

# Embraco Scroll Compressors



think ahead

embraco  
*Nidec*

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# We are Nidec Global Appliance

## A global partner for home and commercial refrigeration industries

With over 9,700 employees and 14 units across 9 countries, Nidec Global Appliance manufactures and commercializes solutions for commercial and residential appliances. Its portfolio includes Embraco's complete range of solutions for the refrigeration industry, Nidec motors for residential washing machines, dryers and dishwashers, and FIR motors and pumps for food service, commercial washing machines and medical applications. Nidec Global Appliance is a platform of ACIM (Appliance, Commercial and Industrial Motors), a business unit of Nidec Corporation.



Over 50 years  
raising the bar  
of refrigeration

think ahead

Since 1971 Embraco has been responsible for shaping refrigeration market trends by bringing solutions beyond the compressor for the residential and commercial cold chain. A pioneer in fostering the development of variable speed and the use of natural refrigerants over the years, the brand delivers innovation driven by the Think Ahead positioning, which means focusing on the future's needs to transform the refrigeration segment and make its customers' lives easier. Embraco counts on a broad and competitive portfolio for food service, food retail, merchandisers, and medical applications, including complete, synchronized and integrated solutions, which combines efficiency and data intelligence.

	<p><b>Home Appliances</b></p> <p>Products for residential freezers, refrigerators and mini-fridges.</p>
	<p><b>Commercial Appliances</b></p> <p>Compressors and cooling solutions for commercial applications, such as bottle coolers, chest freezers, reach-ins, ice machines, medical refrigerators, etc.</p>
	<p><b>Aftermarket</b></p> <p>Parts distribution, replacement and retail focused on retail owners, installers and contractors.</p>



# Digital Tools



embraco  
toolboxapp



Available in all countries and in more than 10 languages, the Embraco Tool Box has 7 functionalities which help refrigeration professionals on their daily routine. **Download the App now for Android and iOS systems.**



### Find inside:

- Cross-reference
- Product catalogue
- Distributor locator
- Unit converter
- Refrigerant slider
- Refrigeration club
- Troubleshooting



### Product Software Selector

Choose the best solution for your business at Embraco's official portfolio platform. **Access: [products.embraco.com](https://products.embraco.com)**



**Embraco website in 11 languages**  
[www.embraco.com](https://www.embraco.com)



# Product Features

## Scroll Compressors for Refrigeration Application

### 01 High Pressure Release Valve

Internal high pressure releasing to improve reliability

### 02 Triple Dynamic Seal

Three floating flexible O shape seal design, isolating high, Medium, and low pressure chamber, for long term excellent overall performance

### 03 Liquid Injection Valve (XFL Series)

Effectively reduce discharge gas temperature, enlarge operation range

### 04 Vapor Injection (XFV Series)

Directly inject low temperature and low pressure vapor into scroll medium pressure pocket, improve Sub Cooling and increase compression ratio, for wider operation range, larger capacity, and higher efficiency ratio

### 05 Dual Compliance Technology

Radial and axial compliance scroll technology, liquid and debris handling capability to improve reliability and durability

### 06 Sight Glass

Welding assembly near bottom of shell to monitor oil level, simple after service

### 07 Low Side Pressure Design

Suction gas motor cooling, higher durability

### 08 Sound Muffler

Reduce discharge gas pulsation, lower sound level

### 09 Dual Discharge Valve

Prevent high pressure gas returning to scroll, lower compressor shutdown noise and higher volumetric efficiency

### 10 Pre-Discharge Valve

Gas discharge prior to main port and dynamically adjust compression ratio, higher partial load energy efficiency

### 11 Symmetric Scroll Profile

Balanced scroll force and reduce gas leakage between scroll pockets, lower sound level and higher energy efficiency

### 12 Suction Screen

Filter debris, improve reliability

### 13 Internal Line Break Motor Protection

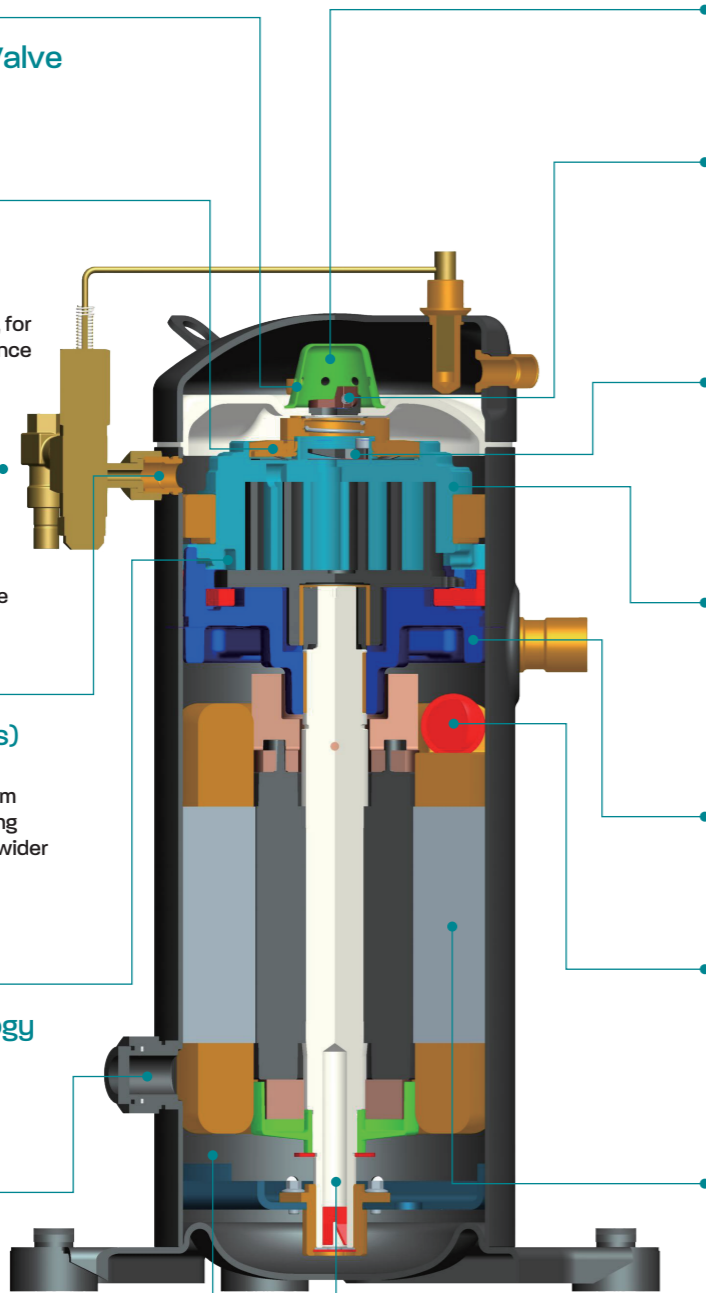
Motor dual protection of high temperature and overload current, better durability

### 14 High Efficient Motor

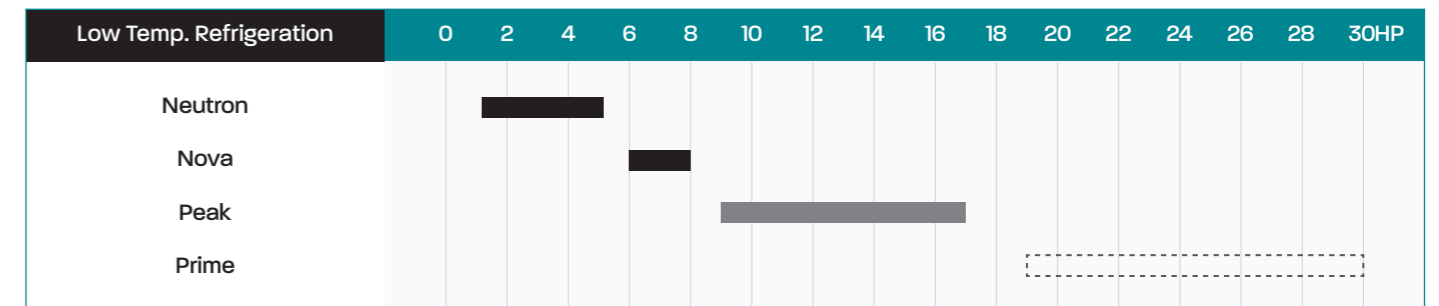
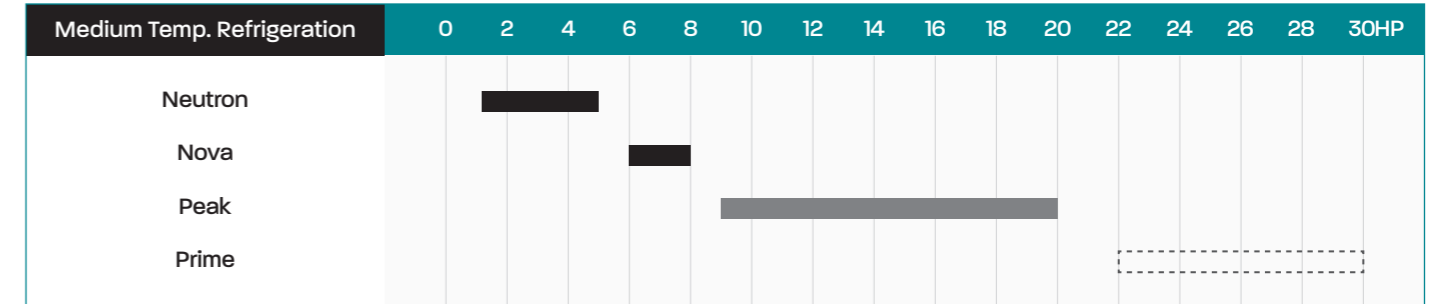
Optimized stator slot design to improve motor efficiency, higher energy efficiency

### 15 Dynamic Auto Balanced Oil Circulation

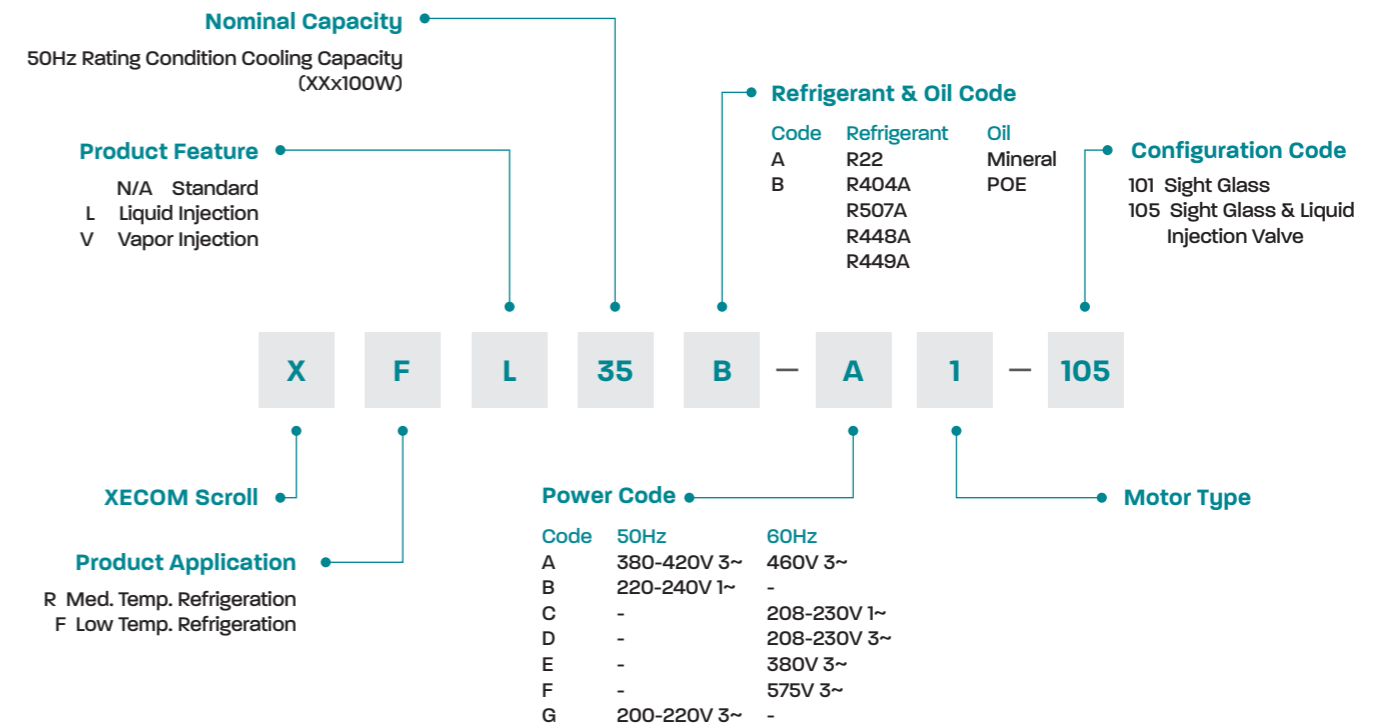
Dynamic centrifugal oil pump and reduce oil circulating rate, improve reliability



# Product Platform & Capacity Range



## Nomenclature



General

# Technical Data

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XR | R22

MODEL	XR22A-B1-101	XR28A-B1-101	XR32A-B1-101	XR38A-B1-101	XR45A-B1-101
Power Supply (V/Ph/Hz)	220V-240V/1Ph/50Hz	220V-240V/1Ph/50Hz	220V-240V/1Ph/50Hz	220V-240V/1Ph/50Hz	220V-240V/1Ph/50Hz
Nominal Capacity(HP)	1.2	1.4	1.7	2	2.5
50Hz Displacement(m <sup>3</sup> /H)	3.7	4.3	5.3	6.1	7.2
Displacement(cc/Rev.)	21.5	25.0	30.5	35.1	41.4
Refrigerant	R22	R22	R22	R22	R22
Cooling Capacity(W)	2280	2650	3230	3750	4500
Cooling Capacity(BTU/H)	7782	9044	11024	12799	15358
Power Input(W)	1361	1450	1643	1805	2070
COP(W/W)	1.70	1.80	2.00	2.08	2.17
EER((BTU/H)/W)	5.72	6.24	6.71	7.09	7.42
Rated Load Amps(A)	7.6	7.9	8.6	10.1	11.5
Lock Rotor Amps(A)	74	74	74	74	90
Max. Operating Current(A)	9.2	10.7	12.8	14.8	20.4
Crankcase Heater Power(W)	70	70	70	70	70
Connection Tube (mm/inch)	Discharge Tube Inside Diameter	12(1/2")	12(1/2")	12(1/2")	12(1/2")
	Suction Tube Inside Diameter	22(7/8")	22(7/8")	22(7/8")	22(7/8")
Dimensions (mm)	Length(L)	237	237	237	237
	Width(W)	237	237	237	237
	Height(H)	413	413	413	413
4 Foot Mounting Size (mm)	190.5x190.5(φ8.5)	190.5x190.5(φ8.5)	190.5x190.5(φ8.5)	190.5x190.5(φ8.5)	190.5x190.5(φ8.5)
Oil Type	3GS	3GS	3GS	3GS	3GS
Initial Oil Charge Volume(L)	1.4	1.4	1.4	1.4	1.4
Refill Oil Charge Volume(L)	1.25	1.25	1.25	1.25	1.25
Max. Operating Pressure (MPa)	High Pressure Side	3.0	3.0	3.0	3.0
	Low Pressure Side	2.0	2.0	2.0	2.0
Weight(kg)	27.0	27.0	27.0	27.5	28.0

MODEL	XR52A-B1-101	XR63A-B1-101	XR72A-B1-101	XR22A-A1-101	XR28A-A1-101
Power Supply (V/Ph/Hz)	220V-240V/1Ph/50Hz	220V-240V/1Ph/50Hz	220V-240V/1Ph/50Hz	380V-420V/3Ph/50Hz or 460V/3Ph/60Hz	380V-420V/3Ph/50Hz or 460V/3Ph/60Hz
Nominal Capacity(HP)	3	3.5	4	1.2	1.4
50Hz Displacement(m <sup>3</sup> /H)	8.5	10.1	11.5	3.7	4.3
Displacement(cc/Rev.)	48.9	58.0	66.1	21.5	25
Refrigerant	R22	R22	R22	R22	R22
Cooling Capacity(W)	5230	6320	7220	2310	2697
Cooling Capacity(BTU/H)	17850	21570	24642	7884	9205
Power Input(W)	2338	3056	3329	1181	1301
COP(W/W)	2.24	2.07	2.17	2.00	2.10
EER((BTU/H)/W)	7.63	7.06	7.40	6.68	7.08
Rated Load Amps(A)	13.6	16.7	18.5	2.6	2.8
Lock Rotor Amps(A)	90	102	102	22	22
Max. Operating Current(A)	24.1	25.7	28.5	3.3	3.8
Crankcase Heater Power(W)	70	70	70	70	70
Connection Tube (mm/inch)	Discharge Tube Inside Diameter	12(1/2")	12(1/2")	12(1/2")	12(1/2")
	Suction Tube Inside Diameter	22(7/8")	22(7/8")	22(7/8")	22(7/8")
Dimensions (mm)	Length(L)	237	237	237	237
	Width(W)	237	237	237	237
	Height(H)	413	413	413	413
4 Foot Mounting Size (mm)	190.5x190.5(φ8.5)	190.5x190.5(φ8.5)	190.5x190.5(φ8.5)	190.5x190.5(φ8.5)	190.5x190.5(φ8.5)
Oil Type	3GS	3GS	3GS	3GS	3GS
Initial Oil Charge Volume(L)	1.4	1.4	1.4	1.4	1.4
Refill Oil Charge Volume(L)	1.25	1.25	1.25	1.25	1.25
Max. Operating Pressure (MPa)	High Pressure Side	3.0	3.0	3.0	3.0
	Low Pressure Side	2.0	2.0	2.0	2.0
Weight(kg)	28.0	28.6	28.6	24.0	24.0

Standard rating conditions: ARI Evaporating Temperature: -6.7°C, Condensing Temperature: 48.9°C, Superheat: 25K, Subcooling: 0K



