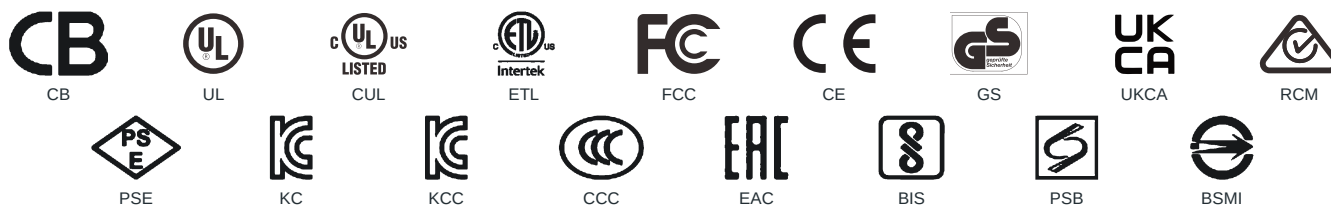


AC-DC Power Adapters

MKC series | Constant-voltage DC cord and 5V USB models | Up to 15W
xx can be US, EU, UK or AU, representing different AC plug types.

MKC-HxxD Horizontal DC cord   US  EU  UK  AU	MKC-SxxD Small enclosure DC cord   US  EU  UK  AU	MKC-VxxD Vertical DC cord   US  EU  UK  AU	MKC-DExD Interchangeable DC cord   US  EU  UK  AU
MKC-SxxU Single USB-A port   US  EU  UK  AU	MKC-VxxU Interchangeable USB-A   UK  AU  EU	MKC-VxxT Dual USB-A ports   US  EU  UK  AU	MKC-DExU Interchangeable USB-A   US  EU  UK  AU

GLOBAL CERTIFICATION OPTIONS



Certification options are listed in the catalogue. Coverage depends on the selected model, rating and market.

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

Output	Current	Power	Interface
5.0V DC	1.000A	5.0W	DC cord / USB-A
5.0V DC	2.500A	12.5W	DC cord / USB-A
12.0V DC	1.250A	15.0W	DC cord
24.0V DC	0.625A	15.0W	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 energy performance

INPUT AND OUTPUT

Parameter	Specification
Input voltage / frequency	100-240V AC, 50/60Hz
Rated input current	0.4A Max.
DC cord models	3.0-40.0V DC; up to 2.5A; maximum 15W, subject to the limits below
USB-A models	5.0V DC; up to 2.5A total / 12.5W For dual ports, the total output rating is shared.
Output type	Fixed, constant-voltage output; select the required rating when ordering

OUTPUT RATING LIMITS

Output voltage	Maximum current	Maximum power
3.0-5.0V DC	2.500A	12.5W
5.1-12.0V DC	2.100A	15.0W
12.1-24.0V DC	1.230A	15.0W
24.1-40.0V DC	0.620A	15.0W

The maximum current is also limited by P_{out} / V_{out} . Do not combine the maximum voltage and maximum current independently. The final nameplate rating governs.

OPERATING CONDITIONS AND CONSTRUCTION

Parameter	Evaluated scope
Construction	Class II; direct plug-in; plastic enclosure; IP20
Maximum ambient / altitude	+40 deg C / 2,000m or less

EVALUATED 5V / 1A ENERGY PERFORMANCE (Representative model efficiency)

ERP sample MKC-0501000SEU: average efficiency 81.42% at 115V / 60Hz and 80.51% at 230V / 50Hz.

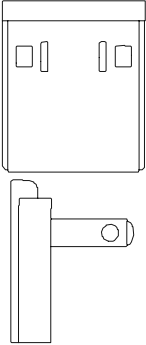
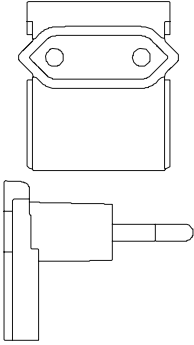
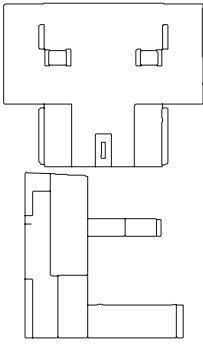
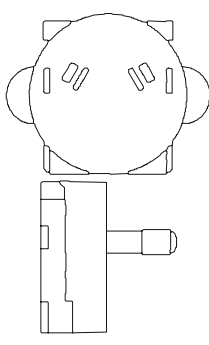
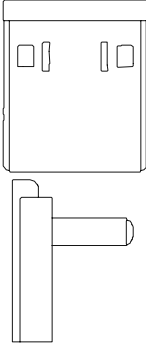
No-load power: 0.05W / 0.08W respectively. Results apply to the evaluated sample; report NP2209140W01.

