FASTBUS

F051

Crate Power Supply

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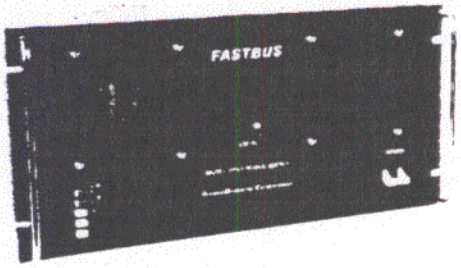
FEATURES

- Power source for F050 FASTBUS crate
- Modular, high-efficiency switching power units used for FASTBUS crate voltages of +5.0 V, -5.2 V, and -2.0 V
- Modular linear power units used for ±15 V
- Main power at 230 volts (nominal), 115 volts optional
- DPM switched readout for voltage and current
- Over-temperature, current and voltage protection
- Remote regulator sense



GENERAL DESCRIPTION

The Model F051 FASTBUS Power Supply is a standard 8 3/4" x 19" rack-mountable unit that provides power for a FASTBUS crate. Each of the internal switching power supply units are modular (5" x 8" x length) to provide flexibility in the selection of the appropriate power supply for various FASTBUS requirements. The efficiency of the +5.0 V and -5.2 V switching power modules exceed 70% and the −2.0 V module exceeds 60%. The ±15 volt power supply units are linear providing a low noise power source for low-level input analog modules.

The F051 is provided with a digital panel meter to monitor the output of each internal power unit. The meter is switch selectable between voltage and current. Voltage adjustment potentiometers are located on the rear panel of the chassis.

All power connections to the output of the F051 are strain relieved and enclosed within the chassis to help avoid accidental shorting of the power supply output terminals.

Two front panel mounted fans provide cooling for the internal power units. The air-flow is forced from the front panel of the chassis toward the rear. Also, a convenient built-in rear panel heavy duty handle is provided for lifting the F051 chassis.

In addition, there is a 115-V AC auxiliary power outlet switched by the power supply breaker for external loads up to 500 VA. The FASTBUS air-handling unit may be operated from this outlet.

GENERAL SPECIFICATIONS OF SWITCHING UNITS:

Item	Specifications
Regulation, line-load	0.2% or 10 mV, whichever is greater
Stability	0.1%/8 hr and 0.3%/1000 hr
Voltage Temp. Coeff.	0.02% per degree C, (0 to 50 degree C)
Noise/Ripple	50 mV p-p, 75 mV p-p (A03), 10 Hz to 50 MHz
Voltage Hold-up	20 ms
Recovery Time	500 μs to ±1/2%
Voltage Limit	+6 V, −6.2 V, −2.6 V
Current Limit	Automatic Current Limit/Foldback

GENERAL SPECIFICATIONS OF ±15 V LINEAR UNITS:

Item	Specifications
Regulation, line-load	0.1% + 1 mV
Stability	0.01% per 24 hr. period
Noise/Ripple	1.0 mV RMS
Transient Response	50 μs to 0.1%
Voltage Limit	+17 V, −17 V
Current Limit	Fold-back, adjustable: 75% - 125%
Adjustable voltage range	±10%

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ORDERING INFORMATION

Weight: 68.04 kg (150 lb.)

Model No.	Power Supply Capacity				
	+5.0V	**−5.2V**	**−2.0V**	**+15V**	**−15V**
F051-A01	150A	150A	150A	10A	10A
F051-A02	200A	200A	150A	15A	15A
F051-A03	300A	300A	150A	23A	23A
F050-B01*	150A	150A	150A	10A	10A

*F051-B01 is a 115-V AC version of the F051-A01 and requires a 20-amp, 115-V AC (nominal) outlet.

Accessories — Model 5828-A15J for Model F051 Output Power Cable (3/0 welding) 1.5 meters
Model 5828-A30J for Model F051 Output Power Cable (3/0 welding) 3.0 meters
Model 5828-A40J for Model F051 Output Power Cable (3/0 welding) 4.0 meters
Model 5828-B15J for Model F051 Output Power Cable (2/0 welding) 1.5 meters
Model 5828-B30J for Model F051 Output Power Cable (2/0 welding) 3.0 meters
Model 5828-B40J for Model F051 Output Power Cable (2/0 welding) 4.0 meters
Model 5821-A15J for Model F051 Power Supply to Crate Voltage Sense Cable 1.5 meters
Model 5821-A30J for Model F051 Power Supply to Crate Voltage Sense Cable 3.0 meters
Model 5821-A40J for Model F051 Power Supply to Crate Voltage Sense Cable 4.0 meters