XR | R22

MODEL	XR32A-A1-101	XR38A-A1-101	XR45A-A1-101	XR52A-A1-101	XR63A-A1-101
Power Supply (V/Ph/Hz)	380V-420V/3Ph/50Hz or 460V/3Ph/60Hz	380V-420V/3Ph/50Hz or 460V/3Ph/60Hz	380V-420V/3Ph/50Hz or 460V/3Ph/60Hz	380V-420V/3Ph/50Hz or 460V/3Ph/60Hz	380V-420V/3Ph/50Hz or 460V/3Ph/60Hz
Nominal Capacity(HP)	1.7	2	2.5	3	3.5
50Hz Displacement(m <sup>3</sup> /H)	5.3	6.1	7.2	8.5	10.1
Displacement(cc/Rev.)	30.5	35.1	41.4	48.9	58.0
Refrigerant	R22	R22	R22	R22	R22
Cooling Capacity(W)	3280	3820	4510	5240	6330
Cooling Capacity(BTU/H)	11195	13038	15392	17884	21604
Power Input(W)	1535	1710	2000	2293	2713
COP(W/W)	2.10	2.23	2.26	2.29	2.33
EER((BTU/H)/W)	7.29	7.62	7.70	7.80	7.96
Rated Load Amps(A)	3.0	3.5	4.3	5.1	6.0
Lock Rotor Amps(A)	22	22	41	41	41
Max. Operating Current(A)	4.7	5.4	6.3	7.5	8.8
Crankcase Heater Power(W)	70	70	70	70	70
Connection Tube (mm/inch)	Discharge Tube Inside Diameter	12(1/2")	12(1/2")	12(1/2")	12(1/2")
	Suction Tube Inside Diameter	22(7/8")	22(7/8")	22(7/8")	22(7/8")
Dimensions (mm)	Length(L)	237	237	237	237
	Width(W)	237	237	237	237
	Height(H)	413	413	413	413
4 Foot Mounting Size (mm)	190.5x190.5(φ8.5)	190.5x190.5(φ8.5)	190.5x190.5(φ8.5)	190.5x190.5(φ8.5)	190.5x190.5(φ8.5)
Oil Type	3GS	3GS	3GS	3GS	3GS
Initial Oil Charge Volume(L)	1.4	1.4	1.4	1.4	1.4
Refill Oil Charge Volume(L)	1.25	1.25	1.25	1.25	1.25
Max. Operating Pressure (MPa)	High Pressure Side	3.0	3.0	3.0	3.0
	Low Pressure Side	2.0	2.0	2.0	2.0
Weight(kg)	24.0	24.5	25.5	25.5	25.5

MODEL	XR72A-A1-101	XR91A-A1-101	XR110A-A1-101	XR125A-A1-101	XR135A-A1-101
Power Supply (V/Ph/Hz)	380V-420V/3Ph/50Hz or 460V/3Ph/60Hz	380V-420V/3Ph/50Hz or 460V/3Ph/60Hz	380V-420V/3Ph/50Hz or 460V/3Ph/60Hz	380V-420V/3Ph/50Hz or 460V/3Ph/60Hz	380V-420V/3Ph/50Hz or 460V/3Ph/60Hz
Nominal Capacity(HP)	4	5	6	7	8
50Hz Displacement(m <sup>3</sup> /H)	11.5	14.4	17.4	19.5	21.3
Displacement(cc/Rev.)	66.1	82.8	100.0	112.1	122.4
Refrigerant	R22	R22	R22	R22	R22
Cooling Capacity(W)	7210	9100	10980	12550	13550
Cooling Capacity(BTU/H)	24608	31058	37474	42833	46246
Power Input(W)	3041	3845	4697	5272	5766
COP(W/W)	2.37	2.37	2.34	2.38	2.35
EER((BTU/H)/W)	8.09	8.08	7.98	8.12	8.02
Rated Load Amps(A)	6.8	7.7	8.7	9.7	10.6
Lock Rotor Amps(A)	61	61	75	87	87
Max. Operating Current(A)	10.3	12.9	13.5	14.7	16.4
Crankcase Heater Power(W)	70	70	70	70	70
Connection Tube (mm/inch)	Discharge Tube Inside Diameter	12(1/2")	12(1/2")	12(1/2")	12(1/2")
	Suction Tube Inside Diameter	22(7/8")	22(7/8")	22(7/8")	22(7/8")
Dimensions (mm)	Length(L)	237	237	237	237
	Width(W)	237	237	244	244
	Height(H)	413	413	436	436
4 Foot Mounting Size (mm)	190.5x190.5(φ8.5)	190.5x190.5(φ8.5)	190.5x190.5(φ8.5)	190.5x190.5(φ8.5)	190.5x190.5(φ8.5)
Oil Type	3GS	3GS	3GS	3GS	3GS
Initial Oil Charge Volume(L)	1.4	1.4	1.7	1.7	1.7
Refill Oil Charge Volume(L)	1.25	1.25	1.45	1.45	1.45
Max. Operating Pressure (MPa)	High Pressure Side	3.0	3.0	3.0	3.0
	Low Pressure Side	2.0	2.0	2.0	2.0
Weight(kg)	28.0	28.0	33.7	35.3	35.5

Standard rating conditions: ARI Evaporating Temperature: -6.7°C, Condensing Temperature: 48.9°C, Superheat: 25K, Subcooling: 0K



XR | R22

MODEL	XR162A-A1-101	XR190A-A1-101	XR215A-A1-101
Power Supply (V/Ph/Hz)	380V-420V/3Ph/50Hz or 460V/3Ph/60Hz	380V-420V/3Ph/50Hz or 460V/3Ph/60Hz	380V-420V/3Ph/50Hz or 460V/3Ph/60Hz
Nominal Capacity(HP)	9	10	12
50Hz Displacement(m <sup>3</sup> /H)	25.7	30.0	34.0
Displacement(cc/Rev.)	147.7	172.4	195.4
Refrigerant	R22	R22	R22
Cooling Capacity(W)	16210	18950	21600
Cooling Capacity(BTU/H)	55324	64676	73720
Power Input(W)	6814	7843	8984
COP(W/W)	2.38	2.42	2.40
EER((BTU/H)/W)	8.12	8.25	8.21
Rated Load Amps(A)	12.5	14.4	16.5
Lock Rotor Amps(A)	100	114	129
Max. Operating Current(A)	19.8	22.3	25.0
Crankcase Heater Power(W)	90	90	90
Connection Tube (mm/inch)	Discharge Tube Inside Diameter	22(7/8")	22(7/8")
	Suction Tube Inside Diameter	28(1-1/8")	28(1-1/8")
Dimensions (mm)	Length(L)	250	250
	Width(W)	274	274
	Height(H)	548	548
4 Foot Mounting Size (mm)	190.5x190.5(φ8.5)	190.5x190.5(φ8.5)	190.5x190.5(φ8.5)
Oil Type	3GS	3GS	3GS
Initial Oil Charge Volume(L)	3.5	3.5	3.5
Refill Oil Charge Volume(L)	3	3	3
Max. Operating Pressure (MPa)	High Pressure Side	3.0	3.0
	Low Pressure Side	2.0	2.0
Weight(kg)	54.5	55.8	56.8

MODEL	XR230A-A1-101	XR260A-A1-101	XR280A-A1-101
Power Supply (V/Ph/Hz)	380V-420V/3Ph/50Hz or 460V/3Ph/60Hz	380V-420V/3Ph/50Hz or 460V/3Ph/60Hz	380V-420V/3Ph/50Hz or 460V/3Ph/60Hz
Nominal Capacity(HP)	13	15	20
50Hz Displacement(m <sup>3</sup> /H)	36.4	41.3	44.3
Displacement(cc/Rev.)	209.2	237.4	254.6
Refrigerant	R22	R22	R22
Cooling Capacity(W)	23000	26050	27800
Cooling Capacity(BTU/H)	78498	88908	94881
Power Input(W)	9552	10996	11750
COP(W/W)	2.41	2.37	2.37
EER((BTU/H)/W)	8.22	8.09	8.07
Rated Load Amps(A)	17.6	20.3	21.6
Lock Rotor Amps(A)	149	149	149
Max. Operating Current(A)	27.4	31.3	33.6
Crankcase Heater Power(W)	90	90	90
Connection Tube (mm/inch)	Discharge Tube Inside Diameter	22(7/8")	22(7/8")
	Suction Tube Inside Diameter	28(1-1/8")	28(1-1/8")
Dimensions (mm)	Length(L)	250	250
	Width(W)	274	274
	Height(H)	548	548
4 Foot Mounting Size (mm)	190.5x190.5(φ8.5)	190.5x190.5(φ8.5)	190.5x190.5(φ8.5)
Oil Type	3GS	3GS	3GS
Initial Oil Charge Volume(L)	3.5	3.5	3.5
Refill Oil Charge Volume(L)	3	3	3
Max. Operating Pressure (MPa)	High Pressure Side	3.0	3.0
	Low Pressure Side	2.0	2.0
Weight(kg)	58.5	59.0	59.3

Standard rating conditions: ARI Evaporating Temperature: -6.7°C, Condensing Temperature: 48.9°C, Superheat: 25K, Subcooling: 0K



XR | R404A

MODEL	XR22B-B1-101	XR28B-B1-101	XR32B-B1-101	XR38B-B1-101	XR45B-B1-101
Power Supply (V/Ph/Hz)	220V-240V/1Ph/50Hz	220V-240V/1Ph/50Hz	220V-240V/1Ph/50Hz	220V-240V/1Ph/50Hz	220V-240V/1Ph/50Hz
Nominal Capacity(HP)	1.2	1.4	1.7	2	2.5
50Hz Displacement(m <sup>3</sup> /H)	3.7	4.3	5.3	6.1	7.2
Displacement(cc/Rev.)	21.5	25.0	30.5	35.1	41.4
Refrigerant	R404A	R404A	R404A	R404A	R404A
Cooling Capacity(W)	2320	2690	3210	3610	4405
Cooling Capacity(BTU/H)	7918	9181	10956	12321	15034
Power Input(W)	1467	1549	1775	1950	2290
COP(W/W)	1.58	1.74	1.81	1.85	1.92
EER((BTU/H)/W)	5.40	5.93	6.17	6.32	6.57
Rated Load Amps(A)	7.9	8.2	9.1	10.1	11.5
Lock Rotor Amps(A)	74	74	74	74	90
Max. Operating Current(A)	9.0	10.5	13.0	14.8	20.4
Crankcase Heater Power(W)	70	70	70	70	70
Connection Tube (mm/inch)	Discharge Tube Inside Diameter	12(1/2")	12(1/2")	12(1/2")	12(1/2")
	Suction Tube Inside Diameter	22(7/8")	22(7/8")	22(7/8")	22(7/8")
Dimensions (mm)	Length(L)	237	237	237	237
	Width(W)	237	237	237	237
	Height(H)	413	413	413	413
4 Foot Mounting Size (mm)	190.5x190.5(φ8.5)	190.5x190.5(φ8.5)	190.5x190.5(φ8.5)	190.5x190.5(φ8.5)	190.5x190.5(φ8.5)
Oil Type	3GS	3GS	3GS	POE	POE
Initial Oil Charge Volume(L)	1.4	1.4	1.4	1.4	1.4
Refill Oil Charge Volume(L)	1.25	1.25	1.25	1.25	1.25
Max. Operating Pressure (MPa)	High Pressure Side	3.2	3.2	3.2	3.2
	Low Pressure Side	2.0	2.0	2.0	2.0
Weight(kg)	27.0	27.0	27.0	27.5	28.0

MODEL	XR52B-B1-101	XR63B-B1-101	XR72B-B1-101	XR22B-A1-101	XR28B-A1-101
Power Supply (V/Ph/Hz)	220V-240V/1Ph/50Hz	220V-240V/1Ph/50Hz	220V-240V/1Ph/50Hz	380V-420V/3Ph/50Hz or 460V/3Ph/60Hz	380V-420V/3Ph/50Hz or 460V/3Ph/60Hz
Nominal Capacity(HP)	3	3.5	4	1.2	1.4
50Hz Displacement(m <sup>3</sup> /H)	8.5	10.1	11.5	3.7	4.3
Displacement(cc/Rev.)	48.9	58.0	66.1	21.5	25.0
Refrigerant	R404A	R404A	R404A	R404A	R404A
Cooling Capacity(W)	5140	6170	7205	2340	2724
Cooling Capacity(BTU/H)	17543	21058	24590	7986	9297
Power Input(W)	2595	3380	3760	1310	1437
COP(W/W)	1.98	1.83	1.92	1.79	1.90
EER((BTU/H)/W)	6.76	6.23	6.54	6.10	6.47
Rated Load Amps(A)	13.6	16.7	18.5	2.8	2.9
Lock Rotor Amps(A)	90	102	102	22	22
Max. Operating Current(A)	24.1	25.7	28.5	3.3	3.8
Crankcase Heater Power(W)	70	70	70	70	70
Connection Tube (mm/inch)	Discharge Tube Inside Diameter	12(1/2")	12(1/2")	12(1/2")	12(1/2")
	Suction Tube Inside Diameter	22(7/8")	22(7/8")	22(7/8")	22(7/8")
Dimensions (mm)	Length(L)	237	237	237	237
	Width(W)	237	237	237	237
	Height(H)	413	413	413	413
4 Foot Mounting Size (mm)	190.5x190.5(φ8.5)	190.5x190.5(φ8.5)	190.5x190.5(φ8.5)	190.5x190.5(φ8.5)	190.5x190.5(φ8.5)
Oil Type	POE	POE	POE	3GS	3GS
Initial Oil Charge Volume(L)	1.4	1.4	1.4	1.4	1.4
Refill Oil Charge Volume(L)	1.25	1.25	1.25	1.25	1.25
Max. Operating Pressure (MPa)	High Pressure Side	3.2	3.2	3.2	3.2
	Low Pressure Side	2.0	2.0	2.0	2.0
Weight(kg)	28.0	28.6	28.6	24.0	24.0

Standard rating conditions: ARI Evaporating Temperature: -6.7°C, Condensing Temperature: 48.9°C, Superheat: 25K, Subcooling: 0K



XR | R404A

MODEL	XR32B-A1-101	XR38B-A1-101	XR45B-A1-101	XR52B-A1-101	XR63B-A1-101
Power Supply (V/Ph/Hz)	380V-420V/3Ph/50Hz or 460V/3Ph/60Hz	380V-420V/3Ph/50Hz or 460V/3Ph/60Hz	380V-420V/3Ph/50Hz or 460V/3Ph/60Hz	380V-420V/3Ph/50Hz or 460V/3Ph/60Hz	380V-420V/3Ph/50Hz or 460V/3Ph/60Hz
Nominal Capacity(HP)	1.7	2	2.5	3	3.5
50Hz Displacement(m <sup>3</sup> /H)	5.3	6.1	7.2	8.5	10.1
Displacement(cc/Rev.)	30.5	35.1	41.4	48.9	58.0
Refrigerant	R404A	R404A	R404A	R404A	R404A
Cooling Capacity(W)	3310	3760	4430	5120	6210
Cooling Capacity(BTU/H)	11297	12833	15119	17474	21195
Power Input(W)	1700	1890	2260	2525	3104
COP(W/W)	1.95	2.00	2.00	2.00	2.00
EER((BTU/H)/W)	6.65	6.79	6.69	6.92	6.83
Rated Load Amps(A)	3.3	3.5	4.3	5.1	6.0
Lock Rotor Amps(A)	22	22	41	41	41
Max. Operating Current(A)	4.7	5.4	6.3	7.5	8.8
Crankcase Heater Power(W)	70	70	70	70	70
Connection Tube (mm/inch)	Discharge Tube Inside Diameter	12(1/2")	12(1/2")	12(1/2")	12(1/2")
	Suction Tube Inside Diameter	22(7/8")	22(7/8")	22(7/8")	22(7/8")
Dimensions (mm)	Length(L)	237	237	237	237
	Width(W)	237	237	237	237
	Height(H)	413	413	413	413
4 Foot Mounting Size (mm)	190.5x190.5(φ8.5)	190.5x190.5(φ8.5)	190.5x190.5(φ8.5)	190.5x190.5(φ8.5)	190.5x190.5(φ8.5)
Oil Type	3GS	POE	POE	POE	POE
Initial Oil Charge Volume(L)	1.4	1.4	1.4	1.4	1.4
Refill Oil Charge Volume(L)	1.25	1.25	1.25	1.25	1.25
Max. Operating Pressure (MPa)	High Pressure Side	3.2	3.2	3.2	3.2
	Low Pressure Side	2.0	2.0	2.0	2.0
Weight(kg)	24.0	24.5	25.5	25.5	25.5

MODEL	XR72B-A1-101	XR91B-A1-101	XR110B-A1-101	XR125B-A1-101	XR135A-A1-101
Power Supply (V/Ph/Hz)	380V-420V/3Ph/50Hz or 460V/3Ph/60Hz	380V-420V/3Ph/50Hz or 460V/3Ph/60Hz	380V-420V/3Ph/50Hz or 460V/3Ph/60Hz	380V-420V/3Ph/50Hz or 460V/3Ph/60Hz	380V-420V/3Ph/50Hz or 460V/3Ph/60Hz
Nominal Capacity(HP)	4	5	6	7	8
50Hz Displacement(m <sup>3</sup> /H)	11.5	14.4	17.4	19.5	21.3
Displacement(cc/Rev.)	66.1	82.8	100.0	112.1	122.4
Refrigerant	R404A	R404A	R404A	R404A	R22
Cooling Capacity(W)	7525	8970	10980	12500	13550
Cooling Capacity(BTU/H)	25683	30614	37474	42662	46246
Power Input(W)	3575	4250	5289	5949	5766
COP(W/W)	2.10	2.10	2.08	2.10	2.35
EER((BTU/H)/W)	7.18	7.20	7.09	7.17	8.02
Rated Load Amps(A)	6.8	7.7	9.7	11.0	10.6
Lock Rotor Amps(A)	61	61	75	87	87
Max. Operating Current(A)	10.3	12.9	14.3	17.5	16.4
Crankcase Heater Power(W)	70	70	70	70	70
Connection Tube (mm/inch)	Discharge Tube Inside Diameter	12(1/2")	12(1/2")	12(1/2")	12(1/2")
	Suction Tube Inside Diameter	22(7/8")	22(7/8")	22(7/8")	22(7/8")
Dimensions (mm)	Length(L)	237	237	237	237
	Width(W)	237	237	244	244
	Height(H)	413	413	436	436
4 Foot Mounting Size (mm)	190.5x190.5(φ8.5)	190.5x190.5(φ8.5)	190.5x190.5(φ8.5)	190.5x190.5(φ8.5)	190.5x190.5(φ8.5)
Oil Type	POE	POE	POE	POE	3GS
Initial Oil Charge Volume(L)	1.4	1.4	1.4	1.7	1.7
Refill Oil Charge Volume(L)	1.25	1.25	1.25	1.45	1.45
Max. Operating Pressure (MPa)	High Pressure Side	3.2	3.2	3.2	3.0
	Low Pressure Side	2.0	2.0	2.0	2.0
Weight(kg)	28.0	28.0	33.7	35.3	35.5

