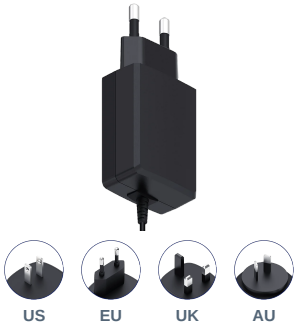
AC-DC Power Adapters

MKD series | Constant-voltage DC cord and 5V USB models | Up to 18W
xx can be US, EU, UK or AU, representing different AC plug types.

MKD-CxxD
Fixed plug | DC cord

MKD-HxxD
Horizontal | DC cord

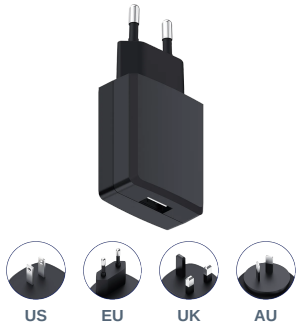
MKD-SxxD
Straight | DC cord



MKD-DEXD
Interchangeable | DC cord

MKD-HxxU
Horizontal | USB-A

MKD-SxxU
Straight | USB-A



MKD-VxxU
Vertical | USB-A

MKD-DEXU
Interchangeable | USB-A

GLOBAL CERTIFICATION OPTIONS

CB · UL · CUL · ETL · FCC · CE · GS · UKCA · RCM
PSE · KC · KCC · CCC · EAC · BIS · PSB · BSMI

Catalogue certification options; coverage varies by model, rating and market. See page 7 for documented scope.

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

Output	Current	Power	Interface
5.0V DC	3.000A	15.0W	DC cord / USB-A
9.0V DC	2.000A	18.0W	DC cord
12.0V DC	1.500A	18.0W	DC cord
24.0V DC	0.750A	18.0W	DC cord

Each model has a fixed output. Voltage, current and power limits apply simultaneously; 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	0.5A Max.
DC cord models	3.0-48.0V DC; up to 3.1A; maximum 18W, subject to the limits below
USB-A models	5.0V DC; up to 3.1A / 15.5W; single USB-A port
Output type	Fixed, constant-voltage output; select the required rating when ordering

OUTPUT RATING LIMITS

Output voltage	Maximum current	Maximum power
3.0-6.0V DC	3.100A	15.5W
6.1-12.0V DC	2.500A	18.0W
12.1-24.0V DC	1.500A	18.0W
24.1-48.0V DC	0.750A	18.0W

Limits follow CB report S01A23120534P001. Current must also satisfy Pout / Vout. The approved rating and regional certificate scope govern; do not combine maximum voltage and current independently.

OPERATING CONDITIONS AND CONSTRUCTION

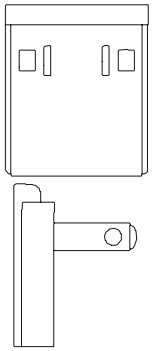
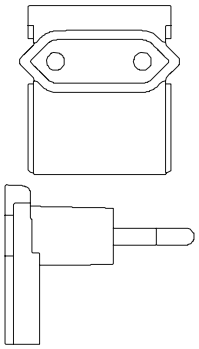
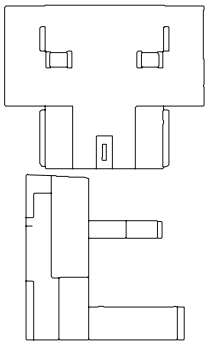
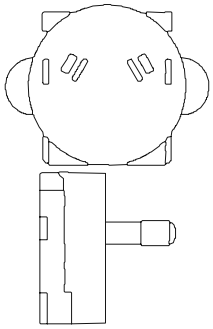
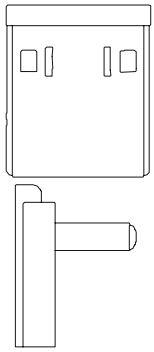
Parameter	Evaluated scope
Construction / application	Class II; direct plug-in; plastic enclosure; indoor use Power supply for audio/video and information technology equipment
Maximum ambient temperature	+40 deg C
Operating altitude	Up to 5,000m in the CB-evaluated configuration. Regional approval limits apply; the supplied CCC document states 2,000m.

Final enclosure, plug, output rating and cable assembly must match the applicable evaluated configuration.

