Copeland Air-Cooled Condensing Units

With Reciprocating & Scroll Compressors
For Cold Chain Applications

COPELAND™

EMERSON™

Emerson Cold Chain Centres

Emerson

Emerson is a global technology and engineering company providing innovative solutions for customers in industrial, commercial, and residential markets. Our Emerson Automation Solutions business helps process, hybrid and discrete manufacturers maximize production, protect personnel and the environment while optimizing their energy and operating costs. Our Emerson Commercial and Residential Solutions business helps ensure human comfort and health, protect food quality and safety, advance energy efficiency, and create sustainable infrastructure.

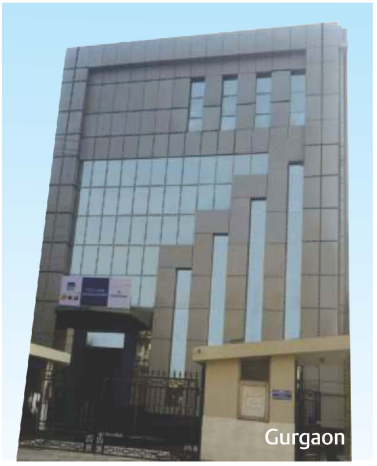
Emerson Cold Chain Centers

In keeping with our commitment of scaling up the cold chain infrastructure in the country, Emerson has developed dedicated state-of-the-art Cold Chain Centers of Excellence at Chakan, Pune and Gurgaon. These centers showcase the wide range of technology and service solutions available for the cold chain industry from Emerson. They also serve as training centers to help contractors on product selection and technology options appropriate for various refrigeration applications.
Together, these centers offer Project Design Services, Training and Education, Semi-Hermetic Services, Distribution Services and more.

State Of The Art Manufacturing Facilities

With increasing demand for locally built branded products & growing focus on Cold Chain, we have set up a world-class assembly line capable of building Condensing Units with reciprocating, semi-hermetic, & scroll technologies that are100% factory tested & unmatched in reliability, performance and energy efficiency. The layout and the performance of the Condensing Units is optimized using CAE facilities. The components are sourced internationally and have been subjected to stringent Qualification Standards of Emerson. Their performance is validated by testing in suitable appliances at an ambient of 46°C. Backed by Emerson's countrywide Sales and Service network, we are positioned to provide prompt service to our customers.

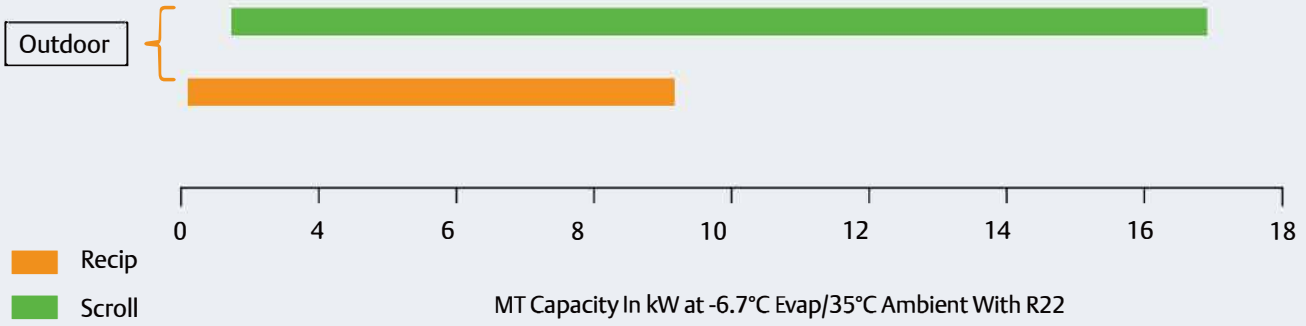
Chakan


Gurgaon

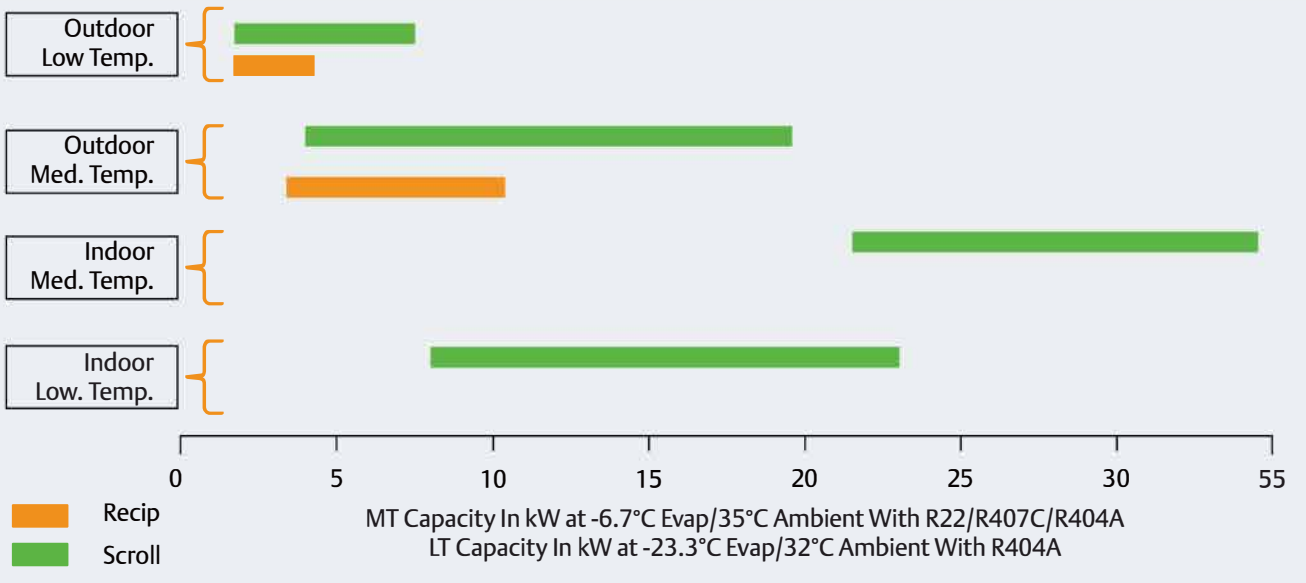
Complete Range for Cold Chain

The Integral Horsepower Condensing Units provide perfect cooling, creating value for its users. These Condensing Units cater to all cold chain applications including milk-cooling, fruits & vegetable, meat/poultry cold storage, fishery, and food services. Our Condensing Units have been successfully adopted in the Indian market and enjoy proven success with its robust and reliable design. These CDUs have been applied by several well-known end-users in the Dairy sector and Process chilling space in India.

Bulk Milk Cooling Tanks

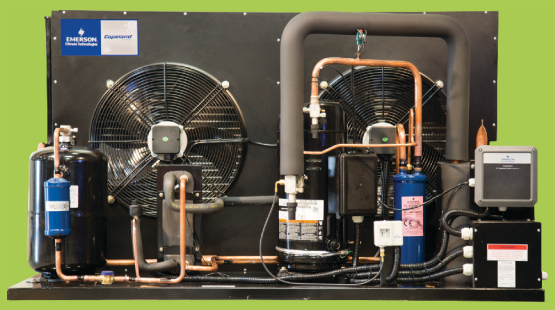


Cold Storage Applications



Choice Is Yours: Indoor & Outdoor Type Condensing Units

Indoor



Simple & Rugged Design
- Reliable in most demanding conditions
- Unique air flow design suited for high ambient conditions

Greater Serviceability
- Easily serviceable in field
- Simple installation

Weather Housing
- Optional Weather-proof and housing available with indoor units

Outdoor

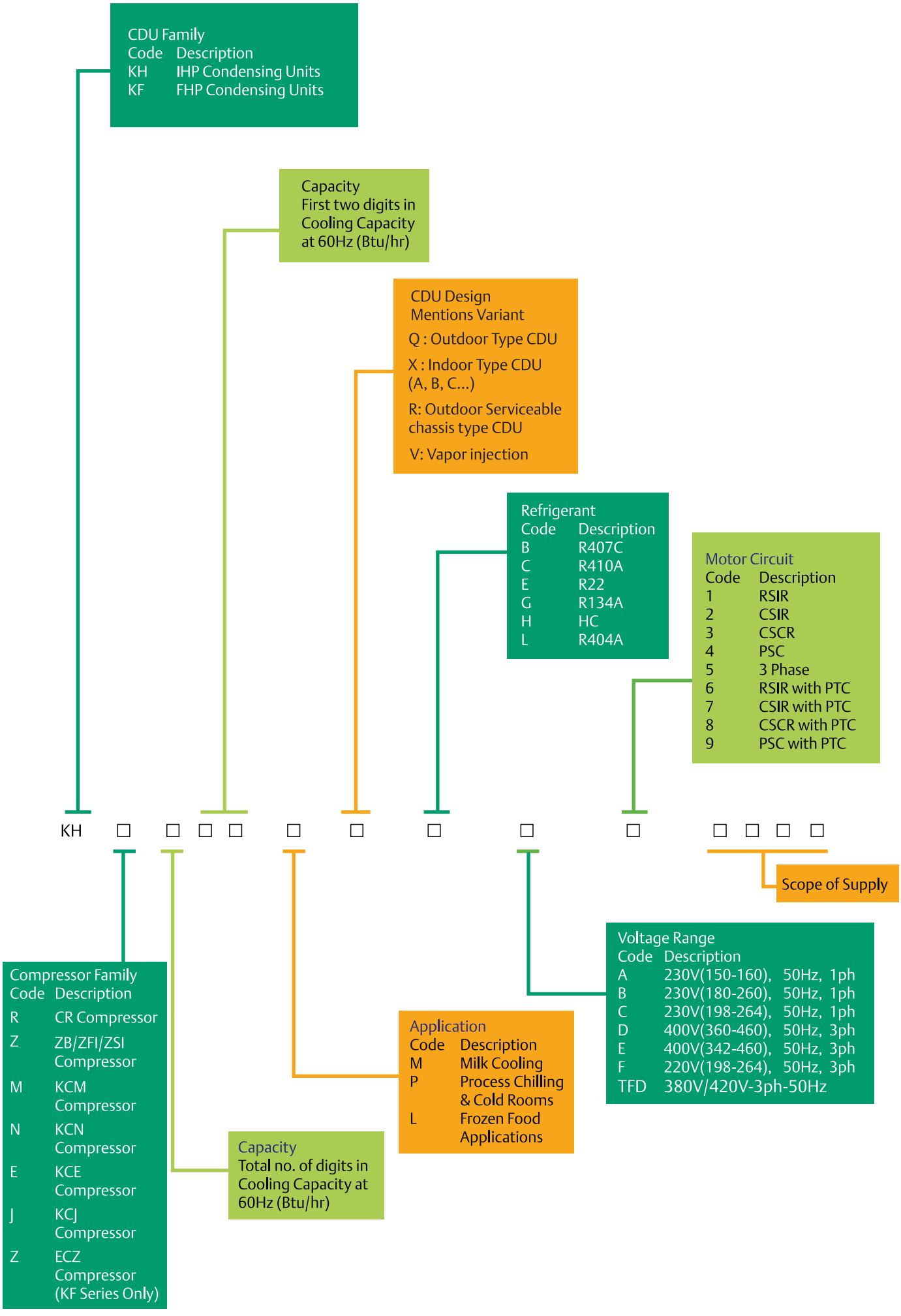
Tropicalized Design
- Large condenser face area & higher CFM for elevated ambient conditions
- Designed to operate at maximum ambient of 46°C

Compact & Sleek
- Aesthetically pleasing and compact

Weather-Proof Housing
- Complete protection from rust and dust

Silent Operation
- Fitted with a low noise fan for quiet operations

Features	Benefits
High Performance • Wide Operating Envelope • Optimized Condenser Design • Higher CFM	• High Ambient Performance Up To 46 ^{O}C • Lower Pull-Down Time • Extreme Field Condition Application
Reliability • Proven System Design • Compressor Selection As Per Application • Robust Components of Construction	• External Module Protects Compressor • Long durable life
Best Life Cycle Cost • High Efficiency Reciprocating and Scroll Compressor Usage • Minimal Vibrations	• Lower Operating Cost • System Leak Reduction
Compact Design • Compact Profile • Light Weight • Low Noise	• Lower Installation Cost • Aesthetically Pleasing • Roof-top and Closer Installation • Useful for Areas with Noise Level Regulations • Comfortable for End-Users
Customizable	• Customized units available for targeted applications like bulk milk coolers, cold rooms among many others • Comes with factory installed components and controls
Versatility	• Multi-Refrigerant Capability including R22, R134A, R404A, R448A
Sales & Service Support	• Pan-India Availability


CDU Family
Code Description
KH IHP Condensing Units
KF FHP Condensing Units
Capacity
First two digits in Cooling Capacity at 60Hz (Btu/hr)
CDU Design
Mentions Variant
Q : Outdoor Type CDU
X : Indoor Type CDU (A, B, C...)
R: Outdoor Serviceable chassis type CDU
V: Vapor injection
Refrigerant
Code Description
B R407C
C R410A
E R22
G R134A
H HC
L R404A
Motor Circuit
Code Description
1 RSIR
2 CSIR
3 CSCR
4 PSC
5 3 Phase
6 RSIR with PTC
7 CSIR with PTC
8 CSCR with PTC
9 PSC with PTC
KH □ □ □ □ □ □ □ □ □ □ □ □ □
Scope of Supply
Voltage Range
Code Description
A 230V(150-160), 50Hz, 1ph
B 230V(180-260), 50Hz, 1ph
C 230V(198-264), 50Hz, 1ph
D 400V(360-460), 50Hz, 3ph
E 400V(342-460), 50Hz, 3ph
F 220V(198-264), 50Hz, 3ph
TFD 380V/420V-3ph-50Hz
Application
Code Description
M Milk Cooling
P Process Chilling & Cold Rooms
L Frozen Food Applications
Compressor Family
Code Description
R CR Compressor
Z ZB/ZFI/ZSI Compressor
M KCM Compressor
N KCN Compressor
E KCE Compressor
J KCJ Compressor
Z ECZ Compressor (KF Series Only)
Capacity
Total no. of digits in Cooling Capacity at 60Hz (Btu/hr)

Process Chilling & Cold Rooms

Complete Range for Medium Temperature Applications

Available from 1 to 30HP covering various segments like Cold Rooms, Banana Ripening, Fruits / Vegetables, Pharmaceutical, Industrial Chillers in Plastic/Rubber Industry.

- 2 to 20kW in Reciprocating
- 3.5 to 54.5kW in Scroll

Optimally Sized Condenser Coil For Elevated Ambient Conditions

The Condensing Units come with large condenser face area & higher CFM for elevated ambient conditions. Our units are factory tested to work at a maximum ambient of 46°C.

Best-In-Class Efficiency & Reliability

Highest efficiency compressors from Copeland; reciprocating/scroll compressors which are designed to handle tropicalized ambient conditions

Silent Operation

With its optimized discharge loop, improved shell design and unique suspension design, the compressors are silent in operation. Condensing Units come with a low noise fan for minimizing the sound. The Condensing Unit structure is reinforced to prevent sound leakage.

Reciprocating Compressor Outdoor Units R404A, 1-Phase

Model		Ambient Temp (°C)	Evaporating Temp (°C)							
			-17.8	-12.2	-6.7	-1.1	4.4	7.2	10.0	12.8
KHM511PQL-BX	Q	35	-	2.5	3.6	4.7	5.9	6.5	7.1	7.7
		38	-	2.4	3.4	4.4	5.5	6.1	6.7	7.3
		43	-	2.2	3.0	3.9	5.0	5.5	6.0	6.6
		46	-	2.0	2.7	3.6	4.6	5.1	5.6	6.1
	P	35	-	1.3	1.5	1.6	1.8	1.8	1.9	1.9
		38	-	1.3	1.5	1.7	1.8	1.9	1.9	2.0
		43	-	1.3	1.5	1.7	1.9	2.0	2.1	2.1
		46	-	1.4	1.6	1.8	2.0	2.0	2.1	2.2
KHM514PQL-BX	Q	35	-	3.4	4.5	5.8	7.2	7.9	8.7	9.3
		38	-	3.2	4.2	5.5	6.8	7.5	8.2	8.8
		43	-	2.8	3.8	4.9	6.2	6.8	7.4	8.0
		46	-	2.6	3.5	4.6	4.9	6.4	6.9	7.5
	P	35	-	1.4	1.9	2.1	2.3	2.4	2.4	2.5
		38	-	1.6	2.0	2.2	2.4	2.4	2.5	2.6
		43	-	1.8	2.0	2.3	2.5	2.6	2.7	2.7
		46	-	1.8	2.1	2.3	2.6	2.7	2.8	2.8
KHM519PQL-BX	Q	35	-	4.5	5.8	7.2	8.8	9.6	10.4	11.1
		38	-	4.2	5.4	6.8	8.3	9.1	9.8	10.5
		43	-	3.8	4.9	6.1	7.5	8.2	8.8	9.5
		46	-	3.3	4.3	5.4	6.6	7.3	7.8	-
	P	35	-	2.1	2.4	2.5	2.7	2.8	2.8	2.9
		38	-	2.2	2.4	2.6	2.8	2.9	3.0	3.0
		43	-	2.3	2.5	2.8	3.0	3.1	3.1	3.2
		46	-	2.3	2.6	2.9	3.1	3.2	3.3	-
KHM522PQL-BX	Q	35	-	5.3	6.5	8.2	9.9	10.8	11.6	12.4
		38	-	4.9	6.1	7.7	9.4	10.2	11.0	11.7
		43	-	4.3	5.4	6.9	8.5	9.3	10.0	10.6
		46	-	4.0	5.1	6.5	8.0	8.8	9.4	10.0
	P	35	-	2.4	2.7	2.9	3.2	3.3	3.4	3.4
		38	-	2.4	2.7	3.0	3.3	3.4	3.5	3.6
		43	-	2.5	2.8	3.2	3.4	3.6	3.7	3.8
		46	-	2.5	2.9	3.2	3.5	3.6	3.8	3.9

Q: Cooling Capacity (kW) P: Power Input Including Fan Motor Power(kW) Return Gas Of 18.3°C, Subcooling 0K

Reciprocating Compressor Outdoor Units R404A, 3-Phase									
Model		Ambient Temp (°C)	Evaporating Temp (°C)						
			-17.8	-12.2	-6.7	-1.1	4.4	7.2	10.0	12.8
KHM511PQL-EX	Q	35	-	2.8	3.9	5.2	6.3	6.7	7.0	7.3
		38	-	2.6	3.7	4.8	5.9	6.4	6.7	7.0
		43	-	2.3	3.2	4.3	5.3	5.8	6.2	6.6
		46	-	1.9	2.9	3.9	4.9	5.4	5.8	6.2
	P	35	-	1.3	1.4	1.6	1.7	1.7	1.8	1.8
		38	-	1.3	1.5	1.6	1.8	1.8	1.9	1.9
		43	-	1.3	1.5	1.7	1.8	1.9	1.9	2.0
		46	-	1.4	1.5	1.7	1.9	1.9	2.0	2.1
KHM514PQL-EX	Q	35	-	3.7	5.1	6.6	8.0	8.4	9.0	9.7
		38	-	3.4	4.8	6.1	7.4	8.0	8.5	9.3
		43	-	3.0	4.2	5.4	6.6	7.2	7.7	8.6
		46	-	2.6	3.7	4.9	6.1	6.7	7.2	8.1
	P	35	-	1.3	1.4	1.6	1.7	1.7	1.8	1.8
		38	-	1.3	1.5	1.6	1.8	1.8	1.9	1.9
		43	-	1.3	1.5	1.7	1.8	1.9	1.9	2.0
		46	-	1.4	1.5	1.7	1.9	1.9	2.0	2.1
KHM519PQL-EX	Q	35	-	4.5	5.8	7.2	8.8	9.6	10.4	11.1
		38	-	4.2	5.4	6.8	8.3	9.1	9.8	10.5
		43	-	3.8	4.9	6.1	7.5	8.2	8.8	9.5
		46	-	3.5	4.5	5.7	7.0	7.6	8.3	-
	P	35	-	2.1	2.4	2.5	2.7	2.8	2.8	2.9
		38	-	2.2	2.4	2.6	2.8	2.9	2.9	3.0
		43	-	2.3	2.5	2.8	3.0	3.1	3.1	3.2
		46	-	2.3	2.6	2.9	3.1	3.2	3.3	-
KHM522PQL-EX	Q	35	-	5.3	6.5	8.2	9.9	10.8	11.6	12.4
		38	-	4.9	6.1	7.7	9.4	10.2	11.0	11.7
		43	-	4.3	5.4	6.9	8.5	9.3	10.0	10.6
		46	-	4.0	5.1	6.5	8.0	8.8	9.4	10.0
	P	35	-	2.4	2.7	2.9	3.2	3.3	3.4	3.4
		38	-	2.4	2.7	3.0	3.3	3.4	3.5	3.6
		43	-	2.5	2.8	3.2	3.4	3.6	3.7	3.8
		46	-	2.5	2.9	3.2	3.5	3.6	3.8	3.9