Standard rating conditions: ARI Evaporating Temperature: -6.7°C, Condensing Temperature: 48.9°C, Superheat: 25K, Subcooling: 0K



XR | R404A

MODEL	XR162B-A1-101	XR190B-A1-101	XR215B-A1-101
Power Supply (V/Ph/Hz)	380V-420V/3Ph/50Hz or 460V/3Ph/60Hz	380V-420V/3Ph/50Hz or 460V/3Ph/60Hz	380V-420V/3Ph/50Hz or 460V/3Ph/60Hz
Nominal Capacity(HP)	9	10	12
50Hz Displacement(m <sup>3</sup> /H)	25.7	30.0	34.0
Displacement(cc/Rev.)	147.7	172.4	195.4
Refrigerant	R404A	R404A	R404A
Cooling Capacity(W)	16270	18920	21560
Cooling Capacity(BTU/H)	55529	64573	73584
Power Input(W)	7715	8885	10192
COP(W/W)	2.11	2.13	2.12
EER((BTU/H)/W)	7.20	7.27	7.22
Rated Load Amps(A)	14.2	16.4	18.8
Lock Rotor Amps(A)	100	114	129
Max. Operating Current(A)	21.0	23.6	26.5
Crankcase Heater Power(W)	90	90	90
Connection Tube (mm/inch)	Discharge Tube Inside Diameter	22(7/8")	22(7/8")
	Suction Tube Inside Diameter	28(1-1/8")	28(1-1/8")
Dimensions (mm)	Length(L)	250	250
	Width(W)	274	274
	Height(H)	548	548
4 Foot Mounting Size (mm)	190.5x190.5(φ8.5)	190.5x190.5(φ8.5)	190.5x190.5(φ8.5)
Oil Type	POE	POE	POE
Initial Oil Charge Volume(L)	3.5	3.5	3.5
Refill Oil Charge Volume(L)	3	3	3
Max. Operating Pressure (MPa)	High Pressure Side	3.2	3.2
	Low Pressure Side	2.0	2.0
Weight(kg)	54.5	55.8	56.8

MODEL	XR230B-A1-101	XR260B-A1-101	XR280B-A1-101
Power Supply (V/Ph/Hz)	380V-420V/3Ph/50Hz or 460V/3Ph/60Hz	380V-420V/3Ph/50Hz or 460V/3Ph/60Hz	380V-420V/3Ph/50Hz or 460V/3Ph/60Hz
Nominal Capacity(HP)	13	15	20
50Hz Displacement(m <sup>3</sup> /H)	36.4	41.3	44.3
Displacement(cc/Rev.)	209.2	237.4	254.6
Refrigerant	R404A	R404A	R404A
Cooling Capacity(W)	22950	26000	27700
Cooling Capacity(BTU/H)	78328	88737	94539
Power Input(W)	10809	12457	13355
COP(W/W)	2.12	2.09	2.07
EER((BTU/H)/W)	7.25	7.12	7.08
Rated Load Amps(A)	19.9	22.9	24.6
Lock Rotor Amps(A)	148.5	148.5	148.5
Max. Operating Current(A)	27.6	32.8	35.2
Crankcase Heater Power(W)	90	90	90
Connection Tube (mm/inch)	Discharge Tube Inside Diameter	22(7/8")	22(7/8")
	Suction Tube Inside Diameter	28(1-1/8")	28(1-1/8")
Dimensions (mm)	Length(L)	250	250
	Width(W)	274	274
	Height(H)	548	548
4 Foot Mounting Size (mm)	190.5x190.5(φ8.5)	190.5x190.5(φ8.5)	190.5x190.5(φ8.5)
Oil Type	POE	POE	POE
Initial Oil Charge Volume(L)	3.5	3.5	3.5
Refill Oil Charge Volume(L)	3	3	3
Max. Operating Pressure (MPa)	High Pressure Side	3.2	3.2
	Low Pressure Side	2.0	2.0
Weight(kg)	58.5	59.0	59.3

Standard rating conditions: ARI Evaporating Temperature: -6.7°C, Condensing Temperature: 48.9°C, Superheat: 25K, Subcooling: 0K



XFL | R22

MODEL	XFL09A-B1-105	XFL10A-B1-105	XFL12A-B1-105	XFL15A-B1-105	XFL17A-B1-105
Power Supply (V/Ph/Hz)	220V-240V/1Ph/50Hz	220V-240V/1Ph/50Hz	220V-240V/1Ph/50Hz	220V-240V/1Ph/50Hz	220V-240V/1Ph/50Hz
Nominal Capacity(HP)	1.2	1.4	1.7	2	2.5
50Hz Displacement(m <sup>3</sup> /H)	3.7	4.3	5.3	6.1	7.2
Displacement(cc/Rev.)	21.3	24.7	30.5	35.1	41.4
Refrigerant	R22	R22	R22	R22	R22
Cooling Capacity(W)	900	1000	1200	1520	1780
Cooling Capacity(BTU/H)	3072	3413	4096	5188	6075
Power Input(W)	895	960	1110	1300	1546
COP(W/W)	1.01	1.04	1.08	1.17	1.15
EER((BTU/H)/W)	3.43	3.56	3.69	3.99	3.93
Rated Load Amps(A)	4.10	4.40	5.25	6.14	7.31
Lock Rotor Amps(A)	74	74	74	74	90
Max. Operating Current(A)	7.4	8.6	10.6	12.6	14.1
Crankcase Heater Power(W)	70	70	70	70	70
Connection Tube (mm/inch)	Discharge Tube Inside Diameter	12(1/2")	12(1/2")	12(1/2")	12(1/2")
	Suction Tube Inside Diameter	22(7/8")	22(7/8")	22(7/8")	22(7/8")
Dimensions (mm)	Length(L)	237	237	237	237
	Width(W)	237	237	237	237
	Height(H)	413	413	413	413
4 Foot Mounting Size (mm)	190.5x190.5(φ8.5)	190.5x190.5(φ8.5)	190.5x190.5(φ8.5)	190.5x190.5(φ8.5)	190.5x190.5(φ8.5)
Oil Type	3GS	3GS	3GS	3GS	3GS
Initial Oil Charge Volume(L)	1.4	1.4	1.4	1.4	1.4
Refill Oil Charge Volume(L)	1.25	1.25	1.25	1.25	1.25
Max. Operating Pressure (MPa)	High Pressure Side	3.0	3.0	3.0	3.0
	Low Pressure Side	2.0	2.0	2.0	2.0
Weight(kg)	27.0	27.0	27.0	27.5	28.0

MODEL	XFL20A-B1-105	XFL25A-B1-105	XFL28A-B1-105	XFL09A-A1-105
Power Supply (V/Ph/Hz)	220V-240V/1Ph/50Hz	220V-240V/1Ph/50Hz	220V-240V/1Ph/50Hz	380V-420V/3Ph/50Hz or 460V/3Ph/60Hz
Nominal Capacity(HP)	3	3.5	4	1.2
50Hz Displacement(m <sup>3</sup> /H)	8.5	10.1	11.5	3.7
Displacement(cc/Rev.)	48.9	58.0	66.1	21.3
Refrigerant	R22	R22	R22	R22
Cooling Capacity(W)	2050	2650	2890	900
Cooling Capacity(BTU/H)	6997	9044	9862	3072
Power Input(W)	1755	2255	2410	890
COP(W/W)	1.17	1.18	1.20	1.01
EER((BTU/H)/W)	3.99	4.01	4.09	3.45
Rated Load Amps(A)	8.29	10.66	11.39	1.64
Lock Rotor Amps(A)	90	102	102	22
Max. Operating Current(A)	15.5	19.3	22	2.2
Crankcase Heater Power(W)	70	70	70	70
Connection Tube (mm/inch)	Discharge Tube Inside Diameter	12(1/2")	12(1/2")	12(1/2")
	Suction Tube Inside Diameter	22(7/8")	22(7/8")	22(7/8")
Dimensions (mm)	Length(L)	237	237	237
	Width(W)	237	237	237
	Height(H)	413	413	413
4 Foot Mounting Size (mm)	190.5x190.5(φ8.5)	190.5x190.5(φ8.5)	190.5x190.5(φ8.5)	190.5x190.5(φ8.5)
Oil Type	3GS	3GS	3GS	3GS
Initial Oil Charge Volume(L)	1.4	1.4	1.4	1.4
Refill Oil Charge Volume(L)	1.25	1.25	1.25	1.25
Max. Operating Pressure (MPa)	High Pressure Side	3.0	3.0	3.0
	Low Pressure Side	2.0	2.0	2.0
Weight(kg)	28.0	28.6	28.6	24.0

Standard rating conditions: ARI Evaporating Temperature: -6.7°C, Condensing Temperature: 48.9°C, Superheat: 25K, Subcooling: 0K



XFL | R22

MODEL	XFL10A-A1-105	XFL12A-A1-105	XFL15A-A1-105	XFL17A-A1-105	XFL20A-A1-105
Power Supply (V/Ph/Hz)	380V-420V/3Ph/50Hz or 460V/3Ph/60Hz	380V-420V/3Ph/50Hz or 460V/3Ph/60Hz	380V-420V/3Ph/50Hz or 460V/3Ph/60Hz	380V-420V/3Ph/50Hz or 460V/3Ph/60Hz	380V-420V/3Ph/50Hz or 460V/3Ph/60Hz
Nominal Capacity(HP)	1.4	1.7	2	2.5	3
50Hz Displacement(m <sup>3</sup> /H)	4.3	5.3	6.1	7.2	8.5
Displacement(cc/Rev.)	24.7	30.5	35.1	41.4	48.9
Refrigerant	R22	R22	R22	R22	R22
Cooling Capacity(W)	1000	1200	1520	1780	2050
Cooling Capacity(BTU/H)	3413	4096	5188	6075	6997
Power Input(W)	950	1100	1280	1520	1731
COP(W/W)	1.05	1.09	1.19	1.17	1.18
EER((BTU/H)/W)	3.59	3.72	4.05	4.00	4.04
Rated Load Amps(A)	1.75	2.03	2.36	2.80	3.19
Lock Rotor Amps(A)	22	22	22	41	41
Max. Operating Current(A)	2.6	3.2	3.6	4.7	5.5
Crankcase Heater Power(W)	70	70	70	70	70
Connection Tube (mm/inch)	Discharge Tube Inside Diameter	12(1/2")	12(1/2")	12(1/2")	12(1/2")
	Suction Tube Inside Diameter	22(7/8")	22(7/8")	22(7/8")	22(7/8")
Dimensions (mm)	Length(L)	237	237	237	237
	Width(W)	237	237	237	237
	Height(H)	413	413	413	413
4 Foot Mounting Size (mm)	190.5x190.5(φ8.5)	190.5x190.5(φ8.5)	190.5x190.5(φ8.5)	190.5x190.5(φ8.5)	190.5x190.5(φ8.5)
Oil Type	3GS	3GS	3GS	3GS	3GS
Initial Oil Charge Volume(L)	1.4	1.4	1.4	1.4	1.4
Refill Oil Charge Volume(L)	1.25	1.25	1.25	1.25	1.25
Max. Operating Pressure (MPa)	High Pressure Side	3.0	3.0	3.0	3.0
	Low Pressure Side	2.0	2.0	2.0	2.0
Weight(kg)	24.0	24.5	25.5	25.5	25.5

MODEL	XFL25A-A1-105	XFL28A-A1-105	XFL35A-A1-105	XFL42A-A1-105
Power Supply (V/Ph/Hz)	380V-420V/3Ph/50Hz or 460V/3Ph/60Hz	380V-420V/3Ph/50Hz or 460V/3Ph/60Hz	380V-420V/3Ph/50Hz or 460V/3Ph/60Hz	380V-420V/3Ph/50Hz or 460V/3Ph/60Hz
Nominal Capacity(HP)	3.5	4	5	6
50Hz Displacement(m <sup>3</sup> /H)	10.1	11.5	14.4	17.4
Displacement(cc/Rev.)	58.0	66.1	82.8	100.0
Refrigerant	R22	R22	R22	R22
Cooling Capacity(W)	2650	2890	3580	4295
Cooling Capacity(BTU/H)	9044	9862	12218	14659
Power Input(W)	2235	2360	2673	3168
COP(W/W)	1.19	1.22	1.34	1.36
EER((BTU/H)/W)	4.05	4.18	4.57	4.63
Rated Load Amps(A)	4.12	4.35	4.92	5.84
Lock Rotor Amps(A)	41	61	61	75
Max. Operating Current(A)	7.4	8.4	9.8	11.5
Crankcase Heater Power(W)	70	70	70	70
Connection Tube (mm/inch)	Discharge Tube Inside Diameter	12(1/2")	12(1/2")	12(1/2")
	Suction Tube Inside Diameter	22(7/8")	22(7/8")	22(7/8")
Dimensions (mm)	Length(L)	237	237	237
	Width(W)	237	237	237
	Height(H)	413	413	413
4 Foot Mounting Size (mm)	190.5x190.5(φ8.5)	190.5x190.5(φ8.5)	190.5x190.5(φ8.5)	190.5x190.5(φ8.5)
Oil Type	3GS	3GS	3GS	3GS
Initial Oil Charge Volume(L)	1.4	1.4	1.4	1.7
Refill Oil Charge Volume(L)	1.25	1.25	1.25	1.45
Max. Operating Pressure (MPa)	High Pressure Side	3.0	3.0	3.0
	Low Pressure Side	2.0	2.0	2.0
Weight(kg)	28.0	28.0	28.0	35.3

Standard rating conditions: ARI Evaporating Temperature: -6.7°C, Condensing Temperature: 48.9°C, Superheat: 25K, Subcooling: 0K



XFL | R22

MODEL	XFL51A-A1-105	XFL62A-A1-105	XFL72A-A1-105	XFL80A-A1-105
Power Supply (V/Ph/Hz)	380V-420V/3Ph/50Hz or 460V/3Ph/60Hz	380V-420V/3Ph/50Hz or 460V/3Ph/60Hz	380V-420V/3Ph/50Hz or 460V/3Ph/60Hz	380V-420V/3Ph/50Hz or 460V/3Ph/60Hz
Nominal Capacity(HP)	7.5	9	10	12
50Hz Displacement(m <sup>3</sup> /H)	21.3	25.7	30.0	34.0
Displacement(cc/Rev.)	122.4	147.7	172.4	195.4
Refrigerant	R22	R22	R22	R22
Cooling Capacity(W)	5160	6210	7200	8190
Cooling Capacity(BTU/H)	17611	21195	24573	27952
Power Input(W)	3890	4635	5400	6220
COP(W/W)	1.33	1.34	1.33	1.32
EER((BTU/H)/W)	4.53	4.57	4.55	4.49
Rated Load Amps(A)	7.16	8.54	9.95	11.46
Lock Rotor Amps(A)	87	100	114	129
Max. Operating Current(A)	14.1	19.8	22.3	25.0
Crankcase Heater Power(W)	70	90	90	90
Connection Tube (mm/inch)	Discharge Tube Inside Diameter	12(1/2")	22(7/8")	22(7/8")
	Suction Tube Inside Diameter	22(7/8")	28(1-1/8")	28(1-1/8")
Dimensions (mm)	Length(L)	237	250	250
	Width(W)	244	274	274
	Height(H)	436	548	548
4 Foot Mounting Size (mm)	190.5x190.5(φ8.5)	190.5x190.5(φ8.5)	190.5x190.5(φ8.5)	190.5x190.5(φ8.5)
Oil Type	3GS	3GS	3GS	3GS
Initial Oil Charge Volume(L)	1.7	3.5	3.5	3.5
Refill Oil Charge Volume(L)	1.45	3	3	3
Max. Operating Pressure (MPa)	High Pressure Side	3.0	3.0	3.0
	Low Pressure Side	2.0	2.0	2.0
Weight(kg)	35.5	54.5	55.8	56.8

MODEL	XFL88A-A1-105	XFL100A-A1-105	XFL106A-A1-105
Power Supply (V/Ph/Hz)	380V-420V/3Ph/50Hz or 460V/3Ph/60Hz	380V-420V/3Ph/50Hz or 460V/3Ph/60Hz	380V-420V/3Ph/50Hz or 460V/3Ph/60Hz
Nominal Capacity(HP)	13	15	17
50Hz Displacement(m <sup>3</sup> /H)	36.4	41.3	44.3
Displacement(cc/Rev.)	209.2	237.4	254.6
Refrigerant	R22	R22	R22
Cooling Capacity(W)	8800	9950	11100
Cooling Capacity(BTU/H)	30034	33959	37884
Power Input(W)	6700	7600	8400
COP(W/W)	1.31	1.31	1.32
EER((BTU/H)/W)	4.48	4.47	4.51
Rated Load Amps(A)	12.34	14.00	15.47
Lock Rotor Amps(A)	148.5	148.5	148.5
Max. Operating Current(A)	27.4	31.3	33.6
Crankcase Heater Power(W)	90	90	90
Connection Tube (mm/inch)	Discharge Tube Inside Diameter	22(7/8")	22(7/8")
	Suction Tube Inside Diameter	28(1-1/8")	28(1-1/8")
Dimensions (mm)	Length(L)	250	250
	Width(W)	274	274
	Height(H)	548	547
4 Foot Mounting Size (mm)	190.5x190.5(φ8.5)	190.5x190.5(φ8.5)	190.5x190.5(φ8.5)
Oil Type	3GS	3GS	3GS
Initial Oil Charge Volume(L)	3.5	3.5	3.5
Refill Oil Charge Volume(L)	3	3	3
Max. Operating Pressure (MPa)	High Pressure Side	3.0	3.0
	Low Pressure Side	2.0	2.0
Weight(kg)	58.5	59.0	59.3

Standard rating conditions: ARI Evaporating Temperature: -6.7°C, Condensing Temperature: 48.9°C, Superheat: 25K, Subcooling: 0K



