

# Coolspool Combination

## 28V DC POWER SUPPLY AND AIRCRAFT START UNIT

The Coolspool Combination unit 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 userconfigurable, with a combination of different power supplies and high-discharge batteries that operate in parallel to deliver instant ripple free power for turbine starting. The output voltage of the unit can be manually adjusted by the operator ensuring the GPU delivers the desired output voltage to the aircraft.

Each GPU is supplied with power supply LED status monitors, output voltage and current indication and battery state-of-charge monitoring.

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

The Coolspool Combination unit can be used inside the hangar or outside on the ramp, either plugged to an external supply input or just with battery power for turbine start.



### Supplied as standard with



### Options

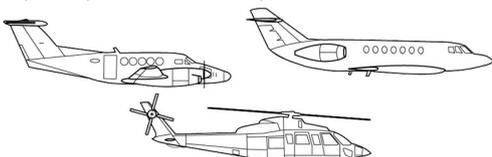
- 4m (13ft) Nato lead
- 10m (33ft) input lead extension

### 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
- Output voltage adjustable via knob situated in the control panel
- 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 main enclosure, cable tray and handle; aluminium panels.
- Replaceable/washable air filters allow outdoor use
- Civil or military use
- Cleared for air transportation

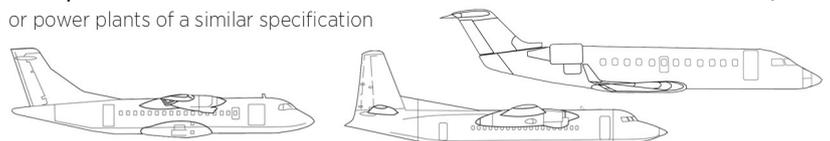
### Typical power plant:\*

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



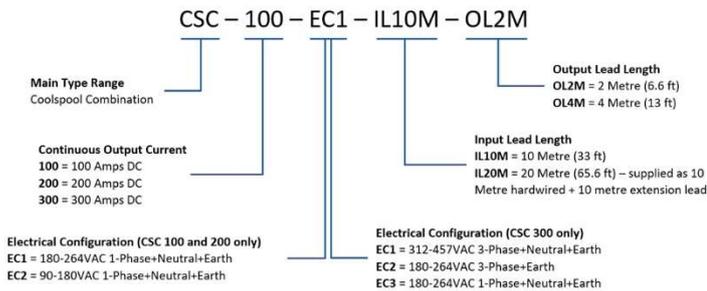
**Coolspool Combination 200:** PT6A-27, Makila, TPE 731, GE T700, AE3007, CF34

**Coolspool Combination 300:** PT6C-267, Makila, TPE 731, ALF502, HTF7000, RR Tay or power plants of a similar specification



# Coolspool Combination

## Part number system



Control panel

## Specifications

Combination Type	CSC100	CSC200	CSC300
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 @ 10hr rate (20°C)	86 Ah @ 10hr rate (20°C)	114 Ah @ 10hr 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+N+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 3 pin 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, overvoltage		
Dimensions	With handle: L 960mm (38in) Without handle: L 710mm (28in)	W 590mm (23in) W 590mm (23in)	H 1100mm (43.3in) H 554mm (22in)
Weight (incl. cables)	86kg (189.6 lbs)	115kg (253.5 lbs)	147kg (324 lbs)
NCAGE	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)



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