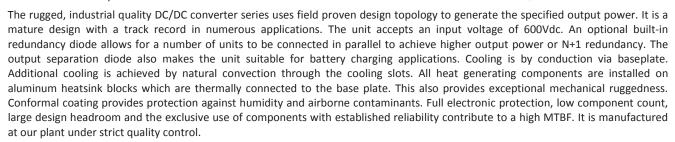
# 600Vdc Input, 500W Rugged Industrial Quality DC/DC Converter HVI 500-FX Series

- Rugged industrial quality
- High input voltage
- Wide DC-input voltage range
- Field-proven design
- Full electronic protection
- Fan cooling
- N+1 redundancy available



#### **SPECIFICATIONS**

#### Input Voltage

600Vdc nominal 450 - 800Vdc operating range Other input range on request

#### Input Protection

Inrush current limiting
Varistor
Reverse polarity protection
Internal safety fuse
Lower voltage than specified
minimum input will not damage
unit

### Isolation

3000VDC input to chassis 4300VDC input to output, 5600 type test 1000VDC output to chassis

## Standards

Designed to meet EN60950-1 and related standards

## EMI

EN55022 Class A with margins

# Switching Frequency

55kHz ±3kHz

## **Output Voltage**

24V, 36V, 48V or 110Vdc Output is floating; either terminal can be grounded Other outputs on request

#### Redundancy diode

Available as option

#### Line/Load Regulation

Better than +/-1% combined from zero load to full load

## **Dynamic Response**

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

#### Output Ripple / Noise

Better than 0.2% rms or 1% pp of the output voltage (20MHz BW)

## Output Overload Protection

Rectangular current limiting with short-circuit protection (no hiccup) Thermal shutdown in case of insufficient airflow (self-resetting)

## **Output Overvoltage Protection**

Second regulator loop, completely stable and independent of main regulator loop

#### Efficiency

Min. 80% at full load depending on input/output configuration

#### **Operating Temperature**

0°C to 55°C for full specification without derating Extended temperature ranges available

#### **Temperature Drift**

0.03% per  $^{\circ}\text{C}$  over operating temperature range

#### Cooling

Conduction to customer heatsink or chassis and natural convection

#### **Environmental Protection**

Basic ruggedizing Conformal coating Heavy ruggedizing available as option

## Shock/Vibration

IEC 61373 Cat 1 A&B

## Humidity

5 – 95%, non condensing

# MTBF

130,000 hours @45 °C (fans excluded)
Demonstrated MTBF is significantly higher.

## Indicators

Green "Output ON" LED visible through cooling slots

#### **Control Input**

None on standard version Available as option

#### **Alarm Outputs**

None.

Available as option

#### Dimensions (W x H x D)

FX: 153 x 67 x 358 mm (6" x 2.7" x 14.2") including mounting flanges and terminals

## Weight

2.2 kg (4.9 lb)

## Connections

12-pole barrier type terminal block with 3/8" spacing

#### **RoHS Compliance**

Compliant

#### Warranty

Two years subject to application within good engineering practice

**Terminal Block Pin-out** 

ALARM (option)			DC OUTPUT				DC INPUT				
FAIL OPEN	сом	FAIL CLOSED	+	+	-	-	GND	N/C	+	N/C	33-33
1	2	3	4	5	6	7	8	9	10	11	12

