

Technical data

KeContact P40 / P40 Pro



KEBA[®]

Automation by innovation.

KeContact P40 / P40 Pro

Design



Colors (standard)

Design cover:	<ul style="list-style-type: none">• Pure white (RAL 9010)• Deep black (RAL 9005)
Enclosure base:	Anthracite gray (RAL 7016)
Charging cable:	Yellow-green (RAL 6018)

Product specifications

Power variants:	<ul style="list-style-type: none">• 7,4 kW / 22 kW // KeContact P40 Pro• 7,4 kW / 11 kW // KeContact P40
Charging cable:	Type 2 cable (EN 62196-1, VDE-AR-E 2623-2-2)
Integrated energy meter:	Yes, optionally MID or MessEV certified with display
Connection of an external energy meter:	Yes (Modbus TCP, RS485 interface - Modbus RTU compatible*)
Current monitoring:	Yes
Integrated phase switch-off:	Yes (3ph.→1ph.)
Dynamic house connection monitoring:	Yes (external energy meter required)
PV optimized charging:	Yes (external energy meter required)
Backend communication protocol:	OCPP 1.6 / KEBA eMobility Portal
Local communication protocols:	<ul style="list-style-type: none">• Modbus TCP*• ISO 15118 ready* // KeContact P40 Pro

*)... Function will be made available with a later software update.

General

Charge mode:	Mode 3 in accordance with EN 61851-1 AC charging
Overvoltage category:	III in accordance with EN 60664
Protection class:	I
Protection type:	IP54
Protection against mechanical impact:	IK10
Rated short-time withstand current:	< 3 kA (effective value in accordance with EN 61439-1)

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Internal residual current operated circuit-breaker (RCCB):	Type A 30 mA (in accordance with EN 61008-1)
Internal residual direct current monitoring device (RDC-MD):	6 mA (in accordance with IEC 62955)
Ventilation:	If ventilation is requested by the vehicle, charging will not be started

Power supply

Nominal supply voltage (Europe):	230/3x230(400) V 16 A / 32 A
Nominal current:	Current limit adjustable via service button: 6 A, 8 A, 10 A, 16 A, 20 A, 32 A Current limit freely adjustable via app between 6 A and 16/32 A in 1 A steps
Line frequency:	50 Hz
Mains forms:	TT (230/400 V) / TN (230/400 V) / IT (230 V)
Internal consumption:	<ul style="list-style-type: none"> • Idle: 2,5 W (Eco / Sleep mode) • Vehicle plugged in: 4 W (paused) • Vehicle plugged in: 6 W (charging)

Supply terminals

Type:	Push-in spring terminals
Cable feed:	Bottom side (surface-mounted), rear side (flush-mounted)
Connection cross-section of the supply:	Depending on the cable and the type of installation
<ul style="list-style-type: none"> • 16 A nominal current: • 32 A nominal current: 	2,5-10 mm ² / AWG 13-7 6,0-10 mm ² / AWG 9-7
Stripping length:	18 mm
Temperature rating:	100 °C

Ambient conditions

Application:	Inside and outside area
Installation (stationary):	On the wall or on a floor-mounted column
Operating temperature:	Data without direct sunlight
<ul style="list-style-type: none"> • Variants with certified meter: • Variants without certified meter: 	-25 °C ... +50 °C -30 °C ... +50 °C
Maximum temperature for continuous current without derating:	
<ul style="list-style-type: none"> • 3x16 A nominal current: • 1x32 A nominal current: • 3x32 A nominal current: 	+40 °C (+50 °C with integrated case fan) +40 °C +30 °C (+40 °C with integrated case fan)
Storage temperature:	-30 °C to +80 °C
Altitude:	max. 2.000 m above sea level
Rate of temperature change:	max. 0,5 °C / minute
Temperature behavior:	Automatic power reduction if overheating occurs

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Interfaces

WLAN

Type:	IEEE 802.11 b,g,n
Band:	2,4 GHz
Supported modes:	AP Ad-hoc-Mode, Client mode

Ethernet interface

Ethernet interface:	RJ45
Data transfer rate:	10/100 Mbit/s

Bluetooth®

Bluetooth® standard:	BLE 5.0 or higher
Intended use:	Connection with KEBA eMobility App
Band:	2,4 GHz

Switch contact inputs [X1.1 / X1.2]

