Modules that can be replaced using a universal conversion adapter

- The universal conversion adapter can be used to replace the MELSEC-A series, MELSEC-AnS series, and SYSMAC C series modules that do not support the use of a conversion adapter with the MELSEC-Q series modules.
- The universal conversion adapter can also be used to replace the modules that share each common terminal by 8 points with the common separation modules (QX40H/QX70H/QX80H/QX90H).

POINT

Check that the specifications of MELSEC-Q series modules satisfy the specifications of the devices and equipment currently connected.

MELSEC-A series → MELSEC-Q series

Modules that do not support the use of a conversion adapter

Input/Output	MELSEC-A series module before replacement			MELSEC-Q series module after replacement			No. of required modules
	Model	Specifications*	No. of points	Model	Specifications*	No. of points	
Input	AX20(-UL)	200 to 240VAC	16	QX28	100 to 240VAC	8	2
	AX21(EU)		32				4
	AX80	12/24VDC, source type	16	QX70	5/12VDC, positive/negative common shared type	16	1
	AX80E						
	AX81		32	QX71		32	
	AX81-S1	12/24VDC, sink/source type	32				
	AX31	12/24VDC, 12/24VAC	32	QX41	24VDC		
				QX71	12VDC		
Output	AY20EU	100 to 240VAC		QY22	100 to 240VAC	16	1
	AY40A	12/24VDC, 0.3A, independent		QY68A	5 to 24VDC, 2A, independent	8	2
	AY60	24VDC (12/48VDC), 2A	16				
	AY60E						
	AY60EP	12/24VDC, 2A					
	AY60S(-UL)	24/48VDC (12VDC), 2A					
	AY15EU	240VAC, 2A	24	QY10	240VAC, 2A	16	

*: Input specifications: Sink type = Positive common, Source type = Negative common
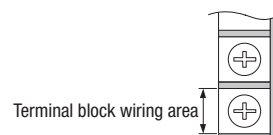
Modules that share each common terminal by 8 points

Input/Output	MELSEC-A series module before replacement			MELSEC-Q series module after replacement			No. of required modules
	Model	Specifications*	No. of points	Model	Specifications*	No. of points	
Input	AX40(-UL)	12/24VDC, sink type, 8 points/common	16	QX40H	24VDC, positive common, 8 points/common	16	1
	AX70(-UL)	5/12/24VDC, sink/source type, 8 points/common		QX70H	5VDC, positive common, 8 points/common		
				QX90H	5VDC, negative common, 8 points/common		
	AX80(-UL)	12/24VDC, source type, 8 points/common		QX80H	24VDC, negative common, 8 points/common		
	AX80E						

*: Input specifications: Sink type = Positive common, Source type = Negative common

Reference: Terminal block specifications

Item	MELSEC-A series module before replacement	MELSEC-Q series module after replacement	Universal conversion adapter (large type)
Terminal block screw size	M3	M3	M3
Terminal block wiring area	7.2mm	6mm	7.2mm

Terminal block wiring area

MELSEC-AnS series → MELSEC-Q series

Modules that do not support the use of a conversion adapter

Input/Output	MELSEC-AnS series module before replacement			MELSEC-Q series module after replacement			No. of required modules
	Model	Specifications[*1]	No. of points	Model	Specifications[*1]	No. of points	
Input	A1SX30	12/24VDC, 12/24VAC	16	QX40	24VDC, positive common	16	1
Output	A1SY14EU	24VDC/240VAC	12	QY10	24VDC/240VAC	16	1
	A1SY18A(EU)[*2]		8	QY18A		8	
	A1SY68A[*2]	5/12/24/48VDC, sink/source type		QY68A	5 to 24VDC, sink/source type		
I/O combined	A1SX48Y58	Input: 24VDC, sink type Output: 12/24VDC, sink type	Input: 8 Output: 8	QX48Y57	Input: 24VDC, positive common Output: 12 to 24VDC, sink type	Input: 8 Output: 7	1
	A1SX48Y18	Input: 24VDC, sink type Output: 24VDC/240VAC		QX40+QY10	Input: 24VDC, positive common Output: 24VDC/240VAC	Input: 16 Output: 16	1 + 1

*1: Input specifications: Sink type = Positive common
*2: The existing terminal block can be mounted to the universal conversion adapter as it is. (Attach a cover included with the existing terminal block when a standard base unit is used.)

