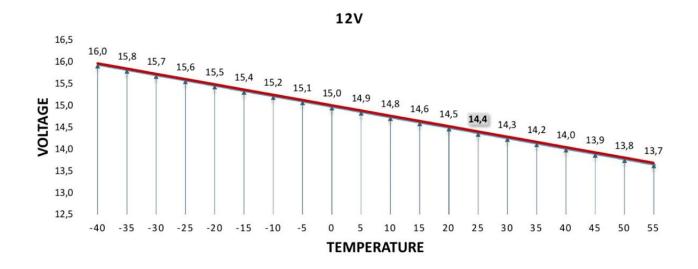
TROUBLE SHOOTING AND SERVICE

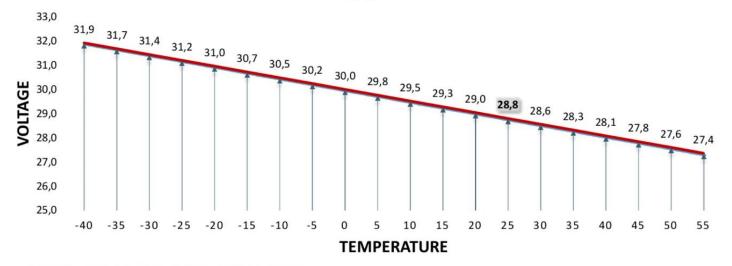
| Yellow | Yellow | Red/green | Explanation | |
|------------|------------|-----------|--|--|
| \bigcirc | \bigcirc | | Low battery voltage or no battery connected | |
| 0 | \bigcirc | | Battery temperature > 50°C | |
| | \circ | | Time error (timeout), the battery is probably to big for the charger | |
| | \bigcirc | | Faulty connected battery polarity | |

CHARGING INDICATORS

| DIODE | EXPLANATION | EVENT |
|-------|-------------------|--|
| 0 | Yellow lower LED | The charging process will start with max power – I Phase. The current will drop as the battery is recharged. The charging time is determined by the battery size and the degree of discharge. |
| | Yellow middle LED | When the threshold value (BR) is reached, the internal timer will start the U" phase of the charging process. The U2 phase keeps the charger in the higher charging voltage (14,4V/28,8V) in 4 hours. This ensures recharge and equalize the charge in all battery cells. This action also prevents sulfating of the battery. |
| | Green LED | Maintenance charge, the voltage drops to 13,7V (27,5V). This loading phase keeps the battery fully charged and the charger can be left switched on in this position over time. Possible parallel load or consumption is supplied from the charger and the battery is kept fully charged. The battery charger can provide full power in this phase. |

The charger is equipped with a temperature measurement device. The charging voltage level will adopt to the correct value according to the ambient temperature. The compensation is 0.2V / 10 degrees (default 25 degrees)





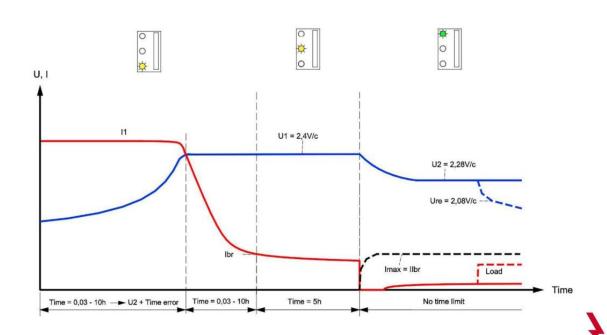
TYPES, CELLS & RATED CAPACITY

| CHARGER | BATTERY TYPE | NUMBER OF CELLS | RATED CAPACITY |
|-------------|---------------------|-----------------|----------------|
| chAmp 12/17 | Lead acid batteries | 6 | 50-220Ah |
| chAmp 24/12 | Lead acid batteries | 12 | 40-200Ah |
| chAmp 24/8 | Lead acid batteries | 12 | 30-180Ah |
| champ 24/10 | Lead acid batteries | 12 | 35-200Ah |
| chAmp 12/30 | Lead acid batteries | 6 | 100-400Ah |
| chAmp 24/20 | Lead acid batteries | 12 | 80-300Ah |

CHARGING CURVES

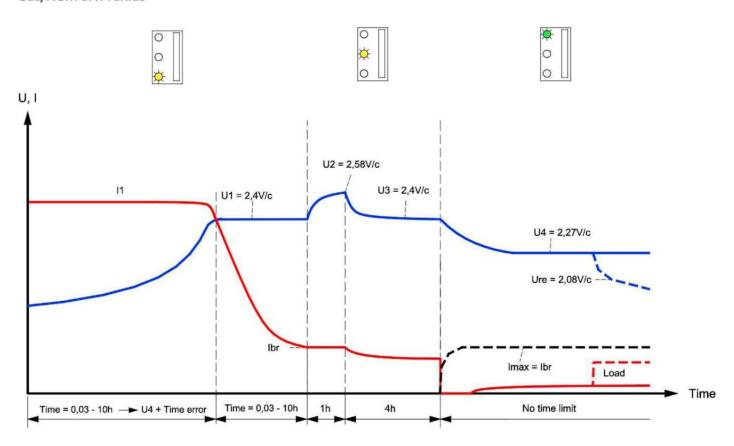
The chAmp Charger is designed for charging open- and valve-regulated batteries of different sizes. If Primepower AB is informed of the battery capacity and type the charger is delivered correctly programmed.

The charger is always delivered programmed for standard batteries if nothing else is mentioned to Primepower! STANDARD BATTERIES (STD)



The right battery

GEL/AGM BATTERIES



TRACTIONARY BATTERIES

