

Before Using the Product

Please read this document before use. Keep this for future reference and make sure that end users will read this.

■ Related manuals

Before using the product, please read the manuals that are supplied with the base unit and the servo amplifier.

Confirm the following descriptions:

- SAFETY PRECAUTIONS
- CONDITIONS OF USE FOR THE PRODUCT
- EMC AND LOW VOLTAGE DIRECTIVES
- WARRANTY

Details of the product are also described in the manual shown below (sold separately).

Please read the manual and understand the functions and performance of the product to use it correctly.

- MELSEC iQ-R Simple Motion Module User's Manual (Startup) IB-0300245 (1XB012)
- MELSEC iQ-R Simple Motion Module User's Manual (Application) IB-0300247 (1XB014)
- MELSEC iQ-R Simple Motion Module User's Manual (Advanced Synchronous Control) IB-0300249 (1XB016)

■ Manuels correspondants

Avant d'utiliser le produit, prendre la peine de lire les manuels fournis avec l'unité de base et le servo-amplificateur.

Revoir les points suivants :

- PRÉCAUTIONS DE SÉCURITÉ
- CONDITIONS D'UTILISATION DE PRODUIT
- DIRECTIVES EMC ET BASSE TENSION
- GARANTIE

■ Packing list

Check that the following items are included in the package.

Item	Quantity
Module	1
"Before Using the Product" (this document)	1

■ Signal layout for external input connection connector

■ Affectation des signaux au connecteur de raccordement d'entrée externe

◆ External input connection connector (module side)

*1, *2	0 0	2A20	1B20	0 0	1A20
	0 0	2A19	1B19	0 0	1A19
	0 0	2A18	1B18	0 0	1A18
	0 0	2A17	1B17	0 0	1A17
	0 0	2A16	1B16	0 0	1A16
	0 0	2A15	1B15	0 0	1A15
	0 0	2A14	1B14	0 0	1A14
	0 0	2A13	1B13	0 0	1A13
	0 0	2A12	1B12	0 0	1A12
	0 0	2A11	1B11	0 0	1A11
	0 0	2A10	1B10	0 0	1A10
	0 0	2A9	1B9	0 0	1A9
	0 0	2A8	1B8	0 0	1A8
	0 0	2A7	1B7	0 0	1A7
	0 0	2A6	1B6	0 0	1A6
	0 0	2A5	1B5	0 0	1A5
	0 0	2A4	1B4	0 0	1A4
	0 0	2A3	1B3	0 0	1A3
	0 0	2A2	1B2	0 0	1A2
	0 0	2A1	1B1	0 0	1A1

Front view of the module

Pin number	Signal name	Pin number	Signal name
1B20	Manual pulse generator/Incremental synchronous encoder B phase/SIGN (HB) ^{3*4*5}	1A20	Manual pulse generator power supply output (+5VDC) (5V) ⁹
1B19	Manual pulse generator/Incremental synchronous encoder A phase/PULSE (HA) ^{3*4*5}	1A19	Manual pulse generator power supply output (+5VDC) (5V) ⁹
1B18	Manual pulse generator/Incremental synchronous encoder B phase/SIGN (HBL) ^{3*4*6}	1A18	Manual pulse generator/Incremental synchronous encoder B phase/SIGN (HBH) ^{3*4*6}
1B17	Manual pulse generator/Incremental synchronous encoder A phase/PULSE (HAL) ^{3*4*6}	1A17	Manual pulse generator/Incremental synchronous encoder A phase/PULSE (HAH) ^{3*4*6}
1B16	No connect ⁷	1A16	No connect ⁷
1B15	Manual pulse generator power supply output (+5VDC) (5V) ¹⁰	1A15	Manual pulse generator power supply output (+5VDC) (5V) ¹⁰
1B14	Manual pulse generator power supply output (GND) (SG) ¹⁰	1A14	Manual pulse generator power supply output (GND) (SG) ¹⁰
1B13	No connect ⁷	1A13	No connect ⁷
1B12		1A12	
1B11		1A11	
1B10		1A10	
1B9		1A9	
1B8	Forced stop input signal common (EMI.COM)	1A8	Forced stop input signal (EMI)
1B7	Common (COM)	1A7	Common (COM)
1B6	Common (COM)	1A6	Common (COM)
1B5	Input signal (SIN10) ⁸	1A5	Input signal (SIN5) ⁸
1B4	Input signal (SIN9) ⁸	1A4	Input signal (SIN4) ⁸
1B3	Input signal (SIN8) ⁸	1A3	Input signal (SIN3) ⁸
1B2	Input signal (SIN7) ⁸	1A2	Input signal (SIN2) ⁸
1B1	Input signal (SIN6) ⁸	1A1	Input signal (SIN1) ⁸

