



OFFICINE MARIO DORIN SINCE 1918

DORIN[®]
INNOVATION



VS & 2VS 系列

OPEN TYPE COMPRESSORS

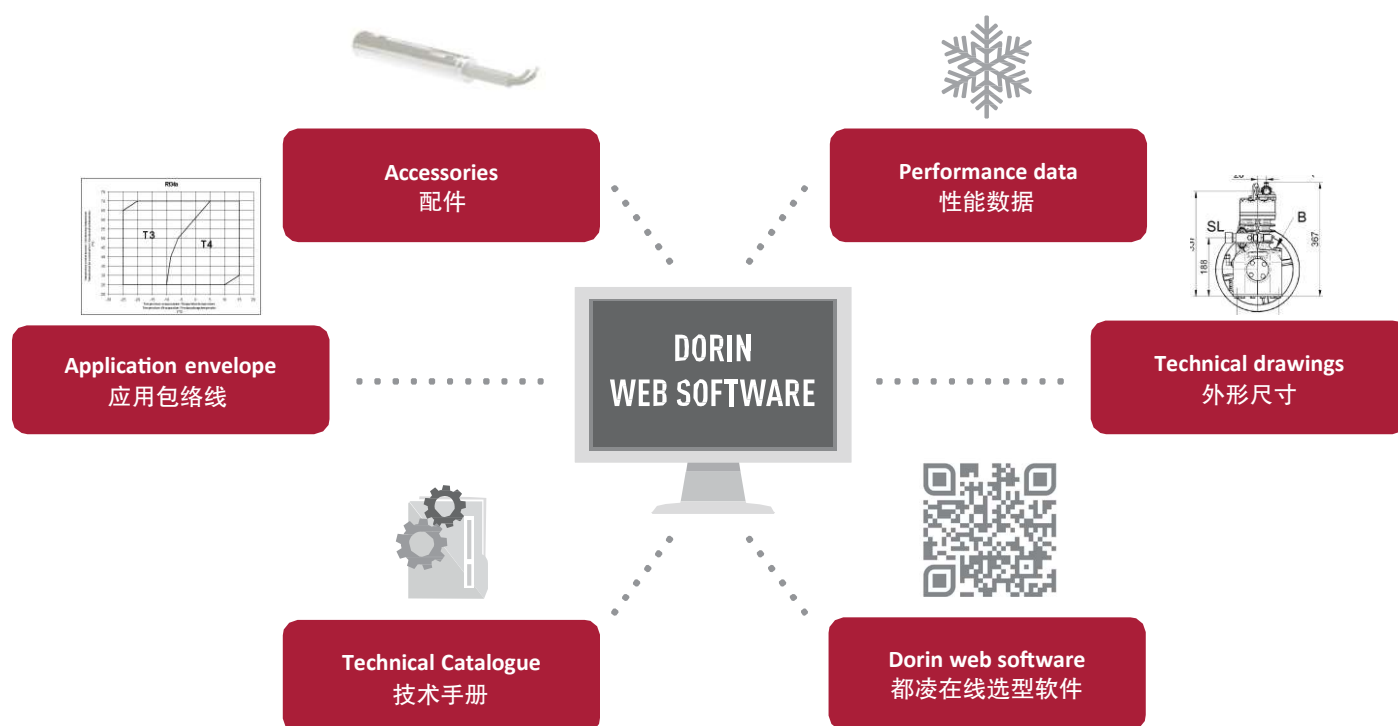
HFC APPLICATION

开启式压缩机
HFC应用

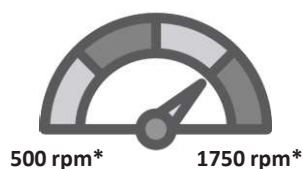


DORIN Web Software

都凌 (在线) 选型软件

**RPM Range**

转速范围



* Minimum and maximum operating rpm to be checked in the following pages depending on the models

* 最小和最大运行转速须依据不同型号在以下页面中查询

Refrigerants in DORIN software (GWP - AR4)

都凌选型软件支持的制冷剂

	SAFETY GROUP A1 安全组别A1	
MT - HT	R134A (1430)	
MT - LT	R404A (3922)	R22 (1810)

For all the refrigerants not available in the software please contact DORIN for the calculations

对于选型软件未涉及的制冷剂，请联系Dorin都凌技术人员获得相关性能数据

Factory certifications

都凌工厂认证

ISO 45001:2018

ISO 9001:2015

Compressor certifications

都凌压缩机认证



VS SERIES Features

VS 系列产品特点



1932

Year of the first open type compressor produced from DORIN

1932年Dorin都凌生产出第一台开启式压缩机

**Silent operations and low vibrations**

运行安静流畅，振动水平低

Crankshafts balanced individually, excellent fluid dynamics studies are our strengths

曲轴能够独立平衡运转，这得益于我们出色的流体动力学研究

**Suitable for direct or belt drive at variable rpm**

适用于可变转速的直接或皮带驱动

 η **Highest levels of efficiency**

优异的运行效率

Using latest coating technologies for reducing frictions and improving lubrication

采用最新的涂层技术来减少摩擦和改善润滑

**2 years standard warranty**

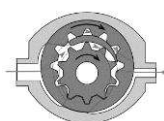
两年标准质保

**All open type compressors can be provided in accordance to Directive 2014/34/EU – ATEX**

所有的开启式机型均可提供符合2014/34/EU法令的ATEX防爆版本

Each compressor shows following ATEX marking: II 3G c IIB X

所有压缩机均带有II 3G c IIB X ATEX标记

**Models up to 52VS included are lubricated with oil slinger, the larger ones with oil pump**

52VS 及以下的型号使用甩油盘润滑，52VS以上较大型号使用油泵

The crankshaft for the models without oil pump has to rotate in the direction pointed out by the arrow, clearly marked on the compressor, the models with oil pump can rotate in both directions

不带油泵的机型的曲轴必须按压缩机上明显标识的箭头所指的方向旋转，在带油泵的机型中可以任意旋转

VS SERIES Technical Features

开启式系列产品技术特点

- 1** Extra reliability and efficiency of optimised valve plate design
最优化的阀板设计保证了可靠性和效率

