
AMEDIO

PROFESSIONAL+ PnC

CHARGING STATION FOR ELECTRIC VEHICLES



MENNEKES charging stations for public and semi-public use

Variants

	Communication acc. to ISO 15118 incl. Plug and Charge (PnC)
3G / 4G modem	3G / 4G modem
LAN (RJ45)	LAN (RJ45)
MID counter	MID counter
RFID system	RFID system
Personal and line protection	Personal and line protection
DC-leakage detection	DC-leakage detection
LED status display	LED status display

AMEDIO Professional+

AMEDIO Professional+ PnC

Charging socket type 2 with hinged lid

	Order no.		Order no.
22 kW	140802412	22 kW	140822412

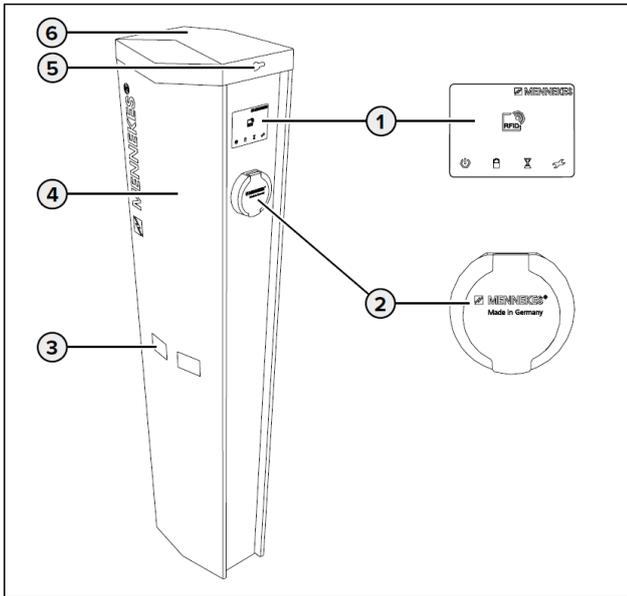
These products are not marketed in Germany.

Product features

- Overall
 - Charging mode 3 acc. to IEC 61851
 - Vehicle connectors and charging socket acc. to IEC 62196
 - 2x charging socket type 2 (mode 3) with hinged lid
 - Charging capacity up to 22kW
 - MID certified energy meter
 - Unlocking function in case of grid failure with type 2 (mode 3)
 - Status information through LED info bar
 - 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 / Networking
 - 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) (only for Plug & Charge variants)
- 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
- Protection device
 - Integrated residual current (type A) and miniature circuit breaker
 - DC leakage detection > 6mA
 - Over voltage protection type 2
 - Surge protection ethernet
- Enclosure
 - Enclosure made of black sheet metal, galvanized and powder-coated
 - Lockable plastic cover with integrated profile half cylinder

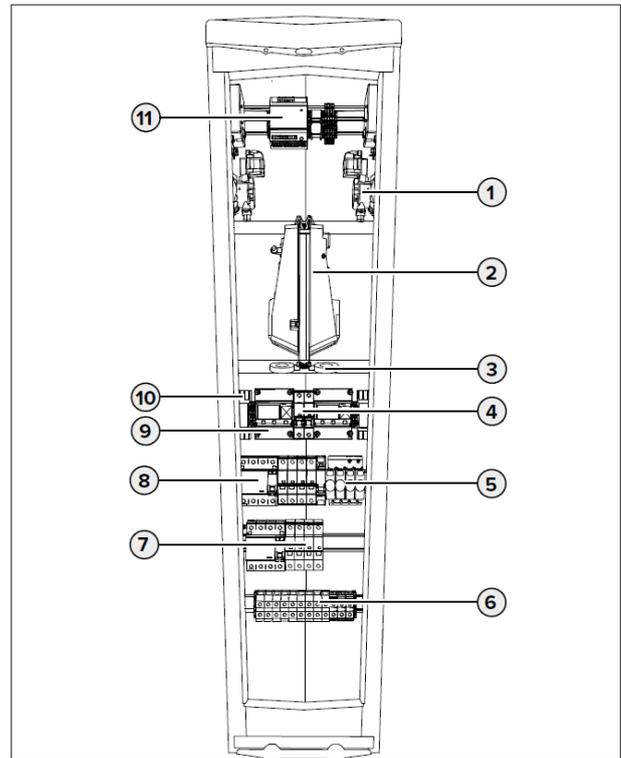
Assembly

External view



1. LED info bar with RFID reader
2. Charging socket (mode 3) with hinged lid
3. Counter window
4. Front plate
5. Lock for unlocking the cover
6. Cover

Inside view



1. Charging socket
2. MENNEKES ECU
3. Differential current transformer
4. Control circuit fuse
5. Overvoltage protection
6. Connection terminals for mains connection
7. MCB
8. RCD
9. Calibrated energy meter (MID licence)
10. Phase sequence measuring relay
11. Power supply unit

