MITSUBISHI ELECTRIC

TECHNICAL BULLETIN

[Issue No.] FA-A-0190

[Title] Production discontinuation of MELSEC-Q series Ethernet interface module/FL-net(OPCN-2) interface module

[Date of Issue] March 2016

[Relevant Models] QJ71E71-B2, QJ71E71-B5, QJ71FL71-B2, QJ71FL71-B2-F01, QJ71FL71-B5-F01

Thank you for your continued support of Mitsubishi programmable controllers, MELSEC-Q series.

Production of the following MELSEC-Q series models will be discontinued.

1. Model to be discontinued

Product		Model	Interface
Ethernet interface module		QJ71E71-B2	10BASE2
		QJ71E71-B5	10BASE5
FL-net(OPCN-2) interface module	Ver. 1.00	QJ71FL71-B2	10BASE2
	Ver. 2.00	QJ71FL71-B2-F01	10BASE2
		QJ71FL71-B5-F01	10BASE5

2. Schedule

- Transition to made-to-order: Completed
- Order acceptance: Through January 31, 2017
- Production discontinuation: February 28, 2017

3. Reasons for discontinuing production

Some parts of the above products are now obsolete, and we will have difficulty to maintain our production system.

4. Repair acceptance

- Repair support period: Until February 29, 2024 (for seven years after the discontinuation of production)

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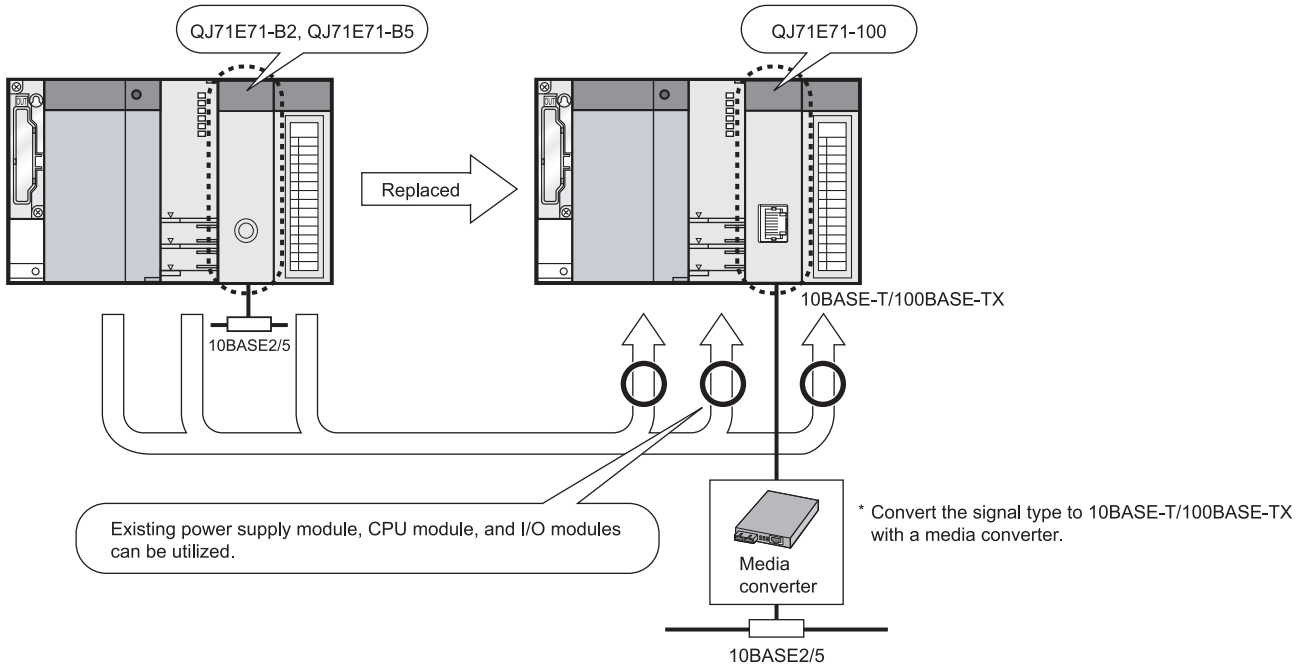
5. Alternative models

