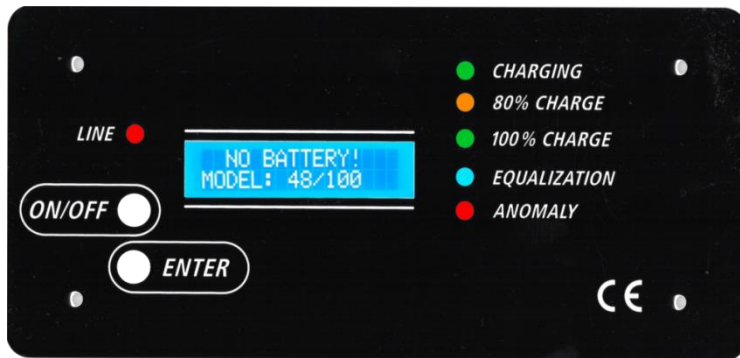


Working Temperature	From -20°C to +45°C
Storage Temperature	From 0°C to +60°C
Maximum Humidity	80% without condensation
Environment	Non-Alkaline

In case of environments with different values from the above, please contact us to evaluate further options



The **control card** developed by TCE Group Srl offers **the possibility to change the charging cycle parameters** based on the necessities and conditions of the battery through special programs.

FAST CHARGE – NEW! (Opportunity Charge)



The “**FAST CHARGE**” feature can be used for 2 different purposes:

- **FAST CHARGE** – Using a charger of a bigger size it's possible to charge in 5-6h
- **OPPORTUNITY CHARGES** – Allows short opportunity charges (Ex. Lunch break)

VOLTAGE CHECK (Battery temperature control)



The “**VOLTAGE CHECK**” feature is a special program developed to **avoid the overheating of the battery during the charging process**.

The **benefits of this program** offers are:

- Energy saving
- Battery water saving
- Battery is more fresh and performing better
- Battery lifespan increased (avoids the expansion of the cells caused by an abnormal overheat)

SET-ABS



The “**SET-ABS**” allows the user to **increase/reduce the final charging time** of the charging cycle to adapt it to the battery conditions.

Ideal for old batteries but in good overall conditions that need a longer final charging time.

STORED CYCLE



The “**STORED CYCLE**” visual allows the visualization of the data regarding the **last 75 charging cycles**.

The recorded information are:

- Duration of the charge
- Ah charged
- Battery state of charge in %

*It is possible to activate **more than one function simultaneously** to improve the control over the charging cycle*

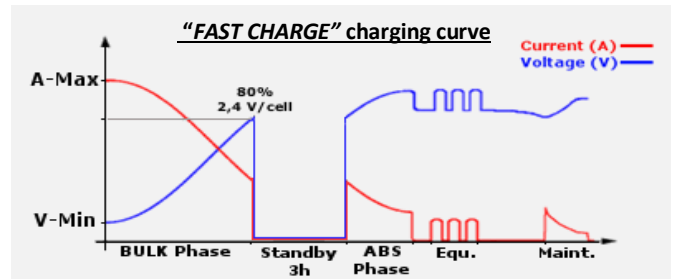
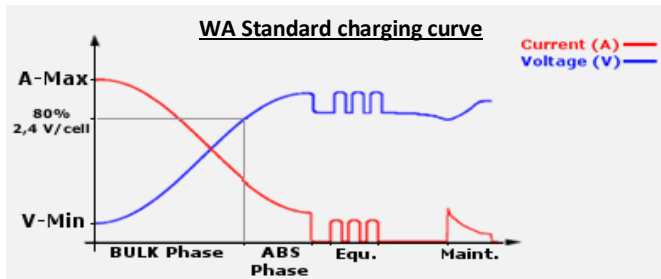
FEATURES

- **Connections**
 - Single Phase 220-230-240-**255** Vac / 50-60Hz
 - Three Phase 380-400-420-**440** V / 50-60 Hz
 - Automatic **equalization and maintenance charge**
 - Backlit 16x2 characters display with automatic standby and high luminescence LEDs
 - Charging parameters visualized on display
 - Visualizations of estimated time until charge is completed
- ABS front panel to **increase efficiency by 5-7%** and reduce the charging noise
 - Power transformer with ventilation channels (**temperature inside the charger reduced up to 20%**)
 - Current reading with internal SHUNT
 - Log of the latest **75 charging cycles** (length, AH charged and SOC – State of Charge in %)
 - Power transformer coated with non-toxic resin. **WA Standard charging curve**
 - Galvanized cabinet for a prolonged use over time

SAFETY

- Protection against **short circuit and reverse polarity**
 - Double safety timer handled by microprocessor
 - Battery check before begin of charging cycle and **safe removal of the battery** during the charging cycle with automatic interruption
 - Automatic restart in case of mains voltage blackout
- Protection against overheating with **thermo couplers**. Automatic interruption and restart of the cycle in case of opening of the couplers
 - Protection against overcurrent and overvoltage
 - **Error codes visualized on the display** and acoustic warning in case of anomalies

CHARGING CURVES



V	Vac	Amp	
		From	To
24V	1x 230 Vac	20	160
	3x 400 Vac	60	180
36V	1x 230 Vac	30	160
	3x 400 Vac	60	180
48V	1x 230 Vac	20	120
	3x 400 Vac	40	200
72V	1x 230 Vac	60	120
	3x 400 Vac	60	120
80V	1x 230 Vac	60	100
	3x 400 Vac	60	300

A	AH (C5-standard)	
	10H	12H
20A	100	130
30A	140	190
40A	190	240
50A	250	315
60A	300	370
70A	320	390
80A	420	600
100A	520	700
120A	600	800
140A	720	950
160A	820	1100
180A	900	1200
200A	1000	1320

Valued referred to a traction battery PzS Wet discharged 80%
Can change based on the functions activated

To request customized sizes, please contact us through our website www.tcechargers.com

BOX INFORMATION

DIMENSIONS			
BOX	H	L	D
"P"	270	360	270
"E"	860	370	510

COLORS		
Front Panel	White RAL 9003	Grey RAL 7004
Box	Orange RAL 2002	Black RAL 9011
	Green RAL 6017	<i>Different colors under request</i>