

[Issue No.] FA-A-0255
[Title] Transition to made-to-order production and production discontinuation of the CC-Link remote I/O modules
[Date of Issue] April 2018
[Relevant Models] AJ65BTC1-32D, AJ65BTC1-32T

Thank you for your continued support of Mitsubishi Electric programmable controllers.
Production of the following CC-Link remote I/O modules will be discontinued.

1 Model to be discontinued

Product	Model to be discontinued	Alternative model	Remarks
CC-Link remote I/O modules 40-pin connector type (FCN connector type)	AJ65BTC1-32D	AJ65SBTCF1-32D	DC input module (Positive common/negative common shared type)
	AJ65BTC1-32T	AJ65SBTCF1-32T	Transistor output module (Sink Type)

2 Schedule

- Start of made-to-order production: June 4, 2018
- Order acceptance: Until September 28, 2018
- Production discontinuation: October 31, 2018

3 Reason for discontinuation

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

4 Repair support

Repair support period: Until October 31, 2025 (for seven years after the discontinuation of production)

5 Recommendable proposals

The delivery time for the made-to-order production is 3 months.
Please allow for this time and purchase the models to be discontinued early enough.
For details on the delivery time, please contact the seller.

6 Specifications comparison between the discontinued and alternative models

DC input module

○: Compatible, △: Need of a partial change, ×: Incompatible

Specifications		AJ65BTC1-32D	AJ65SBTCF1-32D	Compatibility	Precautions for replacement
Number of input points		32 points	32 points	○	—
Isolation method		Photocoupler	Photocoupler	○	—
Rated input voltage		24VDC	24VDC	○	—
Rated input current		Approx. 7mA	Approx. 5mA	△	The rated input current is decreased after migration.*1
Operating voltage range		19.2 to 28.8VDC	19.2 to 26.4VDC	△	Check the operating voltage.
Max. number of simultaneous ON points		32 points (100%)	32 points (100%)	○	—
ON voltage/ON current		14VDC or higher/3.5mA or higher	14VDC or higher/3.5mA or higher	○	—
OFF voltage/OFF current		6VDC or lower/1.7mA or lower	6VDC or lower/1.7mA or lower	○	—
Input resistance		Approx. 3.3kΩ	Approx. 4.7kΩ	△	The input resistance is increased after migration.*1
Response time	OFF → ON	10ms or less	1.5ms or less (at 24VDC)	△	Check that there is no influence such as noises.
	ON → OFF	10ms or less	1.5ms or less (at 24VDC)	△	Check that there is no influence such as noises.
Wiring method for common		32 points/common (1-wire type)	32 points/common (1-wire type)	○	—
Input type		Positive common/negative common shared type (sink/source shared type)	Positive common/negative common shared type (sink/source shared type)	○	—
Number of occupied stations		One station	One station	○	—
Module power supply	Voltage	15.6 to 28.8VDC (ripple ratio: within 5%)	20.4 to 26.4VDC (ripple ratio: within 5%)	△	Check the voltage of the module power supply.
	Current	70mA or lower (at 24VDC)	45mA or lower (at 24VDC)	○	—
Noise immunity		Noise voltage 500Vp-p, noise width 1μs, noise frequency 25 to 60Hz (DC type noise simulator condition)	Noise voltage 500Vp-p, noise width 1μs, noise frequency 25 to 60Hz (DC type noise simulator condition)	○	—
Withstand voltage		500VAC for 1 minute between all DC external terminals and ground	500VAC for 1 minute between all DC external terminals and ground	○	—
Insulation resistance		10MΩ or higher between all DC external terminals and ground (500VDC insulation resistance tester)	10MΩ or higher between all DC external terminals and ground (500VDC insulation resistance tester)	○	—
Weight		270g	150g	○	—
External interface	Transmission part, module power supply part	7-point two-piece terminal block (M3.5 screw)	7-point two-piece terminal block (M3 screw)	×	Change the solderless terminals because of difference in screw size.
	I/O part	40-pin connector	40-pin connector	○	—
Applicable solderless terminal*2	Transmission part, module power supply part	<ul style="list-style-type: none"> RAV1.25-3.5 (compliant with JIS C 2805) [Applicable wire size: 0.3 to 1.25mm² (22 to 16 AWG) stranded wire] RAV2-3.5 [Applicable wire size: 1.25 to 2.0mm² (16 to 14 AWG) stranded wire] 	<ul style="list-style-type: none"> RAV1.25-3 (compliant with JIS C 2805) [Applicable wire size: 0.3 to 1.25mm² (22 to 16 AWG) stranded wire] V2-MS3, RAP2-3SL, TGV2-3N [Applicable wire size: 1.25 to 2.0mm² (16 to 14 AWG) stranded wire] 	×	Change the solderless terminals because of difference in screw size.

