

Connector Remote Terminal Blocks

SRT2-VID/VOD

Connectors Reduce Size of CompoBus/S Remote I/O Terminals

- SRT2 terminals support both highspeed communications (750 kbps) and long-distance communications (500 m) systems, switch selected
- Connectors simplify installation, reduce wiring time
- Eight-point sensor connector models and 16-point MIL connector models
- Saves space in control panels; measures just 90 H x 32 W x 55 D mm (3.54 x 1.26 x 2.17 inches)
- Mounts on DIN rail track; side- and surface-mounting brackets optional



Ordering Information

■ CONNECTOR TERMINAL BLOCKS

I/O classification	Internal I/O circuit common	I/O points	I/O connection method	Part number
Digital input	NPN (+ common)	8	Sensor connector	SRT2-VID08S
	PNP (- common)		(Sensor Connectors are required for each I/O point.	SRT2-VID08S-1
Digital output	NPN (- common)		Order them separately below.)	SRT2-VOD08S
	PNP (+ common)			SRT2-VOD08S-1
Digital input	NPN (+ common)	16	MIL ribbon style connector	SRT2-VID16ML
	PNP (- common)			SRT2-VID16ML-1
Digital output	NPN (- common)			SRT2-VOD16ML
	PNP (+ common)			SRT2-VOD16ML-1

Note: For details about connecting the SRT2-VID or SRT2-VOD to the Master Module, refer to CompoBus/S Operation Manual (W266).

■ ACCESSORIES

Item	Description	Part number
Sensor connectors*	For cable conductor sizes 0.3 to 0.5 mm ²	XS8A-0441
(Order one for each I/O point)	For cable conductor sizes 0.14 to 0.2 mm ²	XS8A-0442
Mounting brackets	Side-mounting DIN rail bracket	SRT2-ATT01
	Surface mounting bracket	SRT2-ATT02

Note: *Refer to the Cable Conductor Size Calculation Formula in the *Precautions* section.

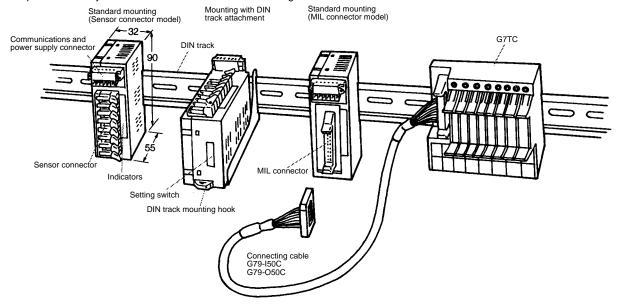
■ APPLICABLE CABLES

Connectable product	Product family	Cable appearance	Cable length	Part number
I/O block	G7TC-OC16 G7TC-OC08 G7TC-ID16-5 G7TC-IA16-5 G7VC Series G70A Series G70D Series		0.5 m (1.64 ft)	G79-O50C
	G7TC-ID16 G7TC-IA16		0.5 m (1.64 ft)	G79-I50C

Application Examples

Vertical or horizontal DIN track mounting according to the available space is possible.

Saves space and easily connects to other devices without wiring effort.



Specifications —

■ RATINGS

Inputs

Item	SRT2-VID08S SRT2-VID08S-1	SRT2-VID16ML SRT2-VID16ML-1	
Input current	6 mA max./point at 24 V, 3 mA max./point at 17	7 V	
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: NPN. Between each input and G: PNP.)		
OFF voltage	5 VDC max. (Between each input terminal and V: NPN. Between each input and G: PNP.)		
OFF current	1 mA max.		
Insulation method	Photocoupler		
Maximum number of inputs	8	12	
Number of circuits	8 points/common, 1 circuit	16 points/common, 1 circuit	

Outputs

Item	SRT2-VID08S SRT2-VID08S-1	SRT2-VID16ML SRT2-VID16ML-1
Rated output current	0.3 A/point	0.3 A/point, 2 A common (See Note.)
Residual voltage	1.2 V max.	
ON delay time	0.5 ms max.	
OFF delay time	1.5 ms max.	
Leakage current	0.1 mA max.	
Insulation method	Photocoupler	
Number of circuits	8 points/common, 1 circuit	16 points/common, 1 circuit

