



VIETNAM

ADVANCE COOL TECHNOLOGY VIETNAM
THE CHILLER EXPERT

Low Temp Condensing unit 2-8 Hp



Reliability



Highest efficiency



Lower energy bills



Lower maintenance cost



Exclusive Distributor : Nutrigood Vietnam Co.LTD.

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Intelligent store solutions - A most innovative approach to enterprise facility management, ACT's Intelligent Store architecture integrates hardware and services to provide retailers a single view into their entire network of facilities and understanding what facilities actually cost to operate and maintain.

The Intelligent Store architecture transforms data from store equipment and controls into actionable insights. Designed to deliver value in both new and existing stores, ACT aims to help retailers:

- **Make better decisions on resources investment for maximum impact**
- **Receive accurate feedback and service customized to meet your specific needs**
- **Reduce operational costs and boost the profitability**

Energy efficiency - Utilizing ACT Scroll compressor technology, variable speed fan motor, large capacity condenser coil and advanced control algorithms, energy consumption is significantly reduced. End-users can save more than 20% on annual energy costs compared to using hermetic reciprocating units.

Reliability - Combining the proven reliability of Copeland Scroll compressors with advanced electronics controller and diagnostics, equipment reliability is greatly enhanced. Fault code alerts and fault code retrieval capabilities provide information to help improve speed and accuracy of system diagnostics. Integrated electronics provide protection against over-current, overheating, incorrect phase rotation, compressor cycling, high pressure resets and low pressure cut-outs. It can also send out a warning message to the operator when there is liquid floodback, which can prevent critical damage to the unit.



Features	Owner/Enterprise benefits
Intelligent store solution	• Retail store monitoring • Enhanced energy savings • High-end food safety through real time monitoring
Energy saving	• Lower operating costs
Diagnostic protection capabilities	• Greatly reduces the chance of nuisance service calls • Extends the life of your equipment • Reduces potential service costs • Keeps equipment operating at their original performance levels to ensure optimum energy efficiency and temperature control • Serves as a guide to what the contractor needs to fix in case of malfunction
Slim profile, lighter weight and optional wall mount capability	• Lower installation costs • Enhances the appearance of your enterprise site • Avoids more costly solutions arising from potential location issues
Sound improvement	• Creates a more comfortable environment for guests • Beneficial for regions with noise ordinances



Reliability



Lower maintenance cost



Highest efficiency



Lower energy bills





Copeland Selection Software

2HP

OPERATING CONDITIONS

Evaporating Temperature:	-25.0°C
Condensing Temperature:	45.0°C
Liquid subcooling:	0.0K
Suction Return Temperature:	20.0°C

Required Capacity:	16.1 kW
Compressor Selected:	ZSI08KQE-PFS
Refrigerant:	R404A Dew Point

PERFORMANCE AT SPECIFIED OPERATING POINT ZSI08KQE-PFS DATA AT 50 HZ

Capacity kW	2.39
Power Input kW	2.09
COP	1.14
Current 220V,	A 9.93
Mass Flow g/s	19.40

COMPRESSOR MECHANICAL AND PHYSICAL DATA

Length/Width, mm	243/243
Net Weight, kg	22.2
Stub Discharge, inch	1/2
Oil Quantity, l	0.74
High Side PS, bar(g)	24.3
Low Side TS Min., °C	-35
Displacement @ 50 Hz, cu.m/h	7.13
Base mounting (hole dia), mm	190 x 190 (19.0)
Sound Pressure @ 1m (MT), dBA	57
Height, mm	388
Stub Suction, inch	3/4
Stub Injection, inch	3/8
Sound Power (MT), dBA	68
Low Side PS, bar(g)	20

COMPRESSOR ELECTRICAL DATA (220/240V - 1~ - 50Hz)

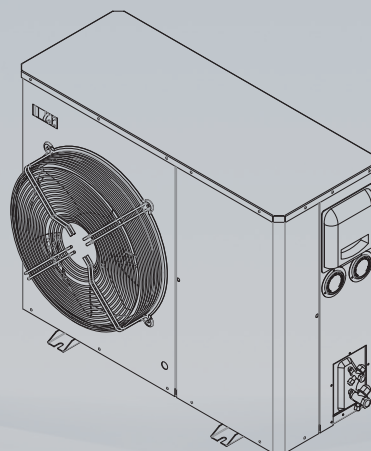
Locked Rotor Current, A	63.9
Maximum Operating Current, A	15.6
Winding Resistance, ohm	1.22/1.36 (R/S)
Default Enclosure Class IP	21 (IEC 34)

ACCESSORIES INCLUDED

Discharge Temperature Protection	Discharge Temp Sensor
Enclosure Class	IP21
Mounting Grommets	Standard
CoreSense Diagnostic Module	IP 54

ACCESSORIES OPTIONAL

Crankcase Heater	33W External
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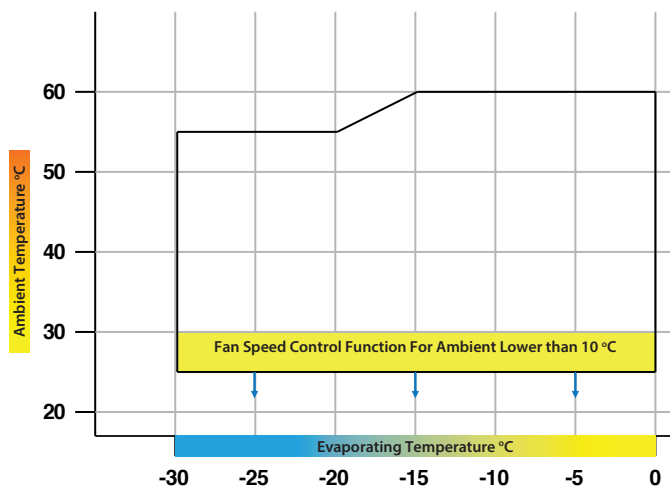
50Hz

ZSI08KQE-PFS

R404A Dew Point

2HP

Minimum evaporating temp. with:
—— 20°C Suction Gas Return



Suction Return Temperature 20.0°C

Evaporating Temperature °C

Liquid subcooling 0.0K

Cond		Capacity kW						
°C		-30	-25	-20	-15	-10	-5	0
25		2.42	3.03	3.76	4.62	5.61	6.76	8.07
30		2.36	2.94	3.63	4.43	5.37	6.46	7.69
35		2.24	2.79	3.44	4.19	5.07	6.08	7.24
40		2.09	2.60	3.20	3.91	4.72	5.66	6.74
45		1.91	2.39	2.95	3.59	4.35	5.21	6.21
50		1.73	2.17	2.68	3.27	3.96	4.75	5.66
55		1.57	1.97	2.43	2.96	3.58	4.29	5.11
60					2.67	3.22	3.85	4.58
		Power Input kW						
		-30	-25	-20	-15	-10	-5	0
25		1.43	1.50	1.53	1.55	1.55	1.56	1.58
30		1.53	1.60	1.65	1.67	1.68	1.69	1.72
35		1.66	1.74	1.78	1.81	1.83	1.85	1.88
40		1.82	1.90	1.95	1.97	1.99	2.01	2.05
45		2.02	2.09	2.14	2.16	2.18	2.20	2.24
50		2.24	2.31	2.35	2.37	2.38	2.40	2.43
55		2.50	2.55	2.58	2.59	2.60	2.61	2.64
60					2.84	2.84	2.84	2.86
		Current 220V, A						
		-30	-25	-20	-15	-10	-5	0
25		7.00	7.22	7.38	7.50	7.58	7.64	7.70
30		7.68	7.91	8.09	8.22	8.32	8.41	8.49
35		8.31	8.56	8.74	8.88	9.00	9.09	9.19
40		8.97	9.21	9.40	9.54	9.66	9.76	9.86
45		9.70	9.93	10.11	10.25	10.36	10.46	10.56
50		10.56	10.77	10.93	11.06	11.16	11.25	11.34
55		11.60	11.79	11.92	12.03	12.11	12.18	12.25
60					13.21	13.26	13.31	13.36
		Mass Flow g/s						
		-30	-25	-20	-15	-10	-5	0
25		15.50	19.50	24.30	30.00	36.80	44.80	54.10
30		15.90	19.90	24.70	30.40	37.10	45.00	54.30
35		15.90	19.90	24.70	30.40	37.10	44.90	54.20
40		15.80	19.70	24.50	30.10	36.70	44.50	53.70
45		15.40	19.40	24.10	29.60	36.20	43.90	53.00
50		15.10	19.00	23.60	29.10	35.60	43.30	52.30
55		14.90	18.80	23.30	28.80	35.20	42.80	51.80
60					28.80	35.20	42.80	51.90

50Hz

ZSI08KQE-PFS

R404A Dew Point

Copeland Scroll - Compressor - Refrigeration - LT Liquid Injection

2HP

COMPRESSOR MECHANICAL AND PHYSICAL DATA

Displacement @ 50 Hz, cu.m/h	7.13
Length/Width, mm	243/243
Height, mm	388
Net Weight, kg	22.2
Stub Suction, inch	3/4
Stub Discharge, inch	1/2
Stub Injection, inch	3/8
Oil Quantity, l	0.74
Base mounting (hole dia), mm	190 x 190 (19.0)
Sound Pressure @ 1m (MT), dBA	57
Sound Power (MT), dBA	68
High Side PS, bar(g)	24.3
Low Side PS, bar(g)	20
Low Side TS Min., °C	-35

COMPRESSOR ELECTRICAL DATA (220/240V - 1~ - 50Hz)

Maximum Operating Current, A	15.6
Locked Rotor Current, A	63.9
Winding Resistance, ohm	1.22/1.36 (R/S)
Default Enclosure Class	IP 21 (IEC 34)

ACCESSORIES INCLUDED

Discharge Temperature Protection	Discharge Temp Sensor
Enclosure Class	IP21
Mounting Grommets	Standard
CoreSense Diagnostic Module	IP 54

ACCESSORIES OPTIONAL

Crankcase Heater	33W External
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MOTOR OPTIONS

Power Supply	Nominal Voltage	Motor Code	Start Connection	DOL Connection	Amps Factor
220 V/1~/50Hz	220	PFS		PSC	1.00

**2HP**

Model: ZSI08KQE-PFS

Suction Return Temperature 20.0°C

Refrigerant: R404A Dew Point

Liquid subcooling 0.0K

S.I.

