

INCH Lite (Basic Charger) TECHNICAL DATASHEET

CHARGER POWER SUPPLY INFORMATION

NOMINAL VOLTAGE	90 V AC to 253 V AC supported (single-phase) and up to 440 V AC (three-phase) Charging station can be connected single-phase or three-phase.
NOMINAL CURRENT PER PHASE	Max 32 A per phase Three phase model 3 x 32 A, single phase model 1 x 32 A. Can be adjusted (low) through charger settings.
MAXIMUM CHARGING POWER	7,4 kW (single phase) and 22 kW (three phase)
FREQUENCY	47 Hz – 63 Hz
SUPPORTING GROUNDING SYSTEMS	The charging station must be properly grounded. Following grounding system are supported: TN-S, TN-C, TN-C-S and TT under special conditions. Where this is possible local grounding should be done. 1-phase connection of IT grounding system is supported and 3- phase IT with use of transformer.
STANDBY OWN ENERGY CONSUMPTION	Own consumption power from 1 W up to 3 W.
DEVICE OVERVOLTAGE SENSITIVITY	Category III EN 60664

CHARGER OUTPUT

NUMBER OF CHARGING OUTPUTS (SOCKETS)	1
NOMINAL VOLTAGE (SINGLE-PHASE VEHICLE CONNECTED)	Power supply voltage 230 V AC (-10 % , +10 %) and 120 V AC (-10 % , +10 %) On-board car charger nominal voltage depends on the car specification and typically reaches values between 100 V DC and 500 V DC.
NOMINAL VOLTAGE (THREE-PHASE VEHICLE CONNECTED)	Power supply voltage 400 V AC (-10 % , +10 %) and 208 V AC (-10 % , +10 %) On-board car charger nominal voltage depends on the car specification and typically reaches values between 100 V DC and 500 V DC. On a three phase charging station single and three phase vehicles can charge.
NOMINAL CURRENT PER PHASE	Max 32 A per phase Three phase model 3 x 32 A, single phase model 1 x 32 A. Can be adjusted through charger settings.
MAXIMUM CHARGING POWER	7,4 kW (single phase) and 22 kW (three phase) Max. power can be adjusted (lowered) when the charging station is installed or later.
CHARGING SOCKET TYPE	Type 2 socket Compliant with IEC 62196-2.
CHARGING CABLE TYPE (ALTERNATIVE)	With Type 2 connector supporting IEC 62196-2 type plug.

ELECTRICAL PROTECTION

DIFFERENTIAL PROTECTION (OPTIONAL)	Residual current device with $\Delta I = 30$ mA. Different options possible: <ul style="list-style-type: none">• DC fault current sensor 6 mA, default option.• RCD Type A, RCD Type A EV, RCD Type B, optionally. One protection can be installed inside the charging station. If differential protection is integrated in the charging station then overcurrent protection needs to be installed in the electric cabinet or vice versa. Compliant with the following standards: <ul style="list-style-type: none">• IEC 61851, IEC 62955, IEC/EN 62423 (Type B).
SURGE AND OVERVOLTAGE PROTECTION (NOT INCLUDED)	Should be installed in external electrical cabinet.
OVERCURRENT PROTECTION (OPTIONAL)	MCB between 16 A and 40 A, characteristics C. One protection can be installed inside the charging station. If differential protection is integrated in the charging station then overcurrent protection needs to be installed in the electric cabinet or vice versa. Rated short time withstand current: 6 kA.

METERING

MID METER (OPTIONAL)

MID meter can be installed inside the charging station, but not connected with the station's controller (readings can be done directly from the meter display). Accuracy meter rating: Class 1 for active energy according to EN 62053-21 and class B according to EN 50470-3.

When MID meter is installed inside the charging station all protection devices need to be installed in the electric cabinet. This guarantees sufficient protection of household loads, EV and user during charging.

COMMUNICATION INTERFACES WITH ELECTRIC VEHICLES

IEC 61851

Digital communication according to IEC 61851-1:2017 is supported.

- Older versions of the standard are also supported.

COMMUNICATION PROTOCOLS

OCPP

Not supported.

Upgradable on request (requires HW change).

USER INTERFACES

STATUS LED

Indicates charger's present status.

BASIC MECHANICAL SPECIFICATION

DIMENSIONS (HxWxD)

45 x 27 x 13.5 [cm] (model with socket)
45 x 27 x 13.5 [cm] (model with cable holder)

- The cable dimensions are not included in the specified dimensions of the product. Approximate height of the tidied up cable on holder is 0.5 m.

WEIGHT

8.2 [kg] (model with socket), including package 9.5 [kg]
11.1 [kg] (model with 5 m cable), including package 12.7 [kg]
12.3 [kg] (model with 7 m cable), including package 13.9 [kg]

DIMENSION INCLUDING PACKAGING (HXWXD)

60 x 40 x 18 [cm] (model with socket)
60 x 40 x 25 [cm] (model with cable)

CASING MATERIAL

Aluminium, cover plate Polycarbonate Lexan.

CASING COLOUR

Anthracite grey.

MOUNTING OPTIONS

Wall mounted:

- With back-plate for wall mounting.

Self-standing with use of additional pole:

- With pole and accessories for mounting of one charger.
- With pole and accessories for mounting of two chargers.

INLET CABLE HANDLING

POWER CABLE ENTRANCE DIRECTION

Power cables can be inserted into the station from the back and from bottom of the charging station. Alternately, with the special wall mounting frame also from the top side.

POWER CABLE DIMENSIONS

From 3 x 2,5 mm², to 5 x 10 mm²

- In special condition also 5 x 16 mm² cable can be used.
- The use of fine-wire cables of appropriate diameter is recommended. Solid-wire cables are also suitable.

CHARGING CABLE HANDLING

CABLE TYPE

Straight cable.

CABLE LENGTH

Multiple lengths supported: 5 m (default in model with cable) or 7 m (optional).

CABLE HOLDER

Cable holder for charging station with embedded cable.

PLUG HOLDER

Magnetic holder.

ENVIRONMENTAL SPECIFICATIONS

INGRESS PROTECTION	IP 56 in testing with IK10. The cable plug could have lower IP.
TEMPERATURE RANGE	Operation temperature range: -20°C to +65°C Storage temperature range: -40°C to +70°C
HUMIDITY	Up to 90 % relative humidity, non-condensing
MAXIMUM ALTITUDE	2000 m

VANDALISM PROTECTION

IMPACT PROTECTION	IK10
PLUG LOCKING	Not supported

MAINTENANCE

ACCESS TO SERVICE AREA	Service doors with screw, or service doors with MID window and key.
FUNCTIONS SUPPORTED THROUGH SERVICE AREA	Access to: <ul style="list-style-type: none">• manual setting of max. charging current,• protection manipulation,• RCD protection test button.
CLEANING	<ul style="list-style-type: none">• Cloth and water or water-based or alcohol-based cleaners.• Do not use solvent-based cleaners.