Coolspool 29 and 58





Coolspool 58: AW139 preflight and start

SPECIFICATION

		Coolspool 29	Coolspoo	ol 58	
Capacity amp/hr		29	58	58	
Short circuit current (approx)		1800 amps	2400 amp	2400 amps	
Standing voltage (off charge)		29 volts (nomina) 28	28	
Re-charge voltage		32–33 volts	32–33 vol	32–33 volts	
Charge time with internal mini charger (from 50% depth of discharge)		7 hours	7 hours	7 hours	
Internal charger		Mini 3-stage fully-automatic dual 110/220V 50/60 Hz auto selecting capacity of 1.9 amps			
Re-charge time using optional 1 x 30 amp charger from 80% discharge		1 hour	Optional 1 and yoke, discharge	Optional 1 x 30amp charger and yoke, from 80% discharge: 2 hours	
Case		Powder-coated light alloy with neoprene shock- absorbing feet			
Safety		Spring-loaded sliding cover protects output socket			
Coolspool 29 Coolspool 58	Height 300mm (12in) 300mm (12in)	Length 400mm (16in) 400mm (16in)	Width 135mm (5in) 270mm (11in)	Weight 30kgs (66lbs) 60kg (132lbs)	

FEATURES

- Solid state digital voltmeter with push-to-view button and watchdog timer for cell protection
- Internal self-contained mini charger with multi-colour LED charge status display
- Stainless steel sliding safety cover
- Safe for air transportation
- Operates in any position (inverted NOT recommended)
- Padded jacket for GPU/aircraft protection
- Neoprene anti-shock/anti-slip feet
- Can be ganged together to double output to create Coolspool 58
- 10 amp accessory socket for work lamp/solder iron etc
- 2-metre (6ft) mains input cord
- 2-metre (6ft) heavy-duty double insulated output cable with rubber Nato plug

OPTIONS

- Lightweight or heavyweight trolley
- 24/28 volt work lamp
- Rapid external charger: 10 amps or 80 amps
- 1000 amp cast brass colour-coded and braided alligator clips with 2-metre (6ft) leads

Typical power plant:* TPE 331, PT6-67, Arrius



shaft turbines

The 28 volt (nominal) 29 amp/hr Powervamp Coolspool 29 portable GPU was developed for larger turbine aircraft and helicopters where portability requirements limit weight and size, but the need to maintain voltage above minimum FADEC limits during the start cycle is critical. This requirement demands that the GPU voltage is at the top of the FADEC upper limit before starter engagement.

When compared to a 24 volt GPU of the same capacity, the Coolspool 29 typically delivers a stunning 30% increase in performance (watts) for the same amperage. With an off-charge voltage of 30 volts, the GPU delivers faster spool-ups, cooler starts and a faster, more positive systems response, which benefits turbine life and system reliability.

Many modern voltage-critical aircraft require the higher 'standing voltage' of the Coolspool 29 to reduce the effect of heavy inrush currents during starting and the momentary voltage collapse below tight FADEC limits. The Coolspool range enables the powering of many aircraft systems that previously could only be activated with the generator on line. The pre-flighting and cycling of systems where aircraft are configured for rapid deployment with role equipment already on line, are examples where the higher Coolspool voltage can prevent the appearance of undesirable/spurious EFIS messages on start-up.

The Coolspool 29 has a built-in mini charger. Connecting any 110/220 volt power cord into the GPU will automatically activate the integral 3-stage charger. A 3-colour LED indicates charging status and a solid-state digital voltmeter, with push-to-view button and timed auto shutdown, accurately displays voltage.