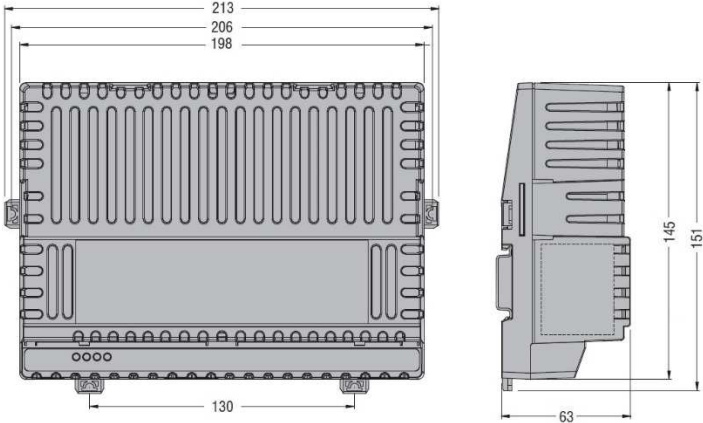


## AUTOMATIC BATTERY CHARGERS

### TECHNICAL CHARACTERISTICS

Supply				
Model	1BAT004		1BAT005	
Rated voltage $U_s$	110 - 240V			
Operating voltage range	100 - 264V			
Frequency	45 - 66Hz			
Maximum current consumption at rated voltage	240V/1.6A	110V/3.1A	240V/2.7A	110V/5.1A
Maximum power consumption at rated voltage	240V 384VA/184W	110V 341VA/190W	240V 630VA/298W	110V 552VA/311W
Maximum power dissipation at rated voltage	240V/23W	110V/29W	240V/28W	110V/41W
Internal fuse	T6.3A (time delay) 5x20mm		T8A (time delay) 5x20mm	
Battery charger circuit				
Battery voltage	12V=		24V=	
Type of battery	Nickel-Cadmium battery (sealed and non-sealed)			
Rated charging voltage $U_c$ DIP 2 in V1 position	14.2V= (2.37V/cell)		28.4V= (2.37V/cell)	
Boost charging voltage	+4.4%			
Max charging current	12A		10A	
Efficiency at maximum rated voltage and maximum power	≥87.2%		≥90.2%	
Protections	Overload with current limit / Battery polarity inverted / Output shortcircuit			
Output voltage variation related to supply (line regulation)	<1%			
Output voltage variation related to temperature	<1%			
Output voltage variation related to load (load regulation)	<1%			
Ripple and noise	<1%			
Signalling				
1 green LED ON	Power ON			
1 yellow LED CHG	Current charge ≥30% $I_c$			
1 red LED ALA	Overload and short circuit			
1 red LED REV	Battery reverse polarity			
Insulation				
Rated insulation voltage $U_i$	250V			
Protection class	Class II / SELV			
Double insulation between the voltage groups	Power supply / Battery Power supply / Enclosure Power supply / Alarm relay			

Power frequency withstand voltage	5kV
<b>Ambient conditions</b>	
Operating temperature	-30...+55°C without derating -30...+70°C with current derating -1.5%/ °C. +Derating with manual adjustment of the current limiting trimmer
Storage temperature	-30...+80°C
Relative humidity	<80% (IEC/EN 60068-2-78)
Maximum pollution degree	2
Overvoltage category	2
Climatic sequence	Z/ABDM (IEC/EN 60068-2-61)
Shock resistance	15g (IEC/EN 60068-2-27)
Vibration resistance	0.7g (IEC/EN 60068-2-6)
<b>Battery connections</b>	
Type of terminal	Screw ( fixed)
Conductor cross section (min... max)	0.2 – 6 mm <sup>2</sup>
UL Rating - Conductor cross section (min... max)	30 - 10 AWG
Tightening torque	0.5 Nm (5 lbin)
<b>Supply connections</b>	
Type of terminal	Screw ( fixed)
Conductor cross section (min... max)	0.2 – 2.5 mm <sup>2</sup>
UL Rating - Conductor cross section (min... max)	30 - 12 AWG
Tightening torque	0.5 Nm (4 lbin)
<b>Relay and boost connections</b>	
Type of terminal	Screw ( fixed)
Conductor cross section (min... max)	0.2 – 2.5 mm <sup>2</sup>
UL Rating - Conductor cross section (min...max)	30 - 12 AWG
Tightening torque	0.5 Nm (4 lbin)
<b>Housing</b>	
Version	Base mount / Internal panel
Material	Polycarbonate
Degree of protection front	IP20
Weight	710g

<p>Dimensions</p>		
<p><b>Certifications and compliance</b></p>		
<p>Certifications obtained</p>	<p>cURus</p>	
<p>Reference standards</p>	<p>IEC/EN 60950-1, IEC/EN 61558-2-16 IEC 61000-3-2, IEC/EN 61000-6-2, IEC/ EN 61000-6-3, UL 60950-1, CSA C22.2 n° 60950-1</p>	