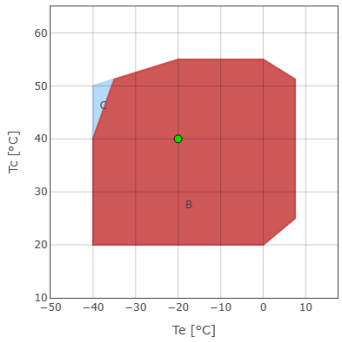
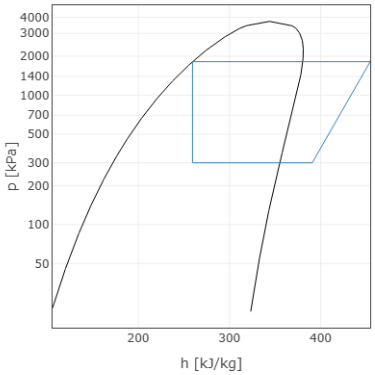
Calculation - APE

Input

Model	3LVS
Refrigerant	R404A
Evaporating temperature	-20.0 °C
Condensing temperature	40.0 °C
Reference temperature	Dew temperature
Suction temperature	20.0 °C
Evaporator outlet temperature	20.0 °C
Liquid subcooling	0.0 K
Compressor speed	1300 RPM
Capacity control system	100%



B = Standard application
C = Head cooling fan or max superheating 20K
• = Dew temperature



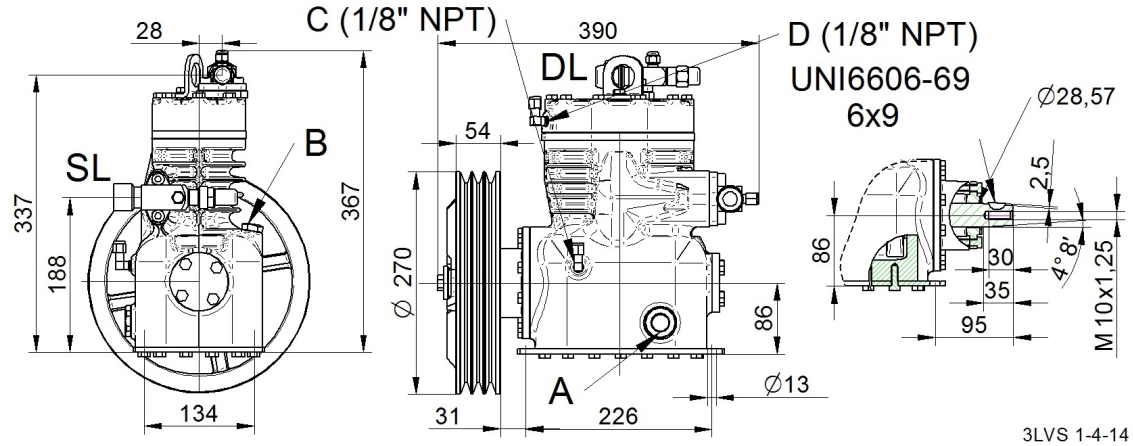
Performance calculation

	Standard conditions	At evaporator	At compressor
Cooling capacity	10270 W	10270 W	10270 W
Shaft power	4.85 kW	4.85 kW	4.85 kW
Condenser capacity	15.12 kW	15.12 kW	15.12 kW
COP	2.12	2.12	2.12
Mass flow	281.6 kg/h	281.6 kg/h	281.6 kg/h
Discharge temperature	93.7 °C	93.7 °C	93.7 °C

Technical data

No. cylinders	2.0	
Bore	61.0	[mm]
Stroke	60.0	[mm]
Swept volume	351.0	[cm³]
Flywheel	270-3A	[mm]
Suction valve	28 s.	[mm]
Discharge valve	3/4"-18	[mm]
Oil charge	1.5	[L]
Net weight	38.0	[kg]
RPM min.	500.0	RPM
RPM max.	1300.0	RPM
Recommended drive motor	4-15	[HP]

Overall dimensions [mm]



DL - Discharge service valve
SL - Suction service valve
A - Oil sight glass
B - Oil charge plug
C - Low pressure connection
D - High pressure connection

Configuration: Standard \ Optional

FW=Flywheel	Optional
CH=Crankcase heater	Optional

For operation with HFC refrigerants the compressor must be ordered with POE OIL. For operation with HCFC refrigerant the compressor shall be ordered with mineral oil.

For low temperature application external cooling must be provided.