AC-DC Power Adapters

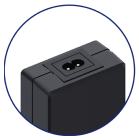
MKJ series | Desktop power adapters | Constant-voltage DC output | Up to 150W

MKJ - Desktop

Representative product view | DC output cord

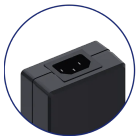


AC INLET OPTIONS



C8

Class II | 2-pole



C14

Class I | 3-pole



C6

Class I | 3-pole

GLOBAL CERTIFICATION OPTIONS

UL | CE | FCC | KC | UKCA | cUL | RCM | PSE | CCC | CB

Certification availability depends on the model, construction, rating and market. See page 6 for documented scope.

REPRESENTATIVE OUTPUT RATINGS (Representative models and ratings; custom voltage/current available)

Output	Current	Power	Interface
5.0V DC	10.000A	50.0W	DC cord
12.0V DC	10.000A	120.0W	DC cord
15.0V DC	8.000A	120.0W	DC cord
20.0V DC	6.000A	120.0W	DC cord
24.0V DC	6.250A	150.0W	DC cord
30.0V DC	5.000A	150.0W	DC cord
36.0V DC	3.000A	108.0W	DC cord
48.0V DC	3.000A	144.0W	DC cord

Each model has a fixed output. Voltage, current, power and construction limits apply together; see page 2.

Electrical and Operating Data

Input ratings, output limits and evaluated operating conditions

INPUT AND OUTPUT

Parameter	Specification
Input voltage / frequency	100-240V AC, 50/60Hz
Rated input current	2.5A Max.
Output range	5.0-48.0V DC; up to 16.0A. Catalogue offering up to 150W. Voltage, current and power limits apply simultaneously.
Output type	Fixed, constant-voltage DC output through an output cord

OUTPUT RATING LIMITS

Output voltage	Max. current	Certified power limit	Catalogue power limit
5.0-8.9V DC	16.000A	80.00W	80.0W
9.0-18.0V DC	12.000A*	120.00W	120.0W
18.1-24.0V DC	6.360A	152.64W	150.0W
24.1-48.0V DC	6.330A	152.64W	150.0W

Certified limits above follow CCC 2022010907473626 / 2022010907473628. *The supplied European safety documents limit the 9.0-18.0V band to 10.0A. Always satisfy Iout <= Pmax / Vout and the exact regional certificate / nameplate rating. The catalogue offering remains up to 150W.

OPERATING CONDITIONS AND CONSTRUCTION

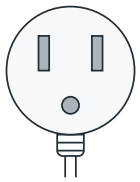
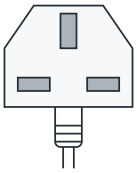
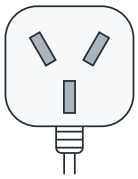
Parameter	Evaluated scope
Construction / application	Desktop; Class I C6 / C14 or Class II C8. Power supply for audio/video and ICT equipment.
Degree of protection	IP20 in the supplied CB / European safety documents.
Operating altitude	2,000m or less under the supplied CCC approvals.
Protection functions	Catalogue features: overcurrent, overvoltage, short-circuit and overtemperature protection; confirm the selected configuration.

Confirm operating / storage temperature, humidity, ripple and output tolerance for the final application.

Plug Options and Dimensions

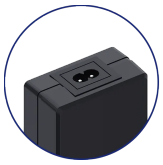
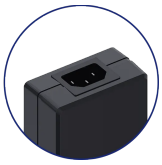
Regional AC cord plugs, desktop inlets and enclosure reference drawing

Worldwide Use

North America / US	Europe / EU	United Kingdom / UK	Australia / AU
			

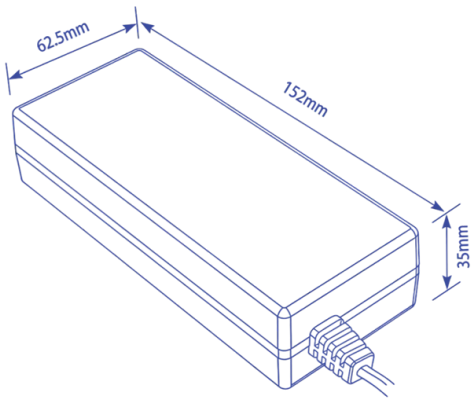
Representative earthed AC cord plug faces, not to scale. Select the cord set for the inlet, protection class and destination market. Class II cord sets use the corresponding approved plug construction.