- 2** Flywheel as optional accessory
可选配飞轮

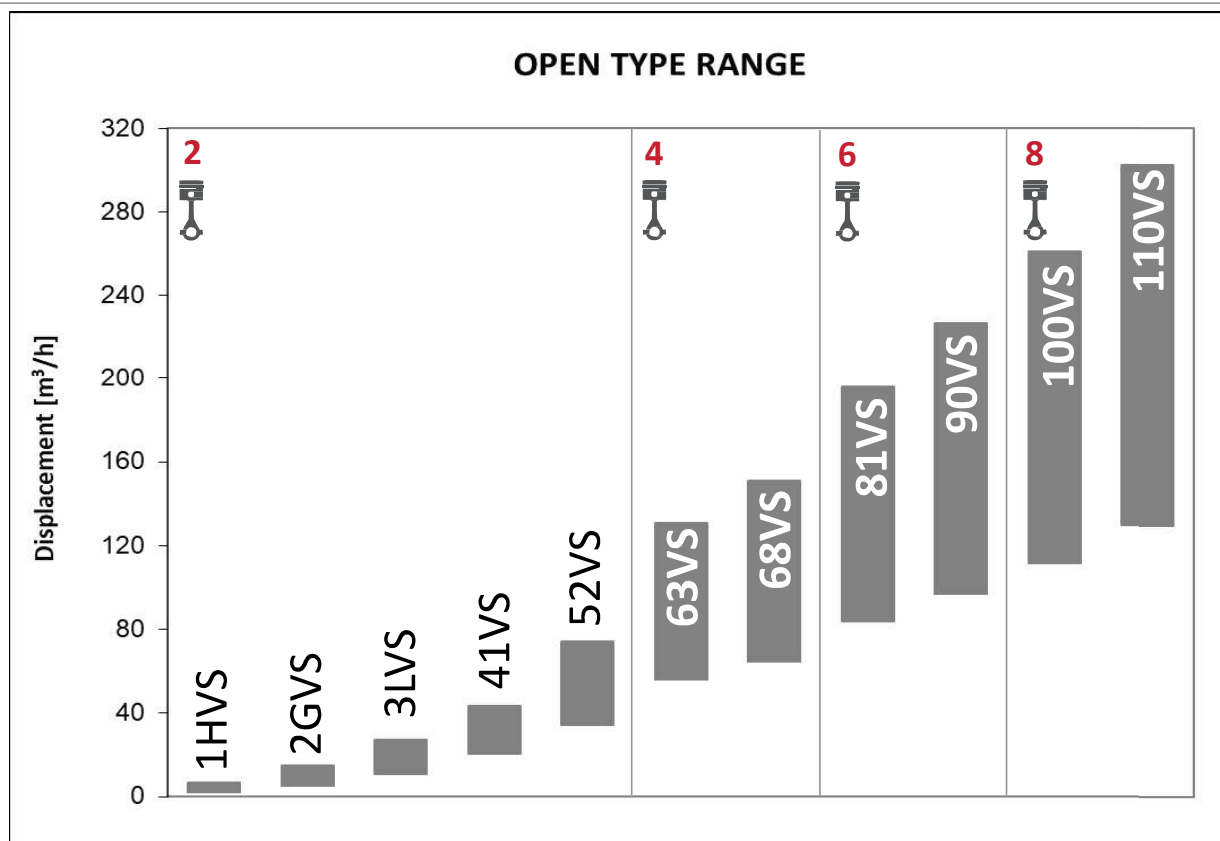
- 3** Easy-to-change shaft seal for maintenance purposes
易于更换的轴封，便于维护