50Hz

Evaporating Temperature °C

	Cooling Capacity, kW						
	-30.0	-25.0	-20.0	-15.0	-10.0	-5.0	0.0
25.0	2.49	3.15	3.95	4.90	6.02	7.31	8.80
30.0	2.42	3.05	3.81	4.71	5.77	7.00	8.42
35.0	2.28	2.88	3.60	4.45	5.45	6.62	7.96
40.0	2.11	2.68	3.35	4.15	5.09	6.19	7.46
45.0	1.92	2.45	3.07	3.82	4.70	5.72	6.92
50.0	1.72	2.21	2.79	3.48	4.30	5.25	6.38
55.0	1.55	2.00	2.53	3.16	3.91	4.80	5.84
60.0				2.88	3.57	4.39	5.36

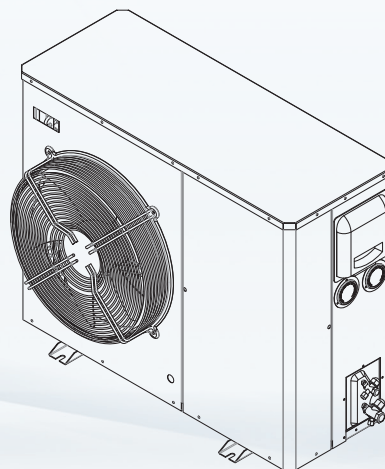
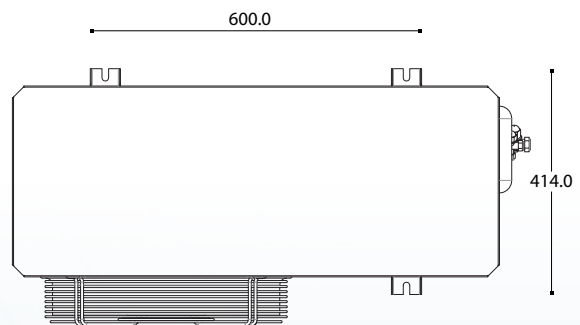
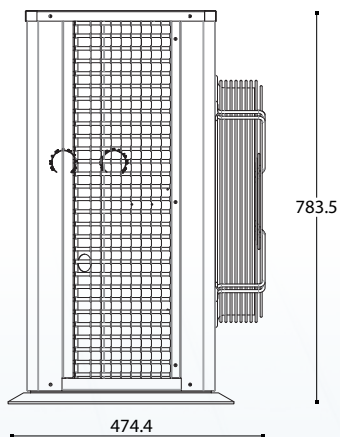
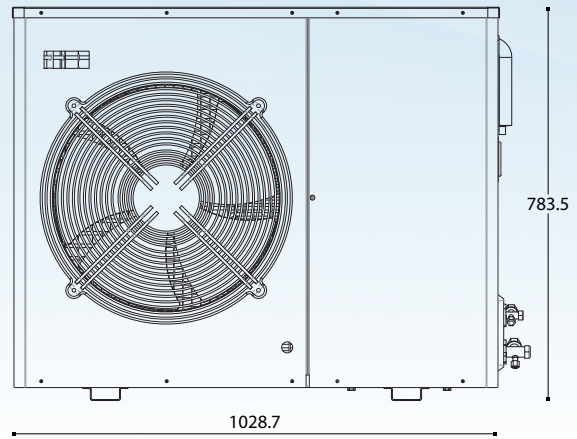
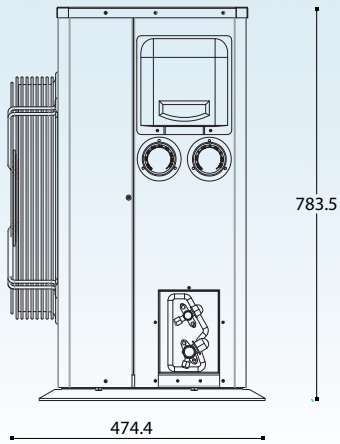
	Power, kW						
	-30.0	-25.0	-20.0	-15.0	-10.0	-5.0	0.0
25.0	1.43	1.50	1.54	1.55	1.56	1.56	1.58
30.0	1.53	1.60	1.65	1.67	1.68	1.70	1.72
35.0	1.66	1.74	1.78	1.81	1.83	1.85	1.88
40.0	1.82	1.90	1.95	1.98	2.00	2.01	2.05
45.0	2.02	2.09	2.14	2.16	2.18	2.20	2.24
50.0	2.24	2.31	2.35	2.37	2.38	2.40	2.43
55.0	2.49	2.55	2.58	2.59	2.60	2.61	2.64
60.0				2.84	2.84	2.84	2.86

	Current at 230 V, A						
	-30.0	-25.0	-20.0	-15.0	-10.0	-5.0	0.0
25.0	7.00	7.22	7.38	7.50	7.58	7.64	7.70
30.0	7.68	7.91	8.09	8.22	8.32	8.41	8.49
35.0	8.31	8.56	8.74	8.88	9.00	9.09	9.19
40.0	8.97	9.21	9.40	9.54	9.66	9.76	9.86
45.0	9.70	9.93	10.11	10.25	10.36	10.46	10.56
50.0	10.56	10.77	10.93	11.06	11.16	11.25	11.34
55.0	11.60	11.79	11.92	12.03	12.11	12.18	12.25
60.0				13.21	13.26	13.31	13.36

	Suction Mass Flow, g/s						
	-30.0	-25.0	-20.0	-15.0	-10.0	-5.0	0.0
25.0	18.20	22.60	27.70	33.60	40.40	48.20	57.00
30.0	18.70	23.00	28.10	34.00	40.80	48.50	57.20
35.0	18.75	23.10	28.20	34.00	40.70	48.40	57.10
40.0	18.55	22.90	27.90	33.70	40.30	48.00	56.60
45.0	18.10	22.40	27.40	33.10	39.70	47.30	55.90
50.0	17.65	21.90	26.90	32.60	39.10	46.60	55.10
55.0	17.35	21.60	26.50	32.10	38.60	46.00	54.60
60.0				32.20	38.60	46.00	54.60

Dimension

2HP





Copeland Selection Software

3HP

OPERATING CONDITIONS

Evaporating Temperature:	-25.0°C
Condensing Temperature:	45.0°C
Liquid subcooling:	8.3K
Suction Return Temperature:	-5.0°C

Required Capacity:	20.0 kW
Compressor Selected:	ZSI09KQE-TFP
Refrigerant:	R404A Dew Point

PERFORMANCE AT SPECIFIED OPERATING POINT ZSI09KQE-TFP DATA AT 50 HZ

Capacity kW	2.72
Power Input kW	2.20
COP	1.24
Current 380V, A	3.96
Mass Flow g/s	23.60
Heat Rejection kW	4.48

COMPRESSOR MECHANICAL AND PHYSICAL DATA

Length/Width, mm	243/243
Net Weight, kg	22.2
Stub Discharge, inch	1/2
Oil Quantity, l	0.74
High Side PS, bar(g)	24.3
Low Side TS Min., °C	-35
Displacement @ 50 Hz, cu.m/h	8.03
Base mounting (hole dia), mm	190 x 190 (19.0)
Sound Pressure @ 1m (MT), dBA	57
Height, mm	388
Stub Suction, inch	3/4
Stub Injection, inch	3/8
Sound Power (MT), dBA	68
Low Side PS, bar(g)	20

COMPRESSOR ELECTRICAL DATA (220/240V - 1~ - 50Hz)

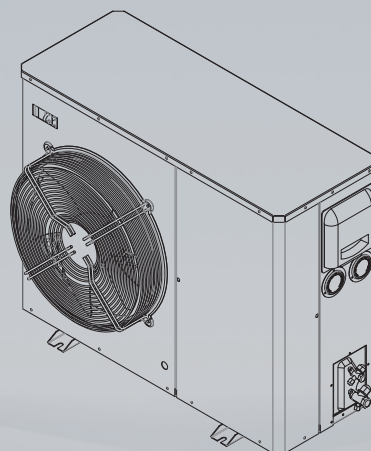
Locked Rotor Current, A	34.8
Maximum Operating Current, A	6.7
Winding Resistance, ohm	6.45
Default Enclosure Class IP	21 (IEC 34)

ACCESSORIES INCLUDED

Discharge Temperature Protection	Discharge Temp Sensor
Enclosure Class	IP21
Mounting Grommets	Standard
CoreSense Diagnostic Module	IP 54

ACCESSORIES OPTIONAL

Crankcase Heater	33W External
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50Hz

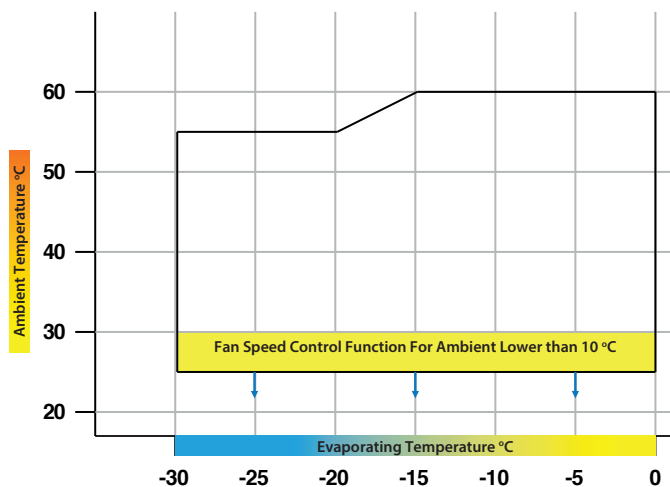
ZSI09KQE-TFS

R404A Dew Point

3HP

Minimum evaporating temp. with:

— 20°C Suction Gas Return



Suction Return Temperature 20.0°C

Evaporating Temperature °C

Liquid subcooling 0.0K

Cond		Capacity kW						
°C		-30	-25	-20	-15	-10	-5	0
25		2.80	3.50	4.32	5.26	6.36	7.62	9.08
30		2.75	3.42	4.19	5.08	6.11	7.29	8.65
35		2.59	3.22	3.94	4.77	5.73	6.83	8.10
40		2.35	2.95	3.62	4.39	5.27	6.30	7.47
45		2.08	2.64	3.26	3.97	4.78	5.72	6.80
50		1.81	2.34	2.91	3.56	4.30	5.15	6.14
55		1.61	2.09	2.61	3.20	3.86	4.63	5.52
60					2.93	3.52	4.20	4.99
		Power Input kW						
		-30	-25	-20	-15	-10	-5	0
25		1.39	1.48	1.53	1.55	1.56	1.58	1.62
30		1.54	1.63	1.68	1.71	1.73	1.76	1.81
35		1.70	1.79	1.85	1.88	1.90	1.94	2.00
40		1.89	1.98	2.03	2.06	2.09	2.13	2.19
45		2.12	2.20	2.25	2.27	2.29	2.33	2.40
50		2.39	2.46	2.50	2.51	2.53	2.56	2.63
55		2.71	2.77	2.79	2.80	2.81	2.83	2.89
60					3.14	3.13	3.14	3.19
		Current 380V, A						
		-30	-25	-20	-15	-10	-5	0
25		3.06	3.25	3.39	3.47	3.49	3.46	3.36
30		3.44	3.63	3.77	3.86	3.91	3.90	3.85
35		3.62	3.80	3.95	4.05	4.11	4.13	4.10
40		3.71	3.88	4.02	4.13	4.20	4.23	4.23
45		3.81	3.96	4.09	4.19	4.27	4.32	4.33
50		4.01	4.14	4.26	4.35	4.42	4.48	4.50
55		4.42	4.53	4.62	4.69	4.76	4.81	4.85
60					5.32	5.38	5.42	5.46
		Mass Flow g/s						
		-30	-25	-20	-15	-10	-5	0
25		17.90	22.50	27.90	34.30	41.70	50.50	60.80
30		18.50	23.10	28.50	34.80	42.20	50.90	61.10
35		18.40	23.00	28.40	34.60	41.90	50.50	60.60
40		17.70	22.40	27.70	33.80	41.00	49.50	59.50
45		16.80	21.40	26.70	32.70	39.80	48.20	58.10
50		15.80	20.40	25.70	31.70	38.70	46.90	56.80
55		15.20	19.90	25.10	31.10	38.00	46.20	55.90
60					31.60	38.50	46.60	56.40

50Hz

ZSI09KQE-TFS

R404A Dew Point

Copeland Scroll - Compressor - Refrigeration - LT Liquid Injection

3HP

COMPRESSOR MECHANICAL AND PHYSICAL DATA

Displacement @ 50 Hz, cu.m/h	8.03
Length/Width, mm	243/243
Height, mm	388
Net Weight, kg	22.2
Stub Suction, inch	3/4
Stub Discharge, inch	1/2
Stub Injection, inch	3/8
Oil Quantity, l	0.74
Base mounting (hole dia), mm	190 x 190 (19.0)
Sound Pressure @ 1m (MT), dBA	57
Sound Power (MT), dBA	68
High Side PS, bar(g)	24.3
Low Side PS, bar(g)	20
Low Side TS Min., °C	-35

COMPRESSOR ELECTRICAL DATA (220/240V - 1~ - 50Hz)

Maximum Operating Current, A	6.7
Locked Rotor Current, A	34.8
Winding Resistance, ohm	6.45
Default Enclosure Class	IP 21 (IEC 34)

ACCESSORIES INCLUDED

Discharge Temperature Protection	Discharge Temp Sensor
Enclosure Class	IP21
Mounting Grommets	Standard
CoreSense Diagnostic Module	IP 54

ACCESSORIES OPTIONAL

Crankcase Heater	33W External
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MOTOR OPTIONS

Power Supply	Nominal Voltage	Motor Code	Start Connection	DOL Connection	Amps Factor
380 V/3~/50Hz	380	TFP		Y	1.00

**3HP**

Model: ZSI09KQE-TFP

Refrigerant: R404A Dew Point

S.I.

Suction Return Temperature -5.0°C

Liquid subcooling 8.3K

50Hz

Evaporating Temperature °C

Capacity kW																
	-35.0	-34.0	-33.0	-32.0	-31.0	-30.0	-29.0	-28.0	-27.0	-26.0	-25.0	-24.0	-23.0	-22.0	-21.0	-20.0
35.0						2.68	2.80	2.93	3.06	3.20	3.34	3.48	3.63	3.78	3.93	4.09
40.0						2.42	2.54	2.66	2.79	2.92	3.05	3.18	3.32	3.46	3.60	3.75
45.0						2.13	2.25	2.36	2.48	2.60	2.72	2.84	2.97	3.10	3.24	3.37
50.0						1.85	1.96	2.07	2.18	2.29	2.40	2.52	2.63	2.75	2.88	3.00
55.0						1.64	1.73	1.84	1.94	2.04	2.15	2.25	2.36	2.47	2.58	2.69

Power Input kW																
	-35.0	-34.0	-33.0	-32.0	-31.0	-30.0	-29.0	-28.0	-27.0	-26.0	-25.0	-24.0	-23.0	-22.0	-21.0	-20.0
35.0						1.70	1.72	1.74	1.76	1.78	1.79	1.81	1.82	1.83	1.84	1.85
40.0						1.89	1.91	1.93	1.95	1.96	1.98	1.99	2.01	2.02	2.02	2.03
45.0						2.12	2.14	2.15	2.17	2.19	2.20	2.21	2.22	2.23	2.24	2.25
50.0						2.39	2.40	2.42	2.43	2.45	2.46	2.47	2.48	2.48	2.49	2.50
55.0						2.71	2.73	2.74	2.75	2.76	2.77	2.77	2.78	2.79	2.79	2.79

COP																
	-35.0	-34.0	-33.0	-32.0	-31.0	-30.0	-29.0	-28.0	-27.0	-26.0	-25.0	-24.0	-23.0	-22.0	-21.0	-20.0
35.0						1.57	1.62	1.68	1.74	1.80	1.86	1.92	1.99	2.06	2.14	2.21
40.0						1.28	1.33	1.38	1.43	1.48	1.54	1.59	1.65	1.72	1.78	1.85
45.0						1.01	1.05	1.10	1.14	1.19	1.24	1.29	1.34	1.39	1.45	1.50
50.0						0.78	0.82	0.85	0.89	0.93	0.98	1.02	1.06	1.11	1.16	1.20
55.0						0.60	0.64	0.67	0.71	0.74	0.78	0.81	0.85	0.89	0.93	0.96

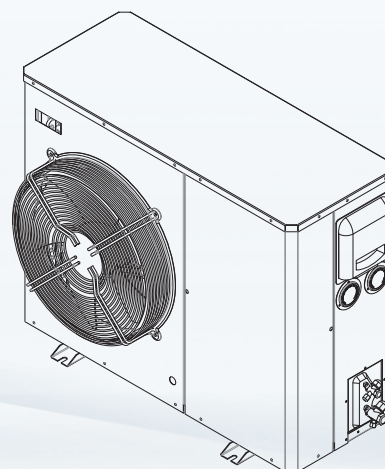
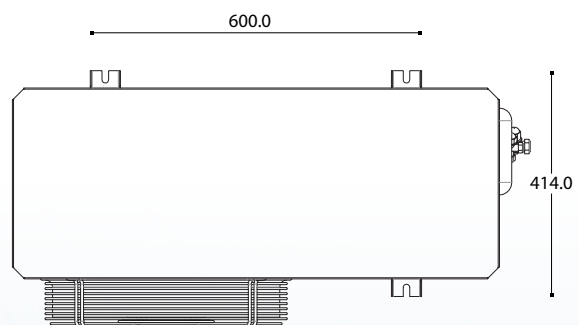
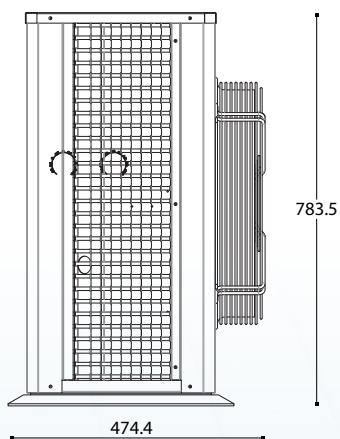
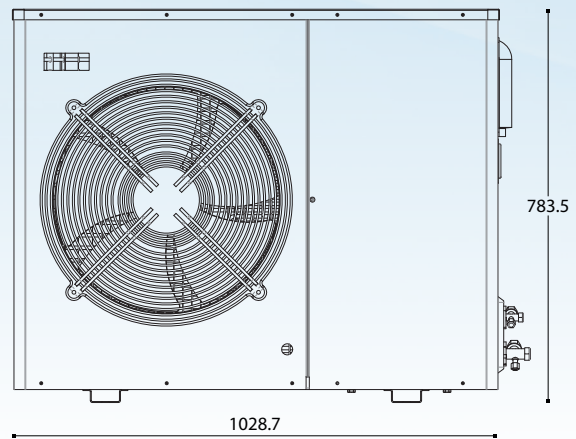
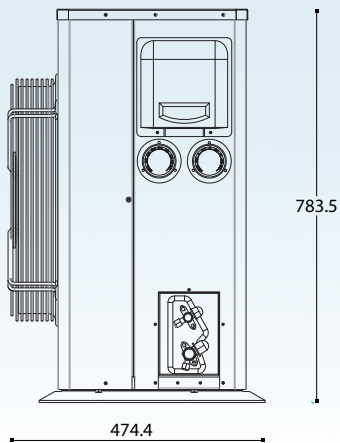
Current 380V, A																
	-35.0	-34.0	-33.0	-32.0	-31.0	-30.0	-29.0	-28.0	-27.0	-26.0	-25.0	-24.0	-23.0	-22.0	-21.0	-20.0
35.0						3.62	3.66	3.70	3.73	3.77	3.80	3.84	3.87	3.90	3.92	3.95
40.0						3.71	3.75	3.78	3.82	3.85	3.88	3.91	3.94	3.97	4.00	4.02
45.0						3.81	3.84	3.87	3.90	3.93	3.96	3.99	4.02	4.04	4.07	4.09
50.0						4.01	4.04	4.07	4.09	4.12	4.14	4.17	4.19	4.21	4.24	4.26
55.0						4.42	4.45	4.47	4.49	4.51	4.53	4.54	4.56	4.58	4.60	4.62

Mass Flow g/s																
	-35.0	-34.0	-33.0	-32.0	-31.0	-30.0	-29.0	-28.0	-27.0	-26.0	-25.0	-24.0	-23.0	-22.0	-21.0	-20.0
35.0						20.30	21.30	22.30	23.30	24.40	25.50	26.60	27.80	29.00	30.30	31.60
40.0						19.50	20.50	21.50	22.60	23.60	24.70	25.90	27.00	28.20	29.50	30.80
45.0						18.40	19.40	20.40	21.40	22.50	23.60	24.70	25.90	27.10	28.30	29.60
50.0						17.20	18.20	19.30	20.30	21.40	22.50	23.60	24.80	26.00	27.20	28.40
55.0						16.50	17.60	18.60	19.70	20.80	21.90	23.00	24.10	25.30	26.50	27.80