Plug Options and Dimensions

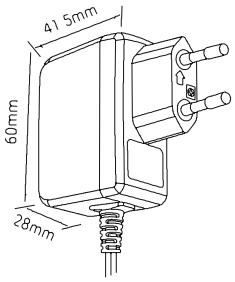
Regional plug options and DC cord enclosure reference drawings

Worldwide Use

Region	North America US	Europe EU	United Kingdom UK	Australia AU	China CN
Blade outline					

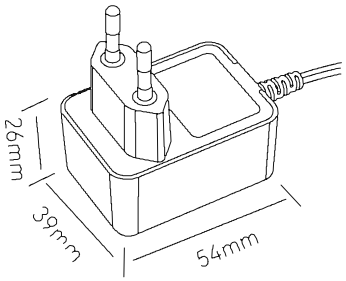
ENCLOSURE OUTLINE AND DIMENSIONS (Representative outline dimensions; for drawings of other versions, please email info@merryking.com.)

MKD-C



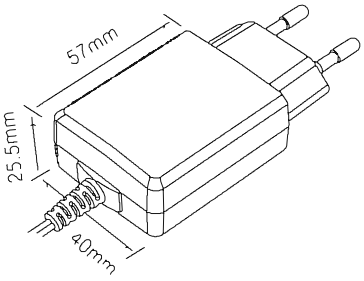
Dimensions (mm): 60 x 41.5 x 28

MKD-H



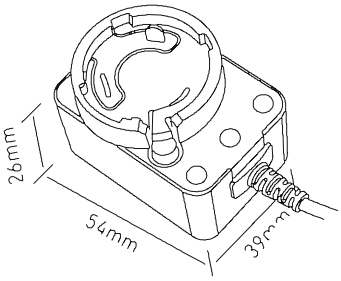
Dimensions (mm): 54 x 39 x 26

MKD-S



Dimensions (mm): 57 x 40 x 25.5

MKD-D



Dimensions (mm): 54 x 39 x 26

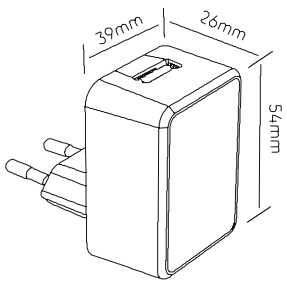
Reference drawings are not to scale. Dimensions follow the official variant drawings; units: mm.

USB Enclosure Dimensions

Official outline drawings for fixed-plug and interchangeable USB-A models

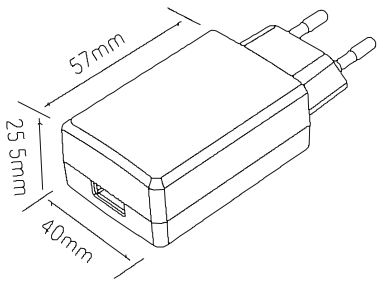
ENCLOSURE OUTLINE AND DIMENSIONS (Representative outline dimensions; for drawings of other versions, please email info@merryking.com.)

MKD-HxxU



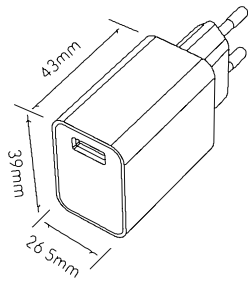
Dimensions (mm): 54 x 39 x 26

MKD-SxxU



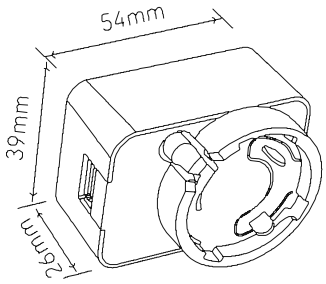
Dimensions (mm): 57 x 40 x 25.5

MKD-VxxU



Dimensions (mm): 43 x 39 x 26.5

MKD-DEXU



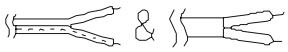
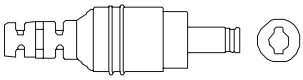
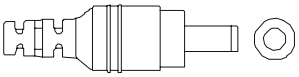
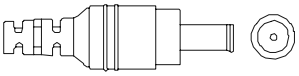
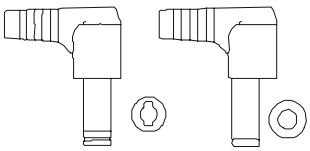
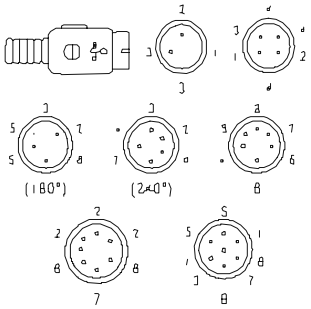
Dimensions (mm): 54 x 39 x 26

