

ATSEL - FD100

Compact & Powerful AC Drives
1HP 0.75KW to 5HP 3.7KW

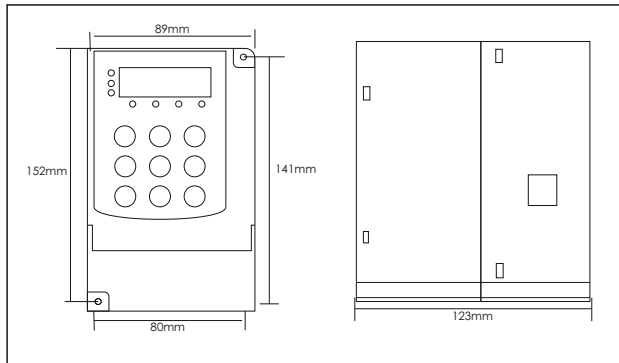
SELEC[®]
Creating Best Value



Specifications

Power supply	Rated input voltage/ frequency	Single Phase 220V 50Hz/60Hz, 3 Phase 415V 50Hz/60Hz.
	Permissible voltage fluctuation	187V to 253V for 1 phase & 320 to 460V for 3 Phase
	Permissible frequency fluctuation	±5%
Control Characteristic	Control mode	Space Vector SVPWM and Flux Vector Control
	Frequency Control range	0.1 ~ 400 Hz.
	Frequency Accuracy	Digital setting 0.01%, Analog instruction 0.1% (Max frequency)
	Frequency resolution	Digital instruction 0.1Hz, Analog instruction 0.1 Hz.
	Accelerated / decelerated time	0.0 ~ 3600 Sec. Four accelerate/decelerate time settings available
	Multi Speed running	Built-in program
	Built-in PI	Easy to set up a simple Automatic control system
	Built-in Counter	Automatically Controlled Production line can be achieved
	Overload Capacity	G Type - 150% rated current for 1 min. P type - 120% rated current for 1 min
	Braking torque	About 20% (with brake resistor is about 150%)
	V/F mode	3 preset V/F mode and V/F program
	Automatic Energy Saving Operation	Changes the V/F curve according to the load to save energy
	Automatic Voltage Regulation	Regulates the voltage automatically whenever there is a change in grid voltage
Operation Function	Operation Commands	Keypad and External terminals
	Frequency Setting	Digital setting, Analog Voltage setting, Analog Current setting
	Input Signal	Forward/Reverse, Jogging selection, Multi Speed Control, Regular Stopping
	Output signal	Fault Alarm Output (250V/2A Contact), Open Collector Output
Protection Functions		Over Current, Over Voltage, Under Voltage, Over heat, Overload, Phase loss
Display		Parameters setting, Running status and Fault display
Operating conditions	Operating environment	Temperature: -10 ~ +50 Degree C, Humidity: < 90%, No condensation, IP20
	Operations Area	Indoor, <1000m altitude above sea level
	Storage Temperature	-20 ~ +60 Degree C
	Vibration	<5.9 m/s ² (0.6g)

