

10KVA – 320KVA

THREE PHASE

Model: AFS1

60 HZ input – 400 HZ *fixed* output

Electronic Frequency Converter

Description:

The AFS1 model provides isolated three phase, highly regulated 400 Hertz power from a three phase 60 Hertz source. These converters provide precise electrical power for operation or testing of aerospace, military and other electrical or electronic equipment, operating from 400 Hertz power.

Installation and operation of the AFS1 is quick and easy. The converter comes ready to install, with built-in input and output circuit breakers behind the front door(s). Start-up and operation is simple using the user friendly LCD Control Panel for reading electrical parameters, event log, and separate LED status indicators.

All models utilize modular PWM-IGBT power control technology, and incorporate soft start circuitry, minimizing disturbances on the input power line during start-up.

User Controls:

The Operator Control Panel is conveniently located on the front of the AFS1, and consists of:

- Inverter Control Enable Push-button
- Inverter On Push-button
- Inverter Off Push-button
- Page Up Key Push-button
- Page Down Key Push-button
- Enter Key Push-button

-Audible Alarm

-Inverter Status Panel:

- Inverter On LED Indicator
- Inverter Output Normal LED Indicator
- Short Circuit LED Indicator
- Blown Fuse/Over Temp LED Indicator
- Inverter Fail Shutdown LED Indicator
- High DC Shutdown LED Indicator
- Overload Shutdown LED Indicator

-Load Status Panel:

- 70, 110, 125, 150% Load LED Indicators

-DC Status Panel:

- DC Low LED Indicator
- DC Low Shutdown LED Indicator
- Rectifier AC Fail LED Indicator
- Rotation Error LED Indicator
- Rectifier Shutdown LED Indicator
- High DC LED Indicator
- Fault LED Indicator

-Mimic Status Panel:

- Rectifier On LED Indicator
- Inverter On LED Indicator
- AC Output LED Indicator

-Real Time Data, LCD Display:

- Input Voltage, L-L
- Input Frequency
- Internal DC Bus Voltage
- Output Voltage, L-N or L-L
- Output Percent of Load
- Output Frequency
- Internal Ambient Temperature
- Time / Date
- Historical Event Records, (77)
- System Abnormal Warnings

Electrical Specifications:

INPUT

Voltage: Three phase, three wire plus safety ground. 208, 240, 480 VAC (as specified) $\pm 10\%$ from nominal

Frequency: 60 Hz

Protection: Input Circuit Breaker, Electronic overload & short circuit, Over-Voltage, Under-Voltage, Phase Reversal. Soft Start circuit limits inrush current

OUTPUT

Frequency: 400 Hz $\pm 0.1\%$

Voltage: Three Phase 120/208, 240/415 VAC (as specified)

Voltage Regulation: $\pm 1\%$

Power Factor: 0.8PF

Distortion: $\leq 3\%$ THD, (linear load)

Duty: Continuous duty at full-rated load

Protection: Output Circuit Breaker, Electronic overload & short-circuit, Over/Under Voltage, Over-temperature

Environmental Characteristics:

Temperature: Operating: 40°C (104°F)

Humidity: 0-90% Rh, (non-condensing)

Altitude: 5,000 Ft Above Sea Level

Location: Indoor

POPULAR OPTIONS:

Output Voltage Adjustment Control, $\pm 10\%$
Caster Wheels
NEMA 12 Enclosure

MODEL RATINGS

Model	OUTPUT				INPUT				
	Capacity	KW	Three Phase		Three Phase				
			Full Load Amps		Full Load Amps (approx)				
	KVA		120/208V.	240/415V	208V	240V	480V	HxWxD (in)	Wt(lbs)
AFS10100-◆*	10	8	27	14	35	30	15	69 x 26 x 34	670
AFS10200-◆*	20	16	56	28	67	58	29	69 x 26 x 34	750
AFS10300-◆*	30	24	83	42	99	86	43	69 x 26 x 34	1,000
AFS10400-◆*	40	32	111	56	134	116	58	73 x 26 x 34	1,220
AFS10500-◆*	50	40	139	70	166	144	72	73 x 26 x 34	1,140
AFS10600-◆*	60	48	167	84	198	172	86	73 x 46 x 34	1,580
AFS10800-◆*	80	64	222	111	265	230	115	73 x 46 x 34	1,900
AFS11000-◆*	100	80	278	139	332	288	144	73 x 46 x 34	2,200
AFS11200-◆*	120	96	333	167	399	346	173	73 x 46 x 34	2,700
AFS11600-◆*	160	128	444	223	531	460	230	73 x 46 x 34	3,300
AFS12000-◆*	200	160	555	279	639	554	277	73 x 89 x 34	4,500
AFS12400-◆*	240	192	667	334	768	666	333	73 x 89 x 34	5,100
AFS13000-◆*	300	240	833	418	960	832	416	73 x 89 x 34	5,900
AFS13200-◆*	320	256	889	446	1022	886	443	73 x 89 x 34	6,500

♦ Input Power Code: 208V=N, 240V=P, 480V=R * Output Power Code: 120/208V=Z, 240/415V=8

Specifications subject to change without notice.
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