XFL | R404A

MODEL	XFL09B-B1-105	XFL10B-B1-105	XFL12B-B1-105	XFL15B-B1-105	XFL17B-B1-105
Power Supply (V/Ph/Hz)	220V-240V/1Ph/50Hz	220V-240V/1Ph/50Hz	220V-240V/1Ph/50Hz	220V-240V/1Ph/50Hz	220V-240V/1Ph/50Hz
Nominal Capacity(HP)	1.2	1.4	1.7	2	2.5
50Hz Displacement(m <sup>3</sup> /H)	3.7	4.3	5.3	6.1	7.2
Displacement(cc/Rev.)	21.3	24.7	30.5	35.1	41.4
Refrigerant	R404A	R404A	R404A	R404A	R404A
Cooling Capacity(W)	983	1152	1406	1620	1920
Cooling Capacity(BTU/H)	3355	3932	4799	5529	6553
Power Input(W)	1000	1057	1237	1430	1700
COP(W/W)	0.98	1.09	1.14	1.13	1.13
EER((BTU/H)/W)	3.35	3.72	3.88	3.87	3.85
Rated Load Amps(A)	4.7	5.0	5.8	6.8	8.0
Lock Rotor Amps(A)	74	74	74	74	90
Max. Operating Current(A)	7.9	9.1	11.3	13.4	15.5
Crankcase Heater Power(W)	70	70	70	70	70
Connection Tube (mm/inch)	Discharge Tube Inside Diameter	12(1/2")	12(1/2")	12(1/2")	12(1/2")
	Suction Tube Inside Diameter	22(7/8")	22(7/8")	22(7/8")	22(7/8")
Dimensions (mm)	Length(L)	237	237	237	237
	Width(W)	237	237	237	237
	Height(H)	413	413	413	413
4 Foot Mounting Size (mm)	190.5x190.5(φ8.5)	190.5x190.5(φ8.5)	190.5x190.5(φ8.5)	190.5x190.5(φ8.5)	190.5x190.5(φ8.5)
Oil Type	POE	POE	POE	POE	POE
Initial Oil Charge Volume(L)	1.4	1.4	1.4	1.4	1.4
Refill Oil Charge Volume(L)	1.25	1.25	1.25	1.25	1.25
Max. Operating Pressure (MPa)	High Pressure Side	3.2	3.2	3.2	3.2
	Low Pressure Side	2.0	2.0	2.0	2.0
Weight(kg)	27.0	27.0	27.0	27.5	28.0

MODEL	XFL20B-B1-105	XFL25B-B1-105	XFL28B-B1-105	XFL09B-A1-105
Power Supply (V/Ph/Hz)	220V-240V/1Ph/50Hz	220V-240V/1Ph/50Hz	220V-240V/1Ph/50Hz	380V-420V/3Ph/50Hz or 460V/3Ph/60Hz
Nominal Capacity(HP)	3	3.5	4	1.2
50Hz Displacement(m <sup>3</sup> /H)	8.5	10.1	11.5	3.7
Displacement(cc/Rev.)	48.9	58.0	66.1	21.3
Refrigerant	R404A	R404A	R404A	R404A
Cooling Capacity(W)	2250	2680	3050	988
Cooling Capacity(BTU/H)	7679	9147	10410	3372
Power Input(W)	1931	2380	2651	990
COP(W/W)	1.17	1.13	1.15	1.00
EER((BTU/H)/W)	3.98	3.84	3.93	3.41
Rated Load Amps(A)	9.1	11.2	12.5	1.8
Lock Rotor Amps(A)	90	102	102	22
Max. Operating Current(A)	16.2	20.5	23.3	2.2
Crankcase Heater Power(W)	70	70	70	70
Connection Tube (mm/inch)	Discharge Tube Inside Diameter	12(1/2")	12(1/2")	12(1/2")
	Suction Tube Inside Diameter	22(7/8")	22(7/8")	22(7/8")
Dimensions (mm)	Length(L)	237	237	237
	Width(W)	237	237	237
	Height(H)	413	413	413
4 Foot Mounting Size (mm)	190.5x190.5(φ8.5)	190.5x190.5(φ8.5)	190.5x190.5(φ8.5)	190.5x190.5(φ8.5)
Oil Type	POE	POE	POE	POE
Initial Oil Charge Volume(L)	1.4	1.4	1.4	1.4
Refill Oil Charge Volume(L)	1.25	1.25	1.25	1.25
Max. Operating Pressure (MPa)	High Pressure Side	3.2	3.2	3.2
	Low Pressure Side	2.0	2.0	2.0
Weight(kg)	28.0	28.6	28.6	24.0

Standard rating conditions: ARI Evaporating Temperature: -6.7°C, Condensing Temperature: 48.9°C, Superheat: 25K, Subcooling: 0K



XFL | R404A

MODEL	XFL10B-A1-105	XFL12B-A1-105	XFL15B-A1-105	XFL17B-A1-105	XFL20B-A1-105
Power Supply (V/Ph/Hz)	380V-420V/3Ph/50Hz or 460V/3Ph/60Hz	380V-420V/3Ph/50Hz or 460V/3Ph/60Hz	380V-420V/3Ph/50Hz or 460V/3Ph/60Hz	380V-420V/3Ph/50Hz or 460V/3Ph/60Hz	380V-420V/3Ph/50Hz or 460V/3Ph/60Hz
Nominal Capacity(HP)	1.4	1.7	2	2.5	3
50Hz Displacement(m <sup>3</sup> /H)	4.3	5.3	6.1	7.2	8.5
Displacement(cc/Rev.)	24.7	30.5	35.1	41.4	48.9
Refrigerant	R404A	R404A	R404A	R404A	R404A
Cooling Capacity(W)	1155	1410	1620	1920	2250
Cooling Capacity(BTU/H)	3942	4812	5529	6553	7679
Power Input(W)	1050	1230	1400	1690	1900
COP(W/W)	1.10	1.15	1.16	1.14	1.18
EER((BTU/H)/W)	3.75	3.91	3.95	3.88	4.04
Rated Load Amps(A)	1.9	2.3	2.6	3.1	3.5
Lock Rotor Amps(A)	22	22	22	41	41
Max. Operating Current(A)	2.6	3.2	3.8	4.9	5.8
Crankcase Heater Power(W)	70	70	70	70	70
Connection Tube (mm/inch)	Discharge Tube Inside Diameter	12(1/2")	12(1/2")	12(1/2")	12(1/2")
	Suction Tube Inside Diameter	22(7/8")	22(7/8")	22(7/8")	22(7/8")
Dimensions (mm)	Length(L)	237	237	237	237
	Width(W)	237	237	237	237
	Height(H)	413	413	413	413
4 Foot Mounting Size (mm)	190.5x190.5(φ8.5)	190.5x190.5(φ8.5)	190.5x190.5(φ8.5)	190.5x190.5(φ8.5)	190.5x190.5(φ8.5)
Oil Type	POE	POE	POE	POE	POE
Initial Oil Charge Volume(L)	1.4	1.4	1.4	1.4	1.4
Refill Oil Charge Volume(L)	1.25	1.25	1.25	1.25	1.25
Max. Operating Pressure (MPa)	High Pressure Side	3.2	3.2	3.2	3.2
	Low Pressure Side	2.0	2.0	2.0	2.0
Weight(kg)	24.0	24.5	25.5	25.5	25.5

MODEL	XFL25B-A1-105	XFL28B-A1-105	XFL35B-A1-105	XFL42B-A1-105
Power Supply (V/Ph/Hz)	380V-420V/3Ph/50Hz or 460V/3Ph/60Hz	380V-420V/3Ph/50Hz or 460V/3Ph/60Hz	380V-420V/3Ph/50Hz or 460V/3Ph/60Hz	380V-420V/3Ph/50Hz or 460V/3Ph/60Hz
Nominal Capacity(HP)	3.5	4	5	6
50Hz Displacement(m <sup>3</sup> /H)	10.1	11.5	14.4	17.4
Displacement(cc/Rev.)	58.0	66.1	82.8	100.0
Refrigerant	R404A	R404A	R404A	R404A
Cooling Capacity(W)	2680	3050	3850	4600
Cooling Capacity(BTU/H)	9147	10410	13140	15700
Power Input(W)	2350	2621	2940	3485
COP(W/W)	1.14	1.16	1.31	1.32
EER((BTU/H)/W)	3.89	3.97	4.47	4.50
Rated Load Amps(A)	4.3	4.8	5.4	6.4
Lock Rotor Amps(A)	41	61	61	75
Max. Operating Current(A)	7.7	8.8	10.3	12.1
Crankcase Heater Power(W)	70	70	70	70
Connection Tube (mm/inch)	Discharge Tube Inside Diameter	12(1/2")	12(1/2")	12(1/2")
	Suction Tube Inside Diameter	22(7/8")	22(7/8")	22(7/8")
Dimensions (mm)	Length(L)	237	237	237
	Width(W)	237	237	244
	Height(H)	413	413	436
4 Foot Mounting Size (mm)	190.5x190.5(φ8.5)	190.5x190.5(φ8.5)	190.5x190.5(φ8.5)	190.5x190.5(φ8.5)
Oil Type	POE	POE	POE	POE
Initial Oil Charge Volume(L)	1.4	1.4	1.4	1.7
Refill Oil Charge Volume(L)	1.25	1.25	1.25	1.45
Max. Operating Pressure (MPa)	High Pressure Side	3.2	3.2	3.2
	Low Pressure Side	2.0	2.0	2.0
Weight(kg)	28.0	28.0	28.0	35.3

Standard rating conditions: ARI Evaporating Temperature: -6.7°C, Condensing Temperature: 48.9°C, Superheat: 25K, Subcooling: OK



XFL | R404A

MODEL	XFL51B-A1-105	XFL62B-A1-105	XFL72B-A1-105	XFL80B-A1-105
Power Supply (V/Ph/Hz)	380V-420V/3Ph/50Hz or 460V/3Ph/60Hz	380V-420V/3Ph/50Hz or 460V/3Ph/60Hz	380V-420V/3Ph/50Hz or 460V/3Ph/60Hz	380V-420V/3Ph/50Hz or 460V/3Ph/60Hz
Nominal Capacity(HP)	7.5	9	10	12
50Hz Displacement(m <sup>3</sup> /H)	21.3	25.7	30.0	34.0
Displacement(cc/Rev.)	122.4	147.7	172.4	195.4
Refrigerant	R404A	R404A	R404A	R404A
Cooling Capacity(W)	5680	6800	7900	9000
Cooling Capacity(BTU/H)	19386	23208	26962	30717
Power Input(W)	4279	5099	5940	6842
COP(W/W)	1.33	1.33	1.33	1.32
EER((BTU/H)/W)	4.53	4.55	4.54	4.49
Rated Load Amps(A)	7.9	9.4	10.9	12.6
Lock Rotor Amps(A)	87	100	114	129
Max. Operating Current(A)	14.8	20.1	22.3	25.6
Crankcase Heater Power(W)	70	90	90	90
Connection Tube (mm/inch)	Discharge Tube Inside Diameter	12(1/2")	22(7/8")	22(7/8")
	Suction Tube Inside Diameter	22(7/8")	28(1-1/8")	28(1-1/8")
Dimensions (mm)	Length(L)	237	250	250
	Width(W)	244	274	274
	Height(H)	436	548	548
4 Foot Mounting Size (mm)	190.5x190.5(φ8.5)	190.5x190.5(φ8.5)	190.5x190.5(φ8.5)	190.5x190.5(φ8.5)
Oil Type	POE	POE	POE	POE
Initial Oil Charge Volume(L)	1.7	3.5	3.5	3.5
Refill Oil Charge Volume(L)	1.45	3	3	3
Max. Operating Pressure (MPa)	High Pressure Side	3.2	3.2	3.2
	Low Pressure Side	2.0	2.0	2.0
Weight(kg)	35.5	54.5	55.8	56.8

MODEL	XFL88B-A1-105	XFL100B-A1-105	XFL106B-A1-105
Power Supply (V/Ph/Hz)	380V-420V/3Ph/50Hz or 460V/3Ph/60Hz	380V-420V/3Ph/50Hz or 460V/3Ph/60Hz	380V-420V/3Ph/50Hz or 460V/3Ph/60Hz
Nominal Capacity(HP)	13	15	17
50Hz Displacement(m <sup>3</sup> /H)	36.4	41.3	44.3
Displacement(cc/Rev.)	209.2	237.4	254.6
Refrigerant	R404A	R404A	R404A
Cooling Capacity(W)	9650	11000	12300
Cooling Capacity(BTU/H)	32935	37543	41980
Power Input(W)	7370	8360	9400
COP(W/W)	1.31	1.32	1.31
EER((BTU/H)/W)	4.47	4.49	4.47
Rated Load Amps(A)	13.6	15.4	17.3
Lock Rotor Amps(A)	148.5	148.5	148.5
Max. Operating Current(A)	27.4	31.1	33.4
Crankcase Heater Power(W)	90	90	90
Connection Tube (mm/inch)	Discharge Tube Inside Diameter	22(7/8")	22(7/8")
	Suction Tube Inside Diameter	28(1-1/8")	28(1-1/8")
Dimensions (mm)	Length(L)	250	250
	Width(W)	274	274
	Height(H)	548	548
4 Foot Mounting Size (mm)	190.5x190.5(φ8.5)	190.5x190.5(φ8.5)	190.5x190.5(φ8.5)
Oil Type	POE	POE	POE
Initial Oil Charge Volume(L)	3.5	3.5	3.5
Refill Oil Charge Volume(L)	3	3	3
Max. Operating Pressure (MPa)	High Pressure Side	3.2	3.2
	Low Pressure Side	2.0	2.0
Weight(kg)	58.5	59.0	59.3

Standard rating conditions: ARI Evaporating Temperature: -6.7°C, Condensing Temperature: 48.9°C, Superheat: 25K, Subcooling: OK



XFV | R22

MODEL	XFV09A-B1-101	XFV10A-B1-101	XFV12A-B1-101	XFV15A-B1-101	XFV17A-B1-101
Power Supply (V/Ph/Hz)	220V-240V/1Ph/50Hz	220V-240V/1Ph/50Hz	220V-240V/1Ph/50Hz	220V-240V/1Ph/50Hz	220V-240V/1Ph/50Hz
Nominal Capacity(HP)	1.2	1.4	1.7	2	2.5
50Hz Displacement(m <sup>3</sup> /H)	3.7	4.3	5.3	6.1	7.2
Displacement(cc/Rev.)	21.3	24.7	30.5	35.1	41.4
Refrigerant	R22	R22	R22	R22	R22
Cooling Capacity(W)	1180	1330	1620	1950	2300
Cooling Capacity(BTU/H)	4027	4539	5529	6655	7850
Power Input(W)	1040	1100	1285	1489	1770
COP(W/W)	1.13	1.21	1.26	1.31	1.30
EER((BTU/H)/W)	3.87	4.13	4.30	4.47	4.43
Rated Load Amps(A)	4.9	5.2	6.1	7.0	8.4
Lock Rotor Amps(A)	74	74	74	74	90
Max. Operating Current(A)	8.1	9.5	11.7	13.9	15.5
Crankcase Heater Power(W)	70	70	70	70	70
Connection Tube (mm/inch)	Discharge Tube Inside Diameter	12(1/2")	12(1/2")	12(1/2")	12(1/2")
	Suction Tube Inside Diameter	22(7/8")	22(7/8")	22(7/8")	22(7/8")
Dimensions (mm)	Length(L)	237	237	237	237
	Width(W)	237	237	237	237
	Height(H)	413	413	413	413
4 Foot Mounting Size (mm)	190.5x190.5(φ8.5)	190.5x190.5(φ8.5)	190.5x190.5(φ8.5)	190.5x190.5(φ8.5)	190.5x190.5(φ8.5)
Oil Type	3GS	3GS	3GS	3GS	3GS
Initial Oil Charge Volume(L)	1.4	1.4	1.4	1.4	1.4
Refill Oil Charge Volume(L)	1.25	1.25	1.25	1.25	1.25
Max. Operating Pressure (MPa)	High Pressure Side	3.0	3.0	3.0	3.0
	Low Pressure Side	2.0	2.0	2.0	2.0
Weight(kg)	27.0	27.0	27.0	27.5	28.0

MODEL	XFV20A-B1-101	XFV25A-B1-101	XFV28A-B1-101	XFV09A-A1-101
Power Supply (V/Ph/Hz)	220V-240V/1Ph/50Hz	220V-240V/1Ph/50Hz	220V-240V/1Ph/50Hz	380V-420V/3Ph/50Hz or 460V/3Ph/60Hz
Nominal Capacity(HP)	3	3.5	4	1.2
50Hz Displacement(m <sup>3</sup> /H)	8.5	10.1	11.5	3.7
Displacement(cc/Rev.)	48.9	58.0	66.1	21.3
Refrigerant	R22	R22	R22	R22
Cooling Capacity(W)	2730	3250	3680	1180
Cooling Capacity(BTU/H)	9317	11092	12560	4027
Power Input(W)	2009	2450	2759	1040
COP(W/W)	1.36	1.33	1.33	1.13
EER((BTU/H)/W)	4.64	4.53	4.55	3.87
Rated Load Amps(A)	9.5	11.6	13.0	1.9
Lock Rotor Amps(A)	90	102	102	22
Max. Operating Current(A)	17.1	21.3	24.2	2.4
Crankcase Heater Power(W)	70	70	70	70
Connection Tube (mm/inch)	Discharge Tube Inside Diameter	12(1/2")	12(1/2")	12(1/2")
	Suction Tube Inside Diameter	22(7/8")	22(7/8")	22(7/8")
Dimensions (mm)	Length(L)	237	237	237
	Width(W)	237	237	237
	Height(H)	413	413	413
4 Foot Mounting Size (mm)	190.5x190.5(φ8.5)	190.5x190.5(φ8.5)	190.5x190.5(φ8.5)	190.5x190.5(φ8.5)
Oil Type	3GS	3GS	3GS	3GS
Initial Oil Charge Volume(L)	1.4	1.4	1.4	1.4
Refill Oil Charge Volume(L)	1.25	1.25	1.25	1.25
Max. Operating Pressure (MPa)	High Pressure Side	3.0	3.0	3.0
	Low Pressure Side	2.0	2.0	2.0
Weight(kg)	28.0	28.6	28.6	24.0