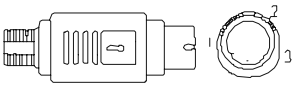
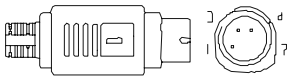
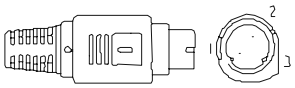
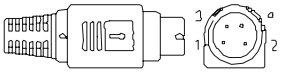
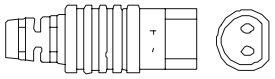
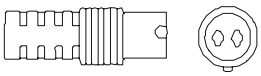
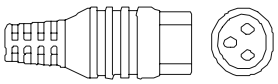
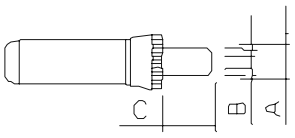
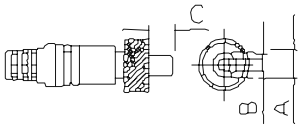
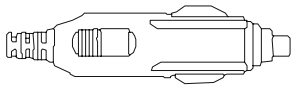
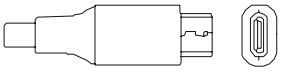
All dimensions are in millimeters. Reference drawings are not to scale. Confirm the final plug, housing and port arrangement against the approved sample.

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

Output cord construction and final configuration requirements

OUTPUT CORD AND USB CABLE

Option	Description
DC cord style	Round or flat cord, depending on configuration
DC cord length options	1.2 m, 1.5 m and 2.0 m; other lengths by agreement
USB cable	Optional; catalogue lengths include 1.0 m and 1.5 m
Cable specification	Confirm conductor gauge, resistance, length tolerance and current rating for the selected output and final assembly

Specify the cable together with the required output voltage and current. Connector styles and reference dimensions are shown on the preceding page.

COMPLETE THE CONFIGURATION WITH

Selection	Details to confirm
Electrical output	Output voltage, current and power; individual nameplate rating
Enclosure and AC connection	C / H / S / D for DC cord models; H / S / V / D for USB models Fixed or interchangeable plug; destination market
Output interface	DC cord or single USB-A port
Connector and cord	Connector dimensions, insertion length, polarity, cable length and gauge
Approvals	Applicable certificate and approved configuration for the destination market

Every configuration must satisfy both the 18W family ceiling and the applicable voltage-band limits. The 5V USB output is limited to 15.5W within the supplied certification scope.

Safety, EMC and Compliance

Standards and evidence for the MKD family and evaluated configurations

SAFETY AND EMC

Area	Standard / documented scope
CB safety	IEC 62368-1:2018; EN IEC 62368-1:2020/A11:2020 CB certificate DK-151704-UL; report S01A23120534P001
European safety / GS	EN 62368-1:2014/A11:2017; EN IEC 61558-1:2019; EN 61558-2-16:2009/A1:2013 GS certificate Z1A 081024 0083 Rev. 00
North American safety	UL 62368-1; CAN/CSA C22.2 No. 62368-1-14 UL reference E361658-A6010-UL
EMC emissions / immunity	EN 55032:2015; EN 55035:2017; EN IEC 61000-3-2:2019; EN 61000-3-3:2013/A1:2019 EMC statement 4789598652-1-S
US emissions	FCC Part 15 Subpart B; ANSI C63.4-2014 FCC verification 4789598652-2-S

REGIONAL APPROVALS

Market / mark	Reference / scope
United Kingdom / UKCA	Safety attestation 21AS110656L368A001 EMC attestation 21AE110656B002
Australia / New Zealand / RCM	AS/NZS 62368.1:2022; certificate GMA-522897-EA Proof of RCM compliance POC25064918
Japan / PSE	Statements TKY120122-AC 22 01 005 / 006 DENAN Appendix 12; J62368-1(2020); J55032(H29)
Korea / KC and KCC	KC certificate HU10898-20004B KCC registration R-R-M6E-MKD-18W
China / CCC	Reference certificate 2021160907688390 expired on 23 May 2026. An updated certificate is required to confirm current CCC coverage.

MATERIAL COMPLIANCE

RoHS: 2011/65/EU and (EU) 2015/863. Tested materials passed the specified requirements in report U11204250604603-1E. Results apply to the submitted samples and tested materials.

Symbols on page 1 show catalogue options. Confirm current approval coverage for the exact model, rating, plug and construction. The references above describe the documents supplied for this series.

Shenzhen Merryking Electronics Co., Ltd.