

TRPI/TRRI/TRSI SERIES: BULK POWER FRONT ENDS

Hot-Swap 2U, Up to 7500 Watts Output Power



LVD73/23/EEC

FEATURES

- 85% Efficiency
- Power Factor Correction to EN61000-3-2
- Up to 10.9W/In³ Power Density
- Hot-Swap N+1 Redundant Operation
- 2U 19-inch Rack Mounting
- ±10% Output Adjustment Range
- Low Cost
- 12V, 24V, 28V or 48V Output
- 1250, 2000 or 2500W Module Output Power
- Up to 7500W Total Power, Non-Redundant
- Up to 5000W Total Power, 2+1 Redundant
- Integral Isolation Diodes
- Output Current Limiting
- Inrush Current Limiting
- Remote Output Adjustment

TWO-YEAR WARRANTY

HOT-SWAP MODULE ORDERING GUIDE

Max. Watts	Output Voltage /Current	Adjustment Range	Input Voltage	Minimum Load	Line/Load Regulation	Model Number
1250*	12V 104.2A	±10%	85VAC - 264VAC	0A	1%	TRPI3000
1250*	24V 52.1A	±10%	85VAC - 264VAC	0A	1%	TRPI5000
1250*	28V 44.6A	±10%	85VAC - 264VAC	0A	1%	TRPI6000
1250*	48V 26.0A	±10%	85VAC - 264VAC	0A	1%	TRPI7000
2000	24V 83.3A	±10%	170VAC - 264VAC	0A	1%	TRRI5000
2000	28V 71.4A	±10%	170VAC - 264VAC	0A	1%	TRRI6000
2000	48V 41.7A	±10%	170VAC - 264VAC	0A	1%	TRRI7000
2500	24V 104.2A	±10%	170VAC - 264VAC	0A	1%	TRSI5000
2500	28V 89.3A	±10%	170VAC - 264VAC	0A	1%	TRSI6000
2500	48V 52.1A	±10%	170VAC - 264VAC	0A	1%	TRSI7000

*NOTE: Below 90VAC input, derate output power by 10%. Full rated power at 90-264VAC.

The maximum rated power and maximum rated output current may not be exceeded for any voltage within the specified output voltage range.

ORDERING GUIDE

The hot-swap modules and the mating rack-mount are separate items and must be ordered separately.

HOT-SWAP MODULES: Order quantity using model number from table.

SYSTEM RACK: Order RRS2U-19.

MATING-CONNECTOR KIT

Order Kit No.
775-1441-0000

SAFETY CERTIFICATIONS

AGENCY	STANDARD
UL	UL1950
CUL	CSA22.2 No.950
DEMKO	EN60950

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TRPI/TRRI/TRSI MODULE SPECIFICATIONS

Typical at Nominal 230VAC Line, Full Load and 25°C Unless Otherwise Noted.

OUTPUT SPECIFICATIONS

Total Output Power, Max 1250, 2000 or 2500 Watts
 Voltage Adjustment Range ±10%
 Total Regulation¹ 1.0%
 Ripple & Noise, Pk-Pk² 125mV, 12V Models
 250mV, 24V & 28V Models
 500mV, 48V Models
 Holdup Time³ 20ms
 Dynamic Response⁴ 1ms
 Temperature Coefficient 0.05%/°C
 Minimum Load 0A
 Overload Protection Constant Current Limiting
 Overvoltage Protection Latched Shutdown
 Active Current Share⁵ 10% Differential From Rated Current
 Remote Sense Up to 0.5V Per Wire

INPUT SPECIFICATIONS

Input Voltage Range See Model Table
 Power Factor 0.98
 Input Frequency 47-63Hz
 Inrush Limiting 25A Peak
 Input Current, Full Load, TRSI 13.1A@230VAC
 TRRI 10.4A@230VAC
 TRPI 12.5A@120VAC
 Input EMI Filter, Conducted EN55022 Curve B
 FCC20780 pt. 15J Curve B
 Harmonic Distortion EN61000-3-2
 Input Immunity, Conducted
 Fast Transients, Line-Line ±2kV (EN61000-4-4 Level 3)
 Surges, Line-Line ±1kV (EN61000-4-5 Level 2)
 Surges, Line-Ground ±2kV (EN61000-4-5 Level 3)

