POWER SUPPLIES SERIES E18

High quality plug-in power supplies

FEATURES:

- compact design
- reliable and powerful
- compliant with Energy Star Compliance Level VI and ErP Ecodesign (Ecoproject)
- high power output
- no load power consumption under 100 mW

APPLICATIONS:

- consumer electronics
- telecommunication devices
- electronic office equipment
- hardware
- home and building automation system
- audio-visual equipment
- cash registers and vending machines

E18 is a series of small and efficient plug-in power supplies with universal application. Its design is based on high-quality electronic components that allow for continuous, long-term operation. It is reliable, fully protected and stable. Provides high efficiency and excellent specification. 5 years warranty included.

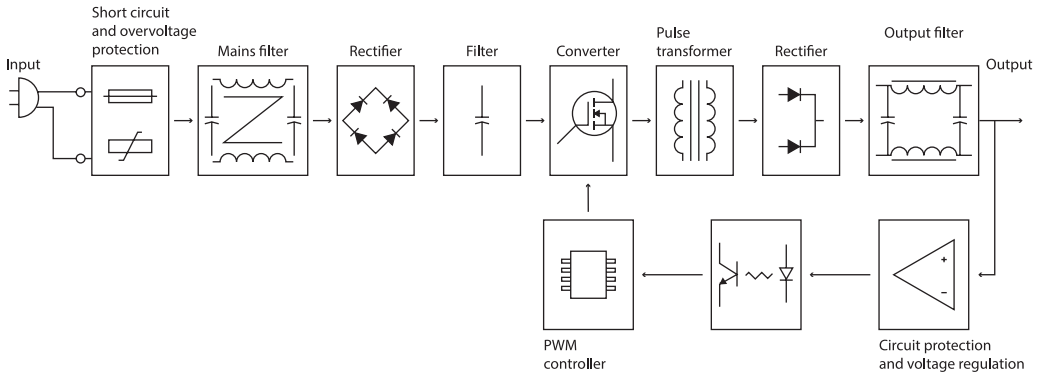
TECHNICAL SPECIFICATION

Group	Parameter	E18-1505	E18-1512	E18-1515	E18-1812	E18-1824	Conditions
Input	Rated input voltage	100–240 VAC					
	Input voltage range	90–264 VAC					
	Mains frequency range	47–63 Hz					
	AC current (max.)	0.6 A					At 100 VAC and full load
	Inrush current (max.)	80 A					At 265 VAC and full load
	No load power consumption	0.1 W					
	Input leakage current (max.)	0.15 mA	0.15 mA	0.15 mA	0.1 mA	0.1 mA	At 264 VAC
	Power factor correction	No					
	Typical power factor	0.5					
Output	Rated output voltage	5 V	12 V	15 V	12 V	24 V	
	Rated output power	15 W	16 W	15 W	18 W	18 W	
	Rated output current	3 A	1.33 A	1 A	1.5 A	0.75 A	
	Energy efficiency	81.5%	84%	84%	85%	85%	At 230 VAC
	Energy conversion efficiency	78%	78%	76%	78%	76%	At 10% load
	Energy efficiency class	DoE Level VI, ErP					
	Line regulation	±2%					
	Load regulation	±5%	3%	3%	±3%	±3%	
	Ripples and noise	150 mVp-p	150 mVp-p	150 mVp-p	120 mVp-p	120 mVp-p	At 100 VAC
	Minimal output current required	No					
	Hold up time (max.)	3 ms					At 100 VAC and full load
	DC voltage rise time (max.)	30 ms					At 100 VAC and full load
	Turn on delay time (max.)	500 ms					At 100 VAC and full load
Environmental	Working temperature range	–5 to +44°C					
	Working humidity range	5% to 95% RH					At 40°C
	Storage temperature range	–40°C to +80°C					
	Cooling method	Free air circulation					Convection cooling
Protection	Input: overvoltage (OVP), undervoltage (UVP)	OVP, UVP					
	Output: overcurrent (OCP), short circuit (SCP), overvoltage (OVP)	OCP (120–140%), SCP, OVP					
	Output overvoltage protection	Yes, 10 V	Yes, 19 V	Yes, 24 V	Yes, 19 V	Yes, 36 V	
	Thermal switch	Yes					"Hiccup" mode
	Automatic recovery on fault remove	Yes					In the controller
Safety and EMC	Withstand isolation voltage (min.)	3 kVAC (input to output)					5 mA, 1 min
	Insulation resistance (min.)	100 MΩ					500 VDC
	Insulation class	II					Reinforced insulation
	Safety compliance	EN 62368-1:2020+A11:2020					
	EMC compliance	EN55032 Class B, EN61000-4-2, -4-4, -4-5					
	Marking	CE, UKCA, RoHS					

