MITSUBISHI ELECTRIC

TECHNICAL BULLETIN

[Issue No.] FA-A-0142-C

[Title] Production discontinuation of MELSEC-AnS/QnAS (small type) series and MELSEC-I/OLINK

[Date of Issue] October, 2012 (Ver. C: March 2015)

[Relevant Models] AnSCPU, AnUSCPU, QnASCPU, and others

Thank you for your continued support of Mitsubishi programmable controllers, MELSEC-AnS/QnAS series and MELSEC-I/OLINK.
MELSEC-AnS/QnAS (small type) series and MELSEC-I/OLINK have been used for about 20 years since they were released in 1990. However, we have decided to discontinue them.
This technical bulletin is to provide the information regarding this production discontinuation.

Contents

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1. Models to be discontinued

Production will be discontinued for the AnS/QnAS (small type) series CPU modules (AnSCPU, AnUSCPU, QnASCPU), power supply module (partial), base unit, I/O module, special function module, network module and relevant products of the AnS/QnAS (small type) series, the products relevant to a made-to-order production based on the small-sized A series products, and the I/OLINK (master, remote I/O).
For the details of programmable controllers to be discontinued, refer to Section 10. Regarding the details of the motion controller A171SHCPUN, A172SHCPUN, A173UHCPU, A173UHCPU-S1 and other relevant models to be discontinued, refer to "Sales and Service" (No.12-14:Issued in October, 2012) for the motion controller.

2. Production discontinuation

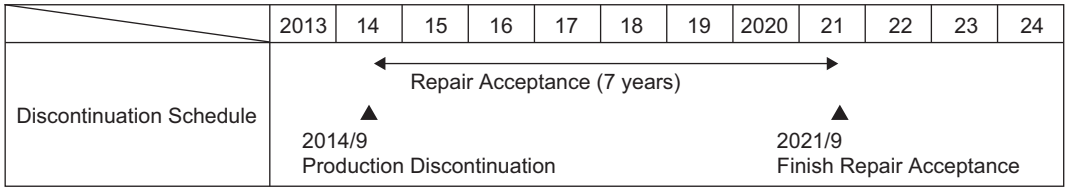
- Transition to made-to-order: April 1st, 2011 (Refer to "Technical Bulletin" (FA-A-0094).)
- Order deadline: Through August, 2014
- Final production: Through September, 2014

3. Reasons for discontinuing production

Conventional main electronic components of the relevant programmable controllers, i.e., semiconductor components (micro computer, memory, ASIC, etc.) are now absolutely difficult to obtain because they are produced based on the stricter process rules and the contributions to environmental conservation, such as lead-free, compliance to RoHS directives are required. We have been producing AnS/QnAS series and I/OLINK products by securing the stock of these obsolete components. However, the stock is about to run out, and we have extreme difficulty to maintain the production system and product quality.

4. Repair acceptance

- Repair acceptance: Through September, 2021 (for 7 years after production discontinuation)



5. Continued production

We will continue production of the modules listed below.

As for power supply modules, we will continue production of the two models, A1S61PN and A1S63P.

It is recommended you to purchase spare parts or replace with the above two models, if using other power supply modules.

For batteries, we will continue production of three models, A6BAT, A8BAT, and A10BAT.

Product	Model
Power supply module	A1S61PN
	A1S63P
Battery	A6BAT
	A8BAT
	A10BAT
Memory card	Q1MEM-64S
	Q1MEM-128S
	Q1MEM-256S
	Q1MEM-512S
	Q1MEM-1MS
	Q1MEM-2MS
	Q1MEM-64SE
	Q1MEM-128SE
	Q1MEM-256SE
	Q1MEM-512SE
	Q1MEM-1MSE
Positioning module	A1SD75-C01H
	A1SD75-C01HA
MELSECNET/10 network module	A1SJ71LP21
	A1SJ71BR11
	A1SJ71QLP21
	A1SJ71QBR11
CC-Link module	A1SJ61BT11
	A1SJ61QBT11
MELSECNET/MINI-CC-Link wiring conversion adapter	A6ADP-1MC16D
	A6ADP-1MC16T
	A6ADP-2MC16D
A-A1S module conversion adapter	A1ADP-XY
	A1ADP-SP

6. Recommendable proposals

We recommend the following solutions for AnS/QnAS (small type) series and MELSEC-I/OLINK (master, remote I/O) production discontinuation.

(1) Purchase of spare parts for necessary models before order deadline described in Section 2.

(2) Replacement with L series or AnyWire

If modules and functions that cannot be replaced by the L series or AnyWire are used in the existing system, replacement with the Q series or CC-Link/LT is recommended.
For the alternative models, please refer to Section 12.
In the alternative model list, we have introduced models that have small restrictions when an AnS/QnAS (small type) series module or I/OLINK module is replaced. Models with reduced specifications can be selected depending on your system, so please check your existing system specification and select the models.
AnyWire products are not available in some countries.
Please consult your local Mitsubishi representative for details.

(3) Replacement with Q series

It is recommended to replace a module with a Q series module if the following conditions are met;

- Existing communication cables are used or the system is gradually replaced when a system including a MELSECNET(II) data link system is replaced.
- Only a CPU module is replaced and an existing AnS/QnAS series module is continued to be used.
- The existing wiring of terminal block type modules is used by utilizing a conversion adapter.

(4) Replacement with CC-Link/LT

It is recommended to replace a module with a CC-Link/LT module if the following conditions are met;

- The sequence program of existing I/OLINK is not modified.
- The communication cables of existing I/OLINK or external power supply are not used.

Reference Material

When considering transition to L series, please refer to the following materials:

• Transition from MELSEC-AnS/QnAS (Small Type) Series to L Series Handbook (Fundamentals)	L(NA)08258ENG
• Transition from MELSEC-AnS/QnAS (Small Type) Series to L Series Handbook (Intelligent Function Modules)	L(NA)08259ENG
• Transition from MELSEC-AnS/QnAS (Small Type) Series to L Series Handbook (Network Modules)	L(NA)08260ENG
• Transition from MELSEC-AnS/QnAS (Small Type) Series to L Series Handbook (Communications)	L(NA)08261ENG

When considering transition to Q series, please refer to the following materials:

• Programmable Controllers MELSEC-A/QnA Series Transition Examples	L(NA)08121E
• Transition from MELSEC-AnS/QnAS (Small Type) Series to Q series Handbook (Fundamentals)	L(NA)08219ENG
• Transition from MELSEC-AnS/QnAS (Small Type) Series to Q series Handbook (Intelligent Function Modules)	L(NA)08220ENG
• Transition from MELSEC-A/QnA (Large Type) Series to Q series Handbook (Network Modules)	L(NA)08048ENG
• Transition from MELSEC-A/QnA (Large Type) Series to Q series Handbook (Communications)	L(NA)08050ENG

When considering transition to CC-Link/LT, please refer to the following material:

• Transition from MELSEC-I/OLINK to CC-Link/LT Handbook	L(NA)08062ENG

For useful renewal tools not described in this technical bulletin, please refer to the following material:

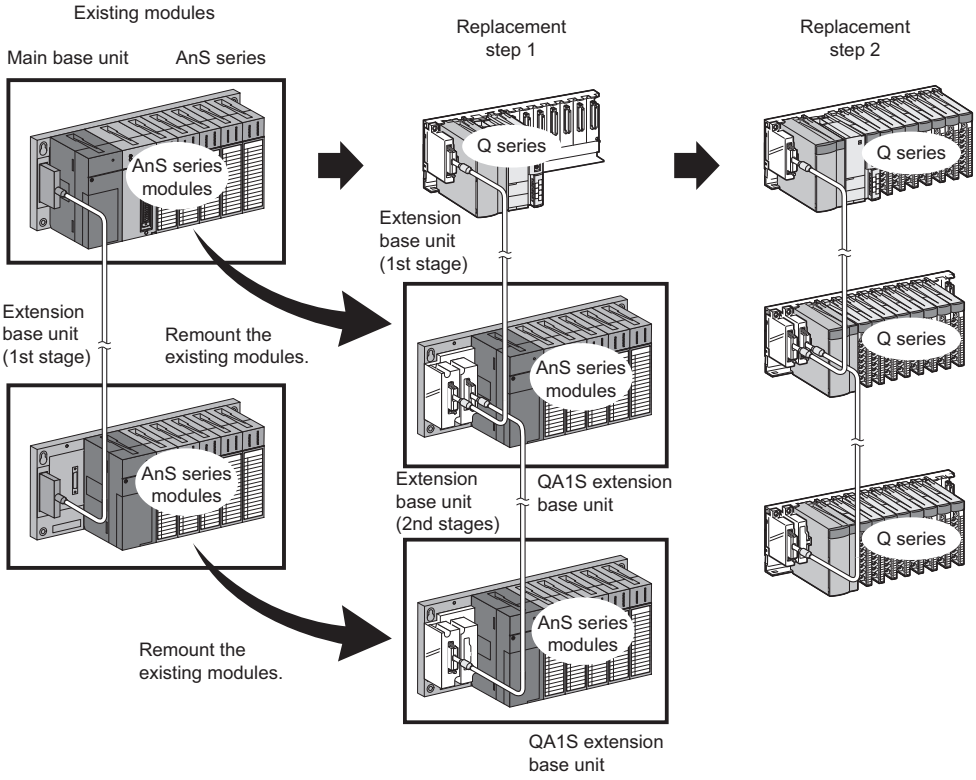
• Mitsubishi Programmable Controllers MELSEC-AnS/QnAS (Small Type) Series Transition Guide	L(NA)08236E

7. Gradual transition from AnS/QnAS series to Q series

By utilizing the QA1S□B type extension base unit, we propose gradual transition by using existing AnS/QnAS (small type) series assets. (Basic model CPUs, Process CPUs, and Redundant CPUs cannot be mounted to a QA1S□B type extension base unit.)

By using your modules on your A (small type) base in your existing system and mounting them to the QA1S□B type extension base unit, you can use your existing A (small type) series modules, and transfer to a system configuration that is controlled by a new Q series CPU. Also, from the next step by gradually changing to the Q series, you can realize a Q series configuration.

For modules that can be mounted to a QA1S□B type extension base unit, please refer to the QCPU User's Manual (Hardware Design, Maintenance and Inspection) (SH-080483ENG).



8. Machine/line modification and spare parts

In conjunction with the AnS/QnAS (small type) series product discontinuation, we propose the following for machine/line modification and spare parts for failure.

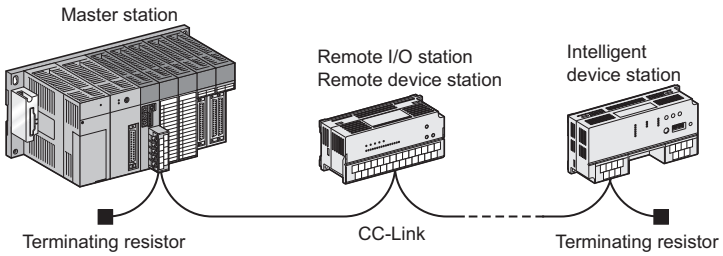
8.1 Correspondence to module failures

We propose possession of a sufficient amount of spare parts for maintenance and exchange for module failures. We will continue production of the power supply modules of A1S61PN and A1S63P after October, 2014.

8.2 Correspondence to machine/line modification

Please select the module that has the function for the machinery/line modification necessary among the CC-Link products. Please mount a CC-Link system master/local station module to an empty slot of a Q series base unit and add modules using the CC-Link system.

"When there are no open slots on the existing system, or there are no spare I/O points left", please remove one/or some existing modules from the existing system to mount a CC-Link system master/local station module. Please add modules of CC-Link remote stations to use the functions of the modules that were removed.



8.3 Spare parts storage

(1) The general specifications of programmable controllers are as follows. Please do not store spare parts under a high temperature or high humidity condition, even within the range guaranteed by the specifications.

Storage ambient temperature	-20 to 75°C
Storage ambient humidity	10 to 90%, no condensation

(2) Store in a place avoiding direct sunlight.

(3) Store under a condition with no dust or corrosive gas.

(4) The battery capacity of an A6BAT battery or a lithium-coin battery (commercially available) for memory card will be decreased by its self-discharging even when it is not used. Replace it with new one in 5 years as a guideline.

(5) Secure the spare parts for a power supply module, power supply built-in type CPU module, or analog module that uses the aluminum electrolytic capacitor, which is listed in the following table, because the basic function will be influenced by life deterioration.

If products are left un-energized for a long time, the characteristics of the aluminum electrolytic capacitor will be deteriorated; therefore, take following measures.

Product	Model
CPU module (Power supply built-in type)	A1SJHCPU
Power supply module	A1S61PN, A1S63P
Analog module	A1S62DA, A1S63ADA, A1S66ADA, A1S68DAV, A1S68DAI

[Countermeasures for preventing aluminum electrolytic capacitor characteristics deterioration]
For the power supply module or power supply built-in type CPU module which uses the aluminum electrolytic capacitor and has the rated voltage of 100VAC/DC or more, characteristics will be deteriorated when it is left un-energized for a long time. Therefore, rotate products at regular inspection (once in one or two years). Or, activate the product once in two or three years, increasing voltage from 0V to the rated voltage over 10 minutes and maintaining the voltage for a few hours.

[Reference]
When an aluminum electrolytic capacitor is left un-energized, it will be deteriorated at approximately 1/4 speed of the case when it is energized, even at normal temperature. For example, when an aluminum electrolytic capacitor is stored for 10 years at normal temperature, its life will be shortened by approximately 2.5 years.
The deterioration will be further accelerated under high temperature and humidity; therefore, avoid such an environment when storing the spare parts.

9. Precautions for replacing with L series, AnyWire, Q series, and CC-Link/LT

The precautions for replacing with alternative models are described below.

(1) CPU module

Select a new CPU module considering the required program capacity, I/O points and device points.

(2) Power supply module

Select a new power supply module by considering the amount of current consumed by each module to be mounted.

(a) Pay enough attention when selecting the capacity of the power supply module if using an extension base unit that does not need power.

(b) In the Q series, when the capacity of the power supply module is selected, it is necessary to take consideration of the base unit current consumed as well, so please pay attention.

(3) Base unit

Select a new base unit based on the number of slots and power supply module to be used.
Pay full attention to the followings.

(a) The dimension of holes for fixing a base unit to a control panel must be modified because they vary depending on the series.

(b) In the L series, install a base unit to a DIN rail to fix it to a control panel.

(c) Please note that the number of extension blocks to be configured, the number of applicable modules, and the maximum number of the entire system configuration vary depending on the CPU module.

(4) I/O module

Select the model that satisfies the following specifications such as the number of I/O points and I/O current/voltage.
Pay full attention to the followings.

(a) Modify the wiring by referring to the manual because the terminal block/connector shape, signal layout, and common type vary depending on the series.

(5) Special function module (Intelligent function module)

Select the model that satisfies the performance specifications.
Pay full attention to the followings.

(a) Modify the X/Y device Nos. if the new model is different from the old one in the number of occupied I/O points.

(b) Modify the wiring by referring to the manual because the terminal block/connector shape and signal layout vary depending on the series.

(6) Network module

Pay full attention to the followings.

(a) Cables may have to be modified. Check the specifications described in the manual.

(b) If there is no alternative network module, it is recommended to replace the system with other network systems.

(c) For the CC-Link and Ethernet network, use the network parameters to modify the initial settings configured using a sequence program.

(7) Programming

When the PLC type is changed in GX Developer (also included with GX Works2), the programs and parameters are automatically converted for the new CPU. Note the followings.

(a) Prepare GX Developer (or GX Works2) with the version supporting the CPU to be used and a cable for connecting GX Developer (or GX Works2) and a programmable controller. For applicable cables, refer to the GX Developer (or GX Works2) manual.

(b) Some network parameters have been deleted because they cannot be converted. Set the parameters after conversion.

In the Q series, parameters can be modified by using "MELSECNET(II)->MELSECNET/10(H) parameter conversion tool" of "A/QnA->Q conversion support tool".

Network parameter	AnS to L	QnAS to L	AnS to Q	QnAS to Q
MELSECNET(II)	MELSECNET(II) parameters have been deleted.			
MELSECNET/10(H)	MELSECNET/10 parameters have been deleted.		MELSECNET/10 parameters are converted for the MELSECNET/10 mode.	
MELSECNET/MINI	MELSECNET/MINI parameters have been deleted.			
CC-Link	—	The parameters of the 5th and subsequent modules are not available when five or more modules are set in the CC-Link module configuration window.	—	The parameters of the 5th and subsequent modules are not available when five or more modules are set in the CC-Link module configuration window.
Ethernet	—	Ethernet parameters have been deleted.	—	"Use the KeepAlive" is set on "Ethernet operations".

(c) The instructions or devices that cannot be used without modification are converted into SM1255 or SD1255 (*1). After PLC type change, search SM1255 or SD1255 and modify them.

By using "A/QnA->Q program conversion support tool" of "A/QnA->Q conversion support tool", a program with instructions or devices converted into SM1255 or SD1255 can be easily modified.

*1 The instructions or devices are converted into SM999 or SD999 in a Basic model QCPU.

(d) If the new CPU module does not have a sufficient program capacity, some parts of the program are deleted during conversion. (The END instruction is added.)

After PLC type change, check if any parts of program are missing or not.

(e) Buffer memory contents and addresses of special function modules (intelligent function modules) and network modules vary depending on the series. Modify the program that writes to/reads from buffer memory, if necessary.

By using "A/QnA->Q program conversion support tool" of "A/QnA->Q conversion support tool", the buffer memory can be converted into compatible buffer memory.

[Reference]
Q and L series support GX Works2. Use of GX Works2 simplifies a program for an intelligent function module and network module.

(f) Roles of accumulator (A), index register (V, Z) and file register (R) vary depending on the series. Therefore, modify programs if necessary.

(g) Microcomputer programs cannot be created.

(h) Each of a main program, sub-program and SFC program is converted into one program file. When a sub-program or SFC program is used, be sure to enable the multiple programs in the PLC parameter (program settings) after conversion. Then modify the part that starts up programs.