Type:	Connections for external, potential-free switch contacts
Quantity:	2
Intended use:	Authorization, charging current reduction, charging pause, simplified charging management with 2 charging stations*
Voltage:	12 V DC PELV (2 mA)
Permitted switching element:	(External) potential-free switch contact
Terminal type:	Push-in spring terminals
Conductor cross-section of the terminals:	<ul style="list-style-type: none">• Rigid conductor: 0,13–1,5 mm² / AWG 28–14• Flexible conductor: 0,13–1,5 mm² / AWG 28–14• Flexible conductor with wire end ferrules: max. 0,75 mm² / AWG 19
Stripping length:	10 mm

Switch contact output [X2]

Type:	Internal, potential-free switch contact
Quantity:	1
Intended use:	Relay monitoring, charging status
Potential isolation:	Isolation voltage 1500 V AC
Permitted switching voltage:	External SELV/PELV safety extra-low voltage; < 30 V AC (50/60 Hz) / ≤ 60 V DC
Required current limitation:	< 0,5 A
Terminal type:	Push-in spring terminals
Conductor cross-section of the terminals:	<ul style="list-style-type: none">• Rigid conductor: 0,13–1,5 mm² / AWG 28–14• Flexible conductor: 0,13–1,5 mm² / AWG 28–14• Flexible conductor with wire end ferrules: max. 0,75 mm² / AWG 19
Stripping length:	10 mm

RS485 interface (Modbus RTU compatible)*

Intended use:	Communication with external energy meter (Modbus RTU compatible)
Terminal type:	Push-in spring terminals

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Conductor cross-section of the terminals:	<ul style="list-style-type: none">• Rigid conductor: 0,13–1,5 mm² / AWG 28–14• Flexible conductor: 0,13–1,5 mm² / AWG 28–14• Flexible conductor with wire end ferrule: max. 0,75 mm² / AWG 19
Stripping length:	10 mm

PLC (Power Line Communication)* // only KeContact P40 Pro

Communication with the vehicle:	ISO 15118 ready*
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*)... Function will be made available with a later software update.

Equipment depending on version

RFID function

Supported standards:	ISO 14443 or ISO 15693
Frequency:	13.56 MHz

Touch button [TB]

Type:	Capacitive button (e.g. for switching to fast charging mode)
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Mobile communication [4G/LTE]

Type:	4G with fallback to 2G
Supported LTE (4G) bands:	B1, B3, B7, B8, B20, B28
Supported GSM (2G) bands:	Band 900 / 1800
Maximum data rate: (depends on external influences)	LTE Cat1. Up to download: 10,2 MBit/s upload: 5,2 MBit/s
SIM card:	SIM card with 4G authentication Size: Micro-SIM (3FF) Type: Industrial/M2M recommended

Energy meter

Meter type:	Electricity meter for active power
Variants of the energy meter:	<ul style="list-style-type: none">• Functional (not calibratable)• MID• MessEV

Energy meter MID

Type:	Active power meter
Accuracy class:	Class B (in accordance with EN 50470-3)

Energy meter MessEV

Type:	Active power meter with auxiliary device (calibratable measurement device)
Conformity with calibration law:	National approval for auxiliary device
Accuracy class:	Class A (in accordance with EN 50470-3) at the power delivery point

