



60W Single Output Moistureproof Adaptor

OWA-60E series

BS EN/EN60335-1
BS EN/EN61558-1,2-16

CB

IEC61558-1,2-16



TPTC004



UK



VI

IP67

(for power body)



■ Applications

- Robotic lawn mower
- Household appliance
- Battery charging
- General electronic products in dusty or humid environment

■ Features

- Universal AC input / Full range
- High efficiency up to 91%
- No load power consumption <0.15W
- Comply with EU ErP and CoC Version 5
- Protections: Short circuit / Overload / Over voltage / Over temperature
- Class II power unit, no FG
- Fully isolated plastic case
- Fanless design, cooling by free air convection
- Various DC plug quick adapter accessory available
(Plug kit sold separately, please refer to : https://www.meanwell.com/upload/pdf/DC_plug.pdf)
- 5 years warranty

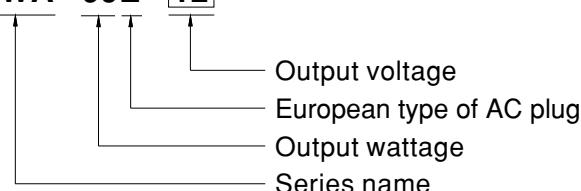
■ Description

OWA-60E is a 60W AC/DC, class II (no FG) external power supply series pinpointing the moistureproof feature. The fully-potted silicone inside the plastic enclosure enhances the heat dissipation; it also benefits that the power body of OWA-60E achieves IP67 level so that this series specializes the application in which the damp, humidity or dust resistance is needed for the external power supply. OWA-60E follows the latest energy efficiency demand, and is compliant with EU ErP and meets Code of Conduct(CoC) Version 5; the no load power consumption is less than 0.15W. It is certified with BS EN/EN 61558-2-16; moreover, the compliance to BS EN/EN 60335-1 for selected models can greatly simplify the system design such as household appliances.

OWA-60E adopts the universal input range from 90VAC to 264VAC. With the working efficiency up to 91%, OWA-60E is cooled by free air convection; the working temperature ranges from -35°C to +70°C.