10.Models to be discontinued

Product	Model
Base unit	A1S32B
	A1S32B-E
	A1S33B
	A1S33B-E
	A1S35B
	A1S35B-E
	A1S38B
	A1S38B-E
	A1S38HB
	A1S38HBEU
	A1S52B
	A1S52B-S1
	A1S55B
	A1S55B-S1
	A1S58B
	A1S58B-S1
	A1S65B
	A1S65B-S1
	A1S68B
	A1S68B-S1
Power supply module	A1S62PN
Extension cable	A1SC01B
	A1SC03B
	A1SC07B
	A1SC12B
	A1SC30B
	A1SC60B
CPU module	A1SCPUC24-R2
	A1SHCPU
	A1SJHCPU
	A1SJHCPU-S8
	A2ASCPU
	A2ASCPU-S1
	A2ASCPU-S30
	A2SHCPU
	A2SHCPU-S1
	A2USCPU
	A2USHCPU-S1
	Q2ASCPU
	Q2ASCPU-S1
	Q2ASHCPU
	Q2ASHCPU-S1
Memory cassette	A1SNMCA-2KE
	A1SNMCA-8KE
	A1SNMCA-8KP
	A2SNMCA-30KE

Product	Model
Battery	A8BAT-SET
Input module	A1S42X
	A1SX10
	A1SX10EU
	A1SX20
	A1SX20EU
	A1SX30
	A1SX40
	A1SX40-S1
	A1SX40-S2
	A1SX41
	A1SX41-S1
	A1SX41-S2
	A1SX42
	A1SX42-S1
	A1SX42-S2
	A1SX71
	A1SX80
	A1SX80-S1
	A1SX80-S2
	A1SX81
	A1SX81-S2
	A1SX82-S1
Output module	A1S42Y
	A1SY10
	A1SY10EU
	A1SY14EU
	A1SY18A
	A1SY18AEU
	A1SY22
	A1SY28A
	A1SY40P
	A1SY41P
	A1SY42P
	A1SY50
	A1SY60
	A1SY60E
	A1SY68A
	A1SY71
	A1SY80
	A1SY81
	A1SY82
I/O combined module	A1SH42
	A1SH42P
	A1SH42P-S1
	A1SH42-S1
	A1SX48Y18
	A1SX48Y58
Dummy module	A1SG62

Product	Model
Blank cover for I/O slot	A1SG60
Interrupt module	A1SI61
Analog input module	A1S64AD
	A1S68AD
Analog output module	A1S68DAI
	A1S68DAV
	A1S62DA
Analog I/O module	A1S63ADA
	A1S66ADA
Temperature input module	A1S62RD3N
	A1S62RD4N
	A1S68TD
Temperature control module	A1S64TCTRT
	A1S64TCTRTBW
High-speed counter module	A1SD61
	A1SD62
	A1SD62D
	A1SD62D-S1
	A1SD62E
Positioning module	A1SD75M1
	A1SD75M2
	A1SD75M3
	A1SD75P1-S3
	A1SD75P2-S3
	A1SD75P3-S3
Position detection module	A1S62LS
Ethernet interface module	A1SJ71E71N3-T
	A1SJ71QE71N3-T
Computer link module	A1SJ71UC24-PRF
	A1SJ71UC24-R2
	A1SJ71UC24-R4
Serial communication module	A1SJ71QC24N1
	A1SJ71QC24N1-R2
MELSECNET(II)/B data link module	A1SJ71AP21
	A1SJ71AR21
	A1SJ71AT21B
MELSECNET/10 network module	A1SJ71LP21GE
	A1SJ71LR21
	A1SJ71QLP21S
	A1SJ71QLP21GE
	A1SJ71QLR21
MELSECNET/10 remote I/O station module	A1SJ72QBR15
	A1SJ72QLP25
	A1SJ72QLR25
JEMANET(OPCN-1) interface module	A1SJ71J92-S3
AS-i master module	A1SJ71AS92
PC fault detection module	A1SS91

Product	Model
Conversion adapter for AnS	A1S-TA32
	A1S-TA32-3
	A1S-TA32-7
	A1S-TB32
ROM writer module	A6WA-28P
Modem interface module	Q6TEL
MELSEC-I/OLINK master module	A1SJ51T64
MELSEC-I/OLINK remote I/O module	AJ55TB2-16R
	AJ55TB2-16T
	AJ55TB2-4R
	AJ55TB2-4T
	AJ55TB2-8R
	AJ55TB2-8T
	AJ55TB3-16D
	AJ55TB32-16DR
	AJ55TB32-16DT
	AJ55TB32-4DR
	AJ55TB32-4DT
	AJ55TB32-8DR
	AJ55TB32-8DT
	AJ55TB3-4D
	AJ55TB3-8D
MODBUS interface module	A1SJ71UC24-R2-S2
	A1SJ71UC24-R4-S2
PROFIBUS interface module	A1SJ71PB92D
	A1SJ71PB93D
Devicenet interface module	A1SJ71DN91

11. Models to be discontinued (announced before September, 2012)

Product	Model	Production discontinuation
CPU module	A1SCPU	Through September, 1998
	A1SJCPU	Through March, 1996
	A1SJCPU-E	Through December, 1999
	A1SJCPU-S3	Through September, 1998
	A1SJCPU-S3-E	Through March, 2003
	A2SCPU	Through September, 1998
	A2SCPU-S1	Through August,1998
	A2USCPU-S1	Through December, 1999
Power supply module	A1S61P	Through December, 1997
	A1S61PEU	Through December, 1997
	A1S61PUL	Through December, 1999
	A1S62P	Through December, 1997
	A1S62PEU	Through December, 1997
	A1S62PUL	Through December, 1999
Memory cassette	A1SMCA-2KE	Through December, 1999
	A1SMCA-8KE	Through December, 1999
	A1SMCA-8KP	Through December, 1999
	A2SMCA-14KE	Through December, 1999
	A2SMCA-14KP	Through August, 2002
	A2SMCA-30KE	Through December, 1999
	A2SMCA-30KP	Through December, 1999
Memory card	Q1MEM-256SF	Through August, 2002
	Q1MEM-512SF	Through August, 2002
	Q1MEM-1MSF	Through August, 2002
	Q1MEM-2MSF	Through August, 2002
Memory card interface module	A1SD59J-S2	Through April, 2010
	A1SD59J-MIF	Through April, 2011
Extension cable	A1SC05NB	Through September, 2008
	A1SC07NB	Through September, 2008
	A1SC30NB	Through September, 2008
	A1SC50NB	Through September, 2008
Output module	A1SY28EU	Through March, 2003
	A1SY42	Through August, 2004
	A1SY81EP	Through December, 1999
I/O combined module	A1SJ-56DT	Through April, 2010
	A1SJ-56DR	Through April, 2010
Terminal block cover	A1STEC-S	Through October, 2010
Analog timer module	A1ST60	Through October, 2010
Pulse catch module	A1SP60	Through April, 2011
Positioning module	A1SD70	Through September 2013 (planned)
	A1SD71-S2	Through October, 2004
	A1SD71-S7	Through October, 2004

Product	Model	Production discontinuation
Temperature control module	A1S62TCRTBW-S2	Through May, 2007
	A1S62TCRT-S2	Through May, 2007
	A1S62TCTTBW-S2	Through May, 2007
	A1S62TCTT-S2	Through May, 2007
	A1S64TCRTBW-S1	Through May, 2007
	A1S64TCRT-S1	Through May, 2007
	A1S64TCTT	Through December, 1999
	A1S64TCTTBW-S1	Through May, 2007
	A1S64TCTT-S1	Through May, 2007
Ethernet interface module	A1SJ71QE71-B2	Through February, 2002
	A1SJ71QE71-B5	Through February, 2002
	A1SJ71QE71N-B2	Through January, 2011
	A1SJ71QE71N-B5	Through January, 2011
	A1SJ71QE71N-B5T	Through July, 2003
	A1SJ71E71-B2	Through September, 1996
	A1SJ71E71-B5	Through September, 1996
	A1SJ71E71-B2-S3	Through December, 2001
	A1SJ71E71-B5-S3	Through December, 2001
	A1SJ71E71N-B2	Through January, 2011
	A1SJ71E71N-B5	Through January, 2011
	A1SJ71E71N-B5T	Through July, 2003
	A1SJ71E71N-T	Through July, 2005
Serial communication module	A1SJ71QC24	Through December, 2004
	A1SJ71QC24-R2	Through December, 2004
	A1SJ71QC24N	Through June, 2006
	A1SJ71QC24N-R2	Through June, 2006
Modem interface module	A1SJ71CMO-S3	Through January, 2010
Intelligent communication module	A1SD51S	Through June, 2010
MELSECNET(II)/B data link module	A1SJ71AP21-S3	Through September, 2008
	A1SJ71T21B	Through December, 1999
	A1SJ72T25B	Through September, 2008
MELSECNET/MINI-S3 master module	A1SJ71PT32-S3	Through September, 2008
	A1SJ71T32-S3	Through March, 2003
ME-NET interface module	A1SJ71ME81	Through February, 2004
S-LINK system master module	A1SJ71SL92	Through March, 2000
	A1SJ71SL92N	Through July, 2010
JEMANET(OPCN-1) interface module	A1SJ72J95	Through October, 2008
B/NET interface module	A1SJ71B62-S3	Through November, 2011
ID interface module	A1SJ71ID1-R4	Through September, 2001
	A1SJ71ID2-R4	Through September, 2001
	A1S32ID1	Through September, 2001
	A1S32ID2	Through September, 2001
	A1S35ID1	Through January, 2011
	A1S35ID2	Through January, 2011
ROM writer module	A2SWA-28AP	Through December, 1999
	A2SWA-28P	Through August, 2002
Cap	A1SCAP	Through December, 1999
	A1SCCA	Through December, 1999
Paging interface module	A1SD21-S1	Through May, 2002

Product	Model	Production discontinuation
PROFIBUS interface module	A1SJ71PB96F	Through February, 2011

12.List of alternative models

12.1 CPU module

12.1.1 Replacement with L series

AnS/QnAS series model		L series alternative model	
Product	**Model**	**Model**	**Remarks (restrictions)**
CPU module	A1SJHCPU	L02CPU/ L02CPU-P	1) I/O control: Selectable (refresh or direct mode) → Refresh mode only 2) Processing speed (LD instruction): During refresh 0.33μs → 0.04μs 3) PC MIX value: 0.4 → 14 4) Number of I/O points: 256 → 1024 5) Number of I/O device points: 2048 → 8192 6) Program capacity: 8K steps → 20K steps 7) Number of file register points: 8K → 64K 8) Built-in function: None → Built-in I/O function and Ethernet function 9) Number of extension base units: 1 base unit (max. 13 slots) → 2 blocks (max. 30 modules) 10) Applicable memory: Built-in RAM or E^2PROM cassette (sold separately) → Program memory, standard RAM, standard ROM, or memory card (sold separately) 11) Microcomputer program: Available → Not available 12) Configuration:Base unit (five slots), CPU module, and power supply module are integrated. → Modules are connected. (No base unit is required.)
	A1SCPUC24-R2[*1] A1SHCPU	L02CPU/ L02CPU-P	1) I/O control: Selectable (refresh or direct mode) → Refresh mode only 2) Processing speed (LD instruction): During refresh 0.33μs → 0.04μs 3) PC MIX value: 0.4 → 14 4) Number of I/O points: 256 → 1024 5) Number of I/O device points: 2048 → 8192 6) Program capacity: 8K steps → 20K steps 7) Number of file register points: 8K → 64K 8) Built-in function: None → Built-in I/O function and Ethernet function 9) Number of extension base units: 1 base unit (max. 16 slots) → 2 blocks (max. 30 modules) 10) Applicable memory:Built-in RAM or E^2PROM cassette (sold separately) → Program memory, standard RAM, standard ROM, or memory card (sold separately) 11) Microcomputer program: Available → Not available 12) Configuration: Modules are mounted on a base unit. → Modules are connected. (No base unit is required.)

*1 A CPU module with the computer link function is replaced by a CPU module or an LJ71C24-R2.

AnS/QnAS series model		L series alternative model	
Product	**Model**	**Model**	**Remarks (restrictions)**
CPU module	A2SHCPU	L02CPU/ L02CPU-P	1) I/O control: Selectable (refresh or direct mode) → Refresh mode only 2) Processing speed (LD instruction): During refresh 0.25μs → 0.04μs 3) PC MIX value: 0.5 → 14 4) Number of I/O points: 512 → 1024 5) Number of I/O device points: 2048 → 8192 6) Program capacity: 14K steps → 20K steps 7) Number of file register points: 8K → 64K 8) Built-in function: None → Built-in I/O function and Ethernet function 9) Number of extension base units: 1 base unit (max. 16 slots) → 2 blocks (max. 30 modules) 10) Applicable memory: Built-in RAM or E^2PROM cassette (sold separately) → Program memory, standard RAM, standard ROM, or memory card (sold separately) 11) Microcomputer program: Available → Not available 12) Configuration: Modules are mounted on a base unit. → Modules are connected. (No base unit is required.)
	A2USCPU	L02CPU/ L02CPU-P	1) I/O control: Refresh mode only 2) Processing speed (LD instruction): 0.2μs → 0.04μs 3) PC MIX value: 0.9 → 14 4) Number of I/O points: 512 → 1024 5) Number of I/O device points: 8192 → 8192 6) Program capacity: 14K steps → 20K steps 7) Number of file register points: 8K → 64K 8) Built-in function: None → Built-in I/O function and Ethernet function 9) Number of extension base units: 1 base unit (max. 16 slots) → 2 blocks (max. 30 modules) 10) Applicable memory: Built-in RAM or E^2PROM cassette (sold separately) → Program memory, standard RAM, standard ROM, or memory card (sold separately) 11) Microcomputer program: Not available 12) Configuration: Modules are mounted on a base unit. → Modules are connected. (No base unit is required.) 13) Sequence instruction: AnA/AnU dedicated instructions are replaceable.*2
	A2USHCPU-S1	L02CPU/ L02CPU-P	1) I/O control: Refresh mode only 2) Processing speed (LD instruction): 0.09μs → 0.04μs 3) PC MIX value: 2.0 → 14 4) Number of I/O points: 1024 → 1024 5) Number of I/O device points: 8192 → 8192 6) Program capacity: 30K steps → 20K steps 7) Number of file register points: 8K → 64K 8) Built-in function: None → Built-in I/O function and Ethernet function 9) Number of extension base units: 1 base unit (max. 16 slots) → 2 blocks (max. 30 modules) 10) Applicable memory: Built-in RAM or E^2PROM cassette (sold separately) → Program memory, standard RAM, standard ROM, or memory card (sold separately) 11) Microcomputer program: Not available 12) Configuration: Modules are mounted on a base unit. → Modules are connected. (No base unit is required.) 13) Sequence instruction: AnA/AnU dedicated instructions are replaceable.*2
		L26CPU-BT/ L26CPU-PBT	1) I/O control: Refresh mode only 2) Processing speed (LD instruction): 0.09μs → 0.0095μs 3) PC MIX value: 2.0 → 60 4) Number of I/O points: 1024 → 4096 5) Number of I/O device points: 8192 → 8192 6) Program capacity: 30K steps → 260K steps 7) Number of file register points: 8K → 384K 8) Built-in function: None → Built-in I/O function, Ethernet function, and CC-Link function 9) Number of extension base units: 1 base unit (max. 16 slots) → 3 blocks (max. 40 modules) 10) Applicable memory: Built-in RAM or E^2PROM cassette (sold separately) → Program memory, Standard RAM, and Standard ROM 11) Microcomputer program: Not available 12) Configuration: Modules are mounted on a base unit. → Modules are connected. (No base unit is required.) 13) Sequence instruction: AnA/AnU dedicated instructions are replaceable.*2

*2 The instruction for file registers and special function modules need to be replaced with those for the L series.

AnS/QnAS series model		L series alternative model	
Product	**Model**	**Model**	**Remarks (restrictions)**
CPU module	Q2ASCPU	L02CPU/ L02CPU-P	1) I/O control: Refresh mode only 2) Processing speed (LD instruction): 0.2μs → 0.04μs 3) PC MIX value: 1.3 → 14 4) Number of I/O points: 512 → 1024 5) Number of I/O device points: 8192 → 8192 6) Program capacity: 28K steps → 20K steps 7) Number of file register points: 0K (Memory card (sold separately) is necessary.) → 64K 8) Built-in function: None → Built-in I/O function and Ethernet function 9) Number of extension base units: 1 base unit (max. 16 slots) → 2 blocks (max. 30 modules) 10) Applicable memory: Built-in RAM or memory card (sold separately) → Program memory, standard RAM, standard ROM, or memory card (sold separately) 11) Microcomputer program: Not available 12) Configuration: Modules are mounted on a base unit. → Modules are connected. (No base unit is required.)
		L26CPU-BT/ L26CPU-PBT	1) I/O control: Refresh mode only 2) Processing speed (LD instruction): 0.2μs → 0.0095μs 3) PC MIX value: 1.3 → 60 4) Number of I/O points: 512 → 4096 5) Number of I/O device points: 8192 → 8192 6) Program capacity: 28K steps → 260K steps 7) Number of file register points: 0K (Memory card (sold separately) is necessary.) → 384K 8) Built-in function: None → Built-in I/O function, Ethernet function, and CC-Link function 9) Number of extension base units: 1 base unit (max. 16 slots) → 3 blocks (max. 40 modules) 10) Applicable memory: Built-in RAM or memory card (sold separately) → Program memory, standard RAM, standard ROM, or memory card (sold separately) 11) Microcomputer program: Not available 12) Configuration: Modules are mounted on a base unit. → Modules are connected. (No base unit is required.)
	Q2ASCPU-S1	L02CPU/ L02CPU-P	1) I/O control: Refresh mode only 2) Processing speed (LD instruction): 0.2μs → 0.04μs 3) PC MIX value: 1.3 → 14 4) Number of I/O points: 1024 → 1024 5) Number of I/O device points: 8192 → 8192 6) Program capacity: 60K steps → 20K steps 7) Number of file register points: 0K (Memory card (sold separately) is necessary.) → 64K 8) Built-in function: None → Built-in I/O function and Ethernet function 9) Number of extension base units: 1 base unit (max. 16 slots) → 2 blocks (max. 30 modules) 10) Applicable memory: Built-in RAM or memory card (sold separately) → Program memory, standard RAM, standard ROM, or memory card (sold separately) 11) Microcomputer program: Not available 12) Configuration: Modules are mounted on a base unit. → Modules are connected. (No base unit is required.)
		L26CPU-BT/ L26CPU-PBT	1) I/O control: Refresh mode only 2) Processing speed (LD instruction): 0.2μs → 0.0095μs 3) PC MIX value: 1.3 → 60 4) Number of I/O points: 1024 → 4096 5) Number of I/O device points: 8192 → 8192 6) Program capacity: 60K steps → 260K steps 7) Number of file register points: 0K (Memory card (sold separately) is necessary.) → 384K 8) Built-in function: None → Built-in I/O function, Ethernet function, and CC-Link function 9) Number of extension base units: 1 base unit (max. 16 slots) → 3 blocks (max. 40 modules) 10) Applicable memory: Built-in RAM or memory card (sold separately) → Program memory, standard RAM, standard ROM, or memory card (sold separately) 11) Microcomputer program: Not available 12) Configuration: Modules are mounted on a base unit. → Modules are connected. (No base unit is required.)

