

Specifications



CC-Link IE TSN - CC-Link bridge module FA3-BR1TC

- Devices missing in the CC-Link IE TSN lineup can be controlled.
- Gradual replacement to CC-Link IE TSN is possible.
- By using the existing devices and wiring as they are, costs can be reduced and the duration of work can be shortened.
- The amount of plastic materials is reduced by reusing the devices.
- Data can be collected from both new and old lines and equipment to verify the data using Mitsubishi Electric MELSOFT Gemini.
- Operation data of the old lines and equipment can be used for the new lines and equipment.

Specifications

Item		Description		
External interface	CC-Link IE TSN communication part	RJ45 connector × 2		
	CC-Link communication part	Terminal block for the CC-Link system (2-piece spring clamp terminal block)		
	Module power supply part	Terminal block for module power supply and FG (2-piece spring clamp terminal block)		
Applicable DIN rail		TH35-7.5Fe, TH35-7.5Al (compliant with JIS C 2812)		
Connection cable and wire	CC-Link IE TSN	1Gbps	An Ethernet cable that meets the 1000BASE-T standard (straight/crossover) Category 5e or higher (double-shielded, STP) cable	
		100Mbps	An Ethernet cable that meets the 100BASE-TX standard (straight/crossover) Category 5 or higher (double shielded, STP) cable	
	CC-Link		Ver. 1.10-compatible CC-Link dedicated cable (FA-CBL200PSBH, FANC-110SBH, and CS-110 manufactured by Mitsubishi Electric)	
			Terminal slot size of the terminal block: 2.4mm × 1.5mm	
	Module power supply and FG	Wire size	Wire size	0.14 to 1.5mm ² (24 to 16 AWG)
			Type	Stranded or solid wire
Material			Copper	
Temperature rating			75°C or higher	
Module power supply	Voltage	24VDC (ripple ratio: 5% or less) (Allowable voltage range: 20.4 to 28.8VDC)		
	Current	150mA		
External dimensions	Height (H)	105mm		
	Width (W)	40mm		
	Depth (D)	70mm (not including a terminal block) 86mm (including a terminal block)		
Weight		180g		

Network specifications

Item		Description	
CC-Link IE TSN	Communication speed	1Gbps/100Mbps	
	Station type	Remote station	
	Certification class	Class B Ver. 2.0	
	Topology	Line topology/Star topology/Mixture of star and line topology/Ring topology	
	Number of link points	RX/RY 3840 points (480 bytes)/3840 points (480 bytes) RWw/RWr 960 points (1920 bytes)/960 points (1920 bytes)	
CC-Link	Transmission speed	Select from 156kbps, 625kbps, 2.5Mbps, 5Mbps, or 10Mbps.	
	CC-Link version	Ver. 2.00	
	Station type	Manager station	
	Maximum number of connectable stations	64 stations	
	Maximum number of link points	CC-Link Ver. 1	Remote I/O (RX/RY) 2048 points (256 bytes)/2048 points (256 bytes) Remote register (RWw/RWr) 256 points (512 bytes)/256 points (512 bytes)
		CC-Link Ver. 2	Remote I/O (RX/RY) 3584 points (448 bytes)/3584 points (448 bytes) Remote register (RWw/RWr) 816 points (1632 bytes)/816 points (1632 bytes)
	Station-to-station cable length (minimum station-to-station distance)	20cm	
	Maximum overall cable length (maximum transmission distance)	156kbps: 1200m 625kbps: 900m 2.5Mbps: 400m 5Mbps: 160m 10Mbps: 100m	

Version that supports CC-Link IE TSN

Class	Support
Class A Ver. 2.0	×
Class B Ver. 2.0	○

CC-Link connection specifications

Send station	Receive station						
	CC-Link Ver. 2.00			CC-Link Ver. 1.10			
Manager station	Local station	Intelligent device station	Remote device station	Local station	Intelligent device station	Remote device station	Remote I/O station
CC-Link IE TSN - CC-Link bridge module	×	×	○*1	×	×	○*2	○*2

*1: Extended cyclic communication

*2: Cyclic communication