Q: Cooling Capacity (kW) P: Power Input Including Fan Motor Power(kW) Return Gas Of 18.3°C, Subcooling 0K

Reciprocating Compressor Outdoor Units R22, 1-Phase

Model		Ambient Temp (°C)	Evaporating Temp (°C)							
			-17.8	-12.2	-6.7	-1.1	4.4	7.2	10.0	12.8
KHJ513PQE-FX	Q	35	-	1.6	2.1	2.6	3.3	3.8	4.3	4.8
		38	-	1.5	2.0	2.5	3.2	3.6	4.1	4.7
		43	-	1.4	1.8	2.3	3.0	3.4	3.9	4.4
		46	-	1.3	1.7	2.2	2.9	3.3	3.8	4.3
	P	35	-	1.1	1.2	1.3	1.4	1.4	1.5	1.5
		38	-	1.1	1.2	1.3	1.4	1.5	1.5	1.6
		43	-	1.2	1.2	1.3	1.4	1.5	1.6	1.6
		46	-	1.2	1.3	1.4	1.5	1.5	1.6	1.7
KHR522PQE-BX	Q	35	1.7	2.6	3.4	4.3	5.3	5.8	6.4	7.0
		38	-	2.4	3.2	4.1	5.0	5.5	6.0	6.6
		43	-	2.1	2.9	3.7	4.5	5.0	5.5	6.0
		46	-	1.9	2.7	3.5	4.3	4.8	5.3	5.8
	P	35	1.2	1.4	1.5	1.6	1.7	1.8	1.8	1.9
		38	-	1.4	1.5	1.7	1.8	1.8	1.9	2.0
		43	-	1.4	1.6	1.7	1.8	1.9	2.0	2.0
		46	-	1.4	1.6	1.7	1.9	1.9	2.0	2.1
KHR530PQE-BX	Q	35	2.3	3.2	4.3	5.4	6.6	7.2	7.7	8.3
		38	-	3.0	4.0	5.1	6.3	6.8	7.4	8.0
		43	-	2.6	3.6	4.6	5.7	6.3	6.8	7.3
		46	-	2.4	3.4	4.5	5.6	6.1	6.6	7.2
	P	35	1.3	1.7	1.9	2.2	2.3	2.4	2.5	2.5
		38	-	1.7	2.0	2.2	2.4	2.5	2.5	2.6
		43	-	1.7	2.0	2.3	2.5	2.6	2.6	2.7
		46	-	1.7	2.0	2.3	2.5	2.6	2.7	2.7
KHR536PQE-BX	Q	35	2.9	4.1	5.4	6.7	8.2	8.9	9.7	10.5
		38	-	3.8	5.1	6.4	7.8	8.5	9.2	10.0
		43	-	3.4	4.6	5.8	7.2	7.8	8.5	9.2
		46	-	3.1	4.3	5.6	6.9	7.6	8.3	9.0
	P	35	1.8	2.0	2.2	2.4	2.6	2.6	2.7	2.7
		38	-	2.0	2.3	2.5	2.7	2.7	2.8	2.8
		43	-	2.0	2.3	2.6	2.8	2.9	3.0	3.0
		46	-	2.0	2.4	2.6	2.9	3.0	3.0	3.1

Q: Cooling Capacity (kW) P: Power Input Including Fan Motor Power(kW) Return Gas Of 18.3°C, Subcooling 0K

Reciprocating Compressor Outdoor Units R22, 3-Phase

Model		Ambient Temp (°C)	Evaporating Temp (°C)							
			-17.8	-12.2	-6.7	-1.1	4.4	7.2	10.0	12.8
KHR522PQE-DX	Q	35	1.8	2.5	3.2	4.2	5.2	5.7	6.2	6.8
		38	-	2.3	3.0	3.9	4.9	5.4	5.9	6.4
		43	-	2.0	2.7	3.5	4.5	5.0	5.4	5.9
		46	-	1.8	2.5	3.3	4.3	4.7	5.2	5.7
	P	35	1.1	1.2	1.4	1.6	1.7	1.8	1.8	1.8
		38	-	1.2	1.4	1.6	1.7	1.8	1.9	1.9
		43	-	1.2	1.4	1.6	1.8	1.9	1.9	2.0
		46	-	1.2	1.4	1.6	1.8	1.9	2.0	2.0
KHR530PQE-DX	Q	35	2.3	3.3	4.3	5.3	6.3	6.9	7.6	8.3
		38	-	3.1	4.0	5.0	6.0	6.6	7.2	7.9
		43	-	2.7	3.6	4.5	5.4	6.0	6.6	7.3
		46	-	2.5	3.4	4.2	5.2	5.8	6.4	7.1
	P	35	1.4	1.5	1.8	2.0	2.2	2.3	2.4	2.5
		38	-	1.6	1.8	2.0	2.3	2.4	2.5	2.5
		43	-	1.6	1.9	2.1	2.4	2.5	2.5	2.6
		46	-	1.6	1.9	2.1	2.4	2.5	2.5	2.6
KHR536PQE-DX	Q	35	2.9	4.1	5.4	6.7	8.2	8.9	9.7	10.5
		38	-	3.8	5.1	6.4	7.8	8.5	9.2	10.0
		43	-	3.4	4.6	5.8	7.2	7.8	8.5	9.2
		46	-	3.1	4.3	5.6	6.9	7.6	8.3	9.0
	P	35	1.8	2.0	2.2	2.4	2.6	2.6	2.7	2.7
		38	-	2.0	2.3	2.5	2.7	2.7	2.8	2.8
		43	-	2.0	2.3	2.6	2.8	2.9	3.0	3.0
		46	-	2.0	2.4	2.6	2.9	3.0	3.0	3.1
KHR542PQE-DX	Q	35	3.7	4.8	6.1	7.7	9.3	10.2	11.1	12.0
		38	-	4.5	5.8	7.3	8.9	9.7	10.5	11.4
		43	-	4.1	5.3	6.6	8.1	8.8	9.6	10.4
		46	-	3.8	4.9	6.1	7.4	8.0	8.8	10.2
	P	35	1.9	2.3	2.6	2.9	3.1	3.2	3.3	3.4
		38	-	2.3	2.6	2.9	3.2	3.3	3.4	3.5
		43	-	2.3	2.7	3.0	3.3	3.5	3.6	3.7
		46	-	2.3	2.7	3.1	3.4	3.6	3.7	3.7
KHR553PQE-DX	Q	35	-	6.9	8.5	10.4	12.5	13.6	14.8	16.1
		38	-	6.6	8.2	10.0	12.1	13.2	14.3	15.5
		43	-	6.1	7.6	9.4	11.3	12.3	13.4	14.5
		46	-	5.6	7.3	9.0	10.9	11.9	12.9	14.0
	P	35	-	3.3	3.6	3.8	3.9	4.0	4.0	4.0
		38	-	3.5	3.7	4.0	4.2	4.2	4.3	4.3
		43	-	3.6	4.0	4.3	4.5	4.6	4.7	4.7
		46	-	3.8	4.1	4.4	4.7	4.8	4.9	5.0
KHR562PQE-DX	Q	35	-	8.0	9.9	12.0	14.3	15.5	16.8	18.1
		38	-	7.7	9.5	11.5	13.7	14.9	16.2	17.4
		43	-	7.2	8.9	10.8	12.9	14.0	15.1	16.4
		46	-	6.7	8.5	10.4	12.4	13.5	14.6	15.8
	P	35	-	4.0	4.3	4.5	4.7	4.7	4.8	4.8
		38	-	4.1	4.4	4.7	4.9	5.0	5.1	5.1
		43	-	4.4	4.7	5.1	5.3	5.4	5.5	5.6
		46	-	4.5	4.9	5.2	5.5	5.7	5.8	5.9
KHR572PQE-DX	Q	35	-	8.2	10.3	12.4	15.6	17.2	18.4	19.6
		38	-	7.8	9.9	12.1	15.0	16.4	17.7	18.9
		43	-	7.0	9.3	11.7	14.0	15.2	16.5	17.9
		46	-	6.6	9.0	11.4	13.5	14.5	15.9	17.3
	P	35	-	4.1	4.7	5.3	5.8	6.1	6.4	6.8
		38	-	4.2	4.8	5.4	6.0	6.3	6.7	7.0
		43	-	4.3	4.9	5.6	6.3	6.6	7.0	7.4
		46	-	4.3	5.0	5.7	6.4	6.8	7.2	7.6

Q: Cooling Capacity (kW) P: Power Input Including Fan Motor Power(kW) Return Gas Of 18.3°C, Subcooling 0K

Reciprocating Compressor Units R407C, 1-Phase

Model		Ambient Temp (°C)	Evaporating Temp (°C)							
			-17.8	-12.2	-6.7	-1.1	4.4	7.2	10.0	12.8
KHR522PQB-BX	Q	35		1.9	2.6	3.4	4.2	4.6	5.0	5.5
		38		1.8	2.5	3.2	3.9	4.4	4.8	5.3
		43		1.5	2.2	2.9	3.6	4.0	4.4	4.8
	P	35		1.3	1.5	1.6	1.8	1.9	1.9	2.0
		38		1. 3	1. 4	1.6	1. 8	1.9	2.0	2. 1
		43		1.3	1.5	1.7	1.8	1.9	2.0	2.1
KHR530PQB-BX	Q	35		3.2	4.1	5.2	6.3	6.8	7.4	8.0
		38		2.9	3.8	4.9	6.0	6.5	7.1	7.6
		43		2.5	3.3	4.4	5.5	6.1	6.5	7.0
	P	35		1.7	1.9	2.0	2.2	2.3	2.4	2.4
		38		1.7	1.9	2.1	2.3	2.4	2.4	2.5
		43		1.7	1.9	2.2	2.5	2.5	2.6	2.6
KHR536PQB-BX	Q	35		3.5	4.7	6.2	7.8	8.7	9.7	10.7
		38		3.2	4.4	5.8	7.4	07.9	9.2	10.1
		43		3.0	4.0	5.2	6.6	6.5	8.2	9.0
	P	35		2.1	2.3	2.5	2.6	2.7	2.8	2.8
		38		2.1	2.3	2.5	2.7	2.8	2.8	2.9
		43		2.1	2.5	2.7	2.9	3.0	3.1	3.1
KHR542PQB-DX	Q	35		3.9	5.6	7.5	9.8	11.2	12.6	14.2
		38		3.6	5.2	7.1	9.3	10.6	12.0	13.6
		43		3.1	4.6	6.3	8.4	9.6	11.0	12.4
	P	35		2.3	2.6	2.9	3.2	3.3	3.3	3.1
		38		2.4	2.7	3.0	3.3	3.4	3.5	3.4
		43		2.4	2.8	3.1	3.5	3.7	3.8	3.9

Q : Cooling Capacity (kW) P : Power Input Including Fan Motor Power (kW) Return Gas of 18°C, Subcooling : 2.7K

Reciprocating Compressor Units R407C, 3-Phase

Model		Ambient Temp (°C)	Evaporating Temp (°C)							
			-17.8	-12.2	-6.7	-1.1	4.4	7.2	10.0	12.8
KHR521PQB-EX	Q	35		2.0	2.7	3.4	4.3	4.7	5.3	5.8
		38		1.9	2.5	3.2	4.0	4.5	5.0	5.5
		43		1.6	2.2	2.9	3.6	4.1	4.6	5.1
	P	35		1.2	1.4	1.5	1.7	1.7	1.8	1.8
		38		1. 2	1.4	1.5	1.7	1.8	1.8	1.9
		43		1.3	1.4	1.6	1.8	1.9	1.9	2.0
KHR529PQB-XX	Q	35		3.2	4.2	5.5	6.5	7.1	7.6	8.2
		8		3.0	4.0	5.1	6.2	6.7	7.3	7.8
		43		2.5	3.6	4.6	5.7	6.1	6.7	7.2
	P	35		1.5	1.7	2.0	2.1	2.3	2.4	2.6
		38		1.5	1.8	2.0	2.2	2.4	2.4	2.5
		43		1.6	1.9	2.0	2.3	2.4	2.5	2.6
KHR535PQB-EX	Q	35		3.7	5.1	6.6	8.4	9.3	10.3	11.4
		38		3.5	4.7	6.2	7.9	8.8	9.8	10.8
		43		3.1	4.2	5.5	7.1	7.9	8.8	9.7
	P	35		2.0	2.2	2.4	2.6	2.6	2.7	2.7
		38		2.0	2.3	2.5	2.6	2.7	2.8	2.8
		43		2.1	2.3	2.6	2.8	2.9	2.9	3.0
KHR541PQB-EX	Q	35		4.3	5.9	7.7	9.8	10.8	11.9	13.1
		38		4.0	5.5	7.2	9.2	10.2	11.3	12.4
		43		3.4	4.9	6.4	8.1	9.1	10.1	11.1
	P	35		2.3	2.5	2.8	3.0	3.1	3.1	3.2
		38		2.4	2.6	2.9	3.1	3.2	3.3	3.3
		43		2.4	2.7	3.0	3.3	3.2	3.5	3.5
KHR553PQB-DX	Q	35		5.3	7.3	9.7	12.5	13.7	15.3	16.9
		38		4.8	6.8	9.1	11.8	13.0	14.4	16.1
		43		3.9	5.8	7.9	10.5	11.7	13.0	14.4
	P	35		3.1	3.2	3.6	3.9	4.0	4.2	4.4
		38		3.1	3.2	3.6	4.0	4.1	4.2	4.6
		43		3.1	3.2	3.7	4.1	4.3	4.5	4.8
KHR562PQB-DX	Q	35		6.1	8.7	11.5	14.6	16.3	18.0	19.9
		38		5.6	8.1	10.7	13.7	15.3	17.0	18.8
		43		4.6	6.9	9.3	12.2	13.8	15.2	16.9
	P	35		3.4	3.8	4.2	4.8	5.0	5.2	5.5
		38		3.5	3.6	4.3	4.9	5.0	5.4	5.7
		43		3.4	3.9	4.4	5.0	5.2	5.5	5.8
KHR572PQB-DX	Q	35		6.4	9.1	12.0	15.3	17.1	18.9	20.9
		38		5.9	8.5	11.3	14.4	16.1	17.9	19.7
		43		4.8	7.2	9.8	12.8	14.5	16.0	17.7
	P	35		3.5	3.9	4.5	5.0	5.2	5.5	5.8
		38		3.6	3.8	4.6	5.1	5.3	5.6	5.9
		43		3.6	4.0	4.6	5.2	5.5	5.8	6.1

Q : Cooling Capacity (kW) P : Power Input Including Fan Motor Power (kW) Return Gas of 18°C, Subcooling : 2.7K

Scroll Compressor Outdoor Units R404A, 3-Phase

Model		Ambient Temp (°C)	Evaporating Temp (°C)							
			-15.0	-12.2	-6.7	-1.1	4.4	7.2	10.0	12.8
KHZ515PQL-EX*	Q	35	3.0	3.3	4.1	4.9	5.9	6.3	6.8	-
		38	2.8	3.1	3.8	4.6	5.5	6.0	6.5	-
		43	2.5	2.8	3.5	4.2	5.0	5.4	5.8	-
		46	2.3	2.6	3.2	3.8	4.6	5.0	5.4	-
	P	35	1.9	1.9	1.9	1.8	1.9	1.9	1.9	-
		38	2.0	2.0	2.0	2.0	2.0	2.0	2.0	-
		43	2.3	2.3	2.3	2.2	2.2	2.2	2.2	-
		46	2.5	2.5	2.5	2.4	2.4	2.4	2.4	-
KHZ519PQL-EX*	Q	35	3.7	4.1	4.9	5.9	7.0	7.6	8.2	-
		38	3.5	3.9	4.7	5.6	6.7	7.2	7.8	-
		43	3.2	3.5	4.3	5.2	6.1	6.6	7.1	-
		46	3.0	3.3	4.0	4.9	5.7	6.2	6.7	-
	P	35	2.0	2.0	2.0	2.0	2.1	2.1	2.1	-
		38	2.1	2.1	2.2	2.2	2.2	2.3	2.3	-
		43	2.4	2.4	2.4	2.5	2.5	2.5	2.6	-
		46	2.6	2.6	2.6	2.7	2.7	2.7	2.7	-
KHZ521PQL-EX*	Q	35	4.1	4.1	5.0	5.9	6.8	7.2	7.6	-
		38	3.9	3.9	4.8	5.6	6.6	7.0	7.5	-
		43	3.7	3.7	4.6	5.3	6.3	6.8	7.3	-
		46	3.3	3.3	4.2	5.1	6.0	-	-	-
	P	35	2.9	2.9	3.1	3.3	3.4	3.5	3.6	-
		38	3.1	3.1	3.3	3.5	3.6	3.7	3.8	-
		43	3.5	3.5	3.6	3.8	4.0	4.0	4.1	-
		46	3.7	3.7	3.8	4.0	4.2	-	-	-
KHZ526PQL-EX	Q	35	5.8	5.8	7.0	8.3	9.8	10.6	11.4	-
		38	5.5	5.5	6.6	7.8	9.2	10.0	10.7	-
		43	4.9	4.9	5.9	7.0	8.3	9.0	9.7	-
		46	4.8	4.8	5.5	6.6	-	-	-	-
	P	35	2.9	2.9	3.0	3.1	3.2	3.2	3.2	-
		38	3.2	3.2	3.2	3.3	3.4	3.4	3.5	-
		43	3.6	3.6	3.6	3.7	3.8	3.8	3.9	-
		46	3.8	3.8	3.9	4.0	-	-	-	-
KHZ529PQL-EX	Q	35	6.0	6.6	7.9	9.3	11.0	11.8	12.7	-
		38	5.6	6.2	7.4	8.8	10.3	11.1	12.0	-
		43	5.0	5.5	6.6	7.8	9.2	9.9	10.7	-
		46	4.8	5.3	6.4	-	-	-	-	-
	P	35	3.4	3.4	3.6	3.7	3.8	3.8	3.9	-
		38	3.7	3.7	3.8	3.9	4.1	4.1	4.2	-
		43	4.2	4.2	4.3	4.4	4.5	4.6	4.6	-
		46	4.5	4.5	4.6	-	-	-	-	-

*Single phase available

Q: Cooling Capacity (kW) P: Power Input Including Fan Motor Power(kW) Return Gas Of 18.3°C, Subcooling 0K

