Copeland™ Scroll ZX Condensing Unit
for Refrigeration Applications

Product Catalogue

COPELAND™

EMERSON™

ZX Condensing unit for refrigeration applications

Emerson offers the ZX platform refrigeration condensing units specifically designed for medium temperature (ZX-MT), low temperature (ZXL-LT), digital modulated variable capacity medium temperature and low temperature (ZXD-MT & ZXLD-LT) refrigeration.

ZX series CDU has been highly successful in the Asian market and enjoys proven success with its energy savings and customer-friendly electronic features.

ZX Platform Condensing Unit was designed based on three factors demanded by industry users:

Intelligent store solutions - A most innovative approach to enterprise facility management, Emerson'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, Emerson 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 Copeland™ 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.

Intelligent store	→	Better decision-making
Highest efficiency	→	Lower energy bills
Reliability	→	Lower maintenance cost

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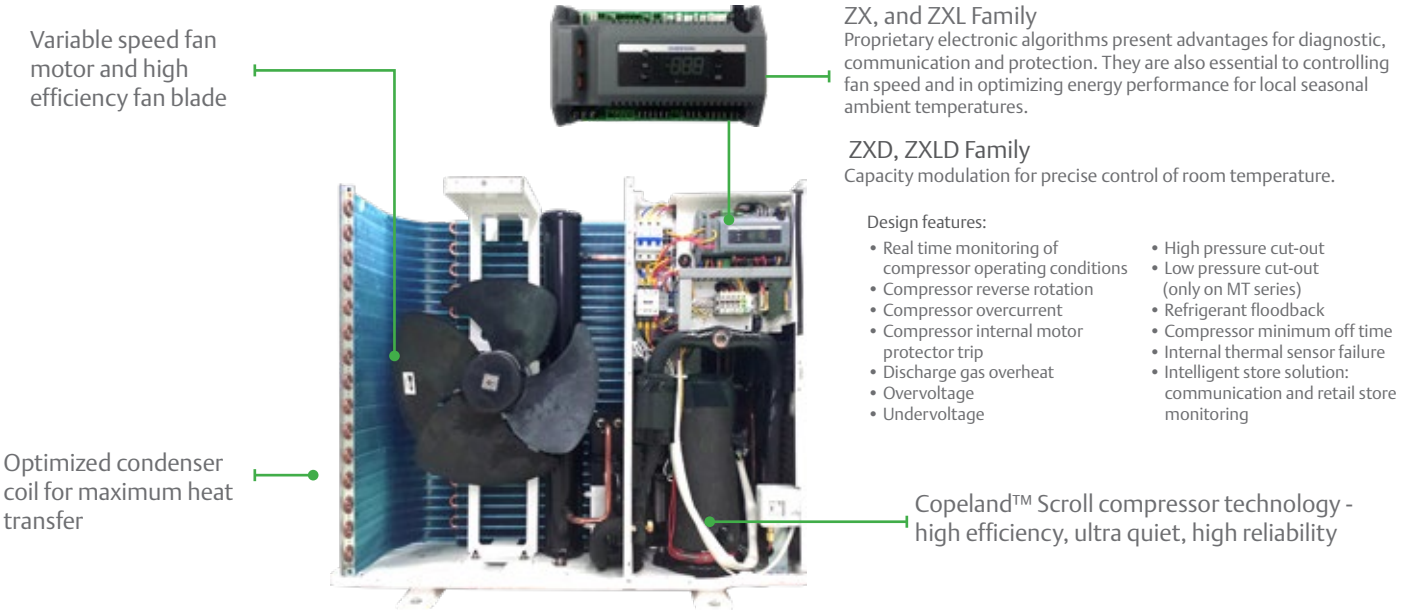


Figure 1. ZX Platform CDU features

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

Nomenclature

ZX	L	020	B	E	-	TFD	-	451
Unit family	Blank = Medium temp L = Low temp D = Digital medium temp LD = Digital low temp	2 - 20 HP	Generation	E = Ester oil		PFJ = 220V/240V - 1ph - 50 Hz TFD = 380V/420V - 3ph - 50 Hz		Bill of material
Base model						Electrical code		Bill of material

Bill of material

CDU Family BOM	ZX	ZXL	ZXD 2-9HP	ZXD 12-16HP		ZXLD 9HP		ZXLD 12-16HP		ZXD/ZXLD 20HP	
	462	462	462	551	581	451 551	481 581	551	581	551	581
Liquid line filter dryer/sight glass	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Liquid receiver	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Oil separator	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Accumulator		✓				✓	✓	✓	✓	✓	✓
Adjustable LP switch		✓			✓	✓	✓	✓	✓	✓	✓
LP Transducer	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
HP Transducer				✓	✓			✓	✓	✓	✓
Fixed LP switch	✓		✓	✓							
Fixed HP switch	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
CoreSense™	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Digital modulation			✓	✓	✓	✓	✓	✓	✓	✓	✓
Fan speed controller	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Intelligent store solution module	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Circuit breaker	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Sound jacket	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Low ambient kit					✓		✓		✓		✓
Electronic oil level protective control				✓	✓			✓	✓	✓	✓
Emergency mode										✓	✓

BOM:
4xx - Chassis with door
5xx - Chassis without door

CoreSense™ for ZX platform condensing unit

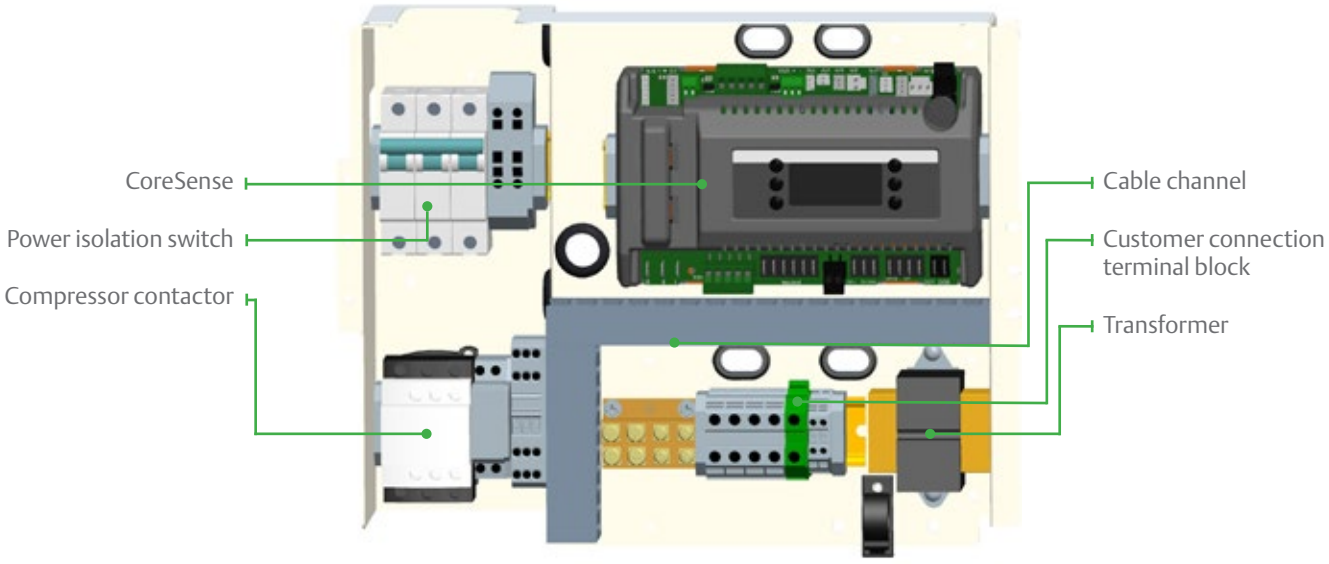
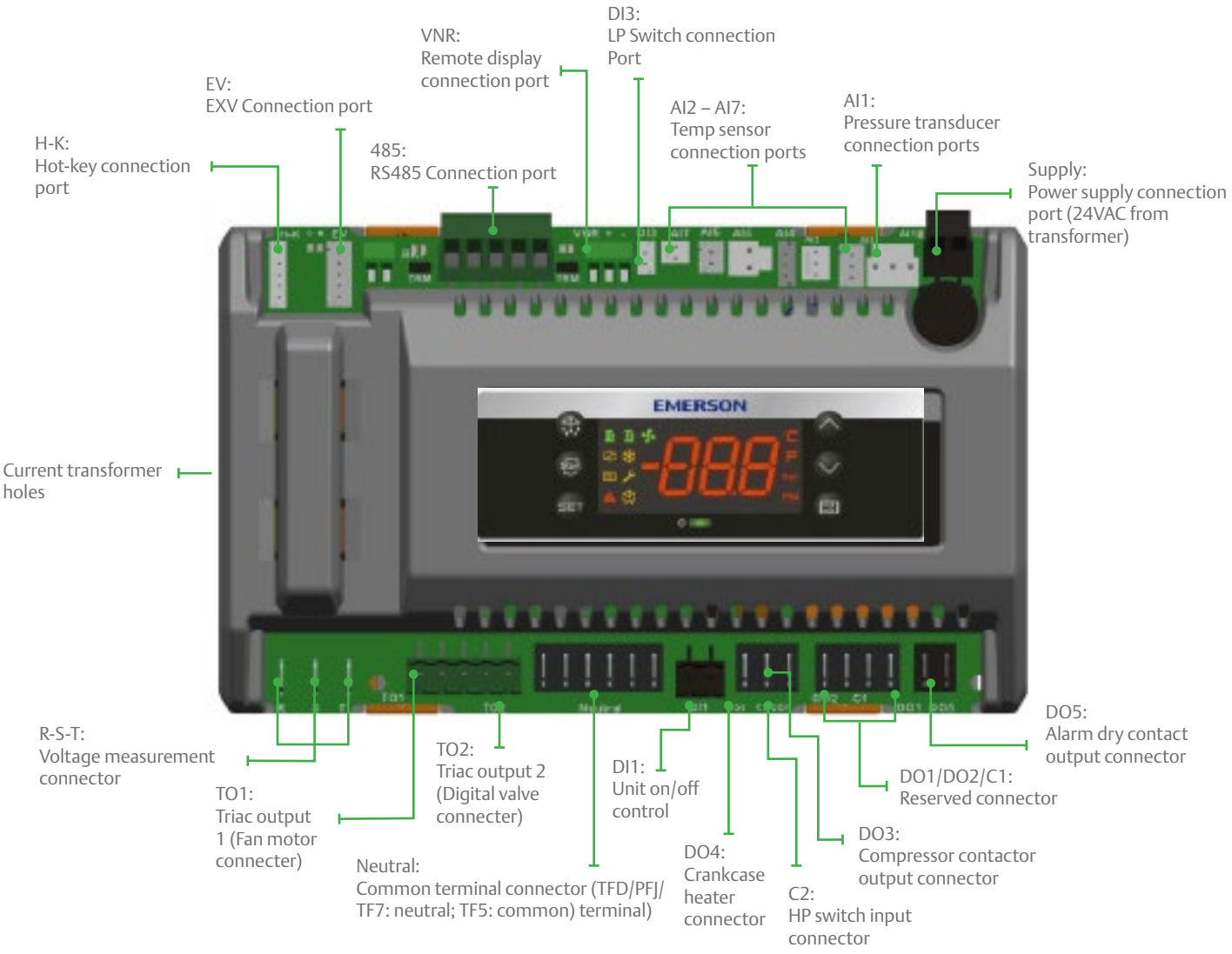


