

[Issue No.] HIME-T-P-0090B

[Title] Production Discontinuation of the PLC MELSEC-F Series CC-Link Master Block FX2N-16CCL-M

[Date of Issue] Jul. 2012 (Ver. B: Nov. 2015)

[Relevant Models] MELSEC-F series

Thanks to the loyal support of our customers the MELSEC-F series of PLCs has been and continues to be very successful.

At this time we would like to announce that the production of the CC-Link master block FX2N-16CCL-M for the PLC MELSEC-F Series will be ending in the upcoming future.

This document will explain the terms for the discontinuation of production as well as give recommendations for substitute products.

1. Models for which production will be discontinued

FX2N-16CCL-M: CC-Link master block for the MELSEC-F Series.

2. Time of production discontinuation

Order acceptance deadline: End of September, 2012.

3. Reason for production discontinuation

Recently, electronic components of FX2N-16CCL-M have become increasingly difficult to obtain.

4. Repair acceptance period

We will accept requests for repair for 7 years after production is discontinued (by the end of September, 2019).

However, please note that we cannot accept requests for repair if replacement parts cannot be are no longer available even within the repair acceptance period.

5. Substitute model

FX3U-16CCL-M (compatible with CC-Link V2)

6. Reference data

Reference data 1 : Specifications of FX3U-16CCL-M

Reference data 2 : Cautions on substitution

Reference data 1 : Specifications of FX3U-16CCL-M

1. Performance Specification

Item	Specification
Applicable function	Master station function (The local station and standby master station functions are not provided.)
CC-Link applicable version	Ver. 2.00 (Ver. 1.10 also supported.)
Station number	0 (set by rotary switch)
Transmission rate	156Kbps / 625Kbps / 2.5Mbps / 5Mbps / 10Mbps (set by rotary switch)
Maximum total cable length (maximum transmission distance)	1,200m maximum (varies depending on the transmission speed.)
Maximum number of connectable stations	1) Remote I/O stations: 8 maximum (Each station occupies 32 I/O points of the PLC.) 2) Remote device stations + Intelligent device stations: 8 maximum (The total number of RX/Ry points is 256 or less.)
Maximum number of I/O points per system	When using an FX3U/FX3UC PLC 1)+2) total number of points ≤ 384 points 1) (Actual number of PLC I/O points) + (Number of points occupied by special function blocks) + (Number of points occupied by the FX3U-16CCL-M: 8 points) ≤ 256points 2) 32 × Number of remote I/O stations ≤ 256 points When using an FX3G/FX3GC PLC 32 × Number of remote I/O stations ≤ 128 points
Connection cable	CC-Link dedicated cable
RAS function	<ul style="list-style-type: none"> • Automatic return function • Slave station cut-off function • Error detection by link special relay/register
Communication with PLC	By FROM and TO instructions or direct specification of buffer memory (FX3U/FX3UC)
Number of I/O occupied points	8 points
Number of connectable units to the main unit	1 (An FX3U-16CCL-M cannot be attached to a main unit together with an FX2N-16CCL-M and/or FX2N-32ASI-M.)

2. Link points of remote net ver. 2 mode and remote net additional mode

CC-Link Version		CC-Link Ver. 1.10	CC-Link Ver. 2.00			
Expanded cyclic setting		—	Single	Double	Quadruple	Octuple
Occupies 1station	bit (RX)	32 points	32 points	32 points	64 points	128 points
	bit (RY)	32 points	32 points	32 points	64 points	128 points
	word (RWw)	4 points	4 points	8 points	16 points	32 points
	word (RWr)	4 points	4 points	8 points	16 points	32 points
Occupies 2stations	bit (RX)	64 points	64 points	96 points	192 points	—
	bit (RY)	64 points	64 points	96 points	192 points	
	word (RWw)	8 points	8 points	16 points	32 points	
	word (RWr)	8 points	8 points	16 points	32 points	
Occupies 3stations	bit (RX)	96 points	96 points	160 points	—	—
	bit (RY)	96 points	96 points	160 points		
	word (RWw)	12 points	12 points	24 points		
	word (RWr)	12 points	12 points	24 points		
Occupies 4stations	bit (RX)	128 points	128 points	224 points	—	—
	bit (RY)	128 points	128 points	224 points		
	word (RWw)	16 points	16 points	32 points		
	word (RWr)	16 points	16 points	32 points		

Reference data 2 : Cautions on substitution

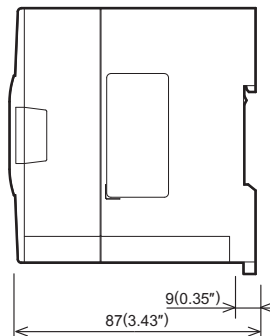
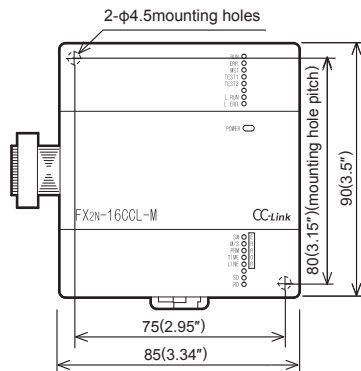
This section describes cautions on substituting the FX2N-16CCL-M with the FX3U-16CCL-M.