[Issue No.] FA-A-0255

Specifications		AJ65BTC1-32D	AJ65SBTCF1-32D	Compatibility	Precautions for replacement
Applicable wire size	I/O part	<ul style="list-style-type: none"> • 0.08 to 0.3mm² (28 to 22 AWG) stranded wire (A6CON1 and A6CON4)^{*3} • 0.08 to 0.2mm² (28 to 24 AWG) stranded wire (A6CON2) • 0.08mm² (28 AWG) stranded wire, φ0.25mm (30 AWG) single wire (A6CON3) 	<ul style="list-style-type: none"> • 0.08 to 0.3mm² (28 to 22 AWG) stranded wire (A6CON1 and A6CON4)^{*3} • 0.08 to 0.2mm² (28 to 24 AWG) stranded wire (A6CON2) • 0.08mm² (28 AWG) stranded wire, φ0.25mm (30 AWG) single wire (A6CON3) 	○	—
Module mounting	Mounting the modules on a DIN rail	Possible	Possible	○	—
	Installation hole diameter	2-φ4.5	2-φ4.5	○	—
	Installation hole pitch	W156 × H56 (2 places)	W109 (2 places)	×	The installation hole pitch is different.

*1 Check the specifications of the sensor and the switch to connect to AJ65SBTCF1-32D.

*2 Use applicable wires for the solderless terminals and fix them with an appropriate tightening torque. Use UL listed solderless terminals. For crimping, use a tool recommended by manufacturers of solderless terminals.

*3 Use cables with outside diameter of 1.3mm or shorter to connect 40 cables to the connector. Select cables depending on the current value used.

Transistor output module

○: Compatible, △: Need of a partial change, ×: Incompatible

Specifications		AJ65BTC1-32T	AJ65SBTCF1-32T	Compatibility	Precautions for replacement
Number of output points		32 points	32 points	○	—
Isolation method		Photocoupler	Photocoupler	○	—
Rated load voltage		12/24VDC (ripple ratio: within 5%)	12/24VDC (ripple ratio: within 5%)	○	—
Operating load voltage range		10.2 to 28.8VDC (ripple ratio: within 5%)	10.2 to 26.4VDC (ripple ratio: within 5%)	△	Check the load voltage.
Maximum load current		0.1A/point, 2A/common	0.1A/point, 3.2A/common	○	—
Maximum inrush current		0.4A or lower, 10ms or less	1.0A or lower, 10ms or less	○	—
Leakage current at OFF		0.1mA or lower	0.1mA or lower	○	—
Maximum voltage drop at ON		2.5VDC or lower (MAX.) 0.1A	0.1VDC or lower (TYP.) 0.1A, 0.2VDC or lower (MAX.) 0.1A	○	—
Output type		Sink Type	Sink Type	○	—
Response time	OFF → ON	2ms or less	0.5ms or less	△	Check the output timing.
	ON → OFF	2ms or less (resistance load)	1.5ms or less (resistance load)	△	Check the output timing.
External power supply	Voltage	10.2 to 28.8VDC (ripple ratio: within 5%)	10.2 to 26.4VDC (ripple ratio: within 5%)	△	Check the voltage of the external power supply.
	Current	50mA or lower (TYP. 24VDC per common). External load current is not included.	50mA or lower (TYP. 24VDC per common). External load current is not included.	○	—
Surge suppressor		Clamp diode	Zener diode	○	—
Wiring method for common		32 points/common	32 points/common	○	—
Number of occupied stations		One station	One station	○	—
Module power supply	Voltage	15.6 to 28.8VDC (ripple ratio: within 5%)	20.4 to 26.4VDC (ripple ratio: within 5%)	△	Check the voltage of the module power supply.
	Current	115mA or lower (at 24VDC)	60mA or lower (at 24VDC)	○	—
Noise immunity		Noise voltage 500Vp-p, noise width 1μs, noise frequency 25 to 60Hz (DC type noise simulator condition)	Noise voltage 500Vp-p, noise width 1μs, noise frequency 25 to 60Hz (DC type noise simulator condition)	○	—
Withstand voltage		500VAC for 1 minute between all DC external terminals and ground	500VAC for 1 minute between all DC external terminals and ground	○	—

