

Coolspool Combination

28V DC POWER SUPPLY AND AIRCRAFT START UNIT

The Coolspool Combination GPU has been developed to provide continuous power for avionics/air conditioning and for starting most DC turbine and turboprop aircraft.

This small and easy-to-move GPU is completely user-configurable. It utilises a combination of DC power supplies and high-discharge batteries to deliver instant ripple free power for turbine starting.

The output voltage can be manually adjusted by the operator ensuring the GPU delivers the desired output voltage to the aircraft.

Each Coolspool Combination GPU is supplied with power supply status LEDs, output voltage and current indicators and battery state-of-charge monitoring system.

The battery isolator switch and sealed lead acid batteries ensure the GPU is cleared for air transportation. The GPU is supplied with a Nato lead set and input lead cable, and also has dedicated cable storage space.

Each Coolspool Combination GPU can be used inside the hangar or outside on the ramp, either plugged in to an external supply input or utilising its own DC battery power for turbine starting.



Supplied as standard with



Hard-wired 10m (33ft) input lead



2m (6.6ft) Nato lead

Options

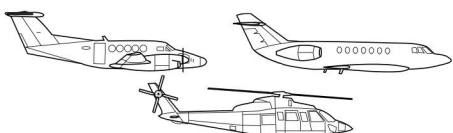
- 4m (13ft) Nato lead
- 10m (33ft) input lead extension

Features

- Modular design with up to x3 power supplies for redundancy
- Super-smooth, low ripple 28V DC adjustable output for sensitive avionics
- Maintenance-free ultra high power sealed lead acid batteries deliver multiple turbine starts
- Adjustable output voltage via control panel
- Battery capacity indicator, voltmeter and ammeter
- Mains on/off switch
- Power supply LED status indicators
- Emergency stop push-button
- Aircraft cable with Nato connector
- Harsh environment input cable with plug
- Low resistance castor wheels for easy movement
- Corrosion resistant stainless-steel and aluminium assembly
- Replaceable/washable air filters allow outdoor use
- Civil or military use
- Cleared for air transportation

Typical power plant:*

Coolspool Combination 100: TPE 331, PT6-67, Arrius or power plants of a similar specification

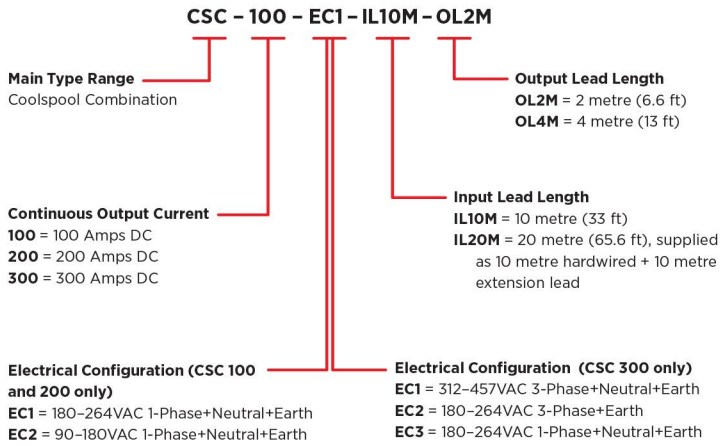


Coolspool Combination 200: PT6A-27, Makila, TPE 731, GE T700, AE3007, CF34
Coolspool Combination 300: PT6C-67, Makila, TFE 731, ALF 502, HTF7000, RR Tay or power plants of a similar specification



Coolspool Combination

Part number system



Control panel

Specifications

Combination Type	CSC 100	CSC 200	CSC 300
Output voltage	28.4 to 29.4V DC (Adjustable)		
Standing voltage	25.6V DC		
Output current (continuous rating)	100A	200A	300A
Peak Amps	2,400	4,800	5,000
Amp/hour capacity	43 Ah @ 10 hr rate (20°C)	86 Ah @ 10 hr rate (20°C)	114 Ah @ 10 hr rate (20°C)
Output ripple	<240mV p-p		
Input voltage	EC1: 180-264VAC (15A max) 1-Ph+N+E EC2*: 90-180VAC (15A max) 1-Ph+N+E	EC1: 180-264VAC (29A max) 1-Ph+N+E EC2**: 90-180VAC (30A max) 1-Ph+N+E	EC1: 312-457VAC (15A max) 3-Ph+N+E EC2: 180-264VAC (27A max) 3-Ph+E EC3: 180-264VAC (45A max) 1-Ph+N+E
Input frequency	47 - 63 Hz		
Operating temperature	-20°C to +50°C (-2°F to +122°F)		
Aircraft cable	2m (6ft) with heavy-duty rubber Nato connector - optional 4m (13ft)		
Input cable	10m (33ft) - optional extra separate extension of 10m (33ft)		
Input plug	EC1: 16A 3 pin 6h blue EC2: 16A 3 pin 4h yellow	EC1: 32A 3 pin 6h blue EC2: 32A 3pin 4h yellow	EC1: 32A 5 pin 6h red EC2: 32A 4 pin 9h blue EC3: 63A 4 pin 6h blue
Cooling	Forced ventilation		
Protections (power supplies)	Thermal, current overload, short circuit, over voltage		
Dimensions	With handle: L 960mm (38in) W 590mm (23in) H 1100mm (43.4in) Without handle: L 710mm (28in) W 590mm (23in) H 554mm (22in)		
Weight (incl. cables)	86kg (189.6lbs)	115kg (253.5lbs)	147kg (324 lbs)
NGAGE	KD628		

* DC Output derated to 53 Amps (if AC input is below 180V)

** DC Output derated to 106 Amps (if AC input is below 180V)

Powervamp
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