Product		Model	
		Model to be discontinued	Alternative models
Ethernet interface module		QJ71E71-B2	QJ71E71-100*1
		QJ71E71-B5	
FL-net(OPCN-2) interface module	Ver. 1.00	QJ71FL71-B2	QJ71FL71-T*1
	Ver. 2.00	QJ71FL71-B2-F01	QJ71FL71-T-F01*1
		QJ71FL71-B5-F01	

*1 The signal type must be converted from 10BASE2/5 to 10BASE-T/100BASE-TX. For conversion, use a commercially available media converter that is compliant with IEEE802.3 standards.

6. Replacement example

• When QJ71E71-B2 or QJ71E71-B5 is replaced with QJ71E71-100



7. Performance specifications comparison between the discontinued and alternative models

The performance specifications of the discontinued and alternative models are shown below.

(1) When replacing the QJ71E71-B2 or QJ71E71-B5

Item			Specifications			
			QJ71E71-B2	QJ71E71-B5	QJ71E71-100	
Transmission specifications	Interface		10BASE2	10BASE5	10BASE-T	100BASE-TX
	Data transmission speed		10Mbps (Half-duplex)			100Mbps (Full-duplex/Half-duplex)
	Transmission method		Base band			
	Maximum node-to-node distance		925m	2500m	-	
	Maximum segment length		185m	500m	100m (length between a hub and node)	
	Maximum number of nodes/connection		30 modules/segment	100 modules/segment	Cascade connection (maximum of 4 levels)	Cascade connection (maximum of 2 levels)
	Minimum interval between nodes		0.5m	2.5m	-	
Sending/receiving data storage memory	Number of simultaneous open connections		16 connections (Connections usable on a program)			
	Fixed buffer		1K words × 16			
	Random access buffer		6K words × 1			
	E-mail	Attachment	6K words × 1			
		Main text	960 words × 1			
Connector			BNC connector	D-Sub connector (male, 15-pin)	RJ45 connector	
Connection cable			Coaxial cable 50Ω (RG58A/U or RG58C/U)	AUI cable (transceiver cable)	Category 3 to 5e straight cable[*1] of unshielded twisted pair cable (UTP) or category 3 to 5e straight cable [*1] of shielded twisted pair cable (STP)	Category 5 or higher straight cable [*2] of shielded twisted pair cable (STP)
Number of occupied I/O points			32 points (I/O assignment: Intelligent 32 points)			
Internal current consumption (5VDC)			0.60A[*3]	0.50A		
12VDC external power supply (Transceiver)			-	Required	-	
External dimensions			98 (H) × 27.4 (W) × 90 (D) [mm]			
Weight			0.13kg[*3]	0.12kg	0.11kg	

*1 System operation using connection with a cross cable is not guaranteed.
Note, however, that a Category 3 to 5e cross cable can be used for data communications between QJ71E71-100 modules or connection with a GOT.

*2 System operation using connection with a cross cable is not guaranteed.
Note, however, that a Category 5 or 5e cross cable can be used for data communications between QJ71E71-100 modules or connection with a GOT.

*3 As described below, a module with a serial number (first five digits) of "05049" or earlier has a different 5VDC internal current consumption value and weight.
• Internal current consumption (5VDC): 0.70A
• Weight: 0.14kg

