PRODUCT NEWS

Product Discontinuation Notices

Variable Speed Drives

OMRON

Issue Date
March 20, 2023

No. E-230320

Discontinuation Notice of The basic drive J1000 Series.

Product Discontinuation

The basic drive

Model JZA[ ]

Recommended Replacement

Compact Drive

Model Q2V-[ ]-B[ ]

[Final order entry date]

The end of February, 2024

[Caution on recommended replacement]

Q2V Series: J1000 functions are fully supported by Q2V series, but mechanical sizes, and additional functionality/parameter may be different.

[Difference from discontinued product]

Recommended replacement Model	Body Color	Dimen-sions	Wire connection	Mounting Dimensions	Charac-teristics	Operation ratings	Operation methods
Q2V-[ ]	--	*	--	*	**	**	**

** : Compatible
* : The change is a little/Almost compatible
-- : Not compatible
- : No corresponding specification

[Product Discontinuation and recommended replacement]

Product discontinuation Model JZA[ ]	Recommended replacement Model Q2V-[ ]-B[ ]
JZAB0P1BAA	Q2V-AB001-BAA
JZAB0P2BAA	Q2V-AB002-BAA
JZAB0P4BAA	Q2V-AB004-BAA
JZAB0P7BAA	Q2V-AB006-BAA
JZAB1P5BAA	Q2V-AB010-BAA
JZA40P2BAA	Q2V-A4001-BAA
JZA40P4BAA	Q2V-A4002-BAA
JZA40P7BAA	Q2V-A4004-BAA
JZA41P5BAA	Q2V-A4005-BAA
JZA42P2BAA	Q2V-A4007-BAA
JZA43P0BAA	Q2V-A4009-BAA
JZA44P0BAA	Q2V-A4012-BAA
JZA20P1BAA	Q2V-A2001-BAA
JZA20P2BAA	Q2V-A2002-BAA
JZA20P4BAA	Q2V-A2004-BAA
JZA20P7BAA	Q2V-A2006-BAA
JZA21P5BAA	Q2V-A2010-BAA
JZA22P2BAA	Q2V-A2012-BAA

Product discontinuation Model JZA[ ]	Recommended replacement Model Q2V-[ ]-B[ ]
JZA24P0BAA	Q2V-A2021-BAA

[Body color]

Product discontinuation Model JZA[ ]	Recommendable replacement Model Q2V-[ ]-B[ ]
Cream.	Blue.

[Dimensions & Mounting dimensions]

Product discontinuation Model JZA[ ]

B0P1/B0P2/B0P4/B0P7/B01P5

Figure 1

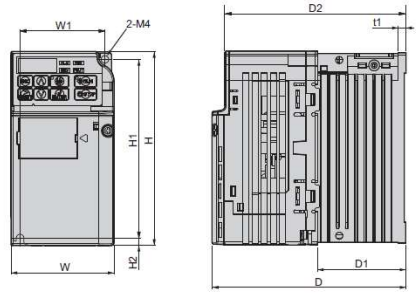
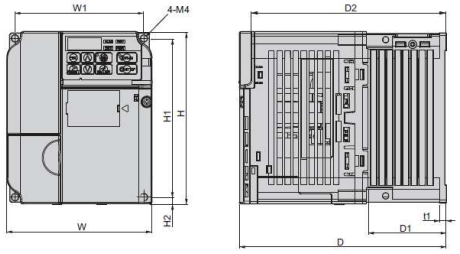


Figure 2



Drive model JZA□	Figure	Dimensions in mm									
		W1	H1	W	H	D	t1	H2	D1	D2	Weight
B0P1	1	56	118	68	128	76	3	5	6.5	67.5	0.6
B0P2											0.6
B0P4						118	5		38.5	109.5	1.0
B0P7	2	96		108		137.5			58	129	1.7
B1P5						154				145.5	1.8

Recommendable replacement Model Q2V-[ ]-B[ ]