AnS/QnAS series model		L series alternative model	
Product	**Model**	**Model**	**Remarks (restrictions)**
CPU module	Q2ASHCPU	L02CPU/ L02CPU-P	1) I/O control: Refresh mode only 2) Processing speed (LD instruction): 0.075μs → 0.04μs 3) PC MIX value: 3.8 → 14 4) Number of I/O points: 512 → 1024 5) Number of I/O device points: 8192 → 8192 6) Program capacity: 28K steps → 20K steps 7) Number of file register points: 0K (Memory card (sold separately) is necessary.) → 64K 8) Built-in function: None → Built-in I/O function and Ethernet function 9) Number of extension base units: 1 base unit (max. 16 slots) → 2 blocks (max. 30 modules) 10) Applicable memory: Built-in RAM or memory card (sold separately) → Program memory, standard RAM, standard ROM, or memory card (sold separately) 11) Microcomputer program: Not available 12) Configuration: Modules are mounted on a base unit. → Modules are connected. (No base unit is required.)
		L26CPU-BT/ L26CPU-PBT	1) I/O control: Refresh mode only 2) Processing speed (LD instruction): 0.075μs → 0.0095μs 3) PC MIX value: 1.3 → 60 4) Number of I/O points: 512 → 4096 5) Number of I/O device points: 8192 → 8192 6) Program capacity: 28K steps → 260K steps 7) Number of file register points: 0K (Memory card (sold separately) is necessary.) → 384K 8) Built-in function: None → Built-in I/O function, Ethernet function, and CC-Link function 9) Number of extension base units: 1 base unit (max. 16 slots) → 3 blocks (max. 40 modules) 10) Applicable memory: Built-in RAM or memory card (sold separately) → Program memory, standard RAM, standard ROM, or memory card (sold separately) 11) Microcomputer program: Not available 12) Configuration: Modules are mounted on a base unit. → Modules are connected. (No base unit is required.)
	Q2ASHCPU-S1	L02CPU/ L02CPU-P	1) I/O control: Refresh mode only 2) Processing speed (LD instruction): 0.075μs → 0.04μs 3) PC MIX value: 3.8 → 14 4) Number of I/O points: 1024 → 1024 5) Number of I/O device points: 8192 → 8192 6) Program capacity: 60K steps → 20K steps 7) Number of file register points: 0K (Memory card (sold separately) is necessary.) → 64K 8) Built-in function: None → Built-in I/O function and Ethernet function 9) Number of extension base units: 1 base unit (max. 16 slots) → 2 blocks (max. 30 modules) 10) Applicable memory: Built-in RAM or memory card (sold separately) → Program memory, standard RAM, standard ROM, or memory card (sold separately) 11) Microcomputer program: Not available 12) Configuration: Modules are mounted on a base unit. → Modules are connected. (No base unit is required.)
		L26CPU-BT/ L26CPU-PBT	1) I/O control: Refresh mode only 2) Processing speed (LD instruction): 0.075μs → 0.0095μs 3) PC MIX value: 1.3 → 60 4) Number of I/O points: 1024 → 4096 5) Number of I/O device points: 8192 → 8192 6) Program capacity: 60K steps → 260K steps 7) Number of file register points: 0K (Memory card (sold separately) is necessary.) → 384K 8) Built-in function: None → Built-in I/O function, Ethernet function, and CC-Link function 9) Number of extension base units: 1 base unit (max. 16 slots) → 3 blocks (max. 40 modules) 10) Applicable memory: Built-in RAM or memory card (sold separately) → Program memory, standard RAM, standard ROM, or memory card (sold separately) 11) Microcomputer program: Not available 12) Configuration: Modules are mounted on a base unit. → Modules are connected. (No base unit is required.)

12.1.2 Replacement with Q series

AnS/QnAS series model		Q series alternative model	
Product	**Model**	**Model**	**Remarks (restrictions)**
CPU module	A1SJHCPU	Q00UJCPU	1) I/O control: Selectable (refresh or direct mode) → Refresh mode only 2) Processing speed (LD instruction) : During refresh 0.33μs → 0.12μs 3) PC MIX value: 0.4 → 4.92 4) Number of I/O points: 256 5) Number of I/O device points: 2048 → 8192 6) Program capacity: 8k steps → 10k steps 7) Number of file register points: 8k → 0 8) Number of extension base units: 2 → 2 (Up to 1 extension base unit when a GOT is connected in a bus topology) 9) Applicable memory: Built-in RAM/E^{2}PROM cassette (sold separately) → program memory/Standard ROM 10) Microcomputer program: Available → Not available 11) Configuration: Including 5 slot base unit, CPU module and power supply module
		Q00UCPU	1) I/O control: Selectable (refresh or direct mode) → Refresh mode only 2) Processing speed (LD instruction) : During refresh 0.33μs → 0.08μs 3) PC MIX value: 0.4 → 7.36 4) Number of I/O points: 256 → 1024 5) Number of I/O device points: 2048 → 8192 6) Program capacity: 8k steps → 10k steps 7) Number of file register points: 8k → 64k 8) Number of extension base units: 1 → 4 (Up to 3 extension base units when a GOT is connected in a bus topology) 9) Applicable memory: Built-in RAM/E^{2}PROM cassette (sold separately) → program memory/Standard RAM/Standard ROM 10) Microcomputer program: Available → Not available
	A1SCPUC24-R2[*1] A1SHCPU	Q00UCPU	1) I/O control: Selectable (refresh or direct mode) → Refresh mode only 2) Processing speed (LD instruction): During refresh 0.33μs → 0.08μs 3) PC MIX value: 0.4 → 7.36 4) Number of I/O points: 256 → 1024 5) Number of I/O device points: 2048 → 8192 6) Program capacity: 8k steps → 10k steps 7) Number of file register points: 8k → 64k 8) Number of extension base units: 1 → 4 (Up to 3 extension base units when a GOT is connected in a bus topology) 9) Applicable memory: Built-in RAM/E^{2}PROM cassette (sold separately) → program memory/Standard RAM/Standard ROM 10) Microcomputer program: Available → Not available

*1 A CPU module with the computer link function is replaced by a CPU module or an LJ71C24-R2.

AnS/QnAS series model		Q series alternative model	
Product	**Model**	**Model**	**Remarks (restrictions)**
CPU module	A2SHCPU	Q01UCPU	1) I/O control: Selectable (refresh or direct mode) → Refresh mode only 2) Processing speed (LD instruction): During refresh 0.25μs → 0.06μs 3) PC MIX value: 0.5 → 9.79 4) Number of I/O points: 512 → 1024 5) Number of I/O device points: 2048 → 8192 6) Program capacity: 14k steps → 15k steps 7) Number of file register points: 8k → 64k 8) Number of extension base units: 1 → 4 (Up to 3 extension base units when a GOT is connected in a bus topology) 9) Applicable memory: Built-in RAM/E^{2}PROM cassette (sold separately) → program memory/Standard RAM/Standard ROM 10) Microcomputer program: Available → Not available
	A2USCPU	Q02UCPU	1) I/O control: Refresh mode only 2) Processing speed (LD instruction): 0.2μs → 0.04μs 3) PC MIX value: 0.9 → 14 4) Number of I/O points: 512 → 2048 5) Number of I/O device points: 8192 → 8192 6) Program capacity: 14k steps → 20k steps 7) Number of file register points: 8k → 64k (Using memory card: max. 4086k points) 8) Number of extension base units: 1 → 4 (Up to 3 extension base units when a GOT is connected in a bus topology) 9) Applicable memory: Built-in RAM/E^{2}PROM cassette (sold separately) → program memory/Standard RAM/Standard ROM/memory card (sold separately) 10) Microcomputer program: Not available 11) Sequence instruction: AnA/AnU-dedicated instructions are replaceable.*2
	A2USHCPU-S1	Q02UCPU	1) I/O control: Refresh mode only 2) Processing speed (LD instruction): 0.09μs → 0.04μs 3) PC MIX value: 2.0 → 14 4) Number of I/O points: 1024 → 2048 5) Number of I/O device points: 8192 → 8192 6) Program capacity: 30k steps → 20k steps 7) Number of file register points: 8k → 64k (Using memory card: max. 4086k points) 8) Number of extension base units: 1 → 4 (Up to 3 extension base units when a GOT is connected in a bus topology) 9) Applicable memory: Built-in RAM/E^{2}PROM cassette (sold separately) → program memory/Standard RAM/Standard ROM/memory card (sold separately) 10) Microcomputer program: Not available 11) Sequence instruction: AnA/AnU-dedicated instructions are replaceable.*2
		Q03UDCPU	1) I/O control: Refresh mode only 2) Processing speed (LD instruction): 0.09μs → 0.02μs 3) PC MIX value: 2.0 → 28 4) Number of I/O points: 1024 → 4096 5) Number of I/O device points: 8192 → 8192 6) Program capacity: 30k steps → 30k steps 7) Number of file register points: 8k → 96k (Using memory card: max. 4086k points) 8) Number of extension base units: 1 → 7 9) Applicable memory: Built-in RAM/E^{2}PROM cassette (sold separately) → program memory/Standard RAM/Standard ROM/memory card (sold separately) 10) Microcomputer program: Not available 11) Sequence instruction: AnA/AnU-dedicated instructions are replaceable.*2

*2 The instruction for file registers and special function modules need to be replaced with those for the Q series.

AnS/QnAS series model		Q series alternative model	
Product	**Model**	**Model**	**Remarks (restrictions)**
CPU module	Q2ASCPU	Q02UCPU	1) I/O control: Refresh mode only 2) Processing speed (LD instruction): 0.2μs → 0.04μs 3) PC MIX value: 1.3 → 14 4) Number of I/O points: 512 → 2048 5) Number of I/O device points: 8192 → 8192 6) Program capacity: 28k steps → 20k steps 7) Number of file register points: 0k (Memory card (sold separately) is necessary.) → 64k (Using memory card: max. 4086k points) 8) Number of extension base units: 1 → 4 (Up to 3 extension base units when a GOT is connected in a bus topology) 9) Applicable memory: Built-in RAM/memory card (sold separately) → program memory/Standard RAM/Standard ROM/memory card (sold separately) 10) Microcomputer program: Not available
		Q03UDCPU	1) I/O control: Refresh mode only 2) Processing speed (LD instruction): 0.2μs → 0.02μs 3) PC MIX value: 1.3 → 28 4) Number of I/O points: 512 → 4096 5) Number of I/O device points: 8192 → 8192 6) Program capacity: 14k steps → 30k steps 7) Number of file register points: 0k (Memory card (sold separately) is necessary.) → 96k (Using memory card: max. 4086k points) 8) Number of extension base units: 1 → 7 9) Applicable memory: program memory/memory card (sold separately) → program memory/Standard RAM/Standard ROM/memory card (sold separately) 10) Microcomputer program: Not available
	Q2ASCPU-S1	Q04UDHCPU	1) I/O control: Refresh mode only 2) Processing speed (LD instruction): 0.2μs → 0.0095μs 3) PC MIX value: 1.3 → 60 4) Number of I/O points: 1024 → 4096 5) Number of I/O device points: 8192 → 8192 6) Program capacity: 60k steps → 40k steps 7) Number of file register points: 0k (Memory card (sold separately) is necessary.) → 128k (Using memory card: max. 4086k points) 8) Number of extension base units: 1 → 7 9) Applicable memory: program memory/memory card (sold separately) → program memory/Standard RAM/Standard ROM/memory card (sold separately) 10) Microcomputer program: Not available

AnS/QnAS series model		Q series alternative model	
Product	**Model**	**Model**	**Remarks (restrictions)**
CPU module	Q2ASCPU-S1	Q06UDHCPU	1) I/O control: Refresh mode only 2) Processing speed (LD instruction): 0.2μs → 0.0095μs 3) PC MIX value: 1.3 → 60 4) Number of I/O points: 1024 → 4096 5) Number of I/O device points: 8192 → 8192 6) Program capacity: 60k steps → 60k steps 7) Number of file register points: 0k (Memory card (sold separately) is necessary.) → 384k (Using memory card: max. 4086k points) 8) Number of extension base units: 1 → 7 9) Applicable memory: program memory/memory card (sold separately) → program memory/Standard RAM/Standard ROM/memory card (sold separately) 10) Microcomputer program: Not available
	Q2ASHCPU	Q02UCPU	1) I/O control: Refresh mode only 2) Processing speed (LD instruction) : 0.075μs → 0.04μs 3) PC MIX value: 3.8 → 14 4) Number of I/O points: 512 → 2048 5) Number of I/O device points: 8192 → 8192 6) Program capacity: 28k steps → 20k steps 7) Number of file register points: 0k (Memory card (sold separately) is necessary.) → 64k (Using memory card: max. 4086k points) 8) Number of extension base units: 1 → 4 (Up to 3 extension base units when a GOT is connected in a bus topology) 9) Applicable memory: program memory/memory card (sold separately) → program memory/Standard RAM/Standard ROM/memory card (sold separately) 10) Microcomputer program: Not available
		Q03UDCPU	1) I/O control: Refresh mode only 2) Processing speed (LD instruction) : 0.075μs → 0.02μs 3) PC MIX value: 3.8 → 28 4) Number of I/O points: 512 → 4096 5) Number of I/O device points: 8192 → 8192 6) Program capacity: 28k steps → 30k steps 7) Number of file register points: 0k (Memory card (sold separately) is necessary.) → 96k (Using memory card: max. 4086k points) 8) Number of extension base units: 1 → 7 9) Applicable memory: program memory/memory card (sold separately) → program memory/Standard RAM/Standard ROM/memory card (sold separately) 10) Microcomputer program: Not available
	Q2ASHCPU-S1	Q04UDHCPU	1) I/O control: Refresh mode only 2) Processing speed (LD instruction): 0.075μs → 0.0095μs 3) PC MIX value: 3.8 → 60 4) Number of I/O points: 1024 → 4096 5) Number of I/O device points: 8192 → 8192 6) Program capacity: 60k steps → 40k steps 7) Number of file register points: 0k (Memory card (sold separately) is necessary.) → 128k (Using memory card: max. 4086k points) 8) Number of extension base units: 1 → 7 9) Applicable memory: program memory/memory card (sold separately) → program memory/Standard RAM/Standard ROM/memory card (sold separately) 10) Microcomputer program: Not available
		Q06UDHCPU	1) I/O control: Refresh mode only 2) Processing speed (LD instruction): 0.075μs → 0.0095μs 3) PC MIX value: 3.8 → 60 4) Number of I/O points: 1024 → 4096 5) Number of I/O device points: 8192 → 8192 6) Program capacity: 60k steps 7) Number of file register points: 0k (Memory card (sold separately) is necessary.) → 384k (Using memory card: max. 4086k points) 8) Number of extension base units: 1 → 7 9) Applicable memory: program memory/memory card (sold separately) → program memory/Standard RAM/Standard ROM/memory card (sold separately) 10) Microcomputer program: Not available

12.2 I/O module

12.2.1 Replacement with L series

AnS/QnAS series model		L series alternative model	
Product	**Model**	**Model**	**Remarks (restrictions)**
Input module	A1SX10	LX10	1) External wiring: Changed 2) Number of slots: Not changed 3) Program: Number of occupied I/O points: Not changed 4) Specifications: Rated input voltage: Not changed Operating voltage range: Not changed Rated input current: Changed (approx. 6mA (60Hz) → 8.2mA (60Hz)) ON voltage/ON current: Not changed OFF voltage/OFF current: Changed Input resistance: Changed 5) Functions: Not changed
	A1SX10EU	LX10	1) External wiring: Changed 2) Number of slots: Not changed 3) Program: Number of occupied I/O points: Not changed 4) Specifications: Rated input voltage: Not changed Operating voltage range: Not changed Rated input current: Changed (approx. 7mA (60Hz) → 8.2mA (60Hz)) ON voltage/ON current: Not changed OFF voltage/OFF current: Changed Input resistance: Changed 5) Functions: Not changed
	A1SX20	LX28	1) External wiring: Changed 2) Number of slots: Changed (Two modules are required.) 3) Program: Number of occupied I/O points: Changed 4) Specifications: Rated input voltage: Changed (200 to 240VAC → 100 to 240VAC) Operating voltage range: Not changed Rated input current: Changed (approx. 9mA (60Hz) → 16.4mA (60Hz)) ON voltage/ON current: Changed OFF voltage/OFF current: Changed Input resistance: Changed 5) Functions: Not changed

