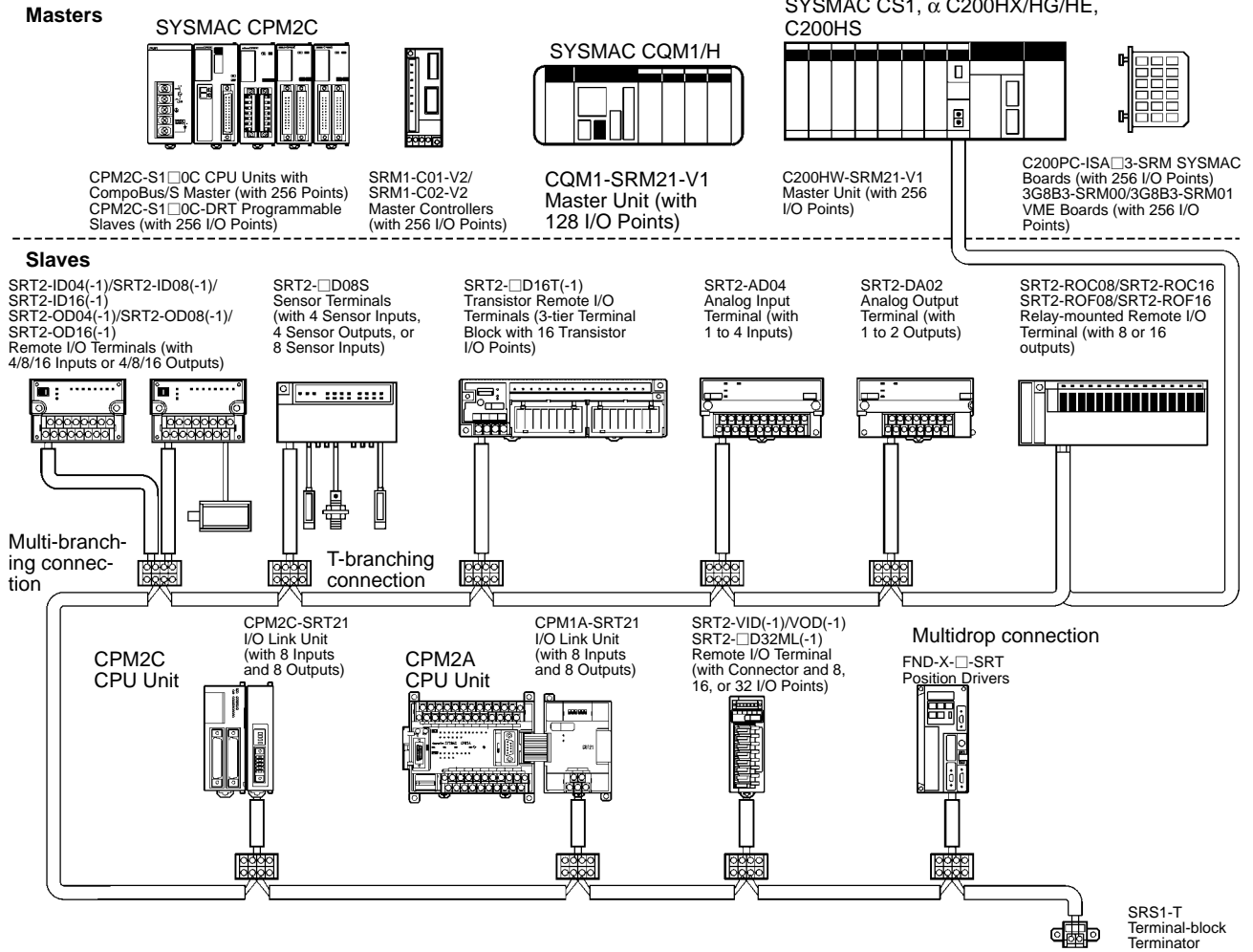


SRT2-V□D16ML(-1)
16 I/O points

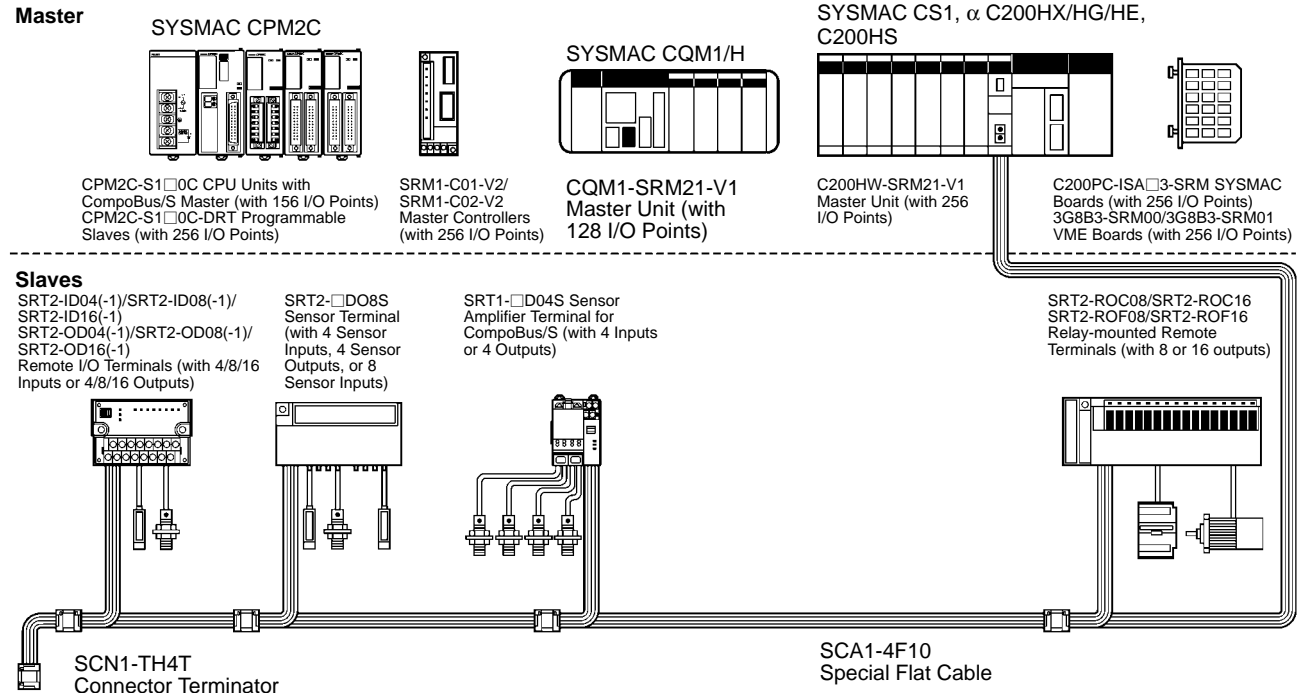
CompoBus/S Connection Examples

High-speed ON/OFF Bus Communications in Remote I/O Systems

Cable Connections



Special Flat Cable Connection



Note: Cabbire cable and flat cable cannot be used together.

Long-distance Communications Supported by SRT2 Models (Long-distance/High-speed Communications Selection)

- Ultra-compact at 80 x 48 x 50 (W x H x D) mm for 4-point and 8-point terminals and 105 x 48 x 50 (W x H x D) mm for 16-point terminals.
- Two independent power supplies can be used because the I/O terminals are insulated from the internal circuits.
- DIN track mounting and screw mounting are both supported.



Ordering Information

I/O classification	Internal I/O circuit common	I/O points	Rated voltage	I/O rated voltage	Model
Input	NPN (+ common)	4	24 VDC	24 VDC	SRT2-ID04
	PNP (– common)				SRT2-ID04-1
Output	NPN (– common)				SRT2-OD04
	PNP (+ common)				SRT2-OD04-1
Input	NPN (+ common)	8			SRT2-ID08
	PNP (– common)				SRT2-ID08-1
Output	NPN (– common)				SRT2-OD08
	PNP (+ common)				SRT2-OD08-1
Input	NPN (+ common)	16			SRT2-ID16
	PNP (– common)				SRT2-ID16-1
Output	NPN (– common)				SRT2-OD16
	PNP (+ common)				SRT2-OD16-1

Note: For more details about connections supported by the Master Unit, refer to page 25.