- 4** High volume oil sump suitable for marine application
适用于船舶应用的加深油底壳



VS range - Displacement

VS系列 – 排量

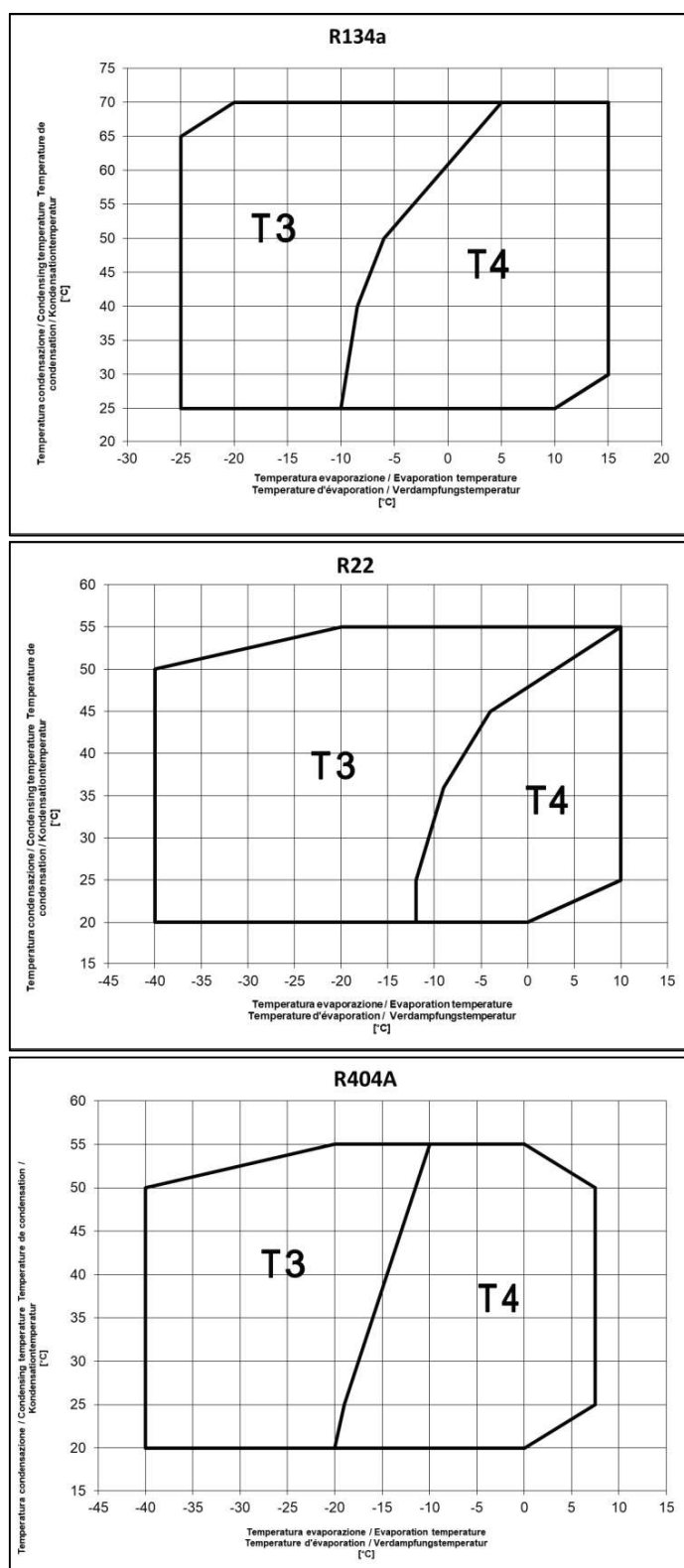


FROM 2,28m³/h TO 302, 61 m³/h
FROM 76 cm³ to 2882 cm³ SWEEP VOLUME

从 2,28 m³/h到302,61 m³/h
行程容积从76 cm³ 到 2882 cm³

Application envelope

应用包络线



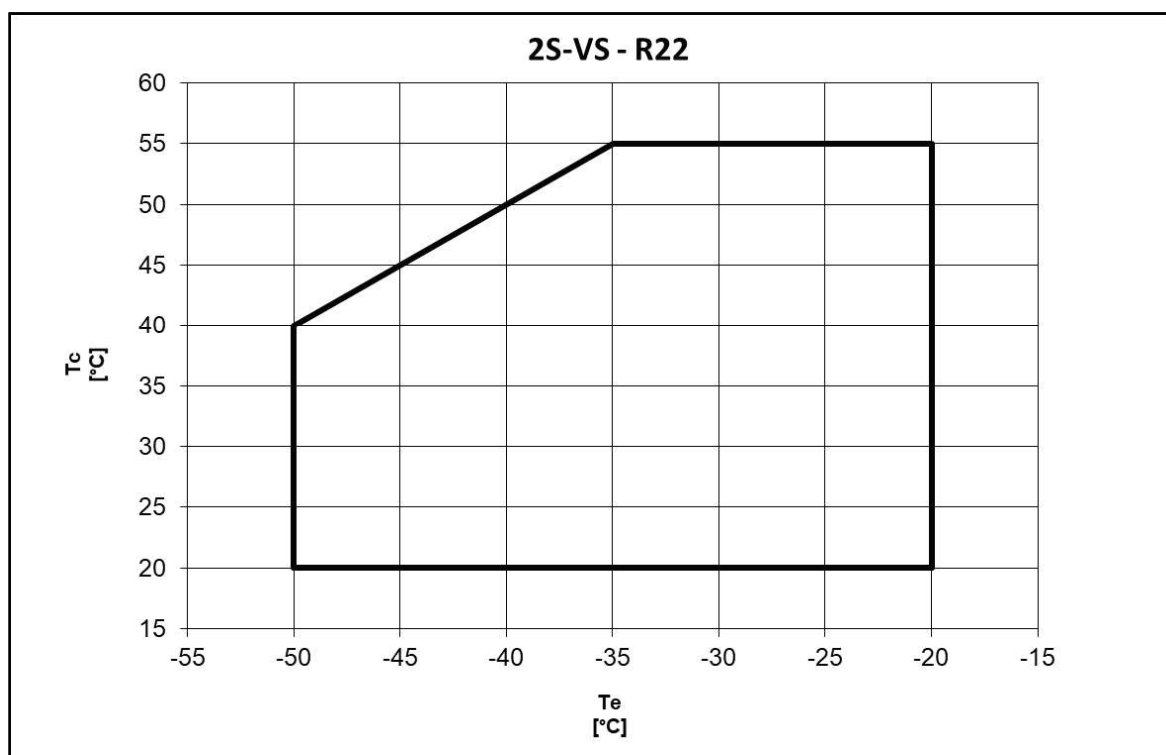
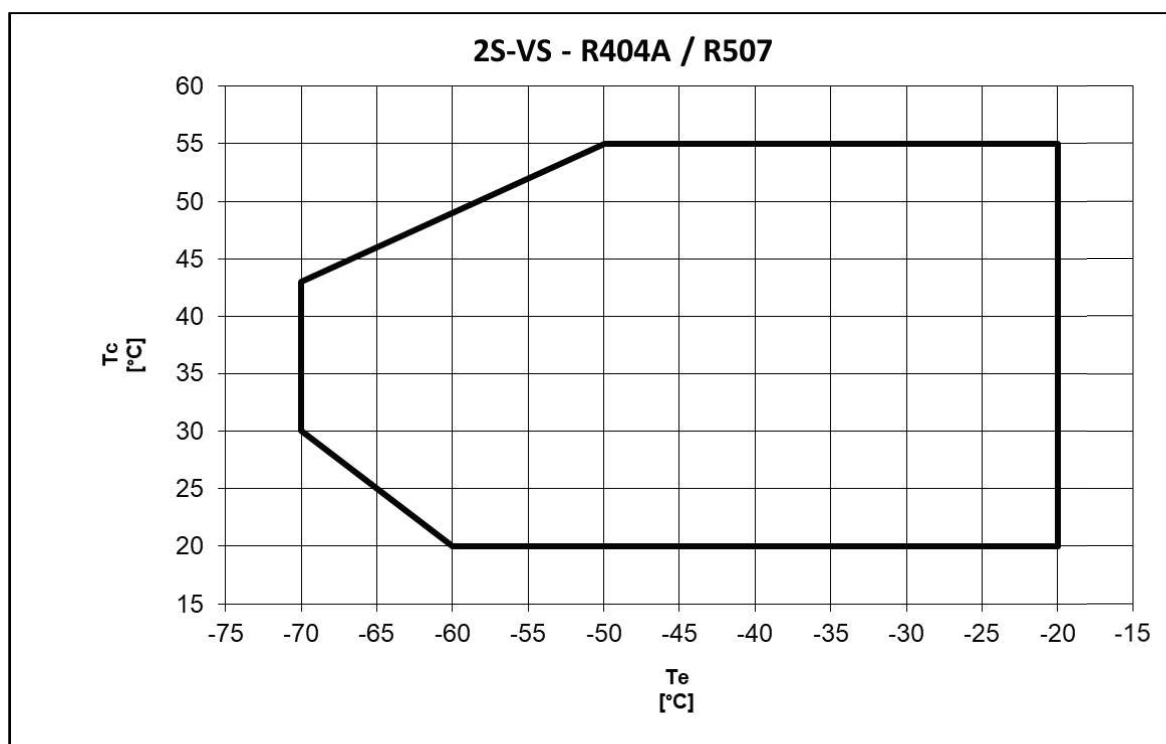
T3 maximum surface temperature 200°C / T3最高表面温度200°C

