

Dalian XuanKe Air Conditioning Compressor Co., Ltd.

XK Compressor.

Technical Data Sheet

August 25, 2023 Ver1.1

Model: DD22V400AA

Product Description

Type:	Scroll
Refrigerant:	R744 (CO₂)
Application:	Refrigeration, Heat pump.
Fixed/Variable speed:	Variable speed, Inverter needed.
Voltage/Frequency:	N/A



Product Specifications

General

Evaporating Temp. Range:	-20°C to 19°C
Type:	Transcritical, Internal high-pressure type
Gas or liquid Injection:	N/A

Mechanical

Displacement:	21.6 cm ³
Weight:	46 kg
Dimensions:	274mm*274mm*487mm L*W*H
Suction Connector:	5/8", Steel
Discharge Connector:	1/2", Steel
Oil Connector (service port):	SAE 1/4"
Design Pressure:	14 MPa
Moisture Content:	<200 PPM

Oil

Model:	PZ68S
Type:	PAG
Charge:	1500 mL
Viscosity:	68 cSt

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Performance

Rated Capacity:	10100±5% W @3000RPM
Rated Power:	6100±5% W
COP:	1.66
Current:	21.5A
Sound Level:	60 dB(A)
Vibration:	— μ m
Maximum Capacity:	18000±5% W @5400RPM
Maximum Power:	11400±5% W

Test condition

Power Supply:	DC Inverter
Speed:	Rated @3000RPM. Maximum @5400RPM
Evaporating Temperature:	-10°C
High Pressure:	9MPa
Suction Temperature:	0°C
GC outlet Temperature:	35°C
Ambient Temperature:	35°C
Noise Measurement Position:	1m
Noise Test Value:	Mean value of four directions sound pressure level

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Motor

Type:	BLDC (Brushless DC Electric Motor) DC Inverter
Poles:	6
Stator Resistance (20°C)	U-V: 0.175 Ω V-W: 0.175 Ω W-U: 0.175 Ω
Control Type:	Vector
Speed Range:	1800~5400RPM
Insulation Grade:	E
Insulation Resistance:	>100M Ω , DC500V, without refrigerant.
Withstand Voltage:	2400V, <10mA, 1sec.
Back Emf/Voltage Constant:	50.7Volts / 1000RPM
Ramp Up/Down Speed:	1~3 RPS
Rated Power	8kW @3600RPM
Maximum Power	14kW @5400RPM
MOC (Maximum Operating Current)	28A
Demagnetizing Current	70A
Ld	2.08
Lq	2.69

V-S Table

Voltage V	91.3	121.7	152.1	182.5	212.9	243.4	273.8
Speed RPM	1800	2400	3000	3600	4200	4800	5400

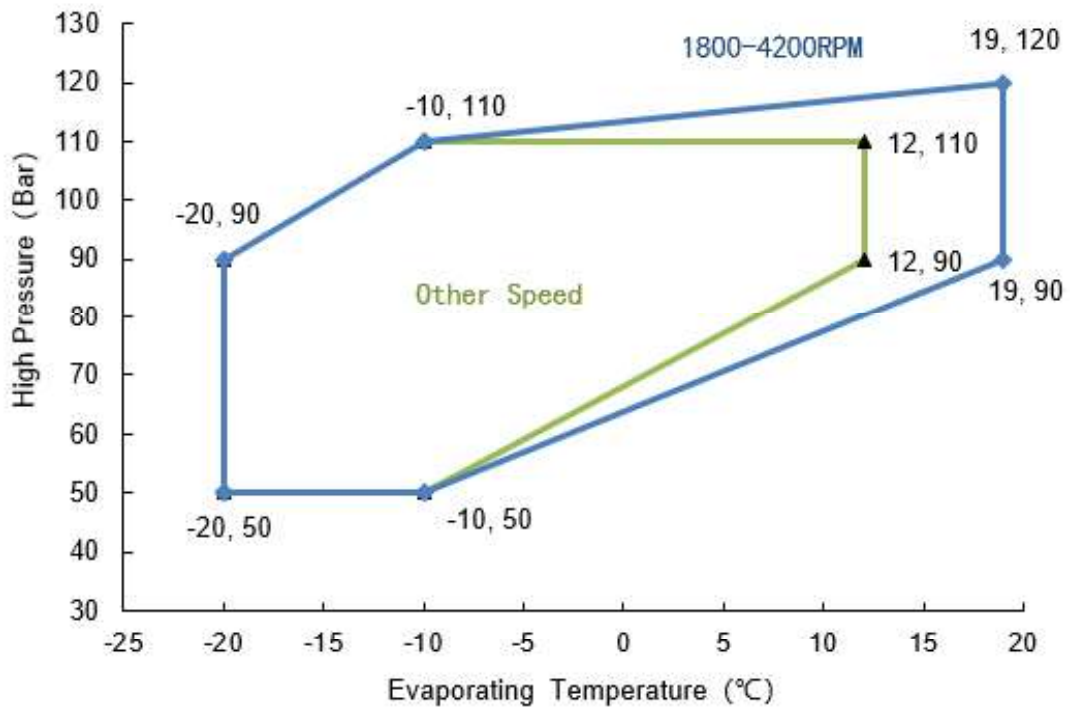
Please consult our technical engineers for further information.