AB001/AB002/ AB004/AB006/AB010

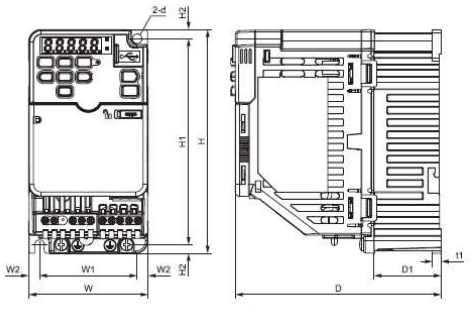


Figure 1

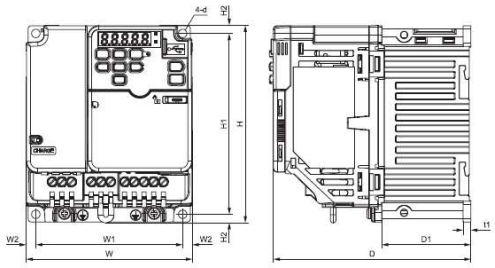
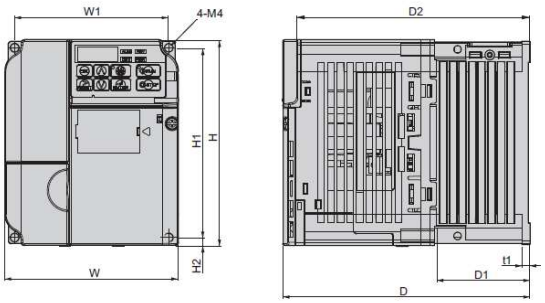


Figure 2

Drive model Q2V-A□	Fig.	Dimensions (mm)									
		W	W1	W2	H	H1	H2	D	D1	t1	d
B001-B	1	68	56	6	128	118	5	76	6.5	3	M5
B002-B											
B004-B								118	38.5	5	
B006-B	2	108	96					137.5	56.5		
B010-B								154			

40P2/40P4/40P7/41P5/42P2/43P0/44P0

Figure 2



Drive model JZA□	Figure	Dimensions in mm									
		W1	H1	W	H	D	t1	H2	D1	D2	Weight
40P2	2	96	118	108	128	81	5	5	10	72.5	1.0
40P4						99			28	90.5	1.2
40P7						137.5			58	129	1.7
41P5						154				145.5	1.7
42P2											1.7
43P0											1.7
44P0		128		140		143			65	134.5	2.4

A4001/A4002/A4004/A4005/A4007/A4009/ A4012

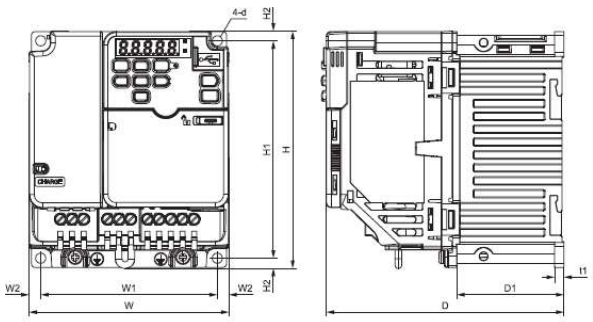


Figure 2

Drive model Q2V-A□	Fig.	Dimensions (mm)									
		W	W1	W2	H	H1	H2	D	D1	t1	d
4001-B	2	108	96	6	128	118	5	81	8.5		M5
4002-B								99	26.5		
4004-B								137.5	56.5		
4005-B								154			
4007-B											
4009-B											
4012-B		140	128					143	65		

Product discontinuation Model JZA[ ]	Recommendable replacement Model Q2V-[ ]-B[ ]
20P1/20P2/20P4/20P7/21P5/22P2/24P0	A2001/A2002/A2004/A2006/A2010/A1012/ A2021