Reference: Terminal block specifications

Item	MELSEC-AnS series module before replacement	MELSEC-Q series module fter replacement	Universal conversion adapter (small type)
Terminal block screw size	M3.5	M3	M3.5
Terminal block wiring area	7.3mm	6mm	7.3mm

Terminal block wiring area

SYSMAC C series → MELSEC-Q series

Modules that do not support the use of a conversion adapter

Input/Output	SYSMAC C series module before replacement			MELSEC-Q series module after replacement			No. of required modules
	Model	Specifications*	No. of points	Model	Specifications*	No. of points	
Input	C500-IA222	200 to 240VAC	16	QX28	100 to 240VAC	8	2
	C500-IA223		32				4
Output	C500-OC223	24VDC/250VAC, independent	16	QY18A	24VDC/240VAC, independent	8	2
	C500-OD215	24VDC, sink type, independent		QY68A	5 to 24VDC, sink/source type, independent		
	C500-OD212	12 to 24VDC, source type	32	QY81P	12 to 24VDC, source type	32	1
	C500-OA223	250VAC	24	QY22	100 to 240VAC	16	2

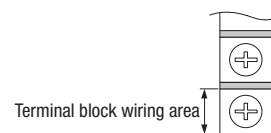*: Input specifications: Sink type = Positive common, Source type = Negative common

Modules that share each common terminal by 8 points

Input/Output	SYSMAC C series module before replacement			MELSEC-Q series module after replacement			No. of required modules
	Model	Specifications*	No. of points	Model	Specifications*	No. of points	
Input	C500-ID112	5 to 12VDC, sink type, 8 points/common	16	QX70H	5VDC, positive common, 8 points/common	16	1
	C500-ID213	12 to 24VDC, sink type, 8 points/common		QX40H	24VDC, positive common, 8 points/common		

*: Input specifications: Sink type = Positive common

Reference: Terminal block specifications

Item	SYSMAC C series [Large type] module before replacement	MELSEC-Q series module after replacement	Universal conversion adapter (large type)
Terminal block screw size	M3.5	M3	M3
Terminal block wiring area	7.3mm	6mm	7.2mm

