

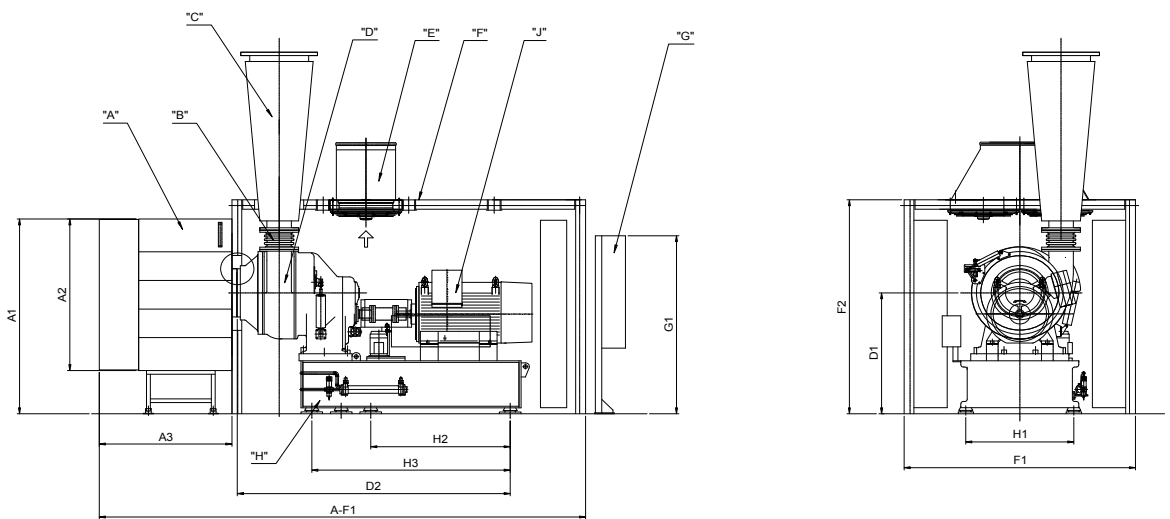
STC-GO (22x-GL315)

Technical Data Sheet

Product

Product Type:	Geared One-Stage Turbocompressor
Product Name:	STC-GO (22x-GL315)
Gearbox type:	Single helical gears, with journal bearings, forced lubrication
Medium:	Air
Control System:	- Dual Point Control STC-GO (22SV-GL315) - Variable Diffuser Vanes STC-GO (22S- GL315) - Inlet Guide Vanes STC-GO (22V- GL315)

Dimensions



A. Inlet silencer:	Inlet air Filter are included, Aluzinc STS Standard
B. Compensator:	Galvanized mild steel St. 37-2 PN10
C. Cone diffuser:	Galvanized or painted mild steel St. 37-2, flange PN10
D. Compressor unit:	Included gear house and compressor
F. Enclosure:	Al-Zn coated steel, insulated with glass wool
E. Ventilation Fan	
G. LCP Panel:	Standard cabinet on steel frame
H. Base frame:	Welded steel St. 37-2
J. Compressor drive:	Electrical motor by client choice

<i>Dimensions-A-(mm)</i>	<i>A1= 2400, A2=1900X1900, A3= 1400</i>
<i>Dimensions-B-(mm)</i>	<i>D_c = 250</i>
<i>Dimensions-C-(mm)</i>	<i>D_d = 500/600 L = 1400/1900</i>
<i>Dimensions-D-(mm)</i>	<i>D1=1430, D2= depending on motor</i>
<i>Dimensions-F-(mm)</i>	<i>F1=2830, A-F1= 6140, F2= 2800</i>
<i>Dimensions-G-(mm)</i>	<i>G1= 1700</i>
<i>Dimensions-H-(mm)</i>	<i>H1= 1300, H2=na, H3= 2770</i>
<i>Dimensions-J-(mm)</i>	<i>Specified by motor supplier</i>
All Dimensions are project specific, non binding and subject to change	

Geared Turbocompressors

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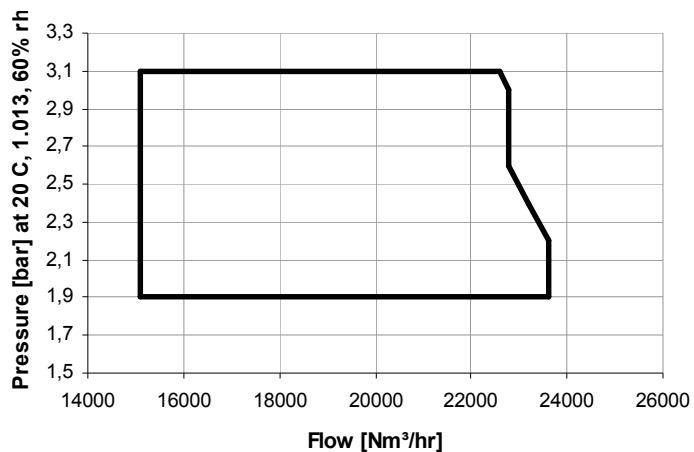
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Performance

