

AMTRON[®] PROFESSIONAL+ PNC

WALLBOX FOR ELECTRIC VEHICLES



MENNEKES AMTRON[®] designed for private and semi-public use

Variants

	Communication acc. to ISO 15118 incl. Plug and Charge (PnC)		Communication acc. to ISO 15118 incl. Plug and Charge (PnC)
		3G / 4G modem	3G / 4G modem
LAN (RJ45)	LAN (RJ45)	LAN (RJ45)	LAN (RJ45)
MID energy meter	MID energy meter	MID energy meter	MID energy meter
RFID system	RFID system	RFID system	RFID system
Personal and line protection	Personal and line protection	Personal and line protection	Personal and line protection
DC leakage detection	DC leakage detection	DC leakage detection	DC leakage detection
LED status display Multifunction button	LED status display Multifunction button	LED status display Multifunction button	LED status display Multifunction button
AMTRON® Professional	AMTRON® Professional PnC	AMTRON® Professional+	AMTRON® Professional+ PnC

Charging socket type 2 with hinged lid

Order no.	Order no.	Order no.	Order no.
7,4 / 22 kW 1364402	7,4 / 22 kW 1365402	7,4 / 22 kW 1366402	7,4 / 22 kW 1367402

7,5 meter permanently connected charging cable with connector type 2 (version „C2“)

Order no.	Order no.	Order no.	Order no.
7,4 / 22 kW 1364202	7,4 / 22 kW 1365202	7,4 / 22 kW 1366202	7,4 / 22 kW 1367202

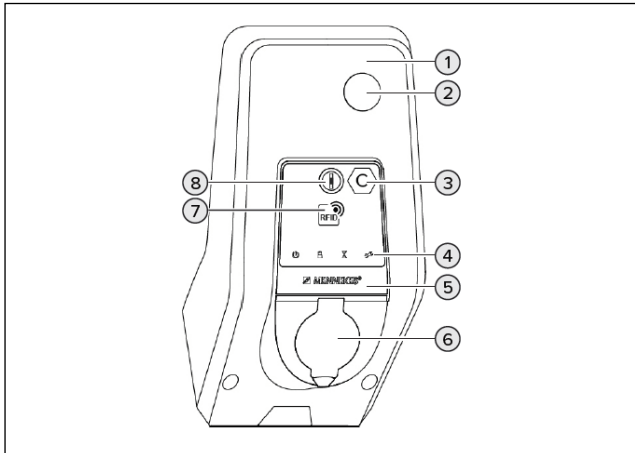


Product features

- Overall
 - Mode 3 charging acc. to IEC 61851
 - Vehicle connectors and charging socket acc. to IEC 62196
 - Charging power up to 7,4 kW (1ph) / 22kW (3ph)
 - MID certified energy meter
 - Unlocking function in case of grid failure (for devices with charging socket type 2)
 - Status information through LED info bar
 - Integrated cable suspension
 - Welding detection: Monitoring the load contactor: in case of error (adhesive load contactor) the charging point will be switched off for a safe isolation from supply.
- Authorisation via a backend system or RFID card (ISO 14443A / MIFARE classic and MIFARE DESFire)
- Communication
 - Locally networkable via LAN (RJ45)
 - Backend connection with optional integrated mobile radio (Micro-SIM, 3G (UMTS) / 4G (LTE)) or locally internet (LAN)
 - Compatible with OCPP 1.5s and OCPP 1.6s+j
 - Backend connection for up to 50 charging points over one SIM card
 - Powerline modem (PLC) for communication according to ISO 15118 (PnC)
- Load management
 - Dynamic and phase-accurate load management for up to 100 charging points
 - Connection of an external MODBUS TCP energy meter for the local blackout protection
 - Connection of intelligent energy management systems via Modbus TCP
- Protection device
 - Integrated residual current (type A) and miniature circuit breaker
 - DC leakage detection > 6mA
- Multifunction button
 - RCD-Test
 - Re-activating of RCD and MCB switch
- Enclosure made of AMELAN®