Terminal block wiring area

SYSMAC C series (C200H series) → MELSEC-Q series

Modules that do not support the use of a conversion adapter

Input/Output	SYSMAC C series module before replacement			MELSEC-Q series module after replacement			No. of required modules	Note
	Model	Specifications	No. of points	Model	Specifications	No. of points		
Input	C200H-IA121	100 to 120VAC	8	QX10	100 to 120VAC	16	1	-
	C200H-IA122		16					
	C200H-IA122V							
	C200H-IA221	200 to 240VAC	8	QX28	100 to 240VAC	8	1	
	C200H-IA222		16				2	
	C200H-IA222V							
	C200H-ID001	No-voltage input (No-contact input), for NPN output	8	QX40, QX40-S1, QX40H	24VDC, positive common	16	1	*1, *2
	C200H-ID002	No-voltage input (No-contact input), for PNP output		QX80, QX80H	24VDC, negative common			
	C200H-ID211	12 to 24VDC, positive/negative common shared type		QX40, QX40-S1, QX40H	24VDC, positive common			*3
				QX80, QX80H	24VDC, negative common			
				QX70	5/12VDC, positive/negative common shared type			
	C200H-ID212	24VDC, positive/negative common shared type	16	QX40, QX40-S1, QX40H	24VDC, positive common			-
				QX80, QX80H	24VDC, negative common			
	C200H-IM211	12 to 24VAC/DC	8	QX40, QX40-S1, QX40H	24VDC, positive common			*3
				QX80, QX80H	24VDC, negative common			
				QX70	5/12VDC, positive/negative common shared type			
	C200H-IM212	24VAC/DC	16	QX40, QX40-S1, QX40H	24VDC, positive common			-
				QX80, QX80H	24VDC, negative common			
Output	C200H-OA221	250VAC maximum, 1A	8	QY22	100 to 240VAC	16	1	-
	C200H-OA222	250VAC maximum, 0.5A	12					
	C200H-OA222V	250VAC maximum, 0.3A						
	C200H-OA223	250VAC maximum, 1.2A	8					
	C200H-OA224	250VAC maximum, 0.5A	12					
	C200H-OC221	250VAC/24VDC maximum, 2A	8	QY10	240VAC, 24VDC	16		*3
	C200H-OC222							
	C200H-OC222N		12					
	C200H-OC222V							
	C200H-OC225		16					-
	C200H-OC226							
	C200H-OC226N							
	C200H-OC223	250VAC/24VDC maximum, 2A, independent contact	5	QY18A	240VAC, 24VDC, independent	8		-
	C200H-OC224		8					
	C200H-OC224N							
	C200H-OC224V							
	C200H-OD411	12 to 48VDC, 1A, sink type	8	QY40P	12 to 24VDC, sink type	16		*3
	C200H-OD211	24VDC, 0.3A, sink type	12					-
	C200H-OD212		16					
	C200H-OD213	24VDC, 2.1A, sink type	8					*3
	C200H-OD214	24VDC, 0.8A, source type	8	QY80	12 to 24VDC, source type	16		-
	C200H-OD216	5 to 24VDC, 0.3A, source type						
	C200H-OD217		12					
	C200H-OD21A	24VDC, 1A, source type	16					

*1: Additional power supply input (5V or 12V) is required at the wiring side.
*2: When 5VDC or 12VDC is used, consider replacing the module with the QX70 (positive/negative common shared type).
*3: When an input module (24VDC, 8 points, positive common) or an output module (12 to 24VDC, 8 points, sink type) are used, consider replacing the module with the QX48Y57.

Reference: Terminal block specifications

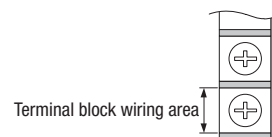| Item	SYSMAC C series [Small type] module before replacement	MELSEC-Q series module after replacement	Universal conversion adapter
Terminal block screw size	M3.5	M3	M3.5
Terminal block wiring area	7.3mm	6mm	7.3mm

Terminal block wiring area

SYSMAC C series (CS series) → MELSEC-Q series

Modules that do not support the use of a conversion adapter

| Input/Output | SYSMAC C series module before replacement | | No. of points | MELSEC-Q series module after replacement | | No. of points | No. of required modules |
	Model	Specifications		Model	Specifications		
Input	CS1W-IA111	100 to 120VAC/DC	16	QX10	100 to 120VAC	16	1
	CS1W-IA211	200 to 240VAC		QX28	100 to 240VAC	8	2
	CS1W-ID211	24VDC, positive/negative common shared type		QX40, QX40-S1, QX40H	24VDC, positive common	16	1
				QX80, QX80H	24VDC, negative common		
Output	CS1W-OC201	250VAC/24VDC, 2A, 120VDC, 0.1A, independent contact	8	QY18A	240VAC, 24VDC, independent	8	1
	CS1W-OC211	250VAC/24VDC, 2A, 120VDC, 0.1A	16	QY10	240VAC, 24VDC	16	
	CS1W-OA201	250VAC, 1.2A	8	QY22	100 to 240VAC		
	CS1W-OA211	250VAC, 0.5A					
	CS1W-OD211	12 to 24VDC, 0.5A, sink type	16	QY40P	12 to 24VDC, sink type		
	CS1W-OD212	24VDC, 0.5A, source type		QY80	12 to 24VDC, source type		

