CIRCONTROL
Mobility & eMobility

Raption 50

The perfect combination of power, design and reliability

Application

Designed to be installed in both public access environments (urban spaces, shopping centres, airports, road-side rest areas...) and private ones (companies with EV fleet, taxi stop stations...) where vehicles need to be ready to continue their journey in less than half an hour.

Concept Design

Conceived to address the main problem identified by Charge Point Owners / Operators when Fast Charging (low uptime), Raption 50 series bases its functioning in state-of-the-art modular power technology.

Another key attribute considered has been its external design. Sophisticated, slim and robust are just some attributes that can be used to describe this series and make it ideal for any type of site (from the most stylish urban area to industrial sites).

Product highlights

For Charge Point **Operator / Owner**

- Its **modular power technology** ensures a very high uptime (reducing the non-operation expenditure) since in case of power module failure the rest of modules continue charging.
- Lower energy consumption (and therefore OpEx) is achieved due to a **sustained high efficiency level** resulting from disconnecting power modules when lower charging power is requested by the EV.
- The modular architecture allows **power scalability** from 25kW to 50kW to meet present and future EV growing battery demands.
- It offers a unique **connector care** concept by means of gun locking feature (optional) and cable floating design, which results on a reduction of cable breaking risk.
- Its **double frontal key-locked door** provides an easy access to the the charger for a quicker installation and service. Moreover, it allows the charger to be installed next to a wall, optimising the available space.
- Capable of being configured as a **Master for the Master-Slave** solution (p. 24).
- Available **480 V model** for Mexico and other Latin America countries.

For Charge Point **User**

- Its **8" colour antivandal touch screen daylight readable** not only provides clear charging instructions (e.g. wrong EV shift position to start the charge) and plug status (e.g. reserved charge point) but also allows the user to select amongst several languages.
- User satisfaction is also increased due to its **build-in courtesy light** which both facilitates locating the charge point in dark areas and reading the messages contained in operator instruction labels.
- **Accessibility for the disabled** has also been considered, complying with international standards regarding the height of connectors/ display that facilitates its operation.

Raption 50 *Series*

General Specifications

AC Power Supply	3P + N + PE
AC Voltage	400V AC +/- 10%
Power Factor	>0,98
Efficiency	95 % at nominal output power
Frequency	50 / 60 Hz
Electrical input protection	Main breaker disconnection
Overcurrent protections	MCB
Safety protection	RCD 30mA Type A
Network connection	Ethernet 10/100BaseTX
Interface protocol	OCPP 1.5 or OCPP 1.6J
Compliance	CE / Combo-2 (DIN 70121; ISO15118) IEC 61851-1; IEC 61851-23; IEC 61851-21-2
	CHAdeMO compatible
Enclosure rating	IP54 / IK10
Enclosure material	Stainless steel
Operating temperature	-30 ºC to +50 ºC
Ambient temperature storage	-40 ºC to +60 ºC
Operating humidity	5 % to 95 % Non-condensing
Socket protection	Locking System
RFID system	ISO / IEC14443-1/2/3 MIFARE Classic
Display HMI	8" colour antivandal touch screen

Power limit control	DC & AC by software
DC cable lenght CCS	3 meters
DC cable lenght CHAdeMO	3 meters
AC cable lenght	3 meters
Lights for status indication	RGB colour indicator
Dimensions (D x W x H)	355x940x1800 mm (without cable engaged)
Weight	235 kg
Cooling system	Air cooling fans
Operational noise level	< 55 dBA
AC Meter	Compliant with the EN 50470-1 and EN 50470-3 (MID European standards) or IEC 62052-11
Optional devices	
Wireless Comunication	4G LTE/WiFi Hotspot/GPRS/GSM
Surge protection	Four pole transient surge protector IEC 61643-1 (class II)
Safety protection	RCD type B
Cable Length	5.5m (all cables)
Anti-vandal connector protection	CHAdeMO, CCS (mechanical connector locking)
Type 2 Charging Socket	Shutter
***25 kW DC version**	Power output DC of 25 kW (2 x 12,5 kW modules)
Network hub	Switch TCP ethernet 8 ports
	Switch TCP ethernet 12 ports
RFID Extension	Legic Advant / Legic Prime ISO 15693/ISO 18092. Sony FeliCa

Models Specifications

Models	**CCS**	**CCS T2C32**	**CCS T2S32**
Maximum AC input current	76 A (38 A*)	108 A (70 A*)	108 A (70 A*)
Required power supply capacity	53 kVA (26 kVA*)	75 kVA (48 kVA*)	75 kVA (48 kVA*)
Maximum output power	50 kW (25 kW*) (@400 VDC)	DC:50 kW (25 kW*) (@400 VDC) AC:22 kW	DC:50 kW (25 kW*) (@400 VDC) AC:22 kW
Output voltage range	DC:50 - 500 V	DC: 50 - 500 V AC: 400 V	DC: 50 - 500 V AC: 400 V
Maximum output current	DC:125 A (63 A*)	DC:125A AC:32 A	DC:125A AC:32 A
Connection	CCS 2	CCS 2 Type 2 Tethered cable	CCS 2 Type 2 Socket (Lock system)

Models	**CCS CHA**	**CCS CHA T2S32**	**CCS CHA T2C32**	**CCS CHA T2C63**
Maximum AC input current	76 A (38 A*)	108 A (70 A*)	108 A (70 A*)	138 A (101 A*)
Required power supply capacity	53 kVA (26 kVA*)	75 kVA (48 kVA*)	75 kVA (48 kVA*)	96 kVA (70 kVA*)
Maximum output power	50 kW (25 kW*) (@400 VDC)	DC:50 kW (25 kW*) (@400 VDC) AC:22 kW	DC:50 kW (25 kW*) (@400 VDC) AC:22 kW	DC:50 kW (25 kW*) (@400 VDC) AC:43 kW
Output voltage range	DC:50 - 500 V	DC: 50 - 500 V AC: 400 V	DC: 50 - 500 V AC: 400 V	DC: 50 - 500 V AC: 400 V
Maximum output current	DC:125 A	DC:125 A AC:32 A	DC:125 A AC:32 A	DC:125 A (63 A*) AC:63 A
Connection	CCS 2 - JEVS G105	CCS 2 - JEVS G105 Type 2 Socket (Lock system)	CCS 2 - JEVS G105 Type 2 Tethered cable	CCS 2 - JEVS G105 Type 2 Tethered cable

Circontrol S.A. - C/ Innovació, 3. Industrial Park Can Mitjans, 08232 Viladecavalls (Barcelona)
Telf. +34 937 362 940 - Fax +34 937 362 941 - circontrol@circontrol.com - www.circontrol.com

rev. 3.0