Figure 1

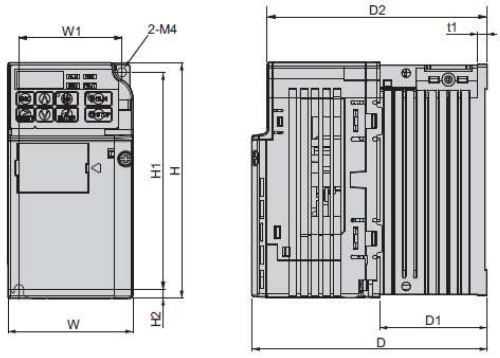
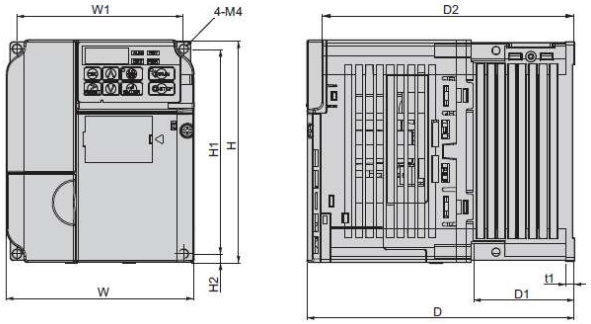


Figure 2



Drive model JZA□	Figure	Dimensions in mm									
		W1	H1	W	H	D	t1	H2	D1	D2	Weight
20P1	1	56	118	68	128	76	3	5	6.5	67.5	0.6
20P2											0.6
20P4						108	5		38.5	99.5	0.9
20P7						128				119.5	1.1
21P5	2	96		108		129			58	120.5	1.7
22P2						137.5				129	1.7
24P0		128		140		143			65	134.5	2.4

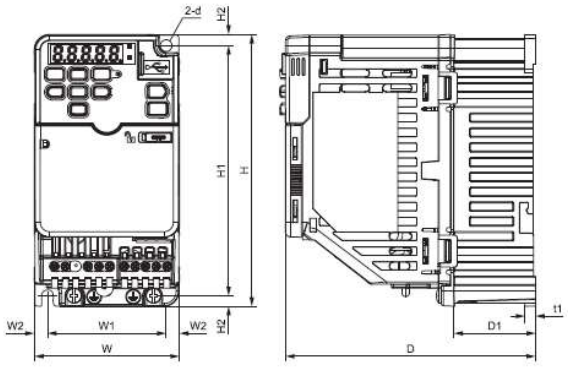


Figure 1

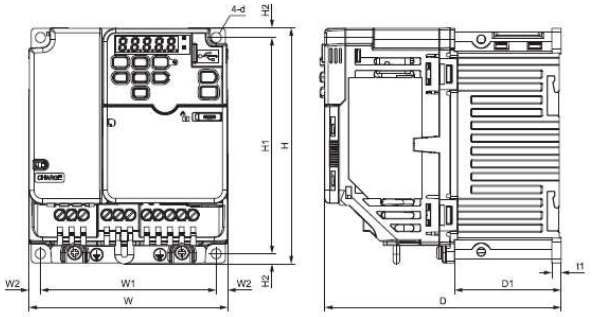
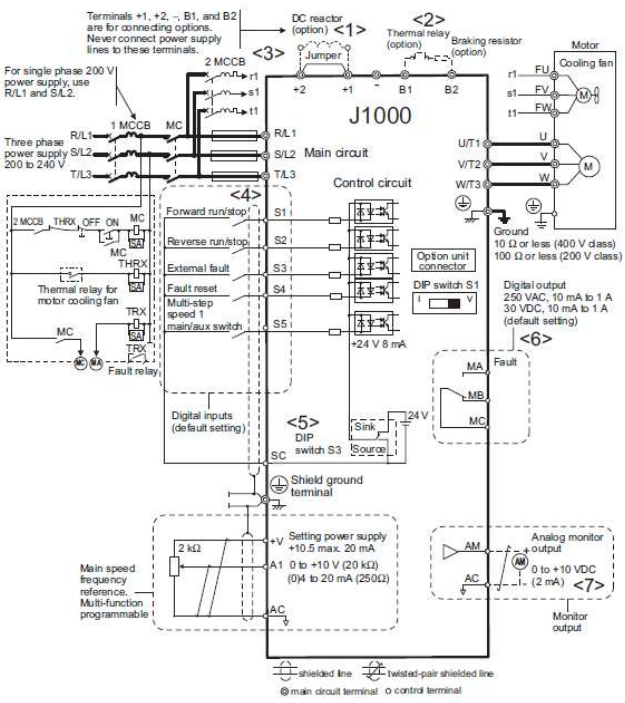
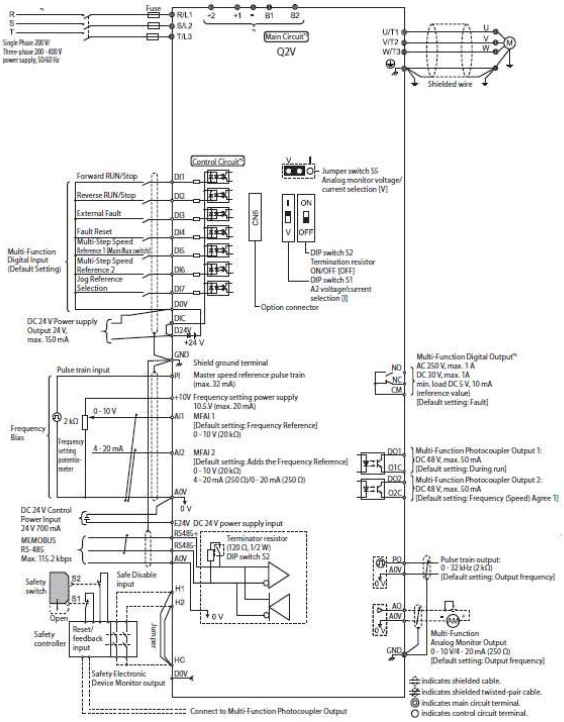


