

HermesFlex

2.2kW Power Module

Preliminary



Astrodyne TDI's 2.2 kW HermesFlex is the perfect rectifier solution for applications requiring a digitally controlled industrial or medical power supply with a universal 90-264VAC, 50/60Hz single-phase input, and a wide-range DC output. For higher power applications, HermesFlex rectifiers can be easily connected in parallel current-sharing groups with the aid of a three-module shelf assembly, enabling 6.6kW per 1U of 19" rack space. HermesFlex is certified to IEC60601 with 2 MOPP isolation and BF leakage current.

Main Characteristics:

- Certified to IEC60601, Type BF, 2x MOPP output isolation
- Programmable Outputs/ variable or fixed mode
- Constant Voltage, Constant Current or Constant Power Modular / scalable product
- Blind-mate / hot-swap compatible
- Full Power Factor Correction (Low Input Harmonic Currents)
- SEMI F47 Compliant with 20ms Holdup at Full Power
- On-board CAN bus and Shelf Level Ethernet Controller

BENEFITS

Reduced System Complexity and Time to Market

Wide range of models with fully adjustable outputs. Multiple control modes provide ultimate application flexibility.

High Reliability for Critical Applications

Astrodyne TDI's comprehensive reliability assurance processes, including design to the rigorous requirements of NAVSO P3641A, HALT, DFMEA and our unique Highly Accelerated Stress Screening (HASS) on 100% of production units, assure the ultimate in unit reliability and performance.

FEATURES

Universal AC Input

90-264Vac

Wide Range Outputs

28V (3V-28V)

56V (5V-56V)

125V (10V-125V)

180V (10V-180V)

250V (10V-250V)

450V (15V-450V)

Up to 2.2KW power per module

Up to 80A current per module (28V model)

Isolated Auxiliary Output: 12VDC/10W

Controls:

High Speed CANbus

Mounting:

Blind Mate Version: Front plug-in into shelf

Hard Wired Version: 4 fixing points on the chassis

Parallel and Redundant Operation

Automatic current sharing, output fault isolation device and hot-swap compatible

Variable Speed Fan Control

Minimizes audible noise and maximizes fan life

Astrodyne TDI
Now you have power.

