

VS1PF Pump and Fan AC Drive

7.5 thru 40 Hp
7.5 thru 700 Hp
7.5 thru 150 Hp

230 VAC
460 VAC
600 VAC

3 Phase - 50/60 Hz
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Applications: Pump and Fan AC Drive Applications (both Variable and Constant Torque) from 5 to 700 Hp.

Features: Nema 1 enclosure as standard up to 15Hp. IP00 with NEMA 1 enclosure Kits available from 20 Hp to 125 Hp. IP00 as standard over 125 Hp. Integral keypad and plain English 2-line display including UP/DOWN keys to adjust speed reference. Dual PID control loops. External DBU Dynamic Braking kits connect to remote braking resistor for enhanced performance needs. Sleep/Wake Function -- Ability to disable/re-enable drives automatically as demand dictates. Energy Savings Function. Power Dip Ride-thru. Flying Start Function.

Input Ratings	Voltage	230	460	600
	Voltage Range	170-253	323-528	446-660
	Phase	3 Phase (single phase with 50% derate)		
	Frequency	50/60 Hz +5%		
Output Ratings	Horsepower	7.5-40 Hp @ 230VAC, 3PH; 7.5-700 Hp @ 460VAC, 3 PH; 7.5-150 Hp @ 600 VAC, 3 PH		
	Overload Capacity	Heavy Duty (Constant Torque) = 150% for 60 seconds, 180% for 4 seconds Normal Duty (Variable Torque) = 110% for 60 seconds and 130% for 4 seconds.		
	Frequency	0-120 Hz		
	Voltage	0 to maximum input voltage (RMS)		
Protective Features	Trip	Missing control power, over current, over voltage, under voltage, over temperature (motor or control), output shorted or grounded, motor overload		
	External Output	LED trip condition indicators, 5 assignable logic outputs, 2 assignable analog outputs		
	Short Circuit	Phase to phase, phase to ground		
Environmental Conditions	Temperature	-10 to 40°C. Derate 2% per °C to maximum ambient temperature of 50°C.		
	Cooling	Forced air		
	Enclosure	NEMA 1 and IP00		
	Altitude	Sea level to 3300 Feet (1000 Meters) Derate 2% per 1000 Feet (303 Meters) above 3300 Feet		
	Humidity	10 to 95% RH Non-Condensing		
	Storage Temperature	-40 to +70°C		
Keypad Display	Display	16 character x 2-line, plain-English alpha-numeric display		
	Keys	9 key membrane with tactile response		
	Functions	Output status monitoring, Digital speed control, Parameter setting and display, Diagnostic and Fault log display, Motor run and jog, Local/Remote toggle		
	LED Indicators	Forward run command, Reverse run command, Stop command		
	Remote Mount	4000 foot distance		
	Trip	Separate message and trace log for each trip, last 5 trips retained in memory		
Control Specifications	Control Method	Microprocessor controlled PWM output, selectable encoderless vector or V/Hz inverter		
	Sleep / Wake Function	Ability to disable/re-enable drive automatically as demand dictates		
	Programmable Preset Speeds	Sixteen		
	Accel/Decel	0-6000 seconds, linear, S-Curve, U-Curve		
	Energy Savings Function	Automatic Mode		
	Frequency Control Range	0-120 Hz		
	Frequency Avoidance	3 Bands		
	Selectable Operating Modes	Keypad, 2-Wire, 3-Wire, 16 Preset Speeds, Fan Pump, Process Control.		
Analog Inputs	Two total	One: 0-10VDC or -10 to 10VDC One: 4-20mADC		
		Two: 0-12 VDC		
Analog Outputs	Two	Two: 0-12 VDC		
Digital Inputs	Pull - up or Pull - down	8 Completely Configurable Inputs		
Digital Outputs	Five Total	Four Form A Relays		
		One Form C Relay		

VS1PF – 230V, 50/60 Hz, 3-Phase

Catalog Number	Frame	Hp (Normal Duty)	Output Current	List Price	Mult. Sym.
VS1PF27-1	A	7.5	24	1,310	EB
VS1PF210-1	B	10	32	1,528	EB
VS1PF215-1	B	15	46	1,692	EB
VS1PF220-9	C	20	60	1,964	EB
VS1PF225-9	C	25	74	2,510	EB
VS1PF230-9	E	30	88	3,273	EB
VS1PF240-9	E	40	115	3,819	EB

VS1PF – 460V, 50/60 Hz, 3-Phase

Catalog Number	Frame	Hp (Normal Duty)	Output Current	List Price	Mult. Sym.
VS1PF47-1	A	7.5	12	1,255	EB
VS1PF410-1	B	10	16	1,528	EB
VS1PF415-1	B	15	24	1,637	EB
VS1PF420-9	C	20	30	2,030	EB
VS1PF420-9L *	D	20	30	2,400	EB
VS1PF425-9	C	25	39	2,400	EB
VS1PF425-9L *	D	25	39	2,837	EB
VS1PF430-9	E	30	45	3,164	EB
VS1PF430-9L *	F	30	45	3,546	EB
VS1PF440-9	E	40	61	3,819	EB
VS1PF440-9L *	F	40	61	4,201	EB
VS1PF450-9	G	50	75	4,583	EB
VS1PF450-9L *	J	50	75	5,128	EB
VS1PF460-9	G	60	91	5,892	EB
VS1PF460-9L *	J	60	91	6,546	EB
VS1PF475-9	H	75	110	7,092	EB
VS1PF475-9L *	K	75	110	7,746	EB
VS1PF4100-9	L	100	152	7,965	EB
VS1PF4100-9L *	M	100	152	8,838	EB
VS1PF4125-9	L	125	183	9,819	EB
VS1PF4125-9L *	M	125	183	10,747	EB
VS1PF4150-9L *	N	150	223	11,347	EB
VS1PF4200-9L *	N	200	264	13,092	EB
VS1PF4250-9L *	P	250	325	15,275	EB
VS1PF4300-9L *	R	300	413	18,547	EB
VS1PF4350-9L *	R	350	432	21,821	EB
VS1PF4400-9L *	R	400	547	30,548	EB
VS1PF4500-9	S	500	613	34,913	EB
VS1PF4600-9	T	600	731	43,640	EB
VS1PF4700-9	T	700	877	52,368	EB

* Built-In DC Link Inductor

VS1PF – 600V, 50/60 Hz, 3-Phase

Catalog Number	Frame	Hp (Normal Duty)	Output Current	List Price	Mult. Sym.
VS1PF57-1	A	7.5	9	1,380	EB
VS1PF510-1	A	10	12	1,680	EB
VS1PF515-1	A	15	17	1,801	EB
VS1PF520-1	C	20	23	2,233	EB
VS1PF525-9	C	25	27	2,640	EB
VS1PF530-9	E	30	34	3,481	EB
VS1PF540-9	E	40	43	4,200	EB
VS1PF550-9	H	50	55	5,041	EB
VS1PF560-9	H	60	64	6,482	EB
VS1PF575-9	H	75	80	7,799	EB
VS1PF5100-9	L	100	104	8,762	EB
VS1PF5125-9	L	125	128	10,800	EB
VS1PF5150-9L	N	150	150	12,481	EB

Farm Duty
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MotorsUnit Handling
Motors

Brake Motors

200 & 575 Volt
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Motors50 Hertz
MotorsInverter/Vector
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