Figure 2

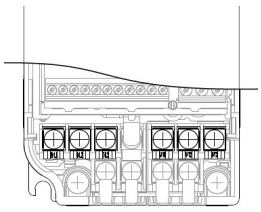
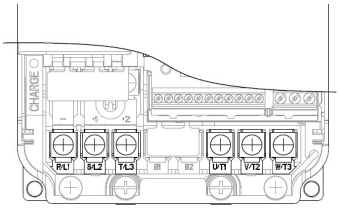
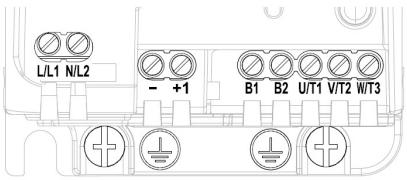
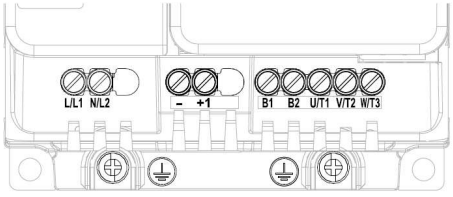
Drive model	Fig.	Dimensions (mm)									
Q2V-A□		W	W1	W2	H	H1	H2	D	D1	t1	d
2001-B	1	68	56					76	6.5	3	
2002-B											
2004-B								108	38.5	5	
2006-B								128	58.5		
2010-B	2	108	96					129	56.5		
2012-B								137.5			
2021-B		140	128					143	65		