Scroll Compressor Outdoor Units R404A, 3-Phase

Model		Ambient Temp (°C)	Evaporating Temp (°C)							
			-15.0	-12.2	-6.7	-1.1	4.4	7.2	10.0	12.8
KHZ538PQL-EX	Q	35	7.5	8.3	10.0	11.8	13.9	15.1	16.3	-
		38	7.1	7.8	9.4	11.2	13.2	14.3	15.4	-
		43	6.4	7.1	8.5	10.2	12.0	12.9	14.0	-
		46	6.1	6.7	8.1	9.6	11.3	12.3	13.2	-
	P	35	4.2	4.3	4.4	4.5	4.6	4.7	4.8	-
		38	4.5	4.6	4.7	4.8	4.9	5.0	5.1	-
		43	5.1	5.1	5.2	5.4	5.5	5.5	5.6	-
		46	5.4	5.4	5.5	5.7	5.8	5.8	5.9	-
KHZ545PQL-EX	Q	35	7.0	8.4	11.2	13.6	15.5	16.4	18.4	-
		38	7.0	8.2	10.6	12.7	14.4	15.6	17.4	-
		43	7.1	7.9	9.5	11.1	12.6	14.2	15.7	-
		46	-	7.8	8.9	9.4	10.4	-	-	-
	P	35	5.8	5.7	5.4	5.5	5.9	6.1	6.6	-
		38	5.8	5.8	5.7	5.9	6.2	6.5	6.8	-
		43	5.8	5.9	6.3	6.4	6.8	7.0	7.1	-
		46	-	6.1	6.6	6.6	7.0	-	-	-
KHZ548PQL-EX	Q	35	8.7	9.6	11.4	13.3	15.4	16.4	-	-
		38	8.4	9.2	10.9	12.7	14.6	15.7	-	-
		43	7.8	8.5	10.0	11.6	13.3	14.4	-	-
		46	-	8.1	9.5	11.0	12.5	-	-	-
	P	35	5.7	5.8	6.1	6.4	6.7	6.9	-	-
		38	6.0	6.1	6.4	6.7	7.1	7.2	-	-
		43	6.4	6.6	7.0	7.4	7.7	7.8	-	-
		46	-	7.0	7.4	7.7	8.0	-	-	-
KHZ558PQL-EX	Q	35	11.2	12.4	15.1	17.8	20.9	22.6	24.2	-
		38	10.4	11.6	14.1	16.8	19.6	21.2	15.1	-
		43	9.0	10.2	12.5	14.9	17.6	19.0	-	-
		46	8.2	9.3	11.6	-	-	-	-	-
	P	35	6.6	6.7	7.0	7.3	7.5	7.7	7.8	-
		38	7.2	7.3	7.5	7.8	8.1	8.2	4.9	-
		43	8.1	8.2	8.4	8.7	8.9	9.0	-	-
		46	8.8	8.8	8.9	-	-	-	-	-
KHZ566PQL-EX	Q	35	12.6	13.8	16.7	19.6	23.0	24.7	26.5	-
		38	12.1	13.4	16.1	18.9	22.2	23.9	25.6	-
		43	11.4	12.5	15.1	17.7	20.8	22.4	24.0	-
		46	10.1	11.1	13.4	15.8	-	-	-	-
	P	35	7.5	7.7	7.9	8.2	8.3	8.5	8.8	-
		38	7.9	8.0	8.2	8.5	8.6	8.8	9.1	-
		43	8.4	8.6	8.8	9.1	9.2	9.4	9.6	-
		46	9.5	9.6	9.8	10.0	-	-	-	-
KHZ576PQL-EX	Q	35	14.7	16.3	19.6	23.1	27.1	29.1	31.3	-
		38	14.2	15.6	18.9	22.3	26.1	28.1	30.2	-
		43	13.2	14.6	17.7	20.9	24.4	26.4	28.3	-
		46	11.6	12.9	15.7	-	-	-	-	-
	P	35	8.8	8.9	9.3	9.7	10.0	10.2	10.4	-
		38	9.2	9.3	9.6	10.0	10.4	10.6	10.8	-
		43	9.8	10.0	10.3	10.6	11.0	11.2	11.4	-
		46	11.1	11.2	11.5	-	-	-	-	-

Q: Cooling Capacity (kW) P: Power Input Including Fan Motor Power(kW) Return Gas Of 18.3°C, Subcooling 0K

Large Refrigeration Scroll Indoor Units R404A, 3-Phase

Model		Ambient Temp (°C)	Evaporating Temp (°C)							
			-15.0	-12.2	-6.7	-1.1	4.4	7.2	10.0	12.8
KHZ595PAL-EX	Q	35	15.7	17.6	21.4	25.7	30.2	32.7	35.3	-
		38	14.3	16.2	19.9	24.0	28.4	30.6	32.8	-
		43	-	13.9	17.4	21.2	25.3	-	-	-
		46	-	-	15.77	-	-	-	-	-
	P	35	11.9	12.1	12.7	13.2	13.9	14.2	14.6	-
		38	12.7	12.9	13.4	14.0	14.6	14.9	15.2	-
		43	-	14.2	14.7	15.3	15.9	-	-	-
		46	-	-	15.6	-	-	-	-	-
KHZ611PAL-EX	Q	35	20.3	22.8	28.2	34.4	41.1	44.9	48.8	-
		38	18.8	21.3	26.5	32.4	38.9	42.6	46.4	-
		43	16.4	18.7	23.6	29.2	35.3	38.7	42.3	-
		46	-	17.0	21.8	27.1	33.0	36.3	39.8	-
	P	35	12.9	13.1	13.5	14.0	14.5	14.7	15.0	-
		38	13.8	14.0	14.3	14.8	15.3	15.5	15.8	
		43	15.2	15.4	15.7	16.1	16.6	16.9	17.1	-
		46	-	16.4	16.7	17.1	17.5	17.8	18.0	-
KHZ613PAL-EX	Q	35	21.9	24.6	30.2	36.6	43.6	47.5	51.5	-
		38	20.8	23.3	28.6	34.7	41.4	45.1	49.2	-
		43	18.7	21.0	25.9	31.5	37.7	41.1	44.9	-
		46	-	19.5	24.2	29.5	35.3	38.6	42.2	-
	P	35	13.3	13.6	14.1	14.7	15.3	15.6	15.9	-
		38	14.1	14.4	14.9	15.5	16.1	16.4	16.7	-
		43	15.5	15.8	16.3	16.9	17.5	17.8	18.0	-
		46	-	16.7	17.2	17.8	18.4	18.7	18.9	-
KHZ615PAL-EX	Q	35	26.3	29.1	35.3	42.4	50.3	54.7	59.3	-
		38	24.8	27.5	33.4	40.2	47.7	51.9	56.6	-
		43	-	-	30.1	36.4	43.3	47.3	51.6	-
		46	-	-	-	34.0	-	-	-	-
	P	35	17.0	17.4	18.1	18.9	19.9	20.5	21.2	-
		38	18.0	18.4	19.1	20.0	21.0	21.6	22.2	-
		43	-	-	21.0	21.9	22.9	23.5	24.1	-
		46	-	-	-	23.1	-	-	-	-
KHZ619PAL-EX	Q	35	32.1	35.5	42.9	51.3	60.7	65.8	71.2	-
		38	30.2	33.5	40.5	48.5	57.5	62.4	67.8	-
		43	-	-	36.4	43.8	52.0	-	-	-
		46	-	-	-	-	-	-	-	-
	P	35	22.6	23.1	24.1	25.3	26.7	27.5	28.4	-
		38	23.4	24.4	25.5	26.7	28.1	28.9	29.3	-
		43	-	-	27.9	29.1	30.6	-	-	-
		46	-	-	-	-	-	-	-	-
KHZ622PAL-EX	Q	35	40.2	44.7	54.4	65.7	78.3	85.2	92.6	-
		38	38.0	42.2	51.5	62.3	74.3	81.0	88.3	-
		43	-	-	46.5	56.4	67.5	73.8	80.7	-
		46	-	-	-	52.8	-	-	-	-
	P	35	26.0	26.5	27.6	28.8	30.3	31.2	32.2	-
		38	27.9	28.0	29.1	30.4	31.9	32.8	34.1	-
		43	-	-	31.9	33.3	34.8	35.7	37.0	-
		46	-	-	-	35.2	-	-	-	-

Q: Cooling Capacity (kW) P: Power Input Including Fan Motor Power (kW) Suction Superheat 10K, Subcooling 0K

Kindly contact sales team for Capacity & Power input

Milk Cooling

Bulk Milk Cooling - BMC

Designed Specifically For Milk Cooling

Optimally sized condenser coil & higher air flow to achieve pull down from 35°C to 4°C within 3 hours as per IS5708 standards. Units available for full range of BMCs starting from 500 ltrs. to 5000 ltrs.

Equipped With Complete System Protection

Our Condensing Units are equipped with complete set of controls which protect it from :

- Liquid Receiver to respond for varying load conditions
- HP/LP cutouts to maintain safe working pressure
- Accumulator to prevent liquid refrigerant from entering the compressor during light load conditions
- IP65 Junction box to withstand dusty & rainy climate
- Moisture indicator & liquid line solenoid valve

Superior Reliability

All our Emerson Condensing Units are 100% factory tested. We are the only company to have a dedicated lab for testing BMC as per ISO 5708 and user conditions. Our units have been successfully running in dusty environments & in ever-changing climatic conditions.

Easier To Service

Layout of components, tubing and electrical connections done to facilitate easy serviceability in field.

Reciprocating Compressor Outdoor Units R22, 1-Phase

Model		Ambient Temp (°C)	Evaporating Temp (°C)							
			-17.8	-12.2	-6.7	-1.1	4.4	7.2	10.0	12.8
KHR522MQE-BX	Q	35	1.7	2.6	3.5	4.5	5.7	6.4	7.1	-
		43	1.2	2.1	2.9	3.9	4.9	5.5	6.2	6.9
		46	-	1.9	2.7	3.6	4.6	5.2	5.9	6.6
	P	35	1.1	1.3	1.5	1.6	1.7	1.7	1.8	1.9
		43	1.1	1.3	1.5	1.7	1.8	1.9	2.0	2.1
		46	1.1	1.3	1.5	1.7	1.9	1.9	2.0	2.1
KHR530MQE-BX	Q	35	2.3	3.3	4.5	5.8	7.3	8.1	8.9	-
		43	1.7	2.6	3.7	5.0	6.3	7.1	7.8	8.6
		46	-	-	3.5	4.7	6.0	6.7	7.4	8.2
	P	35	1.4	1.4	1.4	2.0	2.2	2.3	2.3	2.4
		43	1.3	1.6	1.9	2.2	2.4	2.5	2.6	2.6
		46	-	-	1.9	2.2	2.5	2.6	2.6	2.7
KHR536MQE-FX	Q	35	2.8	4.1	5.4	6.8	8.2	9.0	9.8	-
		43	-	3.3	4.5	5.8	7.2	7.9	8.6	9.3
		46	-	3.0	4.3	5.6	6.9	7.6	8.3	9.0
	P	35	1.8	2.1	2.3	2.5	2.6	2.7	2.7	2.8
		43	-	2.1	2.4	2.6	2.8	2.9	3.0	3.1
		46	-	2.1	2.4	2.7	2.9	3.0	3.1	3.2

Q: Cooling Capacity (kW) P: Power Input Including Fan Motor Power(kW) Return Gas Of 18.3°C, Subcooling 0K

Reciprocating Compressor Outdoor Units R22, 3-Phase

Model		Ambient Temp (°C)	Evaporating Temp (°C)							
			-17.8	-12.2	-6.7	-1.1	4.4	7.2	10.0	12.8
KHR522MQE-EX	Q	35	1.7	2.6	3.5	4.5	5.7	6.3	7.1	-
		43	1.8	2.1	3.0	3.9	4.9	5.5	6.2	6.9
		46	-	2.0	2.8	3.6	4.6	5.2	5.8	6.5
	P	35	1.3	1.3	1.4	1.6	1.7	1.7	1.8	1.8
		43	1.3	1.3	1.5	1.7	1.8	1.9	1.9	2.0
		46	0.0	1.3	1.5	1.7	1.8	1.9	2.0	2.1
KHR530MQE-EX	Q	35	2.4	3.4	4.5	5.8	7.3	8.0	8.8	-
		43	1.8	2.7	3.8	5.0	6.3	7.0	7.8	8.5
		46	-	-	3.5	4.7	6.0	6.7	7.4	8.1
	P	35	1.3	1.3	1.3	2.0	2.2	2.2	2.3	2.4
		43	1.3	1.6	1.9	2.1	2.4	2.4	2.5	2.6
		46	-	-	1.9	2.2	2.4	2.5	2.6	2.7
KHR536MQE-DX	Q	35	2.9	4.1	5.4	6.7	8.2	8.9	9.7	-
		43	-	3.4	4.6	5.8	7.2	7.8	8.5	9.2
		46	-	3.1	4.3	5.6	6.9	7.6	8.3	9.0
	P	35	1.8	2.0	2.2	2.4	2.6	2.6	2.7	2.7
		43	-	2.0	2.3	2.6	2.8	2.9	3.0	3.0
		46	-	2.0	2.4	2.6	2.9	3.0	3.0	3.1
KHR542MQE-DX	Q	35	3.7	4.8	6.1	7.7	9.3	10.2	11.1	-
		43	-	4.1	5.3	6.6	8.1	8.8	9.6	10.4
		46	-	3.8	4.9	6.1	7.4	8.0	8.8	10.2
	P	35	1.9	2.3	2.6	2.9	3.1	3.2	3.3	3.4
		43	-	2.3	2.7	3.0	3.3	3.5	3.6	3.7
		46	-	2.3	2.7	3.1	3.4	3.6	3.7	3.7
KHR553MQE-DX	Q	35	-	6.9	8.5	10.4	12.5	13.6	14.8	-
		43	-	6.1	7.6	9.4	11.3	12.3	13.4	14.5
		46	-	-	7.3	9.0	10.9	11.9	12.9	14.0
	P	35	-	3.3	3.6	3.8	3.9	4.0	4.0	4.0
		43	-	3.6	4.0	4.3	4.5	4.6	4.7	4.7
		46	-	-	4.1	4.4	4.7	4.8	4.9	5.0
KHR562MQE-DX	Q	35	-	8.0	9.9	12.0	14.3	15.5	16.8	-
		43	-	7.2	8.9	10.8	12.9	14.0	15.1	16.4
		46	-	-	8.5	10.4	12.4	13.5	14.6	15.8
	P	35	-	4.0	4.3	4.5	4.7	4.7	4.8	4.8
		43	-	4.4	4.7	5.1	5.3	5.4	5.5	5.6
		46	-	-	4.9	5.2	5.5	5.7	5.8	5.9

Q: Cooling Capacity (kW) P: Power Input Including Fan Motor Power(kW) Return Gas Of 18.3°C, Subcooling 0K

Scroll Compressor Outdoor Units R22, 1-Phase

Model		Ambient Temp (°C)	Evaporating Temp (°C)							
			-15.0	-12.2	-6.7	-1.1	4.4	7.2	10.0	12.8
KHZ515MQE-FX	Q	35	-	3.5	4.4	5.3	6.4	7.1	7.7	8.4
		43	-	3.2	4.0	4.9	5.9	6.5	7.1	7.8
		46	-	3.1	3.9	4.7	5.7	6.3	6.9	7.5
	P	35	-	1.6	1.6	1.6	1.6	1.7	1.7	1.7
		43	-	1.8	1.8	1.9	1.9	1.9	1.9	2.0
		46	-	1.9	2.0	2.0	2.0	2.0	2.1	2.1
KHZ519MQE-FX	Q	35	-	4.0	5.0	6.1	7.4	8.1	8.8	9.6
		43	-	3.7	4.6	5.6	6.7	7.4	8.1	8.9
		46	-	3.5	4.4	5.4	6.5	7.1	7.8	8.6
	P	35	-	1.7	1.7	1.7	1.8	1.8	1.8	1.9
		43	-	1.9	1.9	2.0	2.0	2.1	2.1	2.1
		46	-	2.0	2.1	2.1	2.1	2.2	2.2	2.2
KHZ521MQE-FX	Q	35	-	3.5	4.6	5.7	6.8	8.2	9.0	9.8
		43	-	3.2	4.2	5.2	6.3	7.5	8.2	9.0
		46	-	-	4.0	5.0	6.1	7.3	8.0	8.8
	P	35	-	2.4	2.5	2.5	2.6	2.7	2.8	2.8
		43	-	2.8	2.9	2.9	3.0	3.2	3.2	3.3
		46	-	-	3.0	3.1	3.2	3.3	3.3	3.4
KHZ529MQE-FX	Q	35	-	6.4	8.1	9.8	11.7	12.7	13.9	15.2
		43	-	5.3	7.0	8.7	10.4	11.4	12.5	13.6
		46	-	-	6.7	8.4	10.0	10.9	-	-
	P	35	-	2.7	2.9	3.0	3.1	3.2	3.2	3.3
		43	-	3.2	3.3	3.4	3.6	3.6	3.7	3.8
		46	-	-	3.5	3.6	3.8	3.8	-	-

Q: Cooling Capacity (kW) P: Power Input Including Fan Motor Power(kW) Return Gas Of 18.3°C, Subcooling 0K

Scroll Compressor Outdoor Units R22, 3-Phase

Model		Ambient Temp (°C)	Evaporating Temp (°C)							
			-15.0	-12.2	-6.7	-1.1	4.4	7.2	10.0	12.8
KHZ515MQE-EX	Q	35	-	3.3	4.0	4.9	5.9	6.5	7.1	7.8
		43	-	3.0	3.7	4.5	5.5	6.0	6.6	7.2
		46	-	2.9	3.6	4.4	5.3	5.8	6.4	7.0
	P	35	-	1.6	1.6	1.6	1.6	1.7	1.7	1.7
		43	-	1.8	1.8	1.9	1.9	1.9	1.9	2.0
		46	-	1.9	1.9	2.0	2.0	2.0	2.0	2.1
KHZ521MQE-DX	Q	35	-	4.1	5.4	6.8	8.1	8.9	9.7	10.5
		43	-	3.5	4.9	6.1	7.3	8.0	8.7	9.5
		46	-	-	4.7	5.9	7.1	7.8	8.5	9.3
	P	35	-	2.2	2.4	2.5	2.6	2.7	2.7	2.8
		43	-	2.6	2.8	2.9	3.1	3.1	3.2	3.3
		46	-	-	2.9	3.1	3.2	3.3	3.3	3.4
KHZ526MQE-EX	Q	35	-	-	6.6	8.0	9.6	10.5	11.4	12.1
		43	-	-	6.1	7.3	8.7	9.5	10.3	-
		46	-	-	5.7	-	-	-	-	-
	P	35	-	-	2.6	2.7	2.9	2.9	3.0	3.0
		43	-	-	3.2	3.3	3.4	3.5	3.5	-
		46	-	-	3.6	-	-	-	-	-
KHZ529MQE-EX	Q	35	-	5.9	7.9	10.0	11.4	12.4	13.6	14.9
		43	-	-	9.2	10.2	11.1	12.1	13.3	14.5
		46	-	-	-	8.4	10.0	11.0	12.0	13.2
	P	35	-	2.8	2.9	3.0	3.1	3.2	3.3	3.3
		43	-	-	3.3	3.5	3.6	3.7	3.7	3.8
		46	-	-	-	3.7	3.8	3.9	4.0	4.0
KHZ538MQE-DX	Q	35	-	7.4	9.4	11.4	13.7	14.9	16.2	17.6
		43	-	-	8.2	10.3	12.4	13.5	14.7	16.0
		46	-	-	-	-	11.9	13.0	14.2	15.4
	P	35	-	3.5	3.6	3.8	4.0	4.1	4.2	4.3
		43	-	-	4.3	4.5	4.7	4.8	4.9	5.0
		46	-	-	-	-	5.0	5.1	5.2	5.3
KHZ545MQE-EX	Q	35	7.5	8.4	10.3	12.4	14.7	15.9	17.1	18.2
		43	6.4	7.5	9.2	11.1	13.1	-	-	-
		46	6.3	7.1	8.7	10.5	12.5	-	-	-
	P	35	4.2	4.4	4.6	4.9	5.1	5.2	5.3	5.4
		43	5.0	5.2	5.5	5.8	6.0	-	-	-
		46	5.4	5.6	5.9	6.1	6.4	-	-	-
KHZ548MQE-EX**	Q	35	-	10.8	13.4	15.9	19.2	20.9	22.6	24.3
		43	-	-	-	14.1	17.4	19.0	20.4	21.8
		46	-	-	-	-	16.8	18.3	19.9	-
	P	35	-	5.3	5.4	5.6	6.0	6.2	6.4	6.5
		43	-	-	-	6.9	7.1	7.2	7.4	7.5
		46	-	-	-	-	7.5	7.5	7.6	-
KHZ558MQE-EX	Q	35	10.1	11.6	14.7	18.1	21.9	23.9	26.0	27.4
		43	-	9.7	12.8	16.0	19.5	21.4	23.3	-
		46	-	9.1	12.0	15.1	18.6	-	-	-
	P	35	4.7	5.4	5.6	5.8	6.1	6.2	6.4	6.5
		43	-	6.5	6.8	7.0	7.3	7.5	7.7	-
		46	-	6.9	7.3	7.6	7.7	-	-	-
KHZ566MQE-EX	Q	35	-	13.7	16.9	20.5	24.5	26.8	30.7	33.5
		43	-	-	15.4	18.7	22.4	24.4	28.0	30.5
		46	-	-	14.8	18.1	-	-	-	-
	P	35	-	6.0	6.2	6.5	6.8	7.0	7.3	7.5
		43	-	-	7.4	7.7	8.0	8.2	8.5	8.6
		46	-	-	8.0	8.3	-	-	-	-