[Issue No.] FA-A-0255

Specifications		AJ65BTC1-32T	AJ65SBTCF1-32T	Compatibility	Precautions for replacement
Insulation resistance		10MΩ or higher between all DC external terminals and ground (500VDC insulation resistance tester)	10MΩ or higher between all DC external terminals and ground (500VDC insulation resistance tester)	○	—
Weight		280g	150g	○	—
External interface	Transmission part, module power supply part	7-point two-piece terminal block (M3.5 screw)	7-point two-piece terminal block (M3 screw)	×	Change the solderless terminals because of difference in screw size.
	I/O part	40-pin connector	40-pin connector	○	—
Applicable solderless terminal*1	Transmission part, module power supply part	<ul style="list-style-type: none"> • RAV1.25-3.5 (compliant with JIS C 2805) [Applicable wire size: 0.3 to 1.25mm² (22 to 16 AWG) stranded wire] • RAV2-3.5 [Applicable wire size: 1.25 to 2.0mm² (16 to 14 AWG) stranded wire] 	<ul style="list-style-type: none"> • RAV1.25-3 (compliant with JIS C 2805) [Applicable wire size: 0.3 to 1.25mm² (22 to 16 AWG) stranded wire] • V2-MS3, RAP2-3SL, TGV2-3N [Applicable wire size: 1.25 to 2.0mm² (16 to 14 AWG) stranded wire] 	×	Change the solderless terminals because of difference in screw size.
Applicable wire size	I/O part	<ul style="list-style-type: none"> • 0.08 to 0.3mm² (28 to 22 AWG) stranded wire (A6CON1 and A6CON4)*2 • 0.08 to 0.2mm² (28 to 24 AWG) stranded wire (A6CON2) • 0.08mm² (28 AWG) stranded wire, φ0.25mm (30 AWG) single wire (A6CON3) 	<ul style="list-style-type: none"> • 0.08 to 0.3mm² (28 to 22 AWG) stranded wire (A6CON1 and A6CON4)*2 • 0.08 to 0.2mm² (28 to 24 AWG) stranded wire (A6CON2) • 0.08mm² (28 AWG) stranded wire, φ0.25mm (30 AWG) single wire (A6CON3) 	○	—
Module mounting	Mounting the modules on a DIN rail	Possible	Possible	○	—
	Installation hole diameter	2-φ4.5	2-φ4.5	○	—
	Installation hole pitch	W156 × H56 (2 places)	W109 (2 places)	×	The installation hole pitch is different.

*1 Use applicable wires for the solderless terminals and fix them with an appropriate tightening torque. Use UL listed solderless terminals. For crimping, use a tool recommended by manufacturers of solderless terminals.

*2 Use cables with outside diameter of 1.3mm or shorter to connect 40 cables to the connector. Select cables depending on the current value used.

[Issue No.] FA-A-0255

7 Precautions for replacement

This chapter describes precautions for replacement with an alternative model.

Model to be discontinued	Alternative model

No.	Precautions
(1)	Because the size of the terminal block (two-piece type) is different, the same terminal block cannot be used with the alternative model. Change the wiring at the time of replacement.
(2)	An alternative model displays 16 points of LED operation display. Change the indication selector switch to check the operation indication.*1
(3)	An alternative model is different in a setting method because the type of the transmission speed setting switch and the station number setting switch of an alternative model is lever.*1

*1 For details, refer to the following.

CC-Link System Compact Type Remote I/O module User's Manual