



50kW Station KEYWATT for eBus



Overview

- > Interoperable Combo2 station for eBuses
- > Optimized low surface footprint for easy installation in depot
- > Compatible with installation against walls
- > Can be upgraded to 100kW by connecting two stations in parallel
- > Wide output voltage range: from 400V to 800V DC
- > IP55 for outside use
- > Low-maintenance cooling system without air filter
- > 7" Touch screen display, 5 LEDs & ON/OFF buttons
- > Adjustable angle cable outlet
- > Remote & smart power management via OCPP 1.6



Interoperable
Station



Easy
Installation



Low
Maintenance



Smart
Power



Upgradable
to 100 kW

Available charging protocols



Combo 2

Main applications

- > Bus Depot

Main features

With an optimized surface footprint, the new IES station for eBus has been designed for perfect use in depot environment (installation against walls, adjustable cable outlet). Thanks to the KEYWATT™ design without air filter, maintenance needs are greatly reduced and service continuity optimized. Connected to a centralized network by wire or through air via OCPP1.6, the delivered output power can be adjusted on-line for smart charging. A 50kW station can be upgraded to 100 kW, by connecting a second one in parallel.

INPUT

Voltage : 400VAC 50Hz 3 Phase (3P + N + Ground)

Nominal input current: 80A

Power factor : > 0,98

Efficiency : 93%

OUTPUT

Voltage : 400V to 800VDC

Current : 3 to 75A

Max output power: 50kW

INSULATION

Input / Output: 3500VDC

Input / PE: 2500VAC

Output / PE: 2000VDC

HARDWARE PROTECTIONS

Circuit breaker 125A (+ external RCD needed)

Output diode on power module

Fast acting fuses on output

AC input and DC output relays

ELECTRONIC PROTECTION

Overload and output short-circuit

Over temperature and temperature regulation

Output over voltage / reverse polarity

Charging plug defects / Communication failure

Insulation monitor device on DC output

COMMUNICATION BUS

Combo Compatible: DIN70121

OPERATING TEMPERATURE

Temperature: -25°C to +50°C (derating above +30°C)

Relative Humidity: 10% to 95%

MECHANICAL FEATURES

Dimensions: H 2m x L 0,70m x W 0,52m

DC Cable length: 4 or 7 meters

Index Protection: IP55

Weight: 320kg

Communication

Vehicle interface:

- CCS Combo 2 Protocol

Supervision:

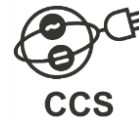
- Connectivity: Ethernet or 3G
- Protocol: OCPP1.6 (SOAP or JSON)
- Smart charging OCCP functions (Dynamic Power Management, Profiles...)

Access & Identification:

- Touch Screen 7"
- ON/OFF buttons
- 5 Status LEDs

Standard compliance

- RED Directive 2014/53/EU
- EMC Directive 2014/30/EU
- LVD Directive 2014/35/EU
- Charge DIN70121-2014 / ISO15118-3



For all eBus types



For use in depot