

STC-GO (KA2S(V)-GK190C)

Technical Data Sheet

Material specification

Volute Casing
Ductile cast iron GGG40

Impeller
High strength aluminum alloy

Diffuser vanes
Brass

Gearwheels
High tensile steel 15CrNi6

Bearings
Ceramic ball bearings with steel inner and outer ring

Shafts
Fast shaft: high tensile
Slow shaft: high tensile

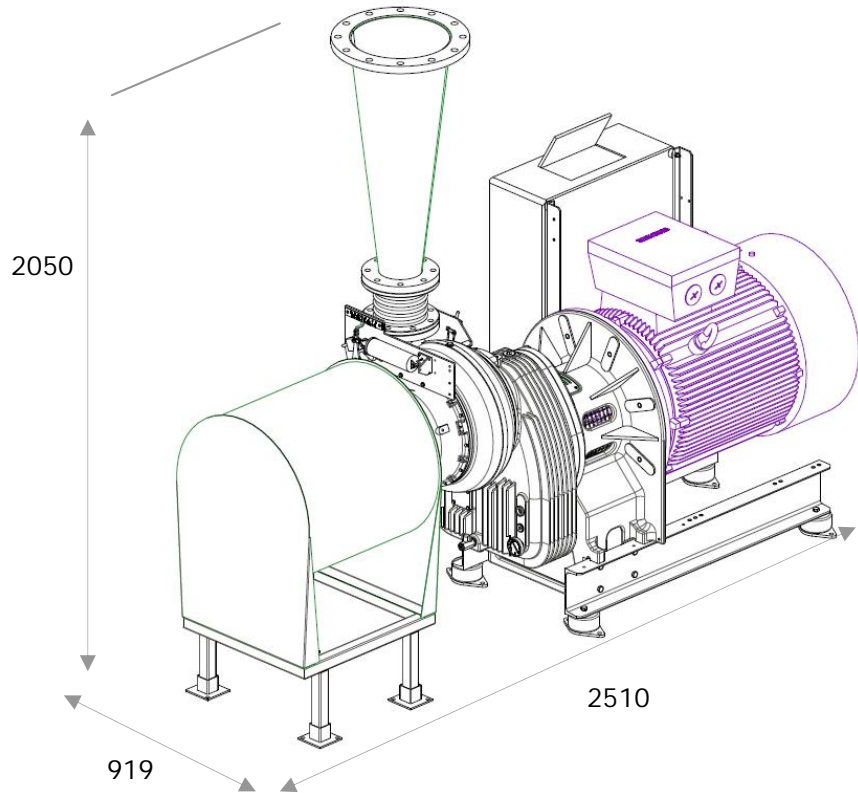
Coupling
Elastic disc coupling
BIPEX 182

Motor
Frame material of grey cast iron, term. box of aluminium

Compressor enclosure
Sheet metal with sound dampening polyester foam

Machine mounts
Natural rubber 60° shore

Cooling
Air cooled



Medium	Air
Control system	Variable diffuser vanes (flow control) (S+SV) Variable inlet guide vanes (head control) (SV)
Design pressure range	0.4 bar(a) – 0.85 bar(a) (defined at 20° C, 1.013 bar 60% Rh.)
Design flow range	1500 – 4500 Nm ³ /h defined at 0° C, 1.013 bar 0% Rh.)
Flow regulation	100% to 45% of design flow
Inlet temperature range	-20° to +40° C
Ambient temperature range	0° to +40° C
Noise level at 1 m distance	without acoustic enclosure: 88 dB(A) with acoustic enclosure: 78 dB(A) At filter inlet: 90 dB(A) Noise level inside cone diffuser 94 dB(A)
Weight approx.	Aggregate: 1350 kg Inlet silencer: 100 kg Acoustic enclosure 100 kg

Turbomachinery Solutions

Answers for energy

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International Standards

Performance Test, Compressor
- ISO 5389 2005-12-15

Flow Measurement
- ASME PTC-19.5- 2004

Measurement, Fluid Flow
- ISO 5167- 1 2003-03-01

Asynchronous Machines
- EN60034

Sound & Acoustic Levels
- ASME PTC-36- 2004
- ISO 3746 1995

Mechanical Vibration
- ISO 10816-1: 1995

Quality Management System
- ISO 9001:2008

Environmental Management System
- ISO 14001:2004

Health & Safety Management System
- BS OHSAS 18001:2007

Directives
- EMC 2004/108/EC
- Low Voltage 2006/95/EF
- Machine 2206/42/EF

CE Certified

Discharge velocity	Max. 20 m/s after cone diffuser
Compressor floor mounting	Machine mounts
Vibration level	Lower than 2.8 mm/s according to ISO 10816-1
Auxiliary power	From 0.6 – 2,5 kW depending on configuration
Compressor drive	
Motor type	E-motor, AC squirrel cage, B5 flanged
Protection / insulation class	IP55 / F/B or F/F
Motor voltage, frequency	Low voltage, 50/60 Hz
Motor power	30 kW – 110 kW
Auxiliaries	
Blow-off-valve	Butterfly valve with silencer (DN65)
Check valve	Dual flap
Compressor accessories	
Inlet configuration	Integral filter/silencer. Barrel or square type, glass fiber, filter grade (G4)
Flexible compensator	With flange of stainless St. 37.2 DIN2501 / EN1092-1 (DN125)
Discharge configuration	Cone diffuser/silencer (DN125)
Instrumentation, safety monitoring	
Local Control Panel	Siemens Touch Panel, BW 4" screen Siemens S7-1200 PLC
Master Control Panel	Siemens Touch Panel, BW 6" screen Siemens S7-300 PLC
Temperature measuring Transmitters	Transducers, PT100 (4-20 mA) Siemens Sitrans (4-20 mA) in oil reservoir Transducers, PT100 (4-20 mA) Differential pressure transmitter (SV-version)
Anti surge switch	At compressor inlet (SUC3)
Oil level guard	In oil sump
PTC thermistors	In electric motor

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