AnS/QnAS series model		L series alternative model	
Product	**Model**	**Model**	**Remarks (restrictions)**
Input module	A1SX20EU	LX28	1) External wiring: Changed 2) Number of slots: Changed (Two modules are required.) 3) Program: Number of occupied I/O points: Changed 4) Specifications: Rated input voltage: Changed (200 to 240VAC → 100 to 240VAC) Operating voltage range: Not changed Rated input current: Changed (approx. 11mA (60Hz) →16.4mA (60Hz)) ON voltage/ON current: Changed OFF voltage/OFF current: Changed Input resistance: Changed 5) Functions: Not changed
	A1SX30	LX40C6	1) External wiring: Changed 2) Number of slots: Not changed 3) Program: Number of occupied I/O points: Not changed 4) Specifications: Rated input voltage: Changed (12VDC is not applicable. 12VAC and 24VAC are not applicable.) Rated input current: Changed (8.5mA → 6mA) ON voltage/ON current: Changed OFF voltage/OFF current: Changed Input resistance: Changed 5) Functions: Not changed [When applying AC input] Convert 12/24VAC to DC externally before input to the LX40C6.
	A1SX40	LX40C6	1) External wiring: Changed 2) Number of slots: Not changed 3) Program: Number of occupied I/O points: Not changed 4) Specifications: Rated input voltage: Changed (12VDC is not applicable.) Rated input current: Changed (approx. 7mA → 6mA) ON voltage/ON current: Changed OFF voltage/OFF current: Changed Input resistance: Changed 5) Functions: Not changed
	A1SX40-S1	LX40C6	1) External wiring: Changed 2) Number of slots: Not changed 3) Program: Number of occupied I/O points: Not changed 4) Specifications: Rated input voltage: Not changed Rated input current: Changed (approx. 7mA → 6mA) ON voltage/ON current: Changed OFF voltage/OFF current: Changed Input resistance: Changed Response time: Changed 5) Functions: Not changed

AnS/QnAS series model		L series alternative model	
Product	**Model**	**Model**	**Remarks (restrictions)**
Input module	A1SX40-S2	LX40C6	1) External wiring: Changed 2) Number of slots: Not changed 3) Program: Number of occupied I/O points: Not changed 4) Specifications: Rated input voltage: Not changed Rated input current: Changed (approx. 7mA → 6mA) ON voltage/ON current: Changed OFF voltage/OFF current: Changed Input resistance: Changed 5) Functions: Not changed
	A1SX41	LX41C4	1) External wiring: Not changed 2) Number of slots: Not changed 3) Program: Number of occupied I/O points: Not changed 4) Specifications: Rated input voltage: Changed (12VDC is not applicable.) Rated input current: Changed (approx. 7mA → 4mA) ON voltage/ON current: Changed OFF voltage/OFF current: Changed Input resistance: Changed 5) Functions: Not changed
	A1SX41-S1	LX41C4	1) External wiring: Not changed 2) Number of slots: Not changed 3) Program: Number of occupied I/O points: Not changed 4) Specifications: Rated input voltage: Not changed Rated input current: Changed (approx. 7mA → 4mA) ON voltage/ON current: Changed OFF voltage/OFF current: Changed Input resistance: Changed Response time: Changed 5) Functions: Not changed
	A1SX41-S2	LX41C4	1) External wiring: Not changed 2) Number of slots: Not changed 3) Program: Number of occupied I/O points: Not changed 4) Specifications: Rated input voltage: Not changed Rated input current: Changed (approx. 7mA → 4mA) ON voltage/ON current: Changed OFF voltage/OFF current: Changed Input resistance: Changed 5) Functions: Not changed

AnS/QnAS series model		L series alternative model	
Product	**Model**	**Model**	**Remarks (restrictions)**
Input module	A1SX42	LX42C4	1) External wiring: Not changed 2) Number of slots: Not changed 3) Program: Number of occupied I/O points: Not changed 4) Specifications: Rated input voltage: Changed (12VDC is not applicable.) Rated input current: Changed (approx. 5mA → 4mA) ON voltage/ON current: Changed OFF voltage/OFF current: Changed Input resistance: Changed 5) Functions: Not changed
	A1SX42-S1	LX42C4	1) External wiring: Not changed 2) Number of slots: Not changed 3) Program: Number of occupied I/O points: Not changed 4) Specifications: Rated input voltage: Not changed Rated input current: Changed (approx. 5mA → 4mA) ON voltage/ON current: Changed OFF voltage/OFF current: Changed Input resistance: Changed Response time: Changed 5) Functions: Not changed
	A1SX42-S2	LX42C4	1) External wiring: Not changed 2) Number of slots: Not changed 3) Program: Number of occupied I/O points: Not changed 4) Specifications: Rated input voltage: Not changed Rated input current: Changed (approx. 5mA → 4mA) ON voltage/ON current: Changed OFF voltage/OFF current: Changed Input resistance: Changed 5) Functions: Not changed
	A1SX71	LX41C4	1) External wiring: Not changed 2) Number of slots: Not changed 3) Program: Number of occupied I/O points: Not changed 4) Specifications: Rated input voltage: Changed (5VDC and 12VDC are not applicable.) Rated input current: Changed (approx. 7mA → 4mA) ON voltage/ON current: Changed OFF voltage/OFF current: Changed Input resistance: Changed 5) Functions: Not changed

AnS/QnAS series model		L series alternative model	
Product	**Model**	**Model**	**Remarks (restrictions)**
Input module	A1SX80	LX40C6	1) External wiring: Changed 2) Number of slots: Not changed 3) Program: Number of occupied I/O points: Not changed 4) Specifications: Rated input voltage: Changed (12VDC is not applicable.) Rated input current: Changed (approx. 7mA → 6mA) ON voltage/ON current: Changed OFF voltage/OFF current: Changed Input resistance: Changed 5) Functions: Not changed
	A1SX80-S1	LX40C6	1) External wiring: Changed 2) Number of slots: Not changed 3) Program: Number of occupied I/O points: Not changed 4) Specifications: Rated input voltage: Not changed Rated input current: Changed (approx. 7mA → 6mA) ON voltage/ON current: Changed OFF voltage/OFF current: Changed Input resistance: Changed Response time: Changed 5) Functions: Not changed
	A1SX80-S2	LX40C6	1) External wiring: Changed 2) Number of slots: Not changed 3) Program: Number of occupied I/O points: Not changed 4) Specifications: Rated input voltage: Not changed Rated input current: Changed (approx. 7mA → 6mA) ON voltage/ON current: Changed OFF voltage/OFF current: Changed Input resistance: Changed 5) Functions: Not changed
	A1SX81	LX41C4	1) External wiring: Not changed (37-pin D-sub connector → 40-pin connector) 2) Number of slots: Not changed 3) Program: Number of occupied I/O points: Not changed 4) Specifications: Rated input voltage: Changed (12VDC is not applicable.) Rated input current: Changed (approx. 7mA → 4mA) ON voltage/ON current: Changed OFF voltage/OFF current: Changed Input resistance: Changed 5) Functions: Not changed

AnS/QnAS series model		L series alternative model	
Product	**Model**	**Model**	**Remarks (restrictions)**
Input module	A1SX81-S2	LX41C4	1) External wiring: Changed (37-pin D-sub connector → 40-pin connector) 2) Number of slots: Not changed 3) Program: Number of occupied I/O points: Not changed 4) Specifications: Rated input voltage: Not changed (12VDC is not applicable.) Rated input current: Changed (approx. 7mA → 4mA) ON voltage/ON current: Changed OFF voltage/OFF current: Changed Input resistance: Changed 5) Functions: Not changed
	A1SX82-S1	LX42C4	1) External wiring: Not changed 2) Number of slots: Not changed 3) Program: Number of occupied I/O points: Not changed 4) Specifications: Rated input voltage: Not changed Rated input current: Changed (approx. 5mA → 4mA) ON voltage/ON current: Changed OFF voltage/OFF current: Changed Input resistance: Changed Response time: Changed 5) Functions: Not changed
Output module	A1SY10 A1SY10EU	LY10R2	1) External wiring: Changed 2) Number of slots: Not changed 3) Program: Number of occupied I/O points: Not changed 4) Specifications: Rated output voltage: Not changed Rated output current: Not changed (If the A1SY10EU is replaced with the LY10R2, the contact life span will be reduced to half.) Wiring method for common: Changed (8 points/common → 16 points/common) 5) Functions: Not changed
	A1SY14EU	LY10R2	1) External wiring: Changed 2) Number of slots: Not changed 3) Program: Number of occupied I/O points: Not changed 4) Specifications: Rated output voltage: Not changed Rated output current: Not changed (The contact life span will be reduced to half.) Wiring method for common: Changed (4 points/common → 16 points/common) 5) Functions: Not changed
	A1SY18A	(None)	(None)
	A1SY18AEU		

AnS/QnAS series model		L series alternative model	
Product	**Model**	**Model**	**Remarks (restrictions)**
Output module	A1SY22	LY20S6	1) External wiring: Changed 2) Number of slots: Not changed 3) Program: Number of occupied I/O points: Not changed 4) Specifications: Rated output voltage: Not changed Rated output current: Not changed Wiring method for common: Changed (8 points/common → 16 points/common) 5) Function: Changed (no fuse)
	A1SY28A	(None)	(None)
	A1SY28EU	(None)	(None)
	A1SY40	LY40NT5P	1) External wiring: Changed 2) Number of slots: Not changed 3) Program: Number of occupied I/O points: Not changed 4) Specifications: Rated output voltage: Not changed Rated output current: Not changed Wiring method for common: Changed (8 points/common → 16 points/common) 5) Functions: Changed (fuse → overheat and overload protection)
	A1SY40P	LY40NT5P	1) External wiring: Changed 2) Number of slots: Not changed 3) Program: Number of occupied I/O points: Not changed 4) Specifications: Rated output voltage: Not changed Rated output current: Not changed Wiring method for common: Changed (8 points/common → 16 points /common) 5) Functions: Not changed
	A1SY41	LY41NT1P	1) External wiring: Not changed 2) Number of slots: Not changed 3) Program: Number of occupied I/O points: Not changed 4) Specifications: Rated output voltage: Not changed Rated output current: Not changed 5) Functions: Changed (fuse → overheat and overload protection)
	A1SY41P	LY41NT1P	1) External wiring: Not changed 2) Number of slots: Not changed 3) Program: Number of occupied I/O points: Not changed 4) Specifications: Rated output voltage: Not changed Rated output current: Not changed 5) Functions: Not changed

AnS/QnAS series model		L series alternative model	
Product	**Model**	**Model**	**Remarks (restrictions)**
Output module	A1SY42	LY42NT1P	1) External wiring: Not changed 2) Number of slots: Not changed 3) Program: Number of occupied I/O points: Not changed 4) Specifications: Rated output voltage: Not changed Rated output current: Not changed 5) Functions: Changed (fuse → overheat and overload protection)
	A1SY42P	LY42NT1P	1) External wiring: Not changed 2) Number of slots: Not changed 3) Program: Number of occupied I/O points: Not changed 4) Specifications: Rated output voltage: Not changed Rated output current: Not changed 5) Functions: Not changed
	A1SY50	LY40NT5P	1) External wiring: Changed 2) Number of slots: Not changed 3) Program: Number of occupied I/O points: Not changed 4) Specifications: Rated output voltage: Not changed Rated output current: Not changed Wiring method for common: Changed (8 points/common → 16 points /common) 5) Functions: Changed (fuse → overheat and overload protection)
	A1SY60	(None)	(None)
	A1SY60E		
	A1SY68A		
	A1SY71	(None)	Consider reexamining the external device to be connected.
	A1SY80	LY40PT5P	1) External wiring: Changed 2) Number of slots: Not changed 3) Program: Number of occupied I/O points: Not changed 4) Specifications: Rated output voltage: Not changed Rated input current: Changed (0.8A → 0.5A) Wiring method for common: Changed (8 points/common → 16 points /common) 5) Functions: Changed (fuse → overheat and overload protection)

AnS/QnAS series model		L series alternative model	
Product	**Model**	**Model**	**Remarks (restrictions)**
Output module	A1SY81	LY41PT1P	1) External wiring: changed (37-pin D-sub connector → 40-pin connector) 2) Number of slots: Not changed 3) Program: Number of occupied I/O points: Not changed 4) Specifications: Rated output voltage: Not changed Rated output current: Not changed 5) Functions: Changed (fuse → overheat and overload protection)
	A1SY81EP	LY41PT1P	1) External wiring: changed (37-pin D-sub connector → 40-pin connector) 2) Number of slots: Not changed 3) Program: Number of occupied I/O points: Not changed 4) Specifications: Rated output voltage: Not changed Rated output current: Not changed 5) Functions: Not changed
	A1SY82	LY42PT1P	1) External wiring: Not changed 2) Number of slots: Not changed 3) Program: Number of occupied I/O points: Not changed 4) Specifications: Rated output voltage: Not changed Rated output current: Not changed 5) Functions: Changed (fuse → overheat and overload protection)
I/O module	A1SH42	LX41C4 + LY41NT1P	1) External wiring: Not changed 2) Number of slots: Changed (Two modules are required.) 3) Program: Number of occupied I/O points: Changed (32 → 64 (32 × 2)) 4) Specifications: (Input part) Rated input voltage: Changed (12VDC is not applicable.) Rated input current: Changed (approx. 5mA → 4mA) ON voltage/ON current: Changed OFF voltage/OFF current: Changed Input resistance: Changed (Output part) Rated output voltage: Not changed Rated output current: Not changed 5) Functions: Changed (fuse → overheat and overload protection)

AnS/QnAS series model		L series alternative model	
Product	**Model**	**Model**	**Remarks (restrictions)**
I/O module	A1SH42P	LX41C4 + LY41NT1P	1) External wiring: Not changed 2) Number of slots: Changed (Two modules are required.) 3) Program: Number of occupied I/O points: Changed (32 → 64 (32 × 2)) 4) Specifications: (Input part) Rated input voltage: Changed (12VDC is not applicable.) Rated input current: Changed (approx. 5mA → 4mA) ON voltage/ON current: Changed OFF voltage/OFF current: Changed Input resistance: Changed (Output part) Rated output voltage: Not changed Rated output current: Not changed 5) Functions: Not changed
	A1SH42-S1	LX41C4 + LY41NT1P	1) External wiring: Not changed 2) Number of slots: Changed (Two modules are required.) 3) Program: Number of occupied I/O points: Changed (32 → 64 (32 × 2)) 4) Specifications: (Input part) Rated input voltage: Not changed Rated input current: Changed (approx. 5mA → 4mA) ON voltage/ON current: Changed OFF voltage/OFF current: Changed Input resistance: Changed Response time: Changed (Output part) Rated output voltage: Not changed Rated output current: Not changed 5) Functions: Changed (fuse → overheat and overload protection)
	A1SH42P-S1	LX41C4 + LY41NT1P	1) External wiring: Not changed 2) Number of slots: Changed (Two modules are required.) 3) Program: Number of occupied I/O points: Changed (32 → 64 (32 × 2)) 4) Specifications: (Input part) Rated input voltage: Not changed Rated input current: Changed (approx. 5mA → 4mA) ON voltage/ON current: Changed OFF voltage/OFF current: Changed Input resistance: Changed Response time: Changed (Output part) Rated output voltage: Not changed Rated output current: Not changed 5) Functions: Not changed

AnS/QnAS series model		L series alternative model	
Product	**Model**	**Model**	**Remarks (restrictions)**
I/O module	A1SX48Y18	LX40C6 + LY10R2	1) External wiring: Changed 2) Number of slots: Changed (Two modules are required.) 3) Program: Number of occupied I/O points: Changed (16 → 32 (16 × 2)) 4) Specifications: (Input part) Rated input voltage: Not changed Rated input current: Changed (approx. 7mA → 6mA) ON voltage/ON current: Changed OFF voltage/OFF current: Changed Input resistance: Changed (Output part) Rated output voltage: Not changed Rated output current: Not changed 5) Functions: Not changed
	A1SX48Y58	LX40C6 + LY40NT5P	1) External wiring: Changed 2) Number of slots: Changed (Two modules are required.) 3) Program: Number of occupied I/O points: Changed (16 → 32 (16 × 2)) 4) Specifications: (Input part) Rated input voltage: Not changed Rated input current: Changed (approx. 7mA → 6mA) ON voltage/ON current: Changed OFF voltage/OFF current: Changed Input resistance: Changed (Output part) Rated output voltage: Not changed Rated output current: Not changed 5) Functions: Not changed
	A1SJ-56DT	LX40C6 + LY40NT5P	1) External wiring: Changed 2) Number of slots: Changed 3) Program: Number of occupied I/O points: Changed (128 (empty 4 slots included) → 64) 4) Specifications: (Input part) Rated input voltage: Not changed Rated input current: Changed (approx. 7mA → 6mA) ON voltage/ON current: Changed OFF voltage/OFF current: Changed Input resistance: Changed (Output part) Rated output voltage: Not changed Rated output current: Not changed 5) Functions: Not changed
I/O module	A1SJ-56DR	LX40C6 + LY10	1) External wiring: Changed 2) Number of slots: Changed 3) Program: Number of occupied I/O points: Changed (128 (empty 4 slots included) → 64) 4) Specifications: (Input part) Rated input voltage: Not changed Rated input current: Changed (approx. 7mA → 6mA) ON voltage/ON current: Changed OFF voltage/OFF current: Changed Input resistance: Changed (Output part) Rated output voltage: Not changed Rated output current: Not changed 5) Functions: Not changed
Dynamic scan I/O module	A1S42X	(None)	Consider converting input signals from dynamic to static and using the LX42C4.
	A1S42Y	(None)	Consider converting input signals from dynamic to static and using the LY42NT1P.

AnS/QnAS series model		L series alternative model	
Product	**Model**	**Model**	**Remarks (restrictions)**
Interrupt module	A1SI61	(None)	Consider using the interrupt function which is a built-in I/O function.
Dummy module	A1SG62	(None)	For the L series, a dummy unit is not required because of baseless configuration. If the I/O assignment is the same as the one before the replacement, consider I/O assignment through parameter settings.
Blank cover	A1SG60	(None)	For the L series, a blank cover is not required because of baseless configuration. If the I/O assignment is the same as the one before the replacement, consider I/O assignment through parameter settings.