(2) When replacing the QJ71FL71-B2

Item		Specifications	
		QJ71FL71-B2	QJ71FL71-T
Transmission specifications	Interface	10BASE2	10BASE-T
	Data transmission speed	10Mbps (Half-duplex)	
	Transmission method	Base band	
	Maximum node-to-node distance	925m	-
	Maximum segment length	185m	100m (length between a hub and node)
	Maximum number of nodes in system	254 modules	
	Maximum number of nodes/connection	30 modules/segment	Cascade connection (maximum of 4 levels)
	Minimum interval between nodes	0.5m	-
	Cyclic data volume	• Maximum (8K bits + 8K words)/system • Maximum (8K bits + 8K words)/node	
	Message data volume	Maximum 1024 bytes	
Common memory area	Area 1 (bit area)	8K bits	
	Area 2 (word area)	8K words	
Error log memory area		512 words	
Status memory area	Bit area	2K bits	
	Word area	2K words	
Local node network parameter setting area		96 words	
Other node network parameter setting area		2048 words	
Network parameter acquisition area		512 words	
Device profile memory area		512 words	
Message area (Transient area)		Maximum 1024 bytes × 2 (1 for each of transmit and receive)	
Connector		BNC connector	RJ45 connector
Connection cable		Coaxial cable 50Ω (RG58A/U or RG58C/U)	Category 3 or higher straight cable*1 of unshielded twisted pair cable (UTP) or category 3 or higher straight cable *1 of shielded twisted pair cable (STP)
Number of occupied I/O points		32 points (I/O assignment: Intelligent)	
Internal current consumption (5VDC)		0.60A*2	0.50A
External dimensions		98 (H) × 27.4 (W) × 90 (D) [mm]	
Weight		0.13kg*2	0.11kg

*1 A cross cable cannot be used.

*2 As described below, a module with a serial number (first five digits) of "05079" or earlier has a different 5VDC internal current consumption value and weight.
- Internal current consumption (5VDC): 0.70A
- Weight: 0.14kg

(3) When replacing the QJ71FL71-B2-F01 or QJ71FL71-B5-F01

Item		Specifications			
		QJ71FL71-B2-F01	QJ71FL71-B5-F01	QJ71FL71-T-F01	
Transmission specifications	Interface	10BASE2	10BASE5	10BASE-T	100BASE-TX
	Data transmission speed	10Mbps (Half-duplex)			100Mbps (Full-duplex/Half-duplex)
	Transmission method	Base band			
	Maximum node-to-node distance	925m	2500m	-	
	Maximum segment length	185m	500m	100m (length between a hub and node)	
	Maximum number of nodes in system	254 modules			
	Maximum number of nodes/connection	30 modules/segment	100 modules/segment	Cascade connection (maximum of 4 levels)	Cascade connection (maximum of 2 levels)
	Minimum interval between nodes	0.5m	2.5m	-	
	Cyclic data volume	• Maximum (8K bits + 8K words)/system • Maximum (8K bits + 8K words)/node			
	Message data volume	Maximum 1024 bytes			
Common memory area	Area 1 (bit area)	8K bits			
	Area 2 (word area)	8K words			
Error log memory area		512 words			
Status memory area	Bit area	2K bits			
	Word area	2K words			
Local node network parameter setting area		128 words			
Other node network parameter setting area		2048 words			
Network parameter acquisition area		512 words			
Device profile memory area		512 words			
Message area (Transient area)		Maximum 1024 bytes × 2 (1 for each of transmit and receive)			
Connector		BNC connector	D-Sub connector (male, 15-pin)	RJ45 connector	
Connection cable		Coaxial cable 50Ω (RG58A/U or RG58C/U)	AUI cable (transceiver cable)	Category 3 or higher straight cable *1 of unshielded twisted pair cable (UTP) or category 3 or higher straight cable *1 of shielded twisted pair cable (STP)	Category 5 or higher straight cable *1 of shielded twisted pair cable (STP)
Number of occupied I/O points		32 points (I/O assignment: Intelligent 32 points)			
Internal current consumption (5VDC)		0.60A*2	0.50A		
12VDC external power supply (Transceiver)		-	Required	-	
External dimensions		98 (H) × 27.4 (W) × 90 (D) [mm]			
Weight		0.13kg*2	0.12kg	0.11kg	

*1 A cross cable cannot be used.
*2 As described below, a module with a serial number (first five digits) of "05079" or earlier has a different 5VDC internal current consumption value and weight.
• Internal current consumption (5VDC): 0.70A
• Weight: 0.14kg

8. Functional comparison between the discontinued and alternative models

All the functions equipped in the discontinued models are also equipped in alternative models.

9. Precautions for replacement

(1) Cable wiring

The signal type must be converted from 10BASE2/5 to 10BASE-T/100BASE-TX.
For conversion, use a commercially available media converter that is compliant with IEEE802.3 standards.

(2) Utilization of programs

Existing programs can be used without modification.