Proposed Protection and Limitation

Discharge Temperature Protector:	Cut-Off/Cut-In Temp. 120/100±5 °C The protector must be attached to the discharge line within 150 mm from the compressor discharge port and must be thermally insulated and tightly fixed on the pipe.
High Pressure Switch:	<12.5MPa
Superheat:	>10K
On-Off Cycle:	<6 times per hour
Minimum run time:	>5 minutes
Minimum stop time:	>3 minutes

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Envelope



Superheat: 10K.

Speed range: 1800~5400RPM. Recommended speed range: 2400~4200RPM.

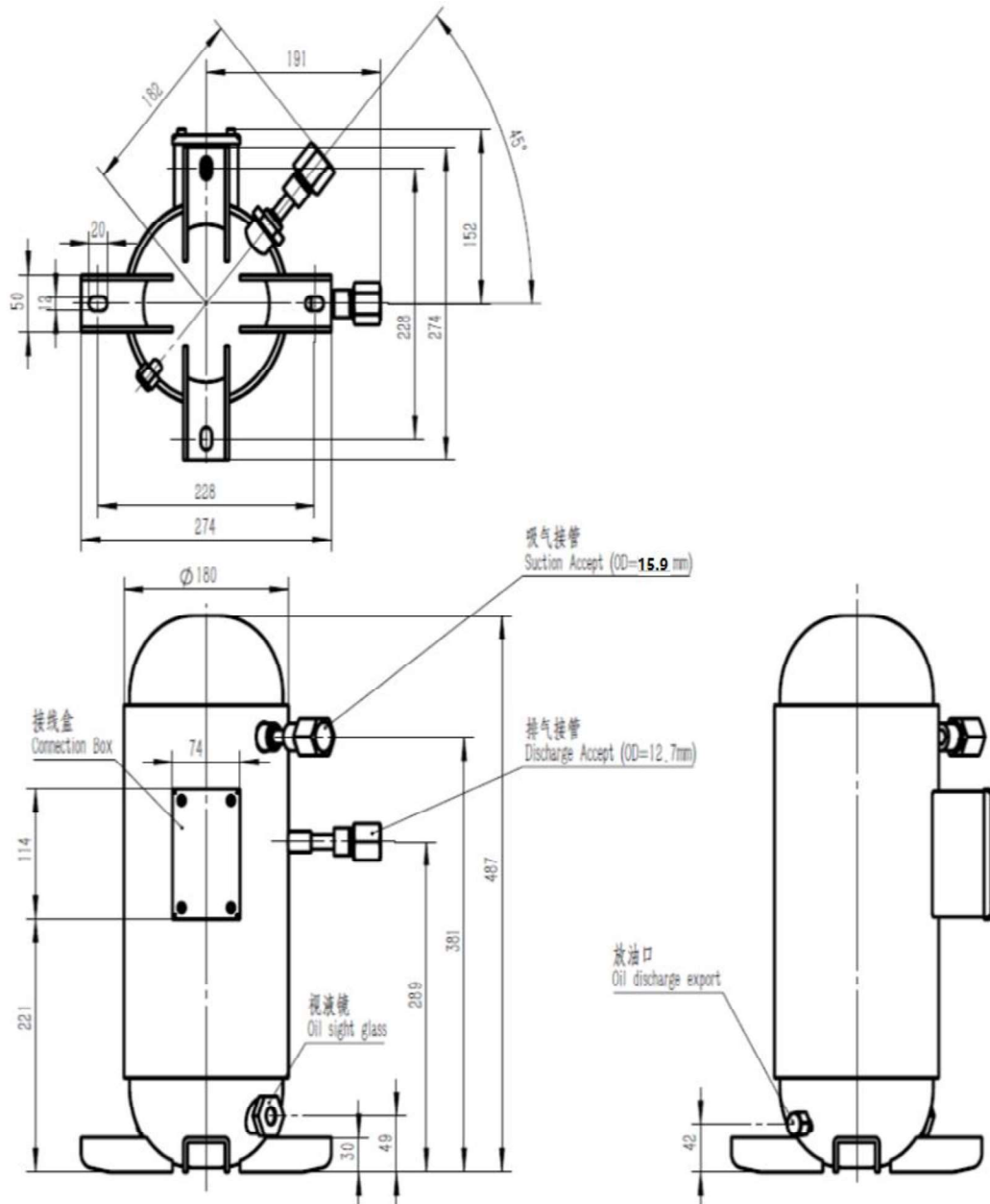
If any other requirements, please contact our technical engineers.

Approvals

CE.

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Appearance



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