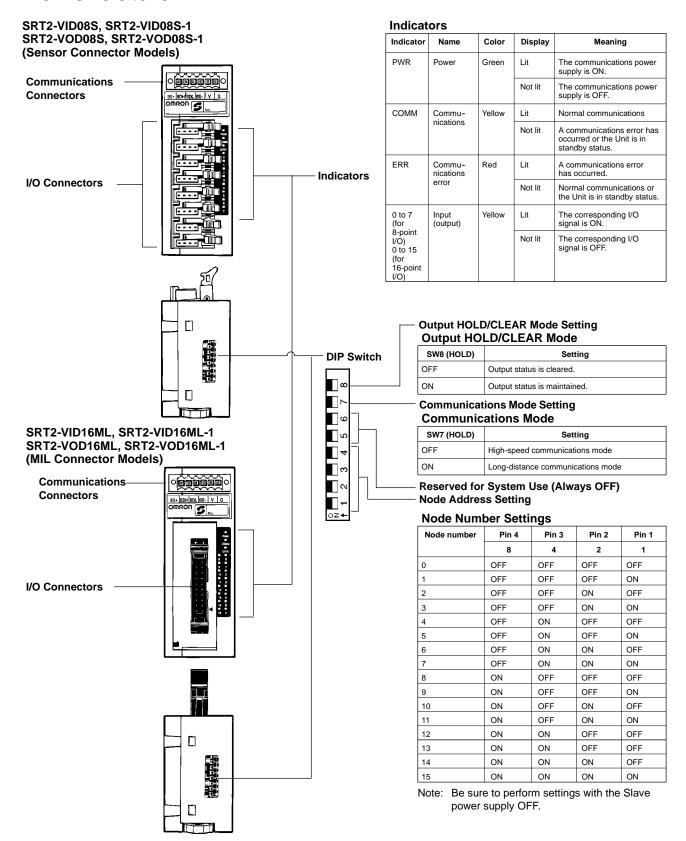
Note: When using V/G terminals in an MIL connector, ensure that the current per terminal for the V/G terminals does not exceed 1 A.

■ CHARACTERISTICS

Communications power supply voltage	14 to 26.4 VDC	
I/O power supply voltage	20.4 to 26.4 VDC (24 VDC +10%/ _{-15%})	
I/O power supply current	Sensor connector: 2.4 A max., MIL ribbon style connector: 2.0 A max.	
Current consumption (See Note)	50 mA max. at 24 VDC	
Noise immunity	±1,500 V with a pulse width of 100 ns to 1 μs and 1 ns onset (tested with noise simulator)	
Vibration resistance	10 to 150 Hz, 1.0 mm double amplitude or 70 m/s ² (50 m/s ² for SRT2-ATT02)	
Shock resistance	200 m/s ²	
Dielectric strength	500 VAC between insulated circuits	
Ambient temperature	Operating: -10°C to 55°C (14°F to 131°F) with no icing or condensation Storage: -25°C to 65°C (-13°F to 149°F) with no icing or condensation	
Ambient humidity	Operating: 25% to 85% with no condensation Storage: 25% to 85%	
Mounting strength	No damage when 100 N pull load was applied in all directions (40 N load for SRT2-ATT02)	
Terminal strength	No damage when the following loads were applied: Communications connector: 100 N Sensor connector: 40 N MIL connector: 100 N	
Screw tightening torque	Communications connector: 0.25 N • m	
Node address setting	Settings made at DIP switch (set before supplying power for Slave communications)	
Weight	Approx. 75 g max.	