Figure 2. Layout of the CoreSense, Intelligent Store Module

CoreSense layout

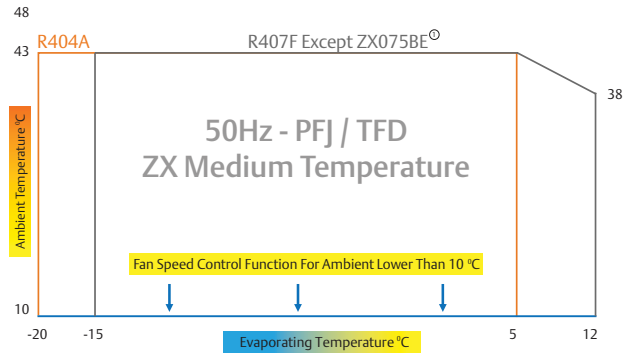


Operating envelopes

ZX Family : Medium temperature

ZX Medium Temperature at 50 Hz - PFJ / TFD

Refrigerant –R404A, R407F
Maximum Suction Gas Temperature: 20°C

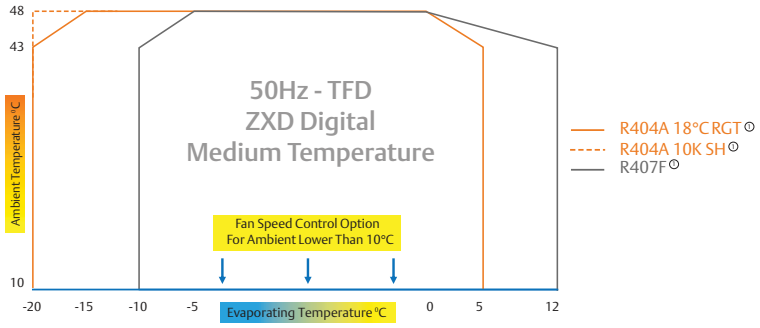


Note①: For model ZX075BE (R407F) Max Evap: 5°C

ZXD Family : Digital medium temperature

ZXD Digital Medium Temperature at 50 Hz - TFD

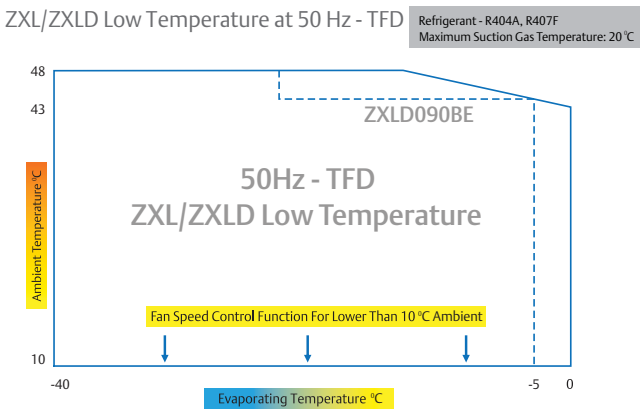
Refrigerant – R404A, R407F
Maximum Suction Gas Temperature: 20°C



Note: For model ZXD075B0/E Max Amb: 43°C , Max Evap: 5°C
For model ZXD090BE Max Amb: 43°C , Max Evap: 0°C
For model ZXD120/160BE Max Evap: 0°C
For model ZXD200BE Max Evap: -4°C

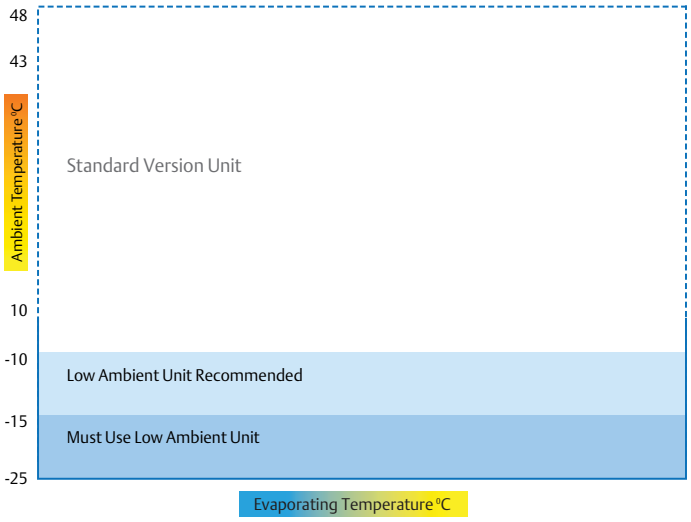
Operating envelopes

ZXD Family : Digital medium temperature



Note: For model ZXLD120BE Max Evap: 0°C

Guideline for using low ambient units



Note: For applications under -25°C ambient temperatures, please contact Emerson engineers.

Notes: ZX and ZXD R134a envelopes available from engineers
ZX, ZXD and ZXL R448a envelopes available from engineers

ZX Family: Medium temperature

Capacity and power (kW) at 50 Hz - PFJ/TFD

R404A

Model	Ambient temperature (°C)	Capacity evaporating temperature (°C)						Power evaporating temperature (°C)					
		-20	-15	-10	-5	0	5	-20	-15	-10	-5	0	5
ZX020BE	27	3.30	3.90	4.44	5.08	5.79	6.60	1.64	1.67	1.70	1.76	1.84	1.96
	32	2.85	3.39	3.92	4.48	5.08	5.76	1.79	1.81	1.84	1.90	2.00	2.12
	38	2.42	2.90	3.36	3.85	4.36	4.94	1.95	1.99	2.02	2.07	2.16	2.26
	43	1.94	2.43	2.89	3.34	3.81	4.30	2.14	2.18	2.22	2.27	2.34	2.41
ZX030BE	27	4.04	4.87	5.81	6.85	7.99	9.23	2.14	2.19	2.24	2.32	2.42	2.55
	32	3.75	4.52	5.39	6.35	7.40	8.55	2.40	2.44	2.50	2.57	2.67	2.81
	38	3.39	4.08	4.85	5.72	6.67	7.69	2.72	2.75	2.80	2.88	3.00	3.15
	43	3.06	3.69	4.39	5.17	6.03	6.97	3.06	3.09	3.14	3.21	3.33	3.50
ZX040BE	27	5.52	6.57	7.70	8.95	10.37	12.02	2.72	2.86	3.02	3.17	3.31	3.36
	32	5.10	6.10	7.13	8.24	9.47	10.87	3.03	3.15	3.31	3.46	3.54	3.68
	38	4.61	5.60	6.57	7.57	8.64	9.85	3.45	3.58	3.71	3.85	3.97	4.03
	43	3.98	5.00	5.95	6.89	7.83	8.85	3.87	4.00	4.12	4.23	4.33	4.38
ZX050BE[2]	27	7.49	9.05	10.67	12.31	13.93	15.51	3.65	3.73	3.86	4.02	4.25	4.53
	32	6.56	8.12	9.76	11.43	13.10	14.74	4.11	4.20	4.32	4.50	4.72	5.00
	38	5.56	7.07	8.67	10.32	11.98	13.63	4.59	4.68	4.79	4.96	5.16	5.42
	43	4.88	6.28	7.79	9.37	10.98	12.58	5.11	5.17	5.27	5.40	5.59	5.81
ZX060BE[2]	27	8.24	9.72	11.47	13.30	15.69	18.48	3.69	3.84	4.06	4.33	4.62	4.93
	32	7.53	9.06	10.72	12.58	14.72	17.20	4.40	4.54	4.75	5.01	5.28	5.56
	38	6.74	8.25	9.83	11.55	13.48	15.69	4.93	5.05	5.25	5.47	5.72	5.98
	43	5.90	7.48	9.07	10.74	12.57	14.63	5.59	5.69	5.85	6.06	6.28	6.51
ZX076BE[2]	27	9.22	11.07	13.00	15.37	18.12	20.53	4.00	4.17	4.41	4.70	5.03	5.35
	32	8.50	10.21	12.06	14.14	16.53	19.30	4.78	4.93	5.16	5.43	5.74	6.05
	38	7.45	8.91	10.83	12.72	14.83	17.26	5.35	5.50	5.70	5.94	6.22	6.50
	43	6.39	8.09	9.80	11.61	13.59	15.81	6.07	6.19	6.36	6.57	6.82	7.07

Notes: [1] Available on PFJ models only
[2] Available on TFD models only
The rating condition is based on a return gas temperature of 18.3°C.
Power includes condenser fan.
Ambient 38°C and 43°C are typical design conditions for unit selection.

