

Single-Board EV Controller



The Deltrix Single Board EV Charging Controller allows integrators to build their own simple but yet safe EV Charging Stations that support from 3.6KW or 7,4KW on a single phase to 11KW on 3 phases and where all components including the relays and DC fault protection are integrated onto a single PCBA.

Controller Board - Physical

Dimensions (LxWxH)

Weight

Mounting Process/options Embedded microcontroller

Firmware

Onboard temperature monitoring

Power supply

Pluggable connectors

Reprogrammable Firmware

108mm x 83mm x 44mm

200 grams

3 holes

Atmel

Embedded

Yes, in micro-controller

On-board

Charging Socket + Mains Supply + PP and CP

Yes, with clip-on connector

Controller Board - Electrical

Mode

Power Rating

Current Settings

Earth Leakage Protection

Status Lighting (On-Board LED)

On board relays

Phases

Supply Connections

Nominal Supply

Over Current Protection

Standby Power Consumption

3 (IEC 61851-1 / SAE J1772 compliant communication protocol)

Power Rating: 3.6KW, 16A, 7.4 KW, 32A or 11KW, 16A on 3 Phases

10-Step adjustable charging current

(Amps: 6, 8, 10, 12, 13, 16, 18, 20, 25, 32)

Embedded ground fault sensor (RCM14 for DC current max 6 mA)

Optional AC (30mA) + DC (6mA)

LEDs with Clear, Connected & Charging (for use with LED Pipe)

1 x 35A or 3 x 40A

Single Phase

L1, L2, L3, N, PE 2.5 - 1mm2

230VAC 50Hz

40A Supply

~1W



Controller Board - Interfacing

RFID No Buzzer No

kWh energy meter support Optional

Contactor Weld Detect

T2 Socket Lock controller

Proximity Pilot & Control Pilot

LCD Support

No

CAN-bus No Ethernet interface No

RCD status Trip Detect

Contactor enable On board relays

GSM Antenna & GPS Antenna No
Penta band 3G/GSM modem No
GPS global positioning No
Local Load Balancing (Master/Slave) No

I²C Bus Connector For custom Add-on Boards (please request a quote) e.g. RFID, Key locking, Fan Control, load balancing, etc.

Part Numbers

Single Board Controller - 1 Phase DEMSBEVC-1-1

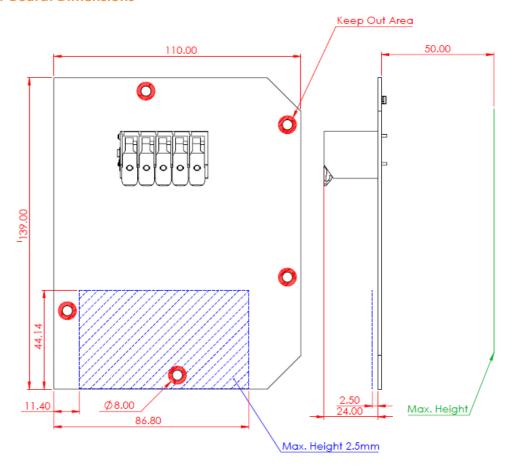
Single Board Controller - 3 Phase DEMSBEVC-3-1 (Nov. 2020)

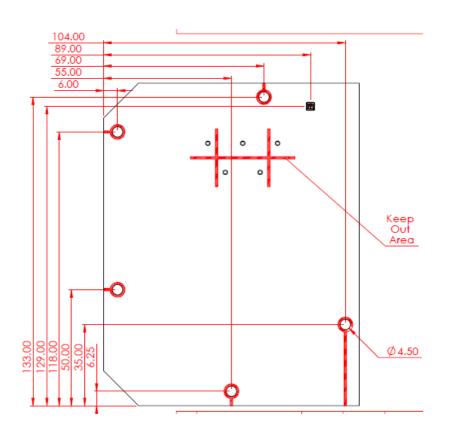
Controller Board - Rear side with connector block





Controller Board: Dimensions







Controller Board: Current Settings (using rotary switch)

Set the maximum charging current with the knob on the printed circuit board according to the following table:

POS	0	1	2	3	4	5	6	7	8	9
	6A	7A	8A	9A	10A	13A	14A	15A	16A	18A

Controller Board: LED Status

The charger has an LED that lights up in either green, yellow, blue or red.

Green	The charger is ready	
Yellow	The cable is connected to the charging box (but may not be the car), but	
	does not charge or finish charging	
Blue	Charging is in progress	
Red	Contact an authorized electrical installer	

EU HQ, Sales & Marketing – Ireland

Deltrix (Europe) Limited
Block 1, Unit 1A
Bracken Road
Sandyford
Dublin D18 H283
Ireland

Tel.: +353 (1) 5390606 E-Mail: info@deltrixchargers.com

Sales & Marketing – Germany

Deltrix (Europe) Limited Max-Planck-Straße 4 85609 Aschheim-Dornach Germany

Tel.: +49 (89) 215 385 23 E-Mail: info@deltrixchargers.com