Heat Rejection kW																
	-35.0	-34.0	-33.0	-32.0	-31.0	-30.0	-29.0	-28.0	-27.0	-26.0	-25.0	-24.0	-23.0	-22.0	-21.0	-20.0
35.0						4.03	4.16	4.30	4.43	4.57	4.71	4.85	5.00	5.14	5.29	5.44
40.0						3.96	4.08	4.21	4.34	4.47	4.60	4.73	4.86	4.99	5.13	5.27
45.0						3.89	4.01	4.12	4.24	4.36	4.48	4.60	4.72	4.84	4.97	5.09
50.0						3.87	3.98	4.09	4.20	4.30	4.41	4.52	4.63	4.74	4.85	4.96
55.0						3.96	4.06	4.15	4.25	4.35	4.44	4.54	4.63	4.73	4.82	4.92

Dimension

3HP





Copeland Selection Software

4HP

OPERATING CONDITIONS

Evaporating Temperature:	-25.0°C
Condensing Temperature:	45.0°C
Liquid subcooling:	8.3K
Suction Return Temperature:	-5.0°C

Required Capacity:	20.0 kW
Compressor Selected:	ZSI14KQE-TFP
Refrigerant:	R404A Dew Point

PERFORMANCE AT SPECIFIED OPERATING POINT ZSI14KQE-TFP DATA AT 50 HZ

Capacity kW	4.36
Power Input kW	3.13
COP	1.39
Current 380V, A	5.42
Mass Flow g/s	37.80
Heat Rejection kW	6.80

COMPRESSOR MECHANICAL AND PHYSICAL DATA

Length/Width, mm	242/242
Net Weight, kg	29.9
Stub Discharge, inch	1/2
Oil Quantity, l	1.36
High Side PS, bar(g)	24.3
Low Side TS Min., °C	-35
Displacement @ 50 Hz, cu.m/h	12.7
Base mounting (hole dia), mm	190 x 190 (19.0)
Sound Pressure @ 1m (MT), dBA	65
Height, mm	431
Stub Suction, inch	7/8
Stub Injection, inch	3/8
Sound Power (MT), dBA	76
Low Side PS, bar(g)	20

COMPRESSOR ELECTRICAL DATA (380/420V - 3~ - 50Hz)

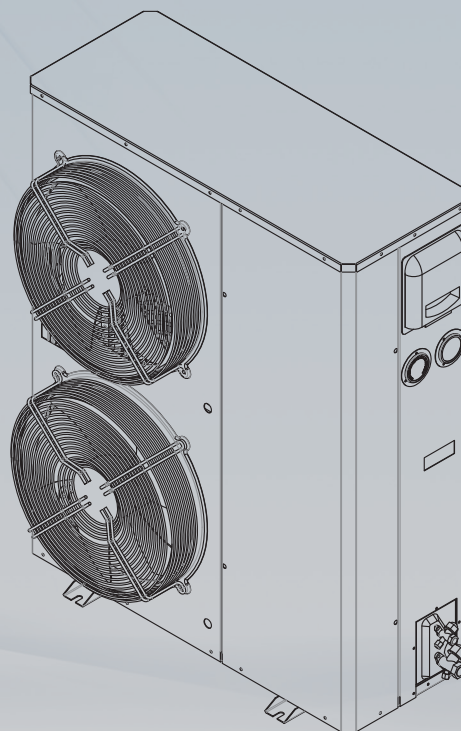
Locked Rotor Current, A	47
Maximum Operating Current, A	9.2
Winding Resistance, ohm	3.2
Default Enclosure Class IP	21 (IEC 34)

ACCESSORIES INCLUDED

Discharge Temperature Protection	Discharge Temp Sensor
Enclosure Class	IP21
Mounting Grommets	Standard
CoreSense Diagnostic Module	IP 54

ACCESSORIES OPTIONAL

Crankcase Heater	40W External
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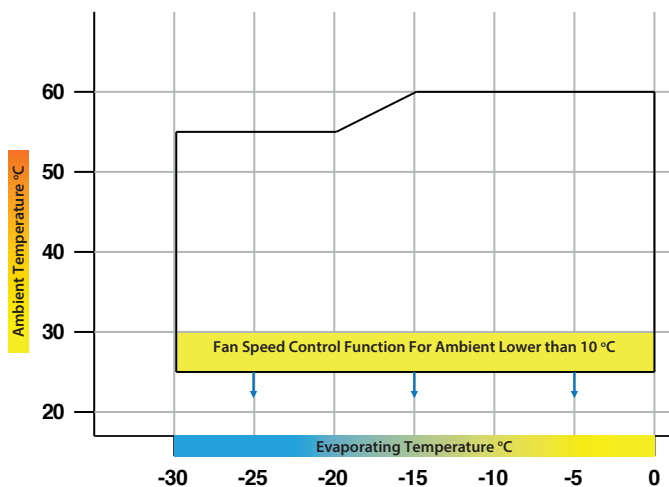
50Hz

ZSI14KQE-TFP

R404A Dew Point

4HP

Minimum evaporating temp. with:
—— 20°C Suction Gas Return



Suction Return Temperature 20.0°C

Evaporating Temperature °C

Liquid subcooling 0.0K

Cond		Capacity kW						
°C		-30	-25	-20	-15	-10	-5	0
25		4.37	5.49	6.81	8.38	10.20	12.30	14.65
30		4.18	5.23	6.49	7.97	9.68	11.65	13.90
35		3.93	4.92	6.10	7.49	9.09	10.95	13.05
40		3.66	4.58	5.68	6.96	8.45	10.15	12.15
45		3.37	4.22	5.23	6.41	7.78	9.36	11.15
50		3.09	3.86	4.77	5.84	7.08	8.51	10.15
55		2.83	3.52	4.32	5.27	6.38	7.66	9.15
60					4.72	5.69	6.82	8.1
		Power Input kW						
		-30	-25	-20	-15	-10	-5	0
25		1.90	2.04	2.16	2.26	2.34	2.39	2.41
30		2.18	2.33	2.45	2.56	2.65	2.71	2.75
35		2.44	2.58	2.71	2.82	2.92	2.99	3.05
40		2.70	2.84	2.97	3.08	3.18	3.26	3.32
45		3.00	3.13	3.25	3.36	3.46	3.54	3.60
50		3.36	3.90	3.58	3.69	3.78	3.86	3.93
55		3.80		4.00	4.09	4.18	4.25	4.32
60					4.60	4.67	4.74	4.80
		Current 380V, A						
		-30	-25	-20	-15	-10	-5	0
25		3.75	3.93	4.10	4.24	4.35	4.42	4.45
30		4.06	4.25	4.42	4.57	4.70	4.79	4.84
35		4.40	4.58	4.76	4.92	5.05	5.16	5.23
40		4.79	4.97	5.14	5.30	5.44	5.55	5.64
45		5.26	5.42	5.58	5.74	5.88	6.00	6.09
50		5.82	5.96	6.11	6.25	6.39	6.51	6.61
55		6.50	6.62	6.74	6.87	7.00	7.11	7.21
60					7.62	7.73	7.83	7.92
		Mass Flow g/s						
		-30	-25	-20	-15	-10	-5	0
25		28.00	35.30	44.00	54.50	66.90	81.50	98.00
30		28.10	35.40	44.10	54.60	66.90	81.50	98.00
35		27.9	35.20	43.90	54.30	66.50	81.00	97.50
40		27.60	34.80	43.40	53.60	65.70	80.00	96.50
45		27.20	34.30	42.70	52.80	64.80	79.00	95.50
50		26.90	33.80	42.00	51.90	63.70	77.50	94.00
55		26.80	33.50	41.60	51.20	62.70	76.50	92.50
60				50.90	50.90	62.20	75.50	92.00

50Hz

ZSI14KQE-TFP

R404A Dew Point

Copeland Scroll - Compressor - Refrigeration - LT Liquid Injection

4HP

COMPRESSOR MECHANICAL AND PHYSICAL DATA

Displacement @ 50 Hz, cu.m/h	12.7
Length/Width, mm	242/242
Height, mm	431
Net Weight, kg	29.9
Stub Suction, inch	7/8
Stub Discharge, inch	1/2
Stub Injection, inch	3/8
Oil Quantity, l	1.36
Base mounting (hole dia), mm	190 x 190 (19.0)
Sound Pressure @ 1m (MT), dBA	65
Sound Power (MT), dBA	76
High Side PS, bar(g)	24.3
Low Side PS, bar(g)	20
Low Side TS Min., °C	-35

COMPRESSOR ELECTRICAL DATA (380/420V - 3~ - 50Hz)

Maximum Operating Current, A	9.2
Locked Rotor Current, A	47
Winding Resistance, ohm	3.2
Default Enclosure Class	IP 21 (IEC 34)

ACCESSORIES INCLUDED

Discharge Temperature Protection	Discharge Temp Sensor
Enclosure Class	IP21
Mounting Grommets	Standard
CoreSense Diagnostic Module	IP 54

ACCESSORIES OPTIONAL

Crankcase Heater	40W External
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MOTOR OPTIONS

Power Supply	Nominal Voltage	Motor Code	Start Connection	DOL Connection	Amps Factor
380 V/3~/50Hz	380	TFP		Y	1.00

**4HP**

Model: ZSI14KQE-TFP

Refrigerant: R404A Dew Point

S.I.