*1 RD77MS2 does not have 2A20 to 2A1 terminals and 2B20 to 2B1 terminals.

*2 The 2A(B)20 to 2A(B)8 terminals are "No connect", 2A5 to 2A1 are "SIN15 to SIN11", and 2B5 to 2B1 are "SIN20 to SIN16".

*3 Input type from manual pulse generator/Incremental synchronous encoder is switched in "[Pr.89] Manual pulse generator/Incremental synchronous encoder input type selection". (Only the value specified against the axis 1 is valid.)

- 0: Differential-output type - 1: Voltage-output/open-collector type (Default value)

*4 Set the signal input form in "[Pr.24] Manual pulse generator/Incremental synchronous encoder input selection".

*5 Voltage-output/open-collector type: Connect the A phase/PULSE signal to HA, and the B phase/SIGN signal to HB.

*6 Differential-output type: Connect the A phase/PULSE signal to HAH, and the A phase/PULSE inverse signal to HAL. Connect the B phase/SIGN signal to HBH, and the B phase/SIGN inverse signal to HBL.

*7 Do not connect to any terminals explained as "No connect".

*8 Set the external command signal [DI, FLS, RLS, DOG, STOP] in "[Pr.116] FLS signal selection", "[Pr.117] RLS signal selection", "[Pr.118] DOG signal selection", "[Pr.119] STOP signal selection" and "[Pr.95] External command signal selection".

*9 Do not connect wires other than the signal wires of the manual pulse generator to 1A20 and 1A19.

*10 Do not use 1A(B)15 and 1A(B)14 for other than the power supply of manual pulse generator.

English	French	English	French
Signal name	Nom de signal	Manual pulse generator power supply output (+5VDC)	Sortie alimentation générateur d'impulsions manuel (+5VDC)
Pin number	Broche N°	Manual pulse generator power supply output (GND)	Sortie alimentation générateur d'impulsions manuel (GND)
External input connection connector (module side)	Connecteur de raccordement d'entrée externe (côté module)	Forced stop input signal common	Signal d'entrée d'arrêt forcé Commun
Front view of the module	Vue de l'avant du module	Common	Commun
Manual pulse generator/Incremental synchronous encoder * phase/SIGN	Générateur d'impulsions manuel/Encodeur synchrone incrémentiel Phase */SIGN	Input signal	Signal d'entrée
Manual pulse generator/Incremental synchronous encoder * phase/PULSE	Générateur d'impulsions manuel/Encodeur synchrone incrémentiel Phase */PULSE	Forced stop input signal	Signal d'entrée d'arrêt forcé
No connect	Non connecté		