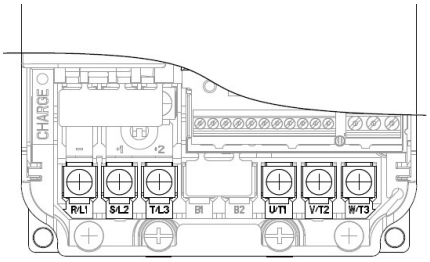
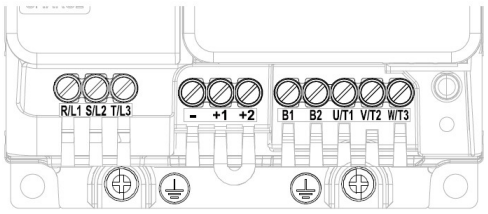
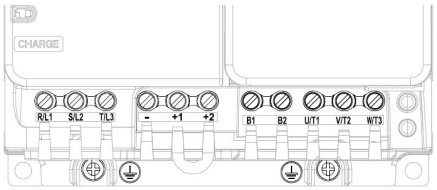
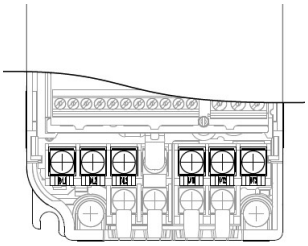
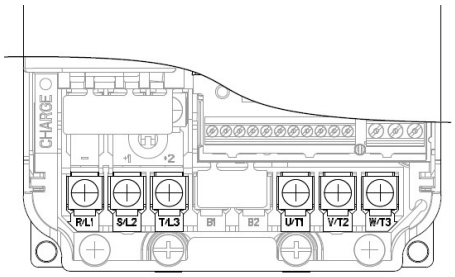
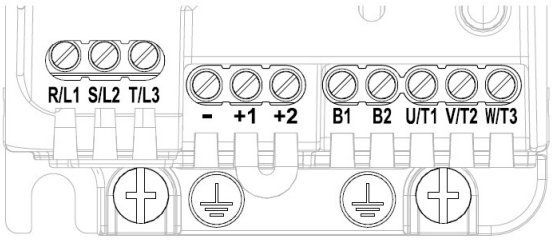
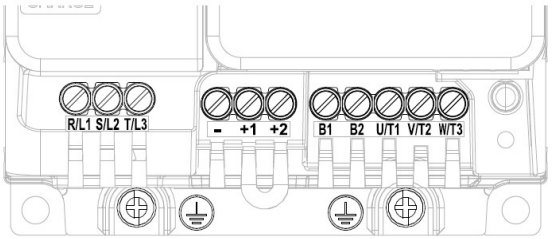
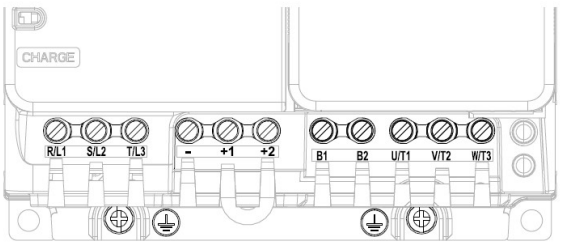
[Wire connection]

Product discontinuation Model JZA[ ]	Recommendable replacement Model Q2V-[ ]-B[ ]
Standard connections 	Standard connections 

Difference of Terminal Block

Main Circuit Terminal Block

Product discontinuation Model JZA[ ]	Recommendable replacement Model Q2V-[ ]-B[ ]
B0P1/B0P2/B0P4/B0P7/B01P5  AB0P7/AB01P5 	AB001/AB002/AB004  AB006/AB010 

Product discontinuation Model JZA[ ]	Recommendable replacement Model Q2V-[ ]-B[ ]
40P2/40P4/40P7/41P5/42P2/43P0/44P0 	A4001/A4002/A4004/A4005/A4007/A4009/  A4012 
20P1/20P2/20P4/20P7  21P5/22P2/24P0 	A2001/A2002/A2004/A2006  A2010/A1012  A2021 