T4 maximum surface temperature 135°C / T4最高表面温度135°C

Suction gas superheat < 30K / 吸气过热度<30K

Application envelope 2 stage models

双级系列应用包络线



Use with R22 only where permitted by national legislation / 仅在相关法律允许的国家和地区使用 R22

Standard and Optional Accessories

标配件和选配件



● STANDARD 标配	Flywheel (FW)* 飞轮	Crankcase heater (CH)* 曲轴箱加热器	Head fan (BF) 机体冷却风机	Water cooled head (WU)* 水冷缸头	Capacity control (CR)* 能量控制头	Unloaded start (US)* 卸载启动
○ OPTIONAL 选配						
1HVS	○	○				
2GVS	○	○				
3LVS	○	○	○			
41VS	○	○	○	○		
52VS	○	○	○	○		
63VS/63VSC	○	○	○	○	○	○
68VS	○	○	○	○	○	○
81VS	○	○	○	○	○	○
90VS	○	○	○	○	○	○
100VS	○	○	○	○	○	○
110VS	○	○	○	○	○	○
2S-81VS	○	○	○	○	○	○
2S-90VS	○	○	○	○	○	○

All models are charged after the production line with POE, PAG or mineral oil

所有型号生产完成后均充注 POE、PAG或矿物油

*Available for the ATEX version

*适用于ATEX版本

Application VS SERIES

VS系列运用领域



Refrigerated transport

冷链运输



Marine Application

船舶应用

Technical features

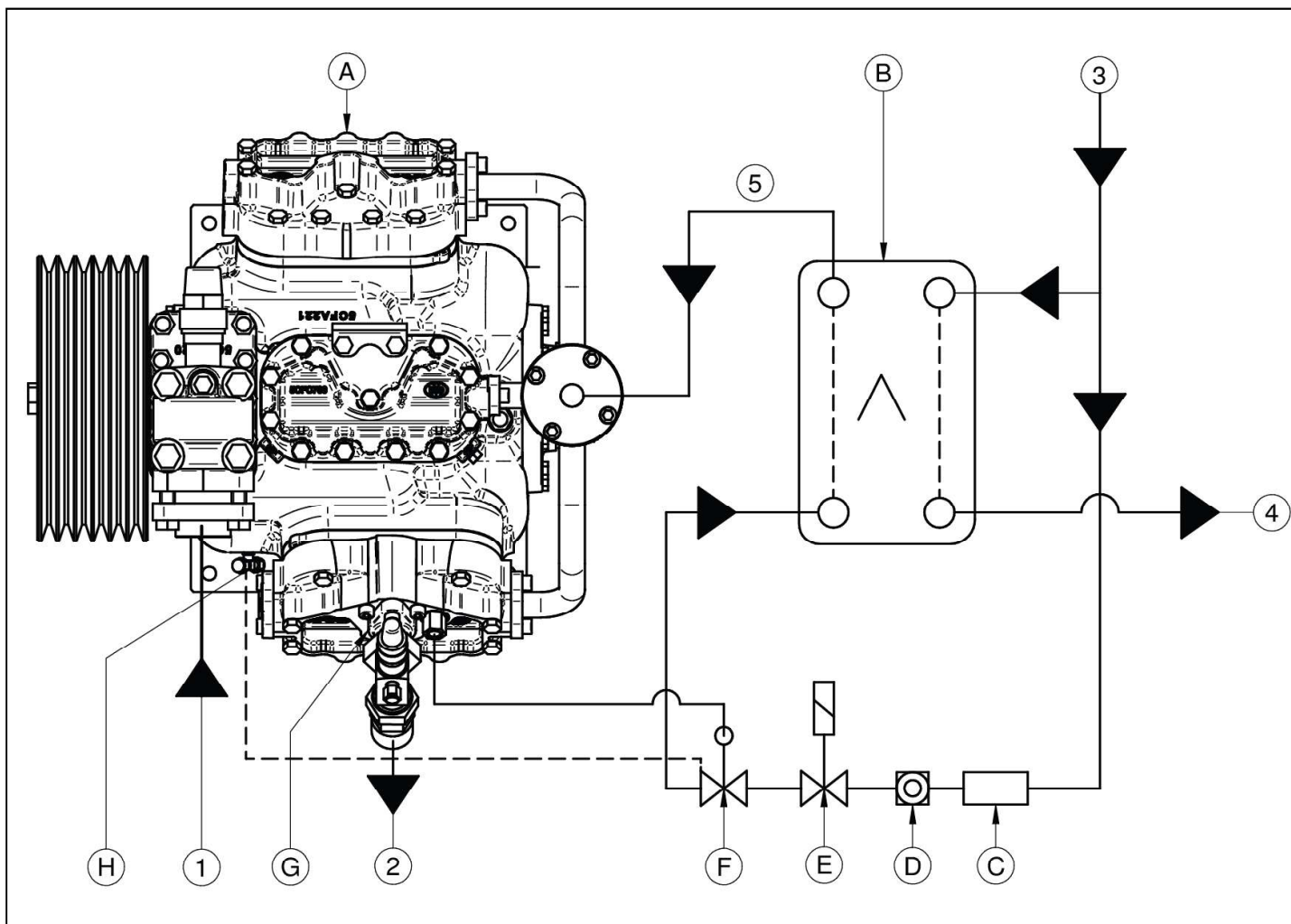
技术特点

MODELLO 型号	NUMBER OF CYLINDERS 缸数	BORE 缸径	STROKE 行程	SWEPT VOLUME 行程容积	DISPLACEMENT 排气量	SUCTION 吸气	DISCHARGE 排气	FLYWHEEL 飞轮	OIL CHARGE 注油量	WEIGHT 净重	RPM 转速		ABSORBED POWER 输入功率
		[mm]	[mm]	[cm ³]	[m ³ /h]	SL [mm]	DL [mm]	[mm] *	[L]	[kg] **	min	max	HP
1HVS	2	45	24	76,0	6,64 @ 1450	5/8" - 16	1/2"-12	160-2A	0,5	17	500	1450	0,75 - 4
2GVs	2	60	30	169,5	14,75 @ 1450	3/4" - 18	5/8" - 16	160-2A	1,0	22	500	1450	2 - 7,5
3LVs	2	61	60	350,7	27,35 @ 1300	28S	3/4" - 18	270-3A	1,5	38	500	1300	4 - 15
41VSR	2	74	65	560,0	43,68 @ 1300	28S	22S	303-3B	3,0	78	600	1300	5,5 - 20
41VSM/3B	2	74	65	560,0	43,68 @ 1300	35S	28S	303-3B	3,0	78	600	1300	5,5 - 20
41VSM/4B	2	74	65	560,0	43,68 @ 1300	35S	28S	303-4B	3,0	82	600	1300	5,5 - 20
52VSR	2	88	78	949,0	74,02 @ 1300	35S	28S	335-4B	4,0	118	600	1300	10 - 30
52VSM	2	88	78	949,0	74,02 @ 1300	42S	35S	335-4B	4,0	118	600	1300	10 - 30
63VS/4B	4	78	65	1245,0	108,32 @ 1450	42S	2 X 28S	310-4B	5,5	156	750	1750	15 - 50
63VS/6B	4	78	65	1245,0	108,32 @ 1450	42S	2 X 28S	310-6B	5,5	156	750	1750	15 - 50
63VSC/6B	4	78	65	1245,0	108,32 @ 1450	42S	35S	310-6B	5,5	156	750	1750	15 - 50
68VS/4B	4	84	65	1440,0	125,28 @ 1450	54S	35S	310-4B	5,5	156	750	1750	15 - 75