Specifications

■ Ratings

Inputs

Input current	6 mA max./point
ON delay time	1.5 ms max.
OFF delay time	1.5 ms max.
ON voltage	15 VDC min. between each input terminal and V
OFF voltage	5 VDC max. between each input terminal and V
OFF current	1 mA max.
Insulation method	Photocoupler
Input indicators	LED (yellow)

Outputs

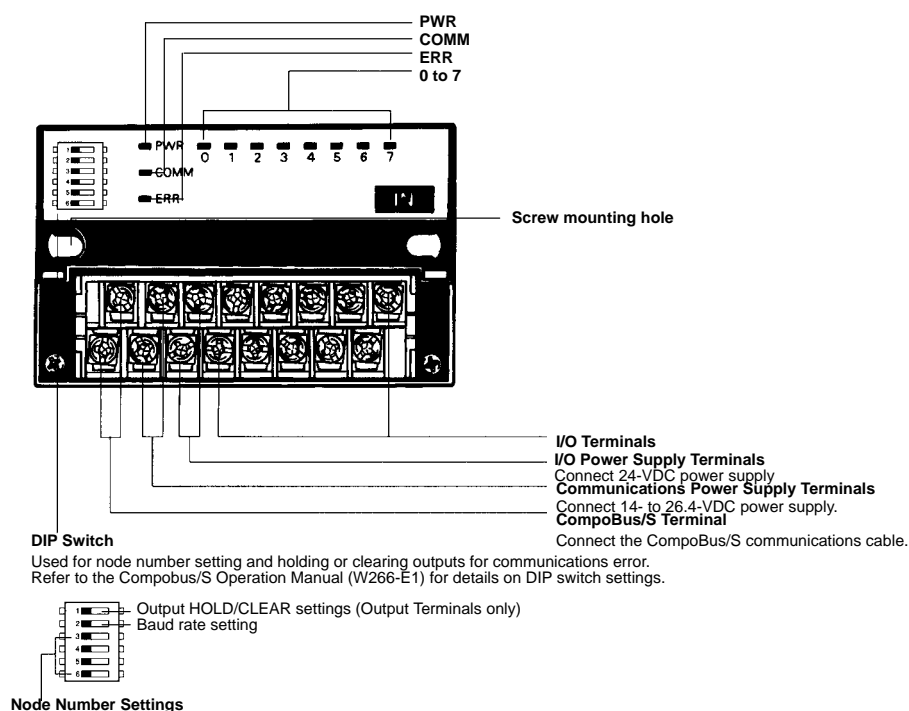
Rated output current	0.3 A/point
Residual voltage	0.6 V max.
Leakage current	0.1 mA max.
Insulation method	Photocoupler
Output indicators	LED (yellow)

■ Characteristics

Communications power supply voltage	14 to 26.4 VDC
I/O power supply voltage	24 VDC +10%/−15%
I/O power supply current	1 A max.
Current consumption (see note)	50 mA max. at 24 VDC
Connection method	Multi-drop method and T-branch method
Connecting Units	4-point and 8-point Terminals: 16 Input Terminals and 16 Output Terminals per Master 16-point Terminals: 8 Input Terminals and 8 Output Terminals per Master
Dielectric strength	500 VAC for 1 min (1-mA sensing current between insulated circuits)
Noise immunity	Conforms to IEC61000-4-4, 2 kV (power lines)
Vibration resistance	10 to 55 Hz, 1.5-mm double amplitude
Shock resistance	Malfunction: 200 m/s ² Destruction: 300 m/s ²
Mounting strength	No damage when 50 N pull load was applied for 10 s in all directions
Terminal strength	No damage when 50 N pull load was applied for 10 s
Screw tightening torque	0.6 to 1.18 N • m
Ambient temperature	Operating: 0°C to 55°C (with no icing or condensation) Storage: −20°C to 65°C (with no icing or condensation)
Ambient humidity	Operating: 35% to 85%
Weight	4-point and 8-point Terminals: 80 g max. 16-point Terminals: 110 g max.
Approved standards (4/8 points)	UL 508, CSA C22.2 No. 14

Note: The above current consumption is the value with all 4 and 8 and 16 points turned ON excluding the current consumption of the external sensor connected to the input Remote Terminal and the current consumption of the load connected to the output Remote Terminal.

