

# CON-ZAT

## DC-DC CONVERTER



POSITIVE PROBLEM SOLVING **+ =**

The CON-ZAT range of power supplies are able to operate as either an AC-DC Power Source or DC-DC Converter. The units start at maximum output powers of 800W to 3.2kW.

This compact range can achieve efficiencies of up to 90%, providing a lower level of input energy to power your application. The units incorporate a passive power factor correction circuit and are protected against over current and short circuits by an automatic, self regulating electronic current limit. All of the components are derated to provide long term reliability and trouble free use.

- + Customised Versions Available on Request
- + Series Operation up to 500V
- + High Efficiency, up to 90%
- + Master/Slave Option
- + AC/DC Input

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## FURTHER DETAILS

Maximum output current can be adjusted to a safe level for the DUT. Optional analogue control and alarm relay models are available on request.

### SELECTION TABLE

Part Number	Max Power	VAC Input	VDC Input	Nominal V <sub>OUT</sub>	V <sub>OUT</sub> Range	Output Current
CON-ZAT 800-12-50	800W	55 - 264VAC	78 - 340VDC	12VDC	0 - 18VDC	0 - 50A
CON-ZAT 800-24-30	800W	55 - 264VAC	78 - 340VDC	24VDC	0 - 36VDC	0 - 30A
CON-ZAT 800-36-20	800W	55 - 264VAC	78 - 340VDC	36VDC	0 - 54VDC	0 - 20A
CON-ZAT 800-48-15	800W	55 - 264VAC	78 - 340VDC	48VDC	0 - 72VDC	0 - 15A
CON-ZAT 800-72-10	800W	55 - 264VAC	78 - 340VDC	72VDC	0 - 108VDC	0 - 10A
CON-ZAT 800-96-7.5	800W	55 - 264VAC	78 - 340VDC	96VDC	0 - 144VDC	0 - 7.5A
CON-ZAT 1600-24-60	1600W	55 - 264VAC	78 - 340VDC	24VDC	0 - 36VDC	0 - 60A
CON-ZAT 1600-36-45	1600W	55 - 264VAC	78 - 340VDC	36VDC	0 - 54VDC	0 - 40A
CON-ZAT 1600-48-30	1600W	55 - 264VAC	78 - 340VDC	48VDC	0 - 72VDC	0 - 30A
CON-ZAT 3000-12-200	3000W	70 - 264VAC	70 - 369VDC	12VDC	0 - 18VDC	0 - 200A
CON-ZAT 3000-24-127	3200W	70 - 264VAC	70 - 369VDC	24VDC	0 - 36VDC	0 - 127A
CON-ZAT 3000-36-95	3200W	70 - 264VAC	70 - 369VDC	36VDC	0 - 54VDC	0 - 95A
CON-ZAT 3000-48-64	3200W	70 - 264VAC	70 - 369VDC	48VDC	0 - 72VDC	0 - 64A
CON-ZAT 3000-72-42	3200W	70 - 264VAC	70 - 369VDC	72VDC	0 - 108VDC	0 - 42A
CON-ZAT 3000-110-25	3000W	70 - 264VAC	70 - 369VDC	110VDC	0 - 165VDC	0 - 25A
CON-ZAT 3000-160-20	3000W	70 - 264VAC	70 - 369VDC	160VDC	0 - 230VDC	0 - 20A
CON-ZAT 3000-220-14	3000W	70 - 264VAC	70 - 369VDC	220VDC	0 - 320VDC	0 - 14A

\*Sense models, IP44 enclosures and 19" enclosures available on request

### OPTIONS

CODE	DESCRIPTION
/H <sup>1</sup>	Trimmer adjustable model with power fail relay alarm (1.5m modular connector)
/AIH <sup>1</sup>	Analogue controllable model with power fail relay alarm (analogue + relay cables)
/TH <sup>1</sup>	Temp. comp model with power fail relay alarm (temp. comp + relay cables)
/AI <sup>2</sup>	Analogue controllable model by external 0-5 VDC
/S-RS-232 <sup>1</sup>	RS-232 control bus in and out
/SH <sup>1</sup>	Slave unit with relay, RS-232 bus input only
/T <sup>2</sup>	Temperature compensation model