ZX Family: Medium temperature
Capacity and power (kW) at 50 Hz - PFJ/TFD

R407F

Model	Ambient temperature (°C)	Capacity evaporating temperature (°C)							Power evaporating temperature (°C)						
		-15	-10	-5	0	5	10	12	-15	-10	-5	0	5	10	12
ZX020BE	27	3.63	4.32	5.07	5.79	6.45	7.24	7.62	1.55	1.67	1.76	1.87	1.99	2.06	2.14
	32	3.36	3.98	4.69	5.39	6.07	6.90	7.30	1.77	1.85	1.93	2.05	2.22	2.35	2.46
	38	2.79	3.35	4.02	4.74	5.46	6.35	6.78	2.11	2.18	2.27	2.44	2.70	2.92	3.06
	43	2.21	2.74	3.40	4.14	4.91			2.40	2.48	2.61	2.84	3.20		
ZX030BE	27	5.01	6.13	7.30	8.53	9.88	11.32	11.91	2.20	2.39	2.47	2.58	2.64	2.78	2.85
	32	4.64	5.65	6.75	7.94	9.31	10.79	11.41	2.44	2.63	2.67	2.77	2.97	3.16	3.27
	38	3.85	4.75	5.79	6.97	8.37	9.93	10.60	2.86	3.00	3.11	3.23	3.57	3.90	4.07
	43	3.06	3.88	4.89	6.09	7.53			3.11	3.28	3.43	3.49	4.03		
ZX040BE	27	6.81	8.21	9.64	11.09	12.65	14.37	15.13	2.87	3.18	3.26	3.38	3.41	3.57	3.66
	32	6.31	7.57	8.91	10.33	11.91	13.70	14.49	3.18	3.49	3.53	3.64	3.84	4.06	4.20
	38	5.24	6.36	7.64	9.07	10.71	12.61	13.46	3.72	3.98	4.10	4.24	4.61	5.01	5.23
	43	4.16	5.20	6.46	7.92	9.64			4.04	4.36	4.53	4.59	5.21		
ZX050BE	27	8.11	10.02	11.73	13.53	15.71	18.56	19.95	3.62	3.70	3.92	4.20	4.46	4.62	4.64
	32	7.42	9.44	11.19	12.96	15.04	17.74	19.05	4.07	4.16	4.39	4.69	4.96	5.14	5.16
	38	6.32	8.44	10.22	11.95	13.91	16.41	17.61	4.61	4.71	4.95	5.26	5.54	5.73	5.76
	43	5.32	7.53	9.33	11.01	12.87			5.12	5.22	5.46	5.77	6.06		
ZX060BE	27	9.24	11.22	13.02	15.16	18.23	21.53	23.15	3.93	3.87	4.07	4.36	4.79	4.96	4.98
	32	8.46	10.57	12.42	14.51	17.45	20.57	22.09	4.50	4.48	4.62	5.00	5.38	5.57	5.60
	38	7.20	9.45	11.35	13.38	16.14	19.03	20.43	5.05	5.02	5.19	5.50	6.07	6.27	6.30
	43	6.07	8.44	10.36	12.33	14.93			5.56	5.51	5.66	5.98	6.44		
ZX076BE	27	10.28	12.48	14.48	16.85	20.08	23.72	25.50	4.44	4.31	4.43	4.64	5.08	5.26	5.28
	32	9.41	11.75	13.80	16.14	19.23	22.66	24.34	5.03	5.01	5.14	5.60	5.93	6.14	6.16
	38	8.01	10.51	12.62	14.88	17.78	20.96	22.51	5.97	5.94	6.07	6.44	7.08	7.34	7.38
	43	6.75	9.38	11.52	13.71	16.44			6.84	6.72	6.90	7.26	7.76		

Notes: The rating condition is based on a return gas temperature of 18.3°C.
Power includes condenser fan.
Ambient 38°C and 43°C are typical design conditions for unit selection.

ZXD Family: Digital medium temperature

Capacity and Power (kW) at 50 Hz - TFD

R404A

Model	Ambient temperature (°C)	Capacity evaporating temperature (°C)						Power evaporating temperature (°C)					
		-20	-15	-10	-5	0	5	-20	-15	-15	-5	0	5
ZXD030BE	27	3.95	4.65	5.56	6.65	7.90	9.28	1.92	2.14	2.24	2.26	2.26	2.29
	32	3.72	4.37	5.20	6.18	7.28	8.47	2.01	2.22	2.33	2.38	2.43	2.53
	38	3.32	3.94	4.69	5.55	6.48	7.45	2.27	2.46	2.56	2.63	2.73	2.90
	43	2.98	3.59	4.29	5.06	5.86	6.67	2.53	2.69	2.78	2.85	2.97	3.19
	48		3.34	4.00	4.70	5.39			2.86	2.92	2.99	3.13	
ZXD040BE	27	5.92	7.11	8.35	9.64	11.01	12.46	2.70	2.85	3.02	3.21	3.43	3.68
	32	5.53	6.69	7.87	9.11	10.40	11.75	2.99	3.12	3.27	3.44	3.64	3.87
	38	4.90	6.00	7.12	8.27	9.45	10.68	3.49	3.59	3.72	3.87	4.04	4.24
	43	4.23	5.28	6.33	7.40	8.48	9.59	4.02	4.10	4.21	4.34	4.50	4.68
	48	3.56	4.56	5.54	6.53	7.51		4.55	4.61	4.70	4.81	4.96	
ZXD050BE	27	7.49	9.05	10.67	12.31	13.93	15.51	3.65	3.73	3.86	4.02	4.25	4.53
	32	6.56	8.12	9.76	11.43	13.10	14.74	4.11	4.20	4.32	4.50	4.72	5.00
	38	5.56	7.07	8.67	10.32	11.98	13.63	4.59	4.68	4.79	4.96	5.16	5.42
	43	4.88	6.28	7.79	9.37	10.98	12.58	5.11	5.17	5.27	5.40	5.59	5.81
	48	4.20	5.49	6.91	8.42	9.98		5.63	5.67	5.75	5.85	6.01	
ZXD060BE	27	8.24	9.72	11.47	13.30	15.69	18.48	3.69	3.84	4.06	4.33	4.62	4.93
	32	7.58	9.06	10.72	12.58	14.72	17.20	4.40	4.54	4.75	5.01	5.28	5.56
	38	6.74	8.25	9.83	11.55	13.48	15.69	4.93	5.05	5.25	5.47	5.72	5.98
	43	5.90	7.48	9.07	10.74	12.57	14.63	5.59	5.69	5.85	6.06	6.28	6.51
	48	5.06	6.71	8.31	9.93	11.66		6.26	6.32	6.46	6.64	6.83	
ZXD076BE	27	9.22	11.07	13.00	15.37	18.12	20.53	4.00	4.17	4.41	4.70	5.03	5.35
	32	8.50	10.21	12.06	14.14	16.53	19.30	4.78	4.93	5.16	5.43	5.74	6.05
	38	7.45	8.91	10.83	12.72	14.83	17.26	5.35	5.50	5.70	5.94	6.22	6.50
	43	6.39	8.09	9.80	11.61	13.59	15.81	6.07	6.19	6.36	6.57	6.82	7.07
	48	5.32	7.26	8.77	10.50	12.34		6.79	6.88	7.02	7.21	7.43	
ZXD090BE	27	11.80	13.70	14.70	16.25	18.30		5.10	5.20	5.50	6.50	6.20	
	32	10.70	12.50	14.50	16.20	17.00		6.20	6.30	6.40	7.10	6.80	
	38	10.50	12.30	14.40	16.10	16.80		7.80	8.20	8.50	9.40	8.40	
	43	9.90	11.90	13.20	14.50	15.20		8.42	8.80	9.56	9.90	9.20	
ZXD120BE	27	15.94	19.72	23.35	26.67	30.50		8.22	8.49	8.96	9.61	10.40	
	32	14.82	18.47	22.12	25.63	29.07		8.97	9.25	9.69	10.27	10.97	
	38	13.37	16.84	20.50	24.22	27.85		9.96	10.25	10.67	11.20	11.81	
	43	11.74	15.04	18.70	22.57	26.52		10.86	11.19	11.61	12.11	12.66	
	48	9.41	12.54	16.18	20.19	24.45		11.85	12.22	12.66	13.15	13.65	
ZXD160BE	27	21.54	24.95	28.49	32.10	35.71		10.45	10.86	11.27	11.69	12.13	
	32	20.35	23.84	27.53	31.33	35.18		11.45	11.89	12.33	12.78	13.26	
	38	19.48	22.99	26.75	30.68	34.73		12.49	12.99	13.48	13.99	14.53	
	43	18.51	22.15	25.88	29.84	33.97		13.41	13.96	14.52	15.09	15.69	
	48	17.21	20.71	24.34	28.26	32.39		14.52	15.15	15.78	16.43	17.11	
ZXD200BE	27	25.15	30.38	35.68	41.14			13.40	13.71	14.08	15.00		
	32	23.59	29.01	34.48	40.12			15.78	15.89	15.96	16.37		
	38	22.20	27.27	32.79	38.45			18.26	18.56	18.77	18.90		
	43	21.26	26.12	31.53	37.07			20.01	20.59	20.78	20.93		
	48	20.76	25.60	30.76	36.06			21.26	21.86	22.02	22.24		

Notes: The rating condition is based on return gas temperature of 18.3°C.
The rating condition is based on suction superheat of 10K.
Power includes condenser fan.
Ambient 38°C and 43°C are typical design conditions for unit selection.

ZXD Family: Digital medium temperature

Capacity and power (kW) at 50 Hz - TFD

R407F

Model	Ambient temperature (°C)	Capacity evaporating temperature (°C)						Power evaporating temperature (°C)					
		-10	-5	0	5	10	12	-10	-5	0	5	10	12
ZXD030BE	27	5.70	6.64	7.48	8.63	10.52	11.57	2.20	2.33	2.61	2.87	2.93	2.86
	32	5.31	6.35	7.24	8.40	10.25	11.27	2.42	2.53	2.79	3.01	3.02	2.92
	38	4.72	5.84	6.75	7.88	9.64	10.62	2.79	2.90	3.14	3.33	3.30	3.19
	43		5.45	6.35					3.23	3.47			
	48												
ZXD040BE	27	7.68	9.32	11.17	13.20	15.41	16.34	2.85	3.04	3.23	3.40	3.49	3.50
	32	7.30	8.93	10.73	12.69	14.77	15.64	3.13	3.30	3.50	3.70	3.86	3.90
	38	6.66	8.27	10.01	11.85	13.77	14.56	3.53	3.66	3.86	4.09	4.31	4.39
	43	6.06	7.64	9.30	11.03	12.81	13.53	3.95	4.04	4.22	4.46	4.72	4.83
	48		6.98	8.56					4.52	4.67			
ZXD050BE	27	9.52	11.65	13.94	16.37	19.26	20.42	3.61	3.77	3.94	4.08	4.20	4.21
	32	9.05	11.21	13.52	15.73	18.47	19.56	3.97	4.11	4.30	4.45	4.64	4.70
	38	8.11	10.33	12.69	14.81	17.35	18.37	4.40	4.54	4.77	4.95	5.23	5.33
	43	7.45	9.47	11.72	13.90	16.40	17.40	4.98	4.98	5.19	5.45	5.82	5.97
	48		8.73	10.79					5.61	5.74			
ZXD060BE	27	10.37	12.69	15.70	18.80	22.69	24.24	3.80	4.18	4.49	4.58	4.62	4.86
	32	9.85	12.20	15.23	17.91	21.39	22.78	4.33	4.74	5.15	5.11	5.14	5.40
	38	9.07	11.50	14.19	16.64	19.76	21.01	4.81	5.27	5.65	5.64	5.75	6.03
	43	8.41	10.59	12.99	15.41	18.34	19.52	5.40	5.72	5.99	6.06	6.26	6.54
	48		9.93	12.07					6.67	6.85			
ZXD076BE	27	13.25	15.54	18.13	21.09	24.47	25.82	4.82	4.98	5.09	5.18	5.14	5.33
	32	12.59	14.78	17.21	19.96	23.07	24.32	5.50	5.59	5.71	5.74	5.71	5.94
	38	11.57	13.60	15.82	18.28	21.06	22.17	6.10	6.07	6.17	6.24	6.31	6.56
	43	10.67	12.55	14.57	16.77	19.23	20.22	6.80	6.60	6.58	6.65	6.75	6.98
	48		11.54	13.33					7.45	7.26			

Notes: The rating condition is based on suction superheat of 10K and return gas temperature of 18.3°C.
Power includes condenser fan.
Ambient 38°C and 43°C are typical design conditions for unit selection.