■ Model Encoding

OWA - 60E - 12





SPECIFICATION

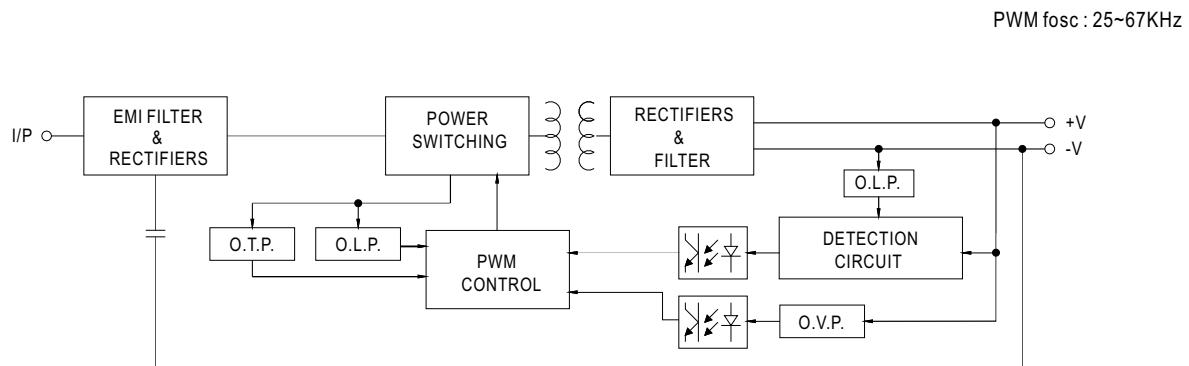
MODEL	OWA-60E-12	OWA-60E-15	OWA-60E-20	OWA-60E-24	OWA-60E-30	OWA-60E-36	OWA-60E-42	OWA-60E-48	OWA-60E-54
OUTPUT	DC VOLTAGE	12V	15V	20V	24V	30V	36V	42V	48V
	RATED CURRENT	5A	4A	3A	2.5A	2A	1.67A	1.5A	1.25A
	RATED POWER	60W	60W	60W	60W	60W	60.12W	63W	60.48W
	RIPPLE & NOISE (max.) Note.2	150mVp-p	150mVp-p	150mVp-p	150mVp-p	200mVp-p	200mVp-p	250mVp-p	250mVp-p
	VOLTAGE TOLERANCE Note.3	±4.0%	±4.0%	±4.0%	±3.0%	±3.0%	±2.0%	±1.0%	±1.0%
	LINE REGULATION	±1.0%	±1.0%	±1.0%	±1.0%	±1.0%	±1.0%	±1.0%	±1.0%
	LOAD REGULATION	±1.5%	±1.0%	±1.0%	±1.0%	±1.0%	±1.0%	±1.0%	±1.0%
	SETUP, RISE TIME Note.4	500ms, 80ms/230VAC	1000ms, 80ms/115VAC at 95% load						
INPUT	HOLD UP TIME (Typ.)	10ms at full load	115VAC / 230VAC						
	VOLTAGE RANGE	90 ~ 264VAC	127 ~ 370VDC						
	FREQUENCY RANGE	47 ~ 63Hz							
	EFFICIENCY (Typ.)	88%	89%	89%	90%	90%	90%	90%	91%
	AC CURRENT (Typ.)	1.2A / 115VAC	0.7A / 230VAC						
	INRUSH CURRENT (Typ.)	COLD START 65A(twidth=750μs measured at 50% Ipeak) at 230VAC							
PROTECTION	OVERLOAD	105 ~ 115%							
		Protection type : Hiccup mode, recovers automatically after fault condition is removed							
	SHORT CIRCUIT	Hiccup mode, recovers automatically after fault condition is removed							
	OVER VOLTAGE	14 ~ 16V	17.5 ~ 23V	23 ~ 27V	28 ~ 34V	34 ~ 40V	41 ~ 50V	46 ~ 54V	53 ~ 62V
ENVIRONMENT		Protection type : Shut down o/p voltage, re-power on to recover							
	OVER TEMPERATURE	Shut down o/p voltage, re-power on to recover							
	WORKING TEMP.	-35 ~ +70°C (Refer to "Derating Curve")							
	WORKING HUMIDITY	20 ~ 95% RH non-condensing							
	STORAGE TEMP., HUMIDITY	-40 ~ +80°C, 10 ~ 95% RH							
SAFETY & EMC	TEMP. COEFFICIENT	±0.03%/°C (0 ~ 50°C)							
	VIBRATION	10 ~ 500Hz, 5G 12min./1cycle, period for 72min. each along X, Y, Z axes							
	SAFETY STANDARDS	BS EN/EN61558-1,-2-16 listed; BS EN/EN60335-1 listed(except for OWA-60E-48,54); EAC TP TC 004, IP67 approved for power body							
	WITHSTAND VOLTAGE	I/P-O/P:3.75KVAC							
	ISOLATION RESISTANCE	I/P-O/P:100M Ohms / 500VDC / 25°C / 70% RH							
OTHERS	EMC EMISSION	Compliance to BS EN/EN55032 (CISPR32) Class B, BS EN/EN55014-1, BS EN/EN61000-3-2 class A, BS EN/EN61000-3-3;EAC TP TC 020							
	EMC IMMUNITY	Compliance to BS EN/EN61000-4-2,3,4,5,6,8,11, BS EN/EN55024, BS EN/EN55014-2, light industry level (surge L- N : 2KV), criteria A;EAC TP TC 020							
	MTBF	292.8K hrs min. MIL-HDBK-217F (25°C)							
NOTE	DIMENSION	130*53*35mm							
	PACKING	0.41Kg; 16pcs/11Kg/0.85CUFT							
1. All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25°C of ambient temperature. 2. Ripple & noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uf & 47uf parallel capacitor. 3. Tolerance : includes set up tolerance, line regulation and load regulation. 4. Length of set up time is measured at cold first start. Turning ON/OFF the power supply may lead to increase of the set up time. ※ Product Liability Disclaimer : For detailed information, please refer to https://www.meanwell.com/serviceDisclaimer.aspx									



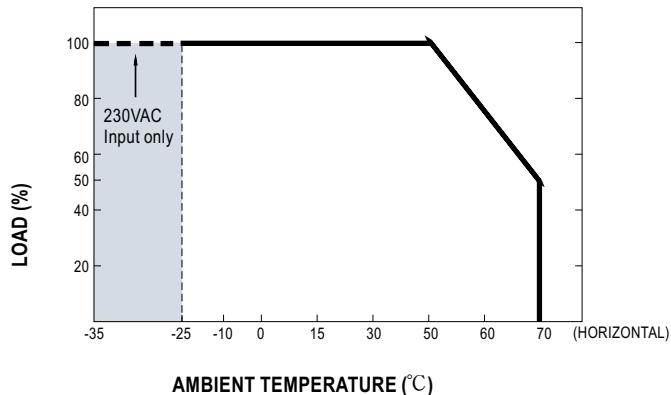
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OWA-60E series