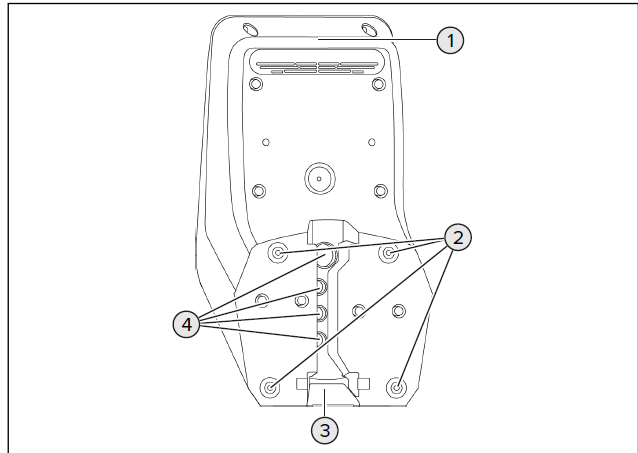
Assembly

Front view



1. Top section of housing
2. Inspection window for energy meter
3. Charging point marking according to DIN EN 17186
4. LED information panel
5. Front panel
6. Charging connection
7. RFID card reader
8. Multi-function button

Rear view



1. Bottom section section
2. Fastening bores for mounting
3. Aperture for supply line / cable duct
4. Cable glands

Compatible energy meters for blackout protection

MENNEKES recommends the use of the following devices:

Siemens PAC 2200:

- Indirect measurement via a transformer (5 A):
 - 7KM2200-2EA30-1JA1 (with MID-certification)
 - 7KM2200-2EA30-1EA1 (without MID-certification)
- Direct measurement (up to 65 A):
 - 7KM2200-2EA40-1JA1 (with MID-certification)
 - 7KM2200-2EA40-1EA1 (without MID-certification)

Phoenix EEM-MB371-EIP 2907976:

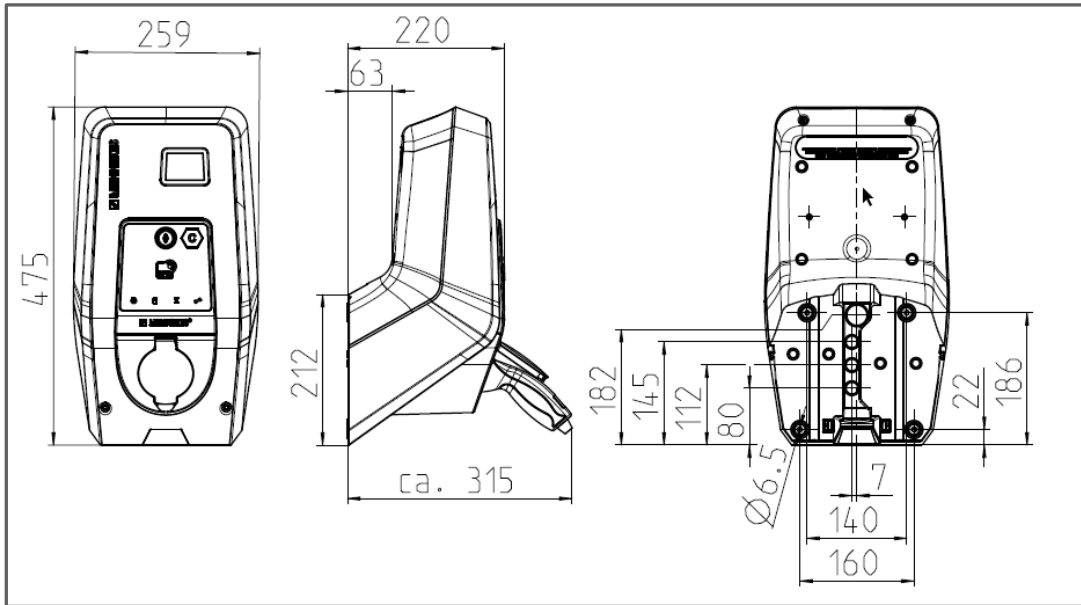
This energy meter also allows a direct connection of Rogowski coils.

