

L100 SERIES

Inverter



Technical Data

Cost-efficient, Compact Inverter

- Capacity range: 0.2 – 7.5 kW
- Compact size
- Modular design for versatile applications
- Global standards to CE, UL, c-UL, CTick
- Internal RS422 interface
- PID-Control
- Automatic voltage regulation
- Motor thermistor input
- Digital display with potentiometer

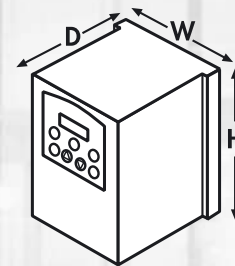


All features at a glance

Inverter L100	200V-Series							400V-Series							
	002 NFE	004 NFE	005 NFE	007 NFE	011 NFE	015 NFE	022 NFE	004 HFE	007 HFE	015 HFE	022 HFE	030 HFE	040 HFE	055 HFE	075 HFE
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 360 ~ 460VAC (Corresponds to input voltage)							
Rated output current in A	1.4	2.6	3.0	4.0	5.0	7.1	10.0	1.5	2.5	3.8	5.5	7.8	8.6	13.0	16.0
Output frequency range	0.5 ~ 360 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: 0.1 Hz Analogue setting: maximum frequency / 1000														
Voltage/frequency characteristic	Constant or reduced torque														
Overload current capacity	150% for 60 seconds (once every 10 minutes)														
Acceleration/deceleration time	0.1 ~ 3000 s in selectable linear and non-linear mode (second acceleration/deceleration usable)														
Starting torque	100% or more (when torque boost has been set)														
Braking torque	Dynamic braking, feedback to capacitor	approx. 100%			approx. 70%		appr. 20%	appr. 100%		appr. 70%		approx. 20%			
	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													
	Forward / Reverse run (Start/Stop)	External signals													
	Intelligent input terminals programmable as	Settings using keys Δ ∇ or potentiometer 0-10VDC (input impedance 10k Ohm) 4-20mA (input impedance 250 Ohm) Potentiometer 1k-2k Ohm, 1W Via keys RUN (for start) and STOP/RESET (for stop) (Default setting: forward run) Intelligent input terminals configurable as FW and RV													
Outputs	Intelligent output terminals programmable as	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 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	Connection of external Analogue meter (0-10VDC, max. 1mA) for frequency or current; connection of external digital frequency meter													
Fault alarm contact	On when the inverter trips (1c contact)														
Other functions	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 and many more														
Protection functions	Overcurrent, overvoltage, undervoltage, electronic thermal, temperature abnormality, ground fault upon starting, overload limit														
Environmental	Ambient temperature	-10 ~ 50°C; > 40°C Current derating													
	Storage temperature and humidity	-25 ~ 70°C (during short term transportation period only) 20 ~ 90% RH (no dew condensation)													
Options	Remote operator, copy unit, cable for digital operator, reactor for improving power factor, noise filter, OPE-J, Bus Communication (Profibus, DeviceNet, CanOpen)														
Overall weight (approx.) in kg	0.85		1.3		2.2		2.8	1.3		1.7		2.8		5.5	5.7

L100 Series Dimensions

Type L100	002 NFE 004 NFE	004 HFE 005 NFE 007 NFE	007 HFE 015 HFE	011 NFE 015 NFE	022 NFE 022 HFE 030 HFE 040 HFE	055 HFE 075 HFE
Width mm	84	114	114	140	140	182
Height mm	120	130	130	180	180	257
Depth mm	114	136	163	160	171	177



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