Reference: Terminal block specifications

Item	SYSMAC C series [Small type] module before replacement	MELSEC-Q series module after replacement	Universal conversion adapter
Terminal block screw size	M3.5	M3	M3.5
Terminal block wiring area	7.3mm	6mm	7.3mm

Terminal block wiring area

New satellite JW series [Large type] → MELSEC-Q series

Modules that do not support the use of a conversion adapter

| Input/Output | New satellite JW series [Large type] module before replacement | | No. of points | MELSEC-Q series module after replacement | | No. of points | No. of required modules |
	Model	Specifications*		Model	Specifications*		
Input	JW-13N	200 to 240VAC	16	QX28	100 to 240VAC	8	2
Output	JW-35S	12/24VDC, source type	32	QY81P	12/24VDC, source type	32	1
Analog output	JW-2DA	0 to ±10VDC, 0 to ±20mADC, 11-bit signed binary	2	Q62DAN	-10 to +10VDC, 0 to ±20mADC, 16-bit signed binary	2	
High-speed counter input	JW-2HC	50/20/15/8kpps, 24-bit binary	2	QD62	200/100/10kpps, 32-bit binary	2	

*: Input specifications: Source type = Negative common

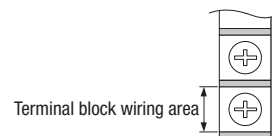### Modules that share each common terminal by 8 points

| Input/Output | New satellite JW series [Large type] module before replacement | | No. of points | MELSEC-Q series module after replacement | | No. of points | No. of required modules |
	Model	Specifications*		Model	Specifications*		
Input	JW-12N	12/24VDC, 24VAC, positive/negative common shared type	16	QX40H	24VDC, positive common, 8 points/common	16	1
				QX80H	24VDC, negative common, 8 points/common		
	JW-32N	12/24VDC, 24VAC, positive/negative common shared type	32	QX40H	24VDC, positive common, 8 points/common	16	2
				QX80H	24VDC, negative common, 8 points/common		
	JW-34N	12/24VDC, positive/negative common shared type	32	QX40H	24VDC, positive common, 8 points/common	16	2
				QX80H	24VDC, negative common, 8 points/common		

*: Input specifications: Sink type = Positive common, Source type = Negative common

Reference: Terminal block specifications

Item	New satellite JW series [Large type] module before replacement	MELSEC-Q series module after replacement	Universal conversion adapter (large type)
Terminal block screw size	M3.5	M3	M3
Terminal block wiring area	7.3mm	6mm	7.2mm

Terminal block wiring area

New satellite JW series Small type → MELSEC-Q series

Modules that do not support the use of a conversion adapter

Input/Output	New satellite JW series [Small type] module before replacement			MELSEC-Q series module after replacement			No. of required modules
	Model	Specifications*	No. of points	Model	Specifications*	No. of points	
Input	JW-203N	200/240VAC	8	QX28	100 to 240VAC	8	1
	JW-201N	100/120VAC		QX40, QX40-S1	24VDC, positive common	16	
	JW-202N	12/24VDC		QX70	12VDC, positive common		
Output	JW-203S	100/120VAC	8	QY22	100 to 240VAC	16	1
	JW-204S JW-204SA	250VAC/30VDC, 2A, independent		QY18A	240VAC/24VDC, 2A, independent	8	
	JW-202S	5/12/24VDC, sink type		QY68A	5 to 24VDC, 2A, independent		
	JW-215SA	5/12/24VDC, source type	16	QY80P	12/24VDC, source type	16	
Analog input	JW-24AD	0 to ±10VDC, 0 to ±20mADC, 13-bit signed binary	4	Q64AD	-10 to 0 to +10VDC, 0 to 20mADC, 16-bit signed binary	4	1
Analog output	JW-22DA	0 to ±10VDC, 0 to ±20mADC, 15-bit signed binary	2	Q62DAN	-10 to +10VDC, 0 to 20mADC, 16-bit signed binary	2	

