

version 1.3., date: 19. 10. 2020

ETREL TECHNICAL DATASHEET

MODEL: Etrel INCH Lite (Basic charger)

CHARGER P	OWER 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 (lowered) 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.		
FREQUENCY	47 Hz – 63 Hz		
SUPPORTED 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 betweer 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.		
ELE	CTRICAL PROTECTION		
DIFFERENTIAL PROTECTION	Residual current device with $\Delta I = 30$ mA.		
	 Different options possible: 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: 	Optional	
SURGE AND OVERVOLTAGE PROTECTION	Should be installed in external electrical cabinet.	*	
OVERCURRENT PROTECTION	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.	Optional	
	kated short time withstand current: 6 kA.		

	METERING	
MID METER	MID meter can be installed inside the charging station, but not connected with the station's controller (readings can be done by user 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 el. cabinet. This guarantees sufficient protection of household loads, EV and user during charging.	Optional
COMMUNICATIC	INTERFACES WITH ELECTRIC VEHIC	LES
IEC 61851	 Digital communication according to IEC 61851-1:2017 is sup Older versions of the standard are also supported. 	oported.
CON	AMUNICATION PROTOCOLS	
ОСРР	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 COLOR	Anthracite grey.	
MOUNTING OPTIONS	Wall mounted:	

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POWER CABLE ENTRANCE DIRECTION

POWER CABLE DIMENSIONS

• 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 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.

Optional (pole)

From 3 x 2,5 mm², to 5 x 10 mm²

• In special condition also $5 \times 16 \text{ mm}^2$ 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		

ENVIR	ONMENTAL SPECIFICATIONS	
INGRESS PROTECTION	IP 56 in testing with IK10. The cable plug could have lower IP.	●
TEMPERATURE RANGE	Operation temperature range: -25°C to +65°C Storage temperature range: -40°C to +70°C	●
HUMIDITY	Up to 95 % relative humidity, non-condensing	•
MAXIMUM ALTITUDE	2000 m	
VA	ANDALISM 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: • manual setting of max. charging current, • protection manipulation, • RCD protection test button.	
CLEANING	 Cloth and water or water-based or alcohol-based cleaners. Do not use solvent-based cleaners. 	•