<sup>1</sup> Master unit or slave with RS-232 bus output can not include the relay alarm

<sup>2</sup> Cable sets with modular connectors are included in packing: 1.5m cable set for analog control and 2.5m for or temp.comp models

## TECHNICAL DATA

	CON-ZAT 800	CON-ZAT 1600	CON-ZAT 3000
VAC <sub>IN</sub> Range For Max. P <sub>OUT</sub>	55 - 264VAC	55 - 264VAC	70 - 264VAC
VAC <sub>IN</sub> Range For Reduced P <sub>OUT</sub>	55 - 200VAC	50 - 200VAC	55 - 230VAC
VDC <sub>IN</sub> Range For Max. P <sub>OUT</sub>	78 - 340 VDC / max 600W	78 - 340VDC	70 - 369VDC
VDC <sub>IN</sub> Range For Reduced P <sub>OUT</sub>	78 - 200VDC	50 - 200VDC	70 - 230VDC
Input Current	4.5A	9A	16A [max]
Power Factor	>0.99	>0.99	>0.95
Efficiency	85 - 90% [230VAC input, 10 - 100% load]	>88% [230VAC input, 10 - 100% load]	89% [230 VAC input, 50 - 100% load]
Inrush Current	<30A, limited by NTC resistor	<30A, cold start	Soft start
Input Fuse	6.3A line (inside the unit)	10A (inside the unit)	Inside the unit
Output Ripple	{f>50Hz} <50mVrms	{f>50Hz} <30mVrms	<1% of output voltage, peak to peak
Status LED Indication	Orange power OK LED		
Isolation (Input Chassis)	1500VAC		
Isolation (Input Output)	3750VAC		
Isolation (Output Chassis)	500VAC		
Protection Class	Mechanical: IP20 metal enclosure, Electrical Class I		
EMC	EN55022B, EN50081-1, EN50082-2	EN55022B, EN50081-1, EN50082-2	EN50081-1, EN55022 class B, EN50082-2
Safety	EN60950, EN60335-2-29 +A2	EN60335-2-29 +A2	Class I, EN 60355-1:1994 + A11:1995+A1:1996+A12:1996 IEC 335-2-29:1994
Dimensions	220 × 112 × 73mm	267 × 135 × 85mm with rubber ends	400 × 250 × 80 mm
Weight	1.5kg	1.9kg without output cables	7.1kg without output cables
Mounting	DIN-rail, wall, bench	Wall, bench	Wall, bench
Connector (Input)	Power cord 1.5m	Input power cord	Input power cord
Connector (Output)	12V model: 2m 10mm <sup>2</sup> output cables 24-96V models: 6mm <sup>2</sup> screw terminals +2m output cables	10m <sup>2</sup> 2m output cables	12-48V models: copper bus bar terminals 72V model: 10m <sup>2</sup> 1.5m output cables 110-220V models: 6m <sup>2</sup> 1.5m output cables
Cooling	Temperature controlled fan		
Overcurrent Protection	Output of the unit is protected against over current and short circuits by automatic, self-resetting electronic current limit		
Reverse Polarity Protection	None	None	With fuse
Humidity	95% non condensing		
Series/ Parallel Connection	Parallel operation: no restrictions, passive load sharing. Series operation: up to 500V total voltage		
Operating Temp. Range	Full power: typically -25°C to 50°C Reduced power: +50°C to +70°C Derating at 2.5% /°C	Full power: typically -25°C to 40°C Reduced power: +40°C to +70°C Derating at 1.7% /°C	Full power typically: -20° to +45°C Reduced power: +45°C to +70°C Derating at 4% /°C

Every effort is made to ensure that the information provided within this technical summary is accurate. However, ETPS Ltd must reserve the right to make changes to the published specifications without prior notice. Where certain operating parameters are critical for your application we advise that they be confirmed at the time of order. ETPS Ltd specialises in modifying its proven platforms to suit your needs. Please contact our office if your requirement is non-standard. Please note that your actual unit may differ from those shown.



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Tel: +44 (0) 1246 452909  
Sales: 0800 612 95 75  
sales@etps.co.uk  
www.etps.co.uk

ETPS Ltd  
Unit 14, The Bridge  
Beresford Way, Chesterfield  
S41 9FG



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