

TECHNICAL BULLETIN

[1/3]

HIME-T-P-0202A

Notice of production discontinuation: Options/Accessories for programmable controller MELSEC-F series

■Date of Issue

May 2019

■Relevant Models

FX-485PC-IF, FX-485PC-IF-SET, F2-232CAB, F2-232CAB-2, FX-232CAB-2, F-12BL, F-20BL, F-40BL

Thank you for your continued support of programmable controller MELSEC-F series.

At this time we would like to announce that the production of Options/Accessories for MELSEC-F Series micro PLC will be discontinued.

1 Applicable models and the schedule for discontinuation

Models for which production will be discontinued		Transition to build-to-order	Order acceptance deadline	Production discontinuation	Repair acceptance period*2
Product	Model	system			
RS-232C/RS-485 conversion interface	FX-485PC-IF	October 31, 2019	February 29, 2020*1	March 31, 2020	March 31, 2027 (For 7 years after product discontinuation)
RS-232C/RS-485 conversion interface (with FX-20P-PS type power supply unit)	FX-485PC-IF-SET				
RS-232C cable for personal computers	F2-232CAB				-
	F2-232CAB-2				
	FX-232CAB-2				
Battery	F-12BL				
	F-20BL				
	F-40BL	1			

^{*1} We will stop accepting orders at the end of February 2020, and discontinue production when the production for accepted orders is finished

2 Reason for discontinuing production

It is difficult to obtain certain parts used in production, and difficult to maintain the production system.

3 Substitute model

No substitute model available.

Regarding RS-232C/RS485 conversion interface, please consider replacing with the commercially available RS-422/RS-485 \$\Rightarrow\$ RS-232C for long distance communication. Please refer to "Page 2 Commercially available RS-422/RS-485 <=> RS-232C converter (connectable product) for long distance communication" for more information.

We kindly ask you to plan early for replacement to the commercially available recommended connectable models described below.

^{*2} Please note that we cannot accept requests for repair if replacement parts are no longer available even within the repair acceptance period.

4 Commercially available RS-422/RS-485 <=> RS-232C converter (connectable product) for long distance communication

We will introduce a commercially available RS-422/RS-485 \Leftrightarrow RS-232C converter (connectable product) for long distance communication.

However, please contact the manufacturer for the production status of the product.

Connectable product: Connectable product refers to the products which satisfies the interface specifications with our products.

However, the operation is not evaluated at Mitsubishi Electric. Before use, please verify from the customer's side that there is no problem in the operation of the target system. Also, please use it in accordance with the specifications (standards) of the product (connectable product).

4.1 RS-422/RS-485 <=> RS-232C converter for long distance communication

Category	Manufacturer	Model Name	Remarks
Connectable products	Diatrend Corporation	DIFU-RS24A	RS-422/RS-485 ⇔ RS-232C converter for long distance communication
Connectable products	Diatrend Corporation	DCNV-AD7	24 V DC output 100 V AC power supply for DIFU-RS24A

4.2 Specification comparison

Item		FX-485PC-IF(-SET) (Manufactured by Mitsubishi Electric) DIFU-RS24A (Manufactured by Corporation) + DCNV-AD7 (Manufactured by Diatrend Corporation)		
Withstand voltage		500 V AC for 1 min (between all terminals and the case)	ESD RMS of 16 kV (All signals)	
Insulation Resistance		$5~\text{M}\Omega$ or higher by 500 V DC insulation resistance tester (Between all terminals and the case)	-	
Power supply voltage		5 V DC	DIFU-RS24A: 12 to 30 V DC	
Transmission RS-232C		Compliant to RS-232C	Compliant to RS-232C	
standard	RS-485	Compliant to RS-485, RS-422	Compliant to RS-232C	
Communication method		Full duplex communication method	Full/half duplex communication method	
Transmission RS-232C		Max. 15 m	Max. 15 m	
distance	RS-485	Max. 500 m (Max. 50 m if FX-**-485-BD is included in the system)	Max 1.2 km	
Transmission speed		300 to 19,200 bps	Max. 230.4 kbps	
Isolation		Photocoupler isolation and transformer isolation between RS-232C port and terminal for RS-485	Photocoupler isolation on each signal (2 kV (power supply and signal))	
Personal computer side	Format	RS-232C	RS-232C	
	Shape	D-SUB 25P (female)	D-SUB 9P (female)*1*2	
Programmable	Format	RS-422/RS-485	RS-422/RS-485 (switchable with a dip switch)	
controller side	Shape	5-point terminal block	9-point terminal block	
Conforming standard*3		CE	CE	
Operating temperature range		0 to 55℃	<difu-rs24a> -20 to 60°C</difu-rs24a>	<dcnv-ad7> 0 to 40°C</dcnv-ad7>
Storage temperature range		-20 to 70℃	<difu-rs24a> -20 to 85℃</difu-rs24a>	<dcnv-ad7> -20 to 80°C</dcnv-ad7>
Accessories		5 V DC Power supply (FX-20P-PS type)*4	D-SUB 9P (male) for RS-232C ⇔ D-SUB 9P (female) cable (3 m)	
Termination resistance		110 Ω and 330 Ω (external)	120 Ω only. (enabled with a dip switch)	
Maximum number of connectable units		Max. 16 units	Max. 32 units	
Power supply unit ^{*5}	Power supply voltage	100/120 V AC +10%, -15% 50/60 Hz	100 to 240 V AC ±10% 50/60 Hz	
	Current consumption	Max. 270 mA	Max. 300 mA	
	Output Voltage	5 V DC ±5%	24 V DC ±5%	

HIME-T-P-0202A

- *1 For customers using the D-SUB 25P as the connection destination of FX-485PC-IF, please consider the following cable as well. Cable for RS-232C <D-SUB 9P (male) \Leftrightarrow D-SUB 25P (male)>: DAC01R2VD (Manufactured by Diatrend Corporation)
- *2 For customers using the D-SUB 9P as the connection destination of FX-485PC-IF, the connection can be made with the RS-232C cable supplied with DIFU-RS24A.
- *3 Excluding the power supply unit (FX-20P-PS and DCNV-AD7).
- *4 Limited to FX-485-IF-SET.
- *5 Specification of the power supply unit (FX-20P-PS and DCNV-AD7).

REVISIONS

Version	Date of Issue	Revision
A	May 2019	First edition

TRADEMARKS

The company names, system names and product names mentioned in this technical bulletin are either registered trademarks or trademarks of their respective companies.

In some cases, trademark symbols such as 'TM, or '®' are not specified in this technical bulletin.