ZXL Family: Low temperature

Capacity and power (kW) at 50 Hz - PFJ/TFD

R404A

Model	Ambient temperature (°C)	Capacity evaporating temperature (°C)									Power evaporating temperature (°C)								
		-40	-35	-30	-25	-20	-15	-10	-5	0	-40	-35	-30	-25	-20	-15	-10	-5	0
ZXL020BE	27	1.52	2.02	2.42	2.86	3.34	3.86	4.42	5.02	5.66	1.35	1.47	1.60	1.73	1.86	2.00	2.14	2.29	2.44
	32	1.45	1.82	2.24	2.70	3.19	3.73	4.31	4.92	5.58	1.50	1.60	1.71	1.83	1.95	2.08	2.21	2.34	2.48
	38	1.25	1.49	1.93	2.40	2.92	3.47	4.07	4.70	5.38	1.72	1.81	1.91	2.01	2.12	2.23	2.34	2.46	2.59
	43	1.10	1.23	1.58	2.07	2.60	3.18	3.79	4.44	5.13	1.95	2.03	2.11	2.20	2.30	2.39	2.50	2.60	2.72
	48	0.99	1.12	1.16	1.67	2.21	2.80				2.22	2.29	2.36	2.44	2.52	2.60			
ZXL030BE	27	2.09	2.58	3.17	3.85	4.60	5.41	6.25	7.61	8.67	1.67	1.84	2.00	2.15	2.30	2.45	2.58	2.71	2.83
	32	2.08	2.49	3.00	3.60	4.27	5.00	5.77	7.35	8.38	1.89	2.05	2.20	2.35	2.49	2.62	2.75	2.87	2.99
	38	2.00	2.33	2.77	3.31	3.92	4.59	5.31	6.95	7.95	2.31	2.45	2.60	2.73	2.86	2.99	3.10	3.21	3.32
	43	1.73	2.03	2.44	2.95	3.54	4.19	4.89	6.55	7.52	2.77	2.91	3.05	3.18	3.30	3.41	3.52	3.62	3.72
	48	1.50	1.70	2.00	2.38	2.96	3.61				3.36	3.49	3.61	3.73	3.84	3.95			
ZXL040BE[1]	27	3.24	3.99	4.86	5.85	6.93	8.10	9.35	10.66	12.01	2.69	2.88	3.10	3.34	3.40	3.50	4.10	4.31	4.50
	32	3.02	3.77	4.63	5.58	6.63	7.75	8.93	10.16	11.43	2.99	3.17	3.39	3.64	3.90	4.17	4.43	4.67	4.88
	38	2.85	3.56	4.37	5.27	6.25	7.28	8.36	9.48	10.63	3.54	3.70	3.91	4.15	4.41	4.68	4.94	5.19	5.41
	43	2.67	3.34	4.10	4.93	5.83	6.77	7.75	8.76	9.78	4.08	4.22	4.40	4.62	4.87	5.12	5.38	5.63	5.85
	48	2.38	2.99	3.68	4.43	5.23	6.06				4.63	4.73	4.88	5.07	5.29	5.52			
ZXL050BE[1]	27	3.80	4.58	5.58	6.78	8.12	9.57	11.09	12.64	14.19	2.92	3.16	3.39	3.62	3.86	4.09	4.40	4.58	4.83
	32	3.52	4.31	5.29	6.43	7.69	9.04	10.42	11.81	13.17	3.26	3.49	3.72	3.96	4.20	4.46	4.72	5.00	5.29
	38	3.25	4.03	4.98	6.06	7.22	8.43	9.65	10.84	11.97	3.88	4.10	4.33	4.57	4.83	5.11	5.41	5.73	6.07
	43	2.99	3.77	4.69	5.71	6.78	7.87	8.95	9.97	10.89	4.43	4.64	4.87	5.12	5.40	5.70	6.03	6.39	6.77
	48	2.63	3.40	4.28	5.23	6.21	7.19				4.89	5.10	5.33	5.59	5.88	6.21			
ZXL060BE[1]	27	4.49	5.51	6.68	7.99	9.42	10.95	12.57	14.27	16.01	3.62	3.84	4.08	4.36	4.66	4.97	5.30	5.63	5.97
	32	4.30	5.32	6.48	7.77	9.17	10.67	12.26	13.91	15.60	4.04	4.27	4.53	4.83	5.16	5.51	5.88	6.27	6.66
	38	4.07	5.02	6.12	7.34	8.66	10.08	11.57	13.11	14.70	4.60	4.84	5.12	5.44	5.80	6.19	6.61	7.05	7.51
	43	3.81	4.67	5.67	6.79	8.00	9.30	10.67	12.09	13.54	5.17	5.41	5.69	6.03	6.42	6.84	7.30	7.78	8.29
	48	3.42	4.16	5.03	6.00	7.07	8.22				5.88	6.11	6.41	6.76	7.16	7.61			
ZXL075BE[1]	27	4.99	6.14	7.42	8.84	10.40	12.13	14.03	16.12	18.41	3.93	4.20	4.51	4.84	5.21	5.59	6.01	6.44	6.89
	32	4.75	5.90	7.14	8.50	9.99	11.61	13.39	15.33	17.45	4.35	4.63	4.94	5.30	5.68	6.10	6.55	7.03	7.53
	38	4.49	5.61	6.80	8.08	9.46	10.94	12.55	14.30	16.19	4.98	5.25	5.58	5.95	6.36	6.81	7.30	7.83	8.38
	43	4.21	5.30	6.43	7.63	8.90	10.25	11.71	13.28	14.97	5.61	5.89	6.22	6.60	7.03	7.51	8.03	8.59	9.19
	48	3.81	4.85	5.91	7.01	8.16	9.38				6.38	6.65	6.98	7.38	7.82	8.32			

Notes: [1] Available on TFD models only
The rating condition is based on the return gas temperature of 5°C.
Power includes condenser fan.
Ambient 38°C and 43°C are typical design conditions for unit selection.

ZXLD Family: Low temperature

Capacity and power (kW) at 50 Hz - TFD

R404A

Model	Ambient Temperature (°C)	Capacity Evaporating Temperature (°C)									Power Evaporating Temperature (°C)								
		-40	-35	-30	-25	-20	-15	-10	-5	0	-40	-35	-30	-25	-20	-15	-10	-5	0
ZXLD090BE	27	5.53	6.79	8.21	9.78	11.43	13.26	15.34	17.66		4.27	4.61	5.02	5.51	6.00	6.49	6.99	7.50	
	32	5.31	6.55	7.87	9.43	10.95	12.65	14.54	16.72		4.71	4.97	5.47	6.05	6.64	7.08	7.76	8.24	
	38	5.00	6.16	7.50	8.85	10.48	11.90	13.58	15.17		5.44	5.68	6.12	6.33	7.39	8.01	8.67	9.22	
	43	4.72	5.85	6.88	8.57	9.98	11.04	12.74	13.89		6.26	6.46	6.80	7.33	8.07	8.92	9.50	10.03	
	48	4.05	5.39	6.57	7.96						7.12	7.46	7.84	8.38					
ZXLD120BE	27	8.57	10.66	13.15	16.28	19.95	23.88	27.87	31.65	35.44	6.92	7.58	8.22	8.86	9.51	10.18	10.87	11.61	12.36
	32	8.25	10.33	12.72	15.68	19.09	22.83	26.71	30.47	34.24	7.89	8.64	9.37	10.09	10.79	11.51	12.26	13.02	13.73
	38	7.57	9.50	11.73	14.34	17.44	20.94	24.59	28.18	31.76	8.82	9.78	10.66	11.50	12.35	13.08	13.84	14.64	15.29
	43	7.06	9.03	10.78	13.16	16.08	19.15	22.45	25.57	28.70	9.47	10.39	11.30	12.29	13.29	14.15	14.94	15.72	16.32
	48	6.77	8.68	10.28	12.45	15.60	18.36				9.86	10.92	11.92	12.89	14.20	14.92			
ZXLD160BE	27	11.58	14.24	17.39	21.31	25.84	30.62	35.36	39.77		8.51	9.30	10.06	10.82	11.58	12.37	13.18	14.04	
	32	11.23	13.90	16.93	20.66	24.89	29.46	34.11	38.53		9.66	10.55	11.41	12.26	13.08	13.92	14.79	15.67	
	38	10.37	12.87	15.72	19.01	22.88	27.20	31.61	35.85		10.73	11.87	12.91	13.88	14.88	15.72	16.59	17.51	
	43	9.73	12.39	14.70	17.85	21.70	25.70	29.97	33.96		11.49	12.58	13.65	14.81	15.98	16.97	17.87	18.76	
	48	9.40	12.03	14.20	17.15	21.43	25.15				11.85	13.09	14.26	15.38	16.91	17.73			
ZXLD200BE	27	12.45	16.13	19.75	23.48	27.41	31.60	36.15	41.11		9.15	10.20	11.27	12.30	13.24	14.03	14.77	15.23	
	32	12.19	15.88	19.27	22.82	26.58	30.65	35.13	40.03		10.17	11.18	12.24	13.30	14.30	15.19	15.93	16.44	
	38	11.82	15.50	18.74	22.14	25.77	29.73	34.08	38.95		11.45	12.48	13.59	14.74	15.82	16.88	17.86	18.70	
	43	11.52	14.96	18.10	21.35	25.48	29.20	33.44	38.24		12.11	13.44	14.68	15.94	17.29	18.57	19.84	20.99	
	48	11.42	14.69	17.66	20.82	24.90	28.50				12.53	14.11	15.49	17.12	18.73	20.32			

Notes: The rating condition is based on the return gas temperature of 5°C.
Power includes condenser fan.
Ambient 38°C and 43°C are typical design conditions for unit selection.