68VS/6B	4	84	65	1440,0	125,28 @ 1450	54S	35S	310-6B	5,5	156	750	1750	15 - 75
81VS	6	78	65	1865,0	162,26 @ 1450	54S	42S	310-6SPB	6,5	203	750	1750	15 - 100
90VS	6	84	65	2160,0	187,92 @ 1450	54S	42S	310-6SPB	6,5	203	750	1750	15 - 100
100VS	8	78	65	2485,0	216,20 @ 1450	80S	54S	310-6SPB	8,5	240	750	1750	20 - 125
110VS	8	84	65	2882,0	250,73 @ 1450	80S	54S	310-6SPB	8,5	240	750	1750	20 - 125

2S-VS SERIES Technical Features

2S-VS系列技术特点

MODELLO 型号	NUMBER OF CYLINDERS 缸数		BORE 缸径	STROKE 行程	SWEPT VOLUME 行程容积		DISPLACEMENT 排气量		SUCTION 吸气	DISCHARGE 排气	FLYWHEEL 飞轮	OIL CHARGE 注油量	WEIGHT 净重	RPM 转速		ABSORBED POWER 输入功率
	LP	HP			LP	HP	LP	HP						min	max	
2S-81VS	4	2	78	65	1242	621	108,05	54,03	54s	42s	310-6SPB	6,5	216	750	1750	15 - 100
2S-90VS	4	2	84	65	1440	720	125,28	62,64	54s	42s	310-6SPB	6,5	216	750	1750	15 - 100



A – Compressor - 压缩机
B – Liquid subcooler - 液体过冷器
C – Filter - 过滤器
D – Indicator - 视液器
E – Solenoid valve - 电磁阀
F – Expansion valve - 膨胀阀
G – Non return valve - 止回阀
H – Low pressure tap - 低压旋塞

1 – From Evaporator - 自蒸发器
2 – To condenser - 至冷凝器
3 – From liquid line - 自液体管路
4 – To evaporator - 至蒸发器
5 – To II stage suction - 至二级吸气

VS SERIES

2S-VS SERIES Preliminary performance data with R404A/R507

2S-VS系列使用R404A/R507制冷剂的初步性能数据

RANGE 系列	MODEL 型号	RPM 转速	T COND 冷凝温度	Q [W]		REFRIGERATION CAPACITY 制冷量					
						EVAPORATING TEMPERATURE 蒸发温度					
			[°C]	-25	-30	-35	-40	-45	-50	-55	-60
2S-VS Without Liquid Subcooler 无中冷器	2S-81VS	1450	30	38380	31660	25660	20370	16100	12500	9500	7070
			40	33510	27450	21850	16950	13380	10620	8090	6030
			50	28200	22840	18030	13590	10750	8380	6350	-
	2S-90VS		30	44520	36720	29760	23630	18670	14490	11000	8200
			40	38860	31720	25340	19630	15510	12030	9170	6830
			50	32670	26490	20900	15750	12470	9700	7370	-
2S-VS With Liquid Subcooler 带中冷器	2S-81VS		30	43770	37300	31260	25690	21030	16850	13230	10200
			40	41100	34850	28900	23250	19060	15250	12050	9280
			50	38500	32340	26510	20770	17120	13870	10920	-
	2S-90VS		30	50750	43250	36250	29800	24400	19520	15350	11820
			40	47660	40420	33520	27000	22100	17700	13980	10760
			50	44680	37500	30750	24080	19840	16080	12650	-

