

# ETL-HP SERIES

| Model   | Output |     | Efficiency |
|---------|--------|-----|------------|
| ETL24HP | 24V    | 84A | 85%        |
| ETL26HP | 26V    | 76A | 85%        |
| ETL28HP | 28V    | 72A | 85%        |
| ETL48HP | 48V    | 43A | 85%        |

### DESCRIPTION

The High Power PFC isolated Front Ends HOT-PLUG power supply provide 24, 26, 28 and 48VDC single output. Complete front-end solutions for driving high density DC to DC modules in distributed Power Systems with (N+1) redundancy. Using Elcon Top Drawer Connector, this ET series provides high reliable and rugged compact power with DMTBF over 500,000 hours.

#### **FEATURES**

- Power Factor (>0.99)
- 0 C to +50 C at full load
- Standard 5" X 5" X 11.25" envelope
- **Output Fully Floating**
- Overcurrent Protection
- Overvoltage Protection
- Remote Sense
- Overtemperature Protection
- Self-contained Forced Air Cooling
- Meets UL, CSA and VDE Safety
- Meets EMI EN88155 Level A ISO9001

#### OPTIONS

- -6B CURRENT SHARING
- -20c ISOLATION DIODE
- -1281 DC POWER GOOD

#### **ELECTRICAL SPECIFICATIONS**

#### **INPUTS**

RANGE: Full input Range 170 to 264 VAC. Single Phase

FREQUENCY: 43 to 63Hz.

INRUSH CURRENT: 25A averaged over ½ cycle

HARMONIC CURRENT: <5%

EFFICIENCY: 80% to 85% (Measured at full load and 208 VAC

Input)

#### **OUTPUTS**

VOLTAGE: 24, 26, 28, and 48 VDC

**CURRENT:** See Tables

ADJUSTMENT RANGE: +5 to -10% of nominal output voltage.

POLARITY: Output is isolated. It may be referenced plus/minus as required.

REMOTE SENSING: Compensates for up to 0.5V total loop drop in the output line.

STATIC REGULATION: Line: +/- 0.25% over full line range.

Load: Option: =/-% zero load to full load. Droop IFE: Option: the output sags from +5% when the load is increased from 10% to

VOLTAGE STABILITY: +/-0.1% FOR 24 hour period after 30

minute warm up.

**OUTPUTS** 

TEMP COEFFICIENT: +/-0.02%/ C FROM 0 c TO +50 c.

P-P RIPPLE AND NOISE: 1% (20Hz to 50MHz Bandwidth).

MINIMUM LOAD: Not Required.

TURN ON DELAY: 1 sec. Max from application of AC line.

OVER VOLTAGE PROTECTION: 125% +/-5% of nominal. OVP shutdown is latched until the input line is removed for 5 secs and

then reapplied. OVP sensing is don at the output terminals.

OVERCURRENT PROTECTION: Current l=Limit Point: 110% to

120% of full load.



# **ETL-HP SERIES**

# **ENVIRONMENTAL**

#### **OVERTEMPERATURE PROTECTION:**

Automatically shuts down and latches the unit in the event of an over temperature condition. After cool down, power must be recycled to restart the unit.

**AUDIBLE NOISE**: 63 dBA max at 1 meter. 70 dBA for high speed fans. (See Output Tables for units with high speed fan).

**TEMPERATURE:** Standard: 0 C to +50 C at full load. Storage: -55 C to +85 C.

HUMIDITY: 20% to 95% non-condensing.

**ALTITUDE**: Operating: 8,000 Ft. Derates to 90% at 10,000 Ft. Non-Operating at 30,000 feet.

**VIBRATION**: Operating: From 5 to 27Hz, 0.02" double amplitude: from 27 to 500Hz, 0.75G, 3 Axes, 5 min/octave sweep, dwell 1 min at resonance.

*Non-Operating*: From 5 to 17Hz, 0.01" double amplitude: from 17 to 500Hz, 1.5G peak: 3 axes, 5min/octave sweep, dwell 1 min at resonance.

MTBF: 500,000 hours

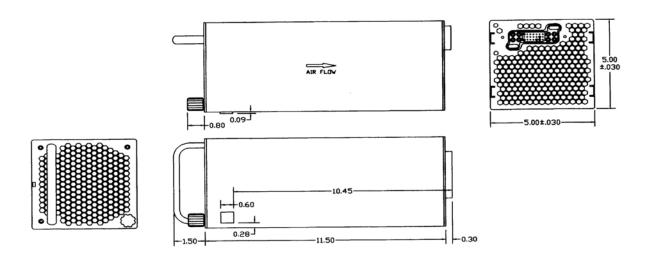
SHOCK: Operating: 5G, half sine, 11msec 3 axes. Non-Operating: 15G half sine, 11 msec, 3 axes.

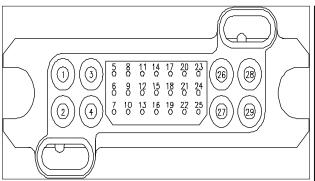
**COOLING**: Forced air, internal fan Airflow normally exits at connector

EMI: Conducted & Radiated EN55022 level A

SAFETY: Meets UL1950, CSA1950, and TUV t EN60950.

## **DIMENSIONS:**





#### **Elcon Lower Drawer Connector**

| Pin 1:                        | AC Input (N)           | Pin 21: | Power Fail          |  |  |
|-------------------------------|------------------------|---------|---------------------|--|--|
| Pin 2:                        | AC Input (L)           | Pin 22: | Undervoltage Detect |  |  |
| Pin 3:                        | Chassis Gnd            | Pin 23: | Remote Sense +      |  |  |
| Pin 4:                        | Chassis Gnd            | Pin 25: | Remote Sense -      |  |  |
| Pin 5:                        | Unit Present           | Pin 26: | Output +            |  |  |
| Pin 7:                        | Unit Present           | Pin 27: | Output -            |  |  |
| Pin 17:                       | Current Sharing        | Pin 28: | Output +            |  |  |
| Pin 18:                       | <b>Current Monitor</b> | Pin 29: | Output -            |  |  |
| Pin 19:                       | Logic Return           |         |                     |  |  |
| Pin 20:                       | Logic Inhibit          |         |                     |  |  |
| Pins 6, 8-16 and 24 Not Used. |                        |         |                     |  |  |