Technical data

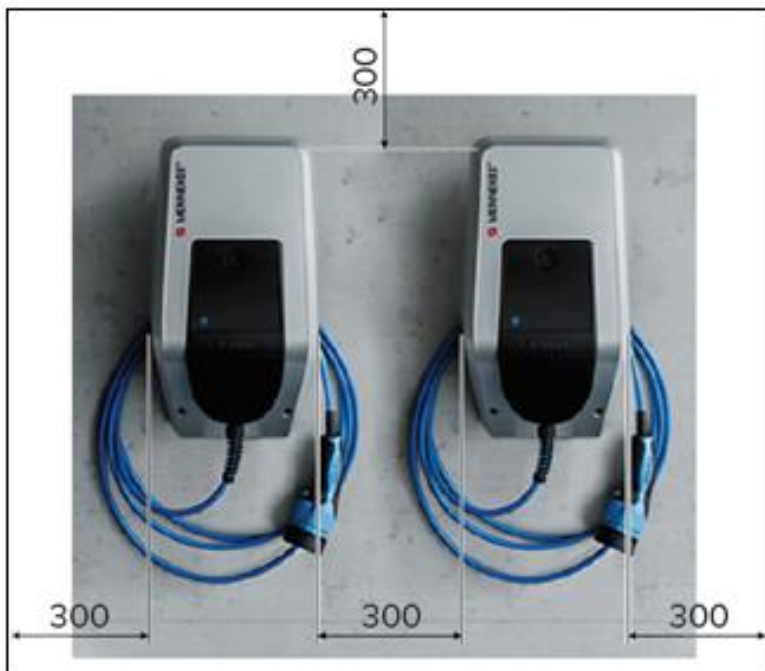
Type-dependent data		AMTRON® Professional+ PnC
Rated voltage U_N [V] AC \pm 10%		400
Rated frequency f_N [Hz]		50
Rated Current I_{nA} [A]		32
Max. backup fuse [A]		100
Max. charging capacity mode 3 [kW]		7,4 / 22
Rated current of charging point mode 3 I_{nc} [A]		32 - 1 / 3ph
Terminal strip supply line	Nominal cross section	10 mm ²
	Rated cross section	rigid 5 x 10 mm ² flexible 5 x 6 mm ²
	Tightening torque	max. 1,8 Nm
Rated insulation voltage U_i [V]		500
Rated impulse withstand voltage U_{imp} [kV]		4
Rated short circuit current I_{cc} [kA]		10
Rated diversity factor RDF		1
Earth system		TN / TT
EMC classification		A+B
Protection class		II
Degree of protection		IP 44 Permanently attached charging cable IP 54 Charging socket type 2 with hinged lid
Overvoltage category		III
Resistance to mechanical impact		IK 10
Pollution degree		3
Setting up		Indoor or outdoor
Condition of installation		Stationary equipment
Usage		ACSEV
Mounting method		Wall mounted
Dimensions H x W x D [mm]		475 x 259 x 220
Weight [kg]		6 - 10
Personal protection (RCD)		40/0,03A, 4P, type A
Line protection (MCB)		32A, 3P+N, characteristic C
Control fuse (MCB)		6A, 2p, characteristic B
Standard		DIN EN 61851-1, DIN IEC / TS 61439-7

Environmental conditions	
Ambient air temperature	-30...+50 °C
Average temperature within 24 hours	< 35 °C
Altitude	Max. 2000m above sea level
Relative humidity	Max. 95 % (non-condensing)

Dimensions [mm]



Mounting distance [mm]



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