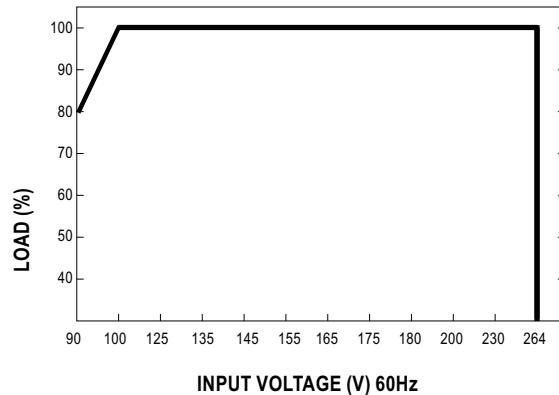
■ Block Diagram



■ Derating Curve

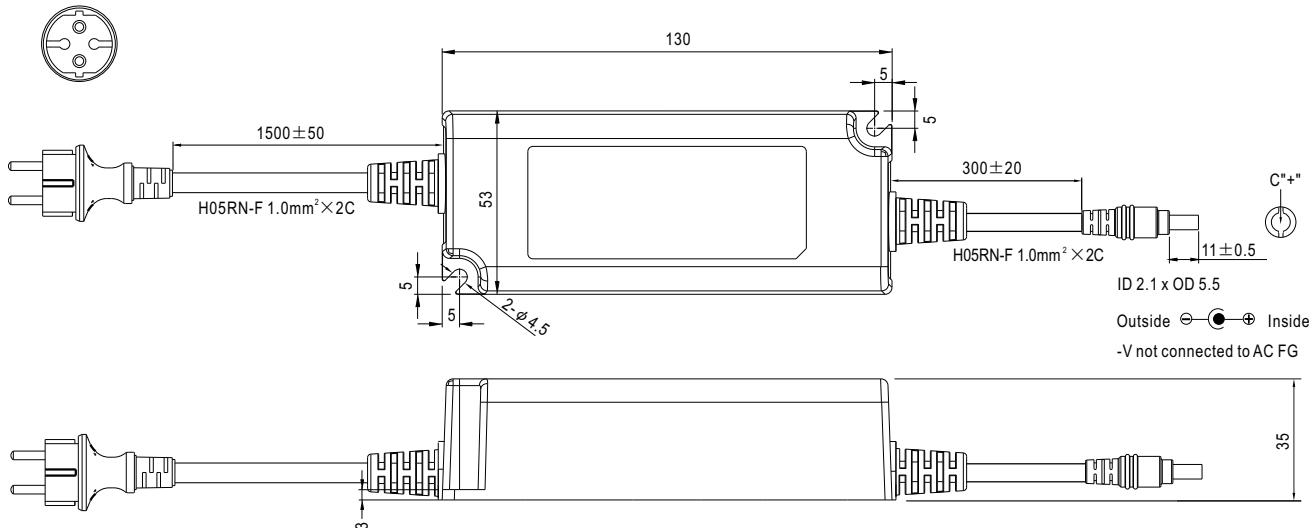


■ Static Characteristics

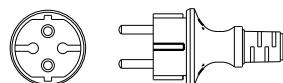


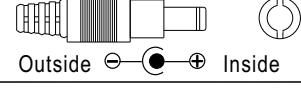
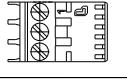
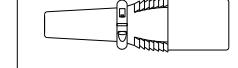
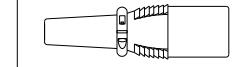
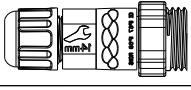
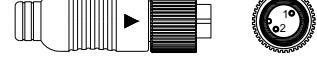
■ Mechanical Specification

CASE NO.: OWA-60 Unit:mm


■ Input Plug Type

All standard models : CEE 7/7


■ Output Plug Assignment

Model Category	Plug Description	Plug Picture	PIN NO.	OUTPUT
For standard model	2.1φ x 5.5φ x 11 mm, center +, tuning fork type		CENTER	+V
For optional model	Lumberg 3611 03, or equivalent		1 2 3	+V floated -V
For optional model	XLR 3P, NEUTRIK NC3MX, or equivalent		1 2,3	+V -V
For optional model	XLR 4P, NEUTRIK NC4MX, or equivalent		1,2 3,4	+V -V
For optional model	CHOGORI 22002411-01 or equivalent		1 2	+V -V
For optional model	Unicable UT-D170F4-2P or equivalent		1 2	+V -V
For optional model	Unicable UT-D224-2P or equivalent		1 2	+V -V

※ For details, please contact MEAN WELL.

■ Installation Manual

 Please refer to : <http://www.meanwell.com/manual.html>