Suction Return Temperature -5.0°C

Liquid subcooling 8.3K

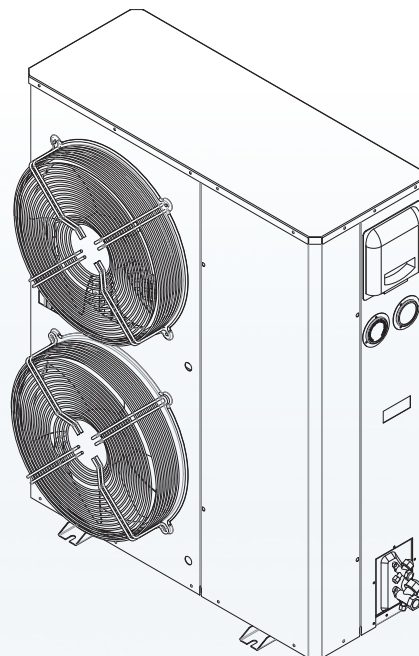
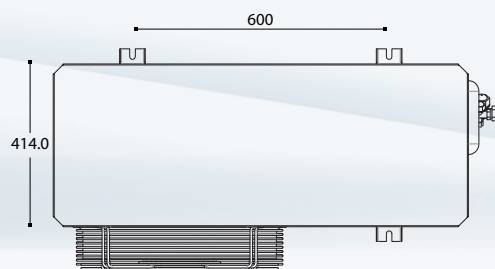
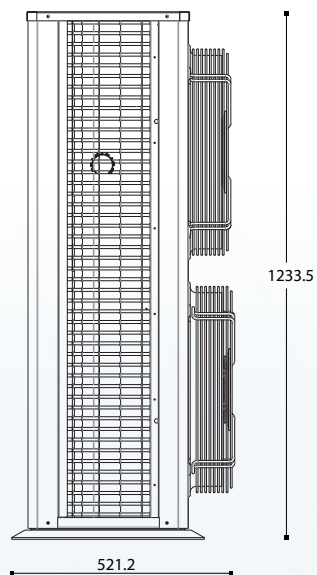
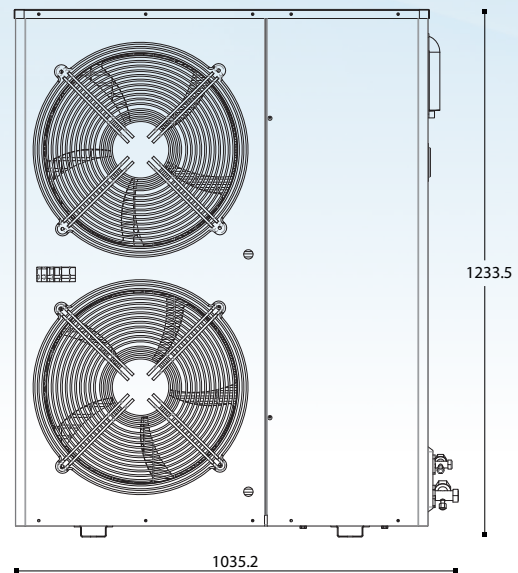
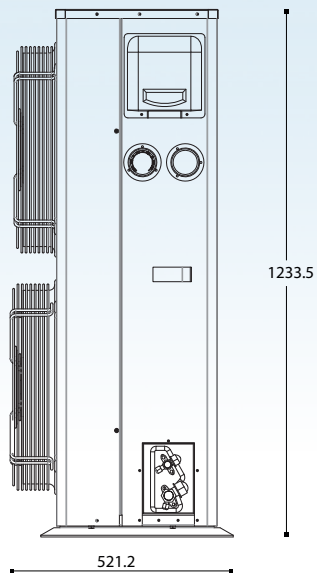
50Hz

Evaporating Temperature °C

Capacity kW																
	-35.0	-34.0	-33.0	-32.0	-31.0	-30.0	-29.0	-28.0	-27.0	-26.0	-25.0	-24.0	-23.0	-22.0	-21.0	-20.0
35.0						4.06	4.25	4.45	4.66	4.87	5.10	5.33	5.57	5.82	6.07	6.34
40.0						3.77	3.95	4.14	4.33	4.53	4.74	4.95	5.17	5.40	5.64	5.88
45.0						3.47	3.64	3.81	3.98	4.17	4.36	4.55	4.76	4.97	5.18	5.41
50.0						3.18	3.33	3.48	3.64	3.81	3.98	4.16	4.34	4.53	4.73	4.93
55.0						2.92	3.05	3.19	3.33	3.48	3.63	3.79	3.95	4.12	4.29	4.47
Power Input kW																
	-35.0	-34.0	-33.0	-32.0	-31.0	-30.0	-29.0	-28.0	-27.0	-26.0	-25.0	-24.0	-23.0	-22.0	-21.0	-20.0
35.0						2.44	2.47	2.50	2.53	2.56	2.58	2.61	2.64	2.66	2.69	2.71
40.0						2.70	2.73	2.76	2.79	2.82	2.84	2.87	2.89	2.92	2.94	2.97
45.0						3.00	3.03	3.05	3.08	3.10	3.13	3.15	3.18	3.20	3.23	3.25
50.0						3.36	3.38	3.40	3.43	3.45	3.47	3.49	3.52	3.54	3.56	3.58
55.0						3.80	3.82	3.84	3.86	3.88	3.90	3.92	3.94	3.96	3.98	4.00
COP																
	-35.0	-34.0	-33.0	-32.0	-31.0	-30.0	-29.0	-28.0	-27.0	-26.0	-25.0	-24.0	-23.0	-22.0	-21.0	-20.0
35.0						1.66	1.72	1.78	1.84	1.91	1.97	2.04	2.11	2.18	2.26	2.34
40.0						1.39	1.45	1.50	1.55	1.61	1.67	1.73	1.79	1.85	1.92	1.98
45.0						1.16	1.20	1.25	1.29	1.34	1.39	1.44	1.50	1.55	1.61	1.66
50.0						0.95	0.99	1.02	1.06	1.10	1.15	1.19	1.23	1.28	1.33	1.38
55.0						0.77	0.80	0.83	0.86	0.90	0.93	0.97	1.00	1.04	1.08	1.12
Current 380V, A																
	-35.0	-34.0	-33.0	-32.0	-31.0	-30.0	-29.0	-28.0	-27.0	-26.0	-25.0	-24.0	-23.0	-22.0	-21.0	-20.0
35.0						4.40	4.44	4.48	4.51	4.55	4.58	4.62	4.66	4.69	4.72	4.76
40.0						4.79	4.83	4.86	4.90	4.93	4.97	5.00	5.04	5.07	5.10	5.14
45.0						5.26	5.29	5.32	5.36	5.39	5.42	5.45	5.48	5.52	5.55	5.58
50.0						5.82	5.85	5.88	5.90	5.93	5.96	5.99	6.02	6.05	6.08	6.11
55.0						6.50	6.52	6.55	6.57	6.59	6.62	6.64	6.67	6.69	6.72	6.74
Mass Flow g/s																
	-35.0	-34.0	-33.0	-32.0	-31.0	-30.0	-29.0	-28.0	-27.0	-26.0	-25.0	-24.0	-23.0	-22.0	-21.0	-20.0
35.0						30.80	32.30	33.80	35.50	37.20	38.90	40.80	42.70	44.60	46.70	48.80
40.0						30.40	31.90	33.40	35.00	36.70	38.50	40.30	42.20	44.10	46.10	48.30
45.0						29.90	31.40	32.90	34.50	36.10	37.80	39.60	41.50	43.40	45.40	47.50
50.0						29.50	30.90	32.40	34.00	35.60	37.30	39.00	40.80	42.70	44.60	46.70
55.0						29.50	30.80	32.30	33.80	35.40	37.00	38.70	40.40	42.20	44.10	46.10
Heat Rejection kW																
	-35.0	-34.0	-33.0	-32.0	-31.0	-30.0	-29.0	-28.0	-27.0	-26.0	-25.0	-24.0	-23.0	-22.0	-21.0	-20.0
35.0						5.98	6.18	6.38	6.60	6.82	7.04	7.28	7.52	7.76	8.01	8.27
40.0						5.93	6.12	6.31	6.51	6.71	6.92	7.13	7.35	7.58	7.81	8.05
45.0						5.90	6.07	6.25	6.43	6.61	6.80	7.00	7.20	7.40	7.62	7.83
50.0						5.94	6.09	6.25	6.41	6.57	6.74	6.91	7.09	7.27	7.46	7.66
55.0						6.08	6.21	6.34	6.48	6.62	6.77	6.92	7.07	7.23	7.39	7.56

Dimension

4HP





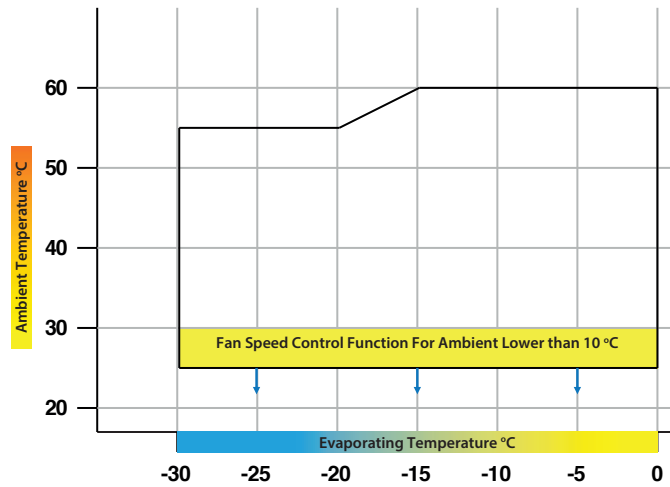
50Hz

ZSI15KQE-TFP

R404A Dew Point

5HP

Minimum evaporating temp. with:
 — 20°C Suction Gas Return



Suction Return Temperature 20.0°C

Evaporating Temperature °C

Liquid subcooling 0.0K

Cond		Capacity kW						
°C		-30	-25	-20	-15	-10	-5	0
25		5.04	6.31	7.75	9.41	11.40	13.70	16.50
30		4.60	5.82	7.18	8.75	10.60	12.80	15.40
35		4.28	5.44	6.72	8.19	9.91	11.95	14.35
40		4.03	5.14	6.34	7.70	9.28	11.15	13.40
45		3.81	4.86	5.97	7.21	8.66	10.40	12.45
50		3.57	4.54	5.56	6.69	7.99	9.55	11.40
55		3.26	4.15	5.07	6.07	7.23	8.61	10.30
60					5.32	6.33	7.53	9.00
		Power Input kW						
		-30	-25	-20	-15	-10	-5	0
25		1.98	1.98	2.07	2.21	2.38	2.55	2.70
30		2.40	2.44	2.54	2.68	2.84	3.00	3.12
35		2.74	2.80	2.91	3.06	3.22	3.35	3.45
40		3.03	3.12	3.25	3.40	3.55	3.67	3.73
45		3.33	3.44	3.59	3.75	3.89	3.99	4.03
50		3.68	3.82	3.98	4.14	4.28	4.37	4.37
55		4.13	4.30	4.47	4.64	4.77	4.84	4.82
60					5.28	5.41	5.46	5.41
		Current 380V, A						
		-30	-25	-20	-15	-10	-5	0
25		3.65	3.74	3.96	4.24	4.50	4.69	4.74
30		4.48	4.56	4.77	5.04	5.29	5.46	5.50
35		5.03	5.11	5.31	5.57	5.82	5.99	6.01
40		5.41	5.50	5.70	5.96	6.21	6.37	6.39
45		5.75	5.84	6.06	6.32	6.57	6.73	6.75
50		6.16	6.27	6.49	6.76	7.02	7.19	7.22
55		6.76	6.88	7.12	7.41	7.68	7.86	7.90
60					8.37	8.66	8.86	8.91
		Mass Flow g/s						
		-30	-25	-20	-15	-10	-5	0
25		32.30	40.60	50.10	61.30	74.60	91.00	110.50
30		30.90	39.30	48.80	59.90	73.20	89.00	108.50
35		30.40	38.90	48.40	59.40	72.40	88.50	107.50
40		30.40	39.00	48.40	59.30	72.20	88.00	107.00
45		30.80	39.40	48.80	59.40	72.10	87.50	106.50
50		31.00	39.80	49.00	59.50	71.90	87.00	105.50
55		30.80	39.60	48.80	59.00	71.10	86.00	104.50
60					57.40	69.10	83.50	102.00