Standard rating conditions: ARI Evaporating Temperature: -6.7°C, Condensing Temperature: 48.9°C, Superheat: 25K, Subcooling: 0K



XFV | R22

MODEL	XFV10A-A1-101	XFV12A-A1-101	XFV15A-A1-101	XFV17A-A1-101	XFV20A-A1-101
Power Supply (V/Ph/Hz)	380V-420V/3Ph/50Hz or 460V/3Ph/60Hz	380V-420V/3Ph/50Hz or 460V/3Ph/60Hz	380V-420V/3Ph/50Hz or 460V/3Ph/60Hz	380V-420V/3Ph/50Hz or 460V/3Ph/60Hz	380V-420V/3Ph/50Hz or 460V/3Ph/60Hz
Nominal Capacity(HP)	1.4	1.7	2	2.5	3
50Hz Displacement(m <sup>3</sup> /H)	4.3	5.3	6.1	7.2	8.5
Displacement(cc/Rev.)	24.7	30.5	35.1	41.4	48.9
Refrigerant	R22	R22	R22	R22	R22
Cooling Capacity(W)	1330	1620	1950	2300	2730
Cooling Capacity(BTU/H)	4539	5529	6655	7850	9317
Power Input(W)	1100	1285	1466	1740	1982
COP(W/W)	1.21	1.26	1.33	1.32	1.38
EER((BTU/H)/W)	4.13	4.30	4.54	4.51	4.70
Rated Load Amps(A)	2.0	2.4	2.7	3.2	3.7
Lock Rotor Amps(A)	22	22	22	41	41
Max. Operating Current(A)	2.8	3.5	4.0	5.1	6.1
Crankcase Heater Power(W)	70	70	70	70	70
Connection Tube (mm/inch)	Discharge Tube Inside Diameter	12(1/2")	12(1/2")	12(1/2")	12(1/2")
	Suction Tube Inside Diameter	22(7/8")	22(7/8")	22(7/8")	22(7/8")
Dimensions (mm)	Length(L)	237	237	237	237
	Width(W)	237	237	237	237
	Height(H)	413	413	413	413
4 Foot Mounting Size (mm)	190.5x190.5(φ8.5)	190.5x190.5(φ8.5)	190.5x190.5(φ8.5)	190.5x190.5(φ8.5)	190.5x190.5(φ8.5)
Oil Type	3GS	3GS	3GS	3GS	3GS
Initial Oil Charge Volume(L)	1.4	1.4	1.4	1.4	1.4
Refill Oil Charge Volume(L)	1.25	1.25	1.25	1.25	1.25
Max. Operating Pressure (MPa)	High Pressure Side	3.0	3.0	3.0	3.0
	Low Pressure Side	2.0	2.0	2.0	2.0
Weight(kg)	24.0	24.5	25.5	25.5	25.5

MODEL	XFV25A-A1-101	XFV28A-A1-101	XFV35A-A1-101	XFV42A-A1-101
Power Supply (V/Ph/Hz)	380V-420V/3Ph/50Hz or 460V/3Ph/60Hz	380V-420V/3Ph/50Hz or 460V/3Ph/60Hz	380V-420V/3Ph/50Hz or 460V/3Ph/60Hz	380V-420V/3Ph/50Hz or 460V/3Ph/60Hz
Nominal Capacity(HP)	3.5	4	5	6
50Hz Displacement(m <sup>3</sup> /H)	10.1	11.5	14.4	17.4
Displacement(cc/Rev.)	58.0	66.1	82.8	100.0
Refrigerant	R22	R22	R22	R22
Cooling Capacity(W)	3250	3680	4650	5550
Cooling Capacity(BTU/H)	11092	12560	15870	18942
Power Input(W)	2450	2702	3060	3628
COP(W/W)	1.33	1.36	1.52	1.53
EER((BTU/H)/W)	4.53	4.65	5.19	5.22
Rated Load Amps(A)	4.5	5.0	5.6	6.7
Lock Rotor Amps(A)	41	61	61	75
Max. Operating Current(A)	8.1	9.2	10.8	12.7
Crankcase Heater Power(W)	70	70	70	70
Connection Tube (mm/inch)	Discharge Tube Inside Diameter	12(1/2")	12(1/2")	12(1/2")
	Suction Tube Inside Diameter	22(7/8")	22(7/8")	22(7/8")
Dimensions (mm)	Length(L)	237	237	237
	Width(W)	237	237	244
	Height(H)	413	413	436
4 Foot Mounting Size (mm)	190.5x190.5(φ8.5)	190.5x190.5(φ8.5)	190.5x190.5(φ8.5)	190.5x190.5(φ8.5)
Oil Type	3GS	3GS	3GS	3GS
Initial Oil Charge Volume(L)	1.4	1.4	1.4	1.7
Refill Oil Charge Volume(L)	1.25	1.25	1.25	1.45
Max. Operating Pressure (MPa)	High Pressure Side	3.0	3.0	3.0
	Low Pressure Side	2.0	2.0	2.0
Weight(kg)	28.0	28.0	28.0	35.3

Standard rating conditions: ARI Evaporating Temperature: -6.7°C, Condensing Temperature: 48.9°C, Superheat: 25K, Subcooling: 0K



XFV | R22

MODEL	XFV51A-A1-101	XFV62A-A1-101	XFV72A-A1-101	XFV80A-A1-101
Power Supply (V/Ph/Hz)	380V-420V/3Ph/50Hz or 460V/3Ph/60Hz	380V-420V/3Ph/50Hz or 460V/3Ph/60Hz	380V-420V/3Ph/50Hz or 460V/3Ph/60Hz	380V-420V/3Ph/50Hz or 460V/3Ph/60Hz
Nominal Capacity(HP)	7.5	9	10	12
50Hz Displacement(m³/H)	21.3	25.7	30.0	34.0
Displacement(cc/Rev.)	122.4	147.7	172.4	195.4
Refrigerant	R22	R22	R22	R22
Cooling Capacity(W)	6850	8200	9500	11000
Cooling Capacity(BTU/H)	23379	27986	32423	37543
Power Input(W)	4454	5307	6183	7122
COP(W/W)	1.54	1.55	1.54	1.54
EER((BTU/H)/W)	5.25	5.27	5.24	5.27
Rated Load Amps(A)	8.2	9.8	11.4	13.1
Lock Rotor Amps(A)	87	100	114	129
Max. Operating Current(A)	15.5	21.8	24.5	27.5
Crankcase Heater Power(W)	70	90	90	90
Connection Tube (mm/inch)	Discharge Tube Inside Diameter	12(1/2")	22(7/8")	22(7/8")
	Suction Tube Inside Diameter	22(7/8")	28(1-1/8")	28(1-1/8")
Dimensions (mm)	Length(L)	237	250	250
	Width(W)	244	274	274
	Height(H)	436	548	548
4 Foot Mounting Size (mm)	190.5x190.5(φ8.5)	190.5x190.5(φ8.5)	190.5x190.5(φ8.5)	190.5x190.5(φ8.5)
Oil Type	3GS	3GS	3GS	3GS
Initial Oil Charge Volume(L)	1.7	3.5	3.5	3.5
Refill Oil Charge Volume(L)	1.45	3	3	3
Max. Operating Pressure (MPa)	High Pressure Side	3.0	3.0	3.0
	Low Pressure Side	2.0	2.0	2.0
Weight(kg)	35.5	54.5	55.8	56.8

MODEL	XFV88A-A1-101	XFV100A-A1-101	XFV106A-A1-101	
Power Supply (V/Ph/Hz)	380V-420V/3Ph/50Hz or 460V/3Ph/60Hz	380V-420V/3Ph/50Hz or 460V/3Ph/60Hz	380V-420V/3Ph/50Hz or 460V/3Ph/60Hz	
Nominal Capacity(HP)	13	15	17	
50Hz Displacement(m³/H)	36.4	41.3	44.3	
Displacement(cc/Rev.)	209.2	237.4	254.6	
Refrigerant	R22	R22	R22	
Cooling Capacity(W)	11600	13200	14800	
Cooling Capacity(BTU/H)	39590	45051	50512	
Power Input(W)	7672	8702	9618	
COP(W/W)	1.51	1.52	1.54	
EER((BTU/H)/W)	5.16	5.18	5.25	
Rated Load Amps(A)	14.1	16.0	17.7	
Lock Rotor Amps(A)	148.5	148.5	148.5	
Max. Operating Current(A)	30.1	34.4	37.0	
Crankcase Heater Power(W)	90	90	90	
Connection Tube (mm/inch)	Discharge Tube Inside Diameter	22(7/8")	22(7/8")	22(7/8")
	Suction Tube Inside Diameter	28(1-1/8")	28(1-1/8")	28(1-1/8")
Dimensions (mm)	Length(L)	250	250	250
	Width(W)	274	274	274
	Height(H)	548	548	548
4 Foot Mounting Size (mm)	190.5x190.5(φ8.5)	190.5x190.5(φ8.5)	190.5x190.5(φ8.5)	
Oil Type	3GS	3GS	3GS	
Initial Oil Charge Volume(L)	3.5	3.5	3.5	
Refill Oil Charge Volume(L)	3	3	3	
Max. Operating Pressure (MPa)	High Pressure Side	3.0	3.0	3.0
	Low Pressure Side	2.0	2.0	2.0
Weight(kg)	58.5	59.0	59.3	

Standard rating conditions: ARI Evaporating Temperature: -6.7°C, Condensing Temperature: 48.9°C, Superheat: 25K, Subcooling: 0K



XFV | R404A

MODEL	XFV09B-B1-101	XFV10B-B1-101	XFV12B-B1-101	XFV15B-B1-101	XFV17B-B1-101
Power Supply (V/Ph/Hz)	220V-240V/1Ph/50Hz	220V-240V/1Ph/50Hz	220V-240V/1Ph/50Hz	220V-240V/1Ph/50Hz	220V-240V/1Ph/50Hz
Nominal Capacity(HP)	1.2	1.4	1.7	2	2.5
50Hz Displacement(m³/H)	3.7	4.3	5.3	6.1	7.2
Displacement(cc/Rev.)	21.3	24.7	30.5	35.1	41.4
Refrigerant	R404A	R404A	R404A	R404A	R404A
Cooling Capacity(W)	1450	1690	2080	2480	3000
Cooling Capacity(BTU/H)	4949	5768	7099	8464	10239
Power Input(W)	1140	1210	1413	1637	1947
COP(W/W)	1.27	1.40	1.47	1.51	1.54
EER((BTU/H)/W)	4.34	4.77	5.02	5.17	5.26
Rated Load Amps(A)	5.4	5.7	6.7	7.7	9.2
Lock Rotor Amps(A)	74	74	74	74	90
Max. Operating Current(A)	8.7	10.0	12.4	14.7	17.1
Crankcase Heater Power(W)	70	70	70	70	70
Connection Tube (mm/inch)	Discharge Tube Inside Diameter	12(1/2")	12(1/2")	12(1/2")	12(1/2")
	Suction Tube Inside Diameter	22(7/8")	22(7/8")	22(7/8")	22(7/8")
Dimensions (mm)	Length(L)	237	237	237	237
	Width(W)	237	237	237	237
	Height(H)	413	413	413	413
4 Foot Mounting Size (mm)	190.5x190.5(φ8.5)	190.5x190.5(φ8.5)	190.5x190.5(φ8.5)	190.5x190.5(φ8.5)	190.5x190.5(φ8.5)
Oil Type	POE	POE	POE	POE	POE
Initial Oil Charge Volume(L)	1.4	1.4	1.4	1.4	1.4
Refill Oil Charge Volume(L)	1.25	1.25	1.25	1.25	1.25
Max. Operating Pressure (MPa)	High Pressure Side	3.2	3.2	3.2	3.2
	Low Pressure Side	2.0	2.0	2.0	2.0
Weight(kg)	27.0	27.0	27.0	27.5	28.0

MODEL	XFV20B-B1-101	XFV25B-B1-101	XFV28B-B1-101	XFV09B-A1-101
Power Supply (V/Ph/Hz)	220V-240V/1Ph/50Hz	220V-240V/1Ph/50Hz	220V-240V/1Ph/50Hz	380V-420V/3Ph/50Hz or 460V/3Ph/60Hz
Nominal Capacity(HP)	3	3.5	4	1.2
50Hz Displacement(m³/H)	8.5	10.1	11.5	3.7
Displacement(cc/Rev.)	48.9	58.0	66.1	21.3
Refrigerant	R404A	R404A	R404A	R404A
Cooling Capacity(W)	3450	4060	4630	1450
Cooling Capacity(BTU/H)	11775	13857	15802	4949
Power Input(W)	2210	2600	3035	1140
COP(W/W)	1.56	1.56	1.53	1.27
EER((BTU/H)/W)	5.33	5.33	5.21	4.34
Rated Load Amps(A)	10.4	12.3	14.3	2.1
Lock Rotor Amps(A)	90	102	102	22
Max. Operating Current(A)	17.8	22.5	25.6	2.4
Crankcase Heater Power(W)	70	70	70	70
Connection Tube (mm/inch)	Discharge Tube Inside Diameter	12(1/2")	12(1/2")	12(1/2")
	Suction Tube Inside Diameter	22(7/8")	22(7/8")	22(7/8")
Dimensions (mm)	Length(L)	237	237	237
	Width(W)	237	237	237
	Height(H)	413	413	413
4 Foot Mounting Size (mm)	190.5x190.5(φ8.5)	190.5x190.5(φ8.5)	190.5x190.5(φ8.5)	190.5x190.5(φ8.5)
Oil Type	POE	POE	POE	POE
Initial Oil Charge Volume(L)	1.4	1.4	1.4	1.4
Refill Oil Charge Volume(L)	1.25	1.25	1.25	1.25
Max. Operating Pressure (MPa)	High Pressure Side	3.2	3.2	3.2
	Low Pressure Side	2.0	2.0	2.0
Weight(kg)	28.0	28.6	28.6	24.0

Standard rating conditions: ARI Evaporating Temperature: -6.7°C, Condensing Temperature: 48.9°C, Superheat: 25K, Subcooling: 0K



XFV | R404A

MODEL	XFV10B-A1-101	XFV12B-A1-101	XFV15B-A1-101	XFV17B-A1-101	XFV20B-A1-101	
Power Supply (V/Ph/Hz)	380V-420V/3Ph/50Hz or 460V/3Ph/60Hz	380V-420V/3Ph/50Hz or 460V/3Ph/60Hz	380V-420V/3Ph/50Hz or 460V/3Ph/60Hz	380V-420V/3Ph/50Hz or 460V/3Ph/60Hz	380V-420V/3Ph/50Hz or 460V/3Ph/60Hz	
Nominal Capacity(HP)	1.4	1.7	2	2.5	3	
50Hz Displacement(m <sup>3</sup> /H)	4.3	5.3	6.1	7.2	8.5	
Displacement(cc/Rev.)	24.7	30.5	35.1	41.4	48.9	
Refrigerant	R404A	R404A	R404A	R404A	R404A	
Cooling Capacity(W)	1690	2080	2480	3000	3450	
Cooling Capacity(BTU/H)	5768	7099	8464	10239	11775	
Power Input(W)	1210	1413	1603	1935	2176	
COP(W/W)	1.40	1.47	1.55	1.55	1.59	
EER((BTU/H)/W)	4.77	5.02	5.28	5.29	5.41	
Rated Load Amps(A)	2.2	2.6	3.0	3.6	4.0	
Lock Rotor Amps(A)	22	22	22	41	41	
Max. Operating Current(A)	2.9	3.5	4.2	5.4	6.4	
Crankcase Heater Power(W)	70	70	70	70	70	
Connection Tube (mm/inch)	Discharge Tube Inside Diameter	12(1/2")	12(1/2")	12(1/2")	12(1/2")	
	Suction Tube Inside Diameter	22(7/8")	22(7/8")	22(7/8")	22(7/8")	
Dimensions (mm)	Length(L)	237	237	237	237	
	Width(W)	237	237	237	237	
	Height(H)	413	413	413	413	413
4 Foot Mounting Size (mm)	190.5x190.5(φ8.5)	190.5x190.5(φ8.5)	190.5x190.5(φ8.5)	190.5x190.5(φ8.5)	190.5x190.5(φ8.5)	
Oil Type	POE	POE	POE	POE	POE	
Initial Oil Charge Volume(L)	1.4	1.4	1.4	1.4	1.4	
Refill Oil Charge Volume(L)	1.25	1.25	1.25	1.25	1.25	
Max. Operating Pressure (MPa)	High Pressure Side	3.2	3.2	3.2	3.2	3.2
	Low Pressure Side	2.0	2.0	2.0	2.0	2.0
Weight(kg)	24.0	24.5	25.5	25.5	25.5	

MODEL	XFV25B-A1-101	XFV28B-A1-101	XFV35B-A1-101	XFV42B-A1-101
Power Supply (V/Ph/Hz)	380V-420V/3Ph/50Hz or 460V/3Ph/60Hz	380V-420V/3Ph/50Hz or 460V/3Ph/60Hz	380V-420V/3Ph/50Hz or 460V/3Ph/60Hz	380V-420V/3Ph/50Hz or 460V/3Ph/60Hz
Nominal Capacity(HP)	3.5	4	5	6
50Hz Displacement(m <sup>3</sup> /H)	10.1	11.5	14.4	17.4
Displacement(cc/Rev.)	58.0	66.1	82.8	100.0
Refrigerant	R404A	R404A	R404A	R404A
Cooling Capacity(W)	4060	4630	5850	6980
Cooling Capacity(BTU/H)	13857	15802	19966	23823
Power Input(W)	2691	3001	3366	3991
COP(W/W)	1.51	1.54	1.74	1.75
EER((BTU/H)/W)	5.15	5.27	5.93	5.97
Rated Load Amps(A)	5.0	5.5	6.2	7.3
Lock Rotor Amps(A)	41	61	61	75
Max. Operating Current(A)	8.5	9.7	11.3	13.3
Crankcase Heater Power(W)	70	70	70	70
Connection Tube (mm/inch)	Discharge Tube Inside Diameter	12(1/2")	12(1/2")	12(1/2")
	Suction Tube Inside Diameter	22(7/8")	22(7/8")	22(7/8")
Dimensions (mm)	Length(L)	237	237	237
	Width(W)	237	237	244
	Height(H)	413	413	436
4 Foot Mounting Size (mm)	190.5x190.5(φ8.5)	190.5x190.5(φ8.5)	190.5x190.5(φ8.5)	190.5x190.5(φ8.5)
Oil Type	POE	POE	POE	POE
Initial Oil Charge Volume(L)	1.4	1.4	1.4	1.7
Refill Oil Charge Volume(L)	1.25	1.25	1.25	1.45
Max. Operating Pressure (MPa)	High Pressure Side	3.2	3.2	3.2
	Low Pressure Side	2.0	2.0	2.0
Weight(kg)	28.0	28.0	28.0	35.3

