

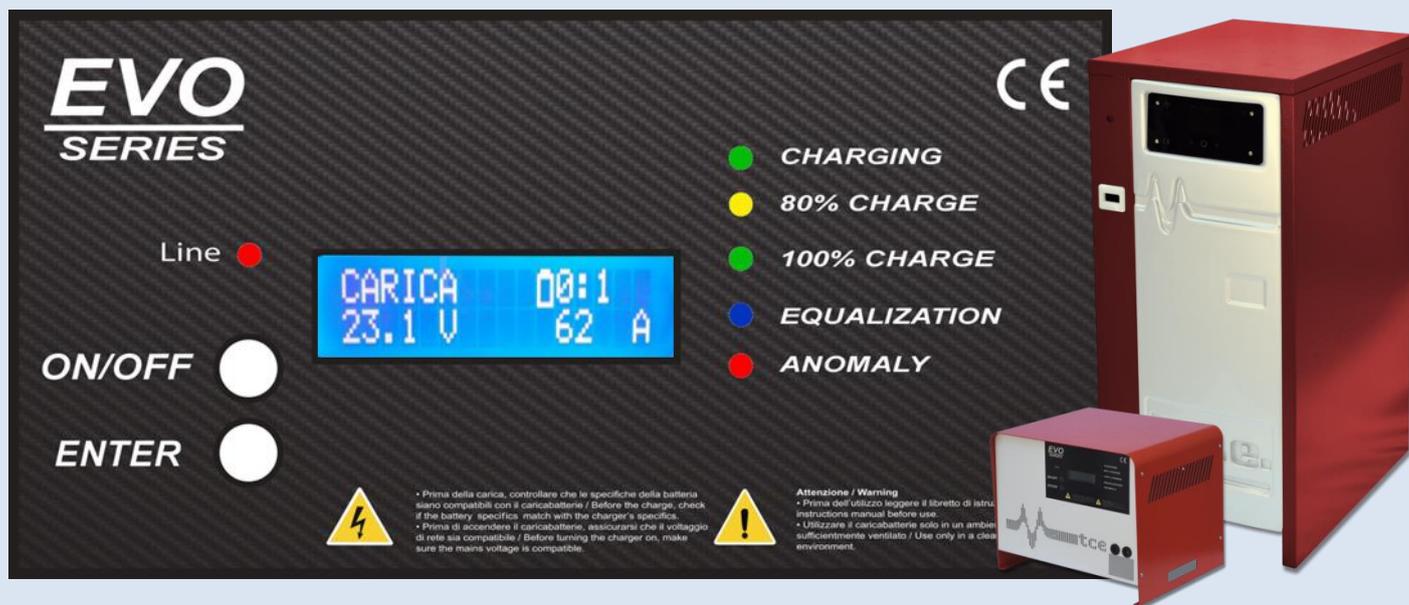
## BATTERY TYPE

PzS Wet (Lead Acid)

## CHARGING TIME

WoWa 8-10H / Wa 10-12H

## APPLICATIONS



## TECHNICAL FEATURES

<b>Power Supply:</b> <ul style="list-style-type: none"> <li>Single Phase 220-230-240-255 Vac / 50-60Hz</li> <li>Three Phase 380-400-420-440 V / 50-60 Hz</li> </ul>	Tropicalized stray-flux transformer impregnated with non-toxic resins and kiln dried
Microchip Microcontroller PIC16™/PIC18™	Automatic equalization charge to prevent sulphation
Maintenance charge to prevent battery self-discharge	Automatic restart after overheat anomaly or power supply interruption
Cabinet protection <b>IP21</b>	WA or WoWa Charging curve
Current Value reading with SHUNT	100 charging cycles log (Duration of the charge, AH delivered)
Power transformer with ventilation Channels (20% cooler)	Visualization of estimated charging cycle's length
ABS front and back panels to increase efficiency by 5-7%	Low output noise while charging

## SAFETY FEATURES

Short circuit and reverse polarity protection with fuse	Overheat protection with thermal probes and control card
Double safety timer	Error codes visualization on display
Safe battery disconnection during charge	Battery health check before charge begins
Buzzer noise in case of error or malfunction	Anomalies management trough microcontroller
Protection against overcurrent and overvoltage	Protection over every charging phase of the cycle

## GENERAL FEATURES

Backlit 16x2 characters alphanumeric display	High luminescence LED on the front panel
Charging parameters visualized on display	Adjustable final charging stage (from 1 to 10H), standard is 4h

