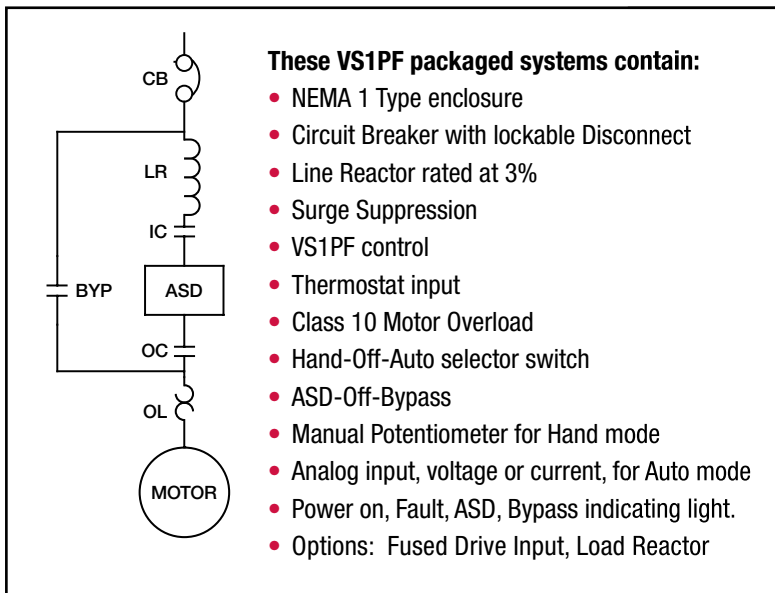


Pump/Fan Packaged Drives

Baldor introduces its newest line of pump and fan drive packages utilizing our popular VS1PF series of controls. With industry standard features of Hand-Off-Auto (HOA) and Local/Remote Bypass features, the package suits most popular specifications. However, Baldor didn't stop there, utilizing an Electronic Bypass, it can switch to Bypass when a Critical Fault occurs on the Drive. A remote "run" command can easily be accommodated as well, allowing your system to send down the command, instead of needing someone to physically turn the switch. No matter what, the motor will continue to operate even in the event of a drive loss.

The VS1PF line of controls offers both V/Hz and Encoderless Vector mode for your Variable Torque (VT) application. Energy Savings mode can reduce KW used by the control when operated on VT loads. The slimline design allows for side-by-side mounting with near zero clearance. All pre-wired with knock-outs provide quick connections to line, load, and analog/digital inputs.



Features

PID Control

In centrifugal pump and fan applications, PID control is provided as a standard function, helping maintain a constant process control of pressure, flow, and oil level. This function includes pre-PID, sleep/wake up, and output inverse sub-functions.

External PID

This function can be used to regulate an unrelated external process, such as a temperature loop, as well as provide cascaded control to the internal PID. It can also be used to control the motor speed directly.

Internal PID

Not only does this regulate process variables, but the drive's internal PID control function can also receive references from an analog input, keypad, or communications port. In addition, it can receive process feedback via an analog or pulse input.

Flying Start

With the flying start function, the drive senses the motor's rotation prior to producing torque. This allows the drive output to be synchronized with the rotating motor during startup. It is particularly useful when back-pressure causes a pump to spin backward or when an updraft causes the fan to rotate (when the drive is disabled).

Sleep/Wake

The sleep/wake function disables/re-enables the drive automatically as demand dictates. This helps eliminate unnecessary operation at idle speeds, thus saving wear and tear, as well as energy. out-of-the-box operation make it among the most popular variable speed motor controls. It is ideal for applications where multiple motors are operated simultaneously from one motor control.

Sensorless Vector Control

The VS1PF can also function in a sensorless vector mode for constant torque pumps such as progressive cavity pumps.

Pre-Heat

This allows the drive to maintain residual heat in the motor, which helps eliminate condensation in damp conditions when the motor is not in use. In the drive, an adjustable, low-level DC current is applied to the stator windings either continuously or on a duty cycle basis.