AC INLET OPTIONS

C8 inlet	C14 inlet	C6 inlet
		
Class II | 2-pole	Class I | 3-pole	Class I | 3-pole

ENCLOSURE OUTLINE AND DIMENSIONS (Representative outline dimensions; for drawings of other versions, please email info@merryking.com.)

MKJ - Desktop



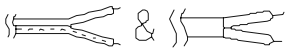
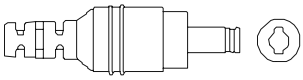
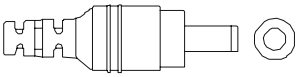
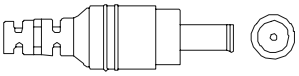
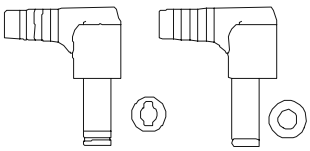
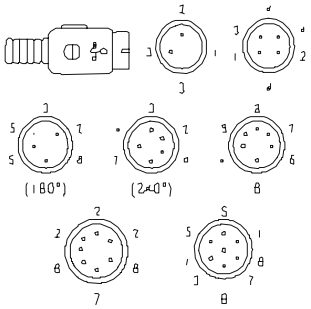
Dimensions (mm): 152 x 62.5 x 35

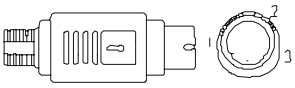
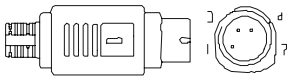
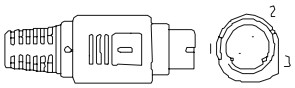
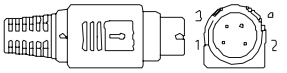
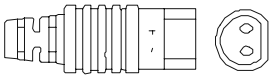
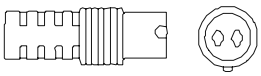
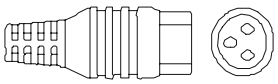
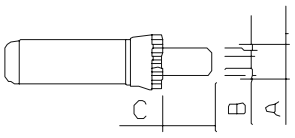
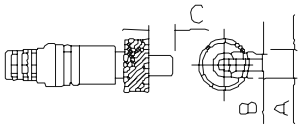
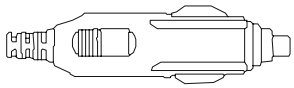
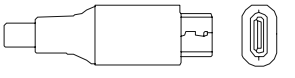
Reference drawing is not to scale; units: mm. Confirm the approved drawing and tolerances for the selected C8, C6 or C14 version.

Output Cable Plug Options

Connector styles, dimensions and outline drawings (Representative specifications; other requirements can be customized.)

Dimension values in mm unless stated otherwise. Connector choice is configuration-dependent.

Plug type	Specification	Outline / drawing
Stripped & tinned	NC	
Barrel type	5.5 x 2.1	
	5.5 x 2.5	
	4.75 x 1.7	
	4.0 x 1.7	
	3.5 x 1.35	
	2.35 x 0.7	
	6.3 x 3.0	
Barrel type	6.5 x 1.4	
Barrel type Right angle	5.5 x 2.1	
	5.5 x 2.5	
	4.75 x 1.7	
	4.0 x 1.7	
	3.5 x 1.35	
	2.35 x 0.7	
	6.3 x 3.0	
	6.5 x 1.4	
DIN (male)	3Pin	
	4Pin	
	5Pin (180 deg)	
	5Pin (240 deg)	
	6Pin	
	7Pin	
	8Pin	

Plug type	Specification	Outline / drawing
Power mini-DIN (male)	3Pin Molding	
	4Pin Molding	
	3Pin Assembly / lock	
	4Pin Assembly / lock	
Interchangeable connector	2Pin	
	2Pin	
	3Pin	
Switchcraft locking type	A:5.5 B:2.5 C:0.375 in (9.52 mm)	
	A:5.5 B:2.5 C:0.475 in (12.06 mm)	
	A:5.5 B:2.1 C:0.375 in (9.52 mm)	
	A:5.5 B:2.1 C:0.475 in (12.06 mm)	
DC plug with screw	A:5.5 B:2.1 / 2.5 C:7.5	
	A:5.5 B:2.1 / 2.5 C:10.1	
Cigarette lighter	-	
USB Type-C	-	