12.2.2 Replacement with Q series

AnS/QnAS series model		Q series alternative model	
Product	**Model**	**Model**	**Remarks (restrictions)**
Input module	A1SX10	QX10	1) External wiring: Changed 2) Number of slots: Not changed 3) Program: Number of occupied I/O points: Not changed 4) Specifications: Rated input voltage: Not changed Rated input current: Changed ON voltage/ON current: Not changed OFF voltage/OFF current: Changed Input resistance: Changed 5) Functions: Not changed
	A1SX10EU	QX10	1) External wiring: Changed 2) Number of slots: Not changed 3) Program: Number of occupied I/O points: Not changed 4) Specifications: Rated input voltage: Not changed Rated input current: Changed ON voltage/ON current: Not changed OFF voltage/OFF current: Changed Input resistance: Changed 5) Functions: Not changed
	A1SX20	QX28	1) External wiring: Changed 2) Number of slots: Changed (Two modules are required.) 3) Program: Number of occupied I/O points: Changed (16 points → 32 points (16 points × 2 modules)) 4) Specifications: Rated input voltage: Not changed Rated input current: Changed ON voltage/ON current: Changed OFF voltage/OFF current: Changed Input resistance: Changed 5) Functions: Not changed
	A1SX20EU	QX28	1) External wiring: Changed 2) Number of slots: Changed (Two modules are required.) 3) Program: Number of occupied I/O points: Changed (16 points → 32 points (16 points × 2 modules)) 4) Specifications: Rated input voltage: Not changed Rated input current: Changed ON voltage/ON current: Changed OFF voltage/OFF current: Changed Input resistance: Changed 5) Functions: Not changed

AnS/QnAS series model		Q series alternative model	
Product	**Model**	**Model**	**Remarks (restrictions)**
Input module	A1SX30	QX40	Consider substituting the QX40 for it. [When applying DC input] 1) External wiring: Changed 2) Number of slots: Not changed 3) Program: Number of occupied I/O points: Not changed 4) Specifications: Rated input voltage: Changed (12VDC and AC input are not applicable.)* Rated input current: Changed ON voltage/ON current: Changed OFF voltage/OFF current: Changed Input resistance: Changed 5) Functions: Not changed * When 12VDC is required, use the QX70. [When applying AC input] Convert 24VAC to DC externally before input to the QX40.
	A1SX40	QX40 (24VDC)	1) External wiring: Changed 2) Number of slots: Not changed 3) Program: Number of occupied I/O points: Not changed 4) Specifications: Rated input voltage: Changed (12VDC is not applicable.) Rated input current: Changed ON voltage/ON current: Changed OFF voltage/OFF current: Changed Input resistance: Changed 5) Functions: Not changed
		QX70 (12VDC)	1) External wiring: Changed 2) Number of slots: Not changed 3) Program: Number of occupied I/O points: Not changed 4) Specifications: Rated input voltage: Changed (24VDC is not applicable.) Rated input current: Changed ON voltage/ON current: Changed OFF voltage/OFF current: Changed Input resistance: Not changed 5) Functions: Not changed
	A1SX40-S1	QX40-S1	1) External wiring: Changed 2) Number of slots: Not changed 3) Program: Number of occupied I/O points: Not changed 4) Specifications: Rated input voltage: Not changed Rated input current: Changed ON voltage/ON current: Changed OFF voltage/OFF current: Changed Input resistance: Changed 5) Functions: Not changed
	A1SX40-S2	QX40	1) External wiring: Changed 2) Number of slots: Not changed 3) Program: Number of occupied I/O points: Not changed 4) Specifications: Rated input voltage: Not changed Rated input current: Changed ON voltage/ON current: Changed OFF voltage/OFF current: Changed Input resistance: Changed 5) Functions: Not changed

AnS/QnAS series model		Q series alternative model	
Product	**Model**	**Model**	**Remarks (restrictions)**
Input module	A1SX41	QX41 (24VDC)	1) External wiring: Not changed 2) Number of slots: Not changed 3) Program: Number of occupied I/O points: Not changed 4) Specifications: Rated input voltage: Changed (12VDC is not applicable.) Rated input current: Changed (approx. 7mA → approx. 4mA) ON voltage/ON current: Changed OFF voltage/OFF current: Changed Input resistance: Changed 5) Functions: Not changed
		QX41-S2 (24VDC)	1) External wiring: Not changed 2) Number of slots: Not changed 3) Program: Number of occupied I/O points: Not changed 4) Specifications: Rated input voltage: Changed (12VDC is not applicable.) Rated input current: Changed (approx. 7mA → approx. 6mA) ON voltage/ON current: Changed OFF voltage/OFF current: Changed Input resistance: Changed 5) Functions: Not changed
		QX71 (12VDC)	1) External wiring: Not changed 2) Number of slots: Not changed 3) Program: Number of occupied I/O points: Not changed 4) Specifications: Rated input voltage: Changed (24VDC is not applicable.) Rated input current: Changed ON voltage/ON current: Changed OFF voltage/OFFcurrent: Changed Input resistance: Not changed 5) Functions: Not changed

AnS/QnAS series model		Q series alternative model	
Product	**Model**	**Model**	**Remarks (restrictions)**
Input module	A1SX41-S1	QX41-S1	1) External wiring: Not changed 2) Number of slots: Not changed 3) Program: Number of occupied I/O points: Not changed 4) Specifications: Rated input voltage: Not changed Rated input current: Changed ON voltage/ON current: Changed OFF voltage/OFF current: Changed Input resistance: Changed 5) Functions: Not changed
	A1SX41-S2	QX41	1) External wiring: Not changed 2) Number of slots: Not changed 3) Program: Number of occupied I/O points: Not changed 4) Specifications: Rated input voltage: Not changed Rated input current: Changed (approx. 7mA → approx. 4mA) ON voltage/ON current: Changed OFF voltage/OFF current: Changed Input resistance: Changed 5) Functions: Not changed
		QX41-S2	1) External wiring: Not changed 2) Number of slots: Not changed 3) Program: Number of occupied I/O points: Not changed 4) Specifications: Rated input voltage: Not changed Rated input current: Changed (approx. 7mA → approx. 6mA) ON voltage/ON current: Changed OFF voltage/OFF current: Changed Input resistance: Changed 5) Functions: Not changed

AnS/QnAS series model		Q series alternative model	
Product	**Model**	**Model**	**Remarks (restrictions)**
Input module	A1SX42	QX42 (24VDC)	1) External wiring: Not changed 2) Number of slots: Not changed 3) Program: Number of occupied I/O points: Not changed 4) Specifications: Rated input voltage: Changed (12VDC is not applicable.) Rated input current: Changed (approx. 5mA → approx. 4mA) ON voltage/ON current: Changed OFF voltage/OFF current: Changed Input resistance: Changed 5) Functions: Not changed
		QX41-S2 (24VDC)	1) External wiring: Not changed 2) Number of slots: Changed (Two modules are required.) 3) Program: Number of occupied I/O points: Not changed (64 points =32 points × 2 modules) 4) Specifications: Rated input voltage: Changed (12VDC is not applicable.) Rated input current: Changed (approx. 5mA → approx. 6mA) ON voltage/ON current: Changed OFF voltage/OFF current: Changed Input resistance: Changed 5) Functions: Not changed
		QX72 (12VDC)	1) External wiring: Not changed 2) Number of slots: Not changed 3) Program: Number of occupied I/O points: Not changed 4) Specifications: Rated input voltage: Changed (24VDC is not applicable.) Rated input current: Changed ON voltage/ON current: Changed OFF voltage/OFF current: Changed Input resistance: Changed 5) Functions: Not changed

AnS/QnAS series model		Q series alternative model	
Product	**Model**	**Model**	**Remarks (restrictions)**
Input module	A1SX42-S1	QX42-S1	1) External wiring: Not changed 2) Number of slots: Not changed 3) Program: Number of occupied I/O points: Not changed 4) Specifications: Rated input voltage: Not changed Rated input current: Changed ON voltage/ON current: Changed OFF voltage/OFF current: Changed Input resistance: Changed 5) Functions: Not changed
	A1SX42-S2	QX42	1) External wiring: Not changed 2) Number of slots: Not changed 3) Program: Number of occupied I/O points: Not changed 4) Specifications: Rated input voltage: Not changed Rated input current: Changed (approx. 5mA → approx. 4mA) ON voltage/ON current: Changed OFF voltage/OFF current: Changed Input resistance: Changed 5) Functions: Not changed
		QX41-S2	1) External wiring: Not changed 2) Number of slots: Changed (Two modules are required.) 3) Program: Number of occupied I/O points: Not changed (64 points =32 points × 2 modules) 4) Specifications: Rated input voltage: Not changed Rated input current: Changed (approx. 5mA → approx. 6mA) ON voltage/ON current: Changed OFF voltage/OFF current: Changed Input resistance: Changed 5) Functions: Not changed

AnS/QnAS series model		Q series alternative model	
Product	**Model**	**Model**	**Remarks (restrictions)**
Input module	A1SX71	QX41-S1 (24VDC)	1) External wiring: Not changed 2) Number of slots: Not changed 3) Program: Number of occupied I/O points: Not changed 4) Specifications: Rated input voltage: Changed (5VDC and 12VDC are not applicable.) Rated input current: Changed ON voltage/ON current: Changed OFF voltage/OFF current: Changed Input resistance: Changed 5) Functions: Not changed
		QX71 (5VDC, 12VDC)	1) External wiring: Not changed 2) Number of slots: Not changed 3) Program: Number of occupied I/O points: Not changed 4) Specifications: Rated input voltage: Changed (24VDC is not applicable.) Rated input current: Not changed ON voltage/ON current: Not changed OFF voltage/OFF current: Not changed Input resistance: Changed 5) Functions: Not changed
	A1SX80	QX80 (24VDC)	1) External wiring: Changed 2) Number of slots: Not changed 3) Program: Number of occupied I/O points: Not changed 4) Specifications: Rated input voltage: Changed (12VDC is not applicable.) Rated input current: Changed ON voltage/ON current: Changed OFF voltage/OFF current: Changed Input resistance: Changed 5) Functions: Not changed
		QX70 (12VDC)	1) External wiring: Changed 2) Number of slots: Not changed 3) Program: Number of occupied I/O points: Not changed 4) Specifications: Rated input voltage: Changed (24VDC is not applicable.) Rated input current: Changed ON voltage/ON current: Changed OFF voltage/OFF current: Changed Input resistance: Not changed 5) Functions: Not changed

AnS/QnAS series model		Q series alternative model	
Product	**Model**	**Model**	**Remarks (restrictions)**
Input module	A1SX80-S1	QX80	1) External wiring: Changed 2) Number of slots: Not changed 3) Program: Number of occupied I/O points: Not changed 4) Specifications: Rated input voltage: Not changed Rated input current: Changed ON voltage/ON current: Changed OFF voltage/OFF current: Changed Input resistance: Changed 5) Functions: Not changed
	A1SX80-S2	QX80	1) External wiring: Changed 2) Number of slots: Not changed 3) Program: Number of occupied I/O points: Not changed 4) Specifications: Rated input voltage: Not changed Rated input current: Changed ON voltage/ON current: Changed OFF voltage/OFF current: Changed Input resistance: Changed 5) Functions: Not changed
	A1SX81	QX81 (24VDC)	1) External wiring: Not changed 2) Number of slots: Not changed 3) Program: Number of occupied I/O points: Not changed 4) Specifications: Rated input voltage: Changed (12VDC is not applicable.) Rated input current: Changed (approx. 7mA → approx. 4mA) ON voltage/ON current: Changed OFF voltage/OFF current: Changed Input resistance: Changed 5) Functions: Not changed
		QX81-S2 (24VDC)	1) External wiring: Not changed 2) Number of slots: Not changed 3) Program: Number of occupied I/O points: Not changed 4) Specifications: Rated input voltage: Changed (12VDC is not applicable.) Rated input current: Changed (approx. 7mA → approx. 6mA) ON voltage/ON current: Changed OFF voltage/OFF current: Changed Input resistance: Changed 5) Functions: Not changed
		QX71 (12VDC)	1) External wiring: Not changed 2) Number of slots: Not changed 3) Program: Number of occupied I/O points: Not changed 4) Specifications: Rated input voltage: Changed (24VDC is not applicable.) Rated input current: Changed ON voltage/ON current: Changed OFF voltage/OFF current: Changed Input resistance: Not changed 5) Functions: Not changed

AnS/QnAS series model		Q series alternative model	
Product	**Model**	**Model**	**Remarks (restrictions)**
Input module	A1SX81-S2	QX81	1) External wiring: Not changed 2) Number of slots: Not changed 3) Program: Number of occupied I/O points: Not changed 4) Specifications: Rated input voltage: Not changed Rated input current: Changed (approx. 7mA → approx. 4mA) ON voltage/ON current: Changed OFF voltage/OFF current: Changed Input resistance: Changed 5) Functions: Not changed
		QX81-S2	1) External wiring: Not changed 2) Number of slots: Not changed 3) Program: Number of occupied I/O points: Not changed 4) Specifications: Rated input voltage: Not changed Rated input current: Changed (approx. 7mA → approx. 6mA) ON voltage/ON current: Changed OFF voltage/OFF current: Changed Input resistance: Changed 5) Functions: Not changed
	A1SX82-S1	QX82-S1	1) External wiring: Not changed 2) Number of slots: Not changed 3) Program: Number of occupied I/O points: Not changed 4) Specifications: Rated input voltage: Not changed Rated input current: Changed ON voltage/ON current: Changed OFF voltage/OFF current: Changed Input resistance: Changed 5) Functions: Not changed
Output module	A1SY10 A1SY10EU	QY10	1) External wiring: Changed 2) Number of slots: Not changed 3) Program: Number of occupied I/O points: Not changed 4) Specifications: Rated output voltage: Not changed Rated output current: Not changed (However, the contact life span of the A1SY10EU is reduced to half.) 5) Functions: Not changed

AnS/QnAS series model		Q series alternative model	
Product	**Model**	**Model**	**Remarks (restrictions)**
Output module	A1SY14EU	QY10	1) External wiring: Changed 2) Number of slots: Not changed 3) Program: Number of occupied I/O points: Not changed 4) Specifications: Rated output voltage: Not changed Rated output current: Not changed (However, contact life span is reduced to half.) 5) Functions: Not changed
	A1SY18A	QY18A	1) External wiring: Changed 2) Number of slots: Not changed 3) Program: Number of occupied I/O points: Not changed 4) Specifications: Rated output voltage: Not changed Rated output current: Not changed (However, contact life span is reduced to half.) 5) Functions: Not changed
	A1SY18AEU	QY18A	1) External wiring: Changed 2) Number of slots: Not changed 3) Program: Number of occupied I/O points: Not changed 4) Specifications: Rated output voltage: Not changed Rated output current: Not changed (However, contact life span is reduced to half.) 5) Functions: Not changed
	A1SY22	QY22	1) External wiring: Changed 2) Number of slots: Not changed 3) Program: Number of occupied I/O points: Not changed 4) Specifications: Rated output voltage: Not changed Rated output current: Not changed 5) Functions: Changed (no fuse)
	A1SY28A	(None)	(None)
	A1SY28EU	(None)	
	A1SY40	QY40P	1) External wiring: Changed 2) Number of slots: Not changed 3) Program: Number of occupied I/O points: Not changed 4) Specifications: Rated output voltage: Not changed Rated output current: Not changed 5) Functions: Changed (fuse → overheat and overload protection)

AnS/QnAS series model		Q series alternative model	
Product	**Model**	**Model**	**Remarks (restrictions)**
Output module	A1SY40P	QY40P	1) External wiring: Changed 2) Number of slots: Not changed 3) Program: Number of occupied I/O points: Not changed 4) Specifications: Rated output voltage: Not changed Rated output current: Not changed 5) Functions: Not changed
	A1SY41	QY41P	1) External wiring: Not changed 2) Number of slots: Not changed 3) Program: Number of occupied I/O points: Not changed 4) Specifications: Rated output voltage: Not changed Rated output current: Not changed 5) Functions: Changed (fuse → overheat and overload protection)
	A1SY41P	QY41P	1) External wiring: Not changed 2) Number of slots: Not changed 3) Program: Number of occupied I/O points: Not changed 4) Specifications: Rated output voltage: Not changed Rated output current: Not changed 5) Functions: Not changed
	A1SY42	QY42P	1) External wiring: Not changed 2) Number of slots: Not changed 3) Program: Number of occupied I/O points: Not changed 4) Specifications: Rated output voltage: Not changed Rated output current: Not changed 5) Functions: Changed (fuse → overheat and overload protection)
	A1SY42P	QY42P	1) External wiring: Not changed 2) Number of slots: Not changed 3) Program: Number of occupied I/O points: Not changed 4) Specifications: Rated output voltage: Not changed Rated output current: Not changed 5) Functions: Not changed
	A1SY50	QY50	1) External wiring: Changed 2) Number of slots: Not changed 3) Program: Number of occupied I/O points: Not changed 4) Specifications: Rated output voltage: Not changed Rated output current: Not changed 5) Functions: Not changed

AnS/QnAS series model		Q series alternative model	
Product	**Model**	**Model**	**Remarks (restrictions)**
Output module	A1SY60	QY68A	1) External wiring: Changed 2) Number of slots: Changed (Two modules are required.) 3) Program: Number of occupied I/O points: Changed (16 points → 32 points (16 points × 2 modules)) 4) Specifications: Rated output voltage: Not changed Rated output current: Not changed 5) Functions: Changed (no fuse, independent common)
	A1SY60E	QY68A	1) External wiring: Changed 2) Number of slots: Changed (Two modules are required.) 3) Program: Number of occupied I/O points: Changed (16 points → 32 points (16 points × 2 modules)) 4) Specifications: Rated output voltage: Not changed Rated output current: Not changed 5) Functions: Changed (no fuse, independent common)
	A1SY68A	QY68A	1) External wiring: Changed 2) Number of slots: Not changed 3) Program: Number of occupied I/O points: Not changed 4) Specifications: Rated output voltage: Changed (48VDC is not applicable.) Rate output current: Not changed 5) Functions: Not changed
	A1SY71	QY71	1) External wiring: Not changed 2) Number of slots: Not changed 3) Program: Number of occupied I/O points: Not changed 4) Specifications: Rated output voltage: Not changed Rated output current: Not changed 5) Functions: Not changed
	A1SY80	QY80	1) External wiring: Changed 2) Number of slots: Not changed 3) Program: Number of occupied I/O points: Not changed 4) Specifications: Rated output voltage: Not changed Rated output current: Changed 5) Functions: Not changed
	A1SY81	QY81P	1) External wiring: Not changed 2) Number of slots: Not changed 3) Program: Number of occupied I/O points: Not changed 4) Specifications: Rated output voltage: Not changed Rated output current: Not changed 5) Functions: Changed (fuse → overheat and overload protection)

