

Ideal combination of power and multiple-function. Dynamic torque-vector control promises optimum motor control under any operating conditions. Broad HP rating for Constant Torque application (G11S) and Variable Torque application (P11S)

Dynamic torque-vector control

Reduced motor instability at low speed

On-line tuning system

Environment-friendly features

Advanced, convenient functions

Global products, communication

Intelligent Keypad panel

Protective functions, Maintenance

Extensive product line

Many useful functions



Variation

FRENIC5000G11S series for general industrial machines

Applicable motor rating [HP]	Three-phase 230V	Three-phase 460V	Applicable motor rating [HP]	Three-phase 230V	Three-phase 460V
1/4	FRNF25G11S-2UX		75	FRN075G11S-2UX	FRN075G11S-4UX
1/2	FRNF50G11S-2UX	FRNF50G11S-4UX	100	FRN100G11S-2UX	FRN100G11S-4UX
1	FRN001G11S-2UX	FRN001G11S-4UX	125	FRN125G11S-2UX	FRN125G11S-4UX
2	FRN002G11S-2UX	FRN002G11S-4UX	150		FRN150G11S-4UX
3	FRN003G11S-2UX	FRN003G11S-4UX	200		FRN200G11S-4UX
5	FRN005G11S-2UX	FRN005G11S-4UX	250		FRN250G11S-4UX
7.5	FRN007G11S-2UX	FRN007G11S-4UX	300		FRN300G11S-4UX
10	FRN010G11S-2UX	FRN010G11S-4UX	350		FRN350G11S-4UX
15	FRN015G11S-2UX	FRN015G11S-4UX	400		FRN400G11S-4UX
20	FRN020G11S-2UX	FRN020G11S-4UX	450		FRN450G11S-4UX
25	FRN025G11S-2UX	FRN025G11S-4UX	500		FRN500G11S-4UX
30	FRN030G11S-2UX	FRN030G11S-4UX	600		FRN600G11S-4UX
40	FRN040G11S-2UX	FRN040G11S-4UX			
50	FRN050G11S-2UX	FRN050G11S-4UX			
60	FRN060G11S-2UX	FRN060G11S-4UX			

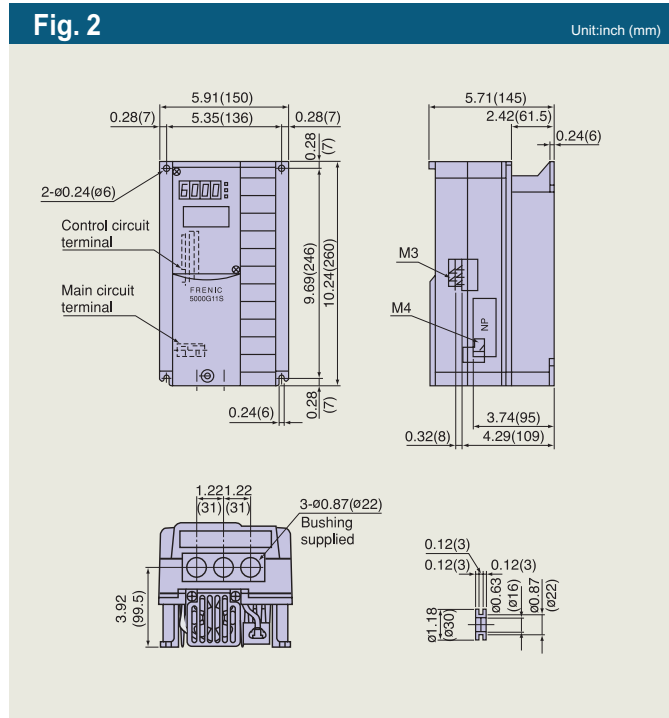
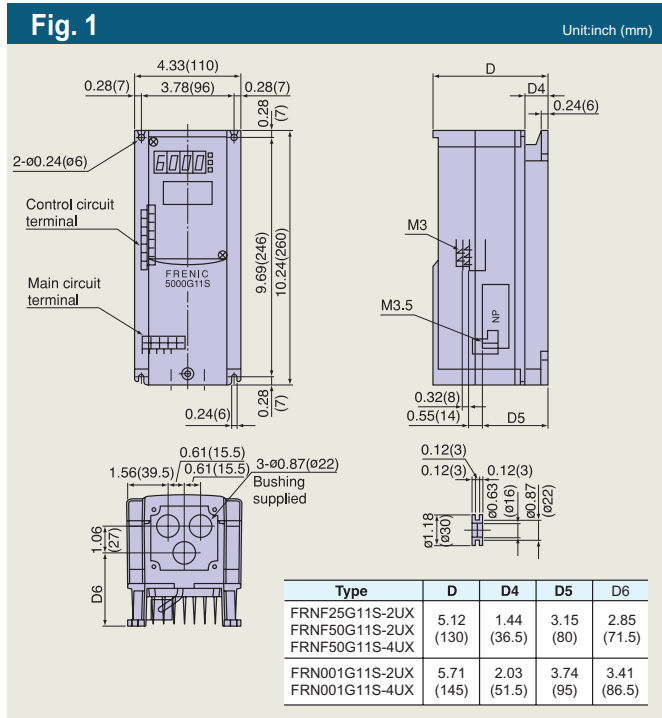
Standard specifications