Significant Energy Savings

With its energy-saving features, the VS1PF drive provides significant savings over damper control. Its automatic mode adjusts output automatically based on load for optimum savings, and its manual mode lets you set the amount of savings manually.

Integrated Bypass Module

The integrated Bypass module makes for quicker integration to existing systems. By providing industry standard interfaces, these controls provide easy systems for end users.

Operator Station:

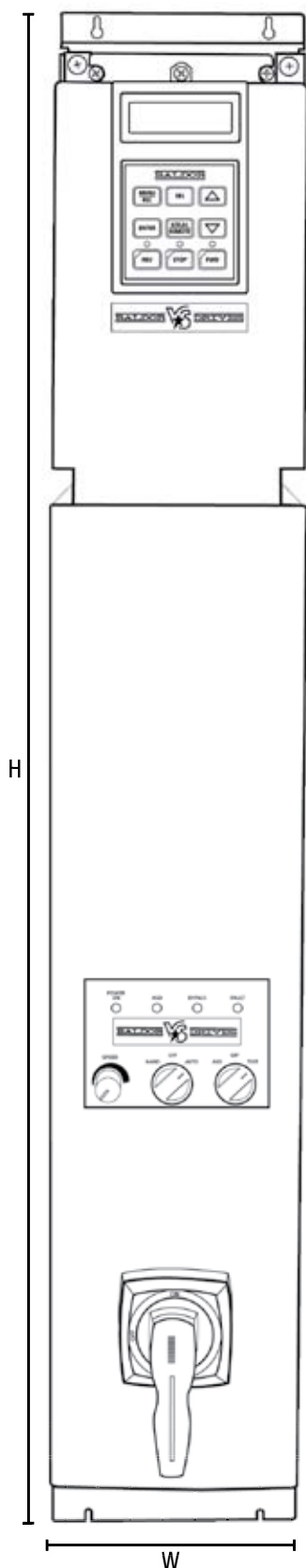
- Speed - Speed pot for operating in Hand mode
- Hand - Speed is controlled by speed pot
- Off - Motor is off
- Auto - Accepts signal from process
- ASD - Drive is on and operational
- Bypass - Motor is operated "across the line." Drive is off
- Test mode allows the control to be programmed while in Bypass mode.



Indicating lights:

- Amber Power Light
- ASD - On when ASD is controlling motor
- Bypass - On when in normal bypass, Slow blinking when commanded from Remote source or from drive
- Fault - On when ASD is faulted. Slow blinking where critical fault occurs

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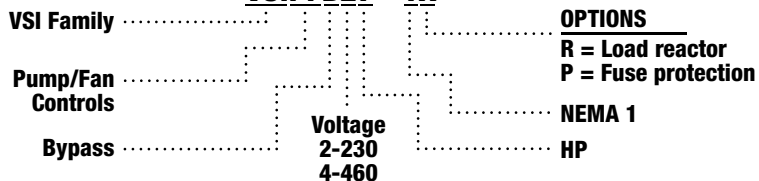


HP	PACKAGED DRIVE CATALOG #	OUTPUT AMPS	Frame
230V CONTROLS			
7.5	VS1PFB27-1	24	B2
10	VS1PFB210-1	32	B2
15	VS1PFB215-1	46	B2
20	VS1PFB220-1	60	C2
25	VS1PFB225-1	74	C2
30	VS1PFB230-1	88	E2
40	VS1PFB240-1	115	E2
460V CONTROLS			
7.5	VS1PFB47-1	12	B4
10	VS1PFB410-1	18	B4
15	VS1PFB415-1	24	B4
20	VS1PFB420-1	30	C4
25	VS1PFB425-1	39	C4
30	VS1PFB430-1	45	E4
40	VS1PFB440-1	61	E4
50	VS1PFB450-1	75	G4
60	VS1PFB460-1	91	G4
75	VS1PFB475-1	110	H4
100	VS1PFB4100-1	152	L4
125	VS1PFB125-1	183	L4