AnS/QnAS series model		Q series alternative model	
Product	**Model**	**Model**	**Remarks (restrictions)**
Output module	A1SY81EP	QY81P	1) External wiring: Not changed 2) Number of slots: Not changed 3) Program: Number of occupied I/O points: Not changed 4) Specifications: Rated output voltage: Not changed Rated output current: Not changed 5) Functions: Not changed
	A1SY82	QY82P	1) External wiring: Not changed 2) Number of slots: Not changed 3) Program: Number of occupied I/O points: Not changed 4) Specifications: Rated output voltage: Not changed Rated output current: Not changed 5) Functions: Changed (fuse → overheat and overload protection)
I/O module	A1SH42	QH42P	1) External wiring: Not changed 2) Number of slots: Not changed 3) Program: Number of occupied I/O points: Not changed 4) Specifications: (Input part) Rated input voltage: Changed (12VDC is not applicable.) Rated input current: Changed ON voltage/ON current: Changed OFF voltage/OFF current: Changed Input resistance: Changed (Output part) Rated output voltage: Not changed Rated output current: Not changed 5) Functions: Changed (fuse → overheat and overload protection)
	A1SH42P	QH42P	1) External wiring: Not changed 2) Number of slots: Not changed 3) Program: Number of occupied I/O points: Not changed 4) Specifications: (Input part) Rated input voltage: Changed (12VDC is not applicable.) Rated input current: Changed ON voltage/ON current: Changed OFF voltage/OFF current: Changed Input resistance: Changed (Output part) Rated output voltage: Not changed Rated output current: Not changed 5) Functions: Not changed

AnS/QnAS series model		Q series alternative model	
Product	**Model**	**Model**	**Remarks (restrictions)**
I/O module	A1SH42-S1	QH42P	1) External wiring: Not changed 2) Number of slots: Not changed 3) Program: Number of occupied I/O points: Not changed 4) Specifications: (Input part) Rated input voltage: Not changed Rated input current: Changed ON voltage/ON current: Changed OFF voltage/OFF current: Changed Input resistance: Changed (Output part) Rated output voltage: Not changed Rated output current: Not changed 5) Functions: Changed (fuse → overheat and overload protection)
	A1SH42P-S1	QH42P	1) External wiring: Not changed 2) Number of slots: Not changed 3) Program: Number of occupied I/O points: Not changed 4) Specifications: (Input part) Rated input voltage: Not changed Rated input current: Changed ON voltage/ON current: Changed OFF voltage/OFF current: Changed Input resistance: Changed (Output part) Rated output voltage: Not changed Rated output current: Not changed 5) Functions: Not changed
	A1SX48Y18	QX40 + QY10	1) External wiring: Changed 2) Number of slots: Changed (Two modules are required.) 3) Program: Number of occupied I/O points: Changed (16 points → 32 points (16 points × 2 modules)) 4) Specifications: (Input part) Rated input voltage: Not changed Rated input current: Changed ON voltage/ON current: Changed OFF voltage/OFF current: Changed Input resistance: Changed (Output part) Rated output voltage: Not changed Rated output current: Not changed 5) Functions: Not changed

AnS/QnAS series model		Q series alternative model	
Product	**Model**	**Model**	**Remarks (restrictions)**
I/O module	A1SX48Y58	QX48Y57	1) External wiring: Changed 2) Number of slots: Not changed 3) Program: Number of occupied I/O points: Not changed 4) Specifications: (Input part) Rated input voltage: Not changed Rated input current: Changed ON voltage/ON current: Changed OFF voltage/OFF current: Changed Input resistance: Changed (Output part) Rated output voltage: Not changed Rated output current: Not changed 5) Functions: Changed (number of output points: 8 points → 7 points)
	A1SJ-56DT	QX40 + QY50	1) External wiring: Changed 2) Number of slots: Changed (5 slots → 4 slots) 3) Program: Number of occupied I/O points: Changed (128 points (including 4 empty slots) → 64 points (4 slots)) 4) Specifications: (Input part) Rated input voltage: Not changed Rated input current: Changed ON voltage/ON current: Changed OFF voltage/OFF current: Changed Input resistance: Changed (Output part) Rated output voltage: Not changed Rated output current: Not changed 5) Functions: Changed (no fuse → built-in fuse)
	A1SJ-56DR	QX40 + QY10	1) External wiring: Changed 2) Number of slots: Changed (5 slots → 4 slots) 3) Program: Number of occupied I/O points: Changed (128 points (including 4 empty slots) → 64 points (4 slots)) 4) Specifications: (Input part) Rated input voltage: Not changed Rated input current: Changed ON voltage/ON current: Changed OFF voltage/OFF current: Changed Input resistance: Changed (Output part) Rated output voltage: Not changed Rated output current: Not changed 5) Functions: Not changed
Dynamic scan I/O module	A1S42X	None	Consider converting input signals from dynamic to static and using the QX42.
	A1S42Y	None	Consider converting input signals from dynamic to static and using the QY42P.
Interrupt module	A1SI61	QI60	1) External wiring: Changed 2) Number of slots: Not changed 3) Program: Number of occupied I/O points: Changed (32 points → 16 points) 4) Specifications: Rated input voltage: Changed (12VDC is not applicable.) Rated input current: Changed ON voltage/ON current: Changed OFF voltage/OFF current: Changed Input resistance: Changed 5) Functions: Changed (condition setting: hardware switch → parameter)

AnS/QnAS series model		Q series alternative model	
Product	**Model**	**Model**	**Remarks (restrictions)**
Dummy module	A1SG62	None	[Dummy module function] Consider using the QG60 and I/O assignment setting.
Blank cover	A1SG60	QG60	No restrictions

Point

When using the extension base unit of the A/QnA series, please refer to the following for details.
📖Transition from MELSEC-A/QnA (Large Type) Series to Q Series Handbook (Fundamentals) L(NA)08043ENG

12.3 Intelligent function module

12.3.1 Replacement with L series

AnS/QnAS series		L series alternative model	
Product	**Model**	**Model**	**Remarks (restrictions)**
Analog input module	A1S64AD	L60AD4	1) External wiring: Cable size is changed. 2) Number of slots: Not changed 3) Program: The number of occupied I/O points, I/O signals, and buffer memory addresses are changed. 4) Performance specifications: Not changed 5) Functional specifications: Not changed
	A1S68AD	L60AD4	1) External wiring: Cable size is changed. 2) Number of slots: Changed (Two modules are required.) 3) Program: The number of occupied I/O points, I/O signals, and buffer memory addresses are changed. 4) Performance specifications: Not changed 5) Functional specifications: Not changed
Analog output module	A1S62DA	L60DA4	1) External wiring: Cable size is changed. 2) Number of slots: Not changed 3) Program: The number of occupied I/O points, I/O signals, and buffer memory addresses are changed. 4) Performance specifications: Changed. Four channels per module and an external power supply (24VDC) are required. 5) Functional specifications: Not changed
	A1S68DAI	L60DA4	1) External wiring: Cable size is changed. 2) Number of slots: Changed (Two modules are required.) 3) Program: The number of occupied I/O points, I/O signals, and buffer memory addresses are changed. 4) Performance specifications: Changed. An external power supply (24VDC) is required. 5) Functional specifications: Not changed
	A1S68DAV	L60DA4	1) External wiring: Cable size is changed. 2) Number of slots: Changed (Two modules are required.) 3) Program: The number of occupied I/O points, I/O signals, and buffer memory addresses are changed. 4) Performance specifications: Changed. An external power supply (24VDC) is required. 5) Functional specifications: Not changed

AnS/QnAS series		L series alternative model	
Product	**Model**	**Model**	**Remarks (restrictions)**
High-speed counter module	A1SD62E	LD62	1) External wiring: Terminal block wiring → Connector wiring Cable size is changed. 2) Number of slots: Not changed 3) Counting speed: 200K, 100K, or 10KPPS 4) Counting range: 32-bit signed binary (-2147483648 to 2147483647) Program does not need to be reviewed. 5) Program: The number of occupied I/O points, I/O signals, and buffer memory addresses are changed. 6) Performance specifications: Output terminal type: sink output The input terminal filter characteristics are different. 7) Functional specifications: Not changed
		L02CPU-P L26CPU-PBT	1) External wiring: Terminal block wiring → Connector wiring Cable size is changed. 2) Number of slots: Changed. 0 module (I/O function built in CPU) 3) Counting speed: 200K, 100K, 50K, or 10KPPS 4) Counting range: 32-bit signed binary (-2147483648 to 2147483647) Program does not need to be reviewed. 5) Program: Incompatible (Need to be created) 6) Performance specifications: The input terminal filter characteristics are different. 7) Function specifications: Limit switch output function → Coincidence output function (Two coincidence detection output points can be set.) No periodic pulse counter function
	A1SD62D A1SD62D-S1	LD62D	1) External wiring: Terminal block wiring → Connector wiring Cable size is changed. 2) Number of slots: Not changed 3) Counting speed: 500K, 200K, or 100KPPS 4) Counting range: 32-bit signed binary (-2147483648 to 2147483647) Program does not need to be reviewed. 5) Program: The number of occupied I/O points, I/O signals, and buffer memory addresses are changed. 6) Performance specifications: Number of channels is 2. 7) Functional specifications: Not changed
		L02CPU L26CPU-BT	1) External wiring: Terminal block wiring → Connector wiring Cable size is changed. 2) Number of slots: Changed. 0 module (I/O function built in CPU) 3) Counting speed: 200K, 100K, 50K, or 10KPPS 4) Counting range: 32-bit signed binary (-2147483648 to 2147483647) Program does not need to be reviewed. 5) Program: Incompatible (Need to be created) 6) Performance specifications: External input voltage 24V only The input terminal filter characteristics are different. 7) Function specifications: Limit switch output function → Coincidence output function (Two coincidence detection output points can be set.) No periodic pulse counter function

AnS/QnAS series		L series alternative model	
Product	**Model**	**Model**	**Remarks (restrictions)**
Positioning module	A1SD75M1	LD77MH4	1) External wiring: Connector and wiring are changed. 2) Number of slots: 2 (modules) 3) Program: I/O signals and buffer memory assignment are changed. The entire program needs to be reviewed according to the specifications change. 4) Performance specifications: Backward compatible (4 axes) 5) Function specifications: Partially changed (Example: Manual pulse generator 1/axis → 1/module)
	A1SD75M2	LD77MH4	1) External wiring: Connector and wiring are changed. 2) Number of slots: 2 (modules) 3) Program: I/O signals and buffer memory assignment are changed. The entire program needs to be reviewed according to the specifications change. 4) Performance specifications: Backward compatible (4 axes) 5) Function specifications: Partially changed (Example: Manual pulse generator 1/axis → 1/module)
	A1SD75M3	LD77MH4	1) External wiring: Connector and wiring are changed. 2) Number of slots: 2 (modules) 3) Program: I/O signals and buffer memory assignment are changed. The entire program needs to be reviewed according to the specifications change. 4) Performance specifications: Backward compatible (4 axes) 5) Function specifications: Partially changed (Example: Manual pulse generator 1/axis → 1/module)

12.3.2 Replacement with Q series

AnS/QnAS series		Q series alternative model	
Product	**Model**	**Model**	**Remark (restrictions)**
Analog input module	A1S64AD	Q64AD	1) External wiring: Cable size is changed. 2) Number of slots: Not changed 3) Program: The number of occupied I/O points, I/O signals, and buffer memory addresses are changed. 4) Performance specifications: Not changed 5) Functional specifications: Not changed
	A1S68AD	Q68ADV Q68ADI	1) External wiring: Cable size is changed. 2) Number of slots: Not changed 3) Program: The number of occupied I/O points, I/O signals, and buffer memory addresses are changed. 4) Performance specifications: Input signals (either V or I input) and I/O characteristics are changed. 5) Functional specifications: Not changed
		Q68AD-G*1	1) External wiring: Cable size is changed. 2) Number of slots: Not changed 3) Program: The number of occupied I/O points, I/O signals, and buffer memory addresses are changed. 4) Performance specifications: Changed Conversion speed (0.5ms/channel) → sampling cycle (10ms/channel) + response speed (20ms) 5) Functional specifications: Changed (Non-insulation → Insulation between channels)
	A1S62DA	Q62DAN	1) External wiring: Cable size is changed. 2) Number of slots: Not changed 3) Program: The number of occupied I/O points, I/O signals, and buffer memory addresses are changed. 4) Performance specifications: Changed External power supply (24VDC) is required. 5) Functional specifications: Not changed
		Q64DAN	1) External wiring: Cable size is changed. 2) Number of slots: Not changed 3) Program: The number of occupied I/O points, I/O signals, and buffer memory addresses are changed. 4) Performance specifications: Changed (4CH/module) External power supply (24VDC) is required. 5) Functional specifications: Not changed
	A1S68DAI	Q68DAIN	1) External wiring: Cable size is changed. 2) Number of slots: Not changed 3) Program: The number of occupied I/O points, I/O signals, and buffer memory addresses are changed. 4) Performance specifications: Changed External power supply (24VDC) is required. 5) Functional specifications: Not changed
	A1S68DAV	Q68DAVN	1) External wiring: Cable size is changed. 2) Number of slots: Not changed 3) Program: The number of occupied I/O points, I/O signals, and buffer memory addresses are changed. 4) Performance specifications: Changed External power supply (24VDC) is required. 5) Functional specifications: Not changed

*1 The Q68AD-G cannot be mounted on the Q series large type base unit (Q3□BL, Q6□BL, Q55BL).

AnS/QnAS series		Q series alternative model	
Product	**Model**	**Model**	**Remark (restrictions)**
Temperature input module	A1S68TD	Q64TD	1) External wiring: Cable size is changed. 2) Number of slots: Changed (Two modules are required.) 3) Program: The number of occupied I/O points, I/O signals, and buffer memory addresses are changed. 4) Performance specifications: Changed (4CH/module) 5) Functional specifications: Not changed
		Q68TD-G-H01 Q68TD-G-H02	1) External wiring: Connector wiring and cable size are changed. 2) Number of slots: Not changed 3) Program: The number of occupied I/O points, I/O signals, and buffer memory addresses are changed. 4) Performance specifications: Not changed 5) Functional specifications: The disconnection detection function is not supported. (Only the Q68TD-G-H02 supports this function.)
	A1S62RD3N	Q64RD	1) External wiring: Cable size is changed. 2) Number of slots: Not changed 3) Program: The number of occupied I/O points, I/O signals, and buffer memory addresses are changed. 4) Performance specifications: Changed (4CH/module) 5) Functional specifications: Not changed
		Q64RD-G	1) External wiring: Cable size is changed. 2) Number of slots: Not changed 3) Program: The number of occupied I/O points, I/O signals, and buffer memory addresses are changed. 4) Performance specifications: Changed (4CH/module) 5) Functional specifications: Transformer isolation is provided between channels.
	A1S62RD4N	Q64RD	1) External wiring: Cable size is changed. 2) Number of slots: Not changed 3) Program: The number of occupied I/O points, I/O signals, and buffer memory addresses are changed. 4) Performance specifications: Changed (4CH/module) 5) Functional specifications: Not changed
		Q64RD-G	1) External wiring: Cable size is changed. 2) Number of slots: Not changed 3) Program: The number of occupied I/O points, I/O signals, and buffer memory addresses are changed. 4) Performance specifications: Changed (4CH/module) 5) Functional specifications: Transformer isolation is provided between channels.