Standard rating conditions: ARI Evaporating Temperature: -6.7°C, Condensing Temperature: 48.9°C, Superheat: 25K, Subcooling: OK



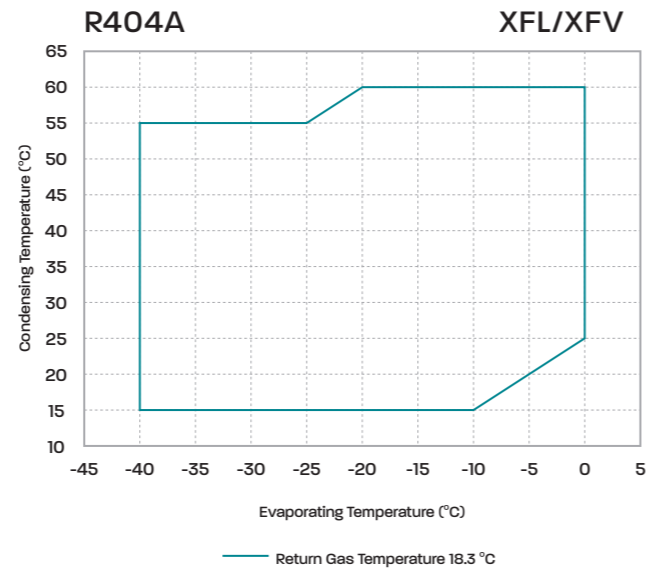
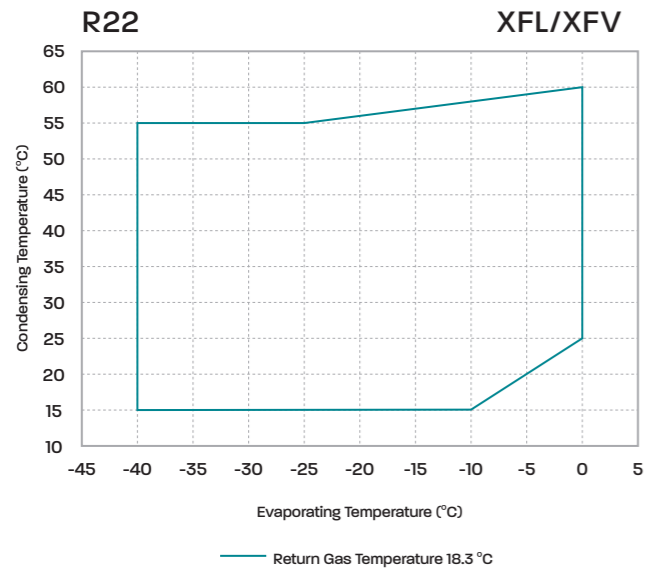
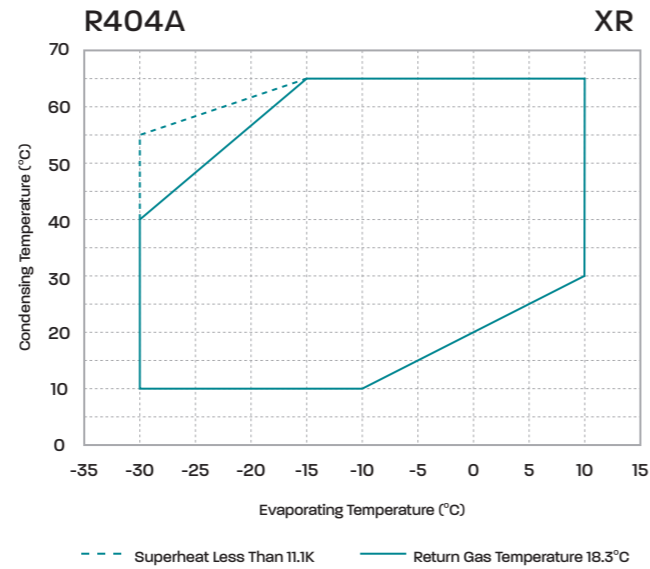
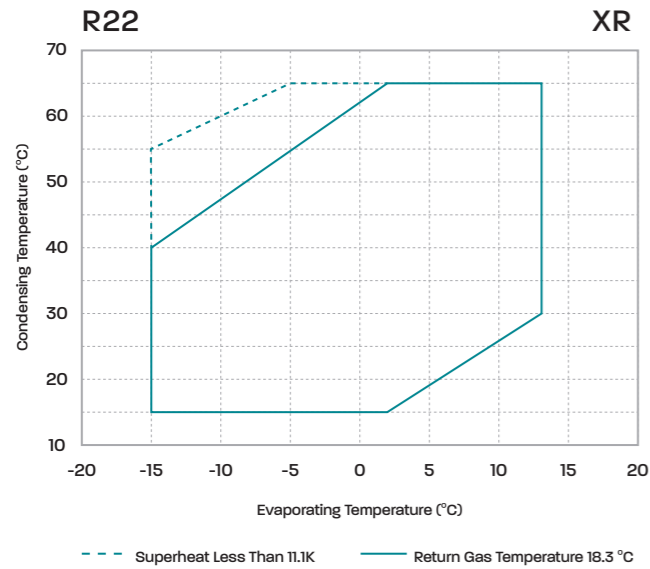
XFV | R404A

MODEL	XFV51B-A1-101	XFV62B-A1-101	XFV72B-A1-101	XFV80B-A1-101
Power Supply (V/Ph/Hz)	380V-420V/3Ph/50Hz or 460V/3Ph/60Hz	380V-420V/3Ph/50Hz or 460V/3Ph/60Hz	380V-420V/3Ph/50Hz or 460V/3Ph/60Hz	380V-420V/3Ph/50Hz or 460V/3Ph/60Hz
Nominal Capacity(HP)	7.5	9	10	12
50Hz Displacement(m <sup>3</sup> /H)	21.3	25.7	30.0	34.0
Displacement(cc/Rev.)	122.4	147.7	172.4	195.4
Refrigerant	R404A	R404A	R404A	R404A
Cooling Capacity(W)	8600	10330	12000	13800
Cooling Capacity(BTU/H)	29352	35256	40956	47099
Power Input(W)	4899	5838	6801	7834
COP(W/W)	1.76	1.77	1.76	1.76
EER((BTU/H)/W)	5.99	6.04	6.02	6.01
Rated Load Amps(A)	9.0	10.8	12.5	14.4
Lock Rotor Amps(A)	87	100	114	129
Max. Operating Current(A)	16.3	22.1	24.5	28.2
Crankcase Heater Power(W)	70	90	90	90
Connection Tube (mm/inch)	Discharge Tube Inside Diameter	12(1/2")	22(7/8")	22(7/8")
	Suction Tube Inside Diameter	22(7/8")	28(1-1/8")	28(1-1/8")
Dimensions (mm)	Length(L)	237	250	250
	Width(W)	244	274	274
	Height(H)	436	548	548
4 Foot Mounting Size (mm)	190.5x190.5(φ8.5)	190.5x190.5(φ8.5)	190.5x190.5(φ8.5)	190.5x190.5(φ8.5)
Oil Type	POE	POE	POE	POE
Initial Oil Charge Volume(L)	1.7	3.5	3.5	3.5
Refill Oil Charge Volume(L)	1.45	3	3	3
Max. Operating Pressure (MPa)	High Pressure Side	3.2	3.2	3.2
	Low Pressure Side	2.0	2.0	2.0
Weight(kg)	35.5	54.5	55.8	56.8

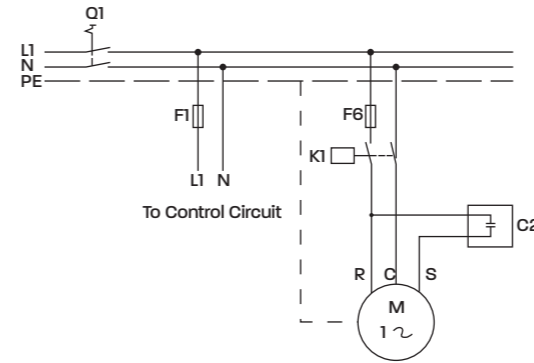
MODEL	XFV88B-A1-101	XFV100B-A1-101	XFV106B-A1-101
Power Supply (V/Ph/Hz)	380V-420V/3Ph/50Hz or 460V/3Ph/60Hz	380V-420V/3Ph/50Hz or 460V/3Ph/60Hz	380V-420V/3Ph/50Hz or 460V/3Ph/60Hz
Nominal Capacity(HP)	13	15	17
50Hz Displacement(m <sup>3</sup> /H)	36.4	41.3	44.3
Displacement(cc/Rev.)	209.2	237.4	254.6
Refrigerant	R404A	R404A	R404A
Cooling Capacity(W)	14700	16650	18600
Cooling Capacity(BTU/H)	50171	56826	63481
Power Input(W)	8439	9572	10500
COP(W/W)	1.74	1.74	1.77
EER((BTU/H)/W)	5.95	5.94	6.05
Rated Load Amps(A)	15.5	17.6	19.3
Lock Rotor Amps(A)	148.5	148.5	148.5
Max. Operating Current(A)	30.1	34.2	36.7
Crankcase Heater Power(W)	90	90	90
Connection Tube (mm/inch)	Discharge Tube Inside Diameter	22(7/8")	22(7/8")
	Suction Tube Inside Diameter	28(1-1/8")	28(1-1/8")
Dimensions (mm)	Length(L)	250	250
	Width(W)	274	274
	Height(H)	548	548
4 Foot Mounting Size (mm)	190.5x190.5(φ8.5)	190.5x190.5(φ8.5)	190.5x190.5(φ8.5)
Oil Type	POE	POE	POE
Initial Oil Charge Volume(L)	3.5	3.5	3.5
Refill Oil Charge Volume(L)	3	3	3
Max. Operating Pressure (MPa)	High Pressure Side	3.2	3.2
	Low Pressure Side	2.0	2.0
Weight(kg)	58.5	59.0	59.3

Standard rating conditions: ARI Evaporating Temperature: -6.7°C, Condensing Temperature: 48.9°C, Superheat: 25K, Subcooling: OK

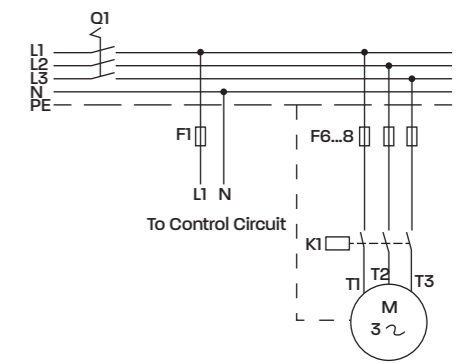




## Wiring Diagrams



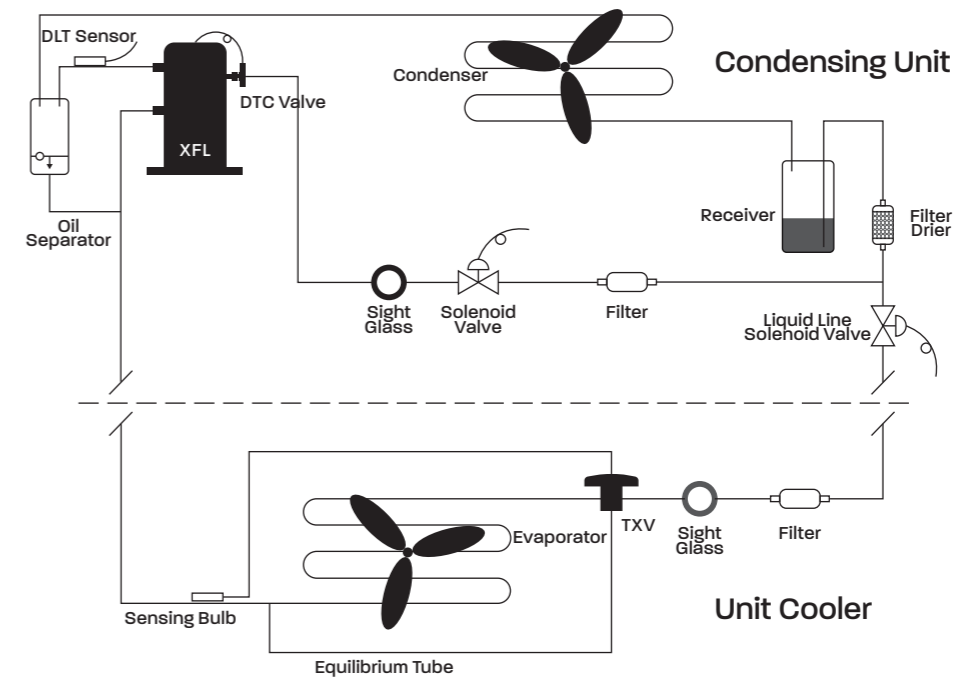
**Electrical Code**  
 L1/N/PE: Single Phase Lines(line/neutral/ground)  
 Q1: Manual Switch    F1/F6: Fuse  
 K1: Compressor Contactor    C2: Run Capacitor  
 M: Compressor Motor  
 R/C/S: Compressor Wiring Terminal



**Electrical Code**  
 L1/L2/L3/N/PE: Three Phase Lines(line/neutral/ground)  
 Q1: Manual Switch    F1/F6...8: Fuse  
 K1: Compressor Contactor  
 M: Compressor Motor  
 T1/T2/T3: Compressor Wiring Terminal

