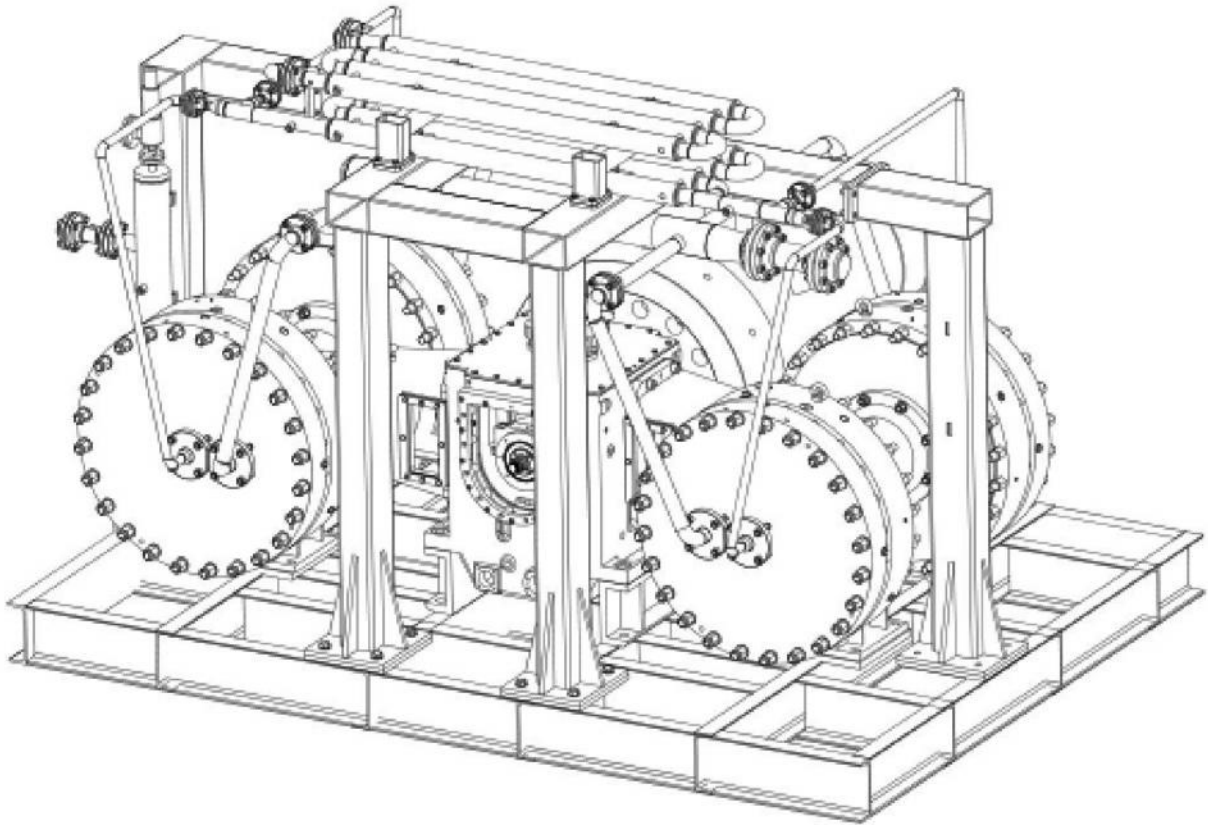


DIAPHRAGM COMPRESSOR



OVERVIEW

Compressor moving parts are of a symmetric balance structure, double cylinder horizontal layout, resulting in compressor operation being stable and reliable with low vibration and low noise. Fewer wearing parts, low operation cost, simple maintenance, easy to operate.

Advanced membrane head structure, simple operation.

Sealing effect: the cylinder parts adopt the form of oil matching plate and embedded structure, which reduces the difficulty of maintenance and installation of diaphragm, reduces the sealing surface, and improves the sealing reliability of the whole machine.

New membrane cavity curve: improves the volume efficiency of the compressor and improves the life of diaphragm and air valve.

The control system with a high degree of automation fully ensures the safe operation of the equipment. The whole equipment (host, instrument, control system) is supplied on a skid-mounted chassis to facilitate the transportation, installation and management of the equipment.