ZXL Family: Low temperature
Capacity and power (kW) at 50 Hz - PFJ/TFD

R407F

Model	Ambient temperature (°C)	Capacity evaporating temperature (°C)									Power evaporating temperature (°C)								
		-40	-35	-30	-25	-20	-15	-10	-5	0	-40	-35	-30	-25	-20	-15	-10	-5	0
ZXL020BE	27	1.32	1.68	2.15	2.72	3.37	4.10	4.88	5.72	6.58	1.69	1.76	1.82	1.86	1.90	1.94	1.98	2.05	2.14
	32	1.25	1.59	2.04	2.59	3.22	3.91	4.67	5.47	6.29	1.74	1.83	1.90	1.96	2.01	2.06	2.11	2.19	2.28
	38	1.14	1.47	1.91	2.43	3.04	3.71	4.43	5.19	5.98	1.80	1.93	2.03	2.12	2.20	2.27	2.35	2.45	2.57
	43	1.06	1.38	1.81	2.33	2.92	3.57	4.27	5.01	5.78	2.02	2.19	2.34	2.46	2.57	2.68	2.80	2.92	3.07
	48	1.00	1.33	1.76	2.27	2.85	3.49				2.55	2.77	2.96	3.14	3.30	3.45			
ZXL030BE	27	1.85	2.36	2.99	3.72	4.56	5.57	6.77	8.20	9.74	2.23	2.43	2.49	2.52	2.57	2.53	2.59	2.69	2.82
	32	1.75	2.24	2.84	3.54	4.35	5.32	6.47	7.84	9.31	2.24	2.46	2.59	2.64	2.69	2.69	2.75	2.82	2.92
	38	1.60	2.07	2.65	3.33	4.11	5.04	6.14	7.45	8.85	2.26	2.45	2.67	2.81	2.94	3.01	3.13	3.23	3.36
	43	1.48	1.94	2.52	3.19	3.95	4.86	5.93	7.19	8.55	2.70	2.78	3.00	3.24	3.46	3.64	3.81	3.97	4.13
	48	1.40	1.87	2.44	3.10	3.86	4.75				3.45	3.81	3.93	4.20	4.58	4.81			
ZXL040BE[1]	27	3.06	3.87	4.80	5.83	7.00	8.30	9.76	11.38	13.17	2.74	2.85	3.03	3.26	3.54	3.85	4.18	4.52	4.84
	32	2.93	3.72	4.60	5.59	6.70	7.94	9.33	10.86	12.56	3.08	3.19	3.38	3.63	3.93	4.26	4.61	4.97	5.32
	38	2.73	3.47	4.30	5.23	6.26	7.42	8.71	10.13	11.72	3.53	3.68	3.90	4.19	4.52	4.90	5.29	5.70	6.11
	43	2.56	3.26	4.04	4.90	5.86	6.94	8.14	9.47	10.95	3.98	4.17	4.44	4.77	5.16	5.58	6.04	6.50	6.92
	48	2.42	3.07	3.78	4.58	5.47	6.46				4.52	4.77	5.10	5.49	5.94	6.44			
ZXL050BE[1]	27	3.50	4.25	5.33	6.70	8.28	9.99	11.75	13.47	15.08	2.95	3.13	3.28	3.45	3.63	3.94	4.25	4.60	5.12
	32	3.23	3.97	5.04	6.36	7.87	9.51	11.15	12.74	14.20	3.39	3.56	3.72	3.87	4.05	4.36	4.61	5.03	5.56
	38	2.90	3.62	4.67	5.96	7.40	8.94	10.48	11.92	13.22	4.23	4.35	4.47	4.61	4.79	5.06	5.35	5.77	6.33
	43	2.69	3.38	4.42	5.68	7.08	8.55	10.00	11.34	12.47	4.99	4.98	5.09	5.22	5.51	5.85	6.17	6.50	6.94
	48	2.55	3.19	4.24	5.48	6.86	8.28				5.60	5.40	5.55	5.87	6.20	6.62			
ZXL060BE[1]	27	4.14	5.11	6.38	7.89	9.61	11.43	13.32	15.21	17.02	3.65	3.81	3.95	4.15	4.39	4.71	5.12	5.65	6.28
	32	3.94	4.90	6.17	7.68	9.38	11.22	13.12	15.01	16.82	4.20	4.36	4.52	4.72	4.98	5.31	5.74	6.30	7.00
	38	3.60	4.52	5.74	7.22	8.88	10.69	12.56	14.42	16.23	4.97	5.13	5.29	5.49	5.75	6.09	6.54	7.10	7.83
	43	3.33	4.18	5.34	6.75	8.36	10.11	11.93	13.75	15.51	5.67	5.81	5.95	6.14	6.40	6.74	7.19	7.76	8.49
	48	3.13	3.90	4.98	6.29	7.81	9.47				6.36	6.48	6.61	6.78	7.02	7.34			
ZXL075BE[1]	27	4.60	5.69	7.08	8.73	10.61	12.66	14.87	17.18	19.57	3.97	4.17	4.37	4.61	4.91	5.30	5.81	6.46	7.30
	32	4.36	5.44	6.80	8.41	10.22	12.21	14.33	16.54	18.82	4.53	4.73	4.93	5.17	5.48	5.88	6.40	7.07	7.92
	38	3.98	5.05	6.38	7.94	9.70	11.60	13.63	15.73	17.87	5.38	5.57	5.77	6.00	6.30	6.70	7.22	7.89	8.74
	43	3.68	4.75	6.06	7.59	9.30	11.14	13.09	15.10	17.14	6.15	6.32	6.50	6.72	7.01	7.40	7.90	8.57	9.41
	48	3.49	4.55	5.85	7.35	9.01	10.80				6.90	7.05	7.20	7.40	7.66	8.03			

Notes: [1] Available on TFD models only
The rating condition is based on the return gas temperature of 5°C.
Power includes condenser fan.
Ambient 38°C and 43°C are typical design conditions for unit selection.

ZX Family: Medium temperature
Technical data at 50 Hz - PFJ

Family				ZX		
Nominal rating		Horsepower	HP	2	3	4
Model name				ZX020B0	ZX030B0	ZX040B0
				ZX020BE	ZX030BE	ZX040BE
	R404A	ET/AT/RGT	°C	-6.7/32/18.3		
		Capacity	kW	4.30	6.00	7.80
		COP	W/W	2.26	2.35	2.29
	R407F	ET/AT/RGT	°C	-6.7/32/18.3		
		Capacity	kW	4.40	6.31	8.37
		COP	W/W	2.32	2.38	2.38
	Sound pressure level	@1m	dB(A)	56		
Compressor	Rated load ampere	R22	Amp	13.2	16.4	20.0
		R404A	Amp	13.2	16.4	20.0
		R407F	Amp	13.2	16.4	20.0
	Locked rotor ampere	R22	Amp	58.0	82.0	114.0
		R404A	Amp	58.0	82.0	114.0
		R407F	Amp	58.0	82.0	114.0
	Oil type	R22		MINERAL		
		R404A		POE		
		R407F		POE		
	Oil recharge volume	R22/R404A/R407F		1.18	1.33	1.83
Fan motor	Number of fan		Pieces	1	1	1
	Diameter		mm	450	450	450
	Fan speed		rpm	933	933	933
	Air flow	Total	m^3/h	3483	3483	3483
	Total fan motor power	Input	W	116	116	116
Others	Oil separator	Volume	Liters	0.5	0.5	0.5
	Receiver volume	R22	kg	5.1	5.1	5.1
		R404A	kg	4.4	4.4	4.4
		R407F	kg	4.5	4.5	4.5
	Pipes	Suction OD	Inch	3/4	3/4	3/4
		Liquid OD	Inch	1/2	1/2	1/2
	Dimension	W x D x H	mm	1029 x 424 x 840		
	Weight	Net	kg	76	79	100
		Gross	kg	114	117	138

ZX Family: Medium temperature
Technical data at 50 Hz - TFD

Family				ZX					
Nominal rating		Horsepower	HP	2	3	4	5	6	7.6
Model name				ZX020B0	ZX030B0	ZX040B0	ZX050B0	ZX060B0	ZX076B0
				ZX020BE	ZX030BE	ZX040BE	ZX050BE	ZX060BE	ZX076BE
	R404A	ET/AT/RGT	°C	-6.7/32/18.3					
		Capacity	kW	4.30	6.00	7.80	10.70	11.80	13.46
		COP	W/W	2.26	2.35	2.29	2.40	2.41	2.50
	R407F	ET/AT/RGT	°C	-6.7/32/18.3					
		Capacity	kW	4.40	6.31	8.37	10.49	11.68	12.98
		COP	W/W	2.32	2.38	2.38	2.44	2.56	2.55
	Sound pressure level	@1m	dB(A)	56			60		
Compressor	Rated load ampere	R22	Amp	4.3	5.7	7.4	8.9	11.5	12.0
		R404A	Amp	5.0	6.1	7.5	9.6	11.5	11.8
		R407F	Amp	5.0	6.1	7.5	9.6	11.5	11.8
	Locked rotor ampere	R22	Amp	26.0	36.0	44.3	58.6	67.0	101.0
		R404A	Amp	26.0	36.0	44.3	58.6	67.0	101.0
		R407F	Amp	26.0	36.0	44.3	58.6	67.0	101.0
	Oil type	R22		MINERAL					
		R404A		POE					
		R407F		POE					
	Oil recharge volume	R22/R404A/R407F		1.18	1.33	1.83	1.83	1.66	1.66
Fan motor	Number of fan		Pieces	1	1	1	2	2	2
	Diameter		mm	450	450	450	450	450	450
	Fan speed		rpm	830	830	830	830	830	830
	Air flow	Total	m^3/h	2922	2922	2922	5910	5910	5910
	Total fan motor power	Input	W	116	116	116	246	246	246
Others	Oil separator	Volume	Liters	0.5	0.5	0.5	0.5	0.5	0.5
	Receiver volume	R22	kg	5.1	5.1	5.1	7.2	7.2	7.2
		R404A	kg	4.4	4.4	4.4	6.3	6.3	6.3
		R407F	kg	4.5	4.5	4.5	6.4	6.4	6.4
	Pipes	Suction OD	Inch	3/4	3/4	7/8	7/8	7/8	7/8
		Liquid OD	Inch	1/2	1/2	1/2	1/2	1/2	1/2
	Dimension	W x D x H	mm	1029 x 424 x 840			1029 x 424 x 1242		
	Weight	Net	kg	76	79	100	108	112	121
		Gross	kg	114	117	121	152	156	154

