

APU 4

AUXILIARY POWER UNIT



- Bespoke APU system
- Water cooled 3-cylinder turbo diesel engine
- EU Stage V emissions compliant
- 15 kVA, 400 VAC, 3-phase power generation
- 24 VDC electrical control interface
- Integrated engine cooling pack, comprising:
 - Charge air cooler
 - Radiator
 - Expansion tank
 - AC condenser
- Modular system design
- Proven, serviceable component architecture

The Calatherm Bespoke Diesel Auxiliary Power Unit (APU) is an independent power generation solution engineered for specialist vehicle applications where reliable auxiliary electrical power is essential.

Powered by a water-cooled, three-cylinder turbocharged diesel engine, the EU Stage V compliant system delivers 15kVA of 400VAC three-phase electrical power, enabling critical onboard equipment and auxiliary systems to operate without reliance on the vehicle's primary engine. An integrated engine cooling pack, comprising a charge air cooler, radiator, expansion tank and cooling assembly, ensures efficient thermal management and dependable operation in demanding environments.

Designed using proven components and robust engineering principles, the modular APU offers straightforward installation, simplified maintenance and long service life. By reducing vehicle engine idling, the system lowers fuel consumption, minimises engine wear and enhances operational availability throughout extended deployments.

BENEFITS

- Provides reliable auxiliary electrical power without operating the vehicle's primary engine.
- Supports mission readiness through dependable power generation in demanding operational environments.
- Reduces vehicle engine idling, lowering fuel consumption and engine wear.
- EU Stage V compliant engine delivers improved environmental performance and reduced emissions.
- Integrated engine cooling pack ensures reliable thermal management during continuous operation.
- Modular design simplifies installation, servicing and long-term fleet maintenance.
- Proven components maximise reliability and minimise maintenance requirements.
- Robust construction delivers dependable performance in harsh military and specialist vehicle applications.

TECHNICAL SPECIFICATION

System Type	Auxiliary Power Unit
Engine	Water cooled 3-cylinder turbo diesel, EU Stage V compliant
Generator	Mecc Alte Brushless Alternator
Cooling Pack	Integrated cooling pack with charge air cooler
Power Output	15 kVA, 400 VAC, 3-phase, 50 Hz
Electrical System Voltage	24 VDC
Cooling Capacity	12 kW with remote mounted HVAC (datasheet available)
Heating Capacity	6 kW with remote mounted HVAC (datasheet available)
Control Module	APU & HVAC control available
Ambient Operating Temperature	Up to +39°C at 43% RH
Mass	495 Kg
Dimensions	1,500 x 825 x 992 mm

Note: Other systems and designs are available.

OUTLINE DIMENSIONS

