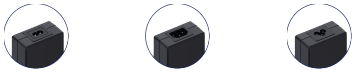
AC-DC Power Adapters

MKF series | Desktop and wall-mounted models | Constant-voltage DC output | Up to 65W
xx can be US, EU, UK or AU, representing different AC plug types.

MKF - Desktop

C8 / C14 / C6 inlet | DC cord





C8 C14 C6

MKF-HxxD

Horizontal | DC cord





US EU UK AU

MKF-VxxD

Vertical | DC cord





US EU UK AU

GLOBAL CERTIFICATION OPTIONS

UL CE FCC GS KC KCC UKCA

cUL RCM PSE CCC CB BIS

Certification options vary 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	8.000A	40.0W	DC cord
9.0V DC	5.000A	45.0W	DC cord
12.0V DC	5.000A	60.0W	DC cord
15.0V DC	4.000A	60.0W	DC cord
19.0V DC	3.420A	64.98W	DC cord
20.0V DC	3.250A	65.0W	DC cord
24.0V DC	2.700A	64.8W	DC cord
48.0V DC	1.350A	64.8W	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	2.0A Max.
Output range	5.0-48.0V DC; up to 8.0A; maximum 65W, subject to the limits below
Output type	Fixed, constant-voltage DC output through an output cord

OUTPUT RATING LIMITS

Output voltage	Maximum current	Maximum power
5.0-8.0V DC	8.000A	48.0W
8.1-10.0V DC	6.000A	60.0W
10.1-15.0V DC	5.000A	60.0W
15.1-24.0V DC	4.000A	65.0W
24.1-48.0V DC	2.600A	65.0W

Limits follow CB report S01A22060099S007M1. Current must also satisfy Iout <= Pmax / Vout. The individual nameplate rating and applicable approval govern the final configuration.

OPERATING CONDITIONS AND CONSTRUCTION

Parameter	Evaluated scope
Construction / application	Desktop: Class I C14 / C6 or Class II C8 inlet. Wall-mounted: Class II MKF-HxxD / MKF-VxxD; indoor use. Power supply for audio/video and information technology equipment.
Maximum ambient temperature	+40 deg C in the CB-evaluated configuration
Operating altitude	2,000m or less; applicable regional approval conditions govern

Voltage, current and power limits apply together. At 24V, the 65W ceiling limits current to 65W / 24V, even though its voltage band permits up to 4.00A. The individual nameplate rating governs.

Plug Options and Dimensions

Regional plug options and enclosure reference drawings

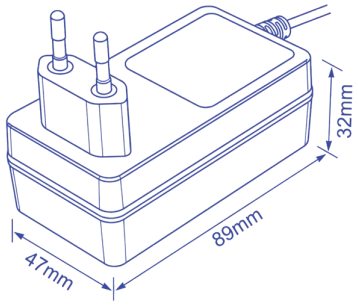
Worldwide Use

Region	North America US	Europe EU	United Kingdom UK	Australia AU
AC plug reference				

Representative MKF-H plug views. US, EU, UK and AU plug options also apply to MKF-V.

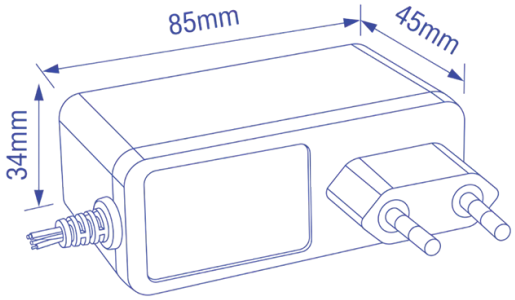
ENCLOSURE OUTLINE AND DIMENSIONS (Representative outline dimensions; for drawings of other versions, please email info@merryking.com.)

MKF-HxxD



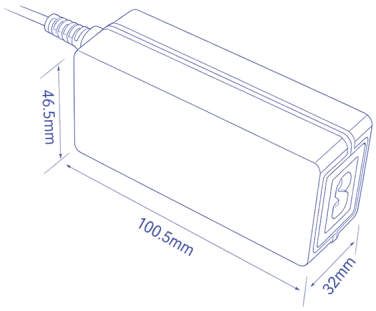
Dimensions (mm): 89 x 47 x 32

MKF-VxxD



Dimensions (mm): 85 x 45 x 34

MKF - Desktop (C8)



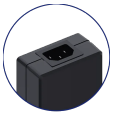
Dimensions (mm): 100.5 x 46.5 x 32

DESKTOP AC INLET OPTIONS



C8

Class II | 2-pole inlet



C14

Class I | 3-pole inlet



C6

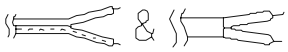
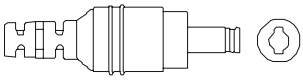
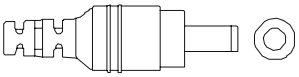
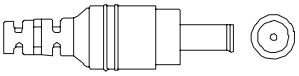
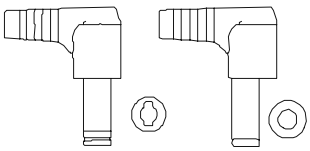
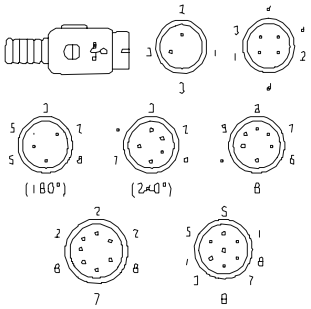
Class I | 3-pole inlet