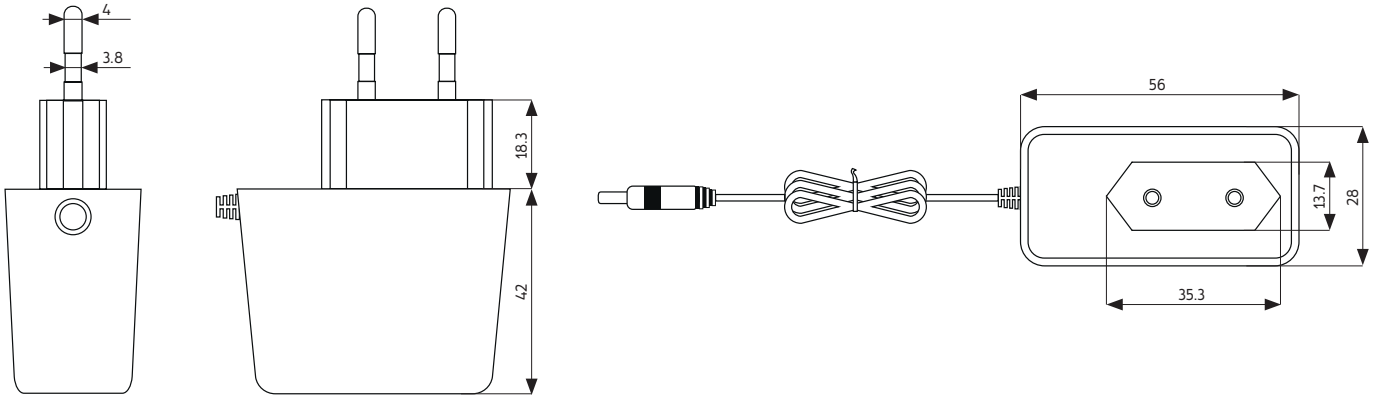
Mechanical and features	Enclosure type	Black ABS plastic					
	LED indicador	No					
	Dimension	56 × 28 × 42 mm					
	Weight	95 g	78 g	80 g	75 g	75 g	
	Standard DC output connector - 211	DC Jack straight 2.1 × 5.5 × 10 mm					Plus in the center
	Output cable	1.5 m, AWG18	1.5 m, AWG24	1.5 m, AWG24	1.5 m, AWG24	1.5 m, AWG24	
	Input connector	EU plug					
	Single package size	85 × 80 × 30 mm					
	Packing	472 × 290 × 310 mm					159 items
	Manufacturing	China					
	Warranty	5 years					
	EAN	5904139610329	5904139614686	5904139609972	5904139610374	5904139610381	

Notes:
Unless otherwise stated, all parameters are specified at 230 VAC input voltage, 50 Hz, ambient temperature 25°C and relative humidity 70% for rated load output. The values of parameters related to the output voltage regulation is measured from low to high line or for load changes from 0 to 100%, respectively. The power supply is considered as an independent unit, but the final equipment still need to reconfirm that the whole system complies with the EMC directives. If the PSU is installed in the final device as a subassembly, the tests should be repeated to verify that the system has been met compliance. Detailed technical data are available on request.

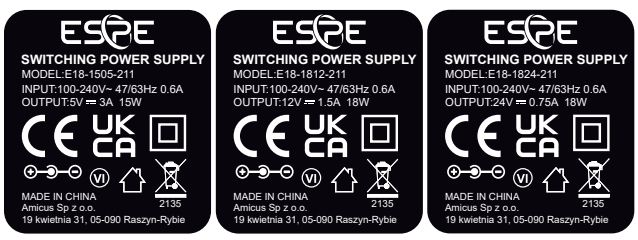
BLOCK DIAGRAM



MECHANICAL SPECIFICATION



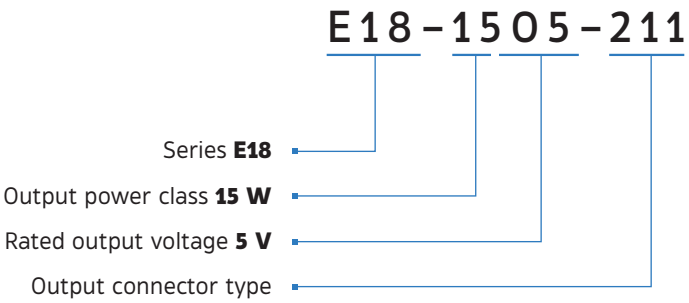
PRODUCT LABEL



Legend to the label icons:

- II safety class: no grounding is required, no dangerous voltage even in an emergency situation will appear on output
- power supply intended for indoor use only
- high efficiency supply with small power consumption at no load, meeting requirements of 6th level rating Energy Star Compliance and European ErP regulations
- polarization: plus in the middle, minus outside
- the product must not be disposed of in normal waste containers

MARKING SYSTEM

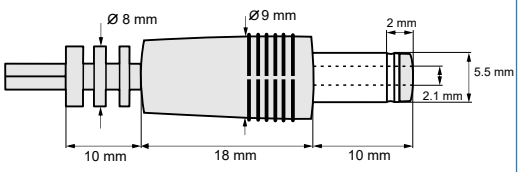


Standard output connector DC Jack 2.1 × 5.5 × 10 mm (plus in the center)

21 – Plug type DC – DC Jack 2.1 × 5.5 × 10 mm

1 – Plug shape DC and polarization – Straight plug, plus in the center 

STANDARD OUTPUT DC 211 CONNECTOR

Index	Type	Size inside [mm]	Size outside [mm]	Clamp type	Technical drawing	Explanatory picture
211	Straight	2.10	5.50	F 		

VARIANTS OF OUTPUT DC CONNECTORS

Type and plug size

00	None
07	0.7 / 2.35 mm
08	0.8 / 3.0 mm
10	1.1 / 3.0 mm
11	1.1 / 3.5 mm
13	1.3 / 3.45 mm
15	1.5 / 5.5 mm
40	1.7 / 4.0 mm
48	1.7 / 4.8 mm

17	1.7 / 5.5 mm
21	2.1 / 5.5 mm
25	2.5 / 5.5 mm
30	3.0 / 5.5 mm
J2	Jack 2.5 mm
UA	USB-A
UM	USB micro
UC	USB Type C

Plug shape and polarization

0	None
1	Straight
2	Angled
3	Straight (CN – reversed polarization)
4	Angled (CN – reversed polarization
6	Socket
7	Socket (CN – reversed polarization)