2S-VS SERIES Preliminary performance data with R22

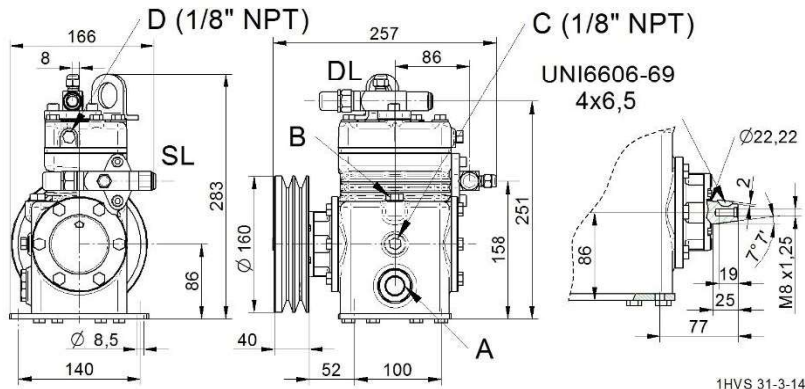
2S-VS系列使用R22制冷剂的初步性能数据

RANGE 系列	MODEL 型号	RPM 转速	T COND 冷凝温度	Q [W]		REFRIGERATION CAPACITY 制冷量					
						EVAPORATING TEMPERATURE 蒸发温度					
			[°C]	-25	-30	-35	-40	-45	-50	-55	-60
2S-VS Without Liquid Subcooler 无中冷器	2S-81VS	1450	30	38270	32830	26750	21740	16430	11830	8700	5440
			40	36180	31260	25900	21550	15740	10780	8620	5390
			50	36570	30000	25300	21400	14770	10060	8560	5350
	2S-90VS		30	43890	38050	30800	24850	18770	13510	9940	6220
			40	41350	35900	29460	24150	18040	12620	9660	6050
			50	40920	34170	28480	23690	16820	11850	9480	5810
2S-VS With Liquid Subcooler 带中冷器	2S-81VS		30	42560	37800	31400	26000	20200	15000	10400	6500
			40	41700	37100	30800	25350	19500	14000	10140	6350
			50	40900	36410	30210	24800	18850	13640	9900	6230
	2S-90VS		30	49400	43850	36420	30200	23450	17400	12080	7550
			40	48380	42980	35690	29400	22560	16220	11760	7350
			50	47450	42220	35030	28740	21850	15810	11480	7200

Technical Drawings

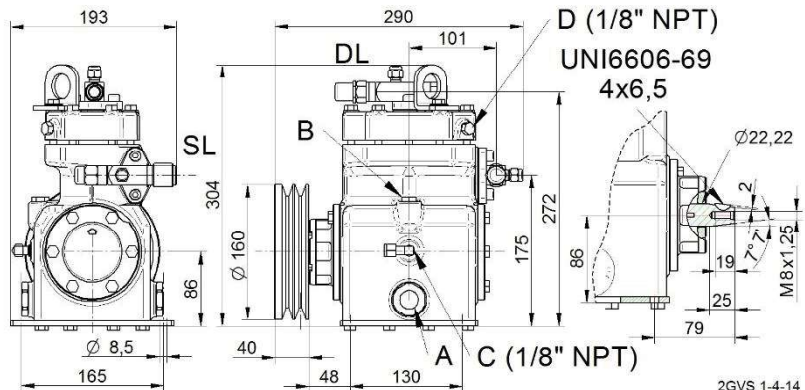
外形尺寸

1HVS



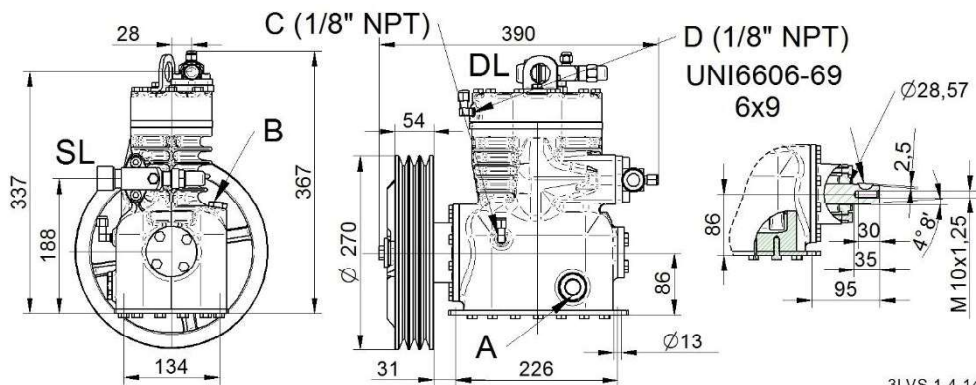
1HVS 31-3-14

2GVS



2GVS 1-4-14

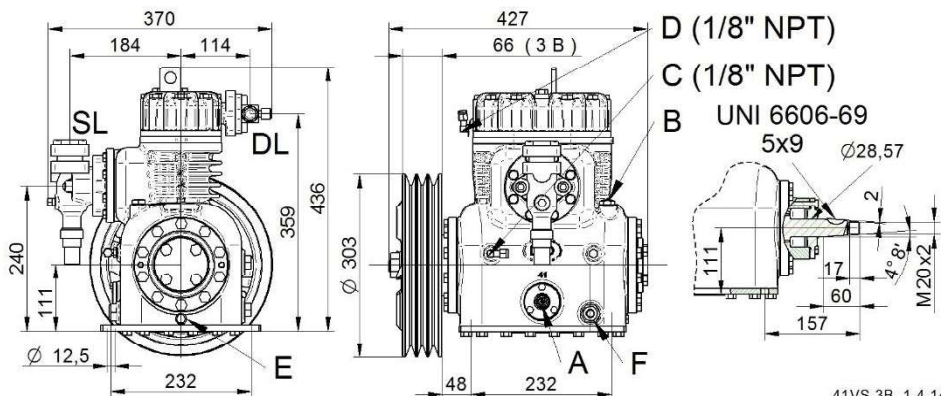
3LVS



3LVS 1-4-14

41VSR

41VSM/3B



41VS-3B 1-4-14

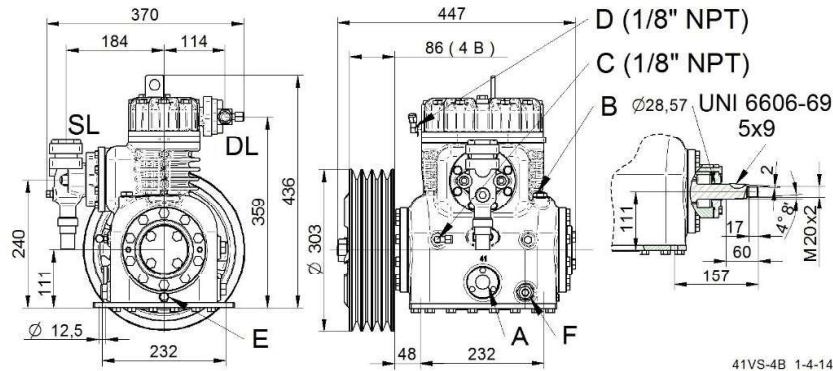
- A – Oil sight glass - 油视镜
- B – Oil charge plug - 注油塞
- C – Low pressure tap - 低压旋塞
- D – High pressure tap - 高压旋塞

