

# ZX Platform Condensing Unit

## Product Catalogue



**Copeland**<sup>™</sup>  
brand products

 **EMERSON**<sup>™</sup>  
Climate Technologies

## About Emerson Climate Technologies

Emerson Climate Technologies, a business segment of Emerson, is the world's leading provider of heating, air conditioning and refrigeration solutions for residential, industrial and commercial applications. The group combines best-in-class technology with proven engineering, design, distribution, educational and monitoring services to provide customized, integrated climate-control solutions for customers worldwide. Emerson Climate Technologies' innovative solutions, which include industry-leading brands such as Copeland Scroll and White-Rodgers, improve human comfort, safeguard food and protect the environment. For more information, visit [EmersonClimate.com](http://EmersonClimate.com).

Emerson's financial performance is embellished with a record of unmissed annual dividend for 55 consecutive years.

For FY11, Emerson was ranked No. 120 on Fortune 500, a list of America's largest companies, and placed No. 1 in the same list's Electronics and Equipment category.

The company invested approximately \$696 million in engineering, development and customer solutions development producing 773 patents worldwide from FY04 to FY10.

In 2010, 37% of the company's global sales from new products are due to the application of innovative technologies.

*Emerson Climate Technologies is pleased to offer the ZX platform refrigeration condensing units (CDU) specifically designed for medium temperature (ZX-MT), digital modulated variable capacity medium temperature (ZXD) and low temperature (ZXL-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.*



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

**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 rather than 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, over-heating, incorrect phase rotation, compressor cycling, high pressure resets, low pressure cut-outs. It can also send out a warning message to an operator when there is a liquid floodback, which can prevent critical damage on the unit.

**Flexibility** - The slim shape and light weight make the ZX Condensing Unit aesthetically appealing and easy to install. The ultra quiet variable-speed fan motor significantly reduces exterior sound levels, allowing additional location flexibility. Combined with wall mounting capability, the ZX Condensing Unit delivers unmatched flexibility.

ZX Condensing Units are greatly suitable for walk-in cooler and freezer applications.

The advance scroll compressor technology, fan speed control and electronic controller are precisely collaborated in all units. It also introduces variable-speed fan motors that go beyond national standards. Guaranteed dependable performance and operation in food service applications while conveying higher energy efficiency and lower sound levels are the main objectives.

- |                       |   |   |
|-----------------------|---|---|
| Diagnostic Protection | → | Increased Reliability and Lower Maintenance Costs |
| Flexibility           | → | More Installation Options                         |
| Highest Efficiency    | → | Lower Energy Bills                                |

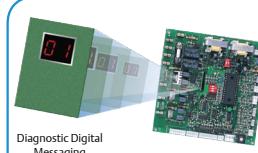
**ZXD Series**



- Shuts down unit during failure
- With real time monitoring of compressor operating conditions

**ZX and ZXL Series**

Proprietary Electronic Algorithms to Control Fan Speed, Optimizing Energy Performance for Local Seasonal Ambient Temperatures



- Compressor Reverse Rotation
- Compressor Over Current
- Compressor Internal Motor Protector Trip
- Discharge Gas Over Heat
- High Pressure Cut Out
- Low Pressure Cut Out (only on MT series)
- Refrigerant Flood Back
- Compressor Minimum Off Time
- Internal Thermal Sensor Failure

**Variable Speed PSC Fan Motors**

- High Efficiency
- Ultra Quiet
- Optimizes Air-Flow for Maximum Heat Transfer

Oversized Condenser Coil for Maximum Heat Transfer



**Copeland Scroll Compressor Technology**

- High Efficiency
- Ultra Quiet
- High Reliability

ZX Platform CDU Features

Features	Owner/Enterprise Benefits
Energy improvement	<ul style="list-style-type: none"><li>• Lower operating costs</li></ul>
Sound improvement	<ul style="list-style-type: none"><li>• Creates a more comfortable environment for guests</li><li>• Beneficial for regions with noise ordinances</li></ul>
Diagnostic protection capabilities	<ul style="list-style-type: none"><li>• Reduces cost of nuisance calls</li><li>• Extends life of your equipment</li><li>• Reduces potential service costs</li><li>• Maintains your equipment to original standards, maintaining energy efficiency and temperature control</li><li>• Have confidence in what your contractor is fixing</li></ul>
Slim profile, lighter weight and optional wall mount capability	<ul style="list-style-type: none"><li>• Lower installation costs</li><li>• Improved appearance of your enterprise site</li><li>• Avoids more costly solutions for potential location issues</li></ul>