Note: The above current consumption is the value with all 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 -

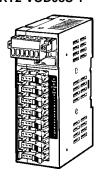


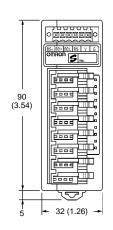
Dimensions

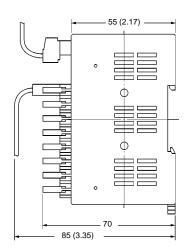
Unit: mm (inch)

■ CONNECTOR TERMINAL BLOCKS

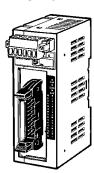
SRT2-VID08S SRT2-VID08S-1 SRT2-VOD08S SRT2-VOD08S-1

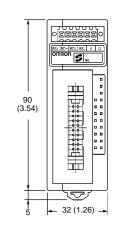


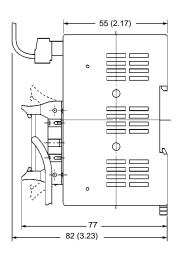




SRT2-VID16ML SRT2-VID16ML-1 SRT2-VOD16ML SRT2-VOD16ML-1

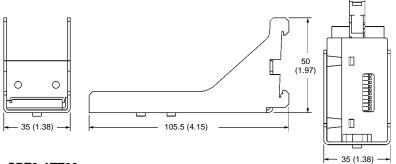


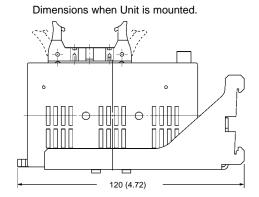




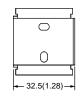
■ MOUNTING BRACKETS

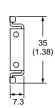
SRT2-ATT01





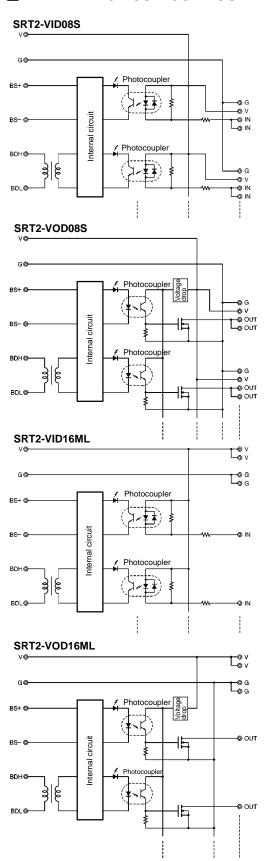
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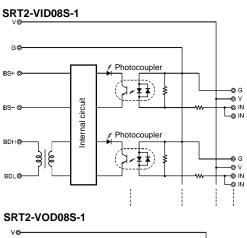


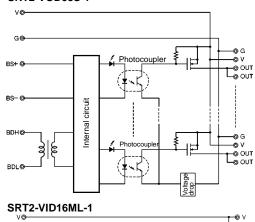


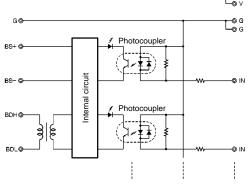
Installation -

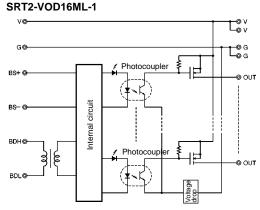
■ INTERNAL CIRCUIT CONFIGURATION



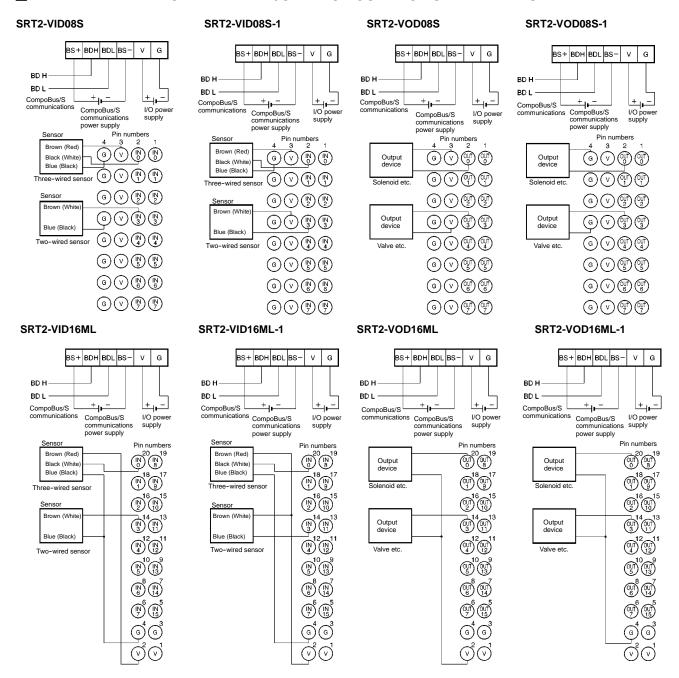








■ TERMINAL ARRANGEMENT AND I/O DEVICE CONNECTION EXAMPLES



Note: 1. V terminals and G terminals are respectively connected internally.