ZXD Family: Digital medium temperature

Technical data at 50 Hz - TFD

Family				ZXD								
Nominal rating		Horsepower	HP	3	4	5	6	7.6	9	12	16	20
Model name				ZXD030B0 ZXD030BE	ZXD040B0 ZXD040BE	ZXD050B0 ZXD050BE	ZXD060B0 ZXD060BE	ZXD076B0 ZXD076BE	ZXD090BE	ZXD120BE	ZXD160BE	ZXD200BE
	R404A	ET/AT/ RGT	°C	-6.7/32/18.3								
		Capacity	kW	5.82	8.30	10.70	11.80	13.46	15.52	24.22	29.81	37.86
		COP	W/W	2.45	2.47	2.43	2.41	2.49	2.28	2.41	2.37	2.34
	R407F	ET/AT/ RGT	°C	-6.7/32/18.3								
		Capacity	kW	6.04	8.28	10.34	11.26	13.90	/	/	/	/
		COP	W/W	2.47	2.71	2.73	2.46	2.50	/	/	/	/
	Sound pressure level	@1m	dB(A)	56	60				62	65	69	72
Compressor	Rated load ampere	R22	Amp	7.4	7.9	10.0	10.0	12.1	/	/	/	/
		R404A	Amp	7.4	7.7	10.4	12.4	12.4	14.6	9.6+10.1	11.1 + 11.1	14.6 + 14.6
		R407F	Amp	7.4	7.9	10.0	12.1	12.1	/	/	/	/
	Locked rotor ampere	R22	Amp	40.0	48.0	64.0	74.0	100.0	/	/	/	/
		R404A	Amp	40.0	48.0	64.0	74.0	100.0	102	74	74	102
		R407F	Amp	40.0	48.0	64.0	74.0	100.0	/	/	/	/
	Oil type	R22		MINERAL								
		R404A		POE								
		R407F		POE								
	Oil recharge volume	R22/ R404A/ R407F	Liters	1.12	1.24	1.77	1.77	1.77	1.89	1.9+1.8	1.9 + 1.9	1.9 + 1.9
Fan motor	Number of fan		Pieces	1	3	2	2	2	2	2	2	3
	Diameter		mm	450	450	450	450	450	450	590	590	600
	Fan speed		rpm	830	830	830	830	830	830	850	850	860
	Air flow	Total	m^3/h	2922	5910	5910	5910	5910	5910	19280	19280	23400
	Total fan motor power	Input	W	116	246	246	246	246	246	950	950	1350
Others	Oil separator	Volume	Liters	0.5	0.5	0.5	0.5	0.5	0.5	2.5	2.5	3
	Receiver volume	R22	kg	5.1	7.2	7.2	7.2	7.2	/	/	/	/
		R404A	kg	4.4	6.3	6.3	6.3	6.3	6.3	17	17	17
		R407F	kg	4.5	6.4	6.4	6.4	6.4	/	/	/	/
	Pipes	Suction OD	Inch	3/4	7/8	7/8	7/8	7/8	7/8	1 3/8	1 3/8	1 3/8
		Liquid OD	Inch	1/2	1/2	1/2	1/2	1/2	1/2	3/4	3/4	3/4
	Dimension	W x D x H	mm	1029 x 424 x 840	1029 x 424 x 1242					1619 x 1010 x 1124		2033x 857x 1913
	Weight	Net	kg	85	104	112	114	122	138	357	362	470
		Gross	kg	123	148	156	158	171	158	457	462	550

ZXL Family: Low temperature
Technical data at 50 Hz - PFJ

Family				ZXL	
Nominal rating		Horsepower	HP	2	3
Model name				ZXL020B0	ZXL030B0
				ZXL020BE	ZXL030BE
	R404A	ET/AT/RGT	°C	-32/32/5°C	
		Capacity	kW	2.11	2.8
		COP	W/W	1.24	1.29
	R407F	ET/AT/RGT	°C	-32/32/5°C	
		Capacity	kW	1.86	2.6
		COP	W/W	0.99	1.02
	Sound pressure level	@1m	dB(A)	56	
Compressor	Rated load ampere TF5	R22	Amp	12.7	15.1
		R404A	Amp	12.7	15.1
		R407F	Amp	12.7	15.1
	Locked rotor ampere TF7	R22	Amp	56.6	82.3
		R404A	Amp	56.6	82.3
		R407F	Amp	56.6	82.3
	Oil type	R22		MINERAL	
		R404A		POE	
		R407F		POE	
	Oil recharge volume	R22/R404A/R407F		0.56	0.56
Fan motor	Number of fan		Pieces	1	1
	Diameter		mm	450	450
	Fan speed		rpm	830	830
	Air flow	Total	m^3/h	2922	2922
	Total fan motor power	Input	W	116	116
Others	Oil separator	Volume	Liters	0.5	0.5
	Receiver volume	R22	kg	5.1	5.1
		R404A	kg	4.4	4.4
		R407F	kg	4.5	4.5
	Pipes	Suction OD	Inch	3/4	3/4
		Liquid OD	Inch	1/2	1/2
	Dimension	W x D x H	mm	1029 x 424 x 840	
	Weight	Net	kg	79	81
		Gross	kg	117	119

ZXL Family: Low temperature
Technical data at 50 Hz - TFD

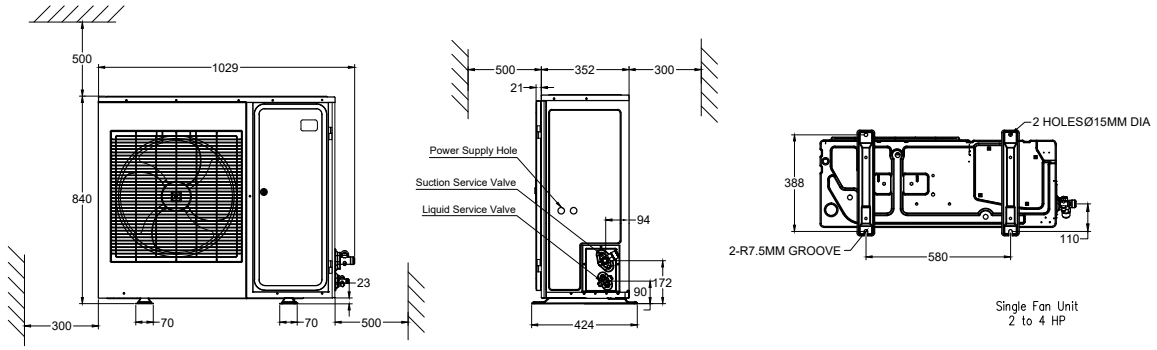
Family				ZXL					
Nominal rating		Horsepower	HP	2	3	4	5	6	7.5
Model name				ZXL020B0	ZXL030B0	ZXL040B0	ZXL050B0	ZXL060B0	ZXL075B0
				ZXL020BE	ZXL030BE	ZXL040BE	ZXL050BE	ZXL060BE	ZXL075BE
	R404A	ET/AT/RGT	°C	-32/32/5°C					
		Capacity	kW	2.11	2.8	4.26	4.99	5.91	6.65
		COP	W/W	1.24	1.29	1.29	1.36	1.33	1.38
	R407F	ET/AT/RGT	°C	-32/32/5°C					
		Capacity	kW	1.86	2.60	4.25	4.61	5.66	6.25
		COP	W/W	0.99	1.02	1.29	1.26	1.27	1.29
	Sound pressure level	@1m	dB(A)	56			60		
Compressor	Rated load ampere	R22	Amp	5.4	5.7	8.1	8.8	11.1	12.1
		R404A	Amp	5.6	6.0	8.6	10.0	11.1	14.6
		R407F	Amp	5.6	6.5	8.6	10.0	11.1	14.6
	Locked rotor ampere	R22	Amp	39.2	39.2	51.5	51.5	74.0	101.0
		R404A	Amp	39.2	39.2	51.5	51.5	74.0	101.0
		R407F	Amp	39.2	39.2	51.5	51.5	74.0	101.0
	Oil type	R22		MINERAL					
		R404A		POE					
		R407F		POE					
	Oil recharge volume	R22/R404A/R407F		0.56	0.56	1.24	1.24	1.77	1.77
Fan motor	Number of fan		Pieces	1	1	1	2	2	2
	Diameter		mm	450	450	450	450	450	450
	Fan speed		rpm	830	830	830	830	830	830
	Air flow	Total	m^3/h	2922	2922	2922	5910	5910	5910
	Total fan motor power	Input	W	116	116	116	246	246	246
Others	Oil separator	Volume	Liters	0.5	0.5	0.5	0.5	0.5	0.5
	Receiver volume	R22	kg	5.1	5.1	5.1	7.2	7.2	7.2
		R404A	kg	4.4	4.4	4.4	6.3	6.3	6.3
		R407F	kg	4.5	4.5	4.5	6.4	6.4	6.4
	Pipes	Suction OD	Inch	3/4	3/4	7/8	7/8	7/8	7/8
		Liquid OD	Inch	1/2	1/2	1/2	1/2	1/2	1/2
	Dimension	W x D x H	mm	1029 x 424 x 840			1029 x 424 x 1242		
	Weight	Net	kg	79	81	93	106	116	121
		Gross	kg	117	119	131	150	165	170

ZXLD Family: Low temperature
Technical data at 50 Hz -TFD

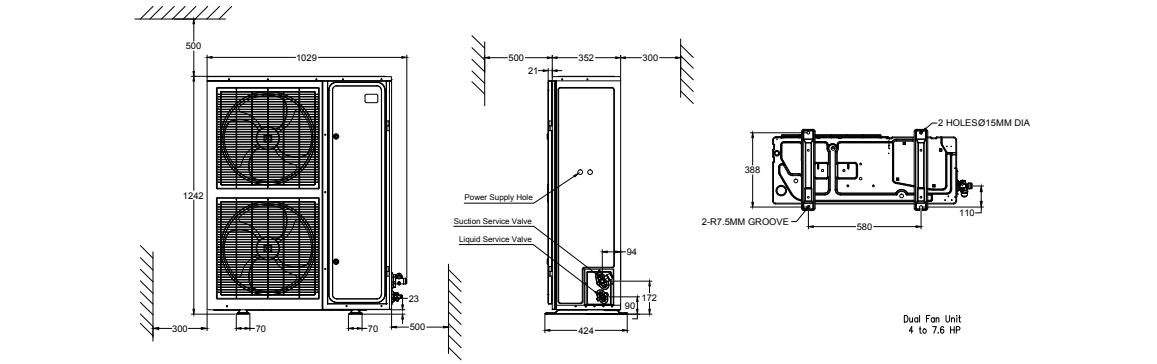
Family				ZXLD			
Nominal rating	Horsepower	HP		9	12	16	20
Model name				ZXLD090BE	ZXLD120BE	ZXLD160BE	ZXLD200BE
Performance	R404A	ET/AT/RGT	°C	-32/32/5	-32/32/5	-32/32/5	-32/32/5
		Capacity	kW	7.24	11.76	15.72	17.91
		COP	W/W	1.38	1.30	1.42	1.52
	Sound pressure level	@1m	dB(A)	62	69	69	72
Compressor	Rated load ampere	r404A	Amp	14.6	11.1+11.1	14.6 + 14.6	14.6 + 14.6
	Locked rotor ampere	r404A	Amp	102	74	102	121
	Oil type	r404A		POE			
	Oil recharge volume		Liters	1.89	1.9+1.9	1.9 + 1.9	1.9 + 1.9
Fan motor	Number of fan		Pieces	2	2	2	3
	Diameter		mm	450	590	590	600
	Fan speed		rpm	830	850	850	860
	Air flow	Total	m^3/h	5910	19280	19280	23400
	Total fan motor power	Input	W	246	950	950	1350
Others	Oil separator	Voume	Liters	0.5	2.5	2.5	3
	Receiver volume (at 32°C)		kg	6.3	17	17	17
	Pipes	Suction OD	inch	7/8	1 3/8	1 3/8	1 3/8
		Liquid OD	inch	1/2	3/4	3/4	3/4
	Dimension	W x D x H	mm	1029 x 424 x 1242	1619 x 1010 x 1124		2033 x 857 x 1913
	Weight	Net	kg	138	362	362	470
		Gross	kg	158	462	462	550

