Ground Support Equipment

# Coolspool Fast Chargers 

Coolspool 17 and Coolspool 29 portable aircraft start units are supplied with an internal 1.9A emergency charger designed to recharge the unit over an extended time period.

Frequent users of the Coolspool 17 and Coolspool 29 units who require expedited charge times should consider the optional Coolspool fast charger.

The Coolspool fast charging system is designed to re-charge your Coolspool unit quickly and safely whilst also optimising the batteries for maximum longevity.

The Coolspool fast charger is available in four dedicated versions to charge the Coolspool 17 or Coolspool 29 ground power units at either 26 V DC or 28 V DC.

These microprocessor controlled fast chargers include a 3-stage step charge control with a low current start up and battery recovery feature.

Each charger is also fitted with reverse polarity, short circuit protection and temperature controlled compensation, and has a wide input range for worldwide operation.


26 V and 28 V Fast Charger connections

For Coolspool 17 26V:
26V Fast Charger with SB50A connector
For Coolspool 17 28V:
28 V Fast Charger with SB50A connector

For Coolspool 29 26V:
26V Fast Charger with Merit connector
For Coolspool 29 28V:
28 V Fast Charger with Merit connector

## Coolspool Fast Chargers

## Specifications

| Input | 90-264V AC/47-63Hz/single phase |
| :---: | :---: |
| Output power | 294W |
| Charge timer (step 2) | 4 hours |
| Safety timer | 72 hours |
| Maximum charge current | 26 V charger: 9.5 A <br> 28 V charger: 9.0A |
| Ripple | < 100 mV p-p |
| Efficiency (at 100\% load) | > 85\% |
| Switch Frequency | 67 kHz (approx.) |
| Operating Temperature | $-25^{\circ} \mathrm{C}$ to $+40^{\circ} \mathrm{C}\left(77^{\circ} \mathrm{F}\right.$ to $\left.104^{\circ} \mathrm{F}\right)$ Storage $-25^{\circ} \mathrm{C}$ to $+85^{\circ} \mathrm{C}\left(77^{\circ} \mathrm{F}\right.$ to $\left.185^{\circ} \mathrm{F}\right)$ |
| Protections | - Short circuit <br> - Reversed polarity <br> - Over-temperature <br> - Safety timer |
| Safety | EN 60335-2-29 |
| Insulation class | Class D I |
| Insulation Voltage | 3750 V AC / 5300V DC |
| EMC | $\begin{aligned} & \text { EN 61000-3-2 } \\ & \text { EN 61000-6-3 } \\ & \text { EN 61000-6-1 } \\ & \text { EN 55014-1-2 } \end{aligned}$ |
| IP rating | IP20 |
| Dimensions ( $\mathrm{L} \times \mathrm{W} \times \mathrm{H}$ ) | H 63.5 mm (2.5in), L 245mm (9.6in), W 186 mm ( 7.3 in ) |
| Weight | 2.36KG (5.2lbs) |

## Features

- 3-step charging with microprocessor control
- Low current start-up of deeply discharged batteries (step 0)
- Boost charge (step 1)
- Top-up charge (step 2)
- Pulsing float charge (step 3)
- Wide input range for worldwide operation
- Temperature compensation
- Battery not connected indicator (flashing green)
- Protected against reversed polarity and short circuit proof
- Unaffected by fluctuations from input voltage
- Smart temperature control: silent temp controlled fan with fan speed regulation
- 3-pin IEC-60320 input connector

CHARGE CONTROL - LED INDICATION

|  | Step $0<30 \mathrm{~min}$ (Yellow) | Step $0>30 \mathrm{~min}$ (Red=error) | Step 1 <br> (Yellow) | Step 2 <br> (Flash Yellow) | Step 3 <br> (Green) | Float charge |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 26 V | $\begin{aligned} & 1.3 \mathrm{~A} \pm 0.5 \mathrm{~A} \\ & \text { (batt. volt }<22 \mathrm{~V} \text { ) } \end{aligned}$ | $<0.3 \mathrm{~A}$ | $\begin{aligned} & 9.5 \mathrm{~A} \pm 0.5 \mathrm{~A} \\ & 22-31.2 \mathrm{~V} \end{aligned}$ | $\begin{aligned} & 31.2 \mathrm{~V} \pm 0.1 \mathrm{~V} \\ & \text { (until I charge }<1.3 \mathrm{~A} \text { or }>4 \mathrm{hr} \text { ) } \end{aligned}$ | $\begin{aligned} & 29.5 \mathrm{~V} \pm 0.2 \mathrm{~V} \\ & \text { (until I charge }>9.5 \mathrm{~A} \text { ) } \end{aligned}$ | $29.5 . V \pm 0.2 \mathrm{~V}$ <br> Pulsing current at safe float volt. |
| 28 V | $\begin{aligned} & 1.3 \mathrm{~A} \pm 0.5 \mathrm{~A} \\ & \text { (batt. volt }<24 \mathrm{~V} \text { ) } \end{aligned}$ | $<0.3 \mathrm{~A}$ | $\begin{aligned} & 9.0 \mathrm{~A} \pm 0.5 \mathrm{~A} \\ & 24-33.6 \mathrm{~V} \end{aligned}$ | $\begin{aligned} & 33.6 \mathrm{~V} \pm 0.1 \mathrm{~V} \\ & \text { (until I charge }<1.3 \mathrm{~A} \text { or }>4 \mathrm{hr} \text { ) } \end{aligned}$ | $\begin{aligned} & 31.5 \mathrm{~V} \pm 0.2 \mathrm{~V} \\ & \text { (until I charge }>9.0 \mathrm{~A} \text { ) } \end{aligned}$ | $\text { 31.5. } \mathrm{V} \pm 0.2 \mathrm{~V}$ <br> Pulsing current at safe float volt. |

Charging characteristics and LED indication


## AERO SPECIALTIES

Ground Support Equipment
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