Technical data

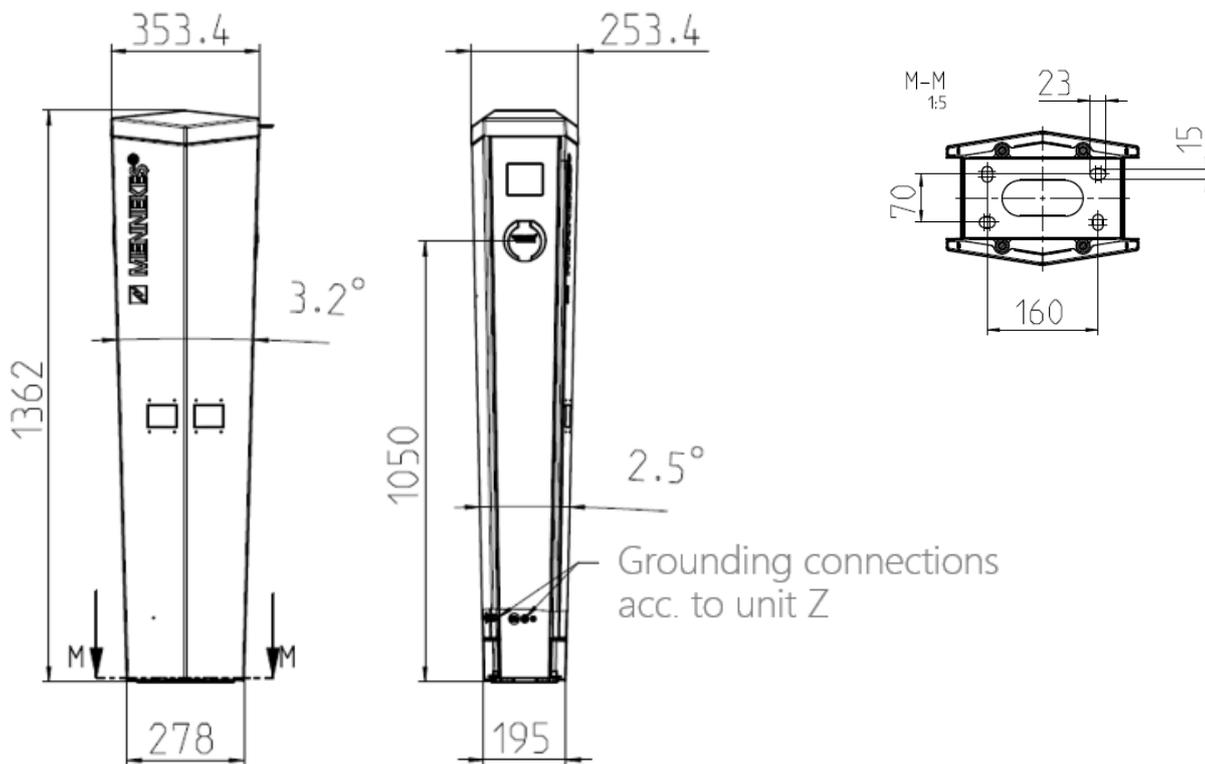
Type-dependent data		AMEDIO Professional+ PnC 22
Max. charging capacity mode 3 [kW]*		2 x up to 22
Rated voltage U_N [V] AC		400 ± 10%
Rated frequency f_N [Hz]		50
Rated Current I_{nA} [A]		63
Max. back-up fuse [A]		100
Degree of protection		IP 54
Protection class		I
Dimensions H x W x D [mm]		1362 x 353,4 x 253,4
Weight [kg]		45 - 50
Rated insulation voltage U_i [V]		500
Rated impulse withstand voltage U_{imp} [kV]		4
Rated current of charging point mode 3 I_{nC} [A]		32 – 1 / 3 ph
Rated conditional short-circuit current I_{cc} [kA]		10
Rated diversity factor RDF		1
Pollution degree		3
Overvoltage category		III
Earth system		TN / TT
Condition of installation		stationary
Setting up		outdoor
Usage		AEVCS
Mounting method		floor-mounted
EMC classification		A+B
Resistance to mechanical impact		IK 10
Terminal strip supply line	Terminals	5 x 2 x 35 mm ²
	Clamping range	rigid 1,5 x 50 mm ² flexible 1,5 x 50 mm ² flexible with ferrules fitted 1,5 - 35
	Tightening torque	3,2 – 3,7 Nm
Surge protection	Supply line**	type 2, pluggable, max. peak surge current 40 kA (8 / 20 μs)
	Ethernet	secondary protection, total peak surge current 5kA (8 / 20 μs)
Personal protection (RCCB)		40/0,03A, 4p, type A
Line protection (MCB)		32A, 3p+N, characteristic C
Control fuse (MCB)		6A, 1p+N, characteristic B
Load contactor		32 A, 3p+N
Standard		DIN EN 61851-1, DIN IEC / TS 61439-7

*The device can be operated in single-phase or three phase.

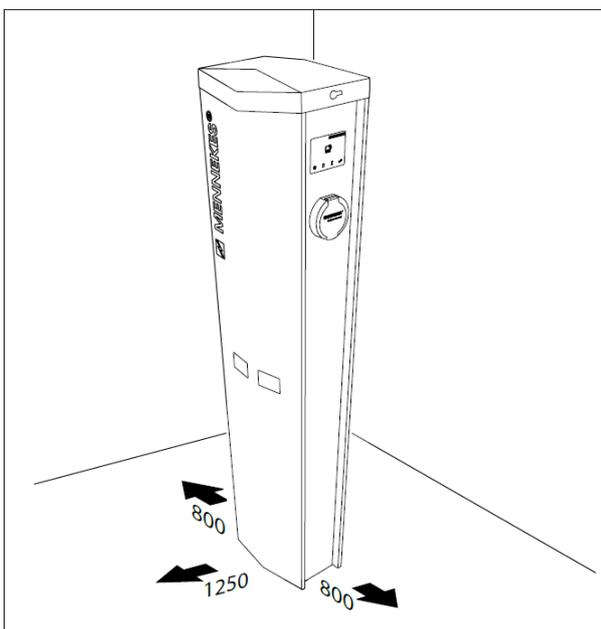
**optional

Environmental conditions	
Ambient temperature	-25...+40 °C
Average temperature within 24 hours	< 35 °C
Altitude	Max. 2000m above the sea
Relative humidity	Max. 95 % (non-condensing)

Dimensions [mm]



Mounting distance [mm]



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