Variablegrid adaptive load-sharing charging system station
Model LCCS2-R12

Description

• Unique technology that shares power with all connected appliances including EV's, to maximize charging performance on shared circuits or panels, resulting in reduced infrastructure costs and maximal power bandwidth.
• Applicable to indoor or outdoor, private homes, condos, fleets, workplace charging, street light utilization or public parking.
• Utilizes local server-based secure network, free of remote communication charges and access hazards.

Features

• Capable of waiting for sufficient available power rather than requiring a constant minimum current flow.
• Metered usage report available via LAN interface for billing or reporting.
• Intelligent power management to ensure all users are fully charged overnight with minimal required infrastructure.
• Power-sharing efficiency approaches 100% as available charging power decreases. This results in lower distribution transformer requirements and lower building demand factors.
• Power flow simultaneously subject to building demand, panel rating, shared branch circuit capacity and maximum charging station power level. Continuously variable power flow control.
• RFID authentication option uses tags you likely already own. No need for special cards. Automatic authorization of single card.
• Unique scalability with soft limits – excessive additional stations beyond design limits merely degrade average performance.
• Multi-point systems can scale incrementally one unit at a time.
• Warranty: 3 years parts and labour
Representative wiring illustration
Material specifications

- Weight 17 lbs inc. cabling
- Length 13.5”, Width 10”, Height 7.5”
- Horizontal space between mounting holes 9”
- Vertical space between mounting holes 12.5”
- Mounting holes: 1/4”
- 16' EVSE cable assembly, 25' length option
- 3' NEMA 6-50 power cord (CA), 1' cord (US)
- fixed-wiring connect option with either bottom or left side
  perforation, AWG 8
- Operating temperature -30°C to +40°C; for indoors and
  outdoors use: Nema 3R
- Max. certified cable size termination 8AWG

Electrical specifications

- Voltage : 208-240V 60Hz
- Current delivery: variable, max. 30A continuous, down to 0A depending on shared
  load activity. 1% metering accuracy.
- Integral supplementary 40A 208V-240V single phase circuit breaker allows splitter
  tap connection to a shared branch to a limit of 24’ (Rule 14-100 c.)
- Automatic monitoring of : input and output ground continuity, ground fault current,
  over-current, communication link integrity and surge suppression reliability.
- Dual modular redundant (DMR) personnel safety protection features
- OCPP optional access with core functionality, including RFID reader for ISO 14443A
  Mifare cards.
- Local sensor/server command and control interface over multiple carrier options,
  supported by HTTPS-level encryption.
- Connection to communications is via RJ45 jack.
- Automatic power fail restart during charge; auto-delayed during high reactive
  restart currents in the panel.
- Remote operator control option with core OCPP functions.
- Centralized human-readable reporting of network or component malfunctions,
  accessible via browser pages.
- Standards-certified for North America (CSA, UL).
- OpenADR utility access via OCPP aggregator (in preparation.)