1. Outside dimensions

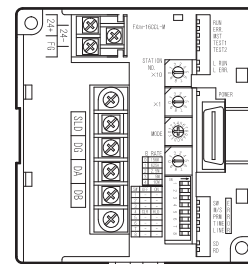
Below are differences in the hardware.

- A. Width (85 mm → 55 mm)
- B. Mounting hole positions
- C. The terminal layout for CC-Link connection and the screw size
- D. The setting switch layout and the contents indicated by LEDs
- E. The current consumption(External power supply 24 V DC: 150 mA → 240 mA)
- F. Connectable PLCs
(FX1N, FX3G, FX2N, FX3U, FX1NC, FX2NC and FX3UC → FX3G, FX3GC, FX3U and FX3UC)

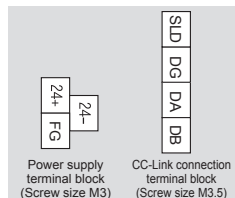
FX2N-16CCL-M (Model to be discontinued)



[Without top cover]

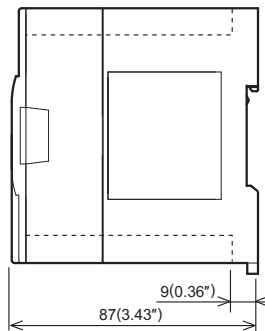
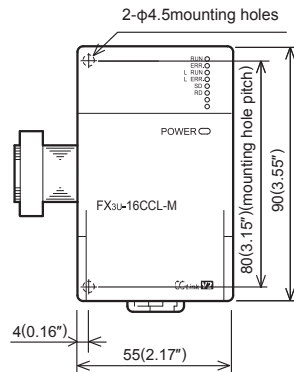


Unit : mm (inches)
MASS (Weight) : 0.4 kg (0.88 lbs)
DIN rail mounting : DIN rail 35 mm (1.38" width)

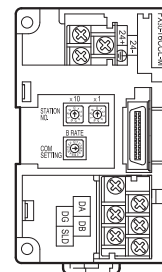


Terminal name	Description
24+	24V DC power supply, + side
24-	24V DC power supply, - side
FG	Functional ground
DA	Send/receive data
DB	Send/receive data
DG	Data ground
SLD	Shield

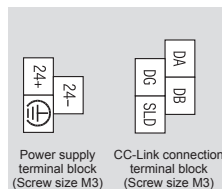
FX3u-16CCL-M (Substitute model)



[Without top cover]



Unit : mm (inches)
MASS (Weight) : 0.3 kg (0.66 lbs)
DIN rail mounting : DIN rail 35 mm (1.38" width)



Terminal name	Description
24+	24V DC power supply, + side
24-	24V DC power supply, - side
⊕	Ground terminal (Functional ground)
DA	Send/receive data
DB	Send/receive data
DG	Data ground
SLD	Shield

2. Program conversion

This section describes changes requiring user program modification and cautions.

(1) Data link startup method

FX2N-16CCL-M (Model to be discontinued)	Data link startup by parameters stored in the buffer memory.
	Data link startup by parameters stored in the EEPROM.
FX3U-16CCL-M (Substitute model)	Data link startup by parameters stored in the buffer memory.
	Data link startup by network parameters.

Caution

The FX3U-16CCL-M does not support the data link startup by parameters stored in the EEPROM. Accordingly, it is necessary to change the data link startup method from "startup by parameters stored in the EEPROM" to "startup by parameters stored in the buffer memory" or "startup by network parameters".

(2) Error status

FX2N-16CCL-M (Model to be discontinued)	Detects only "From/To access error". (Detects only "0" or "1").
FX3U-16CCL-M (Substitute model)	Detects "From/To access error" and other errors. (Detects "0", "1" and other values).

Caution

The FX3U-16CCL-M supports additional error statuses, and may detect errors other than "b0" (From/To access error). If a program judges that an error has occurred only when the error status is "1", it is necessary to change the program.

(3) Input status setting from a station with abnormal data link

FX2N-16CCL-M (Model to be discontinued)	Set by the condition setting switch (DIP switch).
FX3U-16CCL-M (Substitute model)	Set by the buffer memory or network parameters.

Caution

In the FX3U-16CCL-M, the specification of abnormal data clear is set directly by the buffer memory, not by the condition setting switch. It is necessary to change the program so that the parameters will be set in accordance with the setting of the condition setting switch (DIP switch).

(4) Unit reset function by sequence program

FX2N-16CCL-M (Model to be discontinued)	Supports the unit reset function.
FX3U-16CCL-M (Substitute model)	Does not support the unit reset function.

Caution

The unit reset function in the FX2N-16CCL-M resets the PLC by program when the station number and/or transfer speed is changed. The station number of the master station is fixed to "0". It is necessary to turn OFF the power once and turn it ON again after the transfer speed is changed. The FX3U-16CCL-M does not support the unit reset function. To reset the unit, turn the power off once and turn it ON again.

Revised History

Date	Revision	Description
Jul. 2012	A	First Edition
Nov. 2015	B	Partial design change

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