*: Input specifications: Sink type = Positive common, Source type = Negative common
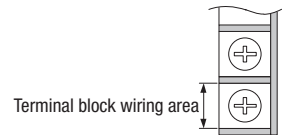
Modules that share each common terminal by 8 points

Input/Output	New satellite JW series [Small type] module before replacement			MELSEC-Q series module after replacement			No. of required modules
	Model	Specifications*	No. of points	Model	Specifications*	No. of points	
Input	JW-212N JW-212NA JW-214N JW-214NA	12/24VDC, positive/negative common shared type	16	QX40H	24VDC, positive common, 8 points/common	16	1
				QX80H	24VDC, negative common, 8 points/common		

*: Input specifications: Sink type = Positive common, Source type = Negative common

Reference: Terminal block specifications

Item	New satellite JW series [Small type] module before replacement	MELSEC-Q series module after replacement	Universal conversion adapter (small type)
Terminal block screw size	M3.5	M3	M3.5
Terminal block wiring area	7.2mm	6mm	7.3mm

Terminal block wiring area

MEMOCON-SC GL series Large type (2000 series I/O) → MELSEC-Q series

Modules that do not support the use of a conversion adapter

Input/Output	MEMOCON-SC GL series [Large type] (2000 series I/O) module before replacement			MELSEC-Q series module after replacement			
	Model	Specifications*	No. of points	Model	Specifications*	No. of points	No. of required modules
Input	JAMSC-B2503A	200VAC	16	QX28	100 to 240VAC	8	2
	JAMSC-B2507A	200VAC	32				4
Output	JAMSC-B2912	100/200VAC, 24VDC	32	QY10	100 to 200VAC, 24VDC	16	2
	JAMSC-B2624	5VDC, sink type	64	QY41H	5/12/24VDC, sink type	32	
	JAMSC-B2630	12/24VDC, source type	16	QY80	12/24VDC, source type	16	1
	JAMSC-B2632	12/24VDC, source type	32	QY81P		32	

*: Input specifications: Sink type = Positive common, Source type = Negative common
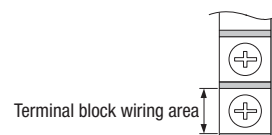
Modules that share each common terminal by 8 points

Input/Output	New satellite JW series [Large type] module before replacement			MELSEC-Q series module after replacement			
	Model	Specifications*	No. of points	Model	Specifications*	No. of points	No. of required modules
Input	JAMSC-B2601	12/24VDC, positive/negative common shared type	16	QX40H	24VDC, positive common, 8 points/common	16	1
				QX80H	24VDC, negative common, 8 points/common		
	JAMSC-B2603	12/24VDC, positive/negative common shared type	32	QX40H	24VDC, positive common, 8 points/common	16	2
				QX80H	24VDC, negative common, 8 points/common		

*: Input specifications: Sink type = Positive common, Source type = Negative common

Reference: Terminal block specifications

Item	MEMOCON-SC GL series [Large type] module before replacement	MELSEC-Q series module after replacement	Universal conversion adapter (large type)
Terminal block screw size	M3	M3	M3
Terminal block wiring area	7.3mm	6mm	7.2mm

Terminal block wiring area

Remarks

The universal conversion adapter (small type) cannot be used to replace the SYSMAC C series Small type (CQM1) or the MEMOCON GL series Small type with the MELSEC-Q series because the terminal block screw size of the universal conversion adapter (small type) is bigger than those of the series before and after replacement.

Reference: Terminal block specifications

Item	Before replacement		MELSEC-Q series module after replacement	Universal conversion adapter (small type)
	SYSMAC C series [Small type] (CQM1) module	MEMOCON GL series [Small type] module		
Terminal block screw size	M3	M3	M3	M3.5
Terminal block wiring area	6.4mm	7mm	6mm	7.3mm

Terminal block wiring area