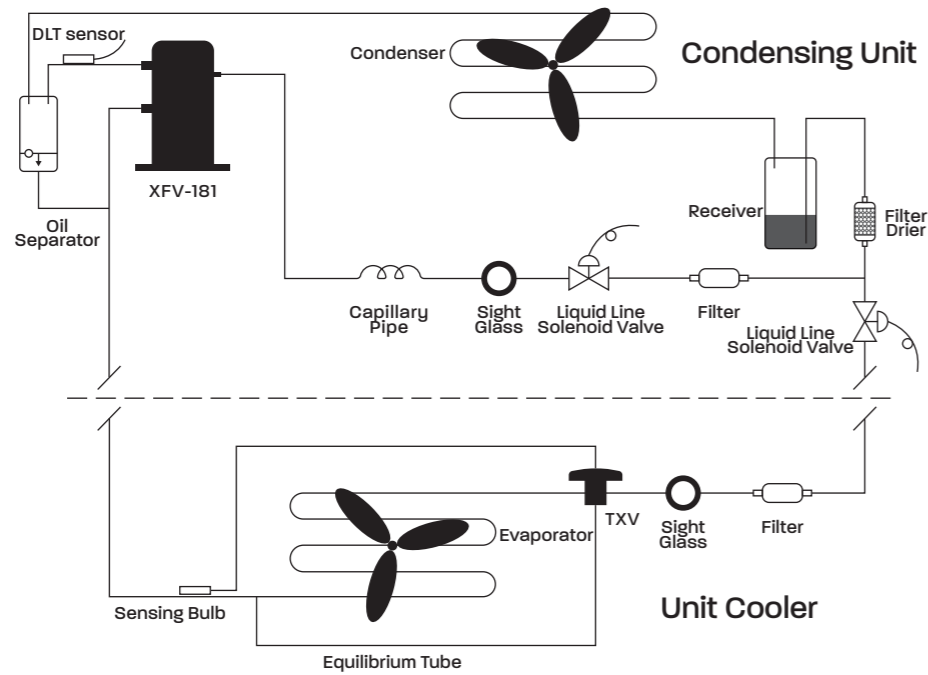
## System Schematic

Liquid injection schematic

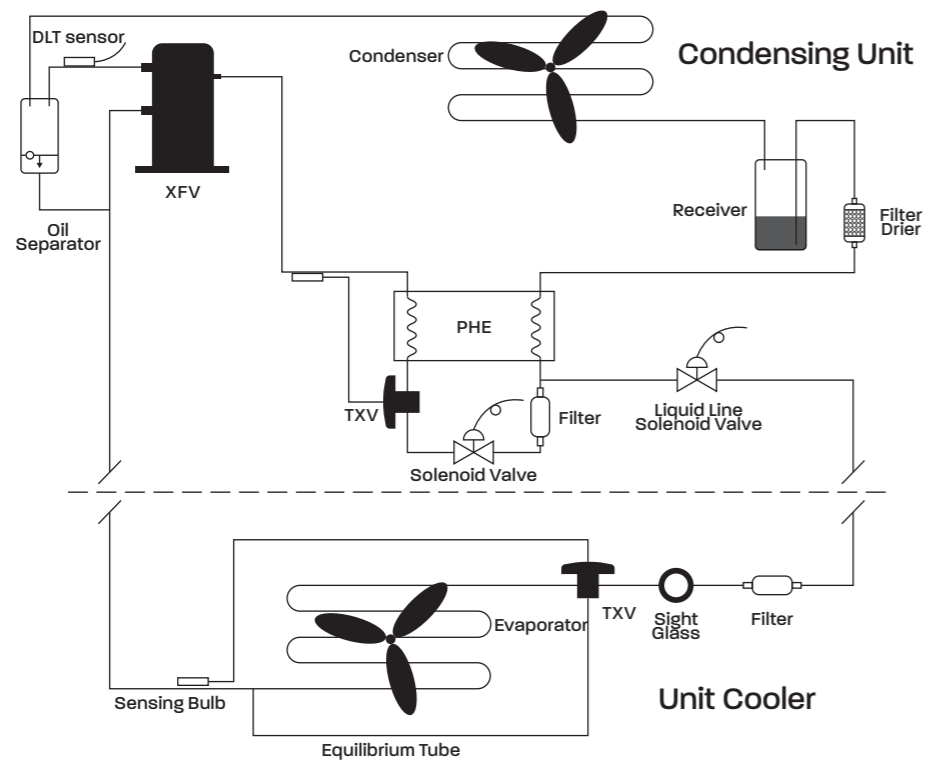


## System Schematic

### Liquid injection schematic

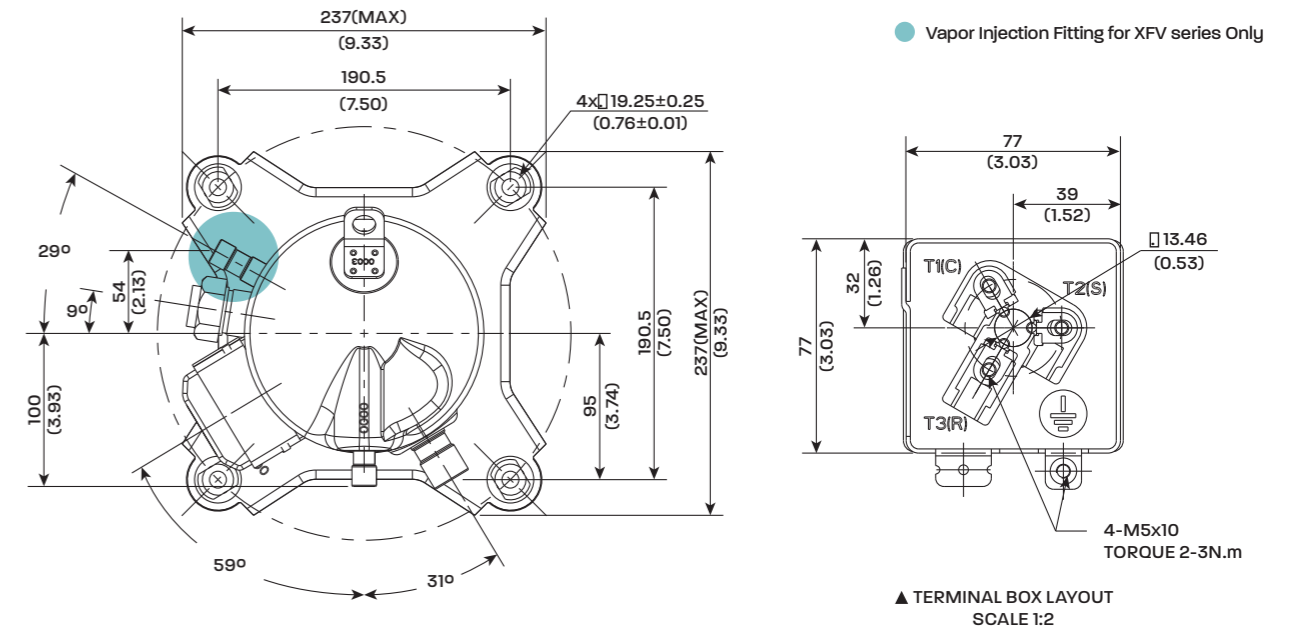


### Vapor injection schematic



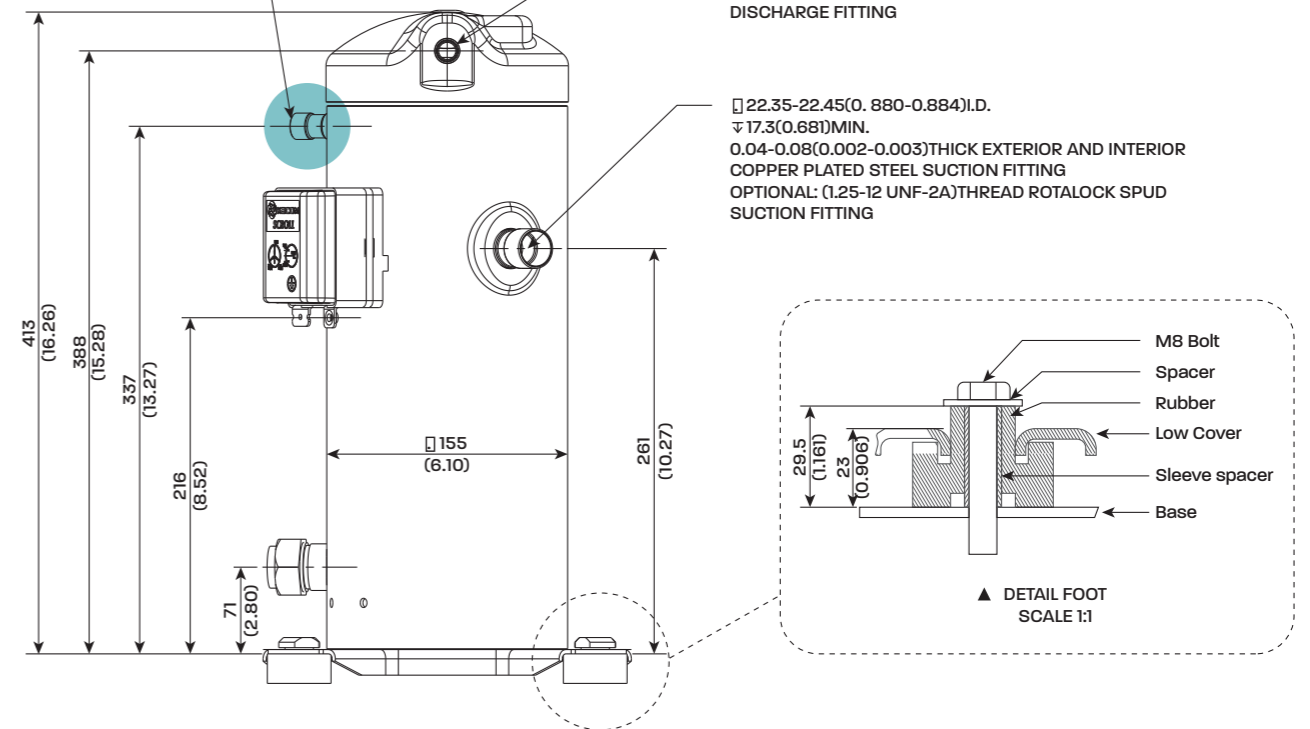
## Dimensional Data | 1.2 - 5HP

### Medium Temp. Ref. XR22-XR91 Low Temp. Ref. XFV09-XFV35



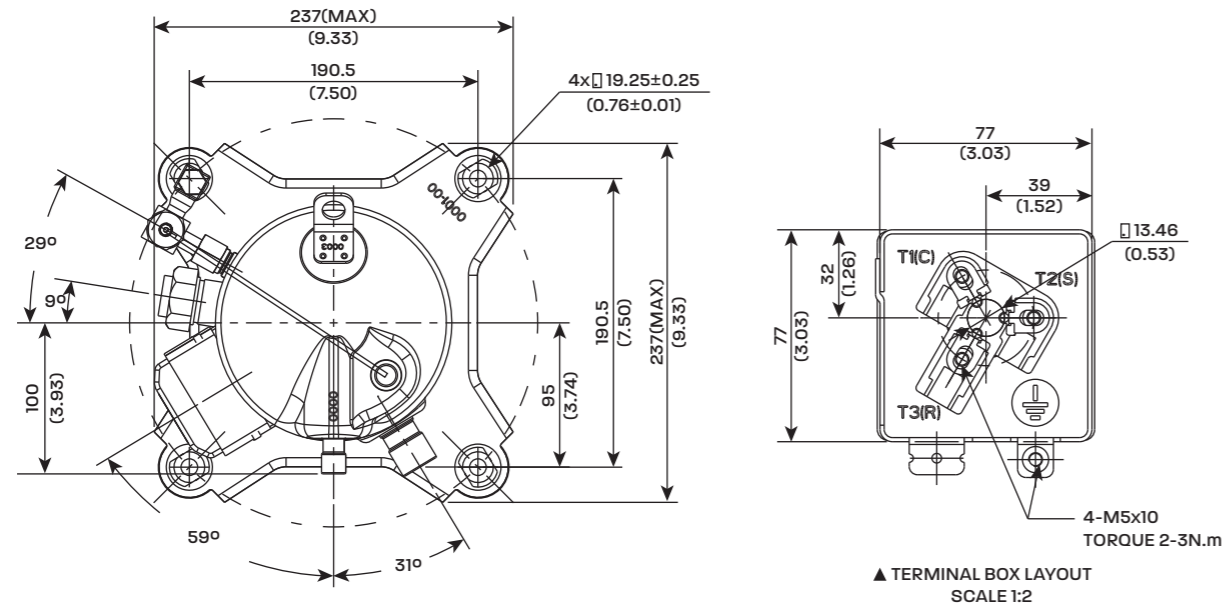
□ 12.78-12.95(0.503-0.510)I.D.  
▽10.1(0.40)MIN.  
0.04-0.08(0.002-0.003) THICK  
EXTERIOR AND INTERIOR  
COPPER PLATED STEEL  
INJECTION FITTING

□ 12.78-12.95(0.503-0.510)I.D.  
▽10.1(0.40)MIN.  
0.04-0.08(0.002-0.003)THICK EXTERIOR AND INTERIOR  
COPPER PLATED STEEL DISCHARGE FITTING  
OPTIONAL: (1.00-14 UNS-2A)THREAD ROTALOCK SPUD  
DISCHARGE FITTING



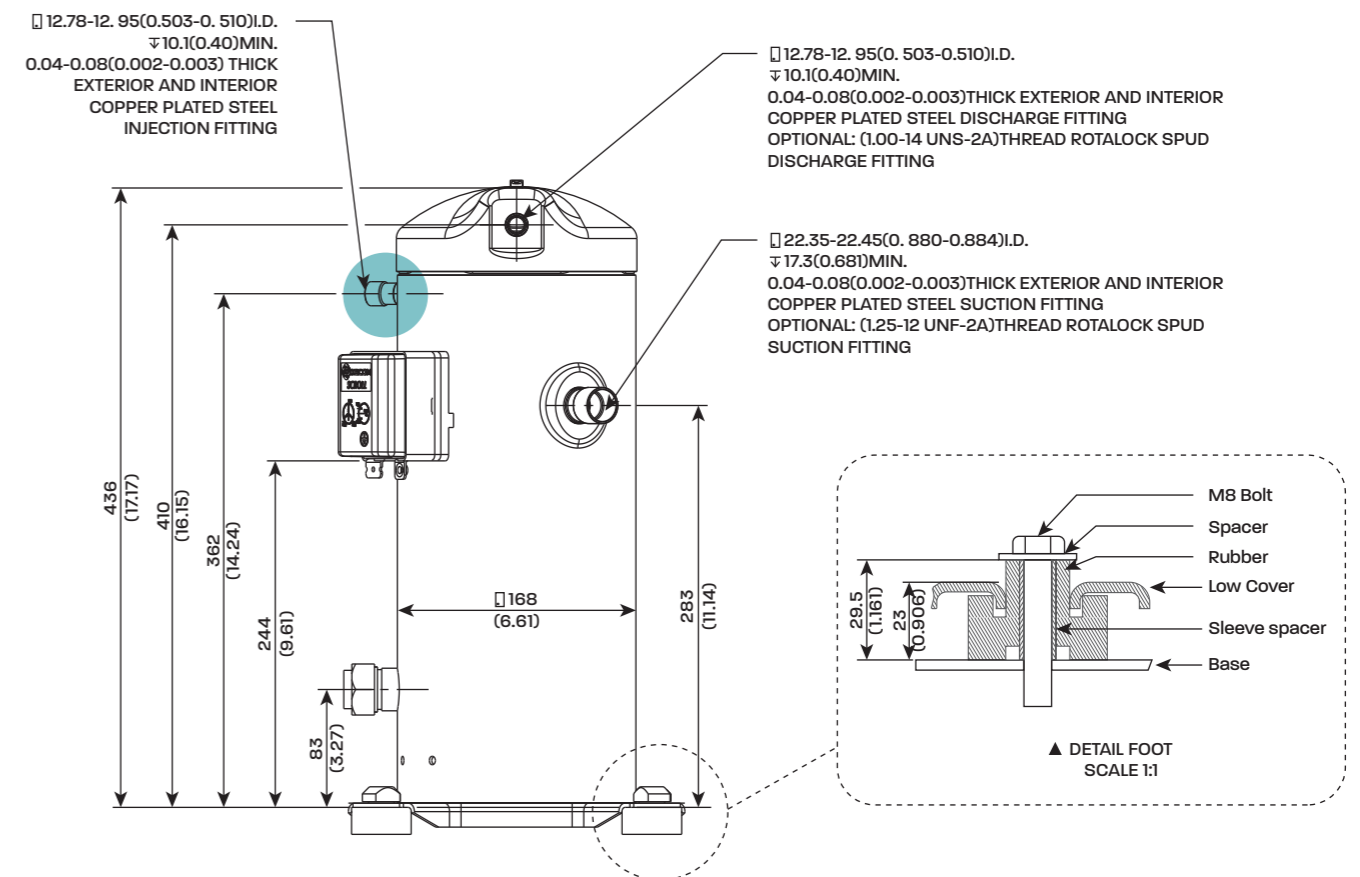
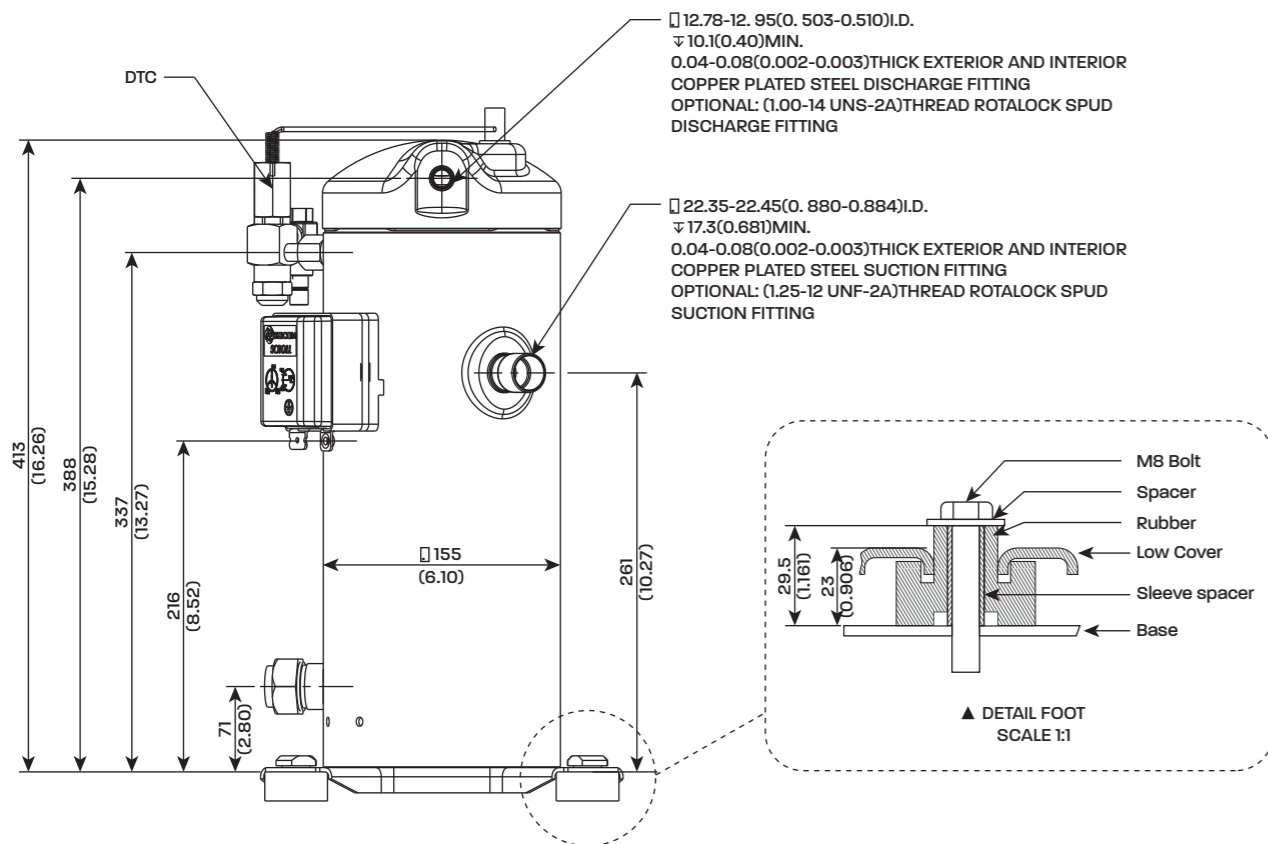
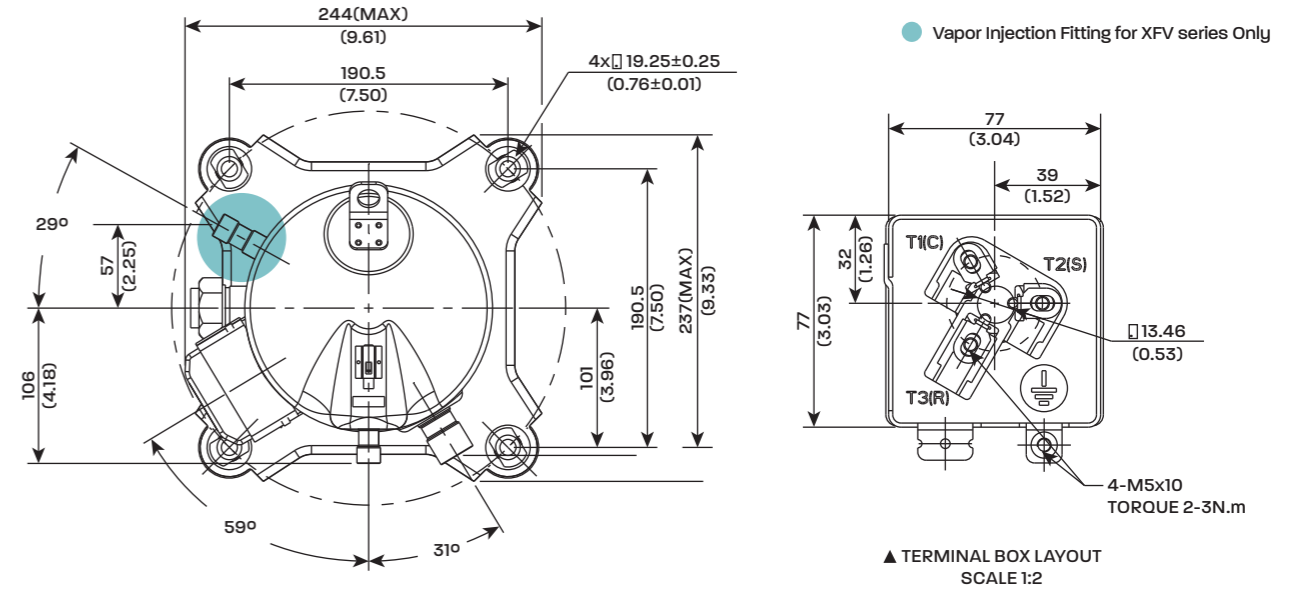
## Dimensional Data | 1.2 - 5HP