## Nomenclature

Z	X	L	0	2	0	E	-	T	F	D	-	4	5	1
Unit Family	= Medium Temp	L = Low Temp	D = Digital Medium Temp			E = Ester oil O = Mineral Oil		PFJ = 220V/240V- 1ph- 50 Hz	TFD = 380V/420V- 3ph- 50 Hz	TF5 = 200V/230V- 3ph- 60 Hz	TF7=380 - 3ph - 60 Hz			Bill of Material
														Bill of Material
	Base Model							Electrical Code						Bill of Material

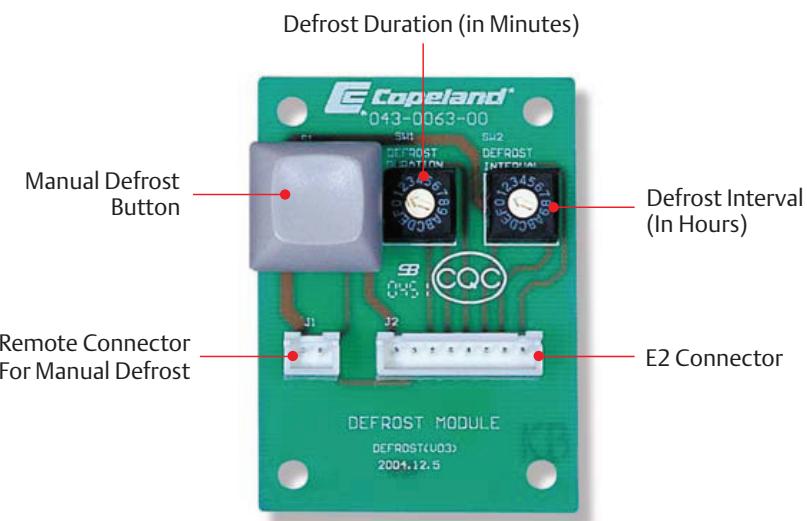
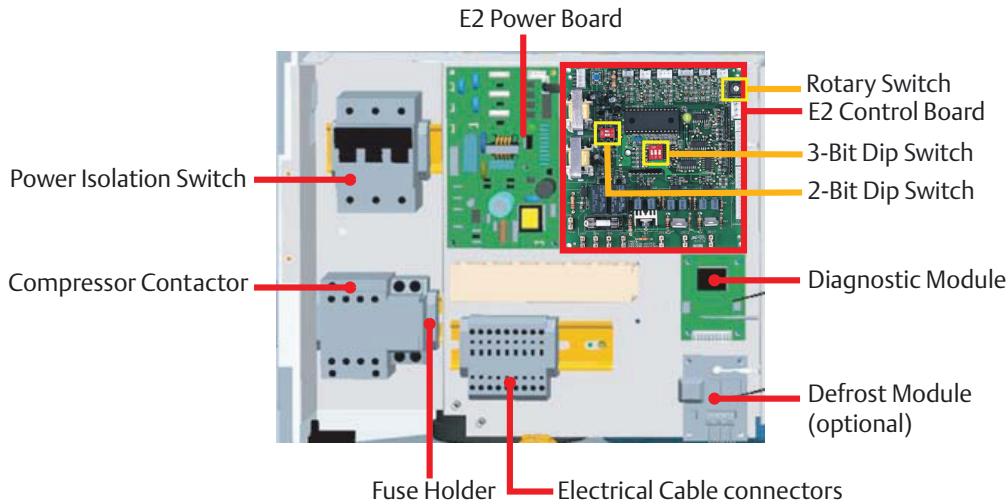
## BOM