Dimensional drawings

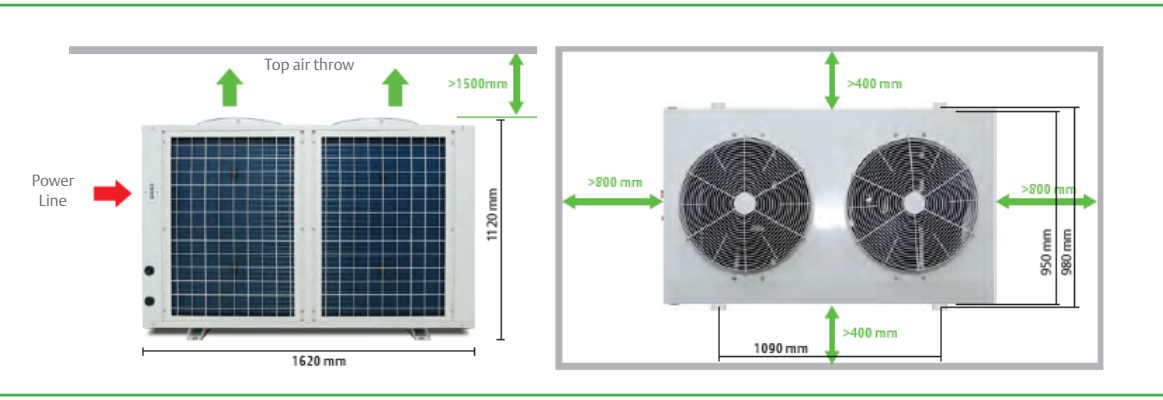
ZX-PFJ (2 HP-4 HP)
ZX-TFD (2HP-4HP), ZX-PFV/TF5/TF7 (2HP-3HP), ZXB-TFD (1.5HP-3.5HP)
ZXL-PFJ (2HP-3HP)
ZXL-TFD (2HP-4HP), ZXL-PFV (2HP, 3.5HP), ZXL-TF5/7 (2HP-3.5HP)
ZXD-TFD (3HP), ZXD-TF7(3HP)



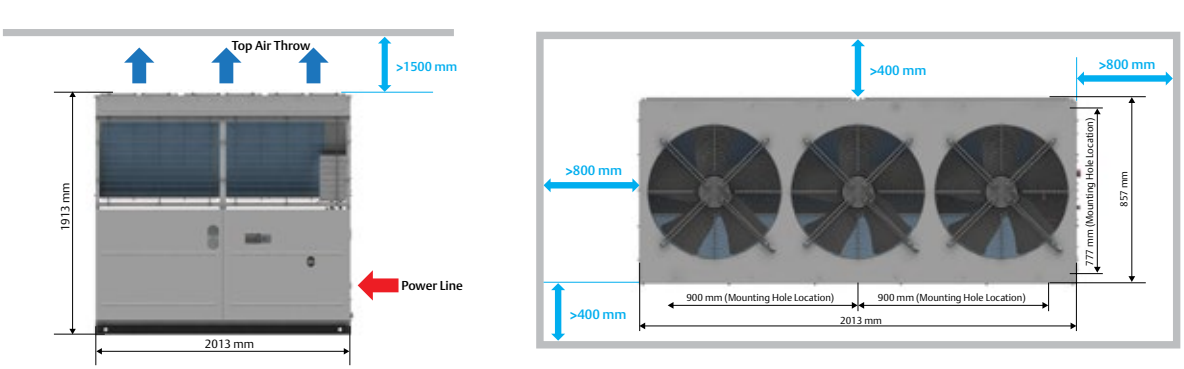
ZX-TFD (5HP-7.6HP), ZX-PFV (4HP-5HP), ZX-TF5/7 (4HP-7.5HP), ZXB-TFD (4HP-6HP)
ZXL-TFD (5HP-7.5HP), ZXL-PFV (4HP-5HP), ZXL-TF5/7 (4HP-7.5HP),
ZXD-TFD (4HP-9HP), ZXD-TF5/7 (4HP-7.5HP), ZXLD-TFD (9HP)



ZXD-TFD (12HP-16HP), ZXLD-TFD (12HP-16HP)



ZXD-TFD (20HP), ZXLD-TFD (20HP)



Fixing dimension and distance – Top air throw unit

PRESSURE TEMPERATURE CHART AT SEA LEVEL

°C	R-134a	R22	R404A HP 62	R407F Vapor	R407F Liquid	R407A Vapor	R407A Liquid	R407C Vapor	R407C Liquid	R408A	R410A	R502	R507A AZ50"	°F
-45.6	0.63	0.21	0.00	-0.26	0.03	0.30	0.03	0.37	0.09	0.07	0.34	-0.03	0.06	-50.0
-44.4	0.61	0.16	0.05	-0.22	0.08	0.26	0.03	0.33	0.04	0.02	0.41	0.02	0.12	-48.0
-43.3	0.59	0.12	0.11	-0.17	0.14	0.22	0.08	0.29	0.01	0.04	0.48	0.08	0.18	-46.0
-42.2	0.56	0.06	0.17	-0.12	0.20	0.17	0.14	0.25	0.07	0.10	0.57	0.14	0.24	-44.0
-41.1	0.53	0.01	0.23	-0.07	0.27	0.12	0.21	0.20	0.13	0.15	0.65	0.19	0.30	-42.0
-40.0	0.50	0.04	0.30	-0.02	0.34	0.07	0.27	0.16	0.19	0.21	0.74	0.26	0.37	-40.0
-38.9	0.47	0.10	0.37	0.04	0.41	0.01	0.34	0.11	0.26	0.28	0.83	0.32	0.44	-38.0
-37.8	0.44	0.15	0.43	0.10	0.48	0.04	0.41	0.06	0.32	0.34	0.92	0.39	0.52	-36.0
-36.7	0.41	0.21	0.51	0.16	0.56	0.10	0.48	0.00	0.39	0.41	1.01	0.46	0.59	-34.0
-35.6	0.37	0.28	0.59	0.22	0.64	0.16	0.56	0.06	0.46	0.48	1.12	0.53	0.68	-32.0
-34.4	0.33	0.34	0.66	0.29	0.72	0.23	0.63	0.11	0.53	0.55	1.22	0.60	0.75	-30.0
-33.3	0.29	0.41	0.74	0.36	0.80	0.29	0.72	0.17	0.61	0.63	1.33	0.68	0.84	-28.0
-32.2	0.25	0.48	0.83	0.43	0.89	0.36	0.80	0.23	0.69	0.71	1.44	0.76	0.93	-26.0
-31.1	0.21	0.55	0.92	0.51	0.98	0.43	0.89	0.30	0.77	0.79	1.56	0.84	1.02	-24.0
-30.0	0.17	0.63	1.01	0.59	1.08	0.51	0.98	0.37	0.86	0.88	1.68	0.93	1.12	-22.0
-28.9	0.13	0.70	1.10	0.67	1.18	0.59	1.08	0.45	0.94	0.97	1.81	1.01	1.21	-20.0
-27.8	0.08	0.79	1.20	0.75	1.28	0.67	1.17	0.52	1.04	1.06	1.94	1.11	1.32	-18.0
-26.7	0.03	0.87	1.30	0.84	1.39	0.75	1.28	0.60	1.14	1.15	2.07	1.20	1.42	-16.0
-25.6	0.02	0.96	1.41	0.93	1.50	0.84	1.38	0.68	1.23	1.25	2.21	1.30	1.53	-14.0
-24.4	0.08	1.05	1.52	1.03	1.61	0.93	1.49	0.77	1.34	1.35	2.35	1.40	1.64	-12.0
-23.3	0.13	1.14	1.63	1.13	1.73	1.03	1.60	0.85	1.44	1.46	2.50	1.51	1.76	-10.0
-22.2	0.19	1.23	1.74	1.23	1.85	1.12	1.72	0.94	1.55	1.57	2.66	1.61	1.88	-8.0
-21.1	0.25	1.34	1.86	1.34	1.98	1.23	1.83	1.03	1.67	1.68	2.81	1.73	2.00	-6.0
-20.0	0.32	1.44	1.99	1.45	2.11	1.33	1.96	1.13	1.79	1.79	2.98	1.84	2.13	-4.0
-18.9	0.38	1.54	2.12	1.56	2.24	1.44	2.09	1.23	1.91	1.91	3.15	1.96	2.26	-2.0
-17.8	0.45	1.66	2.25	1.68	2.38	1.55	2.22	1.34	2.03	2.03	3.32	2.08	2.40	0.0
-16.7	0.52	1.77	2.39	1.80	2.52	1.67	2.36	1.45	2.17	2.16	3.50	2.21	2.54	2.0
-15.6	0.59	1.89	2.52	1.93	2.67	1.79	2.50	1.56	2.30	2.29	3.69	2.34	2.68	4.0
-14.4	0.66	2.01	2.67	2.06	2.82	1.92	2.65	1.68	2.43	2.43	3.88	2.48	2.83	6.0
-13.3	0.74	2.14	2.82	2.20	2.98	2.05	2.80	1.80	2.58	2.57	4.08	2.61	2.99	8.0
-12.2	0.82	2.26	2.97	2.34	3.14	2.18	2.95	1.92	2.72	2.71	4.29	2.76	3.15	10.0
-11.1	0.90	2.40	3.13	2.48	3.31	2.32	3.11	2.05	2.88	2.86	4.50	2.90	3.31	12.0
-10.0	0.99	2.54	3.30	2.63	3.48	2.46	3.28	2.19	3.03	3.01	4.72	3.06	3.48	14.0
-8.9	1.08	2.68	3.46	2.79	3.66	2.61	3.45	2.32	3.19	3.17	4.94	3.21	3.66	16.0
-7.8	1.17	2.82	3.63	2.94	3.84	2.76	3.62	2.46	3.36	3.32	5.17	3.37	3.83	18.0
-6.7	1.27	2.97	3.81	3.11	4.03	2.92	3.80	2.61	3.53	3.49	5.41	3.53	4.01	20.0
-5.6	1.37	3.12	4.00	3.28	4.22	3.08	3.99	2.77	3.71	3.66	5.65	3.70	4.21	22.0
-4.4	1.47	3.28	4.19	3.45	4.42	3.25	4.18	2.92	3.89	3.84	5.90	3.88	4.40	24.0
-3.3	1.58	3.45	4.38	3.63	4.63	3.42	4.37	3.08	4.08	4.02	6.15	4.06	4.60	26.0
-2.2	1.69	3.61	4.58	3.82	4.84	3.60	4.57	3.25	4.27	4.21	6.42	4.23	4.80	28.0
-1.1	1.80	3.79	4.78	4.01	5.05	3.78	4.78	3.42	4.46	4.39	6.69	4.43	5.01	30.0
0.0	1.92	3.97	4.99	4.21	5.28	3.97	4.99	3.59	4.67	4.59	6.97	4.62	5.23	32.0
1.1	2.03	4.15	5.21	4.41	5.51	4.17	5.21	3.78	4.88	4.79	7.26	4.81	5.45	34.0
2.2	2.16	4.34	5.43	4.62	5.74	4.37	5.43	3.97	5.09	5.00	7.55	5.02	5.68	36.0
3.3	2.28	4.53	5.66	4.84	5.98	4.57	5.67	4.16	5.31	5.21	7.86	5.23	5.91	38.0
4.4	2.41	4.73	5.89	5.06	6.23	4.79	5.90	4.36	5.53	5.43	8.17	5.44	6.15	40.0
5.6	2.55	4.93	6.12	5.29	6.48	5.00	6.14	4.56	5.77	5.65	8.48	5.66	6.39	42.0
6.7	2.69	5.14	6.37	5.52	6.74	5.23	6.40	4.77	6.00	5.88	8.81	5.89	6.65	44.0
7.8	2.83	5.35	6.62	5.76	7.01	5.46	6.66	4.99	6.25	6.12	9.14	6.12	6.90	46.0
8.9	2.98	5.57	6.88	6.01	7.28	5.70	6.92	5.21	6.50	6.36	9.48	6.35	7.17	48.0

