

Licences and Certificates



AUXILIARY POWER UNITS



- Approval to design, manufacture and maintain turbine machines and equipment EASA -DOA, POA, MOA
- Certificates for manufacturing and maintaining the military aerospace products MAA 056 and MAA 076 from the Ministry of Defence
- Certificate of Conformity with the quality system and with the requirements of ČSN EN ISO 9001:2009 and ČOS 051622 (AQAP 2110) from the Defence Standardisation, Codification, and Government Quality Assurance Authority
- Civil certificates from ARMAK and CAAC
- NADCAP for non-destructive testing (PT, RT) and chemical processes
- Certificates: AS 9100, ISO 9001, ISO 14001



PBS Velka Bites

APU & ECS Department
+420 566 822 304
sales@pbs.cz

www.pbs.cz

The PBS brand is built on **200 years of history and a global reputation** for high quality engineering and production

www.pbs.cz

AUXILIARY POWER UNITS by PBS

PBS Velka Bites is a member of PBS GROUP – a stable, high quality and innovative engineering company that has been active in the field of high precision engineering for over 200 years.

The key sector for PBS Velka Bites is aerospace engineering: in-house development, production, testing and certification of small turbojet, turboprop and turboshaft engines, Auxiliary Power Units (APU) and Environmental Control Systems (ECS) proven in thousands of aeroplanes, helicopters and UAVs all over the world.

The PBS manufacturing programme program also includes precision casting, precision machining, surface treatment and cryogenics.



Saphir 5



Safir 5K/G MI



Saphir 5F



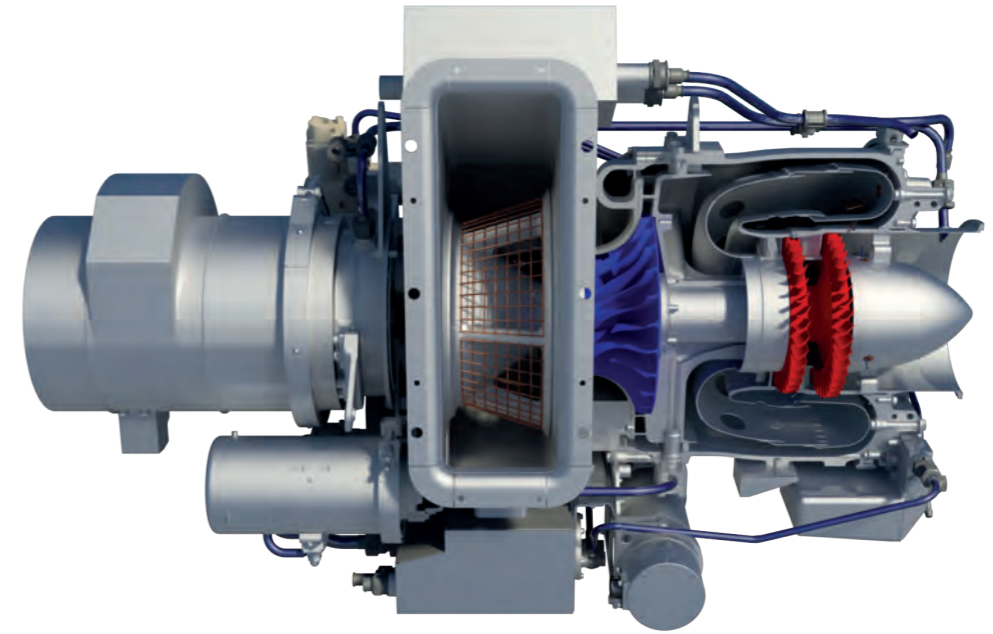
Safir 5K/G MIS



Safir 5L



Safir 5K/G Z8



APU SAFIR 5K/G MI40 – Latest Development

The auxiliary power unit SAFIR 5K/G MI40's (currently under development) intended application is as an autonomous source of the electrical energy to be used in the machine on the ground and during the flight. It's power output is 40 kVA, the design complies with EASA CS-APU and FAA-TSO-C77b requirements and the bleed air output is approx. 30 kg/min.

WHY PBS?

- More than 6,000 APUs sold
- More than 50 years in aerospace production
- In-house development, production, assembly and testing
- EASA certified APU producer

PBS APU Basic Parameters

APU MODEL	Basic parameters			
	Electrical power output	Bleed air flow	Dry weight	Max. operating altitude
Units	kVA, kW	kg/s	kg	m
Safir 5L	0 kVA	0.55	31	6,000
Safir 5K/G Z8	40 kVa	0.28	49	6,000
Safir 5K/G MI	20 kVa	0.44	48	6,000
Safir 5K/G MIS	6 kW	0.44	43	6,000

- Up to 60 kVA of electric power output
- Up to 0.55 kg/s of bleed air flow

PBS Safir 5 product line main features

- Simultaneous supply of electric power and compressed air
- Designed for extreme environments
- Maximum operating altitude up to 6,000m
- Continuous operation for up to 6 hours
- The high purity of air supplied to the air-conditioning system
- Category 1 essential APU EASA certification
- Modifications for specific military and commercial aircraft application
- Long service life, simple maintenance
- Ecological fuel drainage
- Low operating costs

Installation of APU Safir 5K/G MI – in service with the Czech Armed Forces