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Dimensions and weight

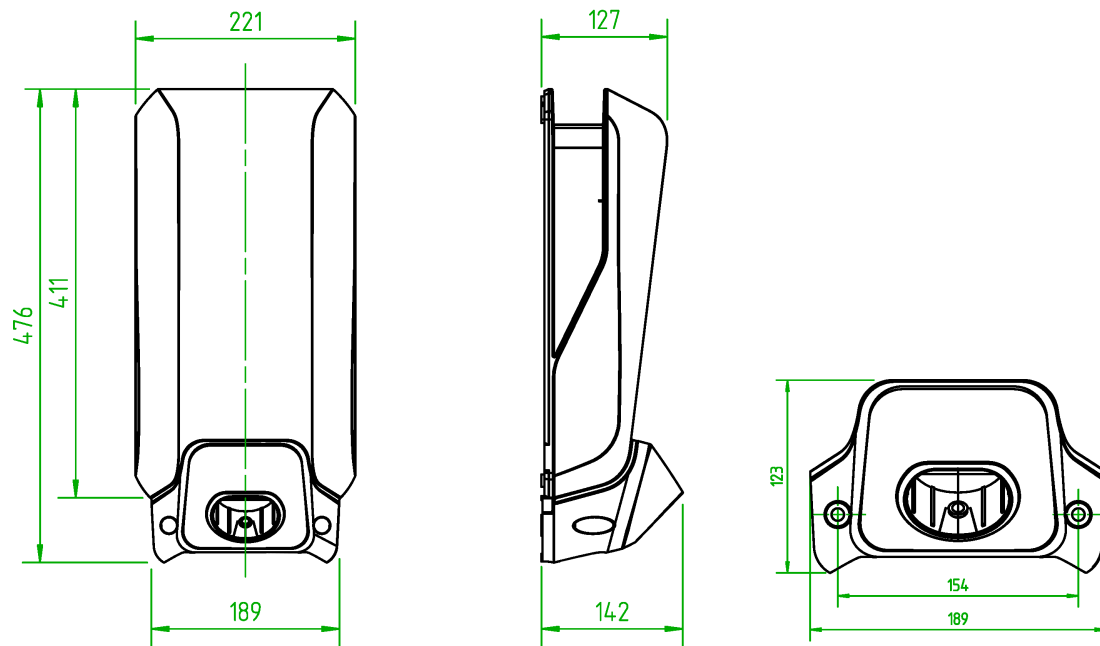


Fig. 1-1: Dimensions in millimeter

Height / width / depth:	476 mm / 221 mm / 142 mm
Weight of the charging station (including 6m charging cable):	~ 6,2 kg (depending on variant)
Dimensions of the packaging:	590 mm x 280 mm x 258 mm

Certifications*

MID variant:	Optional
MessEV variant:	Optional

*)... Information about the certifications can be downloaded from the KEBA website:
www.keba.com/emobility-downloads

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Product key (variants of the charging station)

KC-P40- 32 EU 0 - C 6 3 3 A L P 0 - L S 1 R 1 1 1 1 B L 0 - xxxx
 I II III IV V VI VII VIII IX X XI XII XIII XIV XV XVI XVII XVIII XIX XX XXI XXII XXIII XXIV

Form designation system (example)

<i>I</i>	<i>Device series</i>	KC-P40 ...Device generation
<i>II</i>	<i>Nominal current</i>	16 ...16 A 32 ...32 A
<i>III</i>	<i>Region</i>	EU ...Europe IEC GB ...Great Britain
<i>IV</i>	<i>Future options</i>	0 ...none
<i>V</i>	<i>Connector</i>	C ...Type 2 cable P ...Type 2 cable with protective cap
<i>VI</i>	<i>Cable</i>	6 ...Cable length in meter [m] (0 = no cable)
<i>VII</i>	<i>Phases</i>	1 ...1 phase 3 ...3 phases S ...3→1 phase switching
<i>VIII</i>	<i>Maximum Charging Current</i>	1 ...16 A 3 ...32 A
<i>IX</i>	<i>RCD functionality</i>	A ...RCCB Type A + RDC-MD D ...RDC-MD
<i>X</i>	<i>Metering</i>	0 ...not equipped E ...functional, not calibrated M ...MID (Measuring Instruments Directive) certified L ...MessEV (Mess- und Eichverordnung) certified
<i>XI</i>	<i>PLC</i>	0 ...not equipped P ...PLC communication
<i>XII</i>	<i>Future options</i>	0 ...none
<i>XIII</i>	<i>LAN</i>	0 ...not equipped L ...LAN interface
<i>XIV</i>	<i>Serial meter interface</i>	0 ...not equipped S ...Serial meter interface (RS485)
<i>XV</i>	<i>I/O interface</i>	0 ...not equipped 1 ...Switch contact inputs and output
<i>XVI</i>	<i>RFID</i>	0 ...not equipped R ...RFID functionality
<i>XVII</i>	<i>SRWC</i>	0 ...not equipped 1 ...Short range wireless communication (Bluetooth®)
<i>XVIII</i>	<i>WLAN</i>	0 ...not equipped 1 ...WLAN module
<i>XIX</i>	<i>Mobile communication</i>	0 ...not equipped 1 ...LTE module (4G)
<i>XX</i>	<i>Processing unit</i>	0 ...Variant 0 1 ...Variant 1
<i>XXI</i>	<i>Touch button</i>	0 ...not equipped B ...Touch button
<i>XXII</i>	<i>User interface</i>	L ...LED
<i>XXIII</i>	<i>Future options</i>	0 ...None
<i>XXIV</i>	<i>Customer options</i>	xxxx Options for individual customer versions, not relevant for EU declaration of conformity

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Notes

This data sheet lists various design options for the charging station. The actual design of the charging station depends on the variant.

Mention of names

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