Q: cooling Capacity (kW) P: Power Input Including Fan Motor Power (kW) Return Gas of 18.3°C, Subcooling : 0k

**Subcooling : 2.7K

Frozen Food Applications

Outdoor Type - Frozen Foods

Available In R404A For Frozen Food Applications;
Evaporating Range From -37.2 to -6.7°C

Reciprocating Compressor Outdoor Units R404A, 1-Phase								
Model		Ambient Temp (°C)	Evaporating Temp (°C)					
			-37.2	-31.7	-23.3	-17.8	-12.2	-6.7
KHM475LQL-CX	Q	35	0.4	0.7	1.2	1.4	1.8	2.4
		38	0.4	0.7	1.1	1.3	1.7	2.2
		43	-	0.6	0.9	1.1	1.4	1.9
		46	-	-	0.8	0.9	1.1	1.4
	P	35	0.9	1.1	1.3	1.4	1.6	2.0
		38	1.0	1.2	1.4	1.4	1.7	2.0
		43	-	1.2	1.4	1.3	1.8	2.1
		46	-	0.0	1.5	1.7	1.8	2.0

Q: Cooling Capacity (kW) P: Power Input Including Fan Motor Power(kW)Return Gas Of 4°C, Subcooling 0K

Reciprocating Compressor Outdoor Units R404A, 3-Phase

Model		Ambient Temp (°C)	Evaporating Temp (°C)					
			-37.2	-31.7	-23.3	-17.8	-12.2	-6.7
KHM475LQL-EX	Q	35	0.4	0.7	1.2	1.4	1.8	2.4
		38	0.4	0.7	1.1	1.3	1.7	2.2
		43	-	0.6	0.9	1.1	1.4	1.9
		46	-	-	0.8	0.9	1.1	1.4
	P	35	0.9	1.1	1.3	1.4	1.6	2.0
		38	1.0	1.2	1.4	1.4	1.7	2.0
		43	-	1.2	1.4	1.3	1.8	2.1
		46	-	-	1.5	1.7	1.8	2.0
KHM512LQL-EX	Q	35	0.5	1.2	2.1	2.7	3.4	5.0
		38	0.6	1.2	1.8	2.4	3.2	4.6
		43	0.8	1.0	1.3	2.0	2.8	3.9
		46	-	-	1.3	1.7	2.2	3.0
	P	35	1.4	1.9	2.3	2.5	2.9	3.7
		38	1.5	1.9	2.3	2.6	3.0	3.8
		43	1.7	2.0	2.4	2.7	3.1	3.9
		46	-	-	2.7	3.0	3.3	3.8
KHM515LQL-EX	Q	35	0.5	1.3	2.5	3.0	3.8	5.1
		38	0.6	1.3	2.2	2.7	3.5	4.6
		43	0.8	1.3	1.7	2.2	2.9	3.8
		46	-	-	1.3	1.7	2.2	2.9
	P	35	1.5	2.0	2.5	2.7	3.1	4.0
		38	1.6	2.0	2.5	2.8	3.2	4.0
		43	1.7	2.1	2.5	2.9	3.4	4.2
		46	-	-	2.7	3.1	3.5	4.1
KHM517LQL-EX	Q	35	1.5	2.3	3.6	4.4	5.3	6.1
		38	1.4	2.1	3.2	4.0	4.7	5.5
		43	1.1	1.7	2.7	3.3	3.9	4.5
		46	0.9	1.4	2.2	2.8	3.3	3.8
	P	35	2.0	2.4	3.1	3.5	3.9	4.3
		38	2.1	2.4	3.0	3.4	3.7	4.1
		43	2.1	2.4	2.9	3.2	3.5	3.8
		46	2.2	2.4	2.8	3.0	3.3	3.5
KHM520LQL-EX	Q	35	1.9	2.7	4.0	4.9	5.8	6.6
		38	1.7	2.5	3.6	4.3	5.1	5.9
		43	1.5	2.2	2.8	3.4	4.1	4.7
		46	-	-	2.4	2.5	2.6	2.8
	P	35	2.1	2.6	3.4	4.1	4.4	4.8
		38	2.1	2.6	3.3	4.1	4.3	4.8
		43	2.2	2.6	3.3	4.0	4.2	4.7
		46	-	-	-	-	-	-

Q: Cooling Capacity (kW) P: Power Input Including Fan Motor Power (kW) Return Gas Of 4°C, Subcooling 0K

Scroll Compressor Outdoor Units R404A, 3-Phase

Model		Ambient Temp (°C)	Evaporating Temp (°C)							
			-35	-30	-25	-20	-15	-10	-5	0
KHZ506LRL-EX	Q	35	1.2	1.6	1.9	2.4	2.9	3.5	4.0	4.5
		38	1.2	1.5	1.8	2.2	2.7	3.3	3.8	4.2
		43	1.0	1.3	1.6	1.9	2.5	2.9	3.4	3.7
		46	0.9	1.2	1.5	1.7	2.3	2.7	3.1	3.2
	P	35	1.6	1.7	1.8	1.9	1.9	2.0	2.0	2.0
		38	1.7	1.8	1.9	1.9	2.0	2.0	2.1	2.1
		43	1.8	1.9	2.0	2.1	2.1	2.2	2.2	2.2
		46	1.9	2.0	2.1	2.2	2.2	2.3	2.3	2.4
KHZ508LRL-EX	Q	35	1.4	1.8	2.1	2.6	3.0	3.5	4.0	4.6
		38	1.3	1.7	2.0	2.4	2.8	3.3	3.8	4.3
		43	1.2	1.5	1.8	1.9	2.5	3.0	3.4	3.8
		46	1.1	1.4	1.7	1.8	2.3	2.7	3.1	3.5
	P	35	1.9	2.0	2.2	2.3	2.4	2.5	2.6	2.7
		38	2.0	2.2	2.3	2.4	2.5	2.6	2.7	2.8
		43	2.3	2.4	2.5	2.6	2.7	2.8	2.9	3.0
		46	2.5	2.6	2.7	2.7	2.9	3.0	3.0	3.1
KHZ509LRL-EX	Q	35	1.4	1.8	2.2	2.7	3.4	4.0	4.7	2.8
		38	1.4	1.7	2.1	2.6	3.2	3.8	4.4	-
		43	1.2	1.5	1.9	2.3	2.9	3.4	3.9	-
		46	1.1	1.4	1.8	2.1	2.7	3.1	-	-
	P	35	1.8	1.8	1.9	1.9	2.0	2.0	2.0	1.0
		38	1.9	1.9	2.0	2.0	2.1	2.1	2.2	-
		43	2.0	2.1	2.1	2.2	2.2	2.2	2.4	-
		46	2.1	2.1	2.2	2.3	2.4	2.4	0.0	-
KHZ511LRL-EX	Q	35	1.5	2.3	3.0	3.6	4.3	5.0	5.7	3.3
		38	1.5	2.1	2.8	3.5	4.1	4.7	5.4	-
		43	1.6	2.0	2.4	3.2	3.7	4.3	4.9	-
		46	1.6	1.9	2.2	3.0	3.5	4.0	0.0	-
	P	35	2.1	2.1	2.2	2.2	2.3	2.3	2.4	1.1
		38	2.1	2.2	2.3	2.3	2.4	2.4	2.5	-
		43	2.3	2.4	2.4	2.5	2.5	2.5	2.8	-
		46	2.4	2.5	2.5	2.6	2.7	2.8	0.0	-
KHZ514LRL-EX	Q	35	2.5	3.3	4.0	4.8	5.7	6.7	7.7	8.8
		38	2.4	3.1	3.8	4.5	5.4	6.3	7.3	8.2
		43	2.2	2.8	3.4	4.1	4.8	5.6	6.5	7.3
		46	2.0	2.6	3.2	3.9	4.5	5.2	-	-
	P	35	2.8	3.0	3.2	3.4	3.7	3.9	4.1	4.3
		38	3.0	3.2	3.4	3.6	3.8	4.0	4.3	4.5
		43	3.2	3.5	3.8	4.0	4.2	4.4	4.7	4.9
		46	3.3	3.7	4.0	4.2	4.5	4.7	-	-
KHZ515LRL-EX	Q	35	2.7	3.6	4.5	5.3	6.2	7.1	8.1	9.1
		38	2.6	3.4	4.3	5.0	5.8	6.7	7.6	8.5
		43	2.4	3.1	3.8	4.5	5.2	5.8	6.7	-
		46	2.3	2.9	2.9	3.8	4.7	5.3	-	-
	P	35	3.2	3.5	3.7	4.0	4.3	4.6	4.9	5.1
		38	3.4	3.7	3.9	4.2	4.6	4.9	5.1	5.4
		43	3.7	3.9	4.4	4.8	5.1	5.4	-	-
		46	3.9	4.0	4.5	5.0	5.4	5.8	-	-

Q: Cooling Capacity (kW) P: Power Input Including Fan Motor Power (kW)
Return Gas Temperature 4.4°C, Subcooling : 2.7K

Scroll Compressor Outdoor Units R404A, 3-Phase

Model		Ambient Temp (°C)	Evaporating Temp (°C)							
			-35	-30	-25	-20	-15	-10	-5	0
KHZ518LRL-EX	Q	35	3.5	4.9	6.0	7.2	8.2	9.4	11.0	13.2
		38	3.4	4.7	6.0	7.0	8.0	9.1	10.7	12.9
		43	3.2	4.3	5.7	6.4	7.0	7.9	9.2	11.3
		46	2.5	4.1	5.6	6.0	6.4	7.6	8.9	11.0
	P	35	4.4	4.7	5.0	5.3	5.6	5.9	6.2	6.5
		38	4.7	4.9	5.2	5.5	5.8	6.1	6.4	6.7
		43	4.7	5.1	5.5	5.9	6.3	6.6	7.0	7.4
		46	4.8	5.2	5.6	6.1	6.6	7.0	7.4	7.9
KHZ521LRL-EX	Q	35	4.3	5.5	6.7	8.1	9.7	11.5	13.4	15.4
		38	4.1	5.3	6.4	7.7	9.2	10.9	12.7	14.6
		43	3.8	4.8	5.9	7.1	8.4	9.9	11.6	13.2
		46	3.6	4.5	5.5	6.6	7.9	9.3	10.8	12.4
	P	35	5.2	5.4	5.6	5.9	6.1	6.4	6.7	6.9
		38	5.4	5.6	5.9	6.1	6.3	6.6	6.9	7.1
		43	5.9	6.1	6.3	6.5	6.8	7.0	7.3	7.6
		46	6.2	6.4	6.6	6.8	7.1	7.3	7.6	7.9

Q: Cooling Capacity (kW) P: Power Input Including Fan Motor Power (kW)
Return Gas Temperature 4.4°C, Subcooling : 2.7K

Scroll Compressor Indoor Units R404A, 3-Phase

Model		Ambient Temp (°C)	Evaporating Temp (°C)										
			-40	-35	-30	-25	-20	-15	-10	-5	0	5	7
KHZ526LVL	Q	27	4.95	6.03	7.27	8.69	10.33	12.20	14.36	16.80	19.24	21.68	22.66
		32	4.92	5.94	7.11	8.48	10.05	11.88	13.97	16.37	18.77	21.17	22.13
		38	4.90	5.83	6.92	8.20	9.70	11.46	13.47	15.79	18.11	20.43	21.36
		43	4.89	5.74	6.75	7.96	9.38	11.06	13.01	15.27	17.53	19.79	20.69
		46	4.89	5.68	6.65	7.80	9.18	10.81	12.72	14.93	17.45	20.32	-
	P	27	3.87	4.07	4.27	4.47	4.69	4.91	5.14	5.39	5.64	5.89	5.99
		32	4.22	4.44	4.67	4.90	5.13	5.38	5.63	5.90	6.17	6.44	6.55
		38	4.72	4.98	5.24	5.50	5.76	6.04	6.31	6.61	6.91	7.21	7.33
		43	5.25	5.53	5.82	6.10	6.39	6.68	6.99	7.31	7.63	7.95	8.08
		46	5.62	5.92	6.22	6.52	6.82	7.14	7.46	7.80	8.15	8.54	-
KHZ536LVL	Q	27	6.41	7.82	9.49	11.34	13.34	15.44	17.62	19.85	-	-	-
		32	6.23	7.62	9.23	11.03	12.94	14.95	17.02	19.12	-	-	-
		38	6.00	7.34	8.90	10.60	12.41	14.30	16.23	18.18	-	-	-
		43	5.79	7.09	8.58	10.21	11.93	13.71	15.51	17.34	-	-	-
		46	6.08	7.44	9.01	10.75	12.60	14.52	16.50	18.50	-	-	-
	P	27	4.71	4.97	5.25	5.54	5.84	6.15	6.48	6.83	-	-	-
		32	5.10	5.39	5.71	6.04	6.38	6.73	7.11	7.50	-	-	-
		38	5.61	5.96	6.34	6.73	7.13	7.54	7.98	8.44	-	-	-
		43	6.08	6.49	6.92	7.37	7.83	8.31	8.80	9.33	-	-	-
		46	6.38	6.83	7.30	7.79	8.29	8.81	9.35	9.92	-	-	-
KHZ550LVL	Q	27	8.60	10.48	12.64	15.11	17.92	21.12	24.74	28.82	-	-	-
		32	8.40	10.24	12.33	14.70	17.40	20.46	23.92	27.83	-	-	-
		38	8.14	9.91	11.91	14.15	16.70	19.59	22.85	26.54	-	-	-
		43	7.89	9.60	11.51	13.64	16.06	18.79	21.89	25.39	-	-	-
		46	7.73	9.40	11.25	13.32	15.65	18.28	21.28	24.66	-	-	-
	P	27	6.05	6.45	6.83	7.21	7.59	7.98	8.40	8.85	-	-	-
		32	6.58	7.01	7.42	7.83	8.24	8.67	9.12	9.61	-	-	-
		38	7.32	7.78	8.23	8.67	9.12	9.58	10.07	10.60	-	-	-
		43	8.01	8.50	8.98	9.45	9.93	10.42	10.94	11.50	-	-	-
		46	8.47	8.98	9.47	9.96	10.45	10.96	11.50	12.08	-	-	-
KHZ559LVL	Q	27	10.29	12.59	15.21	18.21	21.65	25.58	30.04	35.09	-	-	-
		32	10.02	12.26	14.81	17.71	21.03	24.81	29.11	33.98	-	-	-
		38	9.66	11.83	14.27	17.05	20.21	23.81	27.91	32.56	-	-	-
		43	9.34	11.44	13.79	16.44	19.46	22.91	26.83	31.29	-	-	-
		46	9.14	11.19	13.48	16.06	18.99	22.34	-	-	-	-	-
	P	27	7.27	7.78	8.28	8.77	9.27	9.79	10.36	11.00	-	-	
		32	7.92	8.48	9.02	9.55	10.09	10.65	11.27	11.95	-	-	-
		38	8.83	9.43	10.02	10.60	11.18	11.80	12.47	13.20	-	-	-
		43	9.68	10.33	10.96	11.58	12.20	12.86	13.57	14.35	-	-	-
		46	10.25	10.92	11.57	12.21	12.86	13.55	-	-	-	-	-

Q: Cooling Capacity (kW) P: Total Power Input (kW) Subcooling : Economized
Suction Superheat : 10K

Scroll Compressor Indoor Units R404A, 3-Phase

Model		Ambient Temp (°C)	Evaporating Temp (°C)										
			-40	-35	-30	-25	-20	-15	-10	-5	0	5	7
KHZ568LVL	Q	27	11.56	14.12	17.08	20.47	24.34	-	-	-	-	-	-
		32	11.25	13.73	16.60	19.87	23.62	-	-	-	-	-	-
		38	10.83	13.22	15.96	19.09	22.67	-	-	-	-	-	-
		43	10.45	12.75	15.38	18.38	21.81	-	-	-	-	-	-
		46	10.21	12.45	15.01	17.93	21.27	-	-	-	-	-	-
	P	27	8.38	9.00	9.60	10.20	10.81	-	-	-	-	-	-
		32	9.15	9.82	10.47	11.12	11.78	-	-	-	-	-	-
		38	10.21	10.94	11.65	12.35	13.08	-	-	-	-	-	-
		43	11.21	12.00	12.75	13.51	14.28	-	-	-	-	-	-
		46	11.87	12.69	13.47	14.26	15.06	-	-	-	-	-	-
KHZ581LVL	Q	27	14.28	16.68	19.94	23.92	28.42	-	-	-	-	-	-
		32	13.84	16.2	19.38	23.21	27.57	-	-	-	-	-	-
		38	13.2	15.52	18.61	22.31	26.51	-	-	-	-	-	-
		43	12.57	14.87	17.89	21.49	25.55	-	-	-	-	-	-
		46	12.16	14.44	17.42	20.98	-	-	-	-	-	-	-
	P	27	10.61	11.27	12.02	12.8	13.6	-	-	-	-	-	-
		32	11.58	12.29	13.1	13.94	14.8	-	-	-	-	-	-
		38	12.87	13.66	14.56	15.48	16.42	-	-	-	-	-	-
		43	14.07	14.94	15.9	16.9	17.92	-	-	-	-	-	-
		46	14.85	15.77	16.78	17.83	-	-	-	-	-	-	-

Q: Cooling Capacity (kW) P: Total Power Input (kW) Subcooling : Economized
Suction Superheat : 10K

Food Service Applications

Reciprocating Compressor Outdoor Units R22, 1-Phase									
Model		Ambient Temp (°C)	Evaporating Temp (°C)						
			-17.8	-12.2	-6.7	-1.1	4.4	7.2	10.0	12.8
KFE461HFE-BX	Q	35	-	-	913	1157	1447	1603	1758	1922
		43	-	-	794	993	1257	1411	1570	1743
		46	-	-	762	946	1204	1357	1521	1696
	P	35	-	-	590	620	695	740	795	850
		43	-	-	615	650	730	780	830	885
		46	-	-	620	665	740	790	840	895
KFJ511HFE-BX	Q	35	-	-	1598	1845	2514	2909	3294	3628
		43	-	-	1354	1548	2167	2534	2891	3196
		46	-	-	1289	1460	2062	2420	2764	3056
	P	35	-	-	884	886	989	1063	1141	1219
		43	-	-	921	939	1048	1121	1197	1271
		46	-	-	932	954	1065	1139	1215	1288

Q: Cooling Capacity (W) P: Power Input Including Fan Motor Power (W) Return Gas Of 18.3°C, Subcooling 0K

Indoor Type - High Med. Temp.

