



- Optimal three stage charging
- State of charge / Amp / AC LEDs
- Low standby battery drain
- Customizable charge algorithm
- Optional control / status signals
- Optional temp compensation
- Vibration resistant
- Reverse polarity protected
- Over temperature protected
- Over current / voltage protected
- UL/CSA 1012 certified
- Two year warranty

Description

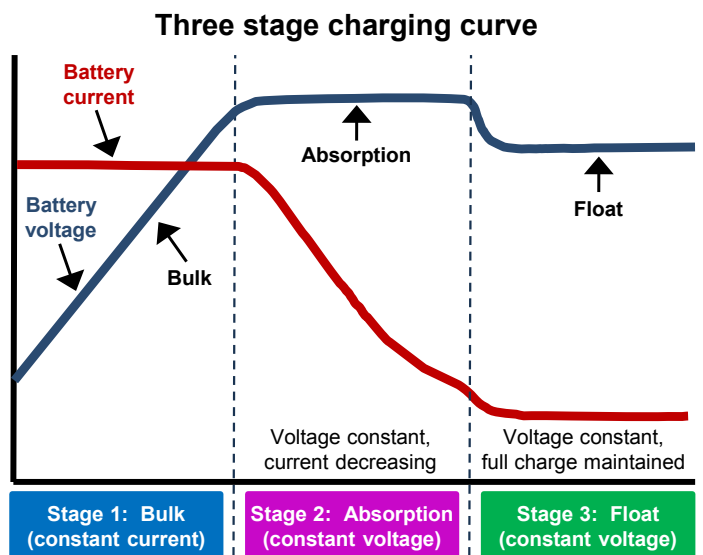
The RTIC1120-FC is a rugged, intelligent and sophisticated three state lead-acid battery charger. With a wide operating temperature range (-20°C to 50°C) and UL/CSA1012 certification, this product is especially suited for high end industrial applications. The RTIC1120-FC is factory programmable to accommodate several charging algorithms and an LED display to indicate status. The charger is controlled by an

embedded microcontroller that contains software developed by and which is proprietary to Chargetek. The RTIC1120-FC precisely controls charging voltage and current to ensure a complete recharge every time. The charger may be left connected indefinitely to the battery, maintaining full charge at all times.

Charging specifications

| PARAMETER | DESCRIPTION / CONDITIONS | MIN | NOM | MAX | UNITS |
|--------------|--|------|------|------|-------|
| V_{FSTERM} | Fast charge termination voltage, 25C | 14.4 | 14.6 | 14.8 | VDC |
| V_{FL} | Float voltage, $I_{OUT} < 1.0 A$, 25C | 13.4 | 13.6 | 13.7 | VDC |
| I_{FS} | Fast charge current, $V_{BATTERY} = 24V$ | 20.0 | 21.0 | 22.0 | Amps |
| I_{ABTERM} | Absorption mode charge termination current, transition from fast to absorption | 4.0 | 5.0 | 6.0 | Amps |
| I_{FLTERM} | Float charge termination current | 2.5 | 3.0 | 3.5 | Amps |
| I_{SBY} | Standby current, AC off | | | 0.5 | ma |

Charging algorithm: Supplies constant current to battery until V_{FSTERM} . Transition to absorption mode follows and regulates battery voltage at V_{FSTERM} until current decreases to $I_{AB-TERM}$. Float mode follows and regulates battery voltage at V_{FL} .



RTIC1120-FC Datasheet

Input specifications

| PARAMETER | DESCRIPTION / CONDITIONS | MIN | NOM | MAX | UNITS |
|---------------|--------------------------|-----|-----|-----|-------|
| AC voltage | 47 - 63Hz | 90 | 120 | 132 | VAC |
| Input current | 90VAC, 15VDC output | | 6.0 | | Amps |

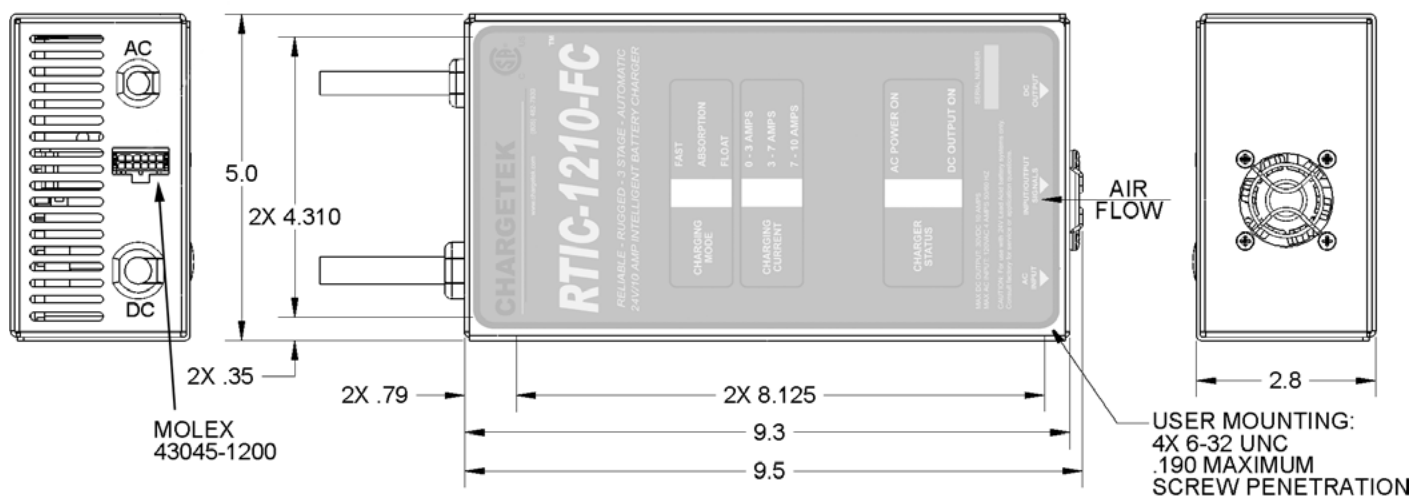
Environmental specifications

| PARAMETER | DESCRIPTION / CONDITIONS |
|---|--|
| Storage temperature | -40°C - 80°C |
| Operating temperature | -20°C - 50°C |
| Relative humidity | 0 - 95% relative humidity (non-condensing) |
| Input to output / chassis voltage isolation | 2KV (leakage current less than 1mA) |
| Output to chassis voltage isolation | 50V (can be increased / consult factory) |

LED indicators

| PARAMETER | DESCRIPTION | RED | YELLOW | GREEN |
|--------------------------|--------------------------------------|---------|------------|-------|
| State of charge | Indicates battery charging status | Bulk | Absorption | Float |
| Charging current in amps | Indicates battery charging current | 14 - 20 | 7 - 14 | 0 - 7 |
| Input AC power | Indicates AC power good | | | On |
| Battery connected | Indicates battery connected properly | | | On |

Outline and mounting



Dimensions in inches

NOTE: Chargetek products are not authorized for use as components in life support systems, hazardous environments, nuclear control systems or other similar applications without the express written consent of the President of Chargetek, Inc. The appearance of products, including safety agency certifications pictured on labels, may change depending on the date manufactured. Specifications are subject to change without notice.

409 Calle San Pablo, Unit 104, Camarillo, CA 93012 Phone: (866) 482-7930 Fax: (805) 482-7936 www.chargetek.com

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