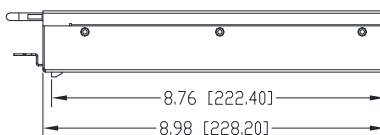
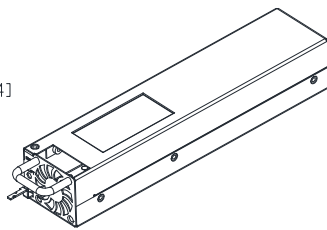
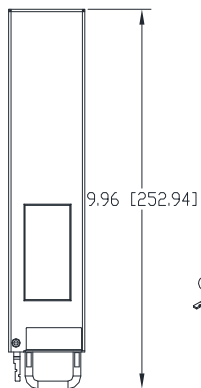


### Product Description

The rectifier EP0300AC48TE is a compact, single phase, hot-pluggable, fan-cooled rectifier and battery charger for stand-alone use or for working in parallel as part of a DC power system equipped with advanced digital controller. The constant output power (300W i.e. 5.5A at 54V) characteristic supplies the specified power over the full output voltage range (48 to 58Vdc).

There is a digital communication (RS-485 bus) between rectifier and controller which allows flexible system design.



### Key Features

#### Efficient rectifier

>90%

#### Rugged rectifier

Exclusively designed to take care of wide line fluctuations and harsh conditions

- Can withstand up to 300Vac (Line-Neutral) without any damage
- Can work up to +75°C

#### Optimum power performance

Constant power between 90V ... 290V ac

#### Compact and light

3 rectifiers can be accommodated in one row (19" shelf) with controller and distribution

### Applications

The typical applications for this rectifier are both in indoor and outdoor environments and include:

- SCADA/ DMS System
- EPBAX
- Broadband
- IP telephony
- Cable Television
- LTE
- GPON
- Enterprise solution

## Technical Specifications

### Input Parameters

Operating Voltage range	90-290 Vac Disconnect: < 90Vac & > 290Vac No damage up to 300Vac
Full Power input voltage Range	90-290 Vac
Frequency	45 to 65Hz
Maximum Current	4A (rms) 230Vac, 100% load
Power Factor	> 0.99 at 230Vac, 100% load
Total Current Harmonic Distortion (THD)	< 10% at 230Vac, 100% load
Efficiency	≥ 90%. 230Vac, 100% load
Input protection	In built surge protection (2kV/3kA) inline fuse

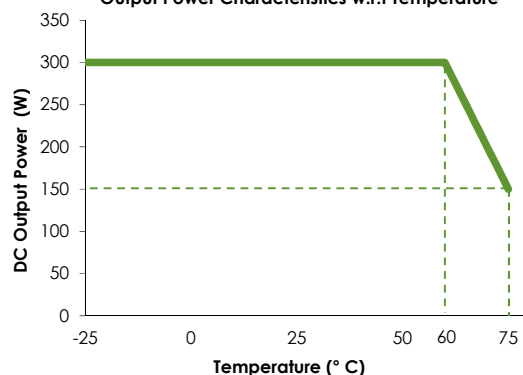
### Output Parameters

Voltage, nominal	48 Vdc
Voltage adjust range	42 ... 57 Vdc (controller)
Rated output Power	300W
Output Current @...V	5.5A@54V
Maximum current	6.25A
Static Voltage regulation	±1% from 10% to 100% load
Noise (Ripple + spikes)	≤ 100 mV <sub>rms</sub>
Load sharing	10%
I/P and O/P connector	Rear side
Output protection	Over voltage shutdown Blocking diode Short circuit proof Over temperature protection

### Other Parameters

Isolation	3.0 kVac – I/P & O/P 1.5 kVac – input & earth 0.5 kVac – output & earth
Visual Indications	Normal LED (Green): 3 status (Blink, OFF, ON) Fault LED (Red): 3 status (Blink, OFF, ON)
Operating temp	-25°C to +75°C
Power De-rating	+60°C to +75°C
Operating Humidity	5% to 95% RH non-condensing > 150k hours Telcordia SR-332, Method 1, Case 3 (Ambient Temperature.: 25°C)
MTBF	< 60dBA at an ambient noise level of 45dBA, and at ambient temperature of 25°C
Audible Noise	
Mechanical	
Width	50.4 mm (2")
Height	45 mm (1.75")
Depth	228.6mm (9")
Weight	0.5 kg (1.1 lbs)

Output Power Characteristics w.r.t Temperature



Note: As a result of continuous product improvement, all specifications are subject to change without prior notice. All performance parameters are valid at Nominal input (230Vac) and nominal output (48Vdc) conditions unless otherwise specified.

### Applicable Standards

Electrical safety	IEC 60950-1 UL 60950-1 CSA 22.2
EMI	As per CISPR-22
EMC	IEC 61000-4-5, (Surge immunity limits) IEC 61000-4-6, (RF Conducted susceptibility immunity limits) IEC 61000-4-3, (Radiated Electromagnetic Field immunity limits) IEC 61000-4-4, (EFT/ Burst immunity limits) IEC 61000-4-2, (ESD Immunity limits)
Harmonics	EN 61000-3-2
Environment	RoHS compliant

### Ordering Information

Product	Description	Comcode
EP0300AC48TEZ	48V, 300W rectifier	150022411

### Country of Sale

South Asia	India
SE Asia	-
NA	-
CALA	-
European	-

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