DOE Level VI: passed for the evaluated 5V / 1A models. Energy and compliance scope: page 7.

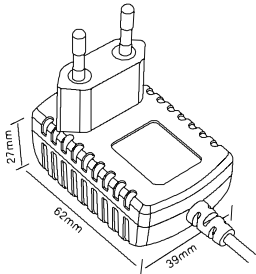
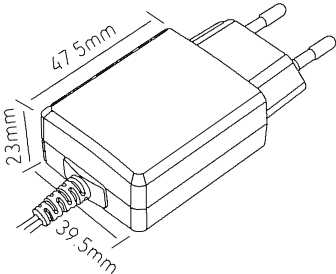
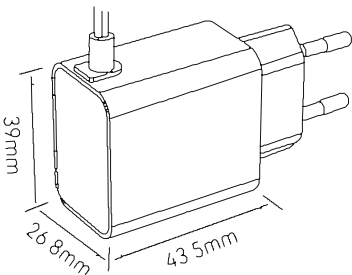
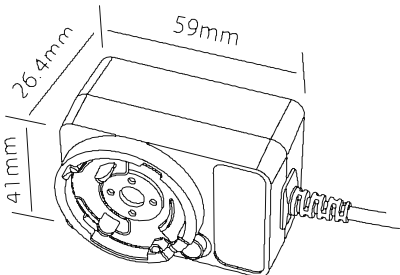
Plug Options and Dimensions

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.)

MKC-HxxD  <p>Dimensions (mm): 62 x 39 x 27</p>	MKC-SxxD  <p>Dimensions (mm): 47.5 x 39.5 x 23</p>
MKC-VxxD  <p>Dimensions (mm): 43.5 x 39 x 26.8</p>	MKC-DEXD  <p>Dimensions (mm): 59 x 41 x 26.4</p>

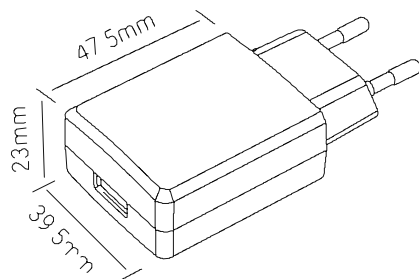
Reference drawings are not to scale. Dimensions follow the official variant drawings; units: mm.

USB Enclosure Dimensions

Official outline drawings for single-port, dual-port and interchangeable USB models

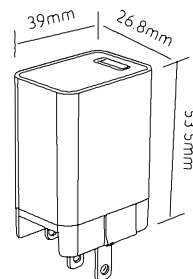
ENCLOSURE OUTLINE AND DIMENSIONS (Representative outline dimensions; for drawings of other versions, please email info@merryking.com.)