Nomenclature



Indicators

Indicator	Display	Color	Meaning
PWR	Lit	Green	The communications power supply is ON.
	Not lit		The communications power supply is OFF.
COMM	Lit	Yellow	Normal communications
	Not lit		A communications error has occurred or the Unit is in standby status.
ERR	Lit	Red	A communications error has occurred.
	Not lit		Normal communications or the Unit is in standby status.
0 to 7	Lit	Yellow	The corresponding I/O signal is ON.
	Not lit		The corresponding I/O signal is OFF.

Output HOLD/CLEAR Mode

Mode	Pin 1	Setting
HOLD	ON	Output status is maintained.
CLEAR	OFF	Output status is cleared when a communications error occurs.

Note: 1. Pin 1 is factory-set to OFF.
2. This function is available to Output Terminals only.

Node Number Settings

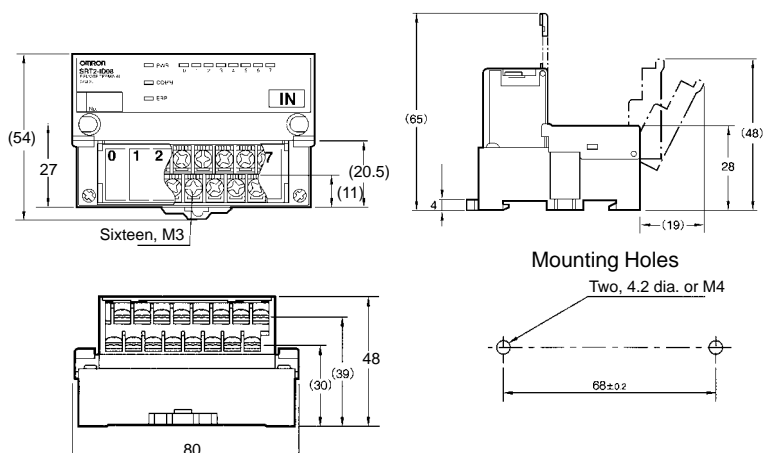
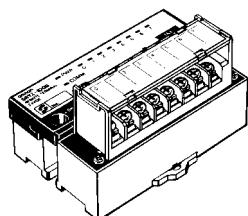
Node number	Pin 3	Pin 4	Pin 5	Pin 6
	8	4	2	1
0	OFF	OFF	OFF	OFF
1	OFF	OFF	OFF	ON
2	OFF	OFF	ON	OFF
3	OFF	OFF	ON	ON
4	OFF	ON	OFF	OFF
5	OFF	ON	OFF	ON
6	OFF	ON	ON	OFF
7	OFF	ON	ON	ON
8	ON	OFF	OFF	OFF
9	ON	OFF	OFF	ON
10	ON	OFF	ON	OFF
11	ON	OFF	ON	ON
12	ON	ON	OFF	OFF
13	ON	ON	OFF	ON
14	ON	ON	ON	OFF
15	ON	ON	ON	ON

Note: 1. The node number is factory-set to 0.
2. For node number settings, refer to the *CompoBus/S Operation Manual (W266-E1)*.