- E – Oil drain plug - 排油塞
- F – Crankcase heater - 曲轴箱加热器
- DL – Discharge service valve - 排气阀
- SL – Suction service valve – 吸气阀

Technical Drawings

外形尺寸

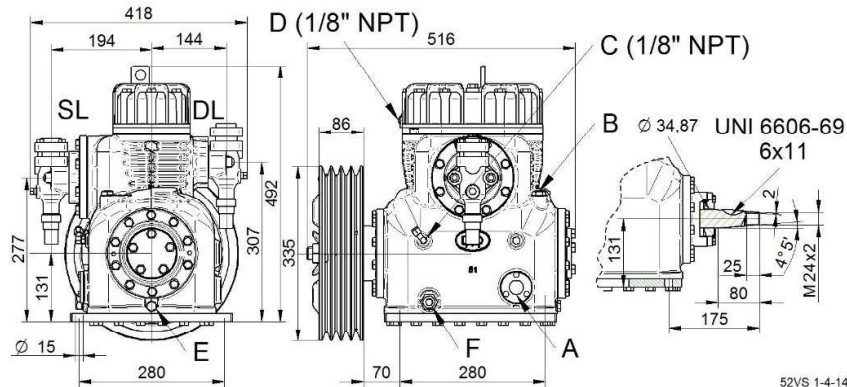
41VSM/4B



41VS-4B 1-4-14

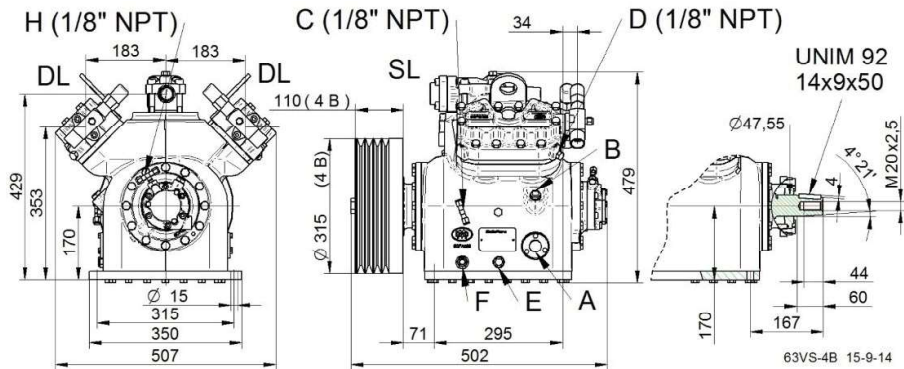
52VSR

52VSM



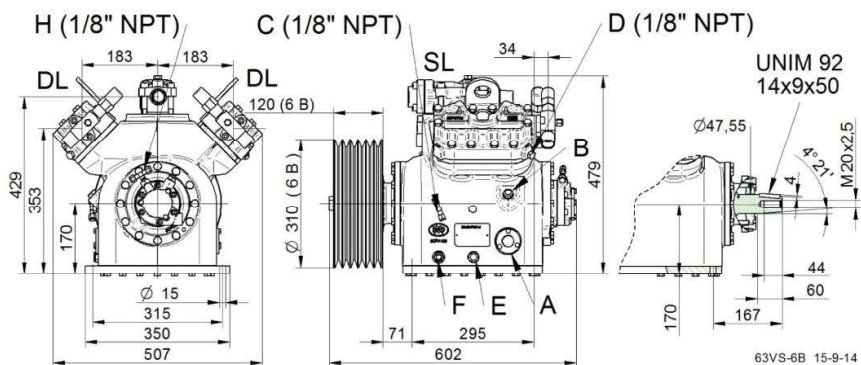
52VS 1-4-14

63VS/4B



63VS-4B 15-9-14

63VS/6B



63VS-6B 15-9-14

A – Oil sight glass - 油视镜

B – Oil charge plug - 注油塞

C – Low pressure tap - 低压旋塞

D – High pressure tap - 高压旋塞

E – Oil drain plug - 排油塞

F – Crankcase heater - 曲轴箱加热器

H – Oil pressure tap - 油压旋塞

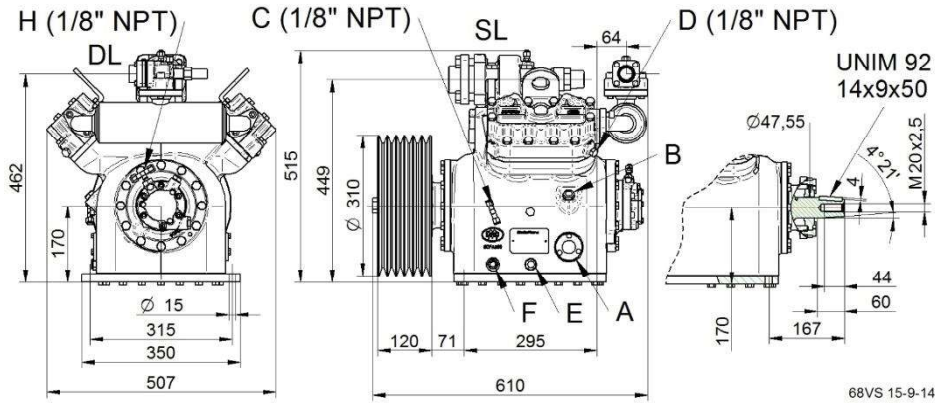
DL – Discharge service valve - 排气阀

SL – Suction service valve - 吸气阀

Technical Drawings

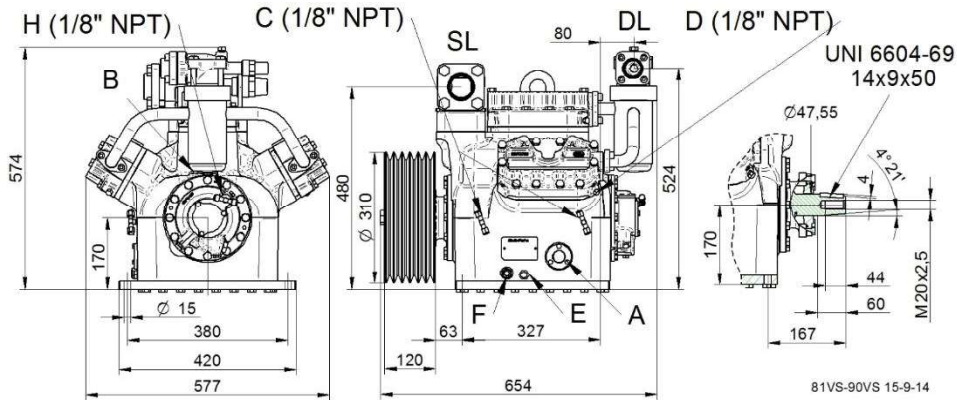
外形尺寸

68VS



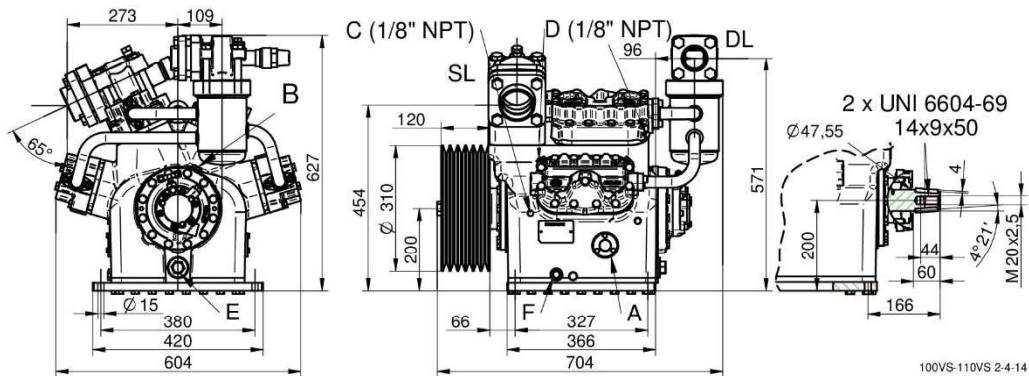
81VS

90VS



100VS

110VS



- A – Oil sight glass - 油视镜
- B – Oil charge plug - 注油塞
- C – Low pressure tap - 低压旋塞
- D – High pressure tap - 高压旋塞
- E – Oil drain plug - 排油塞

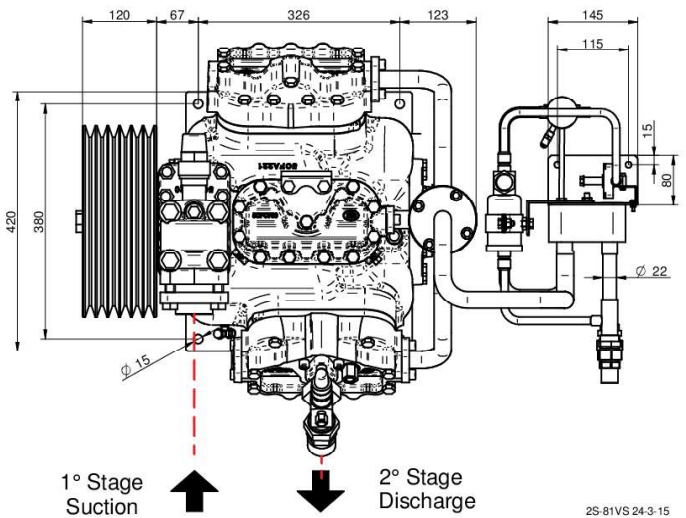
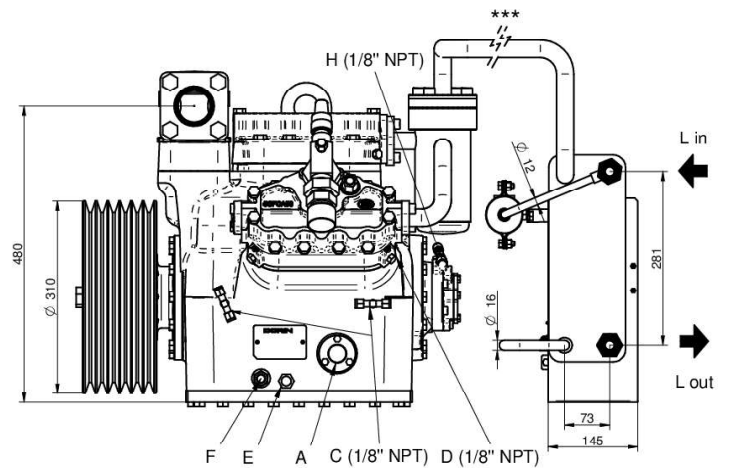
