

FST-610 –SVC high-performance inverter

(0.4KW-2.2KW, single phase, 220V)

0.4KW-93KW, 3 phases, 220V

0.75KW-630KW, 3 phases, 400V)



Application

Pump, fan, air compressor, central air-conditioner, oil pump, conveyor, CNC machine, musical fountain, etc.

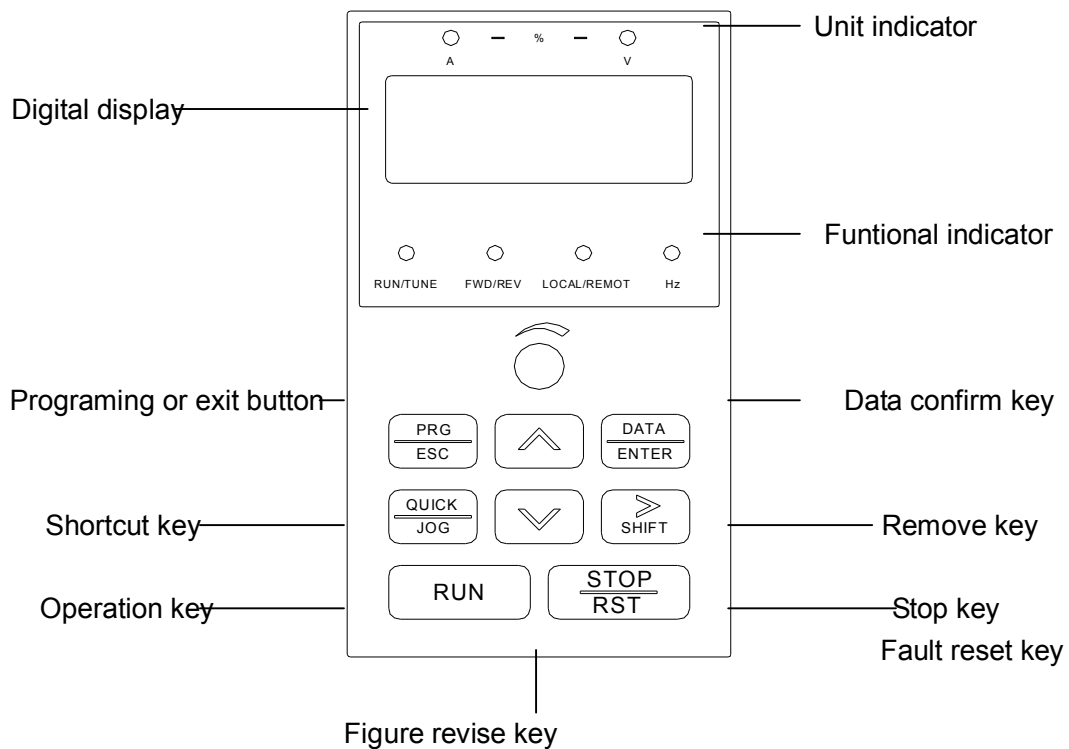
Main features

1. Compact size and less weight.
2. Combined module for 15kw or below with high reliability.
3. Reasonable layout with less interference and better ventilation.
4. Combined module with perfect reliability.
5. 3 control modes available: VF control, sensorless vector control, torque control.
6. High start torque: 0.5Hz, 180%(vector control)
7. 16 steps speed control, simple PLC function, PID function.
8. 7 digital inputs(including 1 pulse input), 2 analog input and 2 analog output, 2 relay output, 1

open-collector output.

9. Automatic output voltage regulation(AVR)
10. RS 485 interface(Modbus RTU communication protocol)
11. Oscillation suppression function.
12. Non-stop at momentary power failure.
13. 20 kinds of fault protection.
14. Output-0-600Hz
15. Droop function
16. Energy saving control mode.

