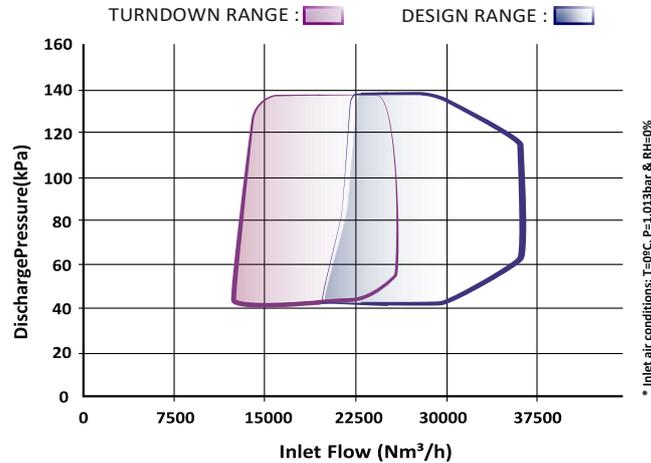




MODEL TCH35.1

SINGLE STAGE TURBOCOMPRESSOR



Product Info

Compressor Type	Integrally geared centrifugal single stage
Medium	Air
Frame family	TCH35.1 – Oil tank embedded in base frame
GearBox	Vertical Split Single helical gears Journal bearings Forced lubrication
Control System	I – Inlet Guide Vanes O – Variable Diffuser Vanes CC – Combined Control (IGV + VDV)

Material specification

Main castings	Cast iron EN GJL-250
Impeller	Aluminium alloy (2618A) or stainless steel
Vanes	Aluminium alloy, Stainless steel, Bronze
GearWheels	High tensile 18CrNiMo7
Fast Shaft	High tensile 18CrNiMo7
Drive Shaft	High tensile 34CrNiMo6
Journal Bearings, Fast Shaft	6-lobes, Steel Alloy & white metal film (babbit)
Journal Bearings, Drive Shaft	Cylindrical, Steel Alloy & white metal film (babbit)
Base Frame	Structural Steel
Coupling	Flexible compact type

Auxiliaries

Inlet Filter/Silencer	95% filtration as per Filter Class EU G4 & baffle type silencer
IGV/VDV Actuation	Electric linear actuator
Expansion Joints	DN500 / 300 steel flanges with Stainless Steel or EPDM Bellows
Cone Diffuser	From Inlet DN300 to Outlet DN600 ~ DN800
Blow-off-valve	DN 200, Electrically actuated
Check valve	DN600 ~ 800, dual flap wafer type
Oil for Gearbox	Approx 450 liters (ISO VG46)
Lube oil cooling	Air (water on demand)
Cooling Fan	IP55 – 50/60Hz

Compressor Drive

Drive	Electrical-motor, 2 Poles
Motor Voltage	Low-medium, or high voltage
Input frequency	50/60 Hz
Motor speed	3000 rpm or 3600 rpm
Protection class	IP55

Standard Quality

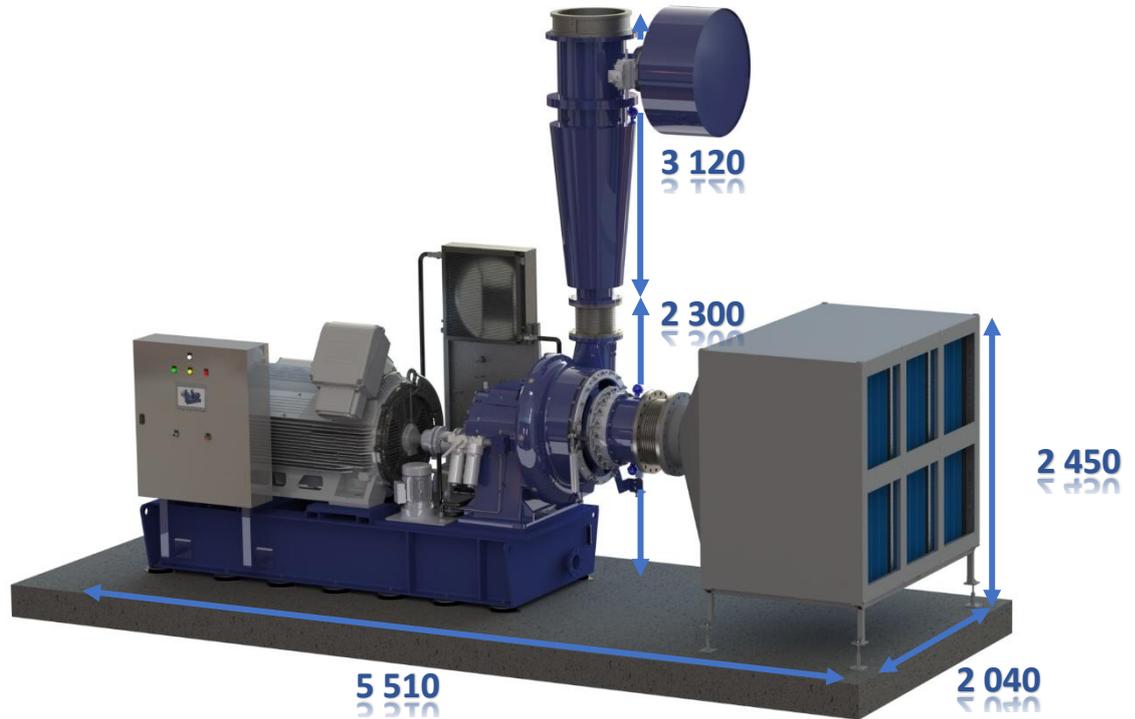
Test Procedure	ISO 5389 & ASME PTC10
Mechanical Test	Internal Standard
Quality	ISO 9001:2015
In Option	API 617/672



MODEL TCH35.1

Single Stage Turbocompressor

Dimensions* [mm]



* Values, dimensions, and reference in this brochure are approximate and intended as a guide only

Performance data

Flow Range	20 000 to 35 000 Nm ³ /h (See Performance chart)
Pressure Range	0.4 to 1.3 barg (See Performance chart)
Turndown	100% - 45% of rated flow with combined control
Power Range	500 to 1200 kW
Discharge Velocity	Below 20 m/s after Cone
Vibration Level	Max 4.5 mm/s per ISO 20816
Noise Level **	95 dB(A) Without enclosure 85 dB(A) With standard enclosure 75 dB(A) With high performance enclosure (in option)

** Enclosure dimensions may be adapted based upon client specific requirements

Panels

Human Machine Interface (HMI)	Siemens KTP900 Basic 9"
Option	Siemens KTP1200 Basic 12"
Option	Allen Bradley Panel View Plus 7"
Programmable Logic Controller (PLC)	CPU Siemens SIMATIC 1510SP-1 PN
Option	Allen Bradley Compact Logix 1769-L series
Instrumentation	Air Pressure transmitters 4-20 mA Air Temperature transmitters 4-20 mA Bearing Temperature RTDs Oil Temperature transmitter and Alarm Switches Oil Pressure transmitter and Alarm Switches Oil level Sight Glass and Alarm Switch Vibration Transmitter 4-20 mA Surge Switch Fast Shaft X, Y, Z displacement surveillance (in option)