## ACCESSORIES

Cable Hook	Easy Wire System (only Box "S")
PRO Control Card (Box "S-C")	Modular accessories related to PRO Control Card
Kit Update Software	Cable's plugs
Battery temperature probe connected to the charger	Cabinet Stand

## CHARGER SIZES

Nominal Vdc <b>V</b>	<b>Vac</b>	Output Current <b>A</b>	
		From	To
<b>12V</b>	1x 230 Vac	20	40
<b>24V</b>	1x 230 Vac	20	160
	3x 400 Vac	60	180
<b>36V</b>	1x 230 Vac	30	160
	3x 400 Vac	60	180
<b>48V</b>	1x 230 Vac	20	120
	3x 400 Vac	40	200
<b>72V</b>	1x 230 Vac	60	120
	3x 400 Vac	60	120
<b>80V</b>	1x 230 Vac	60	100
	3x 400 Vac	60	180

To request other V/A, please contact us through our website

[www.tcechargers.com](http://www.tcechargers.com)

## AH RECHARGE CHART

Output Current <b>A</b>	AH (C5)		
	WoWa <b>8H</b>	Wa <b>10H 12H</b>	
<b>20A</b>	/	120	160
<b>30A</b>	/	180	230
<b>40A</b>	/	230	290
<b>50A</b>	/	300	380
<b>60A</b>	260	375	450
<b>70A</b>	300	385	470
<b>80A</b>	350	420	600
<b>100A</b>	435	520	750
<b>120A</b>	525	600	900
<b>140A</b>	610	720	1050
<b>160A</b>	700	820	1200
<b>180A</b>	785	900	1350
<b>200A</b>	870	1040	1450

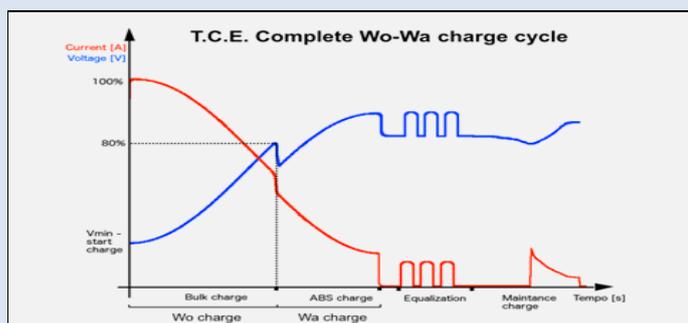
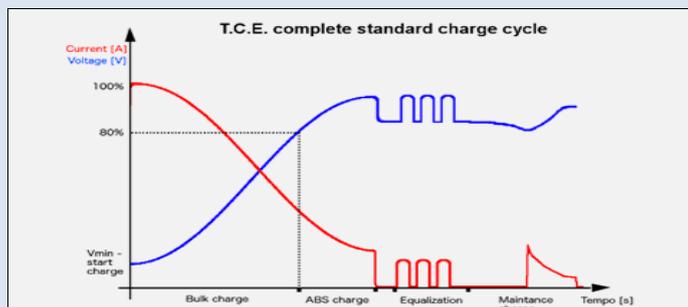
Values referred to a **80% discharged PzS Wet (Lead Acid) traction battery.**

## WORKING CONDITION

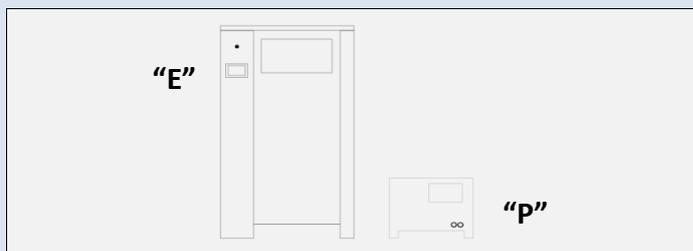
Operating Temperature	From -20°C to +45°C	Maximum Humidity	90% without condensation
Storage Temperature	From 0°C to +60°C	Environment	Not Alkaline

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

## CHARGING CURVES



## BOX GUIDE



### DIMENSIONS

Box	H	L	D
"P"	270	360	270
"E"	860	370	510

### COLORS

Front Panel	White RAL 9010	Gray RAL 7004
Box	Orange RAL 2002	Black RAL 9011
	Green RAL 6017	

The box is based on the size of the power transformer to optimize the charger's operation.