



## Frequency Inverter **SJ200 Series**

### The compact choice with full vector control for demanding applications

- Capacity Range: 0.2 – 7.5 kW
- Global Standards to CE, UL, c-UL, C-Tick and CSA
- Integrated RS485 Interface
- Internal Brake Chopper
- Sensorless Vector Control (SLV)
- Motor-Autotuning
- Integrated EMC-Filter
- 200 % Starting Torque
- Built-in Potentiometer
- PID Control
- Automatic Voltage Regulation
- Motor Thermistor Input

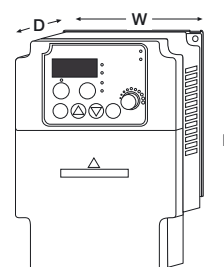


### All features at a glance

Inverter SJ200	200V-Series							400V-Series							
	002 NFEF	004 NFEF	005 NFEF	007 NFEF	011 NFEF	015 NFEF	022 NFEF	004 HFEF	007 HFEF	015 HFEF	022 HFEF	030 HFEF	040 HFEF	055 HFEF	075 HFEF
Protective structure								IP20							
Maximum motor size (4P) in kW	0.2	0.4	0.55	0.75	1.1	1.5	2.2	0.4	0.75	1.5	2.2	3.0	4.0	5.5	7.5
Input supply phase	Single phase / Three phase							Three Phase							
Rated input voltage	200VAC -10% ~ 240VAC +5% 50/60Hz ±5%							380VAC -10% ~ 460VAC +10% 50/60Hz ±5%							
Rated output voltage	Three phase 200 ~ 240VAC (Corresponds to input voltage)							Three phase 380 ~ 460VAC (Corresponds to input voltage)							
Rated output current in A	1.4	2.6	3.0	4.0	5.0	8.0	11.0	1.5	2.5	3.8	5.5	7.8	8.6	13.0	16.0
Output frequency range	0.5 ~ 400 Hz														
Frequency accuracy (at 25°C ±10°C)	Digital command: ±0.01% of maximum frequency (Analogue command: ±0.2% of maximum frequency)														
Frequency setting resolution	Digital setting: 0.01 Hz Analogue setting: maximum frequency / 1000														
Voltage/frequency characteristic	Intelligent Vector Control, Constant or reduced torque														
Overload current capacity	150% for 60 seconds (once every 10 minutes)														
Acceleration/deceleration time	0.1 ~ 3600 s in selectable linear and non-linear mode (second acceleration/deceleration usable)														
Starting torque (using SLV)	200% at 1 Hz														
Braking torque	Dynamic braking, feedback to capacitor		approx. 100%			approx. 70%		appr. 20%		approx. 100%		appr. 70%		approx. 20%	
	External braking resistor		approx. 150%			appr. 100%		approx. 150%		approx. 100%					
DC injection braking		Braking is on at the minimum frequency or less (minimum frequency, braking time and braking force can be set)													
Inputs	Frequency setting		Digital operator		Settings using keys $\odot$ $\ominus$ or potentiometer										
			External signals		0-10VDC (input impedance 10k Ohm) 4-20mA (input impedance 250 Ohm) Potentiometer 1k-2k Ohm, 1W										
	Forward / Reverse run		Digital operator		Via keys RUN (for start) and STOP/RESET (for stop) (Default setting: forward run)										
			External signals		Intelligent input terminals configurable as FW and RV										
Intelligent input terminals programmable as, ie.		FW: Forward run start/stop RV: Reverse run start/stop CF1-CF4: Multistage speed JG: Jogging command AT: Analogue current input selection 2CH: 2nd Accel./decel. time FRS: Free run stop EXT: External trip USP: USP function RS: Reset SFT: Software lock PTC: Thermal protection DB: Ext. DB input SET: 2nd setting active UP: Acceleration (Remote) DWN: Decelerate (Remote)													
Outputs	Intelligent output terminals programmable as, ie.		FA1/FA2: Frequency arrival signal RUN: Motor running signal OL: Overload signal OD: Deviation signal at PID control AL: Alarm signal												
	Frequency and current monitoring		0-10VDC, 8 bit												
Fault alarm contact		On when the inverter trips (1c contact). Alternatively usable as intelligent output terminal													
Other functions		Autotuning, Automatic voltage regulation, retry; analogue gain/bias adjustment, frequency jump, upper/lower limiter, output frequency display, trip history monitoring, carrier frequency setting, PID control, automatic torque boost, USP function, 2nd Setting function, ON/OFF control of cooling fan													
Protection functions		Overcurrent, overvoltage, undervoltage, electronic thermal, temperature abnormality, ground fault, overload, CT error, BRD error													
Environmental	Ambient temperature		-10 ~ 50°C; > 40°C Current derating												
	Storage temperature and humidity		-25 ~ 65°C 20 ~ 90% RH (no dew condensation)												
Options		Remote operator, copy unit, cable for digital operator, reactor for improving power factor, noise filter, ProDrive Software)													
Overall weight (approx.) in kg		0.7	0.8	1.3	2.3	2.8	1.3	1.7	2.8	5.5	5.7				

### SJ200 Series Dimensions

Type SJ200	002 NFEF	004 NFEF 005 NFEF	007 NFEF 011 NFEF	015 NFEF 022 NFEF	004 HFEF	007 HFEF 015 HFEF 022 HFEF 030 HFEF 040 HFEF	055 HFEF 075 HFEF
Width mm	80	80	110	110	110	110	180
Height mm	140	140	155	155	155	155	250
Depth mm	110	124	146	173	146	173	163



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