CDU Family	ZX		ZXL			ZXD			
	BOM	401	451	451	461	471	450	451	461
Liquid Line Filter Dryer/Sight Glass									
Oil Separator									
Accumulator									
Adjustable LP Switch									
Fixed LP Switch									
E2 Controller									
Diagnostic Module									
Buzzer									
Digital Scroll Controller									
Fan Speed Controller									
Circuit Breaker									
Sound Jacket									
Defrost Module	ACC	ACC	ACC			ACC			
Filter Drier						V			

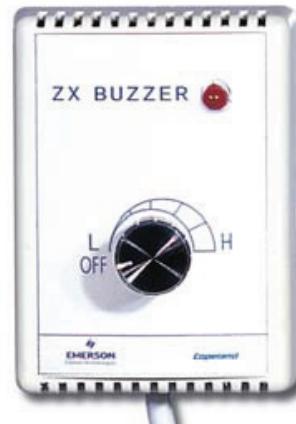
**Notes:** E2 controller has fan speed control function  
 "V" indicates flare type connection  
 "ACC" indicates accessory

# Electronic Controller Assembly on a ZX Platform CDU

## ZX/ZXL Controller Assembly

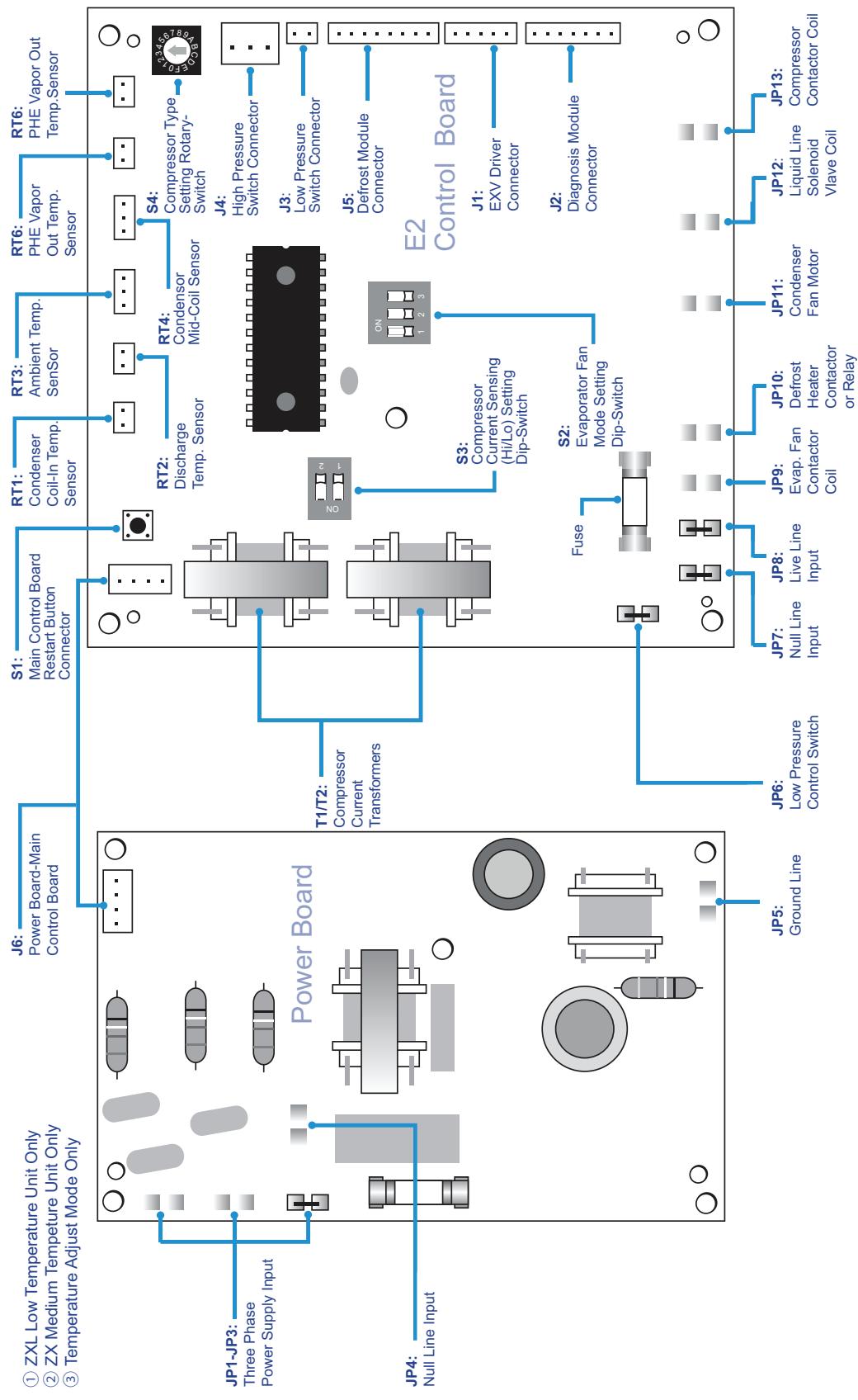