PRESSURE TEMPERATURE CHART AT SEA LEVEL

°C	R-134a	R22	R404A HP 62	R407F Vapor	R407F Liquid	R407A Vapor	R407A Liquid	R407C Vapor	R407C Liquid	R408A	R410A	R502	R507A AZ50"	°F
10.0	3.13	5.80	7.14	6.26	7.57	5.94	7.19	5.43	6.75	6.60	9.83	6.59	7.44	50.0
11.1	3.29	6.03	7.41	6.52	7.85	6.19	7.46	5.67	7.01	6.86	10.20	6.84	7.72	52.0
12.2	3.45	6.26	7.70	6.79	8.15	6.44	7.74	5.91	7.28	7.11	10.57	7.10	8.01	54.0
13.3	3.61	6.51	7.98	7.07	8.45	6.71	8.03	6.16	7.56	7.38	10.94	7.35	8.30	56.0
14.4	3.79	6.76	8.27	7.35	8.76	6.98	8.33	6.41	7.84	7.65	11.34	7.62	8.59	58.0
15.6	3.96	7.01	8.57	7.64	9.08	7.26	8.63	6.68	8.13	7.93	11.73	7.89	8.90	60.0
16.7	4.14	7.27	8.88	7.94	9.40	7.54	8.94	6.94	8.43	8.21	12.14	8.17	9.21	62.0
17.8	4.32	7.54	9.19	8.24	9.74	7.83	9.26	7.22	8.74	8.50	12.56	8.46	9.54	64.0
18.9	4.51	7.81	9.50	8.55	10.08	8.13	9.59	7.50	9.05	8.80	12.99	8.74	9.86	66.0
20.0	4.70	8.09	9.83	8.88	10.43	8.44	9.92	7.79	9.37	9.10	13.42	9.04	10.20	68.0
21.1	4.90	8.37	10.17	9.20	10.78	8.76	10.26	8.09	9.69	9.42	13.87	9.34	10.54	70.0
22.2	5.11	8.67	10.51	9.54	11.15	9.08	10.61	8.39	10.03	9.74	14.32	9.66	10.89	72.0
23.3	5.32	8.97	10.86	9.89	11.52	9.41	10.97	8.70	10.37	10.06	14.79	9.98	11.25	74.0
24.4	5.53	9.28	11.22	10.24	11.90	9.75	11.34	9.03	10.72	10.40	15.27	10.30	11.62	76.0
25.6	5.75	9.59	11.59	10.60	12.29	10.10	11.71	9.35	11.07	10.74	15.76	10.63	11.99	78.0
26.7	5.98	9.90	11.96	10.98	12.69	10.46	12.09	9.69	11.43	11.09	16.26	10.97	12.38	80.0
27.8	6.21	10.23	12.34	11.36	13.10	10.82	12.48	10.03	11.81	11.44	16.77	11.32	12.77	82.0
28.9	6.45	10.57	12.73	11.75	13.52	11.19	12.88	10.39	12.19	11.81	17.29	11.67	13.17	84.0
30.0	6.69	10.91	13.13	12.15	13.94	11.57	13.28	10.75	12.58	12.18	17.83	12.03	13.58	86.0
31.1	6.94	11.26	13.54	12.55	14.38	11.97	13.70	11.12	12.98	12.56	18.37	12.40	13.99	88.0
32.2	7.19	11.61	13.96	12.97	14.82	12.37	14.12	11.50	13.39	12.94	18.93	12.78	14.42	90.0
33.3	7.46	11.98	14.39	13.40	15.27	12.78	14.56	11.88	13.80	13.34	19.50	13.16	14.86	92.0
34.4	7.72	12.35	14.82	13.84	15.74	13.20	15.01	12.28	14.23	13.74	20.08	13.55	15.30	94.0
35.6	7.99	12.73	15.26	14.29	16.21	13.63	15.46	12.69	14.66	14.16	20.68	13.95	15.76	96.0
36.7	8.28	13.12	15.72	14.74	16.69	14.06	15.92	13.10	15.10	14.58	21.28	14.36	16.22	98.0
37.8	8.57	13.51	16.18	15.21	17.19	14.51	16.39	13.52	15.55	15.01	21.90	14.78	16.70	100.0
38.9	8.86	13.92	16.66	15.69	17.69	14.97	16.87	13.96	16.01	15.45	22.53	15.20	17.18	102.0
40.0	9.15	14.32	17.14	16.18	18.20	15.44	17.36	14.41	16.48	15.90	23.18	15.63	17.67	104.0
41.1	9.46	14.74	17.63	16.68	18.72	15.92	17.86	14.86	16.96	16.35	23.84	16.08	18.17	106.0
42.2	9.77	15.17	18.13	17.19	19.26	16.41	18.37	15.32	17.45	16.82	24.51	16.52	18.69	108.0
43.3	10.10	15.61	18.65	17.71	19.80	16.91	18.89	15.79	17.95	17.29	25.20	16.99	19.21	110.0
44.4	10.42	16.06	19.17	18.25	20.36	17.43	19.42	16.28	18.46	17.78	25.90	17.45	19.74	112.0
45.6	10.76	16.51	19.70	18.79	20.92	17.94	19.97	16.78	18.97	18.27	26.61	17.93	20.29	114.0
46.7	11.10	16.97	20.25	19.35	21.50	18.48	20.52	17.28	19.50	18.77	27.34	18.41	20.85	116.0
47.8	11.45	17.45	20.81	19.92	22.09	19.03	21.08	17.80	20.04	19.29	28.09	18.91	21.41	118.0
48.9	11.81	17.93	21.37	20.50	22.69	19.59	21.66	18.33	20.59	19.81	28.85	19.41	21.99	120.0
50.0	12.17	18.42	21.95	21.10	23.30	20.16	22.23	18.87	21.15	20.34	29.62	19.92	22.59	122.0
51.1	12.54	18.92	22.54	21.71	23.92	20.74	22.83	19.42	21.72	20.89	30.41	20.45	23.19	124.0
52.2	12.92	19.43	23.14	22.33	24.55	21.33	23.44	19.99	22.30	21.44	31.22	20.99	23.80	126.0
53.3	13.31	19.94	23.75	22.96	25.20	21.94	24.06	20.56	22.90	22.01	32.04	21.52	24.43	128.0
54.4	13.70	20.48	24.38	23.61	25.86	22.56	24.68	21.14	23.50	22.58	32.88	22.08	25.07	130.0
55.6	14.11	21.01	25.02	24.27	26.53	23.19	25.32	21.75	24.12	23.17	33.74	22.65	25.72	132.0
56.7	14.52	21.56	25.67	24.94	27.21	23.84	25.98	22.36	24.74	23.77	34.61	23.22	26.39	134.0
57.8	14.94	22.12	26.34	25.63	27.90	24.50	26.64	22.99	25.38	24.37	35.50	23.81	27.06	136.0
58.9	15.37	22.69	27.01	26.34	28.61	25.18	27.32	23.63	26.03	24.99	36.41	24.40	27.75	138.0
60.0	15.81	23.27	27.70	27.06	29.33	25.87	28.01	24.28	26.69	25.62	37.34	25.01	28.46	140.0
61.1	16.26	23.86	28.41	27.79	30.07	26.57	28.71	24.94	27.36	26.27	38.29	25.62	29.18	142.0
62.2	16.71	24.46	29.13	28.54	30.81	27.29	29.43	25.63	28.04	26.92	39.26	26.26	29.92	144.0
63.3	17.17	25.07	29.87	29.31	31.57	28.02	30.15	26.32	28.74	27.59	40.24	26.90	30.67	146.0
64.4	17.65	25.69	30.61	30.09	32.35	28.77	30.90	27.03	29.45	28.27	41.25	27.54	31.43	148.0
65.6	18.13	26.32	31.39	30.89	33.13	29.54	31.65	27.76	30.17	28.96	42.28	28.21	32.22	150.0

Notes

Notes

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