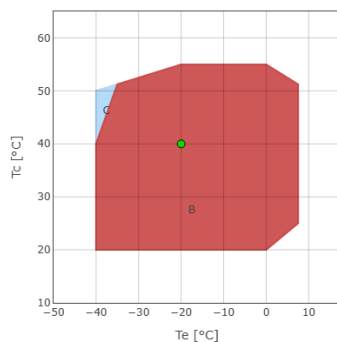




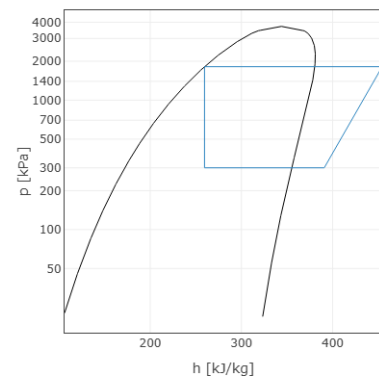
Calculation - APE

Input

Model	81VS
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	1450 RPM
Capacity control system	100%



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

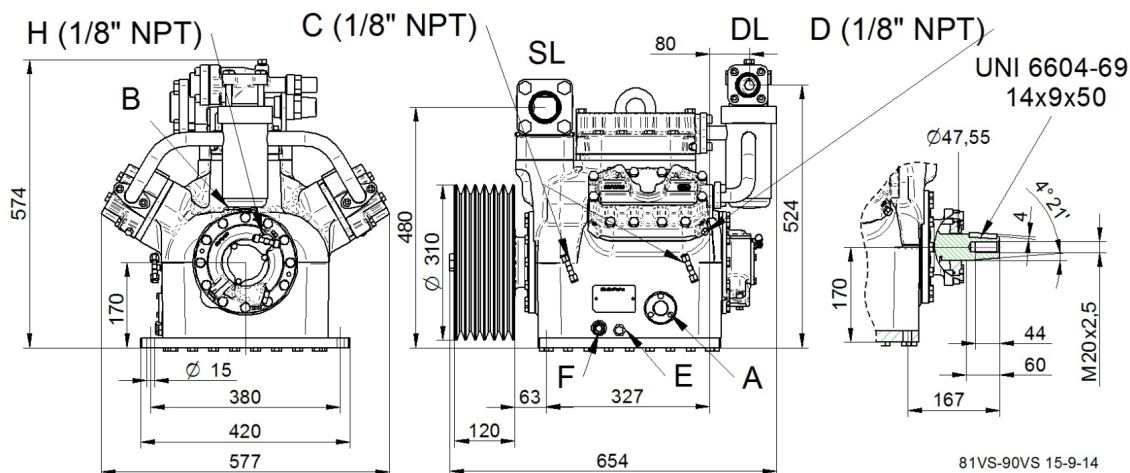


Performance calculation

	Standard conditions	At evaporator	At compressor
Cooling capacity	58300 W	58300 W	58300 W
Shaft power	28.50 kW	28.50 kW	28.50 kW
Condenser capacity	86.79 kW	86.79 kW	86.79 kW
COP	2.05	2.05	2.05
Mass flow	1598.9 kg/h	1598.9 kg/h	1598.9 kg/h
Discharge temperature	93.1 °C	93.1 °C	93.1 °C

Technical data

No. cylinders	6.0	
Bore	78.0	[mm]
Stroke	65.0	[mm]
Swept volume	1865.0	[cm ³]
Flywheel	310-6SPB	[mm]
Suction valve	54 s.	[mm]
Discharge valve	42 s.	[mm]
Oil charge	6.5	[L]
Net weight	211.0	[kg]
RPM min.	750.0	RPM
RPM max.	1750.0	RPM
Recommended drive motor	15-100	[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

E - Oil drain plug

F - Crankcase heater

H - Oil pressure tap



OFFICINE MARIO DORIN SINCE 1918

DORIN[®]
INNOVATION

Model: 81VS - PAGE 3

28/05/2026 - Dorin Software v. 26.02

All data subject to change

Configuration: Standard \ Optional

FW=Flywheel	Optional
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CH=Crankcase heater	Optional
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WH=Water cooled head	Optional
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CR1=Capacity control 50-100%	Optional
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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.