Dimensions

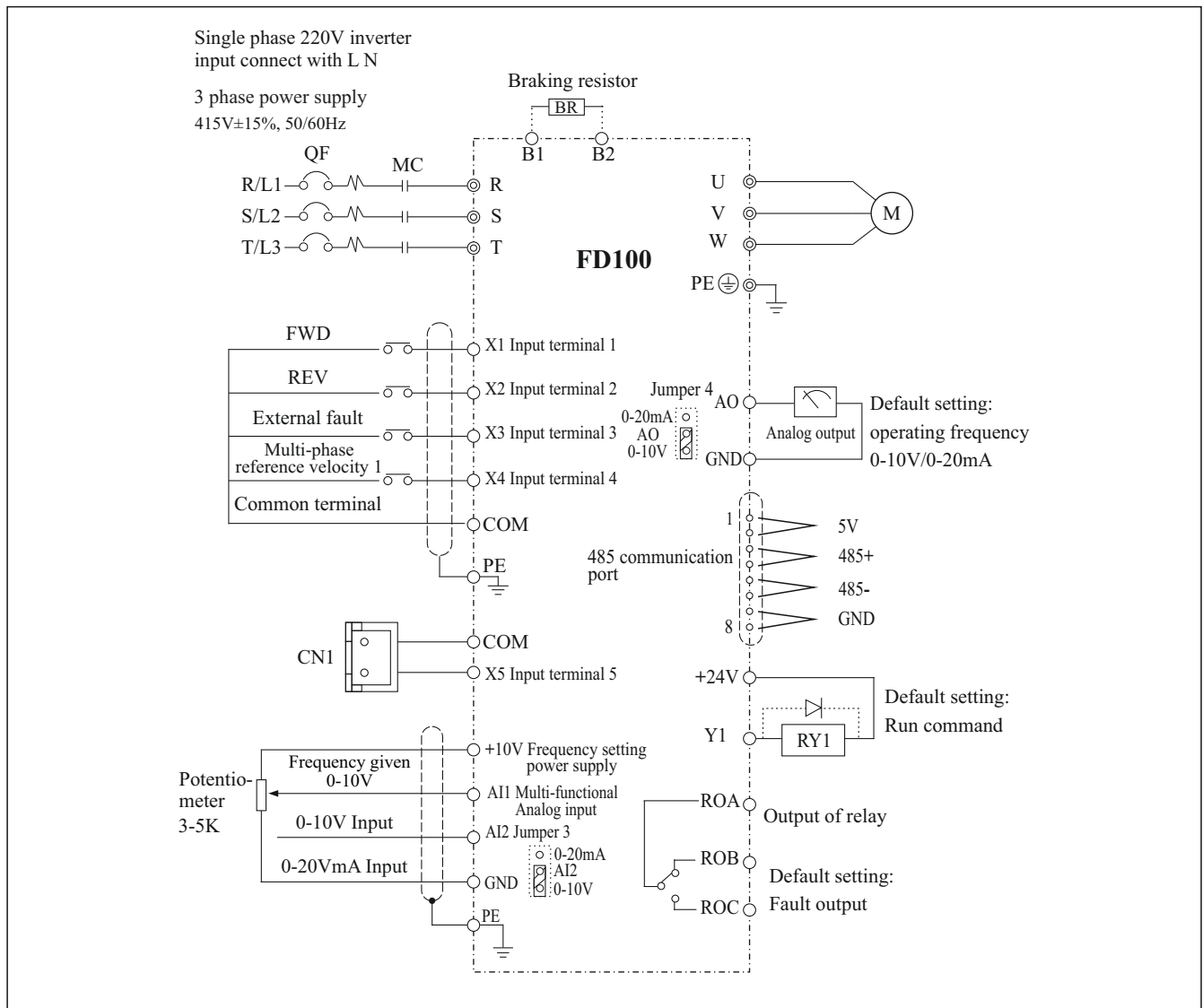


Product Code	Mounting Dimension		Dimension			Pore Diameter (mm)	Weight (kg)
	length (mm)	wide (mm)	length (mm)	wide (mm)	depth (mm)		
FD100-1-010-C-CE	141	80.5	152	89	123	φ5.2	1.2
FD100-1-020-C-CE							
FD100-1-030-C-CE							
FD100-3-010-C-CE							
FD100-3-020-C-CE							
FD100-3-030-C-CE							
FD100-3-050-C-CE							
1 HP ~ 3HP Keyboard installation dimension : length = 115mm, width = 85mm							

FD100 control loop terminal instruction

Class	Sign	Terminal Name	Terminal instruction and factory reset
Multi-functional Inputs	X1	Multifunction input terminal 1	Default : Forward Rotate / Stop
	X2	Multifunction input terminal 2	Default : Reserve Rotate / Stop
	X3	Multifunction input terminal 3	Default : External fault Input
	X4	Multifunction input terminal 4	Default : Multi-Step & Speed Mode 1
	X5	Multifunction input terminal 5	Default: Multi-Step & Speed Mode 2
	COM	Common Terminal	Multi-functional input common terminal +24V Power reference ground
Analog Input	AI1	Analog input 1	0~10V input
	AI2	Analog input 2	0~10V input or 0~20mA input (J4 switch for selection)
	+10V	Analog preset Power Source	10V DC 10mA (potentiometer 3~5KΩ)
	GND	Analog ground for reference	Analog input, Output reference ground
Multi-functional Output	Y1	Multifunction Output terminal 1	Default: Running Status
	ROA	Relay output	Default: Fault Output
	ROB	ROA - ROB Normally Closed	
	ROC	ROA - ROC Normally Open	
Analog Output	AO	Analog output terminal	0~10V or 0~20mA output (J5 switch for selection) GND as reference ground
Analog Output	+24V	+24V power supply	+24VDC 100mA. COM is power from ground
Communication	485+	RS 485 Positive terminal	RS485 Communication with Modbus Protocol
	485-	RS 485 Negative terminal	

3-2-1 Standard wiring diagram for FD100



Ordering Information

Product Code	Description	Output Current	Certification
FD100-1-010-C-CE	1 Phase 220V, 1HP 0.75 KW	5A	CE
FD100-1-020-C-CE	1 Phase 220V, 2HP 1.5 KW	7A	CE
FD100-1-030-C-CE	1 Phase 220V, 3HP 2.2 KW	11A	CE
FD100-3-010-C-CE	3 Phase 415V, 1HP 0.75 KW	2.5A	CE
FD100-3-020-C-CE	3 Phase 415V, 2HP 1.5 KW	3.7A	CE
FD100-3-030-C-CE	3 Phase 415V, 3HP 2.2 KW	5.1A	CE
FD100-3-050-C-CE	3 Phase 415V, 5HP 3.7 KW	9A	CE
AC-FD200-0-1-1	Extension cable & mounting bracket	---	---

Applications : Economic one, Suitable for fans, pumps, Conveyor, Food & drink packaging machinery, Industrial washing machine and most general industries etc.

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