Standards and specifications used in the unit design, manufacture, test and acceptance

Compression engine:

JB / T6905-2004 Diaphragm Compressor
API618-2007 Reciprocating Compressors for Petroleum, Chemical and Gas Industrial Facilities
JB / T53073-1999 Quality Classification of Diaphragm Compressor
JB / T6908-2004 Technical Conditions for Volume Compressors
JB / T6431-2013 Technical Conditions of Grey Iron Casting for Volume Compressors
JB / T9104-2013 Technical Conditions for Ductile Iron Casting for Volume Compressors
JB / T6441-2008 Safety Valve for Compressor
GB22207-2008 Safety Requirements for Volume Type Air Compressor
GB / T3853-2017 Acceptance Test of Volume Compressor
GB / T7777-2003 Measurement and Evaluation of Mechanical Vibration of Volume Compressor
GB / T15487-2015 Flow Measurement Method of Volumes Compressor
JB / T5380-1991 Ultrasonic Detection of Forging Steel Parts of Compressor
JB / T5442-1991 Magnetic particle detection for Important Parts of Compressor
JB / T7663.1-2007 Technical Conditions for Packaging of Volume Compressors
JB / T7663.2-2007 Technical Conditions for Volume Compressor
JB / T5054.5-2000 Product Drawing and Design Document Integrity

GB50231-2009 General Code for Construction and Acceptance of Mechanical Equipment
Installation Engineering
SH / T3143-2012 Technical Regulations for Reciprocating Compressor Engineering in
Petrochemical Industry

Electric motor:

GB755-2008 Quota and Performance of Rotary Motor
JB / T7593-2007 Technical Conditions of Three-phase Asynchronous Motor
GB3836.1-2010 General Requirements for Explosion-proof Electrical Equipment for Explosive
Environment
GB3836.2-2010 "Explosion-proof electrical equipment for Explosive environment explosion-
proof electrical equipment"
GB3836.3-2010 "Explosion-proof electrical equipment for explosive environment"
GB3836.4-2010 "Intrinsically safe Electrical Equipment for Explosive Environment"

Pressure vessel:

TSG 21-2016 Safety Technical Supervision Regulation for Fixed Pressure Vessel
GB / T150-2011, Pressure Vessel
GB / T151-2014 Heat Exchanger
NB / T47013-2015 Nondestructive Inspection of Pressure Equipment

Noise criterion:

SH / T3146-2004 Code for Design of Environmental Protection of Petrochemical Enterprises
GB / T4980-2003 Determination of Noise in Volume Compressor
GB / T50087-2013 Code for Design of Noise Control of Industrial Enterprises

Technical Details: Main technical parameters of the compressor

Model number: 350 - 0.18-8
Type: D type, three cylinder, secondary compression, water cooling
Media: mixed gases (99.998% N₂, > 5 ppm O₂, > 1 ppm H₂O)
Intake air pressure: 0.018 MPa (G)
Exent pressure: 0.8 MPa (G)
Inlet air temperature: room temperature
Ambient temperature: room temperature
Exhaust temperature: 45 Deg. C (after cooling)
Volume flow rate: 350 Nm³ / h
Crankshaft rotation speed: 420 r / min
Piston travel trip: 180 mm
Piston force: 10 T
Lubricating oil label: L-HM68
Lubrication mode: pressure lubrication
Transmission mode: direct-connected transmission
Injection temperature of cooling water: 32 Deg. C
Injection pressure of cooling water: 0.3-0.5 Mjam
Amount of cooling water: 11 t / h
Unit weight: 14,000 kg

Size of the whole machine (length, width and height):

3700mm x 2800mm x 1800 mm

Installation considerations: the maintenance space around and above the compressor shall not be less than 1.5 meters

Technical parameters of the main motor:

Model: YE3-355S-14
Type: three-phase, asynchronous, energy-saving motor
Power: 75 kW
Speed: 420 r / min
Voltage: 380 V
Frequency: 50 Hz
insulation grade: F
Temperature rise level: B
Explosion-proof grade: not explosion-proof
Protection level: IP55
Auxiliary oil pump motor
Model number: YE3-90L-4
Type: three-phase, asynchronous, energy-saving motor
Power: 2.2 kw
Voltage: 380 V
Explosion-proof grade: not explosion-proof
Protection level: IP55