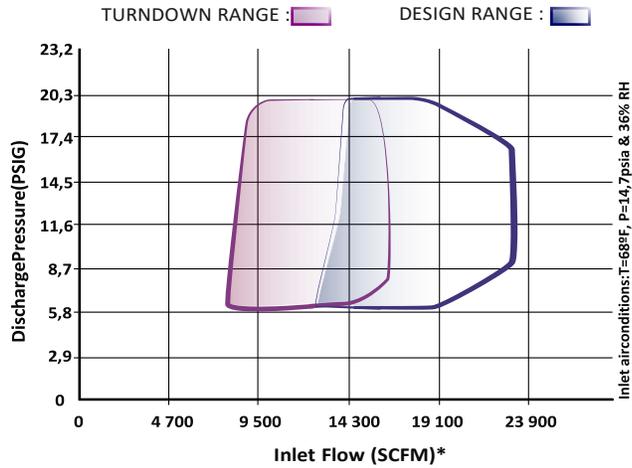




MODEL TCH35.1

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	20" / 12" steel flanges with Stainless Steel or EPDM Bellows
Cone Diffuser	From Inlet 12" to Outlet 24" ~ 32"
Blow-off-valve	8", Electrically actuated
Check valve	24" ~ 32", dual flap wafer type
Oil for Gearbox	Approx 120 Gal US (ISO VG46)
Lube oil cooling	Air (water on demand)
Cooling Fan	IP55 – 50/60Hz

Compressor Drive

Drive	NEMA motor, 2 Pole
Motor Voltage	Low-medium, or high voltage
Input frequency	60 Hz
Motor speed	3600 rpm
Protection class	IP55

Standard Quality

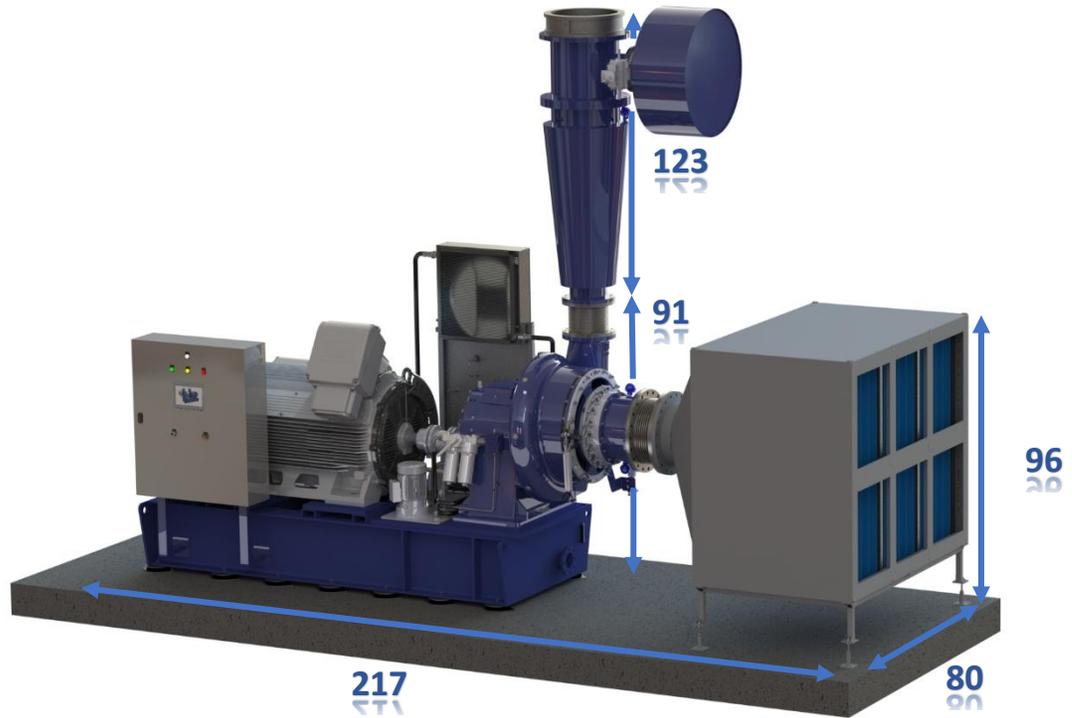
Test Procedure	ISO 5389 & ASME PTC10
Mechanical Test	Internal Standard
Quality	ISO 9001:2015
In Option	API 617/672



MODEL TCH35.1

Single Stage Turbocompressor

Dimensions* [inch]



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

Performance data

Flow Range	13 500 to 23 000 SCFM (See Performance chart)
Pressure Range	6 to 18 PSIG
Turndown	100% - 45% of rated flow with combined control
Power Range	650 to 1 700 HP
Discharge Velocity	Below 65 ft/s after Cone
Vibration Level	Max 0.177 inch/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)	Allen Bradley Panel View Plus 7"
Option	Siemens KTP900 Basic 9"
Option	Siemens KTP1200 Basic 12"
Programmable Logic Controller (PLC)	Allen Bradley Compact Logix 1769-L series
Option	CPU Siemens SIMATIC 1510SP-1 PN
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)