Control Circuit Terminal Block

Product discontinuation Model JZA[ ]			Recommendable replacement Model Q2V-[ ]-B[ ]		
Type	**No.**	**Signal name**	**Type**	**No.**	**Signal name**
Digital input signals	**S1**	Multi-function input selection 1	**Digital input signals**	**DI1**	Multi-Function Digital Input 1 (ON: Forward run, OFF: Stop)
	S2	Multi-function input selection 2		**DI2**	Multi-Function Digital Input 2 (ON: Reverse run, OFF: Stop)
	S3	Multi-function input selection 3		**DI3**	Multi-Function Digital Input 3 (External fault (N.O.))
	S4	Multi-function input selection 4		**DI4**	Multi-Function Digital Input 4 (Fault reset)
	S5	Multi-function input selection 5		**DI5**	Multi-Function Digital Input 5 (Multi-step speed reference 1)
	SC	Multi-function input selection Common		**DI6**	Multi-Function Digital Input 6 (Multi-step speed reference 2)
	---			**DI7**	Multi-Function Digital Input 7 (Jog reference selection)
	---			**D0V*1**	MFDI power supply 0 V
	---			**DIC**	MFDI common
	---			**D24V**	MFDI power supply +24 VDC
---	---		**Safe Disable input**	**H1**	Safe Disable input 1
	---			**H2**	Safe Disable input 2
	---			**HC*2**	Safe Disable function common
Analog input signal	**FS**	Power Supply for Frequency Setting	**Master frequency reference**	**PI**	Master speed reference pulse train
	FR1	Main Speed Freq Ref		**+10V**	Frequency setting power supply
	FC	Frequency reference common		**AI1**	Multi-Function Analog Input 1 (Frequency reference)
	---			**AI2**	Multi-Function Analog Input 2 (Frequency reference bias)
	---			**A0V**	Frequency reference common
	---			**GND**	Connecting shielded cable
Digital output signals	**MA**	NO contact output	**Fault relay output**	**NO**	Multi-Function Digital Output, N.O. output
	MB	NC Output		**NC**	Multi-Function Digital Output, N.C. output
	MC	Relay Output common		**CM**	MFDO common
	---		**Multi-function photocoupler output**	**DO1**	Multi-Function Photocoupler Output 1 (During Run)
	---			**O1C**	
	---			**DO2**	Multi-Function Photocoupler Output 2 (Speed agree 1) *3
	---			**O2C**	
Analog output signals	**AM**	Analog monitor output	**Monitor output**	**PO**	Pulse train output (Output frequency) *3
	AC	Analog monitor common		**AO**	Analog monitor output (Output frequency)
	---			**A0V**	Monitor common

Product discontinuation Model JZA[ ]			Recommendable replacement Model Q2V-[ ]-B[ ]		
Type	**No.**	**Signal name**	**Type**	**No.**	**Signal name**
---	---		**External power supply input**	**E24V**	External 24 V power supply input
	---			**A0V**	External 24 V power supply ground
---	---		**MEMOBUS/ Modbus*4**	**RS485 +**	Communication input/output (+)
	---			**RS485 -**	Communication output (-)
	---			**A0V**	Shield ground

*1. Do not close the circuit between D24V and D0V terminals. Failure to obey will cause damage to the drive.
*2. Do not close the circuit between HC and D0V terminals. Failure to obey will cause damage to the drive.
*3. Connect a flywheel diode as shown in when you drive a reactive load such as a relay coil. Make sure that the diode rating is larger than the circuit voltage.
*4. Select DIP switch S2 to ON to enable the termination resistor in the last drive in a MEMOBUS/Modbus network.

[Characteristics]

Item	Product discontinuation Model JZA[ ]					Recommendable replacement Model Q2V-[ ]-B[ ]				
		B0P1	**B0P2**	**B0P4**	**B0P7**		**B001**	**B002**	**B004**	**B006**
		20P1	**20P2**	**20P4**	**20P7**		**2001**	**2002**	**2004**	**2006**
Applicable motor (4-pole) capacity [kW]	HD	0.1	0.2	0.4	0.75	HD	0.1	0.25	0.55	0.75
	ND	0.2	0.4	0.75	1.1	ND	0.18	0.37	0.75	1.1
Rated input voltage	Single-phase 200..240 V 50/60 Hz 3-phase 200..240 V 50/60 Hz					3-phase AC power supply 200-240 V at 50/60 Hz DC power supply 270-340 VDC				
Rated output voltage	Proportional to input voltage: 0..240 V					Proportional to input voltage: 200-240 V				
Rated output current [A]	HD	0.8	1.6	3.0	5.0	HD	0.8	1.6	3.0	5.0
	ND	1.2	1.9	3.5	6.0	ND	1.2	1.9	3.5	6.0