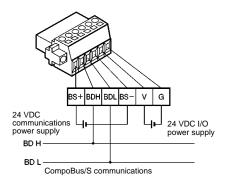
When supplying power for I/O from communications connectors, power can be supplied to the sensor output devices from V and G terminals.

2. When using an inductive load (solenoid, valve etc.), either use one with an internal reverse electromotive force absorption diode or attach a diode externally.

Precautions

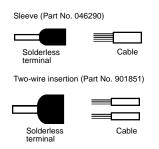
Refer to the CompoBus/S Operation Manual (W266) before using the Unit.

■ COMMUNICATIONS CONNECTOR PIN ARRANGEMENT



The following solderless terminals are recommended.

• Manufacturer: Weidmuller

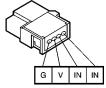


The following product is a dedicated tool.

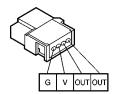
Manufacturer: Weidmuller PZ1.5 Crimper (Part No. 900599)

■ SENSOR CONNECTOR PIN ARRANGEMENT

SRT2-VID08S, SRT2-VID08S-1



SRT2-VOD08S, SRT2-VOD08S-1



Model	Cable conductor size
XS8A-0441	0.3 to 0.5 mm ²
XS8A-0442	0.14 to 0.2 mm ²

Note: The XS8A-0441 or XS8A-0442 Connector is not provided with the SRT2-VID or SRT2-VOD. Place an order for the connector separately.

Cable Conductor Size Calculation Formula

Calculate the cable conductor size as follows.

The following information is given on each sensor cable:

Cable dia. (Number of conductors/Conductor dia.)

Conductor size (mm²) = (Conductor dia./2)² $\times \pi \times \text{Number of conductors}$

Example: E3S-A 4 dia. (18/0.12)

Conductor size (mm²) = $(0.12/2)^2$ x 3.14 x 18 ≈ 0.20

The conductor size is 0.2 mm². Therefore, use the XS8A-0442.

■ MIL CONNECTOR PIN ARRANGEMENT

SRT2-VID16ML, SRT2-VID16ML-1

Function	Pin No.] _	_		
IN0	20	<u> </u>		Function	Pin No.
IN1	18		+	19	IN8
IN2	16		\vdash	17	IN9
IN3	14		 	15	IN10
IN4	12		+	13	IN11
IN5	10		\vdash	11	IN12
IN6	8		14	9	IN13
			<u> </u>	7	IN14
IN7	6		<u> </u>	5	IN15
G	4			3	G
V	2	\vdash		1	V
				1'	

SRT2-VOD16ML, SRT2-VOD16ML-1

Function	Pin No.			I
OUT0	20		Function	Pin No.
OUT1	18	i + 	19	OUT8
OUT2	16	i	17	OUT9
OUT3	14		15	OUT10
OUT4	12	H	13	OUT11
OUT5	10	L' 	11	OUT12
OUT6	8		9	OUT13
OUT7	6		7	OUT14
			5	OUT15
G	4		3	G
V	2		1	V

Note: 1. No cable connector is provided. Use the G79 Series cables below.

Applicable Connector Cables

G79-O50C

G79-O25C

G79-I50C

G79-I25C

2. Refer to the Ordering Information table for applicable Cables.

SRT2-VID/VOD — SRT2-VID/VOD

NOTE: DIMENSIONS SHOWN ARE IN MILLIMETERS. To convert millimeters to inches divide by 25.4.

OMRON ELECTRONICS, INC.
One East Commerce Drive
Schaumburg, IL 60173
1-800-55-OMRON

OMRON CANADA, INC. 885 Milner Avenue Scarborough, Ontario M1B 5V8 416-286-6465