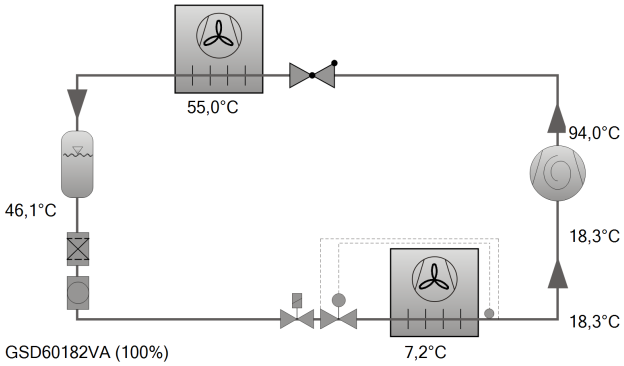
Selection: Scroll-Compressor

Input Values

Compressor model	GSD60182VA
Refrigerant	R410A
Reference temperature	Dew point temp.
Evaporating SST	7,20 °C
Condensing SDT	55,0 °C
Liq. temp. (after condenser)	46,1 °C
Suction gas temperature	18,30 °C
Power supply	460V-3-60Hz
Useful superheat	100%

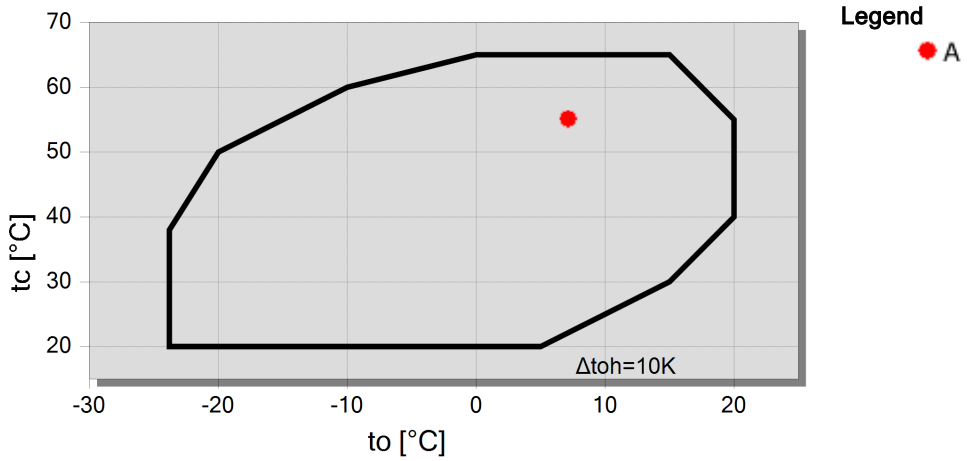


Result

Compressor	GSD60182VA_4
Capacity steps	100%
Cooling capacity	53,7 kW
Cooling capacity *	47,4 kW
Evaporator capacity	53,7 kW
Power input	16,28 kW
Current (460V)	22,9 A
Voltage range	440-480V
Condenser capacity	69,9 kW
COP/EER	3,30
COP/EER *	2,91
Mass flow	1224 kg/h
Discharge gas temp. w/o cooling	94,0 °C