Cable and Configuration Options

AC/DC cord construction and final configuration requirements

AC AND DC CORDS

Option	Description
AC cord options	EU / KC / UK / AU / US / JP / AR / CN plug options. 1.5 m, 2.0 m and other lengths by agreement.
AC connection	Detachable cord with C8 / C14 / C6 inlet. Select the matching appliance connector and regional mains plug.
DC cord style / length	Round or flat cord; 1.2 m, 1.5 m and 2.0 m; other lengths by agreement.
Conductor and connector selection	Specify wire gauge and connector current rating for the selected output. Confirm cable length, voltage drop and temperature rise.

Confirm conductor gauge, cord resistance, length tolerance and connector current rating for the final assembly. Cable construction and length affect voltage drop and operating temperature.

COMPLETE THE CONFIGURATION WITH

Selection	Details to confirm
Electrical output	Output voltage, current and power; individual nameplate rating.
Enclosure and AC connection	C8 / C14 / C6 inlet and matching approved cord set. Protection class, regional AC cord and destination market.
Output interface	DC output cord; connector style from the preceding page.
Connector and cord	Connector dimensions, insertion length, polarity, cable length and gauge.
Approvals	Certificate scope for the exact voltage, current, power and construction.

Every catalogue configuration must satisfy the 150W offering limit and its voltage-band / approval limits. Confirm the complete configuration against the applicable certificate and final production sample.

Class I configurations require protective earthing and a matching approved AC cord. Select a DC connector rated for the required output voltage and current.

Safety, EMC and Compliance

Documented standards and model-specific approval references

SAFETY AND EMC

Area	Standard / documented scope
CB safety - Class II	IEC 62368-1:2014; certificate SG PSB-IV-02139. Report 211-700966-000; MKJ-aaabbbbC8, Class II.
European safety / LVD	EN 62368-1:2014/A11:2017. Attestation N8A 004785 0015 Rev. 00; report 652102001801. MKJ-aaabbbbC6 / C14, Class I; 5.0-48.0V DC.
North American safety	UL 62368-1; CAN/CSA C22.2 No. 62368-1-14. Certificate E361658; report E361658-A6009-UL; C8 / C6 / C14.
European EMC	19AE10122E007 / EA1910122E07001: C8 models; EN 55014-1:2017; EN 55014-2:2015; EN IEC 61000-3-2:2019; EN 61000-3-3:2013/A1:2019.
US emissions	FCC Part 15 Subpart B, Class B; ANSI C63.4-2014. Statement 4789521960-2-S; report 4789521960-2.

REGIONAL APPROVALS

Market / mark	Reference / scope
United Kingdom / UKCA	Safety: 21AS110634L368A003; BS EN 62368-1:2014+A11:2017. EMC: 21AE110634B004; BS EN 55032 / 55035 and BS EN IEC 61000-3-2 / BS EN 61000-3-3, as listed in the attestation.
Australia / New Zealand / RCM	AS/NZS 62368.1:2022; GMA-525435-EA Rev. 00. RCMC25111510 / POC25111510; specified C8 / C6 / C14 ratings. Responsible-supplier and applicable RCM conditions govern.
Korea / KC and EMC	KC 62368-1(2021-08); HU10898-23012A, selected C14 / C6 models. Korean EMC test report: JNDL-23ER-0586; base MKJ-1910800C14.
Japan / PSE	DENAN statements AC 22 06 004 / 005 / 006 (UL Japan). J62368-1(2020), J3000(H25), J55032(H29). Type-classification scope applies; confirm the selected C8 model.
China / CCC	Class I: 2022010907473626; Class II: 2022010907473628. GB 4943.1-2022; GB/T 9254.1-2021; GB 17625.1-2022.

MATERIALS COMPLIANCE

RoHS: Directive 2011/65/EU and amendment (EU) 2015/863. Certificate CCI230400639EN-1CER and test report CCI230400639EN-1 cover the submitted MKJ / MKS adapter samples using the listed IEC 62321 methods.

Certification availability depends on the exact model, rating, inlet and construction. Confirm the applicable certificate scope and current authorization for the complete configuration.