

Model: HVI 3K5-A3P/125-3U7-T6075

COSD: XXXX

Summary description: 3500W, Industrial Quality Power Supply
208Vac, 3-Phase to 125Vdc/28A

Customer Name: Thiele KG/Germany (KS)

Customer Part Number: Same as above



Product description:

This rugged, industrial quality power converter system uses field proven internal power cards to generate the required output power. The system has six PFC 65F internal power cards. Built-in fans provide sufficient airflow for operation at the specified temperature without de-rating. The fans draw air into the unit and the exhaust exits at the rear of the unit. The system has full electronic protection. The input and output are filtered for low noise. Large design headrooms, and the use of components with established reliability result in a high MTBF. The unit is manufactured at our plant under strict quality control.

Special Features: Conformal coating

SPECIFICATIONS

Input Voltage

208Vac 3-phase, 47-63Hz
197-264Vac operating range
Input Current: 14Arms max. per phase
Power factor meets EN61000-3-2, and -12

Input Protection

Inrush current limiting
Varistors
Internal safety fuses
Lower input voltages than the specified minimum will not damage the unit

Isolation

2250Vdc input to chassis
4300Vdc input to output
8mm spacing
1000Vdc output to chassis

Standards

Designed to meet EN 60950-1 and related standards

EMI

EN55032 Class A with margin

Switching Frequency

80kHz ± 5kHz

Output Voltage/Current

125Vdc ± 0.5V/28A
3500W continuous

Redundancy Diode

Installed internally

Line/Load Regulation

±1% combined from zero load to full load including redundancy diode

Dynamic Response

Max 5% voltage deviation for 10% to 50% load step, with better than 1msec recovery time

Output Ripple / Noise

Better than 100mVrms 500mVpp (@20MHz BW)

Output Overload Protection

Rectangular current limiting with short-circuit protection
Thermal shutdown with automatic reset in case of insufficient cooling (self-resetting)
Current Limit set to: 32A ± 3A

Output Overvoltage Protection

Second regulator loop. Second loop completely stable and independent of main regulator loop
OVP setting: 140V ± 5V

Efficiency

85% at full load

Operating Temperature Range

0°C to +50°C for full specification

Temperature Drift

0.03% per °C over operating temperature range

Cooling

By built-in high quality fans

Environmental Protection

Basic ruggedizing
Conformal coating

Shock/Vibration

IEC 61373 Cat 1 A&B

Humidity

5-95% non-condensing

MTBF

Min. 115,000 hours @ 45°C
(Fans excluded) Demonstrated MTBF is significantly higher

Indicators

Green OUTPUT ON LED on each internal modules visible through the cooling slots

Control Input

None

Alarm Output

Not installed

Package / Dimensions (W x H x L)

3U7: 432 x 132x 407mm
(17" x 5.2" x 16")
Mounting holes are clear

Weight

12kg (26 lbs)

Connections


Input: Terminal block
Output: Terminal block

RoHS Compliance

Compliant

Warranty

Two years subject to application with good engineering practice
Contamination related failures and shipping cost excluded

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