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HermesFlex

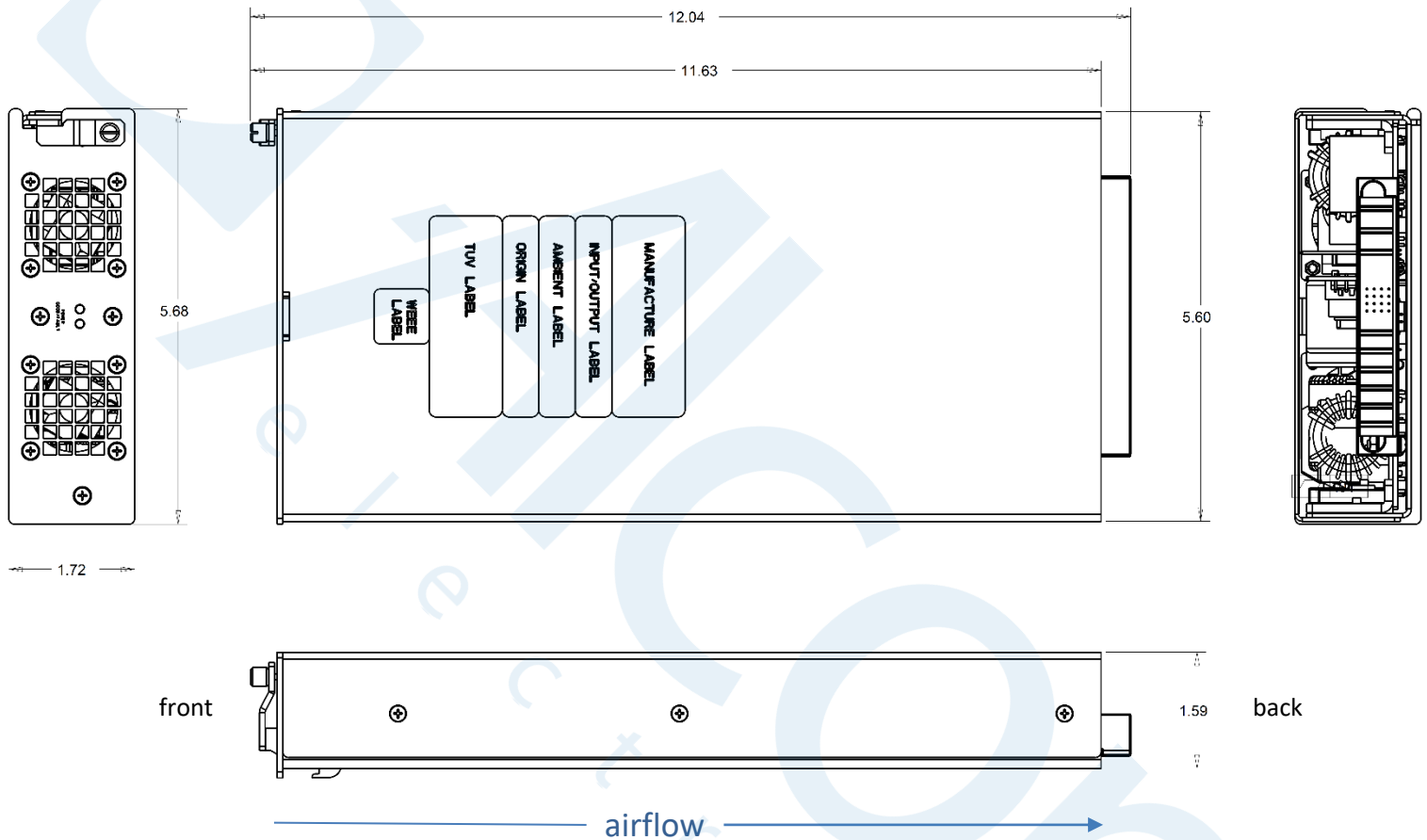
2.2kW Power Module

Parameter	HermesFlex
Input AC	90-264VAC, Single-Phase
AC Frequency	47-63Hz
Max Input Current	16A maximum for 90-132VAC at 1200W output power 14A maximum for 176-300VAC at 2200W output power
Power Factor	>.97
Outputs, DC	Main Output: (Six standard models) 28V, 56V, 125V, 180V, 250V, 450V
Output Power	1,200W Continuous when operating from 90-132VAC Input 2,200W Continuous when operating from 176-300VAC Input
Efficiency	>91%
Ripple/Noise	<1% pk-pk of Vo(max)
Load Regulation	Less than 2% of Vo(max) from no load to full load
Electronic Alarms	AC OK, Output OK, Inhibit, Protect Status
Visual Indicators	Front panel LEDs
Operating Temperature	-30 to +55°C (full rated)
Storage/Transportation	-40 to +85°C
Humidity	0% to 95% non-condensing
Isolation	Input to Output: 4,000VAC (2 MOPP) Input to Earth Ground: 1,500VAC Output to Earth Ground: 500VAC (28, 56V models); 1,000VAC (125, 180V models); 1500VAC (250V model); 1674VAC (450V model)
Connections	Blind Mate Option: FCI Powerblade Hard Wired Option: AC Input- Heavy Duty no-lug Terminal Block DC Output- Heavy Duty Bus Bar/Stud Control: DB9 Female
EMC	Radiated and conducted emissions meet FCC Part 15, Subpart J class A, and EN55022, Class A
Dimensions (inches)	Blind Mate Version: 5.6"×1.59"×12.21" Hard Wired Version: 5.6"×1.59"×12.55" 3.5lbs
Safety	UL/IEC/EN 62368-1 (2nd Ed) UL/IEC/EN 60601-1 (3rd Ed.)
Cooling	Internal Variable Speed Fan, front air draw
Warranty	1 Year

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Module Outline (Blind Mate Version):



