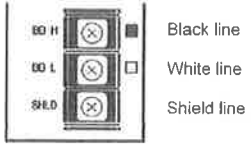
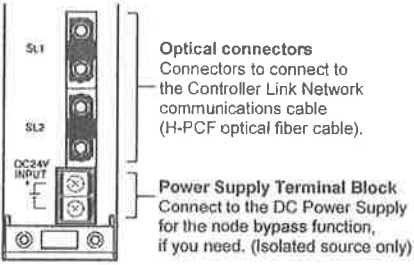
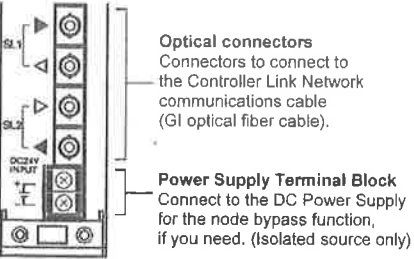


# Wiring Diagram

<p>CS1W-CLK23/CLK21(-V1) CJ1W-CLK23/CLK21(-V1) Wire TYPE</p> <p><b>Terminal Arrangement</b></p> <p>Terminal block for the communications cable Terminals to connect the Controller Link Network communications cable (twisted-pair cable).</p>  <p>Black line White line Shield line</p>	<p>CS1W-CLK13/CLK12(-V1) Optical Ring TYPE (H-PCF Cable)</p> <p><b>Terminal Arrangement</b></p>  <p>Optical connectors Connectors to connect to the Controller Link Network communications cable (H-PCF optical fiber cable).</p> <p>Power Supply Terminal Block Connect to the DC Power Supply for the node bypass function, if you need. (Isolated source only)</p>	<p>CS1W-CLK53/CLK52(-V1) Optical Ring TYPE (GI Cable)</p> <p><b>Terminal Arrangement</b></p>  <p>Optical connectors Connectors to connect to the Controller Link Network communications cable (GI optical fiber cable).</p> <p>Power Supply Terminal Block Connect to the DC Power Supply for the node bypass function, if you need. (Isolated source only)</p>
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## Precautions for Compliance with UL Standards and CSA Standards

### Notice to Users of the SYSMAC CS/CJ-series Controller Link Units in USA and Canada

Please follow the following installation information instead of the general information in the instruction manuals in order to use the product by the certified conditions of UL and CSA when the products are installed in USA and Canada. These conditions are according to the National Electrical Code in USA and the Canadian Electrical Code and may vary from information given in the product manuals or safety precautions.

- Wiring
  - Do not use crimp terminal for wiring. Tighten the screw directly on the solid wire.
  - Do not insert more than one wire in one Power supply terminal for both Optical Ring TYPE units.
  - Do not insert more than two wires in one terminal of the communications cable for the Wire TYPE unit.
  - Tightening torque: 7 Lb In. (0.8N·m) for the all terminals excluding CS1W-CLK52 (-V1).
  - Tightening torque: 4.5 Lb In. (0.5N·m) for CS1W-CLK52 (-V1).
  - Use the designated Communications cables for the Wire TYPE unit.
- Environment
  - Surrounding Air Temperature: 55°C

● Designated Communications Cables (Twisted-pair Cables) for the Wire TYPE unit

Model	Manufacturer	Remarks
#9207	Belden	USA company
L12Y-FCY2 x 0.56 qmm	Kromberg & Schubert, Komtec Department	German company
1 x 2 x AWG - 20PE + Tr.CUSN + PVC	Draka Cables Industrial	Spanish company
ESVC 0.5 x 2 C-1362	Bando Densen Co	Japanese company
ESNC 0.5 x 2 C-99-087B	Nihon Electric Wire & Cable Co	Japanese company

● Optical Fiber Cables with Connectors for the Optical Ring TYPE (H-PCF Cable) unit

	Length	Model	Manufacturer
Optical Fiber Cable Connectors: S3200-COCF2071 to S3200-COCF2071 (*1)	2 m	S3200-CN201-20-20	OMRON
	5 m	S3200-CN501-20-20	
	10 m	S3200-CN102-20-20	
	15 m	S3200-CN152-20-20	
	20 m	S3200-CN202-20-20	
	Over 20 m	S3200-CN-20-20 (Specify length (m) when ordering.)	
Optical Fiber Cable Connectors: S3200-COCF2071 to S3200-COCF2571 (*1)	2 m	S3200-CN201-20-25	
	5 m	S3200-CN501-20-25	
	10 m	S3200-CN102-20-25	
	15 m	S3200-CN152-20-25	
	20 m	S3200-CN202-20-25	
	Over 20 m	S3200-CN-20-25 (Specify length (m) when ordering.)	
Optical Fiber Cable Connectors: S3200-COCF2571 to S3200-COCF2571 (*1)	2 m	S3200-CN201-25-25	
	5 m	S3200-CN501-25-25	
	10 m	S3200-CN102-25-25	
	15 m	S3200-CN152-25-25	
	20 m	S3200-CN202-25-25	
	Over 20 m	S3200-CN-25-25 (Specify length (m) when ordering.)	

\*1. S3200-COCF2071 Full-lock connector for crimp-cut cable  
S3200-COCF2571 Half-lock connector for crimp-cut cable

● Optical Fiber Cables with Connectors for the Optical Ring TYPE (GI Cable) unit

Name	Model	Size	Manufacturer
50/125 μm AGF Cable Optical two-core cable with connectors on both ends	TG05-MM/DL NM2-C-V	2 × CSV-EG-5/30	Sumitomo Electric Industries
62.5/125 μm AGF Cable Optical two-core cable with connectors on both ends	TG06-MM/DL NM2-C-V	2 × CSV-EG-6/35	

The value "D" in the model number indicates the stripped cord length, i.e., the distance from the end of the sheathing to the tip of the Optical Connector. The standard value for "D" is 0.2 m. The value "L" in the model number indicates the total length of the cable (m) from the tip of one Optical Connector to the tip of the other Optical Connector.