Keypad and functions



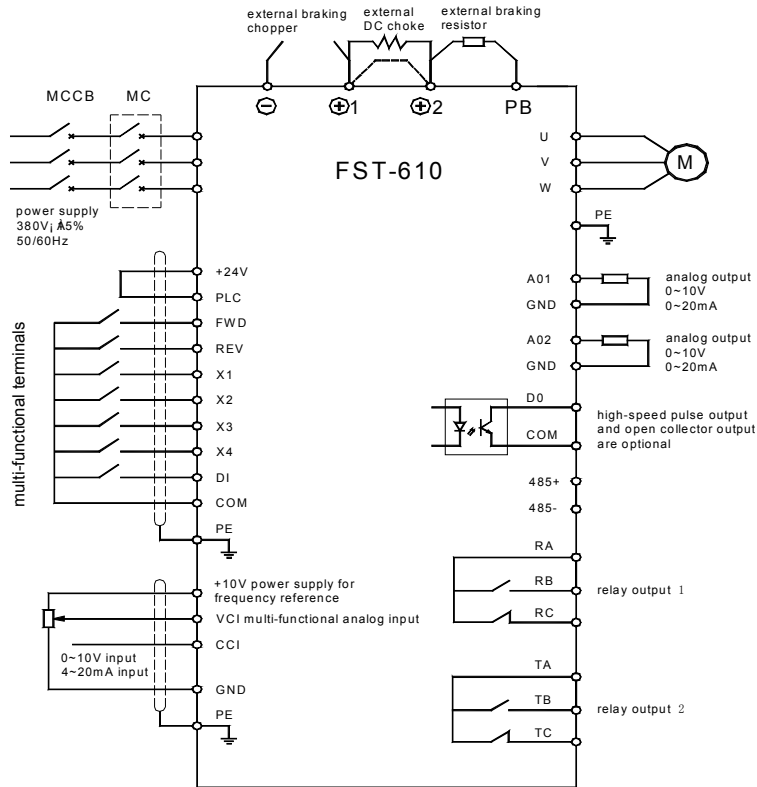
Specifications

I/O Features	Input Voltage Range	380/220V±15%
	Input Frequency Range	47~63Hz
	Output Voltage Range	0~rated Input voltage
	Output Frequency Range	0~600Hz
I/O Terminals	Input Terminals	programmable DI: 7, 1 high speed pulse; programmable AI:2, VCI:-10V~10V, CCI:0~10V or 0~20mA