Item	Product discontinuation Model JZA[ ]					Recommendable replacement Model Q2V-[ ]-B[ ]				
		B1P5	**-**	**-**	**-**		**B010**	**-**	**-**	**-**
		21P5	**22P2**	**24P0**	**-**		**2010**	**2012**	**2021**	**-**
Applicable motor (4-pole) capacity [kW]	HD	1.5	2.2	4.0	-	HD	1.5	2.2	4.0	-
	ND	2.2	3.0	5.5	-	ND	2.2	3.0	5.5	-
Rated input voltage	Single-phase 200..240 V 50/60 Hz 3-phase 200..240 V 50/60 Hz					3-phase AC power supply 200-240 V at 50/60 Hz DC power supply 270-340 VDC				
Rated output voltage	Proportional to input voltage: 0..240 V					Proportional to input voltage: 200-240 V				
Rated output current [A]	HD	8.0	11.0	17.5	-	HD	8.0	11	17.6	-
	ND	9.6	12.0	19.6	-	ND	9.6	12.2	21	-

Item	Product discontinuation Model JZA[ ]					Recommendable replacement Model Q2V-[ ]-B[ ]				
		40P2	40P4	40P7	41P5		4001	4002	4004	4005
Applicable motor (4-pole) capacity [kW]	HD	0.2	0.4	0.75	1.5	HD	0.37	0.55	1.1	1.5
	ND	0.4	0.75	1.5	2.2	ND	0.37	0.75	1.5	2.2
Rated input voltage	3-phase 380..480 VAC, 50/60 Hz					3-phase AC power supply 380-480 V at 50/60 Hz				
Rated output voltage	0..480V (proportional to input voltage)					Proportional to input voltage: 380-480 V				
Rated output current [A]	HD	1.2	1.8	3.4	4.8	HD	1.2	1.8	3.4	4.8
	ND	1.2	2.1	4.1	5.4	ND	1.2	2.1	4.1	5.4

Item	Product discontinuation Model JZA[ ]					Recommendable replacement Model Q2V-[ ]-B[ ]				
		42P2	43P0	44P0	-		4007	4009	4012	-
Applicable motor (4-pole) capacity [kW]	HD	2.2	3.0	4.0	-	HD	2.2	3.0	4.0	-
	ND	3.0	3.7	5.5	-	ND	3.0	4.0	5.5	-
Rated input voltage	3-phase 380..480 VAC, 50/60 Hz					3-phase AC power supply 380-480 V at 50/60 Hz				
Rated output voltage	0..480V (proportional to input voltage)					Proportional to input voltage: 380-480 V				
Rated output current [A]	HD	5.5	7.2	9.2	-	HD	5.6	7.3	9.2	-
	ND	6.9	8.8	11.1	-	ND	7.1	8.9	11.9	-

[Operation ratings]

Item	Product discontinuation Model JZA[ ]		Recommendable replacement Model Q2V-[ ]-B[ ]		
		AB0P1 to AB1P5 A40P2 to A44P0 20P1 to 24P0		AB001 to AB006 A2001 to A2006	AB010 to AB012 A2010 to A2012 A4001 to A4012
Carrier frequency change range	HD	8/10 kHz	HD	10 kHz	8 kHz
	ND	2 kHz Swing PWM	ND	2 kHz	2 kHz
Output frequency range	0.1..400 Hz		V/f, OLV and OLV/PM: 0.01 Hz to 590 Hz AOLV/PM: 0.01 Hz to 270 Hz EZOLV: 0.01 Hz to 120 Hz		
Frequency setting resolution	Digital set value: 0.01 Hz (<100 Hz), 0.1 Hz (>100 Hz)		Digital inputs: 0.01 Hz Analog inputs: 1/2048 of the max. output frequency (11-bit signed)		
Output frequency resolution	0.01 Hz		0.001 Hz		
Acceleration/ Deceleration time	0.01 to 6000 s		0.0 to 6000.0 s		
Ambient temperature	-10ºC to +50ºC		-10ºC to +50ºC		
Ambient humidity	95% RH or less (without cond.)		95% RH or less (without condensation)		

[Operation methods]

There are some differences of operator, parameters and options between JZA[ ] and Q2V-[ ].
Please refer to “J1000 User’s Manual " (SIEP-C71060633-01-OY) and “Q2V Technical Manual" (SIEPCYEUOQ2V01C)