SERVICE CONDITIONS

Altitude: 1,000 m (3,300 ft) Maximum
 Ambient Temperature: -10°C (14°F) to 40°C (104°F)
 Storage Temperature: -20°C (-2°F) to 65°C (149°F)
 Relative Humidity: 0% to 95%, non-condensing
 Intermittent Overload: 110% overload capacity for up to 1 minute

VSIPFB27 - 1X



Pump/Fan Packaged Drives

FRAME	DIMENSIONS in (mm)			APPROXIMATE WEIGHT
	HEIGHT in(mm)	WIDTH in(mm)	DEPTH in(mm)	Lbs
B2	52(1319)	8.6(218)	10.3(261)	35
C2	60(1522)	10.5(266)	10.7(271)	65
E2	62(1573)	12.6(320)	11.9(302)	85
B4	42(1066)	8.6(218)	10.3(261)	35
C4	48(1218)	10.5(266)	10.7(271)	65
E4	54(1370)	12.6(320)	11.9(302)	85
G4	57(1446)	12.3(312)	13.8(350)	100
H4	65(1649)	12.3(312)	14.8(375)	125
L4	62(1573)	36(913)	18.2(462)	150

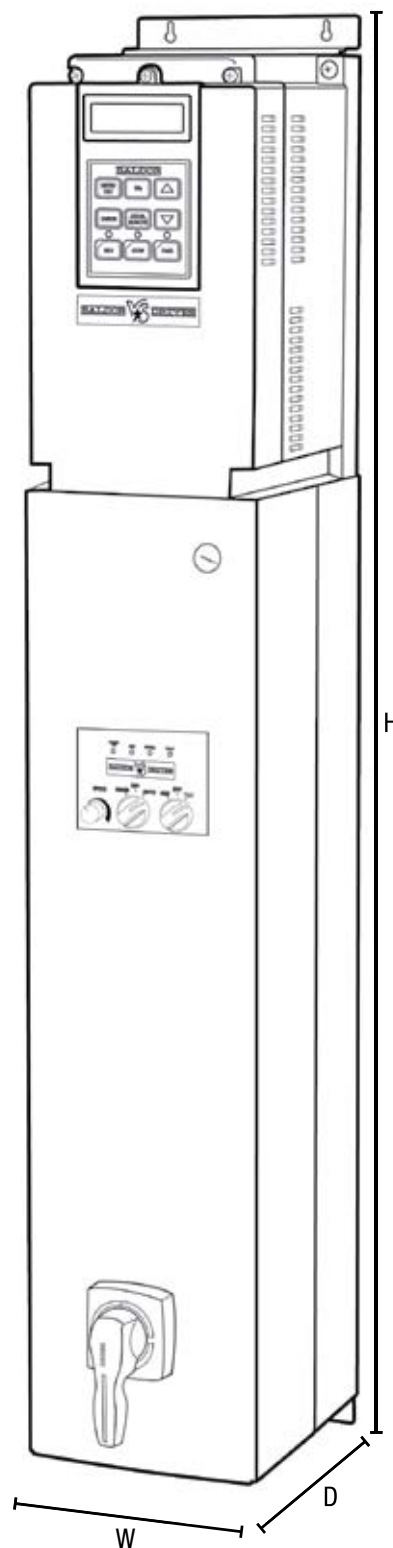
Contact your local District Office for Larger HP versions up to 700HP

Optional Communications Expansion Boards:

TYPE	CATALOG NO.
DeviceNet	VS1PF-DNET
ModBus	VS1PF-MBUS
Profibus	VS1PF-PBUS

SUPPORTING LITERATURE

VS1PF MANUAL: MN763
 VS1PF DATA SHEET: FL763
 VS1PF BROCHURE: BR763



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