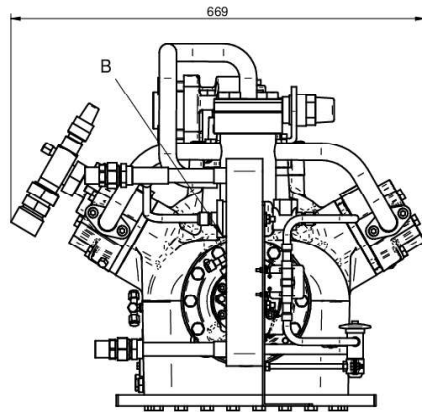
- F – Crankcase heater - 曲轴箱加热器
- H – Oil pressure tap - 油压旋塞
- DL – Discharge service valve - 排气阀
- SL – Suction service valve - 吸气阀

Technical Drawings

外形尺寸

2S-81VS

2S-90VS



■ Subcooler kit supplied loose. Position defined by customer

■ 中冷器组件为未装配状态，位置由客户自行确定。

*** Interstage injection line (not supplied)

*** 高低压间冷媒注入管路（未提供）

A – Oil sight glass - 油视镜
B – Oil charge plug - 注油塞
C – Low pressure tap - 低压旋塞
D – High pressure tap - 高压旋塞
E – Oil drain plug - 排油塞
F – Crankcase heater - 曲轴箱加热器

H – Oil pressure tap - 油压旋塞
DL – Discharge service valve - 排气阀
SL – Suction service valve - 吸气阀
Lin – Liquid inlet – 液体进口
Lout – Liquid outlet – 液体出口

[illegible]



DORIN WEB SOFTWARE

Open the camera app on your device and point it at the QR code to scan it. Make sure that all the four corners of the QR code are in view. A pop-up notification will appear on your screen, tap the notifications to launch the code.

Dorin都凌在线选型软件
扫描二维码，即可在线选型



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