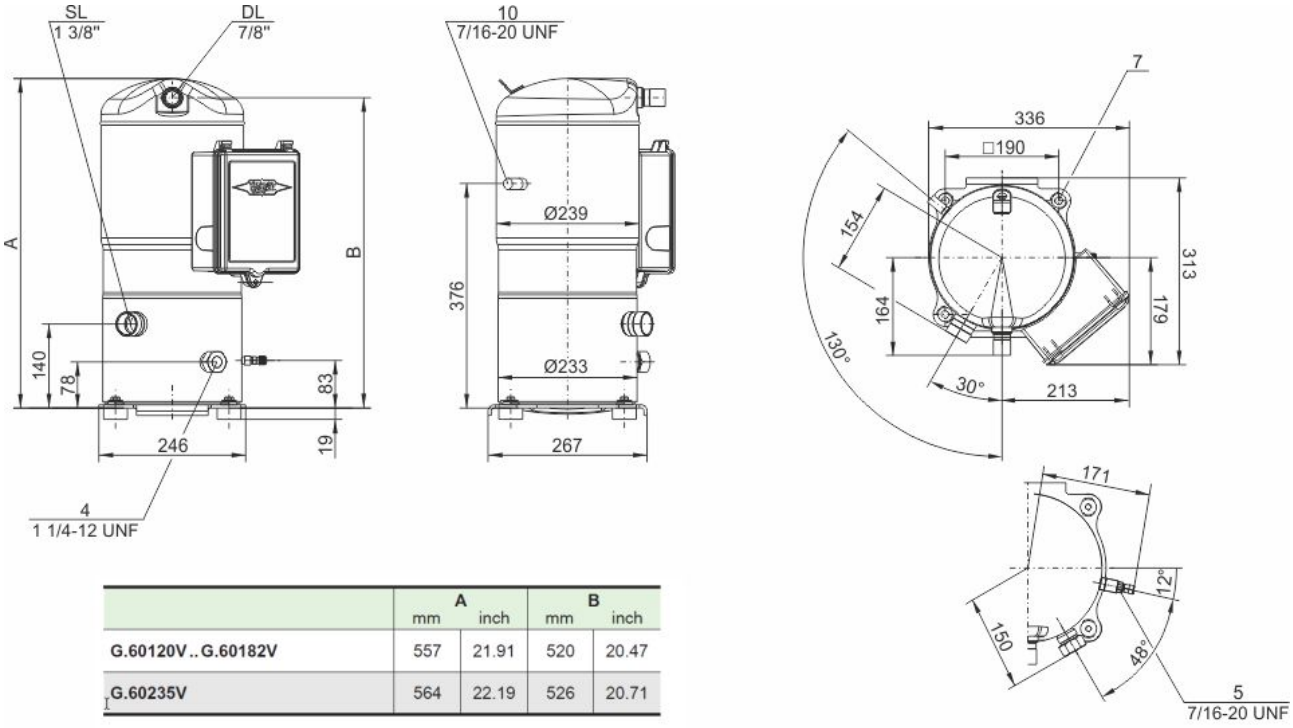
Tentative data. The values are based on tentative data. Larger deviations may occur at the limits of the application range or under special operating conditions. The values must be tested and validated in the respective system before any binding design decision or release.
*according to EN12900 (10K suction gas superheat, 0K liquid subcooling)

Application Limits GSD60182VA



Technical Data: GSD60182VA

Dimensions and Connections



	A		B	
	mm	inch	mm	inch
G.60120V..G.60182V	557	21.91	520	20.47
G.60235V	564	22.19	526	20.71

Legend of connection positions according to "Dimensions":

1 High pressure measurement connection (HP) - Schrader
2 High pressure connection (HP) alternatively: connection for discharge gas temperature sensor
3 Low pressure connection (LP)
4 Sight glass
5 Oil maitenance connection
6 Connection for oil and gas equalization (parallel operation)
7 Mounting position for vibration dampers
8 Mounting position for Tandem and Trio fixing rails
10 Economiser connection (7/16 - 20 UNF, 1/4 (3/8 outer diameter)) - ORBIT FIT only
SL Suction line
DL Discharge line
Dimensions can show tolerances according to EN ISO 13920-B.

Note:

Please consult BITZER for external VSD application guidelines

Technical Data

Technical Data	
Displacement (2900rpm 50 Hz)	29,2 m³/h
Displacement (3500rpm 60 Hz)	35,2 m³/h
Weight	82 kg
Max. pressure (LP/HP)	33 / 45 bar
Connection suction line	
Direct brazing connection	1 3/8 (Standard)
Connection discharge line	
Direct brazing connection	7/8 (Standard "B" version)
Oil type R410A	BVC32 (Standard)
Motor data	
Motor voltage (more on request)	440-480V Y-3-60Hz
Max. operating current	31.7 A
Starting current (Rotor locked)	180.0 A
Max. power input	21,5 kW
Extent of delivery (standard)	
Oil charge	2,7 dm³
Motor protection	SE-B3
Enclosure class	IP54
Available options	
Oil heater	90 W
Discharge gas temperature sensor	Option
Motor protection	SE-E1
Vibration dampers	Option

Scroll-Compressor