Three-phase 230V

Type	FRN___G11S-2UX	F25	F50	001	002	003	005	007	010	015	020	025	030	040	050	060	075	100	125								
Nominal applied motor	HP	1/4	1/2	1	2	3	5	7.5	10	15	20	25	30	40	50	60	75	100	125								
Output ratings	Rated capacity *1)	kVA	0.6	1.2	2.0	3.2	4.4	6.8	9.9	13	18	23	29	36	46	58	72	86	113	138							
	Rated voltage *2)	V	3-phase 200V/50Hz 200, 220V, 230V/60Hz																								
	Rated current *3)	A	1.5	3.0	5.0	8.0	11	17	25	33	46	59	74	87	115	145	180	215	283	346							
	Overload capability		150% of rated current for 1min. 200% of rated current for 0.5s											150% of rated current for 1min. 180% of rated current for 0.5s													
	Rated frequency	Hz	50, 60Hz																								
Input ratings	Phases, Voltage, Frequency		3-phase 200 to 230V 50/60Hz											3-phase 200 to 220V/50Hz (220 to 230V/50Hz)*5 200 to 230V/60Hz													
	Voltage / frequency variations		Voltage : +10 to -15% (Voltage unbalance *6) : 2% or less) Frequency : +5 to -5%																								
	Momentary voltage dip capability *7)		When the input voltage is 165V or more, the inverter can be operated continuously. When the input voltage drops below 165V from rated voltage, the inverter can be operated for 15ms . The smooth recovery method is selectable.																								
	Rated current *8) (with DCR)	A	0.94	1.6	3.1	5.7	8.3	14.0	19.7	26.9	39.0	54.0	66.2	78.8	109	135	163	199	272	327							
	Rated current *8) (without DCR)	A	1.8	3.4	6.4	11.1	16.1	25.5	40.8	52.6	76.9	98.5	117	136	168	204	243	291	-	-							
Required power supply capacity *9)	kVA	0.4	0.6	1.1	2.0	2.9	4.9	6.9	9.4	14	19	23	28	38	47	57	69	95	114								
Control	Starting torque		200% (with Dynamic torque-vector control selected)											180% (with Dynamic torque-vector control selected)													
Braking	Standard	Braking torque	150%					100%					20% *10)					10 to 15% *10)									
		Time	10					5					5					No limit									
		Duty cycle	10					5					3					2									
	Braking torque (Using options)	150%											100%														
	DC injection braking		Starting frequency: 0.1 to 60.0Hz											Braking time: 0.0 to 30.0s					Braking level: 0 to 100% of rated current								
Enclosure (IEC 60529)		IP 40											IP 00 (IP 20 : Option)														
Cooling method		Natural cooling											Fan cooling														
Standards		-UL/cUL											-Low Voltage Directive					-EMC Directive					TÜV (up to 30HP)				
		-IEC 61800-2 (Ratings, specifications for low voltage adjustable frequency a.c. power drive systems)																									
		-IEC 61800-3 (EMC product standard including specific test methods)																									
Weight	lbs(kg)	4.9 (2.2)	4.9 (2.2)	5.5 (2.5)	8.4 (3.8)	8.4 (3.8)	8.4 (3.8)	13.4 (6.1)	13.4 (6.1)	22 (10)	22 (10)	23.1 (10.5)	23.1 (10.5)	63.9 (29)	79.4 (36)	97 (44)	101.4 (46)	154.3 (70)	253.5 (115)								

NOTES: *1) Inverter output capacity (kVA) at 440V in 460V series, 220V in 230V series. *2) Output voltage is proportional to the power supply voltage and cannot exceed the power supply voltage. *3) Current derating may be required in case of low impedance loads such as high frequency motor. *4) When the input voltage is 380V/50Hz or 380 to 415V/60Hz, the tap of the auxiliary transformer must be changed. *5) Order individually. *6) Refer to the IEC 61800-3 (5.2.3). *7) Tested at standard load condition (85% load). *8) This value is under FUJI original calculation method. (Refer to the Technical Information.) *9) When power-factor correcting DC reactor is used. *10) With a nominal applied motor, this value is average torque when the motor decelerates and stops from 60Hz. (It may change according to motor loss.)

External Dimensions



Safety Precautions

Before using this inverter, carefully read the instruction manual, specifications, etc. or consult us or the shop of purchase to fully understand the correct usage of the inverter.