Flow range:	15000 - 23000 Nm ³ /h (at 0°C, 1.013 bar, 0% rh)
Diff. pressure range:	0.9 bar(g) – 2.1 bar(g) (at 20°C, 1.013 bar, 60% rh) Inlet guide vane (IGV) machine to 2/3 of max pressure
Power Range:	400 – 1200 kW
Flow regulation:	100% - 45%
Noise level:	Without silencer hood: 95 dB(A) (at one meter distance) With silencer hood: 78 dB(A) (at one meter distance)




Technical Parameters

Weight approx:	Aggregate:	4500 kg
	Inlet silencer:	750 kg
	Acoustic enclosure:	1000 kg
	Electrical motor:	5000 kg
Footprint:	A-F1 X F1	15 m ² - 18 m ²
Floor Mounting:	Glue or bolted Machine mounts	
Discharge velocity:	Max. 20 m/s after cone diffuser	
Vibration level:	Max 4.5 mm/s according to ISO 10816-1	
Lube oil cooling:	Air or water cooling	
Human Interface:	Siemens touch panel, BW 6" screen	
PLC:	Siemens 7 series (SIMATIC) input 4-20 mA	
Pressure measurement:	Transducers, Endress Häuser (4-20 mA)	
Temp. measurement:	Transducers, PT100 (4-20 mA)	
Transmitters:	Siemens Sitrans, or customer specified (4-20 mA)	

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Compressor drive

Drive:	Electrical Motor 2 pole, low-medium-high voltage
Drive power:	450 kW - 1300 kW
Input frequency:	50/ 60 Hz
Motor speed:	3000 rpm or 3600 rpm
Protection class:	IP55, IP54, IP23

Safety monitoring

Anti surge switch:	At inlet
Temp. switch:	At Inlet, when measuring max temp of 65° C
Pressure probe:	In oil reservoir
Temperature probe:	In oil reservoir, at oil cooler, in enclosure
Oil level guard:	In oil sump

For Dual Point Control:

Temperature:	At inlet
Pressure:	Differential pressure between P1 and P2

Auxiliaries

Oil cooler:	With air or water as cooling media
Electrical actuators:	Blow off valve, inlet guide vane, diffuser vanes
Blow off valve:	Butterfly valve with additional silencer
Cooling fan:	Enclosure cooling
Check valve:	Dual flap, body: Grey cast iron GG25, Plates: CuAl9Ni
Oil for gear box:	Approx 570 liters, type see STS document 930870005

Material specifications

Casing:	Outer volute: Ductile cast iron Inner volute and Gearbox housing: Grey cast iron
Impeller:	High strength aluminum alloy AlCu2MgNi
Gearwheels:	High tensile 15CrNi6
Shaft fast:	High tensile 15CrNi6
Shaft slow:	High tensile 34CrNiMo6
Coupling:	Rexnord with safe guard
Filter material:	Icalon
Machine mounts:	St. SIS 1312, for damping natural rubber hardness 60
Bearings:	All shafts are equipped with hydrodynamic bearings Material: copper alloy with white metal film

Standards

Test Procedure:	ISO 5389 & ASME PTC10
Quality:	ISO 9001
Functional test:	STS standard

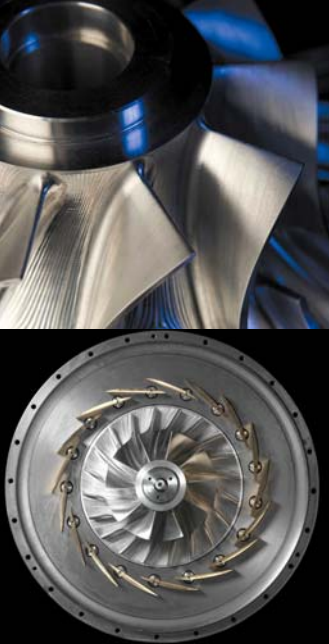
Optional Auxiliaries

Vibration monitoring:	Accelerometer
FloAmp:	Indirect flow measurement
Profibus:	For communication and interface
Master control panel:	For compressors to run at cascade control

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