50Hz

ZSI15KQE-TFP

R404A Dew Point

Copeland Scroll - Compressor - Refrigeration - LT Liquid Injection

5HP

COMPRESSOR MECHANICAL AND PHYSICAL DATA

Displacement @ 50 Hz, cu.m/h	14.4
Length/Width, mm	242/242
Height, mm	431
Net Weight, kg	29.9
Stub Suction, inch	7/8
Stub Discharge, inch	1/2
Stub Injection, inch	3/8
Oil Quantity, l	1.36
Base mounting (hole dia), mm	190 x 190 (19.0)
Sound Pressure @ 1m (MT), dBA	65
Sound Power (MT), dBA	76
High Side PS, bar(g)	24.3
Low Side PS, bar(g)	20
Low Side TS Min., °C	-35

COMPRESSOR ELECTRICAL DATA (380/420V - 3~ - 50Hz)

Maximum Operating Current, A	9.2
Locked Rotor Current, A	47
Winding Resistance, ohm	3.2
Default Enclosure Class	IP 21 (IEC 34)

ACCESSORIES INCLUDED

Discharge Temperature Protection	Discharge Temp Sensor
Enclosure Class	IP21
Mounting Grommets	Standard
CoreSense Diagnostic Module	IP 54

ACCESSORIES OPTIONAL

Crankcase Heater	40W External
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MOTOR OPTIONS

Power Supply	Nominal Voltage	Motor Code	Start Connection	DOL Connection	Amps Factor
380 V/3~/50Hz	380	TFP		Y	1.00

**5HP**

Model: ZSI15KQE-TFP

Refrigerant: R404A Dew Point

S.I.

Suction Return Temperature -5.0°C

Liquid subcooling 8.3K

50Hz

Evaporating Temperature °C

	Capacity kW						
	-30.0	-25.0	-20.0	-15.0	-10.0	-5.0	0.0
25.0	5.31	6.66	8.18	9.96	12.05	14.60	17.60
30.0	4.84	6.14	7.59	9.27	11.25	13.60	16.45
35.0	4.51	5.76	7.13	8.70	10.55	12.75	15.40
40.0	4.27	5.45	6.73	8.19	9.90	11.95	14.40
45.0	4.05	5.17	6.37	7.71	9.27	11.15	13.40
50.0	3.82	4.87	5.97	7.19	8.60	10.30	12.35
55.0	3.51	4.49	5.49	6.58	7.85	9.37	11.20
60.0				5.84	6.95	8.29	9.95

	Power Input kW						
	-30.0	-25.0	-20.0	-15.0	-10.0	-5.0	0.0
25.0	1.98	1.98	2.07	2.21	2.38	2.55	2.70
30.0	2.40	2.44	2.54	2.68	2.84	3.00	3.12
35.0	2.74	2.80	2.91	3.06	3.22	3.35	3.45
40.0	3.03	3.12	3.25	3.40	3.55	3.67	3.73
45.0	3.33	3.44	3.59	3.75	3.89	3.99	4.03
50.0	3.68	3.82	3.98	4.14	4.28	4.37	4.37
55.0	4.13	4.30	4.47	4.64	4.77	4.84	4.82
60.0				5.28	5.41	5.46	5.41

	COP						
	-30.0	-25.0	-20.0	-15.0	-10.0	-5.0	0.0
25.0	2.68	3.35	3.95	4.50	5.07	5.72	6.52
30.0	2.01	2.52	2.99	3.46	3.96	4.54	5.28
35.0	1.65	2.06	2.45	2.84	3.28	3.80	4.47
40.0	1.41	1.75	2.07	2.41	2.79	3.25	3.85
45.0	1.22	1.50	1.77	2.06	2.38	2.79	3.33
50.0	1.04	1.28	1.50	1.73	2.01	2.36	2.83
55.0	0.85	1.05	1.23	1.42	1.65	1.94	2.33
60.0				1.11	1.29	1.52	1.84

	Current 380V, A						
	-30.0	-25.0	-20.0	-15.0	-10.0	-5.0	0.0
25.0	3.65	3.74	3.96	4.24	4.50	4.69	4.74
30.0	4.48	4.56	4.77	5.04	5.29	5.46	5.50
35.0	5.03	5.11	5.31	5.57	5.82	5.99	6.01
40.0	5.41	5.50	5.70	5.96	6.21	6.37	6.39
45.0	5.75	5.84	6.06	6.32	6.57	6.73	6.75
50.0	6.16	6.27	6.49	6.76	7.02	7.19	7.22
55.0	6.76	6.88	7.12	7.41	7.68	7.86	7.90
60.0				8.37	8.66	8.86	8.91

Model: ZSI15KQE-TFP

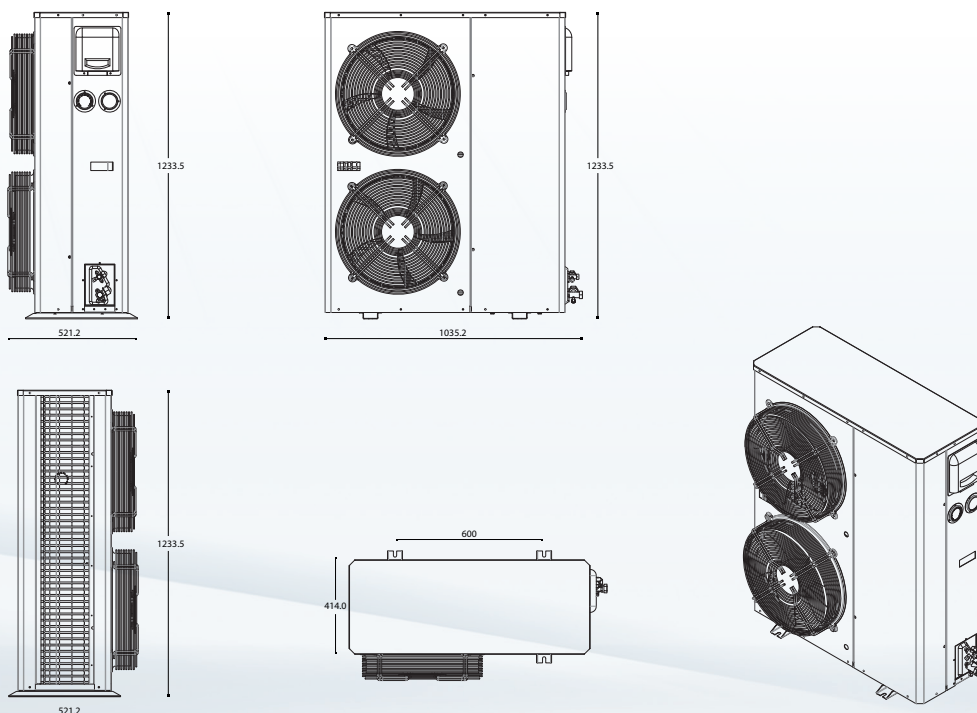
Refrigerant: R404A Dew Point

	Mass Flow g/s						
	-30.0	-25.0	-20.0	-15.0	-10.0	-5.0	0.0
25.0	34.10	43.00	53.30	65.40	80.00	98.00	119.50
30.0	32.70	41.70	51.90	63.90	78.50	96.00	117.50
35.0	32.10	41.20	51.40	63.30	77.50	95.00	116.50
40.0	32.10	41.30	51.50	63.20	77.50	94.50	116.00
45.0	32.50	41.80	51.80	63.40	77.00	94.00	115.00
50.0	32.80	42.10	52.10	63.40	77.00	93.50	114.50
55.0	32.60	42.00	51.80	62.90	76.00	92.50	113.00
60.0				61.20	73.90	90.00	110.50

	Heat Rejection kW						
	-30.0	-25.0	-20.0	-15.0	-10.0	-5.0	0.0
25.0	6.77	8.01	9.49	11.25	13.35	15.80	18.70
30.0	6.71	7.93	9.34	11.00	12.95	15.25	17.90
35.0	6.69	7.88	9.22	10.80	12.60	14.70	17.15
40.0	6.71	7.86	9.13	10.55	12.25	14.15	16.40
45.0	6.76	7.86	9.05	10.40	11.90	13.60	15.60
50.0	6.84	7.89	8.99	10.20	11.55	13.10	14.85
55.0	6.93	7.93	8.94	10.05	11.20	12.55	14.05
60.0				9.85	10.85	12.00	13.25

