



AC Motor Drives VFS11 series

Planet-SWITCH

Planet-DIN

Planet-LOGIC


100% electricity

VFS11... series single and three-phase



VFS11...



Side-by-Side installation
Multiple units installed without side clearance for space saving

Traditional model

Order code	Ie	3-phase motor power at 230V		Qty per pkg	Weight
	[A]	[kW]	[HP]	n°	[kg]
Single-phase supply 200-240VAC 50/60Hz.					
VFS11S 2004PL WP	3.3	0.4	0.54	1	1.300
VFS11S 2007PL WP	4.8	0.75	1	1	1.300
VFS11S 2015PL WP	7.8	1.5	2	1	1.800
VFS11S 2022PL WP	11	2.2	3	1	2.800

Order code	Ie	3-phase motor power at 400V		Qty per pkg	Weight
	[A]	[kW]	[HP]	n°	[kg]
Three-phase supply 380-500VAC 50/60Hz. ②					
VFS11 4004PL WP	1.5	0.4	0.54	1	1.800
VFS11 4007PL WP	2.3	0.75	1	1	1.800
VFS11 4015PL WP	4.1	1.5	2	1	1.900
VFS11 4022PL WP	5.5	2.2	3	1	2.700
VFS11 4037PL WP	9.5	3.7	5	1	2.900
VFS11 4055PL WP	14.3	5.5	7.5	1	6.300
VFS11 4075PL WP	17	7.5	10	1	6.300
VFS11 4110PL WP	27.7	11	15	1	9.800
VFS11 4150PL WP	33	15	20	1	9.800

① Operation up to 50°C without derating.
② 200-240VAC three-phase version available on request; contact Customer Service (tel. +39 0354282422) for details.

General characteristics

The innumerable functions available together with the constructive features consent the new VFS11 speed control to be used in a host of industrial and civil sectors, such as: waterworks and methane piping ducts, cement, paper, chemical and petrochemical industries. The precise design of the front panel board and the configuration menus warrant easy and user-friendly commissioning of the motor drive.

SPEED REFERENCE SIGNALS

Reference signals for speed adjustment are obtained by:

- Front potentiometer
- External potentiometer: 1-10k Ω
- Voltage signal: 0-10V
- Current signal: 4-20mA
- Control panel digital signals
- 15 preset speeds via digital inputs
- I/O logic PNP or NPN switchable
- TTL serial signal (TOSHIBA-MODBUS®RTU).

PROGRAMMABLE OUTPUTS

- 1 relay with changeover contact
- 1 relay with NO contact
- 1 transistor
- 1 analog configurable as 0-10VDC or 4-20mA.

PROTECTIONS

- Overcurrent and overvoltage
- Input and output phase loss
- Overload of: motor drive, motor and braking resistor
- Drive overtemperature
- Excessive torque
- Earth fault.

SPECIAL FUNCTIONS

- PID function for pump and fan application
- Dual set of independent parameters and ramps for two different motor controls
- Automatic restarting and instantaneous speed tuning
- 15 viewable frequency values
- DC-Bus access for DC power supply
- Capacitor pre-charge circuit
- Integrated dynamic braking circuit; optional external braking resistor
- Motor control: constant torque V/f, variable torque, sensorless vector
- Automatic motor torque boost control
- Regenerative energy control
- DC injection braking
- Auto-tuning
- Frequency potentiometer (speed adjustment via 2 external pushbuttons)
- Quick parameter search and programming
- Sequential starting control for sets of motors
- Automatic stopping after continuous running at minimum frequency
- Start-up DC injection braking
- Override function for summing analog VIA-VIB inputs.

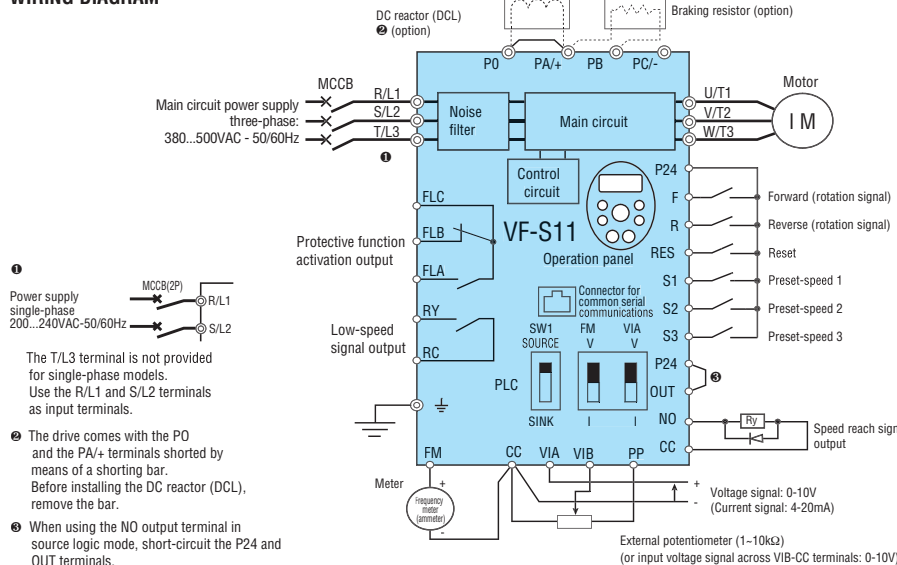
Operational characteristics

- Input voltage: VFS11S... 200-240VAC single-phase
VFS11... 380-500VAC three-phase
- Output voltage: $\leq$ input voltage
- Rated current: VFS11S... 3.3-11A single-phase
VFS11... 1.5-33A three-phase
- Mains voltage: 50/60Hz
- Output frequency: 0.5-500Hz
- Frequency modulation: 2-16.5kHz
- Built-in EMC filter: Class A
- Current overload: 150% (60sec), 200% (0.5sec)
- Low speed torque: 150% 1Hz
- Degree of protection: IP20
- Operating temperature: -10...+60°C
- Maximum altitude: 1000m maximum
- Relative humidity: 20-93% (with no condensing).

Certifications and compliance

Certifications obtained: cULus, CSA, AS C-tick.
Compliant with standards: EN 50178, IEC/EN 61800-3.

WIRING DIAGRAM



DIMENSIONS



	A [mm]	B [mm]	C [mm]
VFS11S 2004PL WP	72	130	130
VFS11S 2007PL WP	72	130	140
VFS11S 2015PL WP	105	130	150
VFS11S 2022PL WP	140	170	150
VFS11 4004PL WP	105	130	150
VFS11 4007PL WP	105	130	150
VFS11 4015PL WP	105	130	150
VFS11 4022PL WP	140	170	150
VFS11 4037PL WP	140	170	150
VFS11 4055PL WP	180	220	170
VFS11 4075PL WP	180	220	170
VFS11 4110PL WP	245	310	190
VFS11 4150PL WP	245	310	190