

POWERBOX Industrial Line OFI1200A Series 1200W Single Output AC/DC Baseplate Power Supply

OFI1200A - a powerful a powerful baseplate cooling power supply for demanding applications. The design of transfer heat to the baseplate makes it suitable for none ventilated applications as in sealed enclosures. A product that is suitable for wide application areas in industrial and others. Ruggedized construction makes it ideal for harsh environmental applications.

Features
Conductive cooling
Output active ORing (optional only 28Vdc & 48Vdc)
Paralleling & Redundancy operation
Voltage & Current, wide range adjustable (see manual)
Active current share
Vibration/shock according MIL-STD-810H
Power Good
Remote sense
Remote On/Off
OCP, OVP, OTP, SCP

85-305VAC
100-277VAC
No
47-63Hz
I (with ground)
0.98/0.95 (110VAC/230VAC)
40A typ.
12V: 10.9A/ 5.1A
28V & 48V: 12.5A/ 5.8A
20ms (230VAC, Full load)
Yes
600ms typ. (Remote on 100ms)
@-40°C deg. <sup>1)</sup>
<1.5mA at 277VAC/60Hz

Output	
Output volt./Cur./Power	See table
Output peak power	N/A
Minimum load	OA
Line regulation	0.5% mV max
Load regulation	0.5% mV max. 10-90% load change
Temp. coefficient	± 0.02%/°C
Ripple & noise (20MHz BW)	1%, :1,5% for 12Vdc. (2% below 0°C)
Output voltage adj.	Potentiometer & ext. voltage. 2)
Paralleling	Yes, up to 9 units



-40°C to +95°C	
See manual	
20-95%RH (Non condensing)	
max. 5000m	
-40°C to +85°C	
20-95%RH (Non condensing)	
MIL-STD-810H, Cat. 4 Fig. 514.8C-3	
MIL-STD-810H,	
Procedure 1, 20G 11ms, Ground material	
With cover option: 142x40x260mm	
Without cover: 142x39x260mm	
IPX0	
1.2kg (1.4kg with cover)	
Input: Phoenix MKDS 5/ 3-9,5 (1714984)	
Output: Studs/M6 Screw	
Signals: Molex 818311041	
Input and Output on each side	

Model Number	Output Voltage	Output Current	Output Voltage adj. <sup>2)</sup>	Efficiency 110VAC/230VAC
OFI1200A12	12VDC	~0-84A	~0-14.4VDC	84% / 86.5%
OFI1200A28	28VDC	~0-43A	~0-33.6VDC	88% / 90.5%
OFI1200A48	48VDC	~0-25A	~0-57.6VDC	89% / 92%

See manual

>1,990,000h @ 25°C, full load

Note

General MTBF Telcordia

Life time expectations

- For startup below -20°C see manual.
- Wide output adj. see manual. Full adj. range only when use external voltage VTRM. On board potentiometer adj. range 35% to 120% of nominal o/p voltage. For option -O: o/p adj. range 5V to 120% of nominal voltage, if need below <5VDC contact Powerbox.
- See manual

www.prbx.com 2022.07.14

Protection	Circuit a	and Others
------------	-----------	------------

Over current protection	Yes, works over 105% of rating auto recovery
Type of current limit	Hiccup <sup>3)</sup>
Constant current mode	Yes (when current level adjusted otherwise hiccup)
Over voltage protection	Yes
Over temp. protection	Yes
Remote sensing	Yes
Remote ON/OFF	Yes
Output LED	Yes, green (operate only at nominal o/p voltage)
Active ORing	Only for 28V & 48V version (optional)

## **Control and Communication**

Power Good	Yes, Normal operation: Low	
VTRM, ITRM	Yes	
Isolation		
Input -Output, RC	3000VAC	
Input-FG	2000VAC	
Output-FG	500VAC	
Output - RC, PG	100VAC	

## Safety Standards

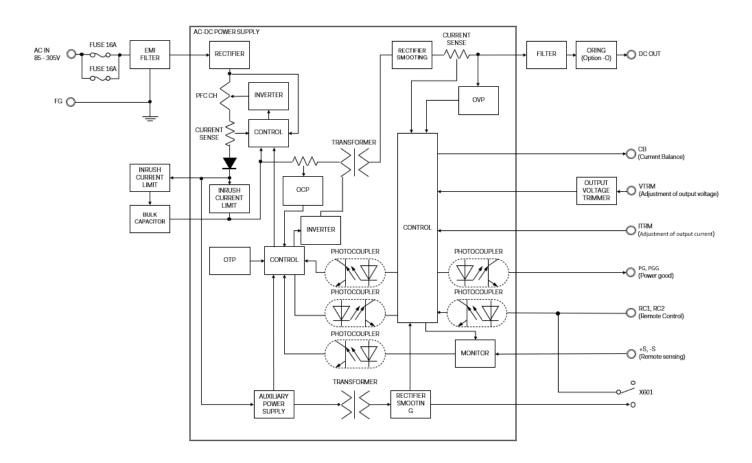
Salety Standards		
UL certificate	UL62368-1 3 <sup>rd</sup> ed. 2019	
	CSA 22.2 No. 62368-1:19 3 <sup>rd</sup> ed.	
CB certificate	IEC 62368-1:2018	
evaluated to	EN62368-1:2020+A11:2020	
	BS EN62368-1:2020+A11:2020	
Certification mark	CE, UKCA, cURus	
RoHS	Yes, Directive 2011/65/EU (2015/863)	
=140		
EMC		
Harmonic attenuator	EN61000-3-2 class A, (C >50% load)	
Flicker	EN61000-3-3	
Conducted noise	EN55032 class B with/without cover	
Radiated noise	EN55032 class A with/without cover	
EMS immunity	Compliance to	
	EN61000-4-2, 3, 4, 5, 6, 8, 11	

# Part numbers and options

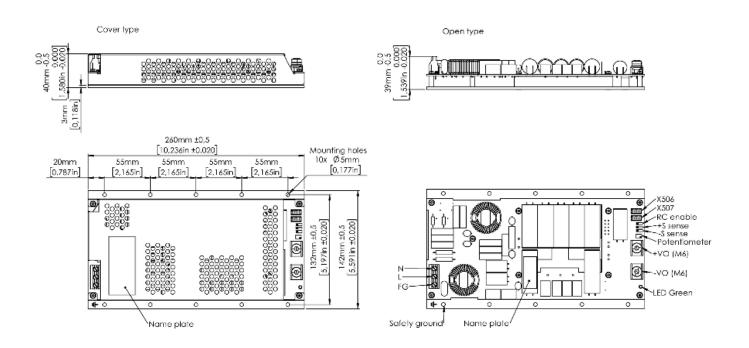
OFI1200A	XX	-	YY
	O/p Voltage		Option
	12: 12VDC		N: Cover
	28: 28VDC		O: Oring (only for 28 & 48)
	48: 48VDC		

www.prbx.com 2022.07.14

### Block diagram



#### Mechanical dimensions



www.prbx.com 2022.07.14