Low Temp. Ref. XFLO9-XFL35



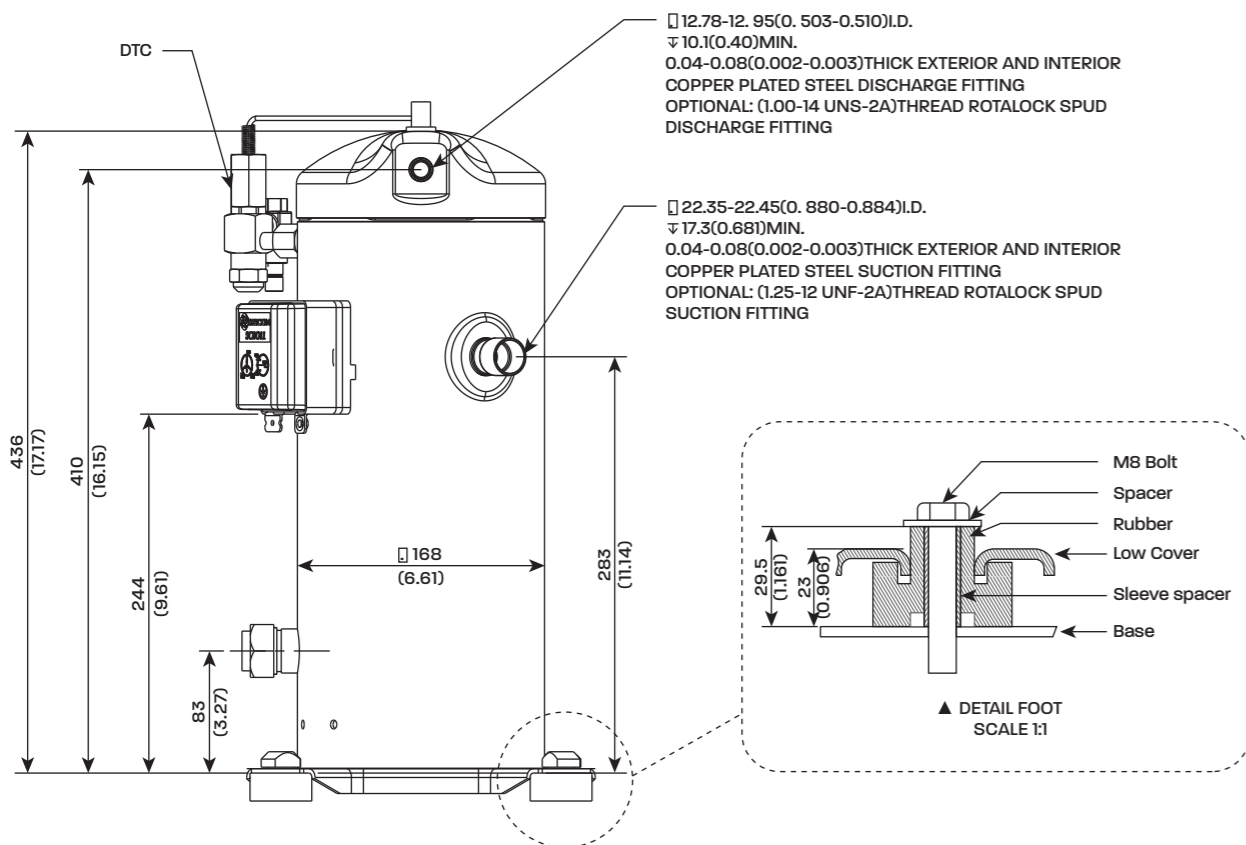
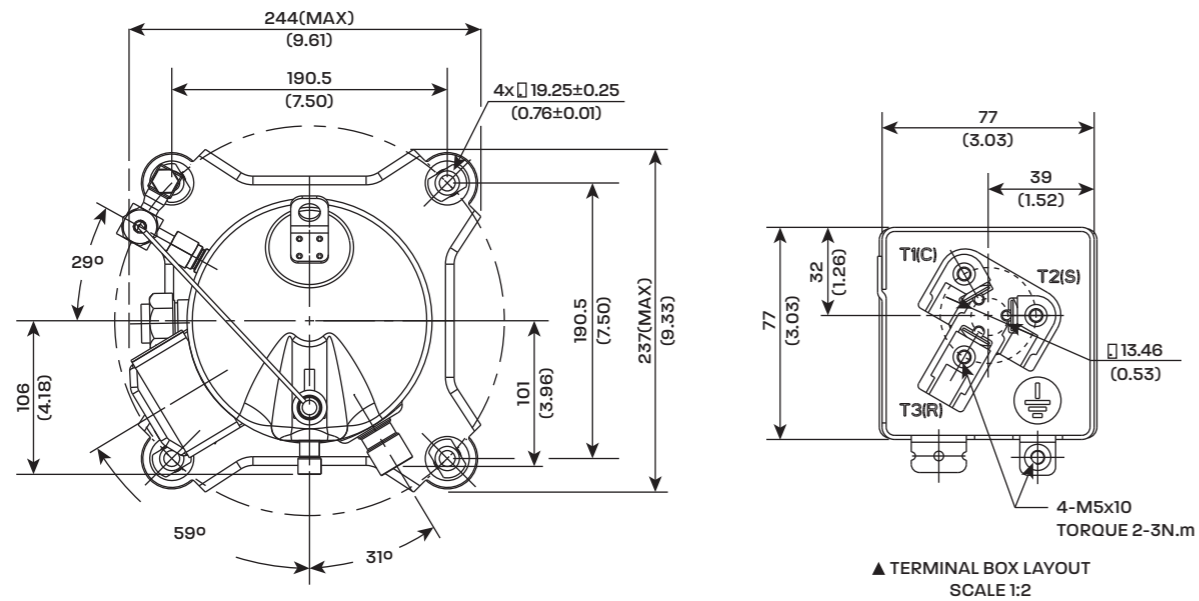
## Dimensional Data | 6 - 8HP

Medium Temp. Ref. XR110-XR135 Low Temp. Ref. Xfv42-Xfv51



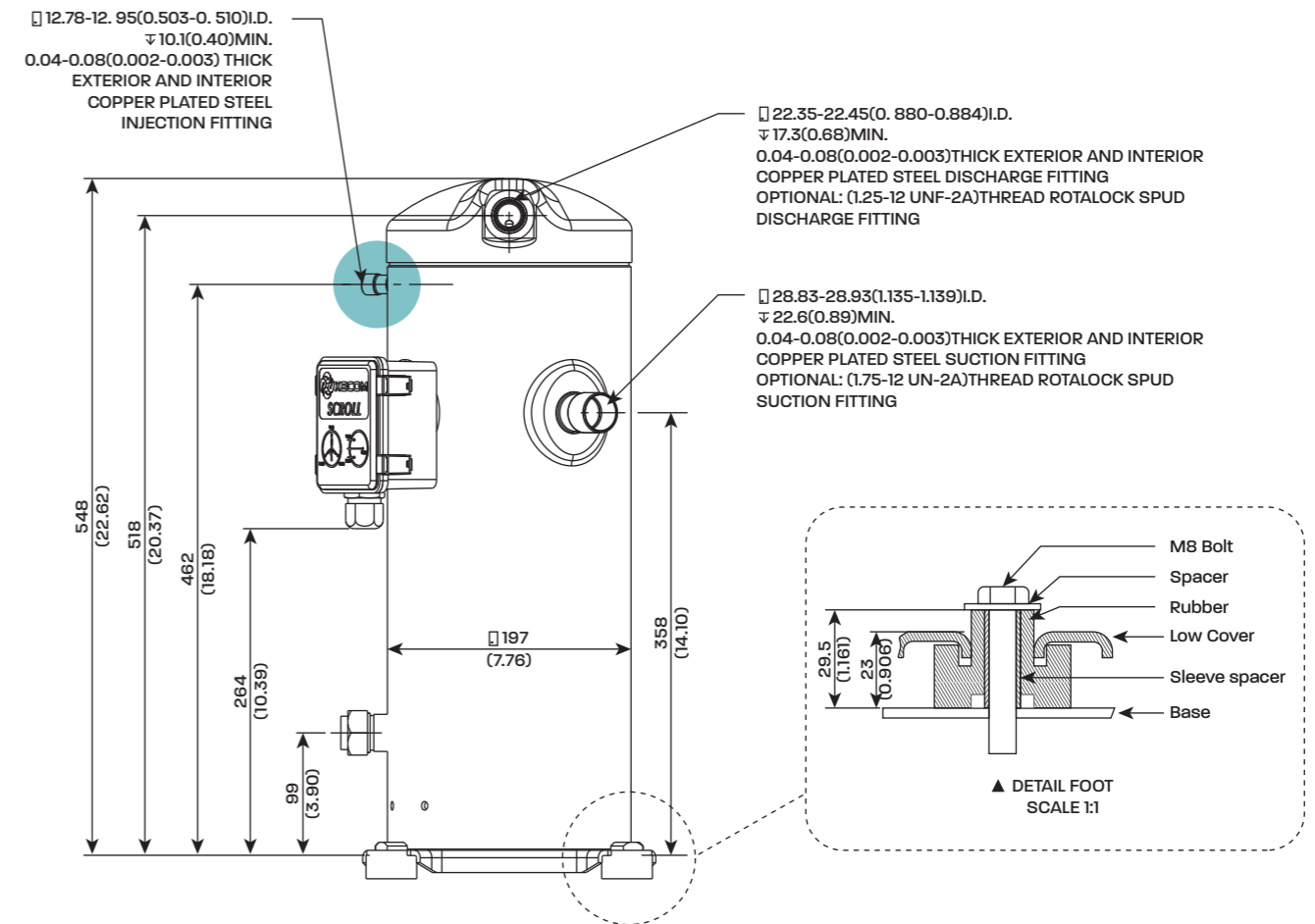
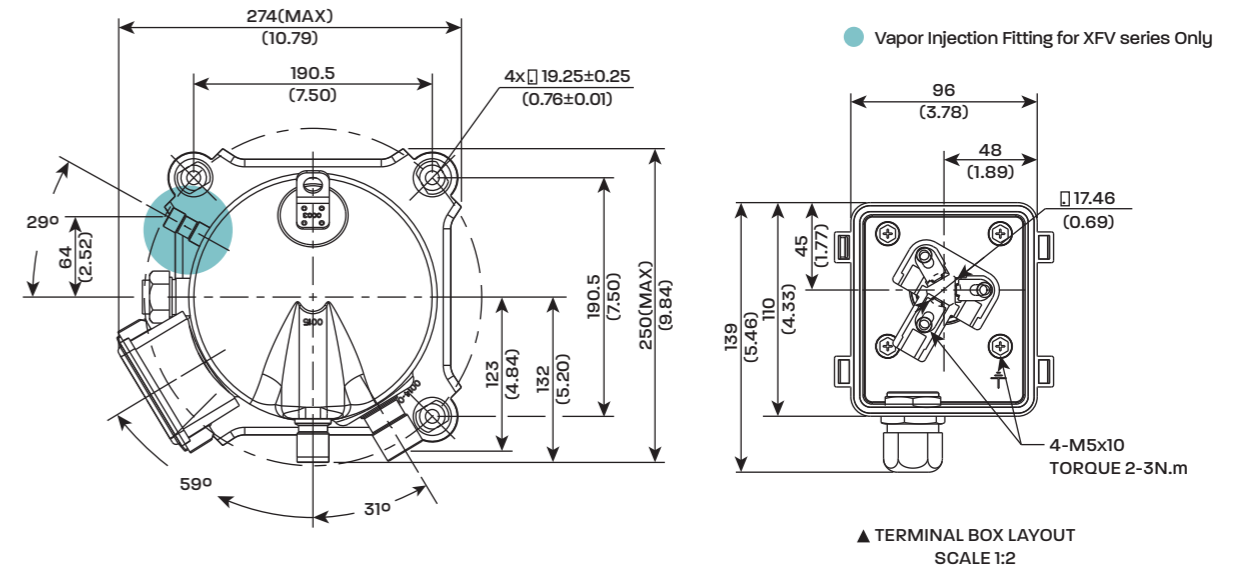
## Dimensional Data | 6 - 8HP

Low Temp. Ref. XFL42-XFL51



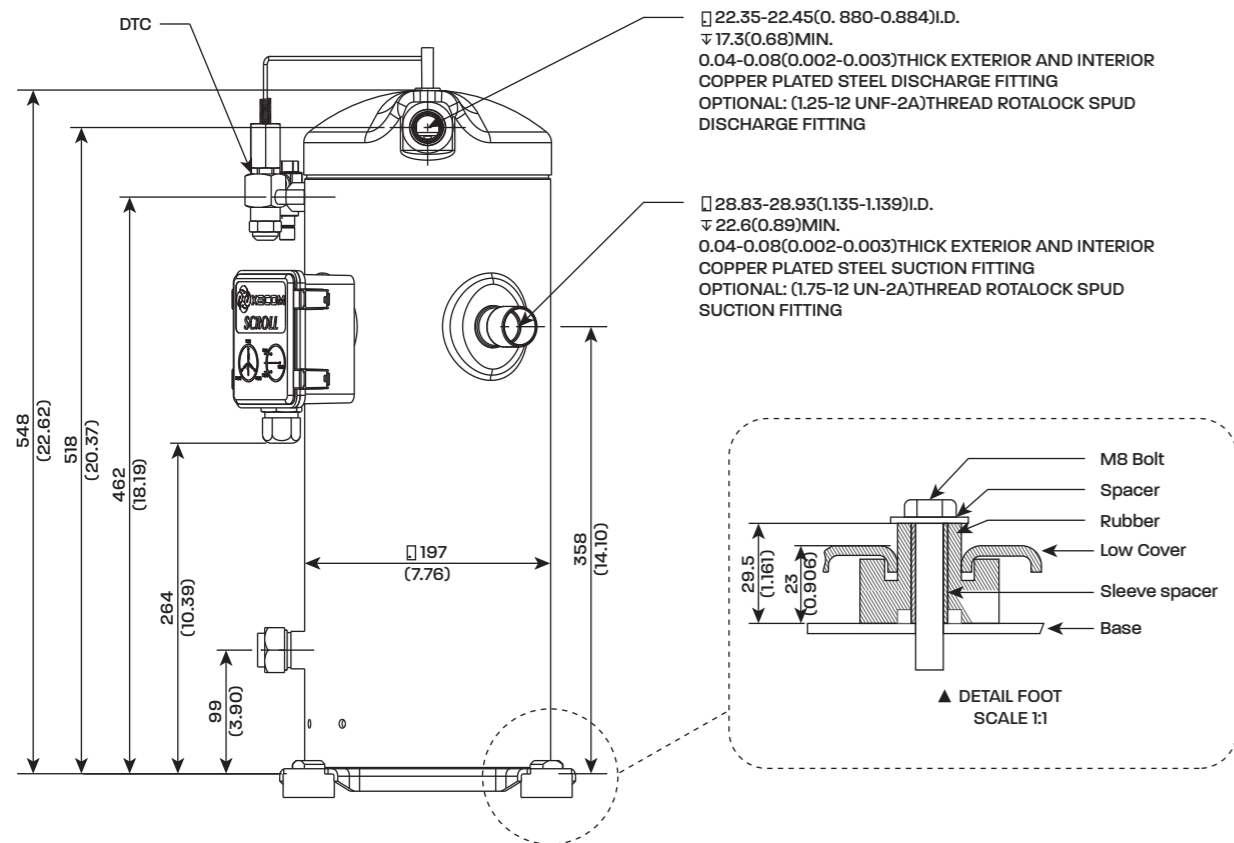
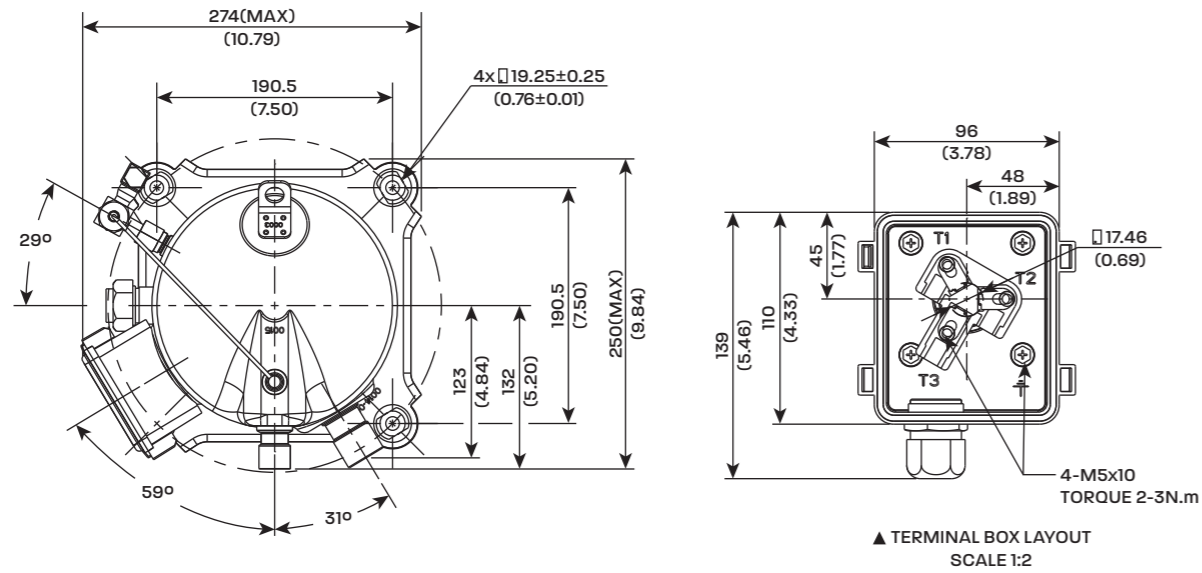
## Dimensional Data | 9 - 20HP

Medium Temp. Ref. XR162-XR280 Low Temp. Ref. XFLV62-XFLV106



## Dimensional Data | 9 - 20HP

Low Temp. Ref. XFL62-XFL106





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Subject to alteration without previous notice  
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