CHARGING SYSTEM FOR ELECTRIC VEHICLES

WITH OPTION OF AUTOMATIC POWER ADJUSTMENT DURING CHARGING

- STAY IN CHARGE -

NO NEED TO UPGRADE THE EXISTING POWER SUPPLY

mikEVSE is easy to install and can charge effectively using the existing power supply, without there being any need to upgrade it. For residential use, even the 3kW power already available to the home under the supply contract can be sufficient to complete a charge cycle overnight, so that when you wake up your car will be 100% charged. Once started, *mikEVSE* will maintain the charge level of the EV, transmitting real-time information as to the available power deliverable at that precise moment, thus limiting charge interruptions to a minimum without ever tripping any power limiters installed on the mains supply. For company use, even several *mikEVSEs* serving the parking facility housing various types of electric vehicles can communicate with one another so as to optimize simultaneous charging by rationalizing it based on the available power, assigning priority to some parking spaces or evenly balancing the charging so that even the last vehicle to arrive is charged with the same rules, or else to minimize charging times by calculating the maximum power that can be supplied at each moment.

MAXIMUM ECONOMY AND ECOLOGY WITH RENEWABLES

In the case of power generation systems relying on non-programmable renewable sources, you can make a simple memorisable selection, with no need to install any additional devices dedicated to specific existing equipment, and ***mikEVSE*** will maximize the use of the locally produced energy, storing it in the EV to ensure maximum savings on your next trip. *mikEVSE* is made using clean energy in a company that was e-Mobile even before manufacturing it!

SAFETY WITHOUT COMPROMISES

In addition to complying with the strictest safety standards set for mode 3 charging devices, ***mikEVSE*** always verifies the presence of the diode installed in series with the control pilot on the EV side before it starts delivering power and continuously during charging, together with the parameters indicative of signal quality and charging energy. No charging can start or continue based on a check on the resistor alone, so there is no possibility of energizing the power contacts by accidentally touching the cable or pin dedicated to the pilot line.

VALUE OF THE INVESTMENT

mikEVSE, at home or in a company setting, can adapt to your charging style, even in the basic version with manual setting: if your e-Mobility dimension grows over time, our charging station will do so too, without obliging you to replace it.
mikEVSE can in fact be reconfigured in a few simple steps so as to become more powerful or acquire optional automatic functions, even after its initial installation.

ONLY 40cm UP TO THE 22 kW MODEL

mikEVSE is very compact in size: a diameter of only 40 cm and depth of 16 cm up to the model having a maximum nominal power of 22 kW (32A three-phase). The EV cable can be placed inside the unit without dirtying the wall.

SIMPLICITY and STURDINESS

Sturdiness, ease of installation and user-friendliness are features shared by all units, from the smaller single-phase model to the powerful three-phase one, with or without automatic adjustment, with a keypad or touch-screen colour display, wall-mounted or pedestal-mounted, with an integral or detachable EV cable. Components that over the years have shown high reliability, also available in a version for extreme temperatures. Every time a disconnection is requested manually before the charge cycle has reached a natural end, ***mikEVSE*** first dialogues with the EV to negotiate the shutoff of current and only then switches the power device, thus maximizing reliability and lifespan.

[FURTHER SPECIFICATIONS and OPTIONS ON BACK PAGE]

FILED PATENTS** ***mikEVSE is the property of: **MICHELE ANDREOLI**

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mikEVSE

- **NOMINAL POWER RATINGS**: *22 kW (single-phase / three-phase, settable 1,4 – 22 kW * 6 – 32 Amp)*
- **ONE SIZE UP TO 22kW** *diameter 40 centimetres / depth 16 centimetres*
- **ELECTRONIC SAFETY TEST TO VERIFY PRESENCE OF EV DIODE**
- **MANUAL FUNCTION**: *function for manually setting a fixed maximum current (or power) to be communicated and made available to the EV (freely adjustable in 0.6 Amp pitches, within the range from the minimum current of 6 Amps to the maximum allowed for the model and/or certification purposes)*
- **AUTOMAX FUNCTION**: *automatic function for communicating and delivering to the EV the maximum current available, at every instant, based on the maximum contracted power and demand of other users in the building*
- **AUTOGEN FUNCTION**: *automatic function for communicating and delivering to the EV the maximum current available, at every instant, within the limits of the power input to the mains supply by a generator system relying on a renewable source (with a minimum configurable also during draw)*
- **MINIMUM POWER SETTING:** *corresponding to a current of 6 Amps*
  (for cos.Φ = 1, rating of 1.38 kW single-phase and 4.14 kW three-phase)
- **MAXIMUM POWER SETTING:** *corresponding to the maximum power limited by the model of mikEVSE, the power configured at the time of installation , or the maximum power under certification limits (whichever is lowest)*
- **MAXIMUM AND CONTRACTED NOMINAL POWER** *can be reconfigured without replacing the charging station, within the range of the minimum power setting and the maximum certified value*
- **WITH MEMBRANE KEYPAD or 4 INCH TOUCH SCREEN COLOUR DISPLAY**
- **WALL MOUNT** *or* **PEDESTAL MOUNT**
- **IP21** *or* **IP44**
- **TEMPERATURE RANGE:** *normal, extended or extreme*
- **EV CABLE INTEGRAL WITH STATION** *or* **DETACHABLE EV CABLE**
- **AVAILABLE CONNECTORS:** *J1772 / Mennekes / Scame*
- **CABLE REEL SEAT** *in the outer cylindrical cavity, up to 5 metres for L3x32 + N1x32 (22kW)*
- **"WALL SAVER" BACKING RING and FRONT FOR EV CABLE:** *projecting ring on back to avoid dirtying the wall during winding of the cable (possibly placed on the ground during charging) and projecting front for keeping the EV cable in place*
- **MULTI-COLOURED LED LIGHTING ON FRONT AND PERIMETER:** *coloured lights reflecting the charge status, visible both on the front and on the sides over the entire perimeter (the charging status can be seen from any observation point in the garage)*
- **ENABLE FUNCTION with MONITORING OF VENTILATION IN CLOSED CHARGING ENVIRONMENT:** *if required by the EV (depending on the type of batteries installed)*
- **MEASUREMENT OF ELECTRICAL PARAMETERS and POWER CONSUMPTION:** *recordable for each individual vehicle*
- **MASTER/SLAVE FUNCTION:** *for connection to a number of charging stations and management of parking facilities*
- **OPTIONAL ETHERNET TCP/IP CONNECTION and WEB DISPLAY OF CHARGE STATUS**
- **SHORT CIRCUIT, OVERLOAD and OVERVOLTAGE PROTECTION:** *integrated protection for the electronic circuit; to be applied externally (by the installer) for the power line together with the residual current device*