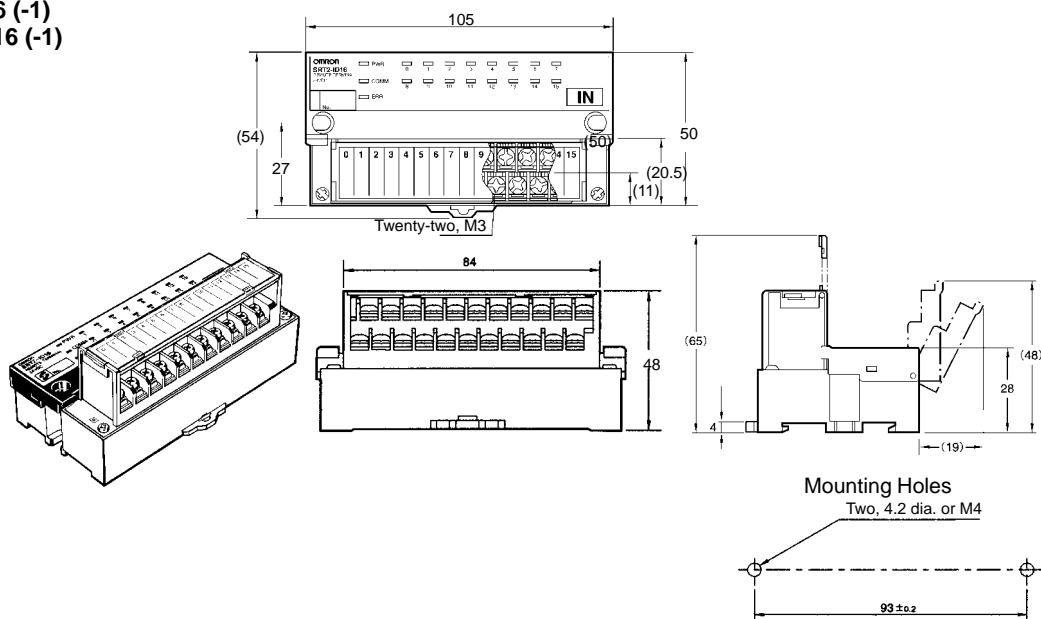
Dimensions

Note: All units are in millimeters unless otherwise indicated.

SRT2-ID04 (-1)
SRT2-OD04 (-1)
SRT2-ID08 (-1)
SRT2-OD08 (-1)



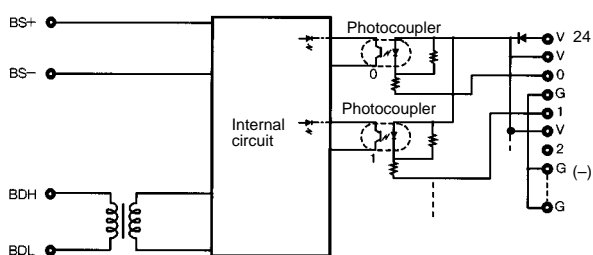
SRT2-ID16 (-1)
SRT2-OD16 (-1)



