



\* Example Photo

# JE/SM RANGE

## Battery Charger / Power Supply

DS-388/2

**JE/SM** range comprises a family of convection cooled battery chargers and standard power supplies and are capable of powering a wide range of electronic equipment. Battery chargers can be operated, and are specifically approved as stand alone units. The chargers are close tolerance, constant voltage type with constant current limit features, enabling fast charge of discharged batteries. The same family of products can also be used for non-battery charging applications. In this case the output voltages are set to the standard nominal levels of 12V / 24V or to a specific level within the available output voltage range.

For ease of installation, most models utilise IEC320 connectors for the input and fast-on tabs for the output. These versatile units can also be fitted with a range of auxiliary functions (depending on model), such as charger fail alarm, boost, temperature compensation etc.

### Output Ratings

Model Number	Nominal O/P Voltage	O/P Current	Nominal O/P Power
JE/SM12-5	12.0 Vdc	5.0A	60W
JE/SM12-10	12.0 Vdc	10.0A	120W
JE/SM12-25	12.0 Vdc	25.0A	300W
JE/SM12-50	12.0 Vdc	50.0A	600W
JE/SM24-5	24.0 Vdc	5.0A	120W
JE/SM24-12.5	24.0 Vdc	12.5A	300W
JE/SM24-30	24.0 Vdc	30.0A	600W

### Input Specification

Voltage Range, $V_{IN}$	216-264V AC	
Frequency	47 - 63Hz	
Input Current	<i>Nominal Power Rating</i>	<i>Maximum Input Current</i>
	60W	0.8A
	120W	1.2A
	180W	1.9A
	300W	2.5A
	600W	4.9A
Inrush Current	20A (Hot) 100A (Cold)	
Leakage Current	<1.0mA @ 240V AC	

### Output Specification

Ripple & Noise	1% Ripple, 2% Noise pk-pk (Maximum)
Line Regulation	100mV
Load Regulation	100mV
Efficiency	78% Typ.
Overload Protection	Constant Current Limit
Over Voltage Protection	110% - 120% Shutdown (Manual Reset)
Reversed Battery	Internal diode, External fuse MUST be fitted.
Over Temp. Protection	Output Reduction Until Normal Operating Temperatures are Resumed

### FEATURES

- NATURALLY COOLED
- HIGH PERFORMANCE
- HIGH EFFICIENCY
- HIGH RELIABILITY
- FULLY AUTOMATIC OPERATION
- SUITABLE FOR ALL BATTERY TYPES
- CONSTANT VOLTAGE
- CURRENT LIMITED
- SOFT-START CIRCUIT
- SHORT CIRCUIT PROTECTED
- OVERLOAD PROTECTED
- OVER VOLTAGE PROTECTED
- OVER TEMP. PROTECTED
- REVERSE BATTERY PROTECTED (External Fuse Required)
- LOW RIPPLE OUTPUT
- OUTPUT FAIL RELAY DRIVE

### APPLICATIONS

- STANDBY GENERATORS
- ALARM SYSTEMS
- MARINE
- INDUSTRIAL CONTROL SYSTEMS
- ELECTRIC VEHICLES
- TELECOMS EQUIPMENT
- RADIO EQUIPMENT

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## Isolation

Withstand Voltage	Input – Output 1.5kV AC Input – Earth 1.5kV AC Output – Earth 500V DC
Isolation Resistance	500V DC / 100M Ohms (Output-Earth)

## Environmental Specification

Working Temperature	0°C to +70°C - Derate 2.5% / °C Above 40°C
Working Humidity	0% - 85% RH
Storage Temperature	-10°C to +80°C
Storage Humidity	0% - 95% RH

## Finish

Covers - Black powder coat.  
All aluminium parts are finished alocrome gold.

## Termination

AC IEC320 Inlet or 3-core flex.  
DC 0.25" Faston Connectors or M4 Screw.

Please note that connector types are specific to certain models.

## Output Fail Relay Drive

A relay can be connected between the output fail relay drive connection and the positive output terminal. This relay must be fused. When the chargers output is within limits the relay is energised, and will de-energise when a fault condition arises.

## Ordering Information

Refer to 'Output Ratings' table overleaf for specific model numbers.  
Please specify desired float voltage or battery type when ordering.

## DIMENSIONS

Nominal O/P Rating	A	B	C	D	E	F	G	H	Weight (kgs)
60W	182	113	67	200	6	N/A	N/A	N/A	1.0
120W	198	112	67	222	6	90	11	N/A	1.3
180W	260	114	85	270	5	92	10	141*	1.9
300W	310	108	98	320	5	92	8	145	2.5
600W	323	263	167	291	7	200	32	N/A	5.0

All dimensions are in millimetres - 60W units have two 6mm mounting holes on centre line - \* applies to 12V units only