Reciprocating Compressor Indoor Units R134A, 1-Phase									
Model		Ambient Temp (°C)	Evaporating Temp (°C)						
			-17.8	-12.2	-6.7	-1.1	4.4	7.2	10.0	12.8
KFE419HBG-BX	Q	35	170	216	260	314	393	444	505	577
		43	138	184	223	270	337	-	-	-
		46	130	175	211	-	-	-	-	-
	P	35	150	155	170	195	225	240	260	275
		43	160	160	175	200	235	-	-	-
		46	165	170	180	-	-	-	-	-
KFE432HFG-BX	Q	35	211	363	463	563	715	825	964	1139
		43	171	306	388	472	609	710	845	1017
		46	153	282	360	441	574	675	807	976
	P	35	283	300	320	342	367	381	397	413
		43	278	302	328	355	384	400	416	432
		46	277	304	332	360	390	405	422	439
KFE444HFG-BX	Q	35	394	497	601	738	943	1075	1231	1411
		43	314	422	519	633	809	921	1056	1213
		46	289	398	492	605	766	873	1001	1150
	P	35	310	335	365	400	440	470	495	525
		43	315	340	375	415	465	495	530	565
		46	320	345	380	420	475	505	540	575
KFN463HFG-BX	Q	35	563	716	871	1046	1257	1379	1515	1666
		43	470	637	790	948	1128	1244	1362	1492
		46	429	604	759	915	1088	1186	1294	1414
	P	35	473	480	512	559	608	629	646	656
		43	476	492	531	581	631	650	665	674
		46	472	490	532	584	634	654	669	678
KFJ467HAG-BX	Q	35	494	689	900	1140	1417	1569	1730	1900
		43	419	586	769	982	1231	1371	1516	1672
		46	394	551	724	926	1166	1301	1442	1591
	P	35	320	465	540	585	650	700	775	875
		43	325	480	560	615	680	735	810	915
		46	330	485	570	625	695	750	825	930
KFJ467HFG-BX	Q	35	485	679	887	1120	1391	1537	1690	1850
		43	415	577	755	962	1203	1340	1474	1619
		46	373	534	695	888	1124	1404	1365	1514
	P	35	247	396	471	519	583	636	711	814
		43	248	408	493	548	617	671	748	851
		46	243	413	506	567	641	698	775	880
KFJ498HAG-CX	Q	35	983	1091	1303	1595	1978	2199	2428	2673
		43	865	937	1115	1375	1722	1921	2139	-
		46	-	2130	1074	1359	1717	1892	-	-
	P	35	586	665	742	829	929	988	1057	1134
		43	609	692	775	868	978	1043	1115	-
		46	-	701	785	880	991	1057	-	-

Q: Cooling Capacity (W) P: Power Input Including Fan Motor Power (W) Return Gas Of 18.3°C, Subcooling : 0K

Reciprocating Compressor Indoor Units R134A, 1-Phase

Model		Ambient Temp (°C)	Evaporating Temp (°C)					
			-35.0	-28.9	-23.3	-17.7	-12.2	-6.7
KFN372LBG-BX	Q	32	102	110	152	275	357	451
		35	99	105	146	269	351	443
		43	91	91	129	252	332	422
	P	32	154	150	156	210	230	260
		35	153	157	162	211	234	265
		43	152	160	165	215	245	280
KFN396LAG-BX	Q	32	102	177	247	316	383	445
		35	99	172	239	305	369	428
		43	91	144	198	252	305	357
	P	32	154	171	191	215	241	269
		35	153	172	193	217	244	273
		43	152	175	200	226	255	286
KFN415LAG-BX	Q	32	176	299	431	567	708	858
		35	161	280	407	539	676	823
		43	123	231	344	464	590	730
	P	32	275	325	365	400	430	470
		35	278	326	368	404	438	480
		43	285	330	375	415	460	505

Q: Cooling Capacity (W) P: Power Input Including Fan Motor Power(W) Return Gas Of 18.3°C, Subcooling : 0K

Scope of Supply

BOM	Process Recip CDUs				Process Scroll CDUs					Process Scroll CDUs		Milk CDUs		FHP CDUs	
	ODU 1-Fan		ODU 2-Fan		ODU 1-Fan		ODU 2-Fan		ODU 2 - fan Horizontal	Indoor Type		ODU Type	Indoor Type	HBP	LBP
	MT	LT	MT	LT	MT	LT	MT	LT	MT	MT	LT				
Fan Guard	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	CDU with compressor, condenser, base plate, fan motor with grill* and mount on accessory box	
Service Valves	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes*	Yes*	Yes	Yes*		
Accumulator	-	Yes++	-^^	Yes	-	Yes	-	Yes	-	Yes**	Yes	-	-		
Oil Separator	-	-	-	-	-	Yes	-	Yes	-	-^	Yes	-	-		
HP/LP	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		
Receiver	-	Yes++	-	Yes	-	Yes	-	Yes	Yes	Yes	Yes	Yes	Yes		
Filter Drier	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		
Moisture Indicator	-^	Yes	-^	Yes	-^	Yes	-^	Yes	Yes	Yes	Yes	Yes	Yes		
Canopy#	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	-^	Yes	Yes	Yes		
Condenser Guard	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	-	-	Yes	Yes		
Solenoid Valve	-^	-^	-^	-^	-^	-^	-^	-^	-^	-^	-^	Yes	Yes		

* Service valve on compressor body
** In Large Ref Scroll CDUs
^ Optional
\+ Available in select models only
++ Except KHM475LQL
^^ Only with KHR572
\# Note: Large Ref Scroll (MT/LT) and KHZ581 LVL No Option Of Canopy; KHZ595PAL CDU Available With Canopy Only

Technical Data Outdoor Type

A. Medium Temperature Applications (Process Chilling & Cold Rooms) Reciprocating									
Model	**Compressor**	**Dimensions (L X W X H) in mm**	**Air Flow (CFM)**	**No Of Fans/ Power***	**Net Weight (kg)**	**Liquid Line Connection Size (in)**	**Suction Line Connection Size (in)**	**Comp-ressor MCC (A)**	**Comp-ressor LRA (A)**
KHM511PQL-EX	KCM511CAL-E510H	1016 X 440 X 800	2693	1/160W	70	3/8"	5/8"	9.5	54
KHM511PQL-BX	KCM511CAL-B310H	1016 X 440 X 800	2693	1/160W	70	3/8"	5/8"	4.5	20
KHM514PQL-EX	KCM514CAL-E510H	1016 X 440 X 800	2637	1/160W	74	3/8"	5/8"	13.5	72
KHM514PQL-BX	KCM514CAL-B310H	1016 X 440 X 800	2637	1/160W	74	3/8"	5/8"	6.1	28
KHM519PQL-EX	KCM519CAL-E510H	1016 X 440 X 800	2637	1/160W	82	3/8"	5/8"	17	85
KHM519PQL-BX	KCM519CAL-B310H	1016 X 440 X 800	2637	1/160W	82	3/8"	5/8"	7.3	41
KHM522PQL-EX	KCM522CAL-E314H	1016 X 440 X 800	2637	1/160W	93	3/8"	5/8"	8	45
KHJ513PQE-FX	KCJ513HAE-S420H	908 X 350 X 602	2072	1/59W	63	3/8"	1/2"	11.5	36
KHR521PQB-EX	CR21K6ME-TFM	908 X 350 X 602	2072	1/59W	80	3/8"	1/2"	5.1	27.5
KHR522PQE-BX	CR22K6M-PF1	908 X 350 X 602	2072	1/59W	80	3/8"	1/2"	13.5	54
KHR522PQE-DX	CR22K6M-TFM	908 X 350 X 602	2072	1/59W	80	3/8"	1/2"	4.5	20
KHR529PQB-XX	CR29K6ME-TFM	908 X 350 X 602	2072	1/59W	80	3/8"	1/2"	7.2	40
KHR530PQE-BX	CR30K6M-PF1	908 X 350 X 602	2072	1/59W	82	3/8"	5/8"	17.8	72
KHR530PQE-DX	CR30K6M-TFM	908 X 350 X 602	2072	1/59W	82	3/8"	5/8"	6.1	28
KHR535PQB-EX	CR35K6ME-TFM	1016 X 440 X 800	2637	1/160 W	93	3/8"	5/8"	7.3	41
KHR536PQE-BX	CR36K6M-PFZ	1016 X 440 X 800	2637	1/160W	92	3/8"	5/8"	21.3	85
KHR536PQE-DX	CR36K6M-TFM	1016 X 440 X 800	2637	1/160W	92	3/8"	5/8"	7.3	41
KHR541PQB-EX	CR41K6ME-TFM	1016 X 440 X 800	2637	1/160 W	93	3/8"	5/8"	8.5	45
KHR542PQE-DX	CR42K6M-TFM	1016 X 440 X 800	2637	1/160W	93	3/8"	5/8"	8	45
KHR553PQE-DX	CR53KQM-TFD	1030 X 432 X 1160	4000	2/106W	98	1/2"	5/8"	13.8	61
KHR562PQE-DX	CR62KQM-TFD	1030 X 432 X 1160	4000	2/106W	98	1/2"	7/8"	16	55
KHR572PQE-DX	CR72KQM-TFM	1030 X 432 X 1160	4000	2/106W	98	1/2"	7/8"	19.5	69

B. Milk Cooling Reciprocating									
Model	**Compressor**	**Dimension (LXWXH)**	**Air Flow (CFM)**	**No Of Fans/Power input (W)**	**Net Weight (KG)**	**Liquid Line Connection Size (in)**	**Suction Line Connection Size (in)**	**Compressor MCC (A)**	**Compressor LRA (A)**
KHR522 MQE-BX	CR22 K6M-PF	11016 X 440 X 800	2637	1 /160 W	93	3 /8 "	1 /2 "	13.5	54
KHR 522 MQE-EX	CR22 K6M-TFM	1016 X 440 X 800	2637	1 /160 W	93	3 /8 "	1 /2 "	4.5	20
KHR530 MQE-BX	CR30 K6M-PF	11016 X 440 X 800	2637	1 /160 W	98	3 /8 "	1 /2 "	17.8	72
KHR530 MQE-EX	CR30 K6M-TFM	1016 X 440 X 800	2637	1 /160 W	97	3 /8 "	1 /2 "	6.1	28
KHR536 MQE-FX	CR36 K 6M-PFZ	1016 X 440 X 800	2637	1 /160 W	98	3 /8 "	5 /8 "	21.3	85
KHR536 MQE-DX	CR36 K6M-TFM	1016 X 440 X 800	2637	1 /160 W	98	3 /8 "	5 /8 "	7.3	41
KHR542 MQE-FX	CR42 K6M-PFZ	1016 X 440 X 800	2637	1 /160 W	98	3 /8 "	5 /8 "	24	104
KHR542 MQE-DX	CR42 K6M-TFM	1016 X 440 X 800	2637	1 /160 W	98	3 /8 "	5 /8 "	8	45
KHR553 MQE-DX	CR53KQM-TFD	1030 X 432 X 1160	4000	2 /106 W	132	1 /2 "	7 /8 "	13.8	61
KHR562 MQE-DX	CR62 KQM-TFD	1030 X 432 X 1160	4000	2 /106 W	132	1 /2 "	7 /8 "	16	55

C. Medium Temperature Applications (Process Chilling & Cold Rooms) Scroll									
Model	**Compressor**	**Dimensions (L X W X H) in mm**	**Air Flow (CFM)**	**No Of Fans/ Power Input (W)**	**Net Weight (kg)**	**Liquid Line Connection Size (in)**	**Suction Line Connection Size (in)**	**Compressor MCC (A)**	**Compressor LRA (A)**
KHZ515PQL-EX	ZB15KQE-TFD	908 X 350 X 602	2072	1/59W	79	3/8"	1/2"	7	26
KHZ519PQL-EX	ZB19KQE-TFD	908 X 350 X 602	2072	1/59W	79	3/8"	1/2"	7	32
KHZ521PQL-EX	ZB21KQE-TFD	1016 X 440 X 800	2637	1/160W	95	3/8"	5/8"	10.3	40
KHZ526PQL-EX	ZB26KQE-TFD	1016 X 440 X 800	2637	1/160W	90	1/2"	5/8"	9	46
KHZ529PQL-EX	ZB29KQE-TFD	1016 X 440 X 800	2637	1/160W	100	1/2"	5/8"	11	50
KHZ538PQL-EX	ZB38KQE-TFD	1016 X 440 X 1172	4000	2/106W	130	1/2"	7/8"	14	65.5
KHZ545PQL-EX	ZB45KQE-TFD	1016 X 440 X 1172	4000	2/106W	140	1/2"	7/8"	14.2	74
KHZ548PQL-EX	ZB48KQE-TFD	1016 X 440 X 1172	4000	2/106W	140	1/2"	7/8"	19.1	101
KHZ558PQL-EX	ZB58KQE-TFD	1260 x 680 x 1020	5000	2/160W	150	5/8"	1 1/8"	23	95
KHZ566PQL-EX	ZB66KQE-TFD	1260 x 680 x 1020	5000	2/160W	152	5/8"	1 1/8"	24.5	111
KHZ576PQL-EX	ZB76KQE-TFD	1260 x 680 x 1020	5000	2/160W	152	5/8"	1 1/8"	28	118

D. Low Temperature Applications (Process Chilling & Cold Rooms) Reciprocating									
Model	**Compressor**	**Dimensions (L X W X H) in mm**	**Air Flow (CFM)**	**No Of Fans/ Power Input (W)**	**Net Weight (kg)**	**Liquid Line Connection Size (in)**	**Suction Line Connection Size (in)**	**Compressor MCC (A)**	**Compressor LRA (A)**
KHM475LQL-CX	KCM475LAL-C	908 X 350 X 602	1767	1/59W	84	3/8"	5/8"	13	72
KHM475LQL-EX	KCM475LAL-E	908 X 350 X 602	1767	1/59W	84	3/8"	5/8"	6.1	28
KHM512LQL-EX	KCM512LAL-E	1016 X 440 X 800	2630	1/160	90	3/8"	5/8"	8	45
KHM515LQL-EX	KCM515LAL-E	1016 X 440 X 800	2630	1/160	90	3/8"	5/8"	8	45
KHM517LQL-EX	KCM517LAL-E	1016 X 440 X 1172	4000	2/106	132	1/2"	5/8"	14.2	61
KHM520LQL-EX	KCM520LAL-E	1016 X 440 X 1172	4000	2/106	132	1/2"	5/8"	16	55

E. Low Temperature Applications (Process Chilling & Cold Rooms) Scroll									
Model	**Compressor**	**Dimensions (L X W X H) in mm**	**Air Flow (CFM)**	**No Of Fans/ Power***	**Net Weight (kg)**	**Liquid Line Connection Size (in)**	**Suction Line Connection Size (in)**	**Compressor MCC (A)**	**Compressor LRA (A)**
KHZ506LRL-EX	ZSI06KQE-TFM	1043 X 440 X 805	2698	1/160W	96.5	3/8"	5/8"	7.9	39.2
KHZ508LRL-EX	ZSI08KQE-TFM	1043 X 440 X 805	2698	1/160W	96.5	3/8"	5/8"	7.9	39.2
KHZ509LRL-EX	ZSI09KQE-TFM	1043 X 440 X 805	2698	1/160W	96.5	3/8"	5/8"	7.8	39.2
KHZ511LRL-EX	ZSI11KQE-TFM	1043 X 440 X 805	2698	1/160W	111	1/2"	7/8"	11.2	51.5
KHZ514LRL-EX	ZSI14KQE-TFM	1043 X 440 X 805	2698	1/160W	140	1/2"	7/8"	12.1	51.5
KHZ515LRL-EX	ZSI15KQE-TFM	1043 X 440 X 805	2698	1/160W	140	1/2"	7/8"	12.7	51.5
KHZ518LRL-EX	ZSI18KQE-TFM	1043 X 440 X 1140	5079	2/106W	169	1/2"	7/8"	15	74
KHZ521LRL-EX	ZSI21KQE-TFM	1043 X 440 X 1140	5079	2/106W	190	1/2"	7/8"	19.3	101

Technical Data Indoor Type

A. Medium Temperature Applications (Process Chilling & Cold Rooms) Scroll									
Model	**Compressor**	**Dimensions (L X W X H) in mm**	**Air Flow (CFM)**	**No Of Fans/ Power***	**Net Weight (kg)**	**Liquid Line Connection Size (in)**	**Suction Line Connection Size (in)**	**Comp-ressor MCC (A)**	**Comp-ressor LRA (A)**
KHZ595PAL-EX	ZB95KQE-TFD	1360 X 820 X 890	6200	2/520W	200	5/8"	1 1/8"	37	140
KHZ611PAL-EX	ZB114KQE-TFD	1820 X1350X1109	9500	2/550W	180	5/8"	1 1/8"	39	174
KHZ613PAL-EX	ZB130KQE-TFD	1776 X1350X1100	8240	2/550W	312	1 1/8"	1 5/8"	33	288
KHZ615PAL-EX	ZB150KQE-TWD	1776 X1350X1100	8240	2/550W	361	1 1/8"	1 5/8"	39	225
KHZ619PAL-EX	ZB190KQE-TWD	1791 X1430X1357	11440	4/520W	408	1 1/8"	1 5/8"	50	272
KHZ622PAL-EX*	ZB220KQE-TWD	2006 X1381X1440	12880	4/520W	533	1 1/8"	1 5/8"	60	310

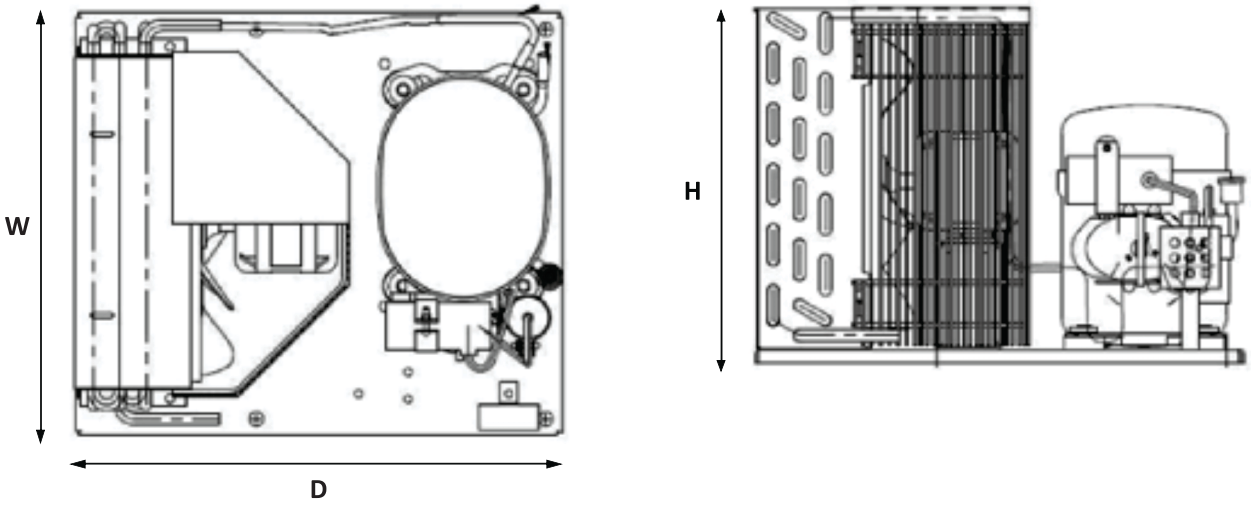
*: condenser fan motor is 1Ph except KHZ622 PAL-EX

B. Low Temperature Applications (Process Chilling & Cold Rooms) Scroll									
Model	**Compressor**	**Dimensions (L X W X H) in mm**	**Air Flow In m3/hr**	**No Of Fans/ Power***	**Net Weight (kg)**	**Liquid Line Connection Size (in)**	**Suction Line Connection Size (in)**	**Comp-ressor MCC (A)**	**Comp-ressor LRA (A)**
KHZ526LVL	ZFI26KQE-TFD	1130 X 680 X 695	4111	2/470W	126	1/2	11/8	13.0	74
KHZ536LVL	ZFI36KQE-TFD	1330 X 820 X 822	6300	2/800W	141	1/2	13/8	16.6	102
KHZ550LVL	ZFI50KQE-TFD	1640 X 820 X 942	7500	2/800W	247	5/8	15/8	25.0	118
KHZ559LVL	ZFI59KQE-TFD	1640 X 820 X 942	7500	2/800W	247	5/8	15/8	27.0	118
KHZ568LVL	ZFI68KQE-TFD	1640 X 820 X 942	7500	2/800W	250	5/8	15/8	28.3	139
KHZ581LVL	ZFI81KQE-TFD	1350 X 788 X 1162	8242	2/1100W	307	5/8	13/8	31	168

