MENNEKES

MY POWER CONNECTION

AMEDIO
Professional 22 T2S

For charging electric vehicles in semi-public and public areas

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Equipment features

General
- Mode 3 charging (IEC 61851-1)
- Plugs and sockets according to IEC 62196-2
- Maximum charging power: 44 kW
- Connection: 1-phase / 3-phase
- Max. charging power configurable by qualified electrician
- Calibrated energy meter, readable from outside (MID-compliant for three-phase supply network connection only)
- Status information via LED information panel
- Unlocking function in case of power failure
- Enclosure made of sheet steel
- Lockable cover made of plastic with integrated profile half-cylinder

User web interface (for EV drivers)
- Monitoring of charging processes
- Data export of all charging processes in CSV format
- Whitelist for RFID card management

Authorisation options
- Autostart (without authorisation)
- RFID (ISO / IEC 14443 A)
  Compatible with MIFARE classic and MIFARE DESFire
- Via a backend system

Networking options
- Connecting to a network via LAN / Ethernet (RJ45)
- Networking multiple products via LAN / Ethernet (RJ45)

Options for connecting to a backend system
- Via LAN / Ethernet (RJ45) and an external router
- Via LAN / Ethernet (RJ45) and Professional+ charging systems
- Support for OCPP 1.5s, OCPP 1.6s and OCPP 1.6j communication protocols

Options for local load management
- Reduction of the charging current via an external control signal (downgrade)
- Reduction of the charging current via an external control signal (downgrade) of the upstream, external energy meter type Siemens PAC2200
- Static load management
- Dynamic load management for up to 100 charging points (phase exact)
- Reduction of the charging current in case of uneven phase load (unbalanced load limitation)
- Local blackout by connecting an external Modbus TCP energy meter

Options for connecting to an external energy management system (EMS)
- Via Modbus TCP
- Via EEBus / Smart Meter Gateway
- Dynamic control of the charging current via an OCPP system (smart charging)

Integrated protective devices
- Residual Current Device type B
- Circuit breaker
- Type 2 surge protection
- Additional type 3 surge protection for Ethernet
- Shunt release, in order to disconnect the charging point voltage from the mains in case of a fault (welded load contact, welding detection)

Compatible meter for blackout protection

MENNEKES recommends using the following devices:

1. Siemens PAC 2200:
- Indirect measurement via a transducer (5 A):
    - 7KM2200-2EA30-1JA1 (with MID approval)
    - 7KM2200-2EA30-1EA1 (without MID approval)
    - 7KM2200-2EA00-1JB1 (with MID approval)
- Direct measurement (up to 65 A):
    - 7KM2200-2EA40-1JA1 (with MID approval)
    - 7KM2200-2EA40-1EA1 (without MID approval)
    - 7KM2200-2EA40-1JB1 (with MID approval)

2. Phoenix EEM-MB371-EIP 2907976

3. Kostal Smart Energy Meter 10507524

4. TQ Energy Manager EM 420-LLRR

Technical data

AMEDIO Professional 22 T2S		140602612
Max. charging power Mode 3 [kW]	Charging point 1	22
	Charging point 2	22
Connection	Charging point 1	1-phase / 3-phase
	Charging point 2	1-phase / 3-phase
Rated current I_{nA} [A]		63
Rated current of a Mode 3 I_{nC} charging point [A]		32
Rated voltage U_N [V] AC ± 10%		230 / 400
Rated frequency f_N [Hz]		50
Max. back-up fuse [A]		100
Rated insulation voltage U_i [V]		500
Rated impulse withstand voltage U_{imp} [kV]		4
Conditional rated short-circuit current I_{CC} [kA]		10
Rated diversity factor RDF		1
Types of system earthing		TN/TT
EMC classification		A+B
Protection class		I
IP rating		IP54
Overvoltage category		III
Mechanical impact protection		IK10
Contamination rating		3
Installation		open air
Stationary / Mobile		fixed
Use (according to IEC 61439-7)		ACSEV
External design		stand mounting
Dimensions H x W x D [mm]		1362 x 353.4 x 253.4
Weight [g]		50000
Standard		IEC 61851, IEC 61439-7

The specific standards according to which the product was tested can be found in the declaration of conformity for the product.

Technical data

Permissible ambient conditions	Min.	Max.
Ambient temperature [°C]	-25	40
Average temperature over 24 hours period [°C]		35
Altitude [m above sea level]		2000
Relative humidity [%]		95

Protective devices	
Personal protection (RC)	40 / 0,03A, 4p, type B
Load safety (LS)	C-32A, 3p+N, 10kA
Control fuse (LS)	B-6A, 1p+N, 10kA

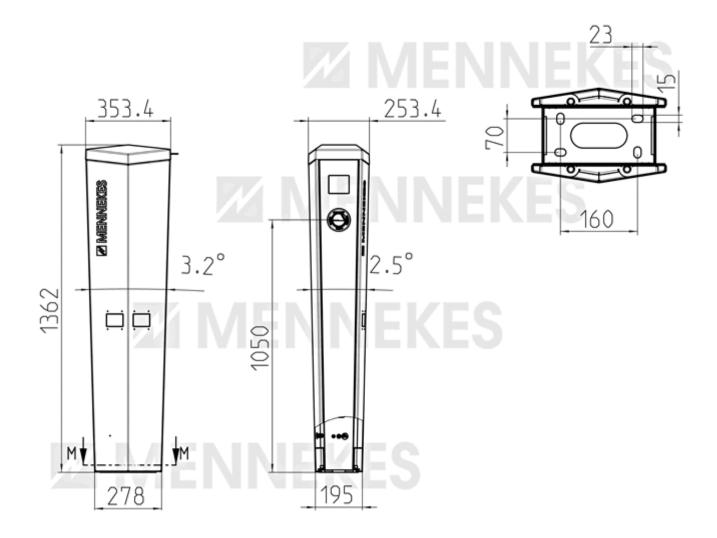| Lightning and surge protection	
Ethernet surge protection	SPD Class 2+3 CAT6
Type 2 surge protection	3+N/PE SPD Class 2

Technical data

Supply line terminal strip		
Number of terminals	5x2	
Conductor material	Copper	
	Min.	Max.
Clamping range - rigid [mm^2]	1.5	50
Clamping range - flexible [mm^2]	1.5	50
Clamping range with ferrule [mm^2]	1.5	35
Tightening torque [Nm]	3.2	3.7

Downgrade input terminals		
Number of terminals	2x2	
Coil voltage [V]	230	
	Min.	Max.
Clamping range - rigid [mm^2]	0.14	2.5
Clamping range - flexible [mm^2]	0.14	2.5
Clamping range with ferrule [mm^2]	0.14	2.5
Tightening torque [Nm]	-	-

Dimensional drawing

1 MB 675

Example