AnS/QnAS series		Q series alternative model	
Product	**Model**	**Model**	**Remark (restrictions)**
Heating-cooling temperature control module Temperature control module	A1S64TCTRT Thermocouple, standard control	Q64TCTTN	1) External wiring: Cable size is changed. 2) Number of slots: Not changed 3) Program: The number of occupied I/O points, I/O signals, and buffer memory addresses are changed. 4) Performance specifications: Not changed 5) Functional specifications: Changed
	A1S64TCTRT Thermocouple, heating-cooling control	Q64TCTTN	1) External wiring: Cable size is changed. 2) Number of slots: Not changed 3) Program: The number of occupied I/O points, I/O signals, and buffer memory addresses are changed. 4) Performance specifications: Not changed 5) Functional specifications: Changed
	A1S64TCTRT Platinum resistance thermometer, standard control	Q64TCRTN	1) External wiring: Cable size is changed. 2) Number of slots: Not changed 3) Program: The number of occupied I/O points, I/O signals, and buffer memory addresses are changed. 4) Performance specifications: Not changed 5) Functional specifications: Changed
	A1S64TCTRT Platinum resistance thermometer, heating-cooling control	Q64TCRTN	1) External wiring: Cable size is changed. 2) Number of slots: Not changed 3) Program: The number of occupied I/O points, I/O signals, and buffer memory addresses are changed. 4) Performance specifications: Not changed 5) Functional specifications: Changed
	A1S64TCTRTBW Thermocouple, standard control	Q64TCTTBWN	1) External wiring: Cable size is changed. 2) Number of slots: Changed (Two slots are required. I/O assignment: 16 empty points for the first half, 16 intelligent points for the second half) 3) Program: The number of occupied I/O points, I/O signals, and buffer memory addresses are changed. 4) Performance specifications: Not changed 5) Functional specifications: Changed
	A1S64TCTRTBW Thermocouple, heating-cooling control	Q64TCTTBWN	1) External wiring: Cable size is changed. 2) Number of slots: Changed (Two slots are required. I/O assignment: 16 empty points for the first half, 16 intelligent points for the second half) 3) Program: The number of occupied I/O points, I/O signals, and buffer memory addresses are changed. 4) Performance specifications: Not changed 5) Functional specifications: Changed
	A1S64TCTRTBW Platinum resistance thermometer, standard control	Q64TCRTBWN	1) External wiring: Cable size is changed. 2) Number of slots: Changed (Two slots are required. I/O assignment: 16 empty points for the first half, 16 intelligent points for the second half) 3) Program: The number of occupied I/O points, I/O signals, and buffer memory addresses are changed. 4) Performance specifications: Not changed 5) Functional specifications: Changed

AnS/QnAS series		Q series alternative model	
Product	**Model**	**Model**	**Remark (restrictions)**
Heating-cooling temperature control module Temperature control module	A1S64TCTRTBW Platinum resistance thermometer, heating-cooling control	Q64TCRTBWN	1) External wiring: Cable size is changed. 2) Number of slots: Changed (Two slots are required. I/O assignment: 16 empty points for the first half, 16 intelligent points for the second half) 3) Program: The number of occupied I/O points, I/O signals, and buffer memory addresses are changed. 4) Performance specifications: Not changed 5) Functional specifications: Changed
	A1S64TCTT-S1 Thermocouple, standard control	Q64TCTTN	1) External wiring: Cable size is changed. 2) Number of slots: Not changed 3) Program: The number of occupied I/O points, I/O signals, and buffer memory addresses are changed. 4) Performance specifications: Not changed 5) Functional specifications: Changed
	A1S64TCTTBW-S1 Thermocouple, standard control	Q64TCTTBWN	1) External wiring: Cable size is changed. 2) Number of slots: Changed (Two slots are required. I/O assignment: 16 empty points for the first half, 16 intelligent points for the second half) 3) Program: The number of occupied I/O points, I/O signals, and buffer memory addresses are changed. 4) Performance specifications: Not changed 5) Functional specifications: Changed
	A1S64TCRT-S1 Platinum resistance thermometer, standard control	Q64TCRTN	1) External wiring: Cable size is changed. 2) Number of slots: Not changed 3) Program: The number of occupied I/O points, I/O signals, and buffer memory addresses are changed. 4) Performance specifications: Not changed 5) Functional specifications: Changed
	A1S64TCRTBW-S1 Platinum resistance thermometer, standard control	Q64TCRTBWN	1) External wiring: Cable size is changed. 2) Number of slots: Changed (Two slots are required. I/O assignment: 16 empty points for the first half, 16 intelligent points for the second half) 3) Program:The number of occupied I/O points, I/O signals, and buffer memory addresses are changed. 4) Performance specifications: Not changed 5) Functional specifications: Changed
	A1S62TCTT-S2 Thermocouple, heating-cooling control	Q64TCTTN	1) External wiring: Cable size is changed. 2) Number of slots: Not changed 3) Program: The number of occupied I/O points, I/O signals, and buffer memory addresses are changed. 4) Performance specifications: Changed (2CH/module → 4CH/module) 5) Functional specifications: Changed
	A1S62TCTTBW-S2 Thermocouple, heating-cooling control	Q64TCTTBWN	1) External wiring: Cable size is changed. 2) Number of slots: Changed (Two slots are required. I/O assignment: 16 empty points for the first half, 16 intelligent points for the second half) 3) Program: The number of occupied I/O points, I/O signals, and buffer memory addresses are changed. 4) Performance specifications: Changed (2CH/module → 4CH/module) 5) Functional specifications: Changed
	A1S62TCRT-S2 Platinum resistance thermometer, heating-cooling control	Q64TCRTN	1) External wiring: Cable size is changed. 2) Number of slots: Not changed 3) Program: The number of occupied I/O points, I/O signals, and buffer memory addresses are changed. 4) Performance specifications: Changed (2CH/module → 4CH/module) 5) Functional specifications: Changed
	A1S62TCRTBW-S2 Platinum resistance thermometer, heating-cooling control	Q64TCRTBWN	1) External wiring: Cable size is changed. 2) Number of slots: Changed (Two slots are required. I/O assignment: 16 empty points for the first half, 16 intelligent points for the second half) 3) Program: The number of occupied I/O points, I/O signals, and buffer memory addresses are changed. 4) Performance specifications: Changed (2CH/module → 4CH/module) 5) Functional specifications: Changed

AnS/QnAS series		Q series alternative model	
Product	**Model**	**Model**	**Remark (restrictions)**
High-speed counter module	A1SD61	QD62	1) External wiring: Terminal block wiring → Connector wiring Cable size is changed. 2) Number of slots: Not changed 3) Counting speed: Can be switched (200KPPS, 100KPPS, or 10KPPS). 4) Counting range: 32-bit signed binary (-2147483648 to 2147483647) Program does not need to be reviewed. 5) Program: The number of occupied I/O points, I/O signals, and buffer memory addresses are changed. 6) Performance specifications: Not changed 7) Function specifications: Limit switch output function → Coincidence output function (Two coincidence detection output points can be set.)
		QD62-H01*2	1) External wiring: Terminal block wiring → Connector wiring Cable size is changed. 2) Number of slots: Not changed 3) Counting speed: Changed (50KPPS) 4) Counting range: 32-bit signed binary (-2147483648 to 2147483647) Program does not need to be reviewed. 5) Program: The number of occupied I/O points, I/O signals and buffer memory addresses are changed. 6) Performance specifications: Not changed 7) Function specifications: Limit switch output function → Coincidence output function (Two coincidence detection output points can be set.)
		QD62-H02*2	1) External wiring: Terminal block wiring → Connector wiring Cable size is changed. 2) Number of slots: Not changed 3) Counting speed: Changed (1-phase input: 10KPPS, 2-phase input: 7KPPS) 4) Counting range: 32-bit signed binary (-2147483648 to 2147483647) Program does not need to be reviewed. 5) Program: The number of occupied I/O points, I/O signals and buffer memory addresses are changed. 6) Performance specifications: Not changed 7) Function specifications: Limit switch output function → Coincidence output function (Two coincidence detection output points can be set.)

*2 An input filter system of the QD62-H01 and QD62-H02 is the same as that of A/AnS series high-speed counter modules.
For this reason, modules can be replaced without considering the specifications of the existing pulse generator such as an encoder.
When replacing the A1SD61, select a module based on the specifications such as the counting speed.

AnS/QnAS series		Q series alternative model	
Product	**Model**	**Model**	**Remark (restrictions)**
High-speed counter module	A1SD62	QD62	1) External wiring: Terminal block wiring → Connector wiring Cable size is changed. 2) Number of slots: Not changed 3) Counting speed: Can be switched (200KPPS, 100KPPS, or 10KPPS). 4) Counting range: 32-bit signed binary (-2147483648 to 2147483647) Program needs to be reviewed. 5) Program: The number of occupied I/O points, I/O signals and buffer memory addresses are changed. 6) Performance specifications: Not changed 7) Function specifications: Not changed
	A1SD62E	QD62E	1) External wiring: Terminal block wiring → Connector wiring Cable size is changed. 2) Number of slots: Not changed 3) Counting speed: Can be switched (200KPPS, 100KPPS, or 10KPPS). 4) Counting range: 32-bit signed binary (-2147483648 to 2147483647) Program needs to be reviewed. 5) Program: The number of occupied I/O points, I/O signals and buffer memory addresses are changed. 6) Performance specifications: Not changed 7) Function specifications: Not changed
	A1SD62D, A1SD62D-S1	QD62D	1) External wiring: Terminal block wiring → Connector wiring Cable size is changed. 2) Number of slots: Not changed 3) Counting speed: Can be switched (500KPPS, 200KPPS, 100KPPS, or 10KPPS). 4) Counting range: 32-bit signed binary (-2147483648 to 2147483647) Program needs to be reviewed. 5) Program: The number of occupied I/O points, I/O signals and buffer memory addresses are changed. 6) Performance specifications: Not changed 7) Function specifications: Not changed

AnS/QnAS series		Q series alternative model	
Product	**Model**	**Model**	**Remark (restrictions)**
Positioning module	A1SD70	QD73A1	1) External wiring: Not changed (External power supply (+/- 15VDC) is not required.) (The directions of connecting a connector are reverse.) 2) Number of slots: Not changed (Two slots are occupied.) 3) Program: Buffer memory assignment is changed. Some setting methods are changed. 4) Performance specifications: Backward compatible 5) Function specifications: Partially changed (some LED indicators not equipped, some setting methods changed)
	A1SD75P1-S3	QD75P1*3 (when an open collector is connected) QD75D1*3 (when a differential driver is connected)	1) External wiring: Connector and wiring are changed. 2) Number of slots: Not changed 3) Program: I/O signals and buffer memory assignment are changed. The entire program needs to be reviewed according to the specifications change. 4) Performance specifications: Not changed 5) Function specifications: Partially changed (Example: Manual pulse generator 1/axis → 1/module)
	A1SD75P2-S3	QD75P2*3 (when an open collector is connected) QD75D2*3 (when a differential driver is connected)	1) External wiring: Connector and wiring are changed. 2) Number of slots: Not changed 3) Program: I/O signals and buffer memory assignment are changed. The entire program needs to be reviewed according to the specifications change. 4) Performance specifications: Not changed 5) Function specifications: Partially changed (Example: Manual pulse generator 1/axis → 1/module)
	A1SD75P3-S3	QD75P4*3 (when an open collector is connected) QD75D4*3 (when a differential driver is connected)	1) External wiring: Connector and wiring are changed. 2) Number of slots: Not changed 3) Program: I/O signals and buffer memory assignment are changed. The entire program needs to be reviewed according to the specifications change. 4) Performance specifications: Not changed 5) Function specifications: Partially changed (Example: Manual pulse generator 1/axis → 1/module)
	A1SD75M1	QD75M1	1) External wiring: Connector and wiring are changed. 2) Number of slots: Not changed 3) Program: I/O signals and buffer memory assignment are changed. The entire program needs to be reviewed according to the specifications change. 4) Performance specifications: Backward compatible 5) Function specifications: Partially changed (Example: Manual pulse generator 1/axis → 1/module)
	A1SD75M2	QD75M2	1) External wiring: Connector and wiring are changed. 2) Number of slots: Not changed 3) Program: I/O signals and buffer memory assignment are changed. The entire program needs to be reviewed according to the specifications change. 4) Performance specifications: Backward compatible 5) Function specifications: Partially changed (Example: Manual pulse generator 1/axis → 1/module)
	A1SD75M3	QD75M4	1) External wiring: Connector and wiring are changed. 2) Number of slots: Not changed 3) Program: I/O signals and buffer memory assignment are changed. The entire program needs to be reviewed according to the specifications change. 4) Performance specifications: Backward compatible 5) Function specifications: Partially changed (Example: Manual pulse generator 1/axis → 1/module)

*3 The QD75P□N and QD75D□N are backward-compatible with the QD75P□ and QD75D□. Programs upon replacement are the same.
The performance, such as start time and data refreshing cycle, has been improved; therefore, check the processing timing and modify the sequence program if required.

12.4 Network module

12.4.1 Replacement with L series

AnS/QnAS series		L series alternative model	
Product	**Model**	**Model**	**Remarks (restrictions)**
CC-Link master/local module	A1SJ61BT11	LJ61BT11/ L26CPU-BT/ L26CPU-PBT	The specifications of the interface are the same. Settings such as the station information setting are configured in the CC-Link module configuration window of the network parameter instead of using a program. For details on modification, refer to the transition handbook.
	A1SJ61QBT11		
Serial communication module	A1SJ71UC24-R2	LJ71C24	The interface is backward compatible. Each module has two channels instead of one channel. For program modification, refer to the transition handbook.
		LJ71C24-R2	
	A1SJ71UC24-R4	LJ71C24	
	A1SJ71QC24N1	LJ71C24	The interface is backward compatible. For program modification, refer to the transition handbook.
	A1SJ71QC24N1-R2	LJ71C24-R2	

12.4.2 Replacement with Q series

AnS series		Q series alternative model	
Product	**Model**	**Model**	**Remarks (restrictions)**
Intelligent communication	A1SD51S	QD51	The QD51(R24) has different specifications from those of the A1SD51S as follows: • Fewer total number of channels • General-purpose input: 27 points → 26 points • RS232I/F: 2 → 2 • RS422/485I/F: 1 → 0 • Backup power function: Supported→Not supported • Program ROM: Built-in EEP-ROM → Built-in flash ROM
		QD51-R24	The QD51(R24) has different specifications from those of the A1SD51S as follows: • Fewer total number of channels • General-purpose input: 27 points → 26 points • RS232I/F: 2 → 1 • RS422/485I/F: 1 → 1 • Backup power function: Supported → Not supported • Program ROM: Built-in EEP-ROM → Built-in flash ROM
Ethernet module	A1SJ71E71N-B2	QJ71E71-B2	The specifications of the Ethernet interface are the same. For program modification, refer to the transition handbook.
	A1SJ71E71N-B5	QJ71E71-B5	
	A1SJ71E71N3-T	QJ71E71-100	
	A1SJ71QE71N-B2	QJ71E71-B2	
	A1SJ71QE71N-B5	QJ71E71-B5	
	A1SJ71QE71N3-T	QJ71E71-100	

AnS series		Q series alternative model	
Product	**Model**	**Model**	**Remarks (restrictions)**
MELSECNET/B data link module	A1SJ71AT21B	QJ71NT11B	It is recommended to replace the MELSECNET (II) and MELSECNET/B data link system with the MELSECNET/H network system. When both a local station and a remote I/O station exist, the PLC to PLC network and remote I/O network are respectively required for these stations. To replace the system gradually with the existing MELSECNET (II) used, it is recommended to use the A1SJ71A□23(B)Q, a MELSECNETII local station module.
		QJ71BR11	
		QJ71LP21-25	
	A1SJ72T25B	QJ72LP25-25	When replacing a module in a remote I/O network master station with a QCPU, replace a module in a remote I/O station with a Q series module.
		QJ72BR15	
	A1SJ71AP21	QJ71LP21-25	It is recommended to replace the MELSECNET (II) and MELSECNET/B data link system with the MELSECNET/H network system. When both a local station and a remote I/O station exist, the PLC to PLC network and remote I/O network are respectively required for these stations. To replace the system gradually with the existing MELSECNET (II) used, it is recommended to use the A1SJ71A□23(B)Q, a MELSECNETII local station module.
	A1SJ71AP21-S3	QJ71LP21G	
	A1SJ71AR21	QJ71BR11	
MELSECNET/10 (PLC to PLC network)	A1SJ71LP21	QJ71LP21-25	No restriction
	A1SJ71LR21	QJ71BR11	Coaxial loop system → Coaxial bus system
	A1SJ71BR11	QJ71BR11	No restriction
	A1SJ71QLP21	QJ71LP21-25	
	A1SJ71QLP21S	QJ71LP21S	
	A1SJ71QLR21	QJ71BR11	Coaxial loop system → Coaxial bus system
	A1SJ71QBR11	QJ71BR11	No restriction
MELSECNET/10 (remote I/O network) master station module	A1SJ71LP21	QJ71LP21-25	
	A1SJ71LR21	QJ71BR11	Coaxial loop system → Coaxial bus system
	A1SJ71BR11	QJ71BR11	No restriction
	A1SJ71QLP21	QJ71LP21-25	
	A1SJ71QLP21S	QJ71LP21S	
	A1SJ71QLR21	QJ71BR11	Coaxial loop system → Coaxial bus system
	A1SJ71QBR11	QJ71BR11	No restriction
MELSECNET/10 (remote I/O network) remote I/O station	A1SJ71QLP25	QJ72LP25-25	When replacing a module in a remote I/O network master station with a QCPU, replace a module in a remote I/O station with a Q series module.
	A1SJ71QLR25	QJ72BR15	
	A1SJ72QBR15	QJ72BR15	
CC-Link master/local module	A1SJ61BT11	QJ61BT11N	The specifications of the interface are the same. Settings such as the station information setting are configured in the CC-Link module configuration window of the network parameter instead of using a program. For details on modification, refer to the transition handbook.
	A1SJ61QBT11		
MELSECNET/MINI-S3 master module	A1SJ71PT32-S3	QJ61BT11N	It is recommended to replace the MELSECNET/MINI-S3 system with the CC-Link system. Using an A2C CC-Link module requires no change in wiring.
MELSEC-I/OLINK	A1SJ51T64	N/A	It is recommended to replace the MELSEC-I/OLINK system with the CC-Link/LT or AnyWire system. For details, refer to Section 12.5.
JEMANET(OPCN-1) interface module	A1SJ71J92-S3	N/A	It is recommended to replace the OPCN-1 system with the MELSECNET/H or CC-Link system.
B/NET interface module	A1SJ71B62-S3	B-QIF	For details, please consult your local Mitsubishi representative.

AnS series		Q series alternative model	
Product	**Model**	**Model**	**Remarks (restrictions)**
Serial communication module	A1SJ71UC24-R2	QJ71C24N	The interface is backward compatible. Each module has two channels instead of one channel. For program modification, refer to the transition handbook.
		QJ71C24N-R2	
	A1SJ71UC24-R4	QJ71C24N	
		QJ71C24N-R4	
	A1SJ71QC24N1	QJ71C24N	The interface is backward compatible. For program modification, refer to the transition handbook.
	A1SJ71QC24N1-R2	QJ71C24N-R2	

12.5 MELSEC-I/OLINK

12.5.1 Replacement with AnyWire DB A20 series

The models listed below have been selected based on the hardware specifications.
Program modification or different wiring is required because the contents of the addresses of remote stations are different.

I/OLINK series		DB A20 series alternative model	
Product	**Model**	**Model**	**Remarks (restrictions)**
Master module	A1SJ51T64	QJ51AW12D2	It is recommended to replace a module with an AnyWire DB A20 module. For details, refer to the user's manual for the corresponding module.
Input module	AJ55TB3-4D (positive common type)	A20SB-04U	1) External wiring: Changed 2) Number of modules: Not changed 3) Program: Changed 4) Specifications: Rated input voltage: Not changed Rated input current: Not changed ON voltage/ON current: Changed OFF voltage/OFF current: Changed Input resistance: Not changed 5) Functions: Changed (wiring: 3-wire → 2-wire) (A negative common type cannot be used.)
	AJ55TB3-4D (negative common type)	A20SB-04US	1) External wiring: Changed 2) Number of modules: Not changed 3) Program: Changed 4) Specifications: Rated input voltage: Not changed Rated input current: Not changed ON voltage/ON current: Changed OFF voltage/OFF current: Changed Input resistance: Not changed 5) Functions: Changed (wiring: 3-wire → 2-wire) (A positive common type cannot be used.)
	AJ55TB3-8D (positive common type)	A20SB-08UD	1) External wiring: Changed 2) Number of modules: Not changed 3) Program: Changed 4) Specifications: Rated input voltage: Not changed Rated input current: Not changed ON voltage/ON current: Changed OFF voltage/OFF current: Changed Input resistance: Not changed 5) Functions: Changed (A negative common type cannot be used.)