MKC-SxxU



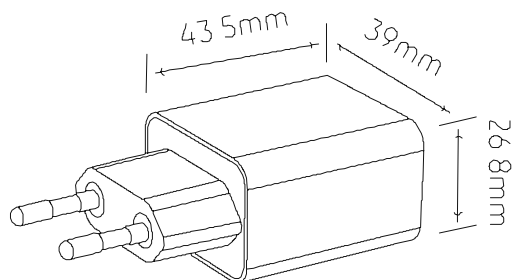
Dimensions (mm): 47.5 x 39.5 x 23

MKC-VxxU



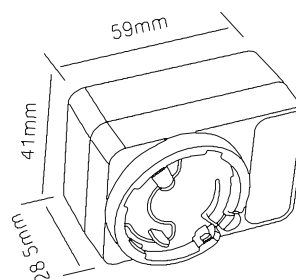
Dimensions (mm): 53.5 x 39 x 26.8

MKC-VxxT



Dimensions (mm): 43.5 x 39 x 26.8

MKC-DEXU



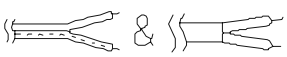
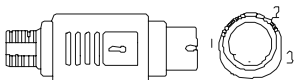
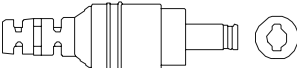
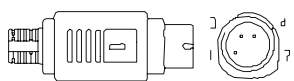
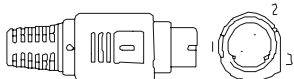
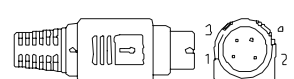
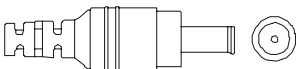
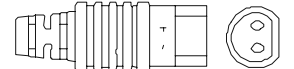
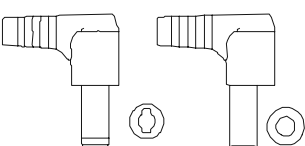
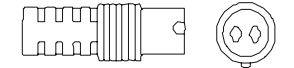
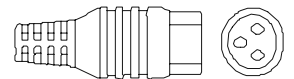
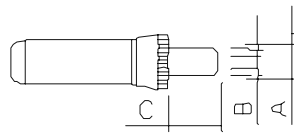
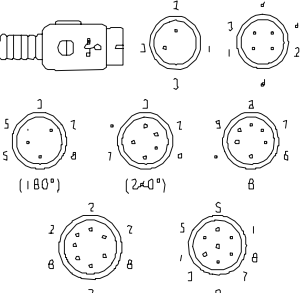
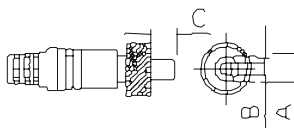
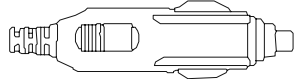
Dimensions (mm): 59 x 41 x 28.5

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	Plug type	Specification	Outline / drawing
Stripped & tinned	NC		Power mini-DIN (male)	3Pin Molding	
Barrel type	5.5 x 2.1			4Pin Molding	
	5.5 x 2.5			3Pin Assembly / lock	
	4.75 x 1.7				
	4.0 x 1.7				
	3.5 x 1.35	4Pin Assembly / lock			
	2.35 x 0.7				
	6.3 x 3.0				
Barrel type	6.5 x 1.4		Interchangeable connector	2Pin	
Barrel type Right angle	5.5 x 2.1			2Pin	
	5.5 x 2.5			3Pin	
	4.75 x 1.7				
	4.0 x 1.7				
	3.5 x 1.35		Switchcraft locking type		
	2.35 x 0.7				
	6.3 x 3.0				
6.5 x 1.4					
DIN (male)	3Pin		DC plug with screw	A:5.5 B:2.1 / 2.5 C:7.5	
	4Pin			A:5.5 B:2.1 / 2.5 C:10.1	
	5Pin (180 deg)		Cigarette lighter	-	
	5Pin (240 deg)				
	6Pin				
	7Pin		USB Type-C	-	
	8Pin				

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
Evaluated 5V / 1A assembly	Output cord length: 110 cm; conductor size: 24 AWG As recorded in the supplied energy reports

Confirm wire gauge, cord resistance and length tolerance for the final assembly. Energy results apply to the evaluated configuration; other cable options may change performance.

COMPLETE THE CONFIGURATION WITH

Selection	Details to confirm
Electrical output	Output voltage, total current and power; individual nameplate rating
Enclosure and AC connection	H / S / V / D enclosure; fixed or interchangeable plug; destination market
Output interface	DC cord, single USB-A or dual USB-A; total shared output for dual ports
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 15W family ceiling and the applicable voltage-band limits. The 5V USB output is limited to 12.5W total within the supplied certification scope.

Safety, EMC and Compliance

Standards and evidence for the MKC family and evaluated configurations

SAFETY AND EMC

Area	Standard / documented scope
CB safety	IEC 62368-1:2018 CB certificate DK-139958-M1-UL; report S01A25060038P001
European safety / GS	EN IEC 62368-1:2020/A11:2020 GS certificate Z1A 081024 0095 Rev. 00
North American safety	UL 62368-1; CAN/CSA C22.2 No. 62368-1-14 UL report reference E361658-A6006-UL
EMC emissions / immunity	EN 55032:2015+A11:2020; EN 55035:2017+A11:2020 CE EMC certificate 21EP12091E01
US emissions	47 CFR FCC Part 15 Subpart B:2017 FCC certificate 19EP06017F01
Regional conformity	UKCA safety and EMC documents; RCM compliance documents; PSE and CCC certificates are included in the supplied MKC files

ENERGY AND MATERIAL COMPLIANCE

Area	Scope / result
DOE / CEC / GEMS	Evaluated 5V / 1A models: complied in the supplied energy reports. DOE Level VI: passed; DOE report NP2209140D01.
ERP	(EU) 2019/1782: complied for the evaluated 5V / 1A models. Report NP2209140W01; 10% load test not required for the 5W sample.
RoHS	2011/65/EU, (EU) 2015/863 and (EU) 2017/2102. Tested materials: pass; report CP2408087R01.
REACH	219 SVHCs: below 0.1% (w/w) in the submitted sample. Report UTLR21078796, dated 4 August 2021.

Certification symbols on page 1 show catalogue options. Match the final model, rating, plug and construction to the applicable approval. Material results describe the tested samples and the scope of the cited reports.

Shenzhen Merryking Electronics Co., Ltd.