

FA-1L...P

KEY FUNCTIONS

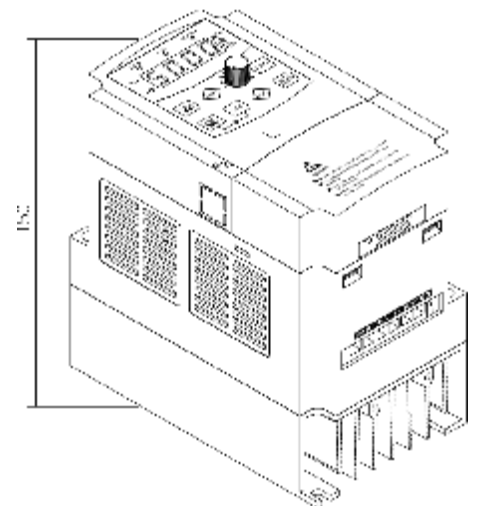
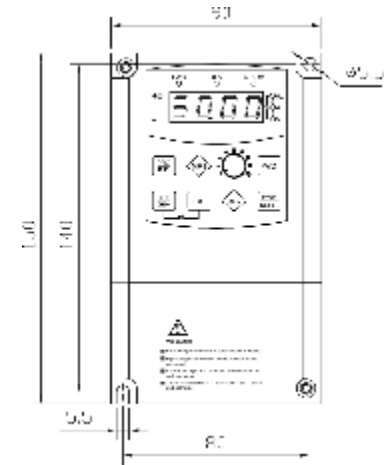
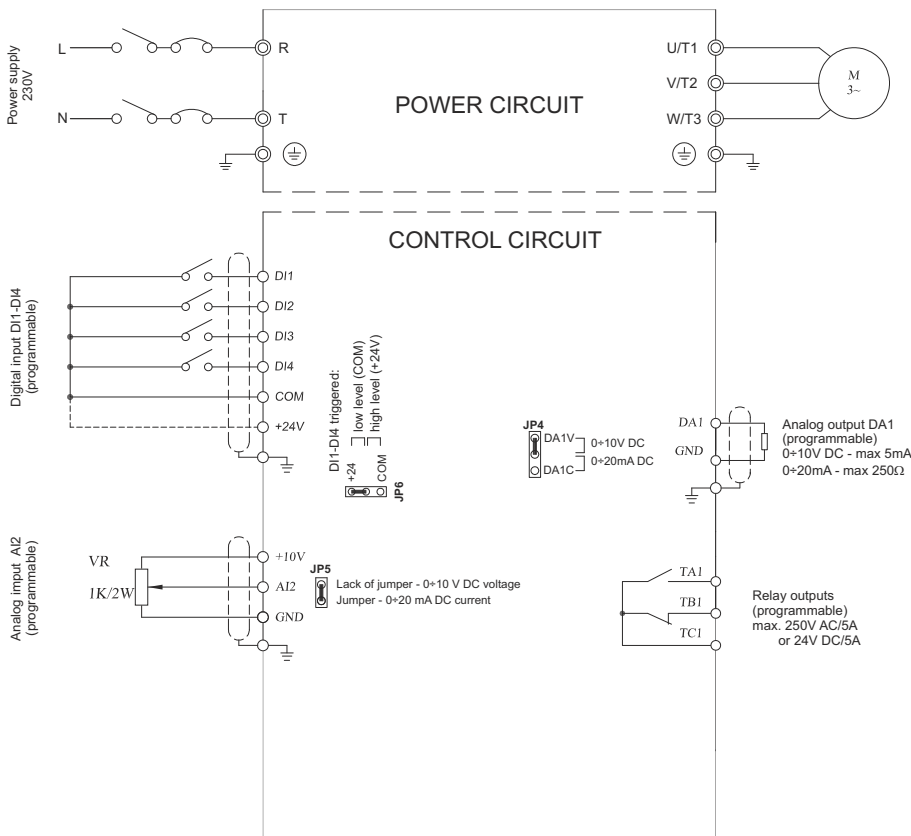
- * The design of efficient inverter-based 32-bit DSP processor ensures fast and effective implementation of advanced control algorithms, asynchronous three-phase motor
- * Ability to work in speed control mode or torque control mode.
- * Motor control based on vector control (both sensorless and with speed-feedback loop), and control based on the freely programmable V/F.
- * Automatic slip compensation, and a large starting torque (up to 180% at a frequency of 0.25Hz).
- * Multi-function control panel
- * Mode PLC - programmable up to seven steps performed once or periodically by the inverter. For each step, you can determine the speed, acceleration and duration.



TYPES

Inverter type	Input voltage V	Input current A	Output voltage V	Output current A	Motor power max kW
FA-1L007P	1×230V	9A	3×230V	4A	0.75kW
FA-1L015P	1×230V	17.5A	3×230V	7A	1.5kW

IN/OUT DESCRIPTION



SPECIFICATIONS

Function		Technical data	
Power supply	Voltage and frequency	1×230V, 50/60 Hz	
	Output voltage	3× 230 V (for 230 V supply)	
	Output frequency	0.00÷320.0 Hz	
	V/F control characteristic	1) Constant torque characteristics 2) Characteristics of the reduced torque (3 types) 3) Characteristics of the torque set by the user (8 points) 4) Vector control (sensorless or closed-loop)	
		V/F control	Sensorless vector control
	Starting torque	18.0% for 0.50 Hz	18.0% for 0.50 Hz
	The dynamics of speed control	1: 100	1: 200
	The stability of the output speed	±0.5%	±0.2%
	Torque boost	In this mode V/F control - automatic or user defined	
	Acceleration/deceleration	Linear or by programmed curve S Maximum acceleration and braking - 3200 sec	
	Accuracy frequency reference	Digital frequency reference: 0.01 Hz (f≤100Hz), 0.1 Hz (>100 Hz); Analog frequency reference: 1% of maximum frequency	
	Overload	1) 150% rated current for 1 minute 2) 200% rated current for 0.1 sec	
	Motor slip compensation	In this mode V/F control can automatically compensate for the slip	
Security	Security of inverter	1) Before too high or too low supply voltage 2) Prior to exceeding the maximum current 3) Before the load is too high 4) Before losing speed and stall 5) Within the current to ground 6) Prior to excessive overheating inverter 7) In addition, the inverter is protected against communication errors or incorrect feedback signal	
	Safety switch	Can be programmed as input or button on the safety switch causing immediate image voltage of the inverter output	
	Security settings	Possibility to secure the set the inverter to use a PIN	
	Error deleting	You can set both automatic and manual reset errors	
Braking	DC braking		
IO	4 digital inputs	1) Trigger inputs for both low level (COM) and high (+24V) 2) A large freedom of programming functions - it is possible to assign to the terminals 68 different functions. Among other things, running back and forth, trying to run back and forth, safety switch, reset, multi-speed control, motor potentiometer, change of acceleration and deceleration, pulse input and more.	
	1 analog input	1) They can workboth as input voltage (0÷10 V) and input current 0÷20mA (software, you can set the range of 4÷20 mA) 2) The analog inputs can be used to ask frequency and time, and to cooperate with PID controller	
	1 analog output	1) They can workboth as a voltage output (0÷10 V) and output current 0÷20 mA 2) Analog outputs can be programmed to indicate: a. Set point and actual frequency b. Voltage and output current c. DC voltage d. Temperatures IGBT power amplifier e. Power output f. Engine speeds g. Torque drive	
	2 transistor outputs	1) Overload of contacts 5 A/250 V AC or 5 A/30 V DC 2) Extensive programming output function (signalling 34 different states of the inverter)	