I/OLINK series		DB A20 series alternative model	
Product	**Model**	**Model**	**Remarks (restrictions)**
Input module	AJ55TB3-8D (negative common type)	A20SB-08USD-1	1) External wiring: Changed 2) Number of modules: Not changed 3) Program: Changed 4) Specifications: Rated input voltage: Not changed Rated input current: Not changed ON voltage/ON current: Changed OFF voltage/OFF current: Changed Input resistance: Not changed 5) Functions: Changed (A positive common type cannot be used.)
	AJ55TB3-16D (positive common type)	A20SB-16UD	1) External wiring: Changed 2) Number of modules: Not changed 3) Program: Changed 4) Specifications: Rated input voltage: Not changed Rated input current: Not changed ON voltage/ON current: Changed OFF voltage/OFF current: Changed Input resistance: Not changed 5) Functions: Changed (A negative common type cannot be used.) (8 points/common → 16 points/common)
	AJ55TB3-16D (negative common type)	A20SB-16USD	1) External wiring: Changed 2) Number of modules: Not changed 3) Program: Changed 4) Specifications: Rated input voltage: Not changed Rated input current: Not changed ON voltage/ON current: Changed OFF voltage/OFF current: Changed Input resistance: Not changed 5) Functions: Changed (A positive common type cannot be used.) (8 points/common → 16 points/common)
Output module	AJ55TB2-4R	A20PB-04RS	1) External wiring: Changed 2) Number of modules: Not changed 3) Program: Changed 4) Specifications: Rated input voltage: Changed (The voltage that can be used is equivalent.) Rated input current: Not changed Maximum switching frequency: Changed (3600 times/hour → 20 times/minute) 5) Functions: Changed (4 points/common → All points independent)

I/OLINK series		DB A20 series alternative model	
Product	**Model**	**Model**	**Remarks (restrictions)**
Output module	AJ55TB2-8R	A20PB-08RS	1) External wiring: Changed 2) Number of modules: Not changed 3) Program: Changed 4) Specifications: Rated input voltage: Changed (The voltage that can be used is equivalent.) Rated input current: Not changed Maximum switching frequency: Changed (3600 times/hour → 20 times/minute) 5) Functions: Changed (8 points/common → All points independent)
	AJ55TB2-16R	A20PB-16RS	1) External wiring: Changed 2) Number of modules: Not changed 3) Program: Changed 4) Specifications: Rated input voltage: Changed (The voltage that can be used is equivalent.) Rated input current: Not changed Maximum switching frequency: Changed (3600 times/hour → 20 times/minute) 5) Functions: Changed (8 points/common → All points independent)
	AJ55TB2-4T	A20PB-04U	1) External wiring: Changed 2) Number of modules: Not changed 3) Program: Changed 4) Specifications: Rated input voltage: Changed (12VDC is not applicable.) Rated input current: Changed (0.5A/point→0.2A/point) 5) Functions: Changed (Surge suppressor: Supported → Not supported)
	AJ55TB2-8T	A20PB-08U	1) External wiring: Changed 2) Number of modules: Not changed 3) Program: Changed 4) Specifications: Rated input voltage: Changed (12VDC is not applicable.) Rated input current: Changed (0.5A/point → 0.2A/point) 5) Functions: Changed (Surge suppressor: Supported → Not supported)
	AJ55TB2-16T	A20PB-16U	1) External wiring: Changed 2) Number of modules: Not changed 3) Program: Changed 4) Specifications: Rated input voltage: Changed (12VDC is not applicable.) Rated input current: Changed (0.5A/point → 0.2A/point) 5) Functions: Changed (Surge suppressor: Supported → Not supported)

I/OLINK series		DB A20 series alternative model	
Product	**Model**	**Model**	**Remarks (restrictions)**
I/O module	AJ55TB32-4DR (positive common type)	A20SB-04U + A20PB-04RS	1) External wiring: Changed 2) Number of modules: Changed (Two modules are required.) 3) Program: Changed 4) Specifications: (Input part) Rated input voltage: Not changed Rated input current: Not changed ON voltage/ON current: Changed OFF voltage/OFF current: Changed Input resistance: Not changed (Output part) Rated load voltage: Changed (The voltage that can be used is equivalent.) Rated load current: Not changed Maximum switching frequency: Changed (3600 times/hour → 20 times/minute) 5) Functions: Changed (Input part) Number of input points: 2 → 4 Wiring: 3-wire → 2-wire A negative common type cannot be used. (Output part) Number of output points: 2 → 4 2 points/common → All points independent
	AJ55TB32-4DR (negative common type)	A20SB-04US + A20PB-04RS	1) External wiring: Changed 2) Number of modules: Changed (Two modules are required.) 3) Program: Changed 4) Specifications: (Input part) Rated input voltage: Not changed Rated input current: Not changed ON voltage/ON current: Changed OFF voltage/OFF current: Changed Input resistance: Not changed (Output part) Rated load voltage: Changed (The voltage that can be used is equivalent.) Rated load current: Not changed Maximum switching frequency: Changed (3600 times/hour → 20 times/minute) 5) Functions: Changed (Input part) Number of input points: 2 → 4 Wiring: 3-wire → 2-wire A positive common type cannot be used. (Output part) Number of output points: 2 → 4 2 points/common → All points independent

I/OLINK series		DB A20 series alternative model	
Product	**Model**	**Model**	**Remarks (restrictions)**
I/O module	AJ55TB32-8DR (positive common type)	A20SB-04U + A20PB-04RS	1) External wiring: Changed 2) Number of modules: Changed (Two modules are required.) 3) Program: Changed 4) Specifications: (Input part) Rated input voltage: Not changed Rated input current: Not changed ON voltage/ON current: Changed OFF voltage/OFF current: Changed Input resistance: Not changed (Output part) Rated load voltage: Changed (The voltage that can be used is equivalent.) Rated load current: Not changed Maximum switching frequency: Changed (3600 times/hour → 20 times/minute) 5) Functions: Changed (Input part) Wiring: 3-wire → 2-wire A negative common type cannot be used. (Output part) 4 points/common → All points independent
	AJ55TB32-8DR (negative common type)	A20SB-04US + A20PB-04RS	1) External wiring: Changed 2) Number of modules: Changed (Two modules are required.) 3) Program: Changed 4) Specifications: (Input part) Rated input voltage: Not changed Rated input current: Not changed ON voltage/ON current: Changed OFF voltage/OFF current: Changed Input resistance: Not changed (Output part) Rated load voltage: Changed (The voltage that can be used is equivalent.) Rated load current: Not changed Maximum switching frequency: Changed (3600 times/hour → 20 times/minute) 5) Functions: Changed (Input part) Wiring: 3-wire → 2-wire A positive common type cannot be used. (Output part) 4 points/common → All points independent

I/OLINK series		DB A20 series alternative model	
Product	**Model**	**Model**	**Remarks (restrictions)**
I/O module	AJ55TB32-16DR (positive common type)	A20SB-08UD + A20PB-08RS	1) External wiring: Changed 2) Number of modules: Changed (Two modules are required.) 3) Program: Changed 4) Specifications: (Input part) Rated input voltage: Not changed Rated input current: Not changed ON voltage/ON current: Changed OFF voltage/OFF current: Changed Input resistance: Not changed (Output part) Rated load voltage: Changed (The voltage that can be used is equivalent.) Rated load current: Not changed Maximum switching frequency: Changed (3600 times/hour → 20 times/minute) 5) Functions: Changed (Input part) A negative common type cannot be used. (Output part) 8 points/common → All points independent
	AJ55TB32-16DR (negative common type)	A20SB-08USD-1 + A20PB-08RS	1) External wiring: Changed 2) Number of modules: Changed (Two modules are required.) 3) Program: Changed 4) Specifications: (Input part) Rated input voltage: Not changed Rated input current: Not changed ON voltage/ON current: Changed OFF voltage/OFF current: Changed Input resistance: Not changed (Output part) Rated load voltage: Changed (The voltage that can be used is equivalent.) Rated load current: Not changed Maximum switching frequency: Changed (3600 times/hour → 20 times/minute) 5) Functions: Changed (Input part) A positive common type cannot be used. (Output part) 8 points/common → All points independent

I/OLINK series		DB A20 series alternative model	
Product	**Model**	**Model**	**Remarks (restrictions)**
I/O module	AJ55TB32-4DT	A20XB-16UD	1) External wiring: Changed 2) Number of modules: Not changed 3) Program: Changed 4) Specifications: (Input part) Rated input voltage: Not changed Rated input current: Not changed ON voltage/ON current: Changed OFF voltage/OFF current: Changed Input resistance: Not changed (Output part) Rated load voltage: Not changed Rated load current: Changed (0.5A/point → 0.2A/point) 5) Functions: Changed (Input part) Number of input points: 2 → 8 (Output part) Number of output points: 2 → 8 Surge suppressor: Supported → Not supported
	AJ55TB32-8DT	A20XB-16UD	1) External wiring: Changed 2) Number of modules: Not changed 3) Program: Changed 4) Specifications: (Input part) Rated input voltage: Not changed Rated input current: Not changed ON voltage/ON current: Changed OFF voltage/OFF current: Changed Input resistance: Not changed (Output part) Rated load voltage: Not changed Rated load current: Changed (0.5A/point → 0.2A/point) 5) Functions: Changed (Input part) Number of input points: 4 → 8 (Output part) Number of output points: 4 → 8 Surge suppressor: Supported → Not supported
	AJ55TB32-16DT	A20XB-16UD	1) External wiring: Changed 2) Number of modules: Not changed 3) Program: Changed 4) Specifications: (Input part) Rated input voltage: Not changed Rated input current: Not changed ON voltage/ON current: Changed OFF voltage/OFF current: Changed Input resistance: Not changed (Output part) Rated load voltage: Not changed Rated load current: Changed (0.5A/point → 0.2A/point) 5) Functions: Changed (Input part) Not changed (Output part) Surge suppressor: Supported → Not supported

12.5.2 Replacement with CC-Link/LT

MELSEC-I/OLINK		Alternative models for CC-Link/LT	
Product	**Model**	**Model**	**Remarks (restrictions)**
Input module	AJ55TB3-4D	CL1X4-D1B2	1) External wiring: Changed 2) Number of modules: Not changed 3) Program: Number of occupied I/O points: Not changed. (in 4-point mode) 4) Specifications: Rated input voltage: Not changed Rated input current: Changed ON voltage/ON current: Changed OFF voltage/OFF current: Changed Input resistance: Changed 5) Functions: Changed (3-wire type → 2-wire type)
	AJ55TB3-8D	CL2X8-D1B2	1) External wiring: Changed 2) Number of modules: Not changed 3) Program: Number of occupied I/O points: Not changed. (in 4-point mode) 4) Specifications: Rated input voltage: Not changed Rated input current: Changed ON voltage/ON current: Changed OFF voltage/OFF current: Changed Input resistance: Changed 5) Functions: Changed (3-wire type → 2-wire type)
	AJ55TB3-16D	CL2X8-D1B2	1) External wiring: Changed 2) Number of modules: Changed (Two modules are required.) 3) Program: Number of occupied I/O points: Not changed. (in 4-point mode) 4) Specifications: Rated input voltage: Not changed Rated input current: Changed ON voltage/ON current: Changed OFF voltage/OFF current: Changed Input resistance: Changed 5) Functions: Changed (3-wire type → 2-wire type)
Output module	AJ55TB2-4R	CL1Y4-R1B2	1) External wiring: Changed 2) Number of modules: Not changed 3) Program: Number of occupied I/O points: Not changed. (in 4-point mode) 4) Specifications: Rated output voltage: Changed Rated output current: Not changed 5) Functions: Not changed

MELSEC-I/OLINK		Alternative models for CC-Link/LT	
Product	**Model**	**Model**	**Remarks (restrictions)**
Output module	AJ55TB2-8R	CL1Y4-R1B2	1) External wiring: Changed 2) Number of modules: Changed (Two modules are required.) 3) Program: Number of occupied I/O points: Not changed. (in 4-point mode) 4) Specifications: Rated output voltage: Changed Rated output current: Not changed 5) Functions: Not changed
	AJ55TB2-16R	CL1Y4-R1B2	1) External wiring: Changed 2) Number of modules: Changed (Four modules are required.) 3) Program: Number of occupied I/O points: Not changed. (in 4-point mode) 4) Specifications: Rated output voltage: Changed Rated output current: Not changed 5) Functions: Not changed
	AJ55TB2-4T	CL1Y4-T1B2	1) External wiring: Changed 2) Number of modules: Not changed 3) Program: Number of occupied I/O points: Not changed. (in 4-point mode) 4) Specifications: Rated output voltage: Not changed Rated output current: Changed 5) Functions: Not changed
	AJ55TB2-8T	CL2Y8-TP1B2	1) External wiring: Changed 2) Number of modules: Not changed 3) Program: Number of occupied I/O points: Not changed. (in 4-point mode) 4) Specifications: Rated output voltage: Not changed Rated output current: Changed 5) Functions: Not changed
	AJ55TB2-16T	CL2Y8-TP1B2	1) External wiring: Changed 2) Number of modules: Changed (Two modules are required.) 3) Program: Number of occupied I/O points: Not changed. (in 4-point mode) 4) Specifications: Rated output voltage: Not changed Rated output current: Changed 5) Functions: Not changed

MELSEC-I/OLINK		Alternative models for CC-Link/LT	
Product	**Model**	**Model**	**Remarks (restrictions)**
I/O module	AJ55TB32-4DR	CL1XY4-DR1B2	1) External wiring: Changed 2) Number of modules: Not changed 3) Program: Number of occupied I/O points: Not changed. (in 4-point mode) 4) Specifications: Rated input voltage: Not changed Rated input current: Changed ON voltage/ON current: Changed OFF voltage/OFF current: Changed Input resistance: Changed Rated output voltage: Changed Rated output current: Not changed 5) Functions: Changed (input: 3-wire type → 2-wire type)
	AJ55TB32-8DR	CL1XY8-DR1B2	1) External wiring: Changed 2) Number of modules: Not changed 3) Program: Number of occupied I/O points: Not changed. (in 4-point mode) 4) Specifications: Rated input voltage: Not changed Rated input current: Changed ON voltage/ON current: Changed OFF voltage/OFF current: Changed Input resistance: Changed Rated output voltage: Changed Rated output current: Not changed 5) Functions: Changed (input: 3-wire type → 2-wire type)
	AJ55TB32-16DR	CL1XY8-DR1B2	1) External wiring: Changed 2) Number of modules: Changed (Two modules are required.) 3) Program: Number of occupied I/O points: Not changed. (in 4-point mode) 4) Specifications: Rated input voltage: Not changed Rated input current: Changed ON voltage/ON current: Changed OFF voltage/OFF current: Changed Input resistance: Changed Rated output voltage: Changed Rated output current: Not changed 5) Functions: Changed (input: 3-wire type → 2-wire type)

MELSEC-I/OLINK		Alternative models for CC-Link/LT	
Product	**Model**	**Model**	**Remarks (restrictions)**
I/O module	AJ55TB32-4DT	CL1XY4-DT1B2	1) External wiring: Changed 2) Number of modules: Not changed 3) Program: Number of occupied I/O points: Not changed. (in 4-point mode) 4) Specifications: Rated input voltage: Not changed Rated input current: Changed ON voltage/ON current: Changed OFF voltage/OFF current: Changed Input resistance: Changed Rated output voltage: Changed Rated output current: Changed 5) Functions: Changed (input: 3-wire type → 2-wire type)
	AJ55TB32-8DT	CL1XY8-DT1B2	1) External wiring: Changed 2) Number of modules: Not changed 3) Program: Number of occupied I/O points: Not changed. (in 4-point mode) 4) Specifications: Rated input voltage: Not changed Rated input current: Changed ON voltage/ON current: Changed OFF voltage/OFF current: Changed Input resistance: Changed Rated output voltage: Changed Rated output current: Changed 5) Functions: Changed (input: 3-wire type → 2-wire type)
	AJ55TB32-16DT	CL1XY8-DT1B2	1) External wiring: Changed 2) Number of modules: Changed (Two modules are required.) 3) Program: Number of occupied I/O points: Not changed. (in 4-point mode) 4) Specifications: Rated input voltage: Not changed Rated input current: Changed ON voltage/ON current: Changed OFF voltage/OFF current: Changed Input resistance: Changed Rated output voltage: Changed Rated output current: Changed 5) Functions: Changed (input: 3-wire type → 2-wire type)

MEMO

REVISIONS

Version	Print Date	Revision
—	October 2012	First edition
A	November 2012	The modem interface module (Q6TEL) is added to the list of models to be discontinued.
B	January 2014	CPU module (A2ASCPU, A2ASCPU-S1, A2ASCPU-S30, A2SHCPU-S1, A1SJHCPU-S8), base unit (A1S32B-E, A1S33B-E, A1S35B-E, A1S38B-E, A1S52B-S1, A1S55B-S1, A1S58B-S1, A1S65B-S1, A1S68B-S1), battery (A8BAT-SET), the MODBUS interface module (A1SJ71UC24-R2-S2, A1SJ71UC24-R4-S2), MELSECNET/10 network module (A1SJ71LP21GE, A1SJ71QLP21GE), PROFIBUS interface module (A1SJ71PB92D, A1SJ71PB93D), Devicenet interface module (A1SJ71DN91) are added to the list of models to be discontinued.
C	March 2015	The A1SD75-C01H and A1SD75-C01HA is deleted from the list of models to be discontinued (resumption of production).