

# AMTRON®

## Start 2.0s 22 T2S

For charging electric vehicles in private 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: 22 kW
- Connection: 1-phase / 3-phase
- Max. charging power configurable by qualified electrician
- Status information via LED information panel
- Sleep mode for reduced standby consumption (approx. 1 W)
- Unlocking function in case of power failure
- Integrated cable hanger
- Enclosure made of AMELAN

## Authorisation options

- Autostart (without authorisation)
- RFID (ISO / IEC 14443 A)  
Compatible with MIFARE classic and MIFARE DESFire

## Options for local load management

- Reduction of the charging current using an external switching contact (downgrade input)
- Reduction of the charging current in case of uneven phase load (unbalanced load limitation)
- Solar charging via an upstream, external energy meter
  - 1-phase solar charging for charging powers from 1.4 - 7.4 kW
  - 3-phase solar charging for charging powers from 4.2 - 22 kW
- Local blackout protection by an upstream, external energy meter

## Options for connecting to an external energy management system (EMS)

- Via Modbus RTU

## Integrated protective devices

- No integrated Residual Current Device
- No integrated circuit breaker
- DC residual current monitoring > 6 mA with tripping characteristics in accordance with IEC 62955
- Switching output for controlling an external shunt release, in order to disconnect the charging point voltage from the mains in case of a fault (welded load contact, welding detection)

## Technical data

AMTRON® Start 2.0s 22 T2S		1331302605
Max. charging power Mode 3 [kW]	Charging point 1	22
Connection	Charging point 1	1-phase / 3-phase
Rated current $I_{nA}$ [A]		32
Rated current of a Mode 3 $I_{nC}$ charging point [A]		32
Rated voltage $U_N$ [V] AC $\pm 10\%$		230 / 400
Rated frequency $f_N$ [Hz]		50
Max. back-up fuse [A]		40
Rated insulation voltage $U_i$ [V]		500
Rated impulse withstand voltage $U_{imp}$ [kV]		4
Conditional rated short-circuit current $I_{CC}$ [kA]		1.8
Rated diversity factor RDF		1
Types of system earthing		TN/TT
EMC classification		A+B
Protection class		I
IP rating		IP44
Overvoltage category		III
Mechanical impact protection		IK10
Contamination rating		3
Installation		open air, interior
Stationary / Mobile		fixed
Use (according to IEC 61439-7)		AEVCS
External design		wall mounting
Dimensions H x W x D [mm]		475 x 259 x 220
Weight [g]		4400
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]	-30	50
Average temperature over 24 hours period [°C]		35
Altitude [m above sea level]		2000
Relative humidity [%]		95

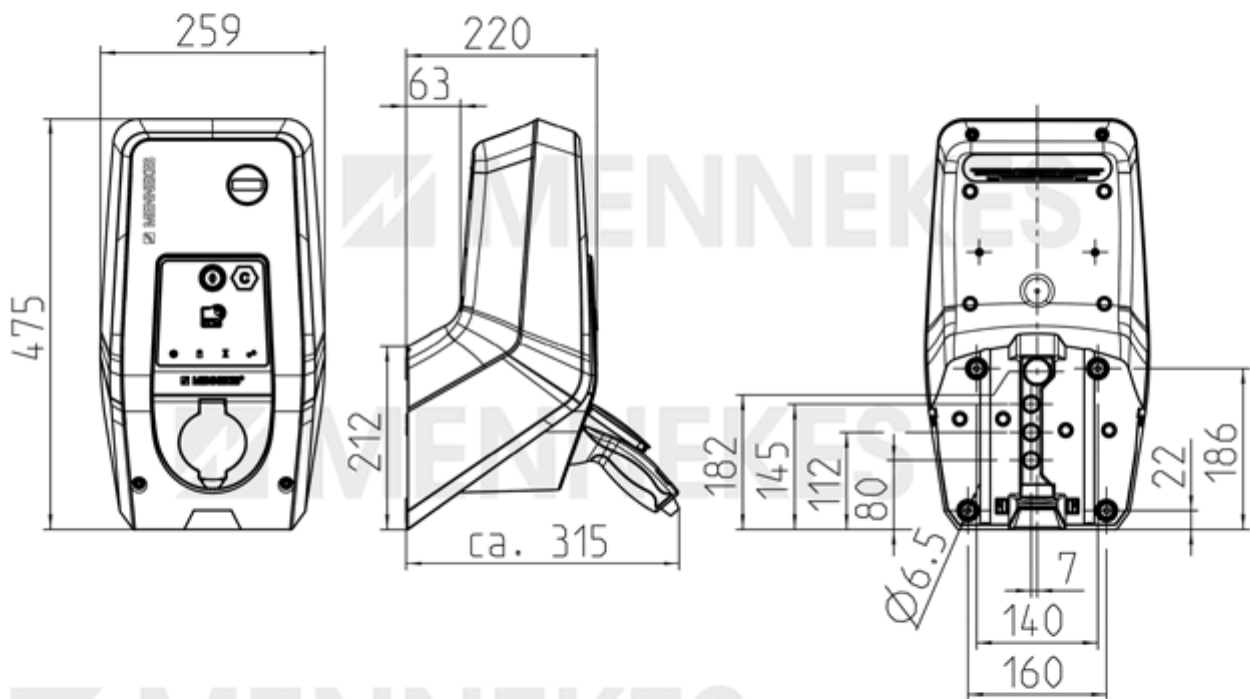
## Technical data

Supply line terminal strip		
Number of terminals	5	
Conductor material	Copper	
	Min.	Max.
Clamping range - rigid [mm <sup>2</sup> ]	0.2	10
Clamping range - flexible [mm <sup>2</sup> ]	0.2	10
Clamping range with ferrule [mm <sup>2</sup> ]	0.2	6
Tightening torque [Nm]	0.8	1.6

Downgrade input terminals		
Number of terminals	2	
Specification of the external switching contact	Potential-free (NC)	
	Min.	Max.
Clamping range - rigid [mm <sup>2</sup> ]	0.2	4
Clamping range - flexible [mm <sup>2</sup> ]	0.2	2.5
Clamping range with ferrule [mm <sup>2</sup> ]	0.25	2.5
Tightening torque [Nm]	0.5	0.5

Switching output für shunt release terminals		
Number of terminals	2	
Max. switching voltage [V] AC	230	
Max. switching voltage [V] DC	24	
Max. switching current [A]	1	
	Min.	Max.
Clamping range - rigid [mm <sup>2</sup> ]	0.2	4
Clamping range - flexible [mm <sup>2</sup> ]	0.2	2.5
Clamping range with ferrule [mm <sup>2</sup> ]	0.25	2.5
Tightening torque [Nm]	0.5	0.5

# Dimensional drawing



1 MB 682

# Example

