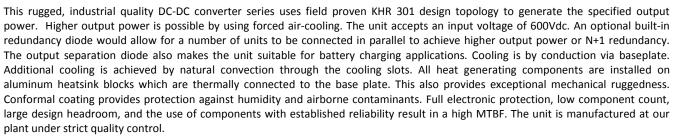
# 600Vdc Input, Rugged 300W Industrial Quality DC-DC Converter HVI 300-F3 Series

- Rugged industrial quality
- Wide DC-input voltage range
- Field-proven design
- Full electronic protection
- Conduction/convection cooled (no fans)
- N+1 redundancy available



## **SPECIFICATIONS**

#### **Input Voltage**

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

#### Input Protection

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

## Isolation

3000Vdc input to chassis 3000Vdc input to output 5600Vdc type test 1000Vdc output to chassis

## Standards

Designed to meet EN 60950-1 and related standards

#### EMI

EN55032 Class A with margins

# Switching Frequency

55kHz ±3kHz

# Output Voltage/Current

12V/20A, 24V/12A, 48V/6A or 110V/2.5A Output is floating; either terminal can be grounded

Other outputs on request

#### **Redundancy Diode**

Available as option

#### Line/Load Regulation

±1.5% 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

Typically 80% at full load

## **Operating Temperature Range**

0°C to 50°C cold plate temperature for full specification without derating Extended temperature ranges available

## **Temperature Drift**

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

# Cooling

Conduction to customer heatsink or chassis and natural convection

## **Environmental Protection**

Ruggedizing Conformal coating Heavy ruggedizing available on request

## Shock/Vibration

IEC 61373 Cat 1 A&B

## Humidity

5 – 95%, non condensing

## MTBF

150,000 hours at 45 °C 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

## Package/Dimensions (W x H x L)

F3: 132mm x 64mm x 300mm (5.2" x 2.5" 11.8") including terminal block and mounting flanges Mounting holes are clear

#### Weight

2 kg (4.4 lbs)

## 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 Pint Out**

| DC OUTPUT |   |    |    |             |             |             | DC INPUT    |     |             |    |             |
|-----------|---|----|----|-------------|-------------|-------------|-------------|-----|-------------|----|-------------|
| +         | + | ov | ov | NOT<br>USED | NOT<br>USED | NOT<br>USED | NOT<br>USED | RTN | NOT<br>USED | +  | NOT<br>USED |
| 1         | 2 | 3  | 4  | 5           | 6           | 7           | 8           | 9   | 10          | 11 | 12          |

ABSOPULSE power supplies are designed and built to customer requirements. The specifications on this data sheet are generic guidelines only and are subject to change.

OEM of industrial and railway quality DC-DC converters, AC-DC power supplies and battery chargers, DC-AC sine-wave inverters, phase and frequency converters, DC-output UPS systems and complete power systems in 19" and 23" racks since 1982. Custom or standard. ABSOPULSE is a BABT-approved Facility.



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