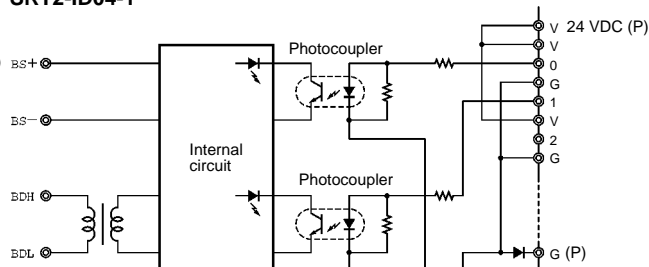
Installation

■ Internal Circuit Configuration

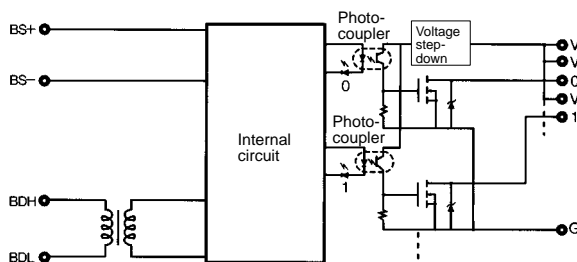
SRT2-ID04



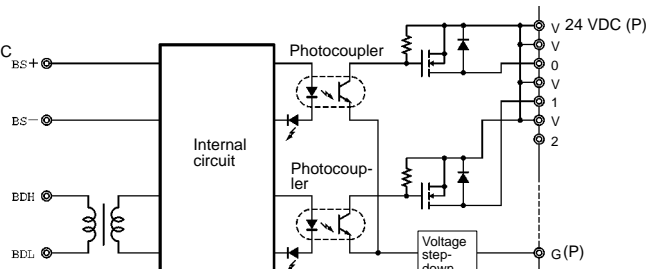
SRT2-ID04-1



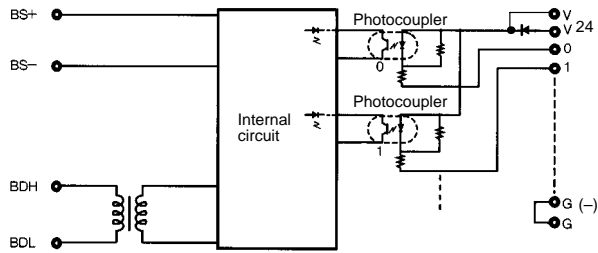
SRT2-OD04



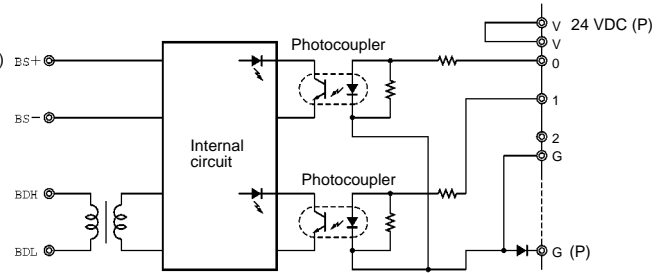
SRT2-OD04-1



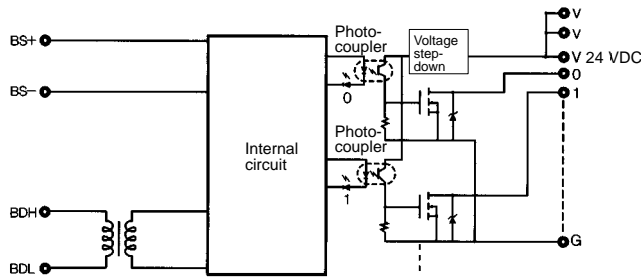
SRT2-ID08



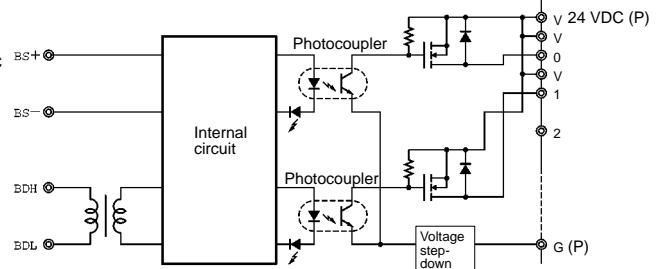
SRT2-ID08-1



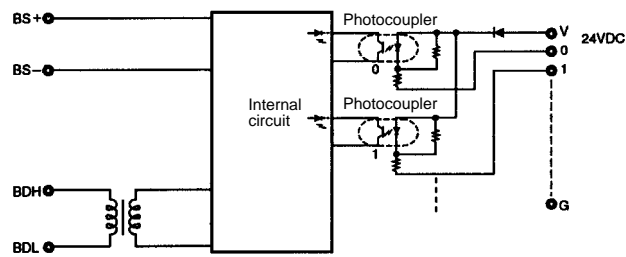
SRT2-OD08



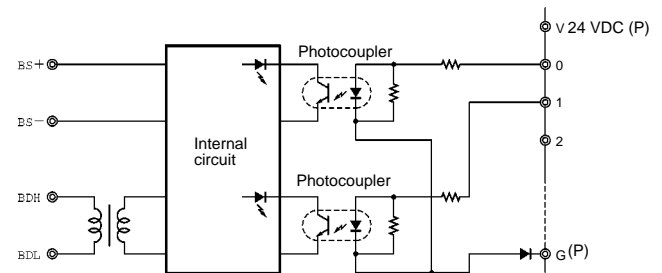
SRT2-OD08-1



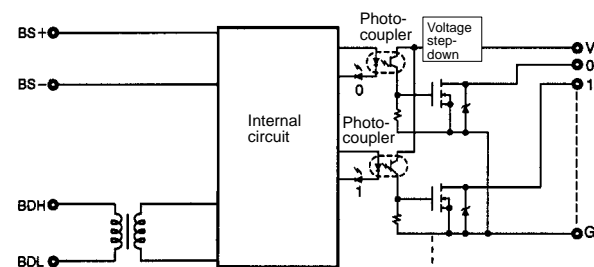
SRT2-ID16



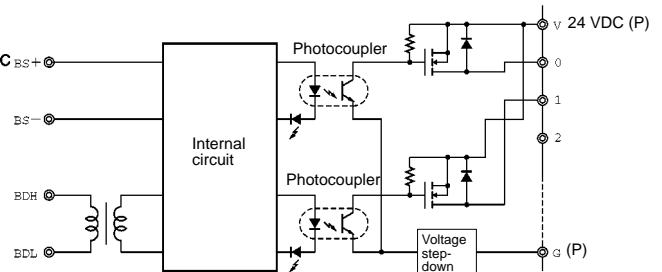
SRT2-ID16-1



SRT2-OD16



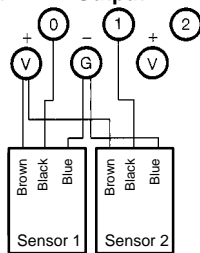
