

GENERAL SPECIFICATIONS

Type			VF1A-G□□□□S4														
			02A1	04A1	05A5	06A9	12A0	21A5	28A5	37A0	44A0	59A0	72A0	85A0	105A	139A	
Nominal applied motor *1 [kW(HP)]		ND	0.75(1)	1.5(2)	2.2(3)	3.0(4)	5.5(7.5)	11(15)	15(20)	18.5(25)	22(30)	30(40)	37(50)	45(60)	55(75)	75(100)	
		HD	0.75(1)	1.1(1.5)	2.2(3)	3.0(4)	5.5(7.5)	7.5(10)	11(15)	15(20)	18.5(25)	22(30)	30(40)	37(50)	45(60)	55(75)	
		HND	0.75(1)	1.1(1.5)	2.2(3)	3.0(4)*9	5.5(7.5)*9	7.5(10)	11(15)	15(20)	18.5(25)	22(30)	30(40)	37(50)	45(60)	55(75)	
		HHD	0.4(1/2)	0.75(1)	1.5(2)	2.2(3)	3.7(5)	5.5(7.5)	7.5(10)	11(15)	15(20)	18.5(25)	22(30)	30(40)	37(50)	45(60)	
Output ratings	Rated capacity [kVA] *2	ND	1.6	3.1	4.2	5.3	9.1	16	22	28	34	45	55	65	80	106	
		HD	1.4	2.6	3.8	4.8	8.5	13	18	24	29	34	46	57	69	85	
		HND	1.4	2.6	3.8	4.8*9	8.5*9	13	18	24	29	34	46	57	69	85	
		HHD	1.1	1.9	3.2	4.2	6.9	9.9	14	18	23	30	34	46	57	69	
	Rated voltage [V] *3		Three-phase 380 to 480V (With AVR)														
	Rated current [A] *4	ND	2.1	4.1	5.5	6.9	12	21.5	28.5	37.0	44.0	59.0	72.0	85.0	105	139	
		HD	1.8	3.4	5.0	6.3	11.1	17.5	23.0	31.0	38.0	45.0	60.0	75.0	91.0	112	
		HND	1.8	3.4	5.0	6.3*9	11.1*9	17.5	23.0	31.0	38.0	45.0	60.0	75.0	91.0	112	
		HHD	1.5	2.5	4.2	5.5	9.0	13.0	18.0	24.0	30.0	39.0	45.0	60.0	75.0	91.0	
	Overload capability	ND, HND	120% of nominal current for 1min														
		HD	150% of nominal current for 1min														
		HHD	150% of nominal current for 1min or 200% of nominal current for 0.5s														
Input ratings	Main power supply		Three-phase 380 to 480V (With AVR)											Three-phase 380 to 480V, 50/60Hz			
	Voltage/frequency variations		Voltage: +10 to -15% (Voltage unbalance:2% or less *8, Frequency: +5 to -5%)														
	Rated current without DCR *5 [A]	ND	2.7	4.8	7.3	11.3	16.8	33.0	43.8	52.3	60.6	77.9	94.3	114	140	-	
		HD	2.7	3.9	7.3	11.3	16.8	23.2	33.0	43.8	52.3	60.6	77.9	94.3	114	140	
		HND	2.7	3.9	7.3	11.3*9	16.8*9	23.2	33.0	43.8	52.3	60.6	77.9	94.3	114	140	
		HHD	1.7	3.1	5.9	8.2	13.0	17.3	23.2	33.0	43.8	52.3	60.6	77.9	94.3	114	
	Rated current with DCR *5 [A]	ND	1.5	2.9	4.2	5.8	10.1	21.1	28.8	35.5	42.2	57.0	68.5	83.2	102	138	
		HD	1.5	2.1	4.2	5.8	10.1	14.4	21.1	28.8	35.5	42.2	57.0	68.5	83.2	102	
		HND	1.5	2.1	4.2	5.8*9	10.1*9	14.4	21.1	28.8	35.5	42.2	57.0	68.5	83.2	102	
		HHD	0.85	1.6	3.0	4.4	7.3	10.6	14.4	21.1	28.8	35.5	42.2	57.0	68.5	83.2	
	Required power supply capacity *6 [kVA]	ND	1.1	2.1	3.0	4.1	7.0	15	20	25	29	39	47	58	71	96	
		HD	1.1	1.5	3.0	4.1	7.0	10	15	20	25	29	39	47	58	71	
		HND	1.1	1.5	3.0	4.1*9	7.0*9	10	15	20	25	29	39	47	58	71	
		HHD	0.6	1.2	2.1	3.1	5.1	7.3	10	15	20	25	29	39	47	58	
Braking	Braking torque *7 [%]	ND	53%	50%	48%	29%	27%	12%							5 to 9%		
		HD	53%	68%	48%	29%	27%	15%							7 to 12%		
		HND	53%	68%	48%	29%*9	27%*9	15%							7 to 12%		
		HHD	100%		70%	40%		20%								10 to 15%	
	DC braking		Starting frequency: 0.0 to 60.0Hz, Braking time: 0.0 to 30.0s, Braking level: 0 to 60% (ND spec.), 0 to 80% (HD/HND spec.), 0 to 100% (HHD spec.) of nominal current														
	Braking chopper		Built-in											Option			
	Minimum connectable resistance [ohm]		200		160		130	80	60	40	34.4	16	-	-	-		
Braking resistor		Option															
DC reactor (DCR)			Option														
Enclosure (IEC60529)			IP20, UL open type														
Cooling method			Natural cooling		Fan cooling												
Mass [kg]			1.2	1.5	1.5	1.6	1.9	5.0	5.0	8.0	9.0	9.5	10	25	26	30	

Note:

*1 Fuji 4-pole standard motor. At the selection of the inverter rating, consider not only the rating capacity(kW) is enough but also inverter output current is larger than selected the motor's nominal current.

*2 Rated capacity is calculated by assuming the output rated voltage as 440 V.

*3 The output voltage cannot exceed the power supply voltage.

*4 When the carrier frequency (F26) is set to below value or higher, the inverter is sure to be necessary to derate their nominal current.
HHD spec.---type 0002 to 0012 : 8kHz, type 0022 to 0168 : 10kHz, type 0203 to 0590 : 6kHz
HND spec.---type 0002 to 0012 : 8kHz, type 0022 to 0059 : 10kHz, type 0072 to 0168 : 6kHz, type 0203 to 0590 : 4kHz HD,ND spec.---All type : 4kHz
The rated output current at HD/HND spec. is decreased 2% for every 1 °C (1.8 °F) when ambient temperature is +40 °C (+104 °F) or more.

*5 The value is calculated assuming that the inverter is connected with a power supply with the capacity of 500 kVA (or 10 times the inverter capacity if the inverter capacity exceeds 50 kVA) and %X is 5%. Be sure to use the DCR when applicable motor capacity is 75kW or above.

*6 Obtained when a DC reactor (DCR) is used.

*7 Average braking torque for the motor running alone. (It varies with the efficiency of the motor.)

*8 Voltage unbalance (%) =(Max. voltage [V] - Min. voltage [V])/Three -phase average voltage [V] × 67 (IEC 61800 - 3) If this value is 2 to 3%, use an optional AC reactor (ACR).

*9 HND spec. of the type 0007 and 0012: allowable ambient temperature 40 °C (+104 °F) or less. The rated output current at HND spec. is decreased 1% for every 1 °C (1.8 °F) when ambient temperature is +40 °C (+104 °F) or more.