Dimension

5HP



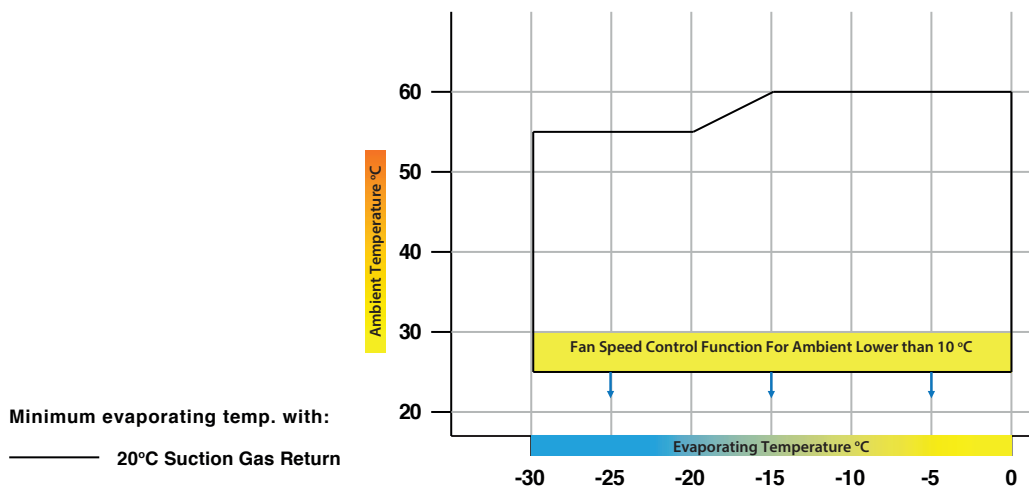


50Hz

ZSI18KQE-TFP

R404A Dew Point

6HP



Suction Return Temperature 20.0°C

Evaporating Temperature °C

Liquid subcooling 0.0K

Cond		Capacity kW						
°C		-30	-25	-20	-15	-10	-5	0
25		6.14	7.60	9.34	11.40	13.80	16.55	19.70
30		5.86	7.25	8.89	10.80	13.05	15.65	18.60
35		5.54	6.85	8.39	10.20	12.30	14.70	17.50
40		5.18	6.41	7.85	9.53	11.45	13.70	16.30
45		4.81	5.95	7.27	8.82	10.60	12.65	15.05
50		4.41	5.46	6.67	8.07	9.70	11.60	13.75
55		4.01	4.95	6.04	7.31	8.77	10.45	12.40
60					6.52	7.81	9.32	11.05
		Power Input kW						
		-30	-25	-20	-15	-10	-5	0
25		2.71	2.83	2.99	3.16	3.32	3.45	3.50
30		3.14	3.27	3.44	3.62	3.80	3.93	4.00
35		3.50	3.62	3.79	3.98	4.16	4.30	4.38
40		3.82	3.94	4.11	4.29	4.47	4.61	4.70
45		4.17	4.28	4.44	4.62	4.80	4.94	5.02
50		4.61	4.71	4.86	5.03	5.19	5.32	5.40
55		5.21	5.29	5.42	5.57	5.72	5.84	5.90
60					6.31	6.44	6.54	6.58
		Current 380V, A						
		-30	-25	-20	-15	-10	-5	0
25		5.70	5.88	6.09	6.31	6.50	6.66	6.76
30		6.14	6.34	6.57	6.80	7.02	7.20	7.33
35		6.56	6.77	7.00	7.25	7.48	7.68	7.83
40		7.02	7.22	7.46	7.70	7.94	8.15	8.30
45		7.57	7.76	7.99	8.23	8.46	8.66	8.81
50		8.27	8.44	8.65	8.87	9.08	9.27	9.42
55		9.17	9.31	9.49	9.68	9.87	10.04	10.17
60					10.73	10.89	11.02	11.12
		Mass Flow g/s						
		-30	-25	-20	-15	-10	-5	0
25		39.30	48.90	60.40	74.10	90.50	109.50	132.00
30		39.40	49.00	60.50	74.20	90.50	109.50	131.50
35		39.40	48.90	60.40	73.90	90.00	108.50	131.00
40		39.10	48.70	60.00	73.40	89.00	108.00	130.00
45		38.80	48.30	59.40	72.70	88.50	107.00	128.50
50		38.40	47.70	58.80	71.80	87.50	105.50	127.50
55		37.90	47.20	58.10	71.00	86.00	104.50	126.00
60					70.30	85.50	103.50	125.00

50Hz

ZSI18KQE-TFP

R404A Dew Point

Copeland Scroll - Compressor - Refrigeration - LT Liquid Injection

6HP

COMPRESSOR MECHANICAL AND PHYSICAL DATA

Displacement @ 50 Hz, cu.m/h	17.1
Length/Width, mm	251/246
Height, mm	438
Net Weight, kg	39.5
Stub Suction, inch	7/8
Stub Discharge, inch	1/2
Stub Injection, inch	3/8
Oil Quantity, l	1.89
Base mounting (hole dia), mm	190 x 190 (19.0)
Sound Pressure @ 1m (MT), dBA	67
Sound Power (MT), dBA	78
High Side PS, bar(g)	24.3
Low Side PS, bar(g)	20
Low Side TS Min., °C	-35

COMPRESSOR ELECTRICAL DATA (380/420V - 3~ - 50Hz)

Maximum Operating Current, A	13.7
Locked Rotor Current, A	67
Winding Resistance, ohm	2.26
Default Enclosure Class	IP 21 (IEC 34)

ACCESSORIES INCLUDED

Discharge Temperature Protection	Discharge Temp Sensor
Enclosure Class	IP21
Mounting Grommets	Standard
CoreSense Diagnostic Module	IP 54

ACCESSORIES OPTIONAL

Crankcase Heater	40W External
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MOTOR OPTIONS

Power Supply	Nominal Voltage	Motor Code	Start Connection	DOL Connection	Amps Factor
380 V/3~/50Hz	380	TFP		Y	1.00

**6HP**

Model: ZSI18KQE-TFP

Refrigerant: R404A Dew Point

S.I.

Suction Return Temperature 5.0°C

Liquid subcooling 8.3K

50Hz

Evaporating Temperature °C

	Capacity kW						
	-30.0	-25.0	-20.0	-15.0	-10.0	-5.0	0.0
25.0	6.47	8.02	9.87	12.05	14.60	17.60	21.00
30.0	6.18	7.66	9.41	11.45	13.90	16.70	19.90
35.0	5.86	7.25	8.90	10.85	13.10	15.70	18.75
40.0	5.50	6.81	8.35	10.15	12.25	14.70	17.50
45.0	5.12	6.34	7.76	9.42	11.35	13.60	16.20
50.0	4.72	5.85	7.16	8.68	10.45	12.50	14.90
55.0	4.33	5.35	6.54	7.92	9.52	11.40	13.55
60.0				7.16	8.60	10.30	12.25

	Power Input kW						
	-30.0	-25.0	-20.0	-15.0	-10.0	-5.0	0.0
25.0	2.71	2.83	2.99	3.16	3.32	3.45	3.50
30.0	3.14	3.27	3.44	3.62	3.80	3.93	4.00
35.0	3.50	3.62	3.79	3.98	4.16	4.30	4.38
40.0	3.82	3.94	4.11	4.29	4.47	4.61	4.70
45.0	4.17	4.28	4.44	4.62	4.80	4.94	5.02
50.0	4.61	4.71	4.86	5.03	5.19	5.32	5.40
55.0	5.21	5.29	5.42	5.57	5.72	5.84	5.90
60.0				6.31	6.44	6.54	6.58

	COP						
	-30.0	-25.0	-20.0	-15.0	-10.0	-5.0	0.0
25.0	2.39	2.84	3.30	3.81	4.40	5.11	6.00
30.0	1.97	2.34	2.74	3.17	3.66	4.25	4.98
35.0	1.68	2.00	2.35	2.72	3.15	3.65	4.28
40.0	1.44	1.73	2.03	2.36	2.74	3.18	3.73
45.0	1.23	1.48	1.75	2.04	2.37	2.76	3.23
50.0	1.02	1.24	1.47	1.73	2.01	2.35	2.76
55.0	0.83	1.01	1.21	1.42	1.66	1.95	2.30
60.0				1.14	1.34	1.57	1.86

	Current 380V, A						
	-30.0	-25.0	-20.0	-15.0	-10.0	-5.0	0.0
25.0	5.70	5.88	6.09	6.31	6.50	6.66	6.76
30.0	6.14	6.34	6.57	6.80	7.02	7.20	7.33
35.0	6.56	6.77	7.00	7.25	7.48	7.68	7.83
40.0	7.02	7.22	7.46	7.70	7.94	8.15	8.30
45.0	7.57	7.76	7.99	8.23	8.46	8.66	8.81
50.0	8.27	8.44	8.65	8.87	9.08	9.27	9.42
55.0	9.17	9.31	9.49	9.68	9.87	10.04	10.17
60.0				10.73	10.89	11.02	11.12

Model: ZSI18KQE-TFP

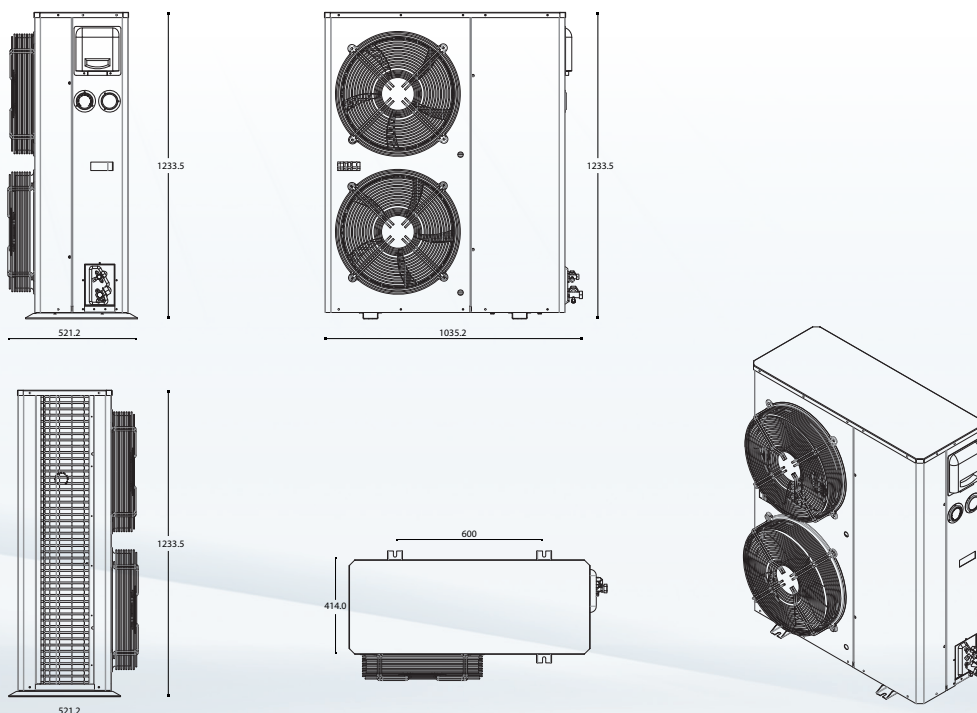
Refrigerant: R404A Dew Point

	Mass Flow g/s						
	-30.0	-25.0	-20.0	-15.0	-10.0	-5.0	0.0
25.0	41.60	51.80	64.20	79.00	97.00	118.00	143.00
30.0	41.70	52.00	64.30	79.00	96.50	117.50	142.50
35.0	41.70	51.90	64.20	79.00	96.50	117.00	142.00
40.0	41.40	51.60	63.80	78.50	95.50	116.00	141.00
45.0	41.00	51.20	63.20	77.50	94.50	115.00	139.50
50.0	40.60	50.60	62.50	76.50	93.50	113.50	138.00
55.0	40.10	50.10	61.80	75.50	92.50	112.50	136.50
60.0				75.00	91.50	111.50	135.50