E2 Display Diagnostic

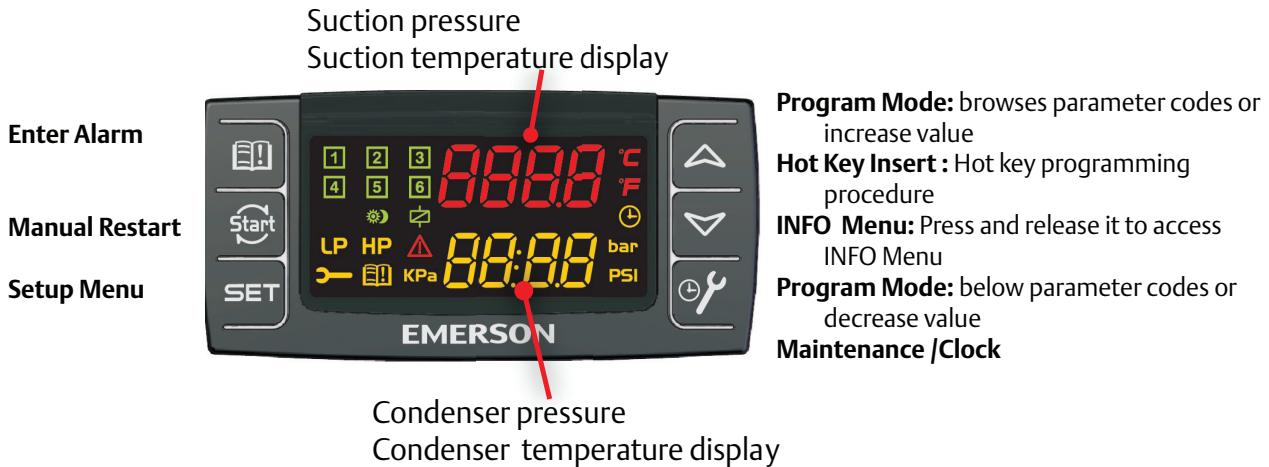


Remote Buzzer  
With Volume

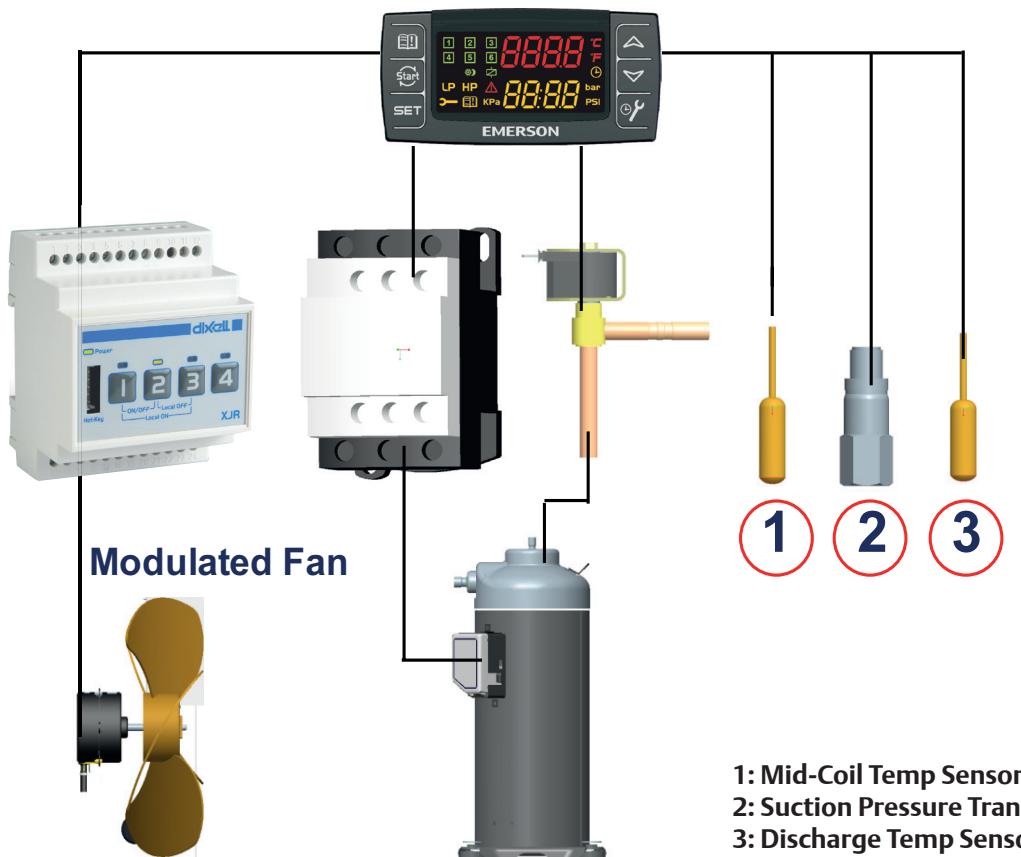
## Power Board and E2 Control Board Diagram



## ZXD Controller Assembly



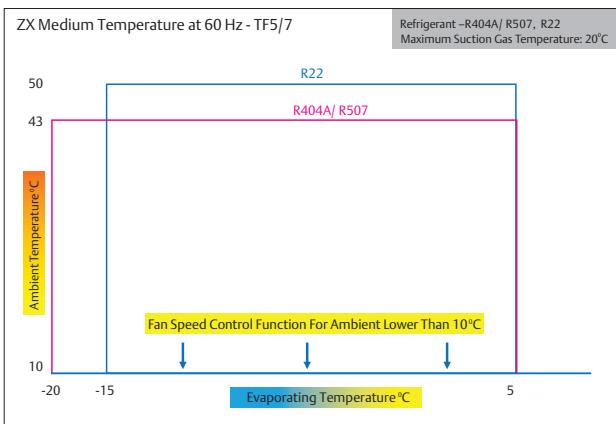
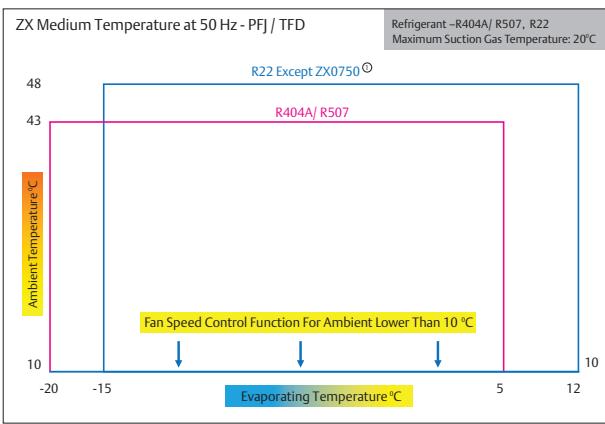
### Emerson Controller On ZXD