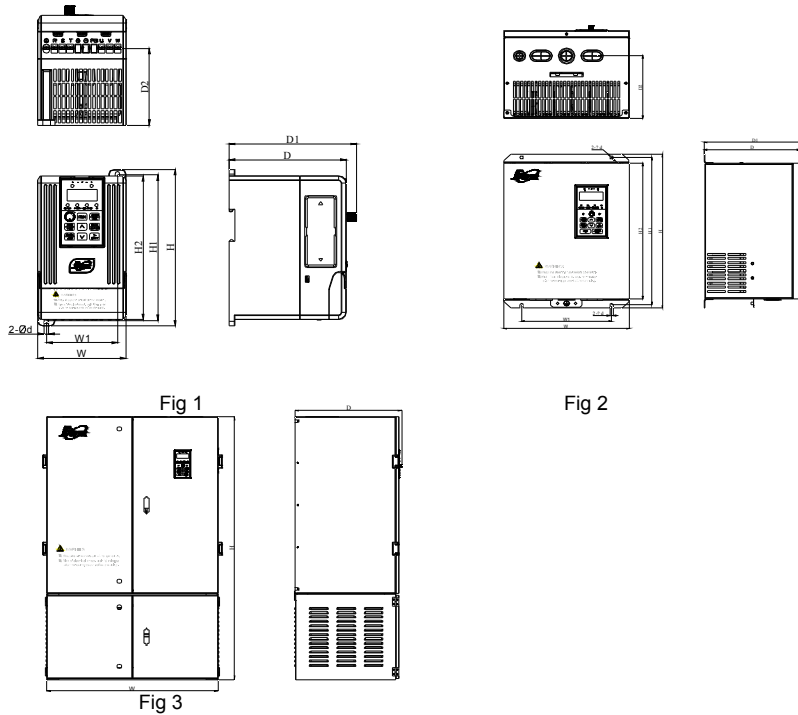


	Output Terminals	Programmable open collector output 1(open collector or high speed pulse output selectable), programmable relay output 2 programmable AI:2, 0/4~20mA or 0~10V selectable
	Communication Terminals	RS485 communication interface is optional, adopt Modbus-RTU communication mode.
Control Function	Control Mode	V/F control, sensorless vector control (SVC)
	Speed Adjusting Range	1:100(SVC)
	Overload Capacity	150% rated current 60s, 180% rated current 10s.
	Frequency Reference Source	Keypad, analog input, DI, serial communication, multi-step speed, simple PLC and PID. The combination of multi-modes and the switch between different modes can be realized.
	Other Functions	<ul style="list-style-type: none"> ● Traverse Control Function ● PID Control Function ● Simple PLC, Multi-Steps Speed Control Function: 16 steps speed can be set. ● None-Stop when instantaneous power off. ● Speed Trace Function: Smoothly start the running motor. ● Automatic Voltage Regulation Function (AVR): ● Up to 23 fault protections over current, over voltage, under voltage, over temperature, phase failure, overload etc.
Man-machine Interface	LED Display	Can display setting frequency, output frequency, output voltage, output current etc.
	Multi-function Key-press	The QUICK/JOG key-press can be used as multi-function key-press.
Environmental Constraint	Temperature	-10°C~+40°C. Inverter will be derated if ambient temperature exceeds 40°C.
	Humidity	≤90%, without condensation
	Altitude	≤1000M, output rated power >1000M, output power with derating
	Impingement and Oscillation	The inverter is prohibited to drop on the floor or with suddenly impact, it also prohibited to be installed at the place where the oscillation may occur very probably.
	Electromagnetic Radiation	The inverter is prohibited to be installed at the place where stronger electromagnetic radiation may occur very probably.
	Store Environment	The inverter is prohibited to be stored at the place where with direct sunlight, fall of oil mist, steam and with heavy oscillation.

FST-610 wiring diagram:



Dimension





Model no.	W	W1	H	H1	H2	D	D1	D2	d	Fig
FST-610-0R7G/1R5PT4	92	74	174	162	160	122	132	85	4.5	1
FST-610-0R4T2/S2										
FST-610-1R5G/2R2PT4										
FST-610-0R7T2/S2										
FST-610-2R2G/3R7PT4										
FST-610-1R5T2/S2										
FST-610-3R7G/5R5PT4	135	110	265	255	240	155	165	123	7	2
FST-610-2R2T2/S2										
FST-610-5R5G/7R5PT4										
FST-610-3R7T2/S2										
FST-610-7R5G/011PT4	200	140	345	330	300	190	205	110	7	2
FST-610-011G/015PT4										
FST-610-015G/018PT4										
FST-610-018G/022PT4	280	200	375	360	330	210	225	150	7	2
FST-610-022G/030PT4										
FST-610-030G/037PT4										
FST-610-037G/045PT4	340	200	530	510	480	240	255	190	10	2
FST-610-045G/055PT4										
FST-610-055G/075PT4										
FST-610-075G/093PT4	400	240	610	590	550	280	295	230	12	2
FST-610-093G/110PT4										
FST-610-110G/132PT4										
FST-610-132G/163PT4	730	500	625	595	560	320	335	260	12	2
FST-610-163G/185PT4										
FST-610-185G/200PT4										
FST-610-200G/220PT4										
FST-610-220G/245PT4	Free standing: 1300*750*465									3
FST-610-245G/280PT4										
FST-610-280/315PT4										
FST-610-315G/355PT4										
FST-610-355G/400PT4	Free standing: 1600*1200*515									3
FST-610-400G/455PT4										
FST-610-455G/500PT4										
FST-610-500G/560PT4										
FST-610-560G/630PT4										
FST-610-630GT4										