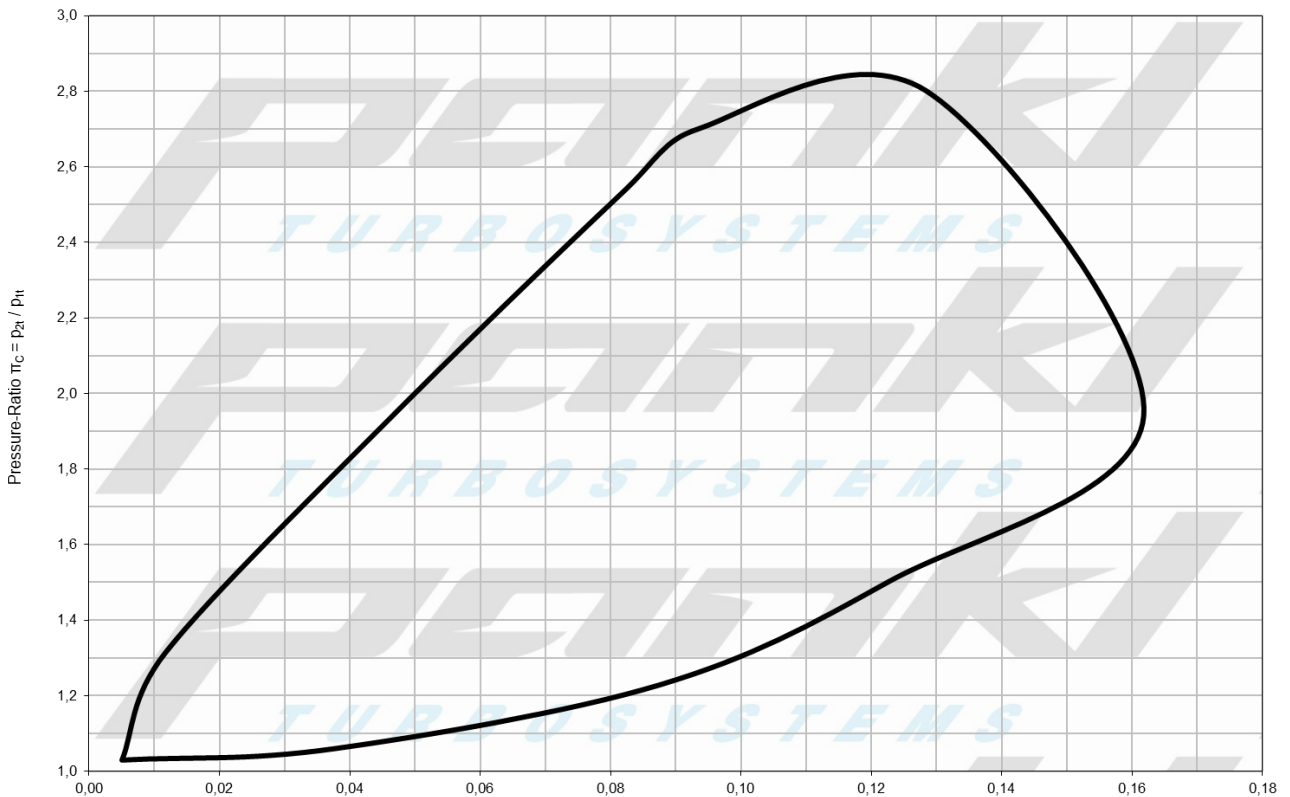


FCAS2 – High Pressure

Type		FCAS2.73-45	
Compressor type	Radial	Nominal voltage	400 / 800 V
Compressor wheel diameter	73 mm	Coolant inlet temperature	< 60° C
Peak compressor efficiency	78%	Coolant flow rate	10 l/min
Acceleration (T90)	< 2.0 sec	Cooling	Water/Glycol (50/50)
Bearing type (oil free)	Aerodynamic	Air inlet conditions	-20° : +40° C
Electric motor	PMSM	Main dimensions (L x W x H)	250 x 190 x 190 mm
Maximum continuous power	22 kW	Weight	< 11.5 kg

Pankl reserves the right to change specification without notice. The data may change according to the configuration



$$\text{Corrected Mass Flow -Rate } \dot{m}_{c,corr} = \dot{m}_c \cdot \sqrt{T_{1t}/T_{ref}} \cdot p_{ref}/p_{1t} \text{ in kg/s}$$

FCAS2.73-45



Key features

- Compact and flexible design
- High efficiency 22kW PMSM
- Wide operating range
- Specification can be adapted to fit customer requirements
- Suitable for various applications
- Liquid cooling
- Aerodynamic oil-free bearing system
- High speed, high power density electric motor
- CAN 2.0 interface
- IP67 enclosure

Pankl Turbosystems GmbH (PTSYS) located in Mannheim, Germany is a subsidiary of Pankl Racing Systems AG, Austria. PTSYS is a high-tech custom solution provider in the field of innovative electrified turbomachinery and air management solutions for automotive, aerospace and industrial applications. PTSYS' leading-edge electrified solutions are fitted with high-efficiency permanent magnet synchronous motors and integrated power electronics. Pankl Turbosystems GmbH's Fuel Cell Air Supply (FCAS) systems for next generation high-performance fuel cells from 30kW to over 300kW are recognized for their weight/size-to-performance ratio and are optimized for highly dynamic transient response and start-stop operation.