English	French
RD77MS2 does not have 2A20 to 2A1 terminals and 2B20 to 2B1 terminals.	Les bornes 2A20 à 2A1 et 2B20 à 2B1 n'existent pas sur le RD77MS2.
The 2A(B)20 to 2A(B)8 terminals are "No connect", 2A5 to 2A1 are "SIN15 to SIN11", and 2B5 to 2B1 are "SIN20 to SIN16".	Les bornes 2A(B)20 à 2A(B)8 sont "Non connecté", 2A5 à 2A1 sont "SIN15 à SIN11", et 2B5 à 2B1 sont "SIN20 à SIN16".
Input type from manual pulse generator/Incremental synchronous encoder is switched in "[Pr.89] Manual pulse generator/Incremental synchronous encoder input type selection". (Only the value specified against the axis 1 is valid.)	Le type d'entrée en provenance du générateur d'impulsions manuel/encodeur synchrone incrémentiel permute en "[Pr.89] Manual pulse generator/Incremental synchronous encoder input type selection". (Seule la valeur spécifiée pour axe 1 est valide.)
- 0: Differential-output type - 1: Voltage-output/open-collector type (Default value)	- 0: Type différentiel-sortie - 1: Type tension-sortie/ouvert-collecteur (valeur par défaut)
Set the signal input form in "[Pr.24] Manual pulse generator/Incremental synchronous encoder input selection".	Adopter une forme d'entrée de signal dans "[Pr.24] Manual pulse generator/Incremental synchronous encoder input selection".
Voltage-output/open-collector type: Connect the A phase/PULSE signal to HA, and the B phase/SIGN signal to HB.	Type tension-sortie/ouvert-collecteur : Raccorder le signal Phase A /PULSE sur HA, et le signal Phase B/SIGN sur HB.
Differential-output type: Connect the A phase/PULSE signal to HAH, and the A phase/PULSE inverse signal to HAL. Connect the B phase/SIGN signal to HBH, and the B phase/SIGN inverse signal to HBL.	Type différentiel-sortie : Raccorder le signal Phase A /PULSE sur HAH, et le signal Phase A/PULSE inversé sur HAL. Raccorder le signal Phase B /SIGN sur HBH, et le signal Phase B/SIGN inversé sur HBL.
Do not connect to any terminals explained as "No connect".	Ne rien raccorder à aucune des bornes portant la mention "Non connecté".
Set the external command signal [DI, FLS, RLS, DOG, STOP] in "[Pr.116] FLS signal selection", "[Pr.117] RLS signal selection", "[Pr.118] DOG signal selection", "[Pr.119] STOP signal selection" and "[Pr.95] External command signal selection".	Régler le signal de commande externe [DI, FLS, RLS, DOG, STOP] dans "[Pr.116] FLS signal selection", "[Pr.117] RLS signal selection", "[Pr.118] DOG signal selection", "[Pr.119] STOP signal selection" et "[Pr.95] External command signal selection".
Do not connect wires other than the signal wires of the manual pulse generator to 1A20 and 1A19.	Ne raccorder sur 1A20 à 1A19 aucun fil autre que les fils de signaux du générateur d'impulsions manuel.
Do not use 1A(B)15 and 1A(B)14 for other than the power supply of manual pulse generator.	Ne pas utiliser 1A(B)15 et 1A(B)14 dans un but autre que l'alimentation du générateur d'impulsions manuel.

The table below shows applicable external input wiring connector. When wiring, use applicable wires.

External input wiring connector		Wire			
Model	Tightening torque	Diameter	Type	Material	Temperature rating
A6CON1	0.20 to 0.29N·m	22AWG	Stranded	Copper	75°C (167°F) or more
A6CON2		24AWG			
A6CON4		22AWG			

Le tableau ci-dessous indique quels connecteurs on peut utiliser comme connecteur de câblage des entrées externes. Pour le câblage, utiliser les fils prescrits.

Connecteur de câblage des entrées externes		Fil			
Modèle	Couple de serrage	Diamètre	Type	Matériau	Gamme de température
A6CON1	0,20 à 0,29N·m	22 AWG	Torsadé	Cuivre	75°C (167°F) ou plus
A6CON2		24 AWG			
A6CON4		22 AWG			

■ Operating ambient temperature

Use the product within the range of 0 to 55°C (32°F to 131°F).

■ Température ambiante de fonctionnement

Utiliser le produit à une température ambiante entre 0°C et 55°C (32°F et 131°F).