SRT2-OD16-1



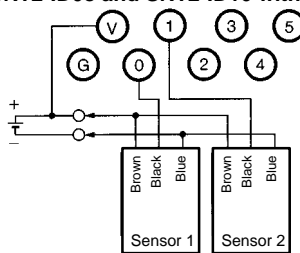
■ External Connections (NPN Models)

Input

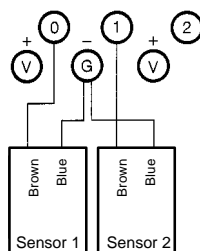
Three-wire Sensors SRT2-ID04 with NPN Output



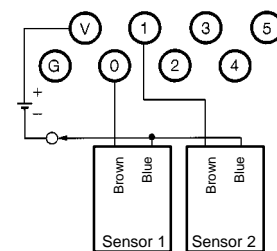
SRT2-ID08 and SRT2-ID16 with NPN Output



Two-wire Sensors SRT2-ID04

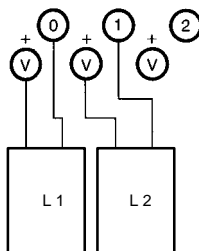


SRT2-ID08 and SRT2-ID16

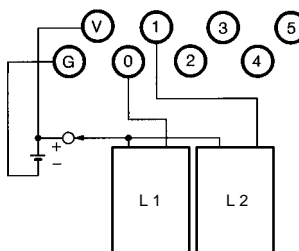


Output

SRT2-OD04



SRT2-OD08 and SRT2-ID16

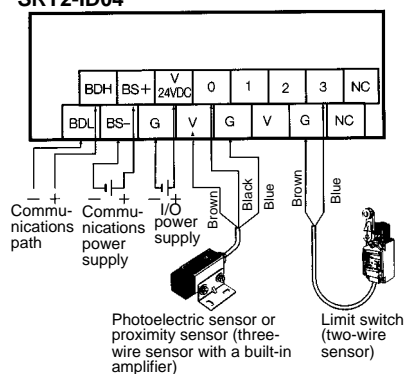


■ Terminal Arrangement and I/O Device Connection Example (PNP Models)

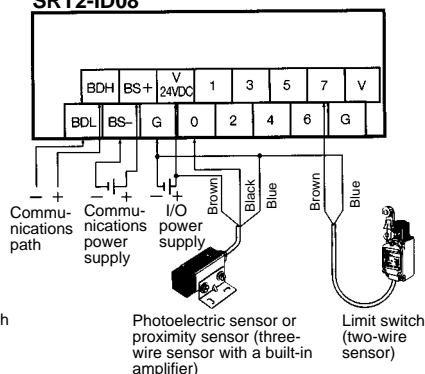
Note: The connections examples shown are for PNP models.