PART NUMBER

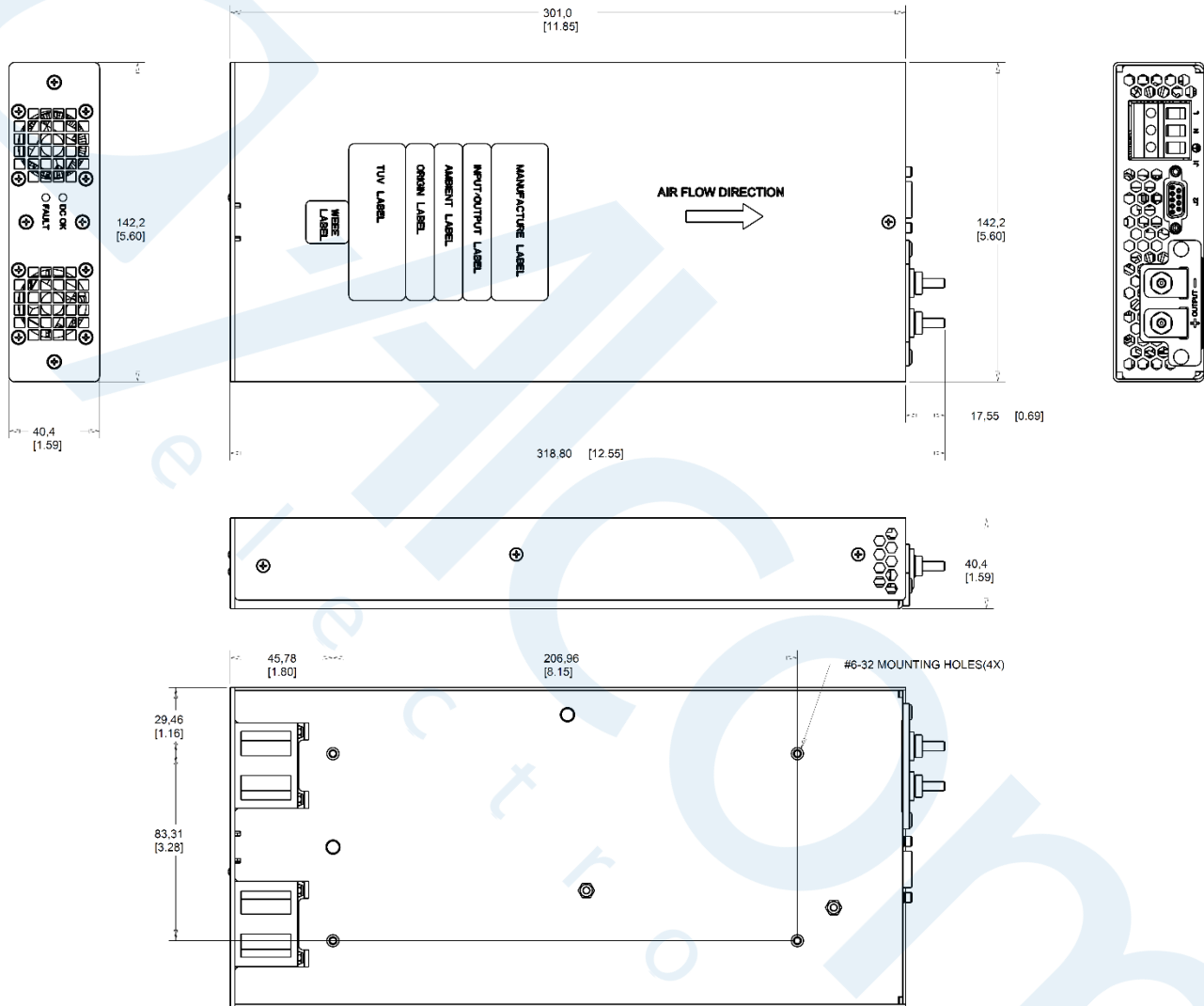
DESCRIPTION

T100113626-F028D00LF	RECTIFIER, 2.2KW 1U 0-28V 80, 2MOPP/BF, ROHS
T100113626-F056D00LF	RECTIFIER, 2.2KW 1U 0-56V 40A, 2MOPP/BF, ROHS
T100113626-F125D00LF	RECTIFIER, 2.2KW 1U 0-125V 18A, 2MOPP/BF, ROHS
T100113626-F180D00LF	RECTIFIER, 2.2KW 1U 0-180V 12.5A, 2MOPP/BF, ROHS
T100113626-F250D00LF	RECTIFIER, 2.2KW 1U 0-250V 9A, 2MOPP/BF, ROHS
T100113626-F450D00LF	RECTIFIER, 2.2KW 1U 0-450VDC 5A, 2MOPP/BF, ROHS

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Module Outline (Hard Wired Version): Coming Soon!



PART NUMBER

DESCRIPTION

T100113627-F028D00LF	RECTIFIER, 2.2KW 1U 0-28V 80A, 2MOPP/BF, ROHS, HW
T100113627-F056D00LF	RECTIFIER, 2.2KW 1U 0-56V 40A, 2MOPP/BF, ROHS, HW
T100113627-F125D00LF	RECTIFIER, 2.2KW 1U 0-125V 18A, 2MOPP/BF, ROHS, HW
T100113627-F180D00LF	RECTIFIER, 2.2KW 1U 0-180V 12.5A, 2MOPP/BF, ROHS, HW
T100113627-F250D00LF	RECTIFIER, 2.2KW 1U 0-250V 9A, 2MOPP/BF, ROHS, HW
T100113627-F450D00LF	RECTIFIER, 2.2KW 1U 0-450VDC 5A, 2MOPP/BF, ROHS, HW

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