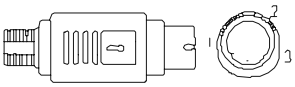
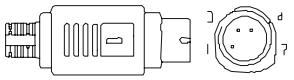
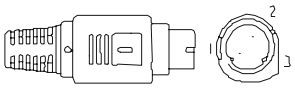
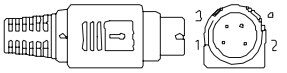
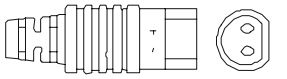
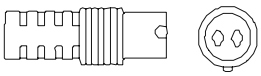
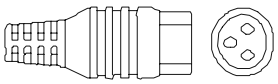
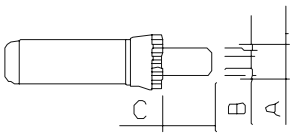
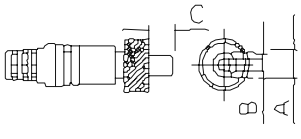
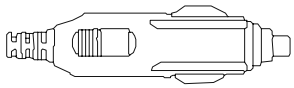
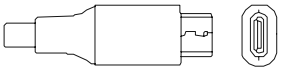
Reference drawings are not to scale; units: mm. The desktop drawing shows the representative C8 enclosure. Confirm the drawing for the selected production version.

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
Desktop AC cord options	EU / KC / UK / AU / US / JP / AR / CN plug options 1.5 m, 2.0 m and other lengths by agreement
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
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	Desktop: C8 / C14 / C6 inlet and matching regional AC cord. Wall-mounted: MKF-HxxD / MKF-VxxD and destination-market plug.
Output interface	DC output cord; connector style from the preceding page
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 65W family ceiling and its voltage-band limits. Confirm the complete product configuration against the applicable approval and final production sample.

Class I desktop configurations require a protective-earth connection and a matching approved AC cord. Evaluated cable details and energy results are shown on page 6.

Energy and Material Compliance

Evaluated energy performance and material compliance for the MKF family

EVALUATED 12V / 5A CONFIGURATION

Item	Evaluated scope
Electrical output	12.0V DC / 5.0A / 60.0W
DOE / CEC sample and reports	MKF-1205000AUS; NP2303240W01 / NP2303240W02
ERP sample and report	MKF-1205000AEU; NP2303240W03
Output cord construction	Maximum 100 cm; minimum conductor size 18 AWG

ENERGY PERFORMANCE | 12V / 5A ONLY

Reported measurement	115V AC / 60Hz	230V AC / 50Hz
Average active efficiency - DOE / CEC	89.75%	89.92%
No-load input power - DOE / CEC	0.058W	0.203W
Average active efficiency - ERP	89.74%	89.32%
Efficiency at 10% load - ERP	90.06%	86.18%
No-load input power - ERP	0.050W	0.190W

DOE Level VI / CEC / ERP: the reports record compliance for the evaluated 12V / 5A configurations. Results apply to the tested samples and cable assembly; other ratings or cable constructions require evaluation.

MATERIAL COMPLIANCE

Evaluation	Documented scope / reference
RoHS	Directive 2011/65/EU and amendment (EU) 2015/863. Certificate CCI250900606EN-1CER; test report CCI250900606EN-1.
Tested sample / scope	MKF-1205000DEXD; additional MKF model families are listed. Submitted materials passed the reported restricted-substance tests. Results are limited to the evaluated samples and report scope.

Safety, EMC and Compliance

Documented standards and model-specific approval references

SAFETY AND EMC

Area	Standard / documented scope
CB safety	IEC 62368-1:2018; EN IEC 62368-1:2020/A11:2020 Class I: DK-135667-M2-UL. Class II: DK-135670-M2-UL. Report S01A22060099S007M1.
North American safety	UL 62368-1; CSA C22.2 No. 62368-1-14 UL-US-2158275-1 / UL-CA-2149232-1 Report reference E361658-20211223.
European safety / LVD	Class I: EN 62368-1:2014/A11:2017; N8A 081024 0033 Rev. 00. Class II: EN IEC 61558-1:2019; EN 61558-2-16:2009/A1:2013; EN 62368-1:2014/A11:2017; N8A 081024 0037 Rev. 00.
GS	Class I: Z1A 081024 0034 Rev. 00. Class II: Z1A 081024 0038 Rev. 00.
EMC emissions / immunity	EN 55032:2015/A11:2020; EN 55035:2017/A11:2020; EN IEC 61000-3-2:2019; EN 61000-3-3:2013/A1:2019. Statement 4790164316-1-S.
US emissions	FCC Part 15 Subpart B; ANSI C63.4-2014 Statement 4790164316-S.
Canadian emissions	ICES-003 Class B; verification ITL-D220715020.

REGIONAL APPROVALS

Market / mark	Reference / scope
United Kingdom / UKCA	Safety: ITL-D210723002. EMC: ITL-D210723003. Confirm the model list in the corresponding test reports.
Australia / New Zealand / RCM	GMA-511936-EA Rev. 01: selected desktop and wall-mounted ratings. Supplier letters cover xyyD models; confirm matching records for other constructions.
Japan / PSE	Statement PSB-JP-2022-0301: J62368-1(2020), J3000(H25), J55032(H29). Additional type-classification statements apply.
Korea / KC and KCC	H: KC HU10898-23007A; KCC R-R-M6E-MKF-65WH1. V: KC HU10898-25017A; KCC R-R-M6E-MKF-65WV1. Applies to the listed Korean-plug wall-mounted configurations.
China / CCC	Certificate 2022010907489001: Class I C6 / C14 configurations. GB 17625.1-2012; GB 4943.1-2011; GB/T 9254.1-2021, as listed.
India / BIS	Registration R-41264520; inclusion letter 87627. Applies to the specified C6 models; IS 13252 (Part 1):2010.

Approval references describe the supplied documentation. Coverage depends on the exact output rating, AC connection and construction. Confirm the current certificate scope for the final product and destination market.