Input

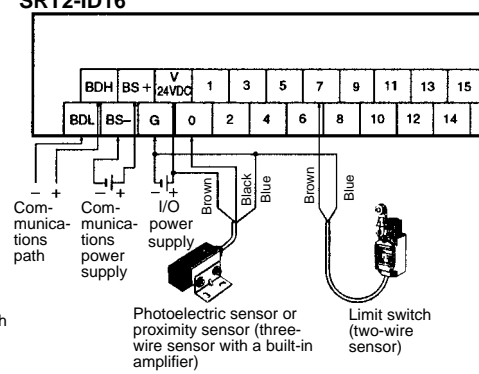
SRT2-ID04



SRT2-ID08

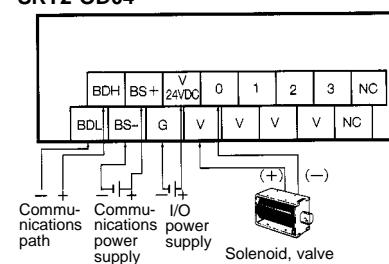


SRT2-ID16

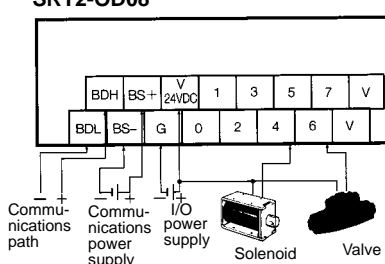


Output

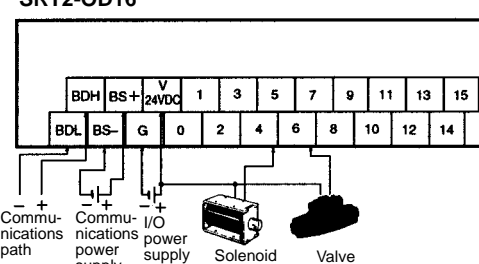
SRT2-OD04

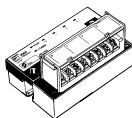
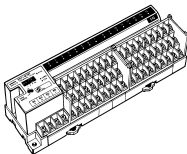
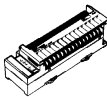


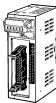


SRT2-OD08



SRT2-OD16



Product	Appearance	Model	Specifications	Standards
Transistor Remote I/O Terminals		SRT2-ID04 SRT2-ID04-1 SRT2-OD04 SRT2-OD04-1	4 NPN inputs (+ common) 4 PNP inputs (– common) 4 NPN outputs (– common) 4 PNP outputs (+ common)	U C CE (see note)
		SRT2-ID08 SRT2-ID08-1 SRT2-OD08 SRT2-OD08-1	8 NPN inputs (+ common) 8 PNP inputs (– common) 8 NPN outputs (– common) 8 PNP outputs (+ common)	
		SRT2-ID16 SRT2-ID16-1 SRT2-OD16 SRT2-OD16-1	16 NPN inputs (+ common) 16 PNP inputs (– common) 16 NPN outputs (– common) 16 PNP outputs (+ common)	
Transistor Remote I/O Terminals with 3-tier Terminal Block		SRT2-ID16T SRT2-ID16T-1 SRT2-MD16T SRT2-MD16T-1 SRT2-OD16T SRT2-OD16T-1	16 NPN inputs (+ common) 16 PNP inputs (– common) 16 NPN I/O points (inputs: + common; outputs: – common) 16 PNP I/O points (inputs: – common; outputs: + common) 16 NPN outputs (– common) 16 PNP outputs (+ common)	U C CE (see note)
Relay-mounted Remote I/O Terminals		SRT2-ROC08	8 relay outputs	U C CE (see note)
		SRT2-ROC16	16 relay outputs	
		SRT2-ROF08	8 power MOS FET relay outputs	
		SRT2-ROF16	16 power MOS FET relay outputs	
Transistor Remote I/O Terminals with Connectors		SRT2-ID32ML SRT2-ID32ML-1	32 NPN transistor inputs (+ common) 32 PNP transistor inputs (– common)	CE (see note)
		SRT2-OD32ML SRT2-OD32ML-1 SRT2-MD32ML SRT2-MD32ML-1	32 NPN transistor outputs (– common) 32 PNP transistor outputs (+ common) 32 NPN transistor I/O points (inputs: + common; outputs: – common) 32 PNP transistor I/O points (inputs: – common; outputs: + common)	
		SRT2-VID08S SRT2-VID08S-1 SRT2-VOD08S SRT2-VOD08S-1	8 NPN transistor inputs (+ common) 8 PNP transistor inputs (– common) 8 NPN transistor outputs (– common) 8 PNP transistor outputs (+ common)	U C CE (see note)
		SRT2-VID16ML SRT2-VID16ML-1 SRT2-VOD16ML SRT2-VOD16ML-1	16 NPN transistor inputs (+ common) 16 PNP transistor inputs (– common) 16 NPN transistor outputs (– common) 16 PNP transistor outputs (+ common)	
	---	SRT2-ATT01 SRT2-ATT02	Mounting hook A Mounting hook B	