	Heat Rejection kW						
	-30.0	-25.0	-20.0	-15.0	-10.0	-5.0	0.0
25.0	8.52	10.05	11.90	14.10	16.55	19.40	22.60
30.0	8.64	10.10	11.85	13.90	16.25	18.90	21.90
35.0	8.63	10.00	11.65	13.60	15.80	18.25	21.00
40.0	8.57	9.86	11.40	13.15	15.20	17.50	20.10
45.0	8.51	9.69	11.10	12.75	14.60	16.70	19.05
50.0	8.52	9.59	10.85	12.35	14.00	15.90	18.00
55.0	8.66	9.61	10.75	12.05	13.55	15.20	17.05
60.0				11.90	13.20	14.65	16.25

Dimension

6HP





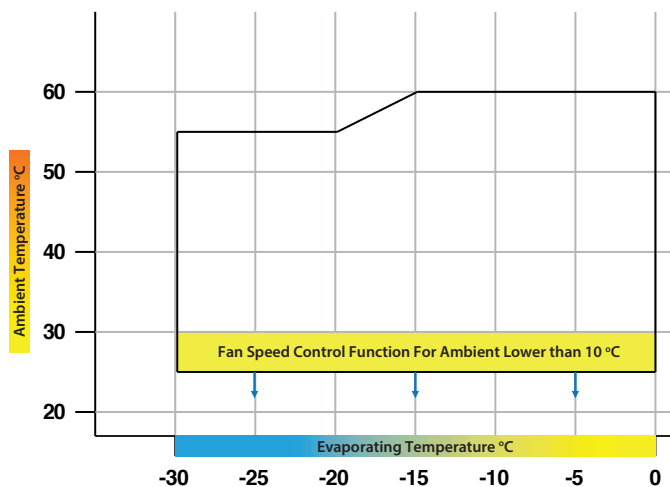
50Hz

ZSI21KQE-TFP

R404A Dew Point

8HP

Minimum evaporating temp. with:
 — 20°C Suction Gas Return



Suction Return Temperature 20.0°C

Evaporating Temperature °C

Liquid subcooling 0.0K

Cond		Capacity kW						
°C		-30	-25	-20	-15	-10	-5	0
25		6.82	8.41	10.35	12.65	15.30	18.35	21.80
30		6.52	8.03	9.86	12.00	14.55	17.40	20.70
35		6.18	7.60	9.32	11.35	13.70	16.35	19.40
40		5.79	7.13	8.73	10.60	12.80	15.30	18.10
45		5.38	6.63	8.11	9.84	11.85	14.15	16.75
50		4.95	6.09	7.45	9.04	10.85	12.95	15.35
55		4.50	5.54	6.77	8.20	9.85	11.75	13.90
60					7.35	8.81	10.50	12.40
		Power Input kW						
		-30	-25	-20	-15	-10	-5	0
25		3.08	3.24	3.41	3.58	3.74	3.91	4.08
30		3.47	3.64	3.81	3.99	4.17	4.35	4.53
35		3.83	3.99	4.17	4.35	4.54	4.73	4.92
40		4.18	4.35	4.52	4.70	4.89	5.08	5.27
45		4.59	4.74	4.90	5.08	5.26	5.44	5.63
50		5.09	5.22	5.37	5.52	5.69	5.87	6.05
55		5.71	5.82	5.94	6.08	6.23	6.39	6.56
60					6.79	6.91	7.05	7.20
		Current 380V, A						
		-30	-25	-20	-15	-10	-5	0
25		7.78	7.94	8.12	8.30	8.47	8.64	8.80
30		8.15	8.33	8.53	8.73	8.94	9.15	9.34
35		8.51	8.70	8.91	9.13	9.36	9.59	9.82
40		8.91	9.10	9.31	9.54	9.79	10.04	10.29
45		9.41	9.59	9.79	10.02	10.27	10.53	10.80
50		10.06	10.21	10.40	10.62	10.87	11.13	11.41
55		10.91	11.03	11.20	11.40	11.63	11.88	12.15
60					12.40	12.61	12.84	13.10
		Mass Flow g/s						
		-30	-25	-20	-15	-10	-5	0
25		43.80	54.30	67.20	82.50	101.00	122.00	146.50
30		44.10	54.60	67.40	82.50	101.00	122.00	146.50
35		44.10	54.60	67.40	82.50	100.50	121.50	146.00
40		43.90	54.40	67.10	82.00	100.00	121.00	145.00
45		43.60	54.00	66.60	81.50	99.00	120.00	144.00
50		43.20	53.50	66.00	81.00	98.00	118.50	142.50
55		42.80	53.10	65.40	80.00	97.50	117.50	141.50
60					79.50	97.00	117.00	141.00

50Hz

ZSI21KQE-TFP

R404A Dew Point

Copeland Scroll - Compressor - Refrigeration - LT Liquid Injection

8HP

COMPRESSOR MECHANICAL AND PHYSICAL DATA

Displacement @ 50 Hz, cu.m/h	18.8
Length/Width, mm	251/246
Height, mm	438
Net Weight, kg	39.7
Stub Suction, inch	7/8
Stub Discharge, inch	1/2
Stub Injection, inch	3/8
Oil Quantity, l	1.89
Base mounting (hole dia), mm	190 x 190 (19.0)
Sound Pressure @ 1m (MT), dBA	67
Sound Power (MT), dBA	78
High Side PS, bar(g)	24.3
Low Side PS, bar(g)	20
Low Side TS Min., °C	-35

COMPRESSOR ELECTRICAL DATA (380/420V - 3~ - 50Hz)

Maximum Operating Current, A	14.6
Locked Rotor Current, A	90.5
Winding Resistance, ohm	1.79
Default Enclosure Class	IP 21 (IEC 34)

ACCESSORIES INCLUDED

Discharge Temperature Protection	Discharge Temp Sensor
Enclosure Class	IP21
Mounting Grommets	Standard
CoreSense Diagnostic Module	IP 54

ACCESSORIES OPTIONAL

Crankcase Heater	40W External
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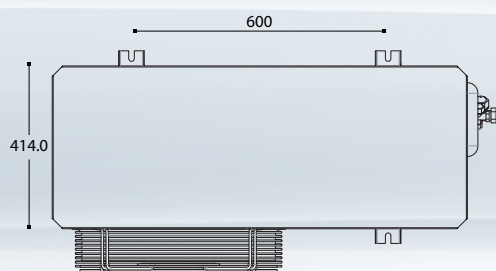
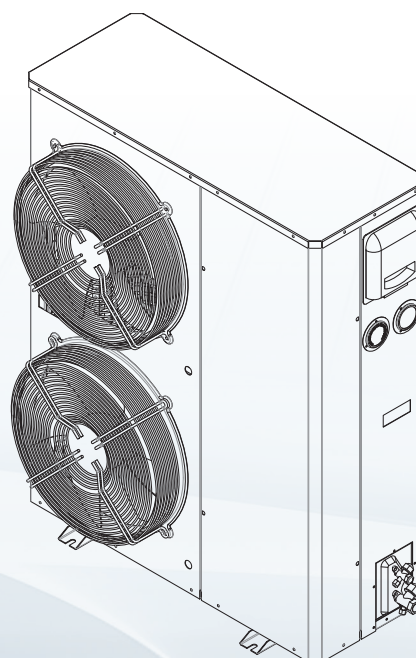
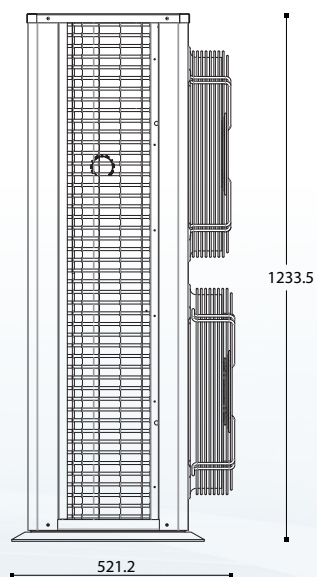
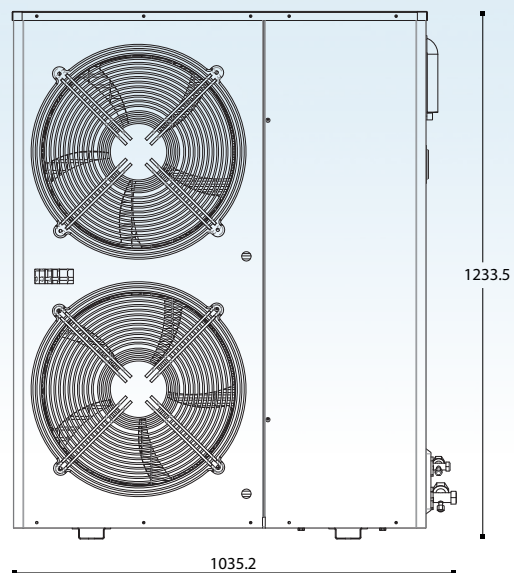
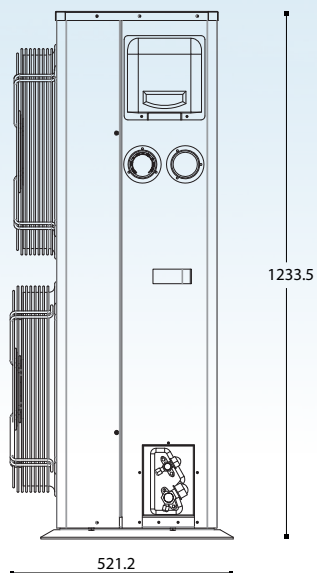
MOTOR OPTIONS

Power Supply	Nominal Voltage	Motor Code	Start Connection	DOL Connection	Amps Factor
380 V/3~/50Hz	380	TFP		Y	1.00



Dimension

8HP





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