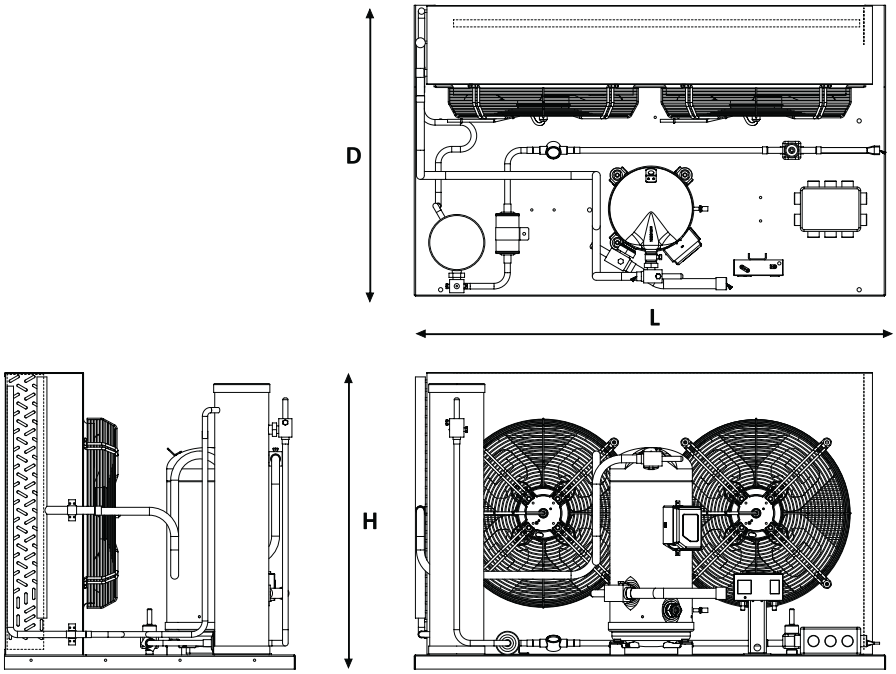
Dimensional Drawings

Indoor Type CDUs

Single Fan FHP Models

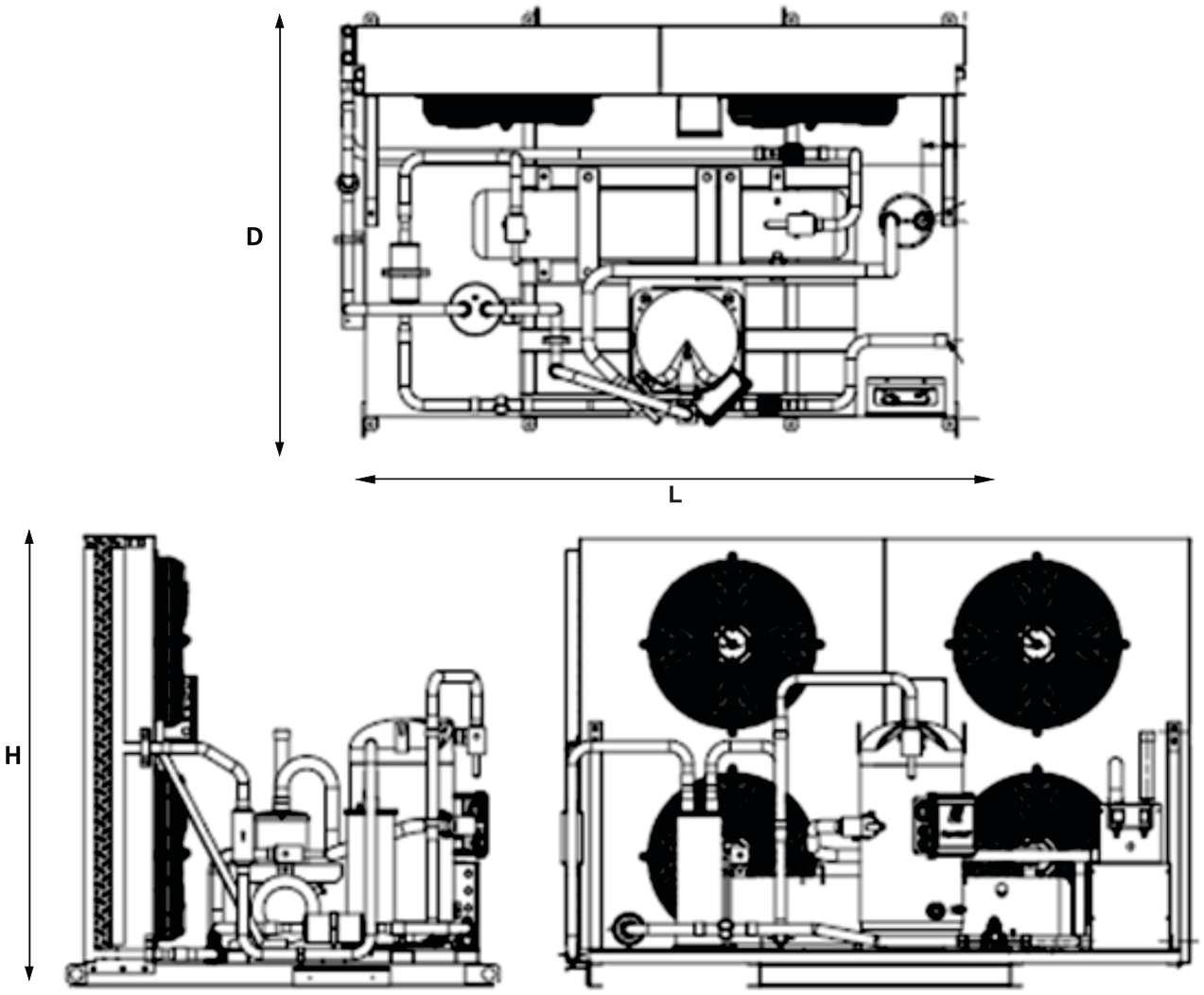


2 Fan MT/LT Model



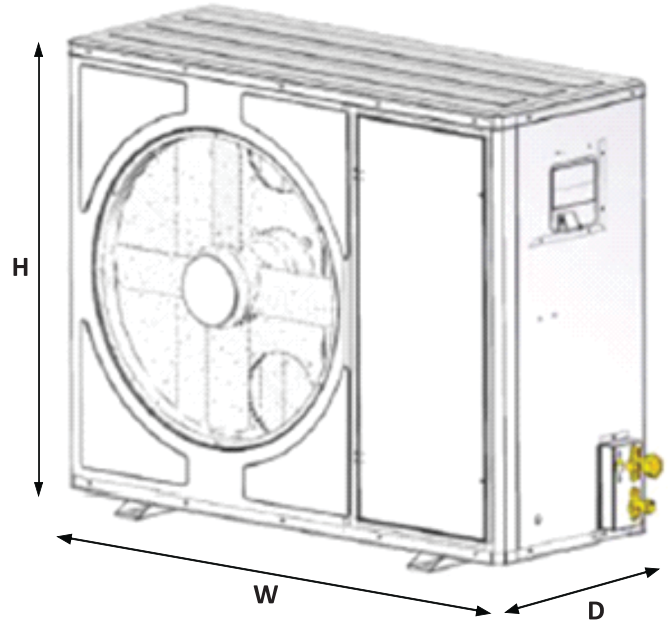
*KHZ 595 is supplied with canopy
KHZ526LVL-KHZ568 LVL models supplied with canopy

4 Fan MT/LT model

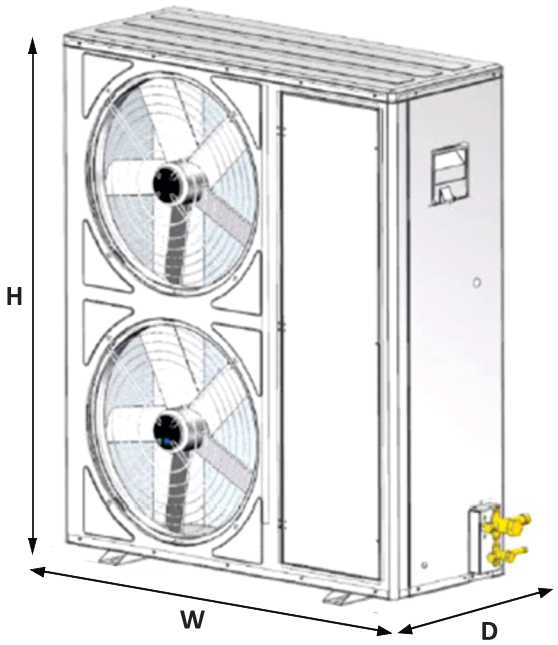


Outdoor Type CDUs (Process & Milk)

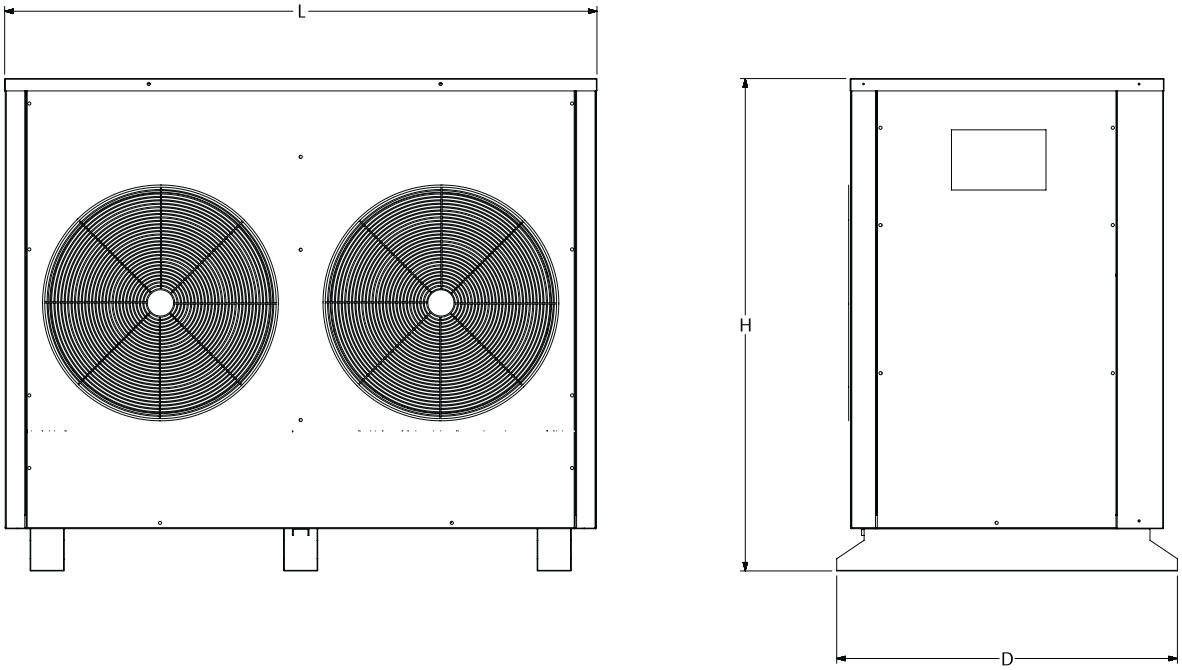
Single Fan Models (Recip/Scroll)



Vertical Double Fan Models (Recip/Scroll)



Horizontal Double Fan Models
(KHZ558, KHZ566, KHZ576, KHZ548-MQE Models only)



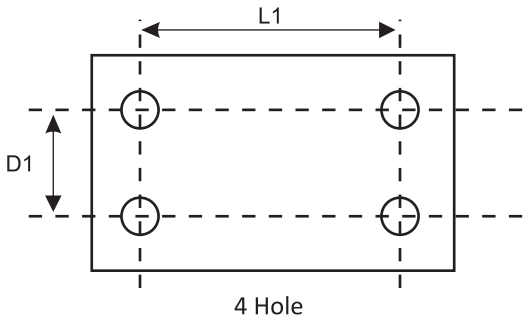
Condensing Unit Mounting Data

ODU Summary

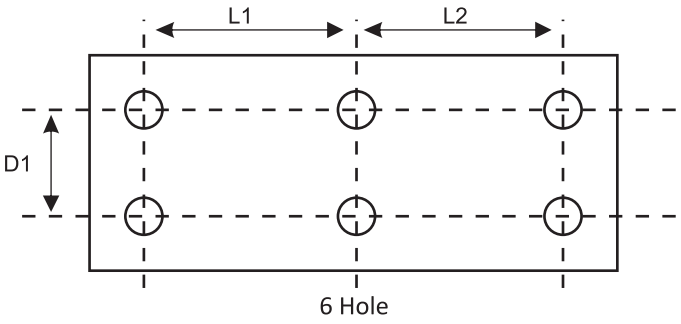
Type	Ref. Models	Box Dimension mm			Mounting Configuration	Mounting CD mm	
		L	W	H		L1	D1
ODU	KHJ513PQE KHR- PQE 522,530 KHM: PQE-511, LQL-475	908	350	603	4 Hole	564	323
	KHR: PQE/PRL-535/536/541/542, MQE-536/542 KHM: PQL/PRL-514/519/522/512/515 KHZ: PQE/PRL- 515~529, MQE/MRE-515~526, LRL-506~515	1052	442	796	4 Hole	656	402
	KHR: PQE/PRE-553/562/572, MQE/MRE-553/562 KHZ: PQE/PRL-529/538/545/548, LQL/LRL-518/521 KHM: LQL/LRL-517/520	1068	442	1169	4 Hole	656	402
	KHZ: PQE/L-558/566/576	1218	701	1013	4 Hole	1043	671
	KHZ: PQE/PRL-558, MQE/MRE/L-548	1485	700	969	4 Hole	1100	665

IDU Summary

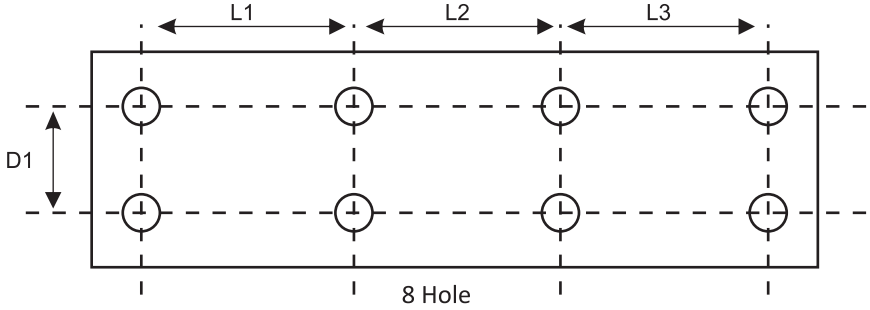
Type	Ref. Models	Box Dimension mm			Mounting Configuration	Mounting CD mm			
		L	W	H		L1	L2	L3	D1
IDU	KHZ: LVL -521/526	1224	733	714	4 Hole	1158	-	-	460
	KHZ595PAL	1383	841	844	4 Hole	1180	-	-	476
	KHZ536LVL	1419	830	838	4 Hole	1353	-	-	779
	KHZ611PAL	1623	1100	1098	4 Hole	1541	-	-	1050
	KHZ550/59/68	1732	827	966	4 Hole	1666	-	-	550
	KHZ581LVL	1776	1350	1097	6 Hole	763	763	-	1290
	KHZ613PAL/ KHZ615PAL	1776	1350	1101	6 Hole	763	763	-	1290
	KHZ619PAL	1791	1430	1357	6 Hole	770	753	-	1370
	KHZ622PAL	2006	1381	1440	8 Hole	510	840	508	1300



4 Hole



6 Hole



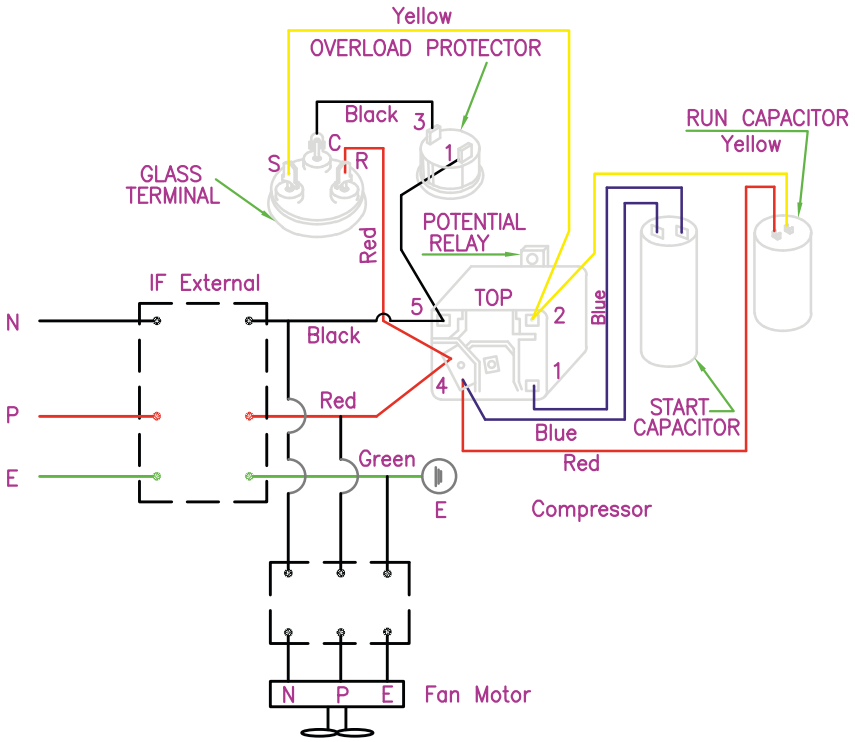
8 Hole

Mounting Configuration

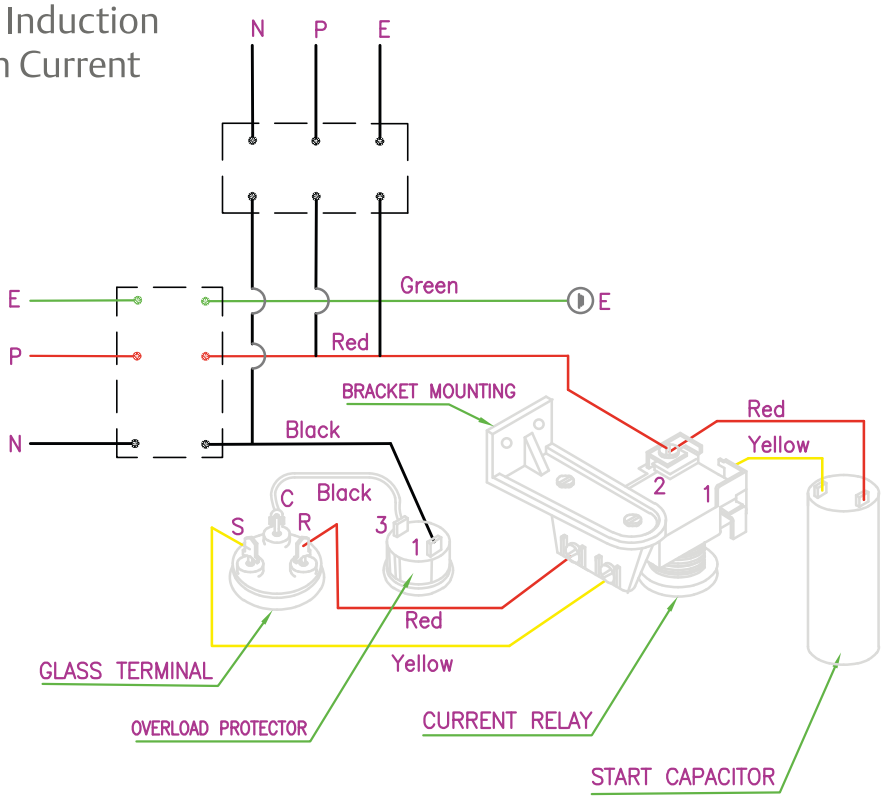
Wiring Diagrams

Fractional Horse Power Condensing Unit

Capacitor Start Capacitor Run (CSCR)