Input Protection, Internal Fuse 20A
GENERAL SPECIFICATIONS

Efficiency 85% at Full Load
 Switching Frequency 70kHz Nominal
 Overtemperature Protection Power Shutdown
 Isolation, Class⁶, min 3000VAC Input - Output
 1500VAC Input - Ground
 50VDC Output - Ground
 Safety Standards EN60950, UL60950, CSA22.2 No.60950

ENVIRONMENTAL SPECIFICATIONS

Operating Temperature 0°C to 70°C Ambient
 Derating 2.5% / °C, 50°C to 70°C
 Storage Temperature -40°C to +85°C
 Cooling Integral Ball Bearing Fan

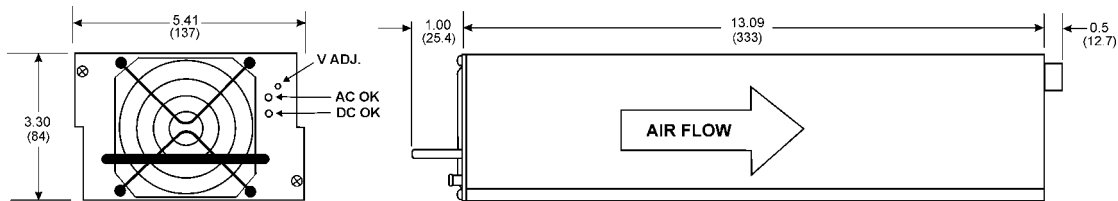
PHYSICAL SPECIFICATIONS

Case Material, Module Aluminum
 Rack Mount Steel
 Finish, Rack Mount Powder Coat Gray
 Dimensions, Inches (mm)
 Hot-Swap Module 3.3H x 4.9W x 13.1D
 (84 x 124 x 333)
 Rack Mount 3.50H x 17.20W x 19.88D
 (89 x 437 x 505)

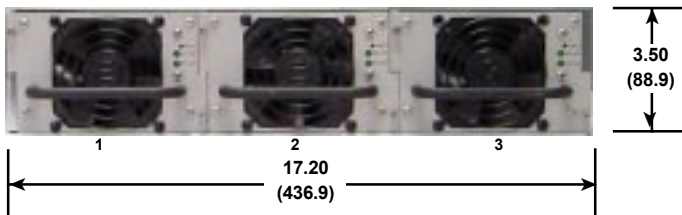
NOTES:

- At remote sense point over full line range and 0-100% load change.
- 20MHz bandwidth. Measured with 0.1µF ceramic and 10µF tantalum capacitors in parallel across the output.
- Full output power at nominal AC line.
- <5% deviation recovering to within 1% for 50% load change.
- Using single wire current share with remote sense connected.
- Input - output isolation figure is for isolation components only. 100% production Hipot tested.

HOT-SWAP MODULE



19" RACK-MOUNT



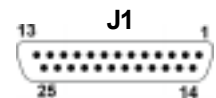
↑ AC CONNECTION AREA ↑ J1 SIGNAL CONNECTOR ↑ + DC OUTPUT BUS BARS ↑ -

ALL DIMENSIONS IN INCHES (mm).

All specifications subject to change without notice.

J1 SIGNAL CONNECTOR			
PIN	FUNCTION	PIN	FUNCTION
1	Inhibit	14	AC Good-1
2	Thermal Alarm -1	15	DC Good-1
3	Current Monitor -1	16	AC Good-2
4	Thermal Alarm -2	17	DC Good-2
5	Current Monitor -2	18	AC Good-3
6	Thermal Alarm -3	19	DC Good-3
7	Current Monitor -3	20	N.C.
8	N.C.	21	N.C.
9	N.C.	22	N.C.
10	Current Share	23	-Sense
11	+ Sense	24	Remote Adjust-1
12	Remote Adjust-2	25	Remote Adjust-3
13	N.C.		

NOTE: AC Connections are made to a terminal block behind the rear grille. There is a separate connection to each module.



**AMP747846-4 Connector
 AMP747912-2 Mate**