

# 150VA, Rugged, Industrial Quality AC-AC Frequency with 26Vac, 400Hz Output

## 110V or 230Vac Input to 26Vac Output at 400Hz

### FC 150-E/26M-F3 Series



- Sinusoidal output voltage
- Rugged, industrial quality
- Filtered input
- Conduction/convection cooled
- Full electronic protection
- Field-proven design topology

This rugged, AC-AC frequency converter uses our field proven, microprocessor-controlled FCH 265 topology to generate the required output power with pure sine wave output voltage. The AC-DC input stage boosts the input voltage to a higher DC bus voltage, which feeds the DC-AC inverter to generate the required AC output. The use of high frequency conversion enables a compact construction, low weight and high efficiency. Cooling is by conduction via baseplate. Additional cooling is achieved by natural convection through the cooling slots. All heat generating components are installed on aluminum heatsink blocks which are thermally connected to the base plate. This also provides exceptional mechanical ruggedness. Conformal coating provides protection against humidity and airborne contaminants. Full electronic protection, low component count, large design headroom and the exclusive use of components with established reliability contribute to a high MTBF. The unit is manufactured at our plant under strict quality control.

### SPECIFICATIONS

#### Input Voltage

110Vac or 230Vac (47... 63Hz)  
Factory selected for required input

#### Input Protection

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

#### Isolation

2250Vdc input to chassis  
3000Vdc input to output  
1500Vdc output to chassis  
Floating output

#### Standards

Designed to meet  
C22.2 No. 107.1 - 01,  
UL 458 and EN62368-1

#### EMI

EN55032 Class A  
with margins

#### Output Voltage

26Vac/6A, 400Hz  
150VA continuous;  
Output is floating, either terminal can be grounded  
Other outputs are available on request.

#### Output Wave Form

Sinusoidal

#### Total Harmonic Distortion

Less than 5% at full load

#### Line/Load Regulation

± 3% from zero load to full load

#### Load Crest Factor

2 at 90% load

#### Output Noise

High frequency ripple is less than 500mVrms (20MHz BW)

#### Output Overload Protection

Current limiting with short circuit protection.  
Thermal shutdown with automatic recovery in case of insufficient cooling

#### Output Overvoltage Protection

40Vac by internal supply voltage limiting

#### Efficiency

Typically, 80% at full load

#### Operating Temperature Range

0° C to +50° C for full specification  
Extended temperature ranges available

#### Temperature Drift

0.05% per ° C over operating temperature range

#### Cooling

Conduction via base plate to customer heat-sink or chassis and natural convection

#### Environmental Protection

Basic ruggedizing  
Conformal coating

#### Shock/Vibration

IEC 61373 Cat 1 A&B

#### Humidity

5 - 95% non-condensing

#### MTBF

Min. 120,000 hours at 45°C  
Demonstrated MTBF is significantly higher

#### Indicators

None

#### Control Input

None

#### Alarm Output

None  
Option: output fail alarm (Form C)

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

F3: 132 x 62 x 290 mm  
5.2" x 2.43" x 11.4"  
Includes mounting flanges, excludes connector  
Mounting holes are clear

#### Weight

2kg; 4.4lb

#### Connections

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

#### RoHS Compliance

Compliant

#### Warranty

Two years subject to application within good engineering practice

#### Terminal Block Pin-out

OUTPUT				INPUT							
NOT USED	L1	L2	NOT USED	NOT USED	NOT USED	NOT USED	NOT USED	NOT USED	GND	N	PH
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.



#### ABSOPULSE ELECTRONICS LTD

110 Walgreen Road, Ottawa, Ontario. K0A 1L0. CANADA  
Tel: +1-613-836-3511 | Fax: +1-613-836-7488

<https://absopulse.com/contact> | <https://www.absopulse.com>