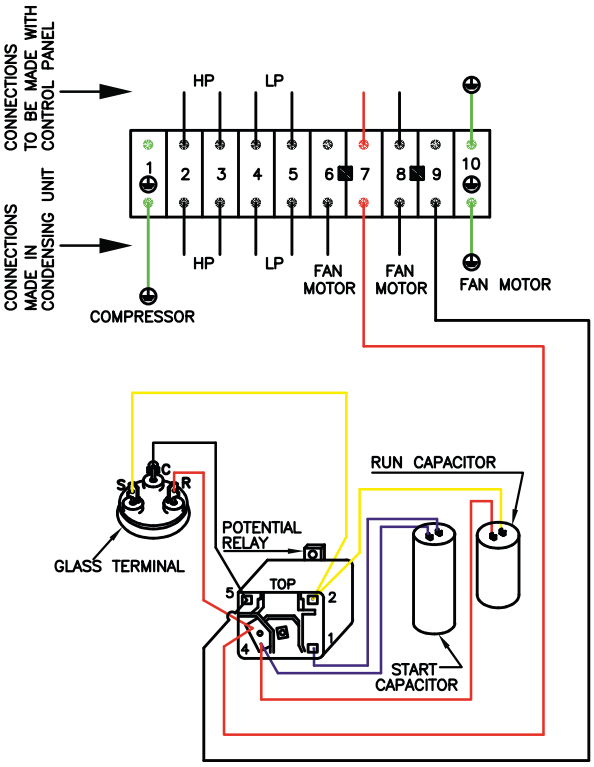
Capacitor Start Induction Run (CSIR) With Current



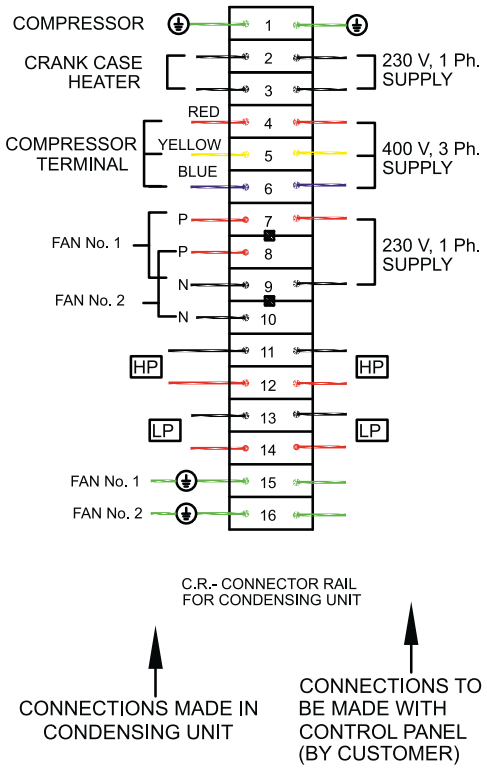
Integral Horse Power Condensing Unit

Connector Diagram (Process Outdoor Type 1 Fan & 2 Fan Units)

Single Phase

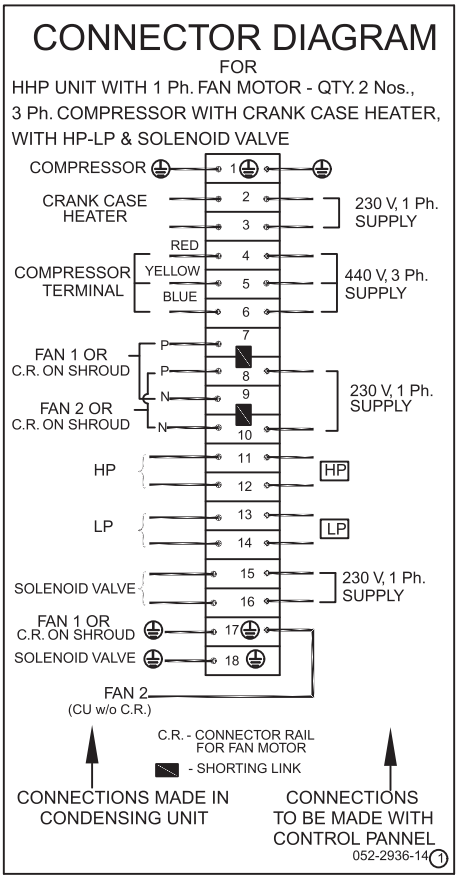


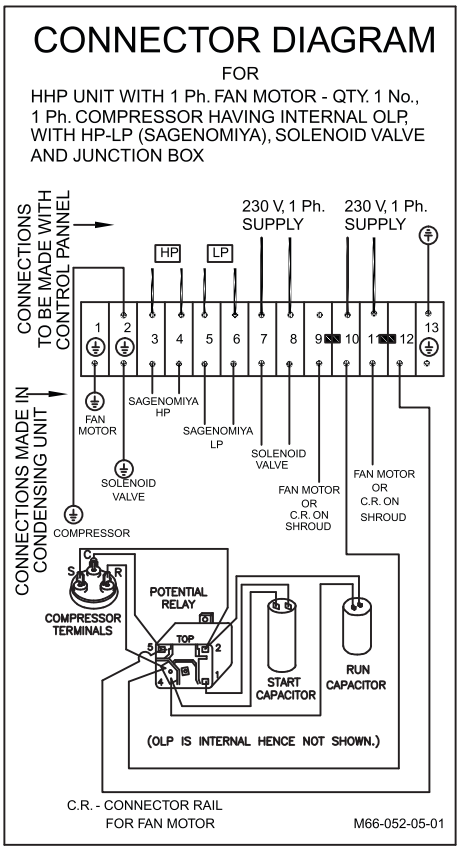
Three Phase



Integral Horse Power Condensing Unit

Connector Diagram (Milk Outdoor Type 1 Fan & 2 Fan Units)



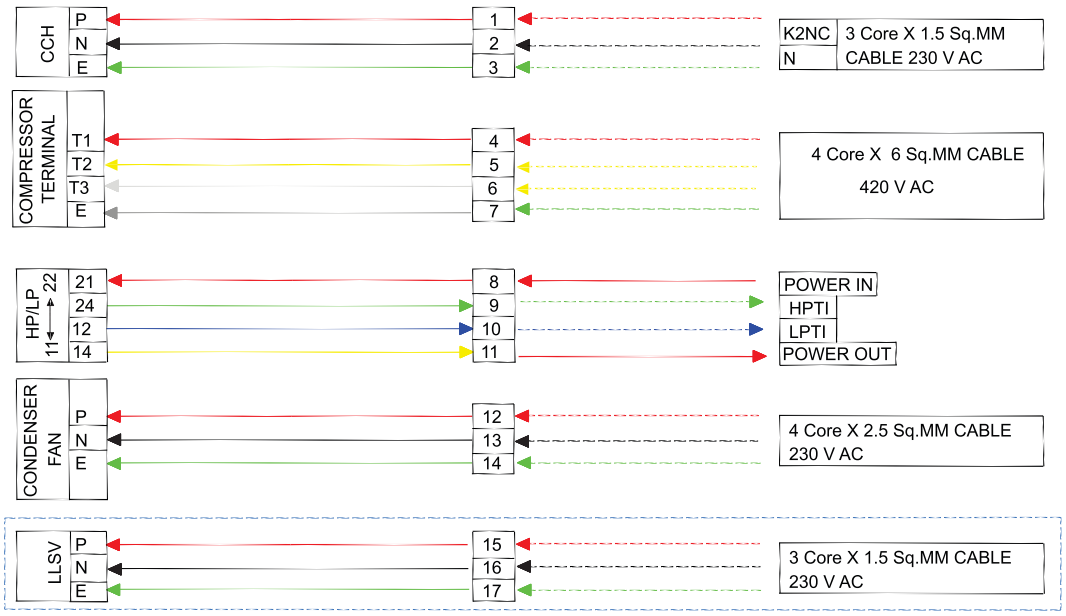


Terminal Box Diagram (Indoor Type MT Scroll CDU)

"052-3445-00" : LARGE REFRIGERATION SCROLL CDUs - TERMINAL BOX WIRING DETAILS: KHZ595PAL, KHZ611PAL ③

COMPRESSOR :- ZB95KQE-TFD, ZB114KQE-TFD ③

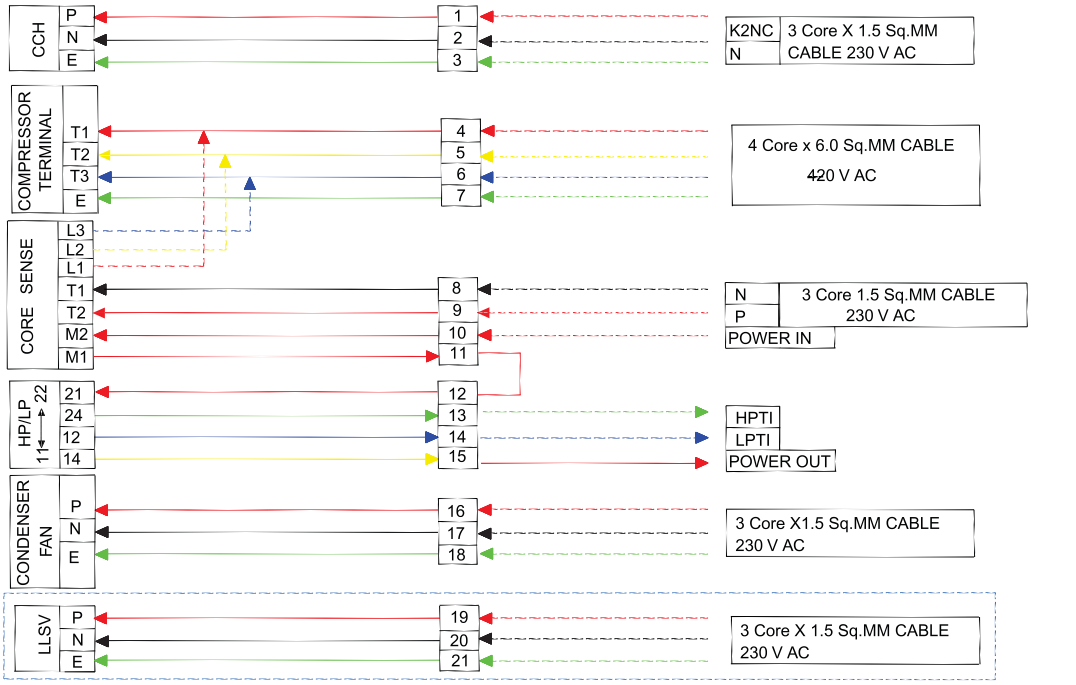
CONTROL WIRING DIAGRAM FOR LARGE SCROLL CONDENSING UNIT ELECTRICAL CONNECTIONS ③



"052-3445-01" : LARGE REFRIGERATION SCROLL CDUs - TERMINAL BOX WIRING DETAILS: KHZ613PAL ③

COMPRESSOR :- ZB130 KQE TWD/TWM ③

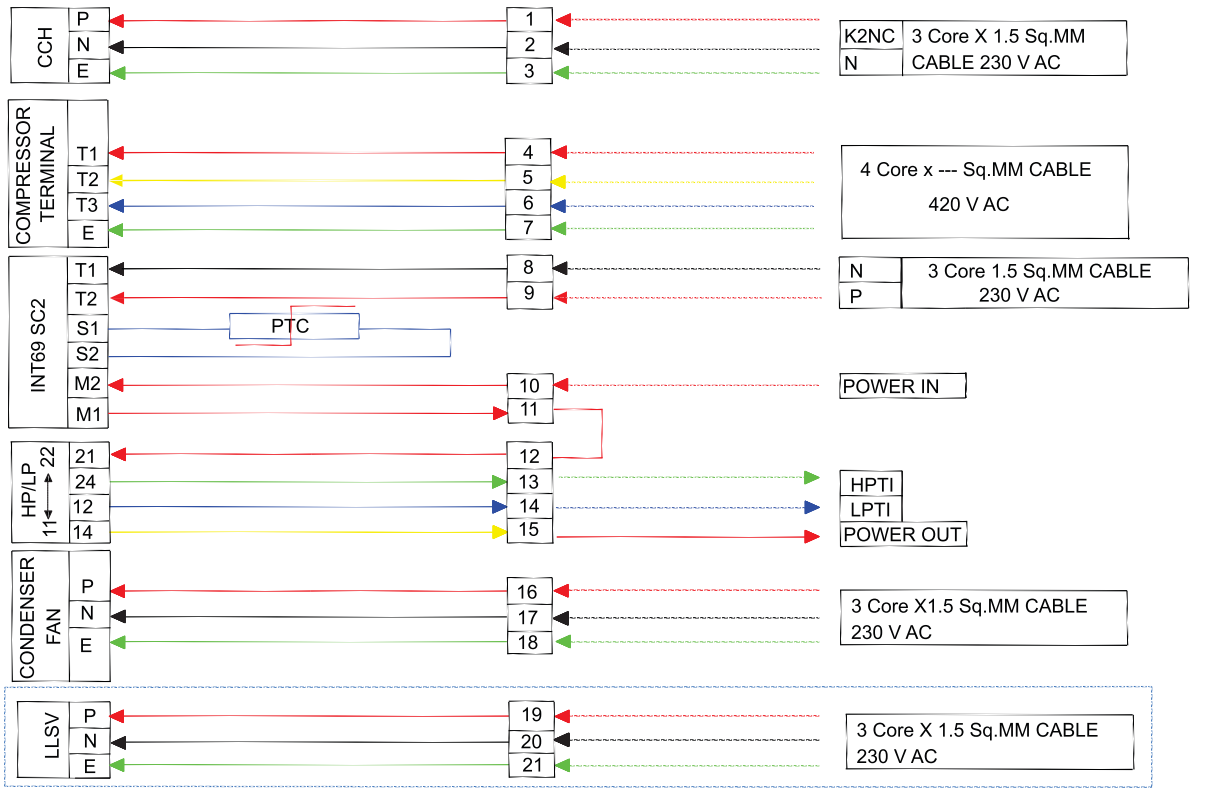
CONTROL WIRING DIAGRAM FOR LARGE SCROLL CONDENSING UNIT ELECTRICAL CONNECTIONS ③



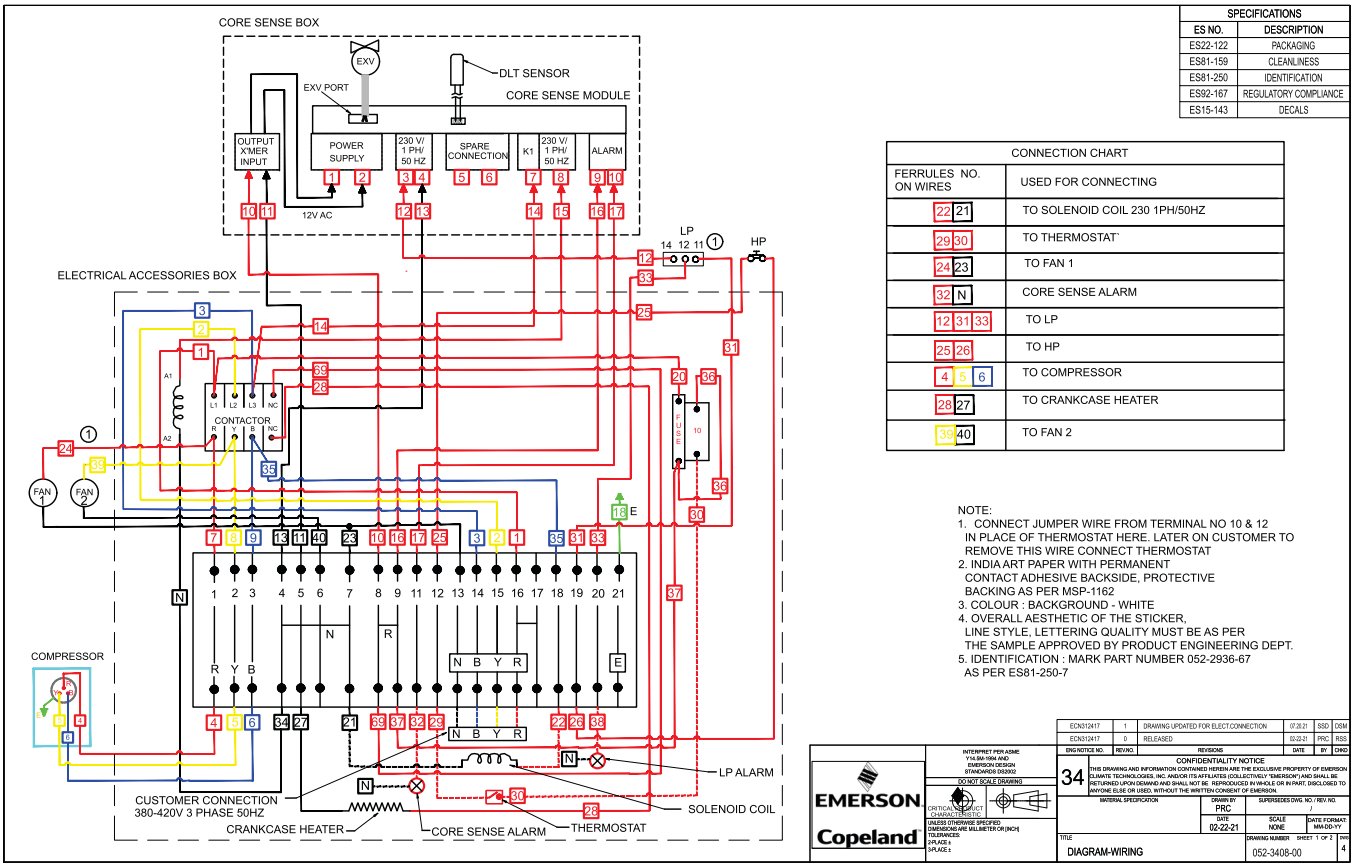
"052-3445-02" : LARGE REFRIGERATION SCROLL CDUs - TERMINAL BOX WIRING DETAILS: KHZ615PAL, KHZ619PAL, KHZ622PAL

COMPRESSOR :- ZB150-ZB220 KQE TWD/TWM

CONTROL WIRING DIAGRAM FOR LARGE SCROLL CONDENSING UNIT ELECTRICAL CONNECTIONS



KHZ*LRL Condensing Unit System Wiring Diagram (2 Fan Model)



SPECIFICATIONS	
ES NO.	DESCRIPTION
ES22-122	PACKAGING
ES81-159	CLEANLINESS
ES81-250	IDENTIFICATION
ES92-167	REGULATORY COMPLIANCE
ES15-143	DECALS

CONNECTION CHART	
FERRULES NO. ON WIRES	USED FOR CONNECTING
22 21	TO SOLENOID COIL 230 1PH/50HZ
29 30	TO THERMOSTAT`
24 23	TO FAN 1
32 N	CORE SENSE ALARM
12 31 33	TO LP
25 26	TO HP
4 5 6	TO COMPRESSOR
28 27	TO CRANKCASE HEATER
39 40	TO FAN 2

NOTE:
1. CONNECT JUMPER WIRE FROM TERMINAL NO 10 & 12 IN PLACE OF THERMOSTAT HERE. LATER ON CUSTOMER TO REMOVE THIS WIRE CONNECT THERMOSTAT
2. INDIA ART PAPER WITH PERMANENT CONTACT ADHESIVE BACKSIDE, PROTECTIVE BACKING AS PER MSP-1162
3. COLOUR : BACKGROUND - WHITE
4. OVERALL AESTHETIC OF THE STICKER, LINE STYLE, LETTERING QUALITY MUST BE AS PER THE SAMPLE APPROVED BY PRODUCT ENGINEERING DEPT.
5. IDENTIFICATION : MARK PART NUMBER 052-2936-67 AS PER ES81-250-7

ECN312417	1	DRAWING UPDATED FOR ELECT.CONNECTION	07.20.21	SSD	DSM
ECN312417	0	RELEASED	02-22-21	PRC	RSS
ENG NOTICE NO.	REV.NO.	REVISIONS	DATE	BY	CHKD

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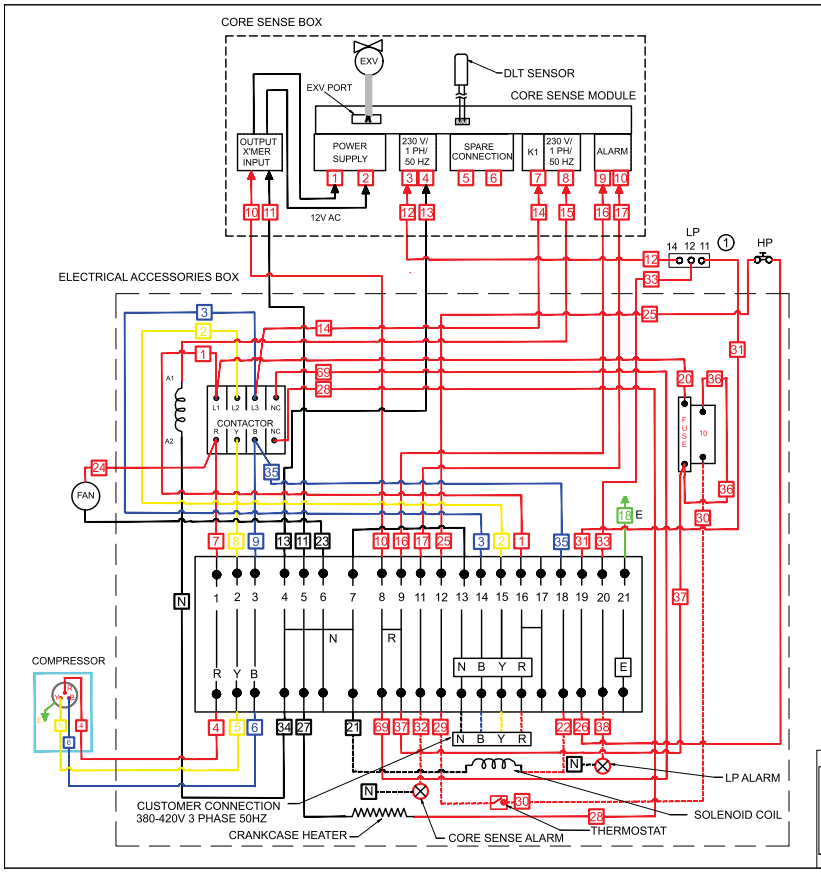
DATE: 02-22-21 | SCALE: NONE | DATE FORMAT: MM-DD-YY
TITLE: DIAGRAM-WIRING | DRAWING NUMBER: 052-3408-00 | SHEET 1 OF 2 | REV: 4

KHZ*LRL Unit Control Wiring Diagram (1 Fan Model)



SPECIFICATIONS	
ES NO.	DESCRIPTION
ES22-122	PACKAGING
ES81-159	CLEANLINESS
ES81-250	IDENTIFICATION
ES92-167	REGULATORY COMPLIANCE
ES15-143	DECALS

CONNECTION CHART	
FERRULES NO. ON WIRES	USED FOR CONNECTING
22 21	TO SOLENOID COIL 230 1PH/50HZ
29 30	TO THERMOSTAT`
24 23	TO FAN
32 N	CORE SENSE ALARM
12 31 33	TO LP
25 26	TO HP
4 5 6	TO COMPRESSOR
28 27	TO CRANKCASE HEATER

NOTE:
1. CONNECT JUMPER WIRE FROM TERMINAL NO 10 & 12 IN PLACE OF THERMOSTAT HERE. LATER ON CUSTOMER TO REMOVE THIS WIRE CONNECT THERMOSTAT
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3. COLOUR : BACKGROUND - WHITE
4. OVERALL AESTHETIC OF THE STICKER, LINE STYLE, LETTERING QUALITY MUST BE AS PER THE SAMPLE APPROVED BY PRODUCT ENGINEERING DEPT.
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XX-PLACE ±
ANGULAR ±

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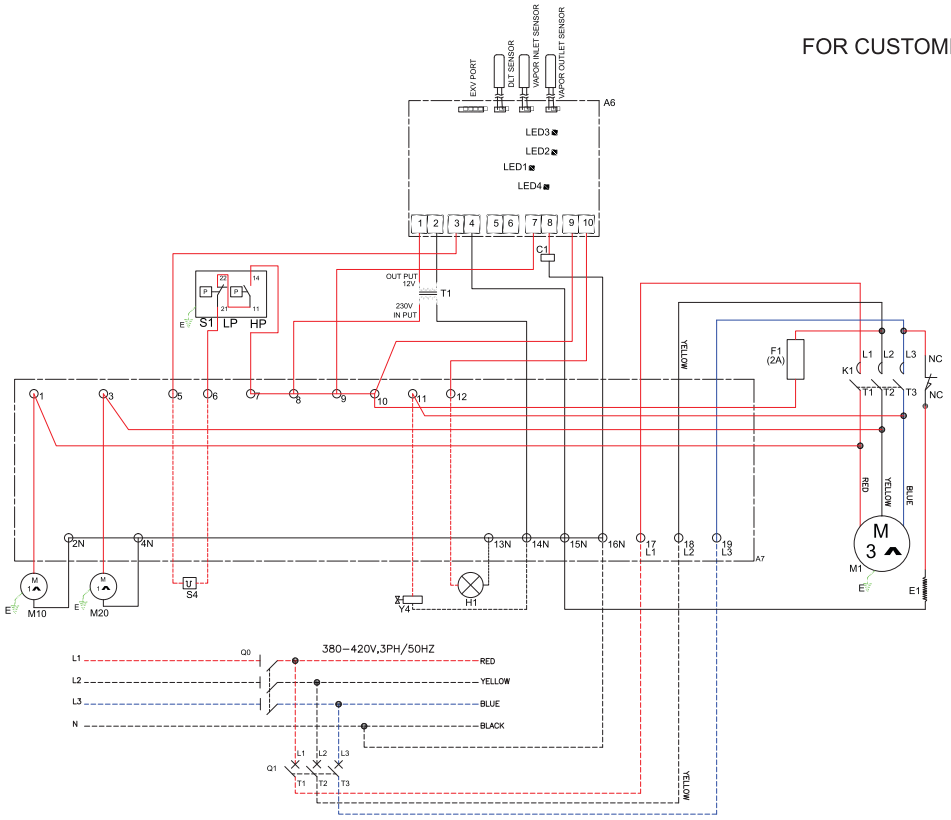
KHZ*LVL Condensing Unit System Wiring Diagram

TFD: 380V/420V -50 Hz-3Ph

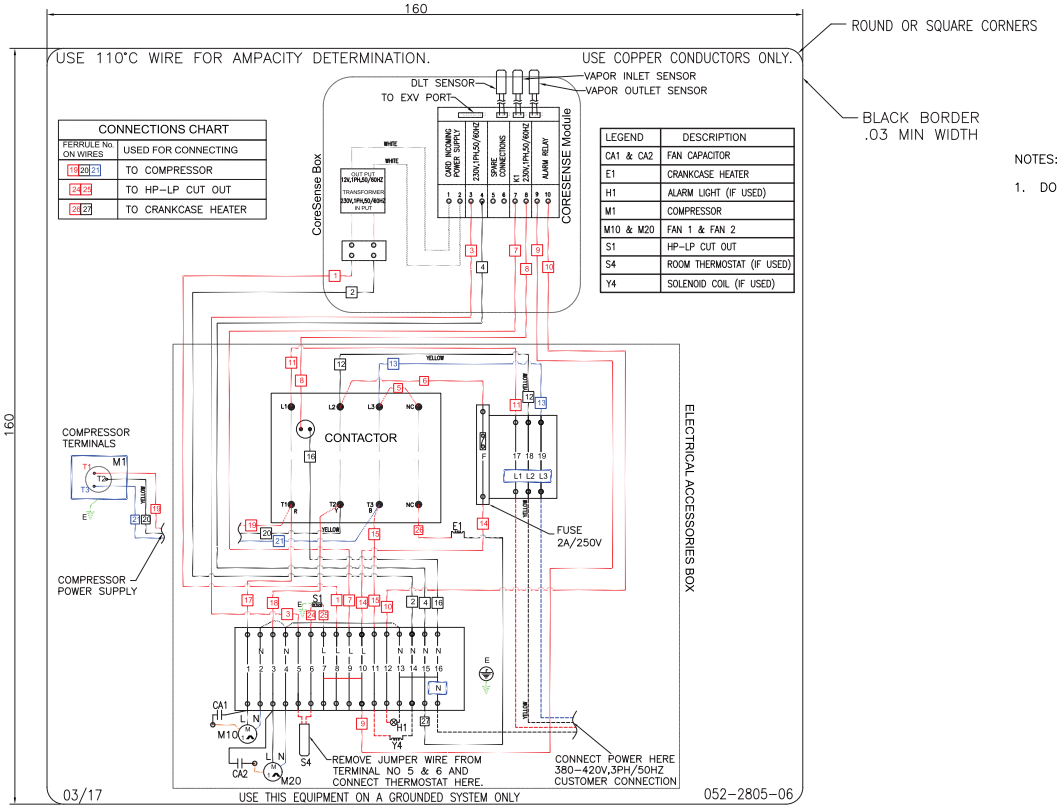
FOR CUSTOMER & PLANT USE ONLY



LEGEND	
NOTATION	DESCRIPTION
A6	CORESENSE MODULE
A7	TERMINAL BOX CONDENSING UNIT
E1	CRANKCASE HEATER
F1	FUSE CONTROL CIRCUIT
H1	SIGNAL LAMP / ALARM (NOT PROVIDED)
K1	COMPRESSOR (M1) CONTACTOR
C1	CONTACTOR COIL
M1	COMPRESSOR
M10	FAN 1
M20	FAN 2
Q0	ISOLATOR (NOT PROVIDED)
Q1	CIRCUIT BREAKER (NOT PROVIDED)
(1) S1	HP–LP CUT OUT
S4	ROOM THERMOSTAT (NOT PROVIDED)
T1	TRANSFORMER
Y4	SOLENOID VALVE LIQUID LINE (NOT PROVIDED)
(1) ———	FIELD OR CUSTOMER WIRING
(1) - - - - -	FACTORY WIRING

KHZ*LVL Condensing Unit Control Wiring Diagram

TFD: 380V/420V -50 Hz-3Ph



Chiller Cold Room

Room Temperature: +4 °C

Refrigerant: R22/R407C

External Room Size m (ft)	External Volume m^3 (ft^3)	Cooling Load kW	India Built Recip CDU (R22)		India Built Recip CDU (R407C)	
			Model	Capacity kW	Model	Capacity kW
1.8*3.0*2.4 (6*10*8)	13.6 (480)	2.2	KHJ513PQE	2.4	KHR522PQB	2.9
2.4*3.7*2.4 (8*12*8)	21.8 (768)	3.0	KHR522PQE	3.5	KHR522PQB	2.9
3.0*3.7*2.4 (10*12*8)	27.2 (960)	3.8	KHR522PQE	3.5	KHR530PQB	4.4
4.3*4.3*2.4 (14*14*8)	44.4 (1568)	5.1	KHR530PQE	4.6	KHR536PQB	5.2
4.3*4.9*2.4 (14*16*8)	50.8 (1792)	6.0	KHR536PQE	5.8	KHR542PQB	6.3
4.9*4.9*2.4 (16*16*8)	58.0 (2048)	7.1	KHR542PQE	6.6	KHR553PQB	7.9
4.9*6.1*2.4 (16*20*8)	72.5 (2560)	7.7	KHR553PQE	9.4	KHR553PQB	7.9
6.1*6.1*2.4 (20*20*8)	90.7 (3200)	9.1	KHR553PQE	9.4	KHR562PQB	9.3
6.1*7.3*2.4 (20*24*8)	108.8 (3840)	10.6	KHR562PQE	10.8	-	-
6.1*7.9*2.4 (20*26*8)	117.8 (4160)	11.5	KHR572PQE	11.7	-	-

Refrigerant:R404A

External Room Size m (ft)	External Volume m^3 (ft^3)	Cooling Load kW	India Built Recip CDU	
			Model	Capacity kW
1.8*3.0*2.4 (6*10*8)	13.6 (480)	2.2	KFJ461PQL	2.1
2.4*3.7*2.4 (8*12*8)	21.8 (768)	3.0	KHM511PQL	3.7
3.0*3.7*2.4 (10*12*8)	27.2 (960)	3.8	KHM511PQL	3.7
4.3*4.3*2.4 (14*14*8)	44.4 (1568)	5.1	KHM514PQL	5.0
4.3*4.9*2.4 (14*16*8)	50.8 (1792)	6.0	KHM519PQL	6.0
4.9*4.9*2.4 (16*16*8)	58.0 (2048)	7.1	KHM522PQL	6.8
4.9*6.1*2.4 (16*20*8)	72.5 (2560)	7.7	KHM511PQL* 2	3.7 * 2
6.1*6.1*2.4 (20*20*8)	90.7 (3200)	9.1	KHM514PQL* 2	5.0 * 2
6.1*7.9*2.4 (20*26*8)	117.8 (4160)	11.5	KHM519PQL* 2	6.0 * 2
6.1*9.8*2.4 (20*32*8)	145.0 (5120)	13.8	KHM522PQL* 2	6.8 *2

Refrigerant: R404A

External Room Size m (ft)	External Volume m^3 (ft^3)	Cooling Load kW	India Built Scroll CDU	
			Model	Capacity kW
2.4*3.7*2.4 (8*12*8)	21.8 (768)	3.0	KHZ515PQL	3.8
3.0*3.7*2.4 (10*12*8)	27.2 (960)	3.8	KHZ515PQL	3.8
4.3*4.3*2.4 (14*14*8)	44.4 (1568)	5.1	KHZ519PQL	4.9
4.3*4.9*2.4 (14*16*8)	50.8 (1792)	6.0	KHZ521PQL	6.2
4.9*4.9*2.4 (16*16*8)	58.0 (2048)	7.1	KHZ526PQL	7.0
4.9*6.1*2.4 (16*20*8)	72.5 (2560)	7.7	KHZ529PQL	8.2
6.1*6.1*2.4 (20*20*8)	90.7 (3200)	9.1	KHZ538PQL	10.3
6.1*7.3*2.4 (20*24*8)	108.8 (3840)	10.4	KHZ538PQL	10.3
6.1*7.9*2.4 (20*26*8)	117.8 (4160)	11.5	KHZ545PQL	12.0
6.1*9.8*2.4 (20*32*8)	145.0 (5120)	13.8	KHZ548PQL	13.6
7.3*7.3*3.6 (24*24*12)	191.8 (6912)	17.3	KHZ566PQL	17.8
7.3*8.4*3.6 (24*28*12)	220.7 (8064)	19.9	KHZ576PQL	20.7
7.3*10.4*3.6 (24*34*12)	273.3 (9792)	24.5	KHZ595PAL	24.0
10.4*12.2*3.6 (34*40*12)	456.7 (16320)	31.60	KHZ611PAL	31.90

Notes:

1. Design Is Based On 43°C Ambient Condition
2. 80mm PUF Panels Considered For Walls & Ceiling
3. Fresh Product Entering Temperature +30°C Is Considered
4. Product Turnover 10% of Storage Capacity Is Considered
5. Product Pull Down Time 12 Hour Is Considered
6. Safety Factor 10% Is Considered
7. Capacity Is Based On 20 Hour Compressor Run Time
8. Selection Is Based On 5K Evaporator TD To Maintain 90% RH
9. Evaporator Selection Capacity Is Equivalent To CDU Capacity

Softy Machines	
Case	Model
15	KHM511PQL
20	KHM514PQL
30	KHM519PQL
40	KHM522PQL

Bulk Milk Chiller

Daily Milk Load	India Built Recip & Scroll CDUs	
	R22	R22/R404A
500 Liters	KHR522MQE-BX/DX	KHZ515MQE/L-BX/DX
1000 Liters	KHR536MQE-BX/DX	KHZ521MQE/L-BX/DX
2000 Liters	KHR536MQE-FX/DX*2 Nos	KHZ521MQE/L-FX/DX*2Nos
3000 Liters	KHR553MQE-DX*2Nos	KHZ538MQE/L-DX*2Nos
4000 Liters	KHR572MAE-DX*2Nos	KHZ545MQE/L-DX*2Nos
5000 Liters	---	KHZ548MQE/L-DX*2Nos

Notes:
1. Selection Is Based On -1°C Evaporating Temp. & 38°C Ambient Condition As Per IS 5708
2. Power Supply - BX/FX: 1Ph, 50Hz & DX/EX: 3Ph, 50Hz
3. Selection Is Based On 5K Evaporator TD
4. Evaporator Selection Capacity Is Equivalent To CDU Capacity
5. Air-Cooled CDU Built Using Hermetic Reciprocating & Scroll Type Compressor.

Freezer Cold Room

Room Temperature: -20 °C

Refrigerant: R404A

External Room Size m (ft)	External Volume m^3 (ft^3)	Cooling Load kW	KHM CDU		ZSi CDU	
			Model	Capacity kW	Model	Capacity kW
1.8*1.2*2.4 (6*4*8)	5.2 (192)	1.5	KHM475LQL*2	1.6	KHZ506LRL	1.9
2.4*3.0*2.4 (8*10*8)	18.1 (640)	2.7	KHM512LQL*2	2.6	KHZ511LRL	3.2
3.0*3.7*2.4 (10*12*8)	27.2 (960)	2.9	KHM515LQL*2	3.2	KHZ511LRL	3.2
4.3*4.9*2.4 (14*16*8)	50.8 (1792)	4.8	KHM517LQL*2	4.8	KHZ515LRL	4.5
4.3*6.1*2.4 (14*20*8)	63.5 (2240)	5.8	KHM520LQL*2	5.3	KHZ518LRL	6.4

Notes:
1. Design Is Based On 43°C Ambient Condition
2. 100mm PUF Panels Considered For Walls & Ceiling
3. Frozen Product Entering Temperature -15°C Is Considered
4. Product Turnover 100% Of Storage Capacity Is Considered
5. Product Pull Down Time 12 Hour Is Considered
6. Safety Factor 10% Is Considered
7. Capacity Is Based On 18 Hour Compressor Run Time
8. Selection Is Based On 5K Evaporator TD
9. Evaporator Selection Capacity Is Equivalent To CDU Capacity
10. Air-Cooled CDU Built Using Hermetic Reciprocating Type Compressor.

WATER CHILLER (15 ° C Inlet & 10° C Outlet)		
Flow Rate (Ltr/ Hr)	R22	R404A
	Model Name	Model Name
600	KHJ513PXX	-
800	KHR522PXX /MXX	KHM511PQL
1000	KHR530PXX /MXX	KHM514PQL
1400	KHR536PXX /MXX	KHM519PQL
1600	KHR542PXX /MXX	-
2000	KHR553PXX /MXX	-
2400	KHR562PXX /MXX	-
2800	KHZ572PXX/MXX	-

Deep Freezer		
Hard Top (Ltrs)	Glass Top (Ltrs)	Model
300	200	KFN372LAG-BX
400	300	KFN396LAG-BX
500	400	KFN415LAG-BX
800	600	KFN396LAG-BX x 2Nos
1000	800	KFN415LAG-BX x 2Nos

Bottle Cooler		
Capacity (Ltr)	R22	R134a
100-120	-	KFE419HBG-BX
220-250	-	KFE432HFG-BX
260-350	-	KFE444HFG-BX
350-500	KFE461HAE-BX	KFN463HFG-BX / KFJ467HAG-BX
600-800	KFJ511HAE-BX	KFJ498HAG-CX

Water cooler		
Capacity (Ltr)	R22	R134a
20	-	KFE419HBG-BX
40	-	KFE444HFG-BX
60	KFE461HAE-BX	KFN463HFG-BX / KFJ467HAG-BX
100	KFJ511HAE-BX	KFJ498HAG-CX

Visi Cooler	
Case	Model
2(110 Ltr)	KFE419HBG-BX
7(250 Ltr)	KFE432HFG-BX
9(400 Ltr)	KFE444HFG-BX
12(650 Ltr)	KFN463HFG-BX

Based on a return gas temperature of 18.3°C. Power includes condenser fan.

Note: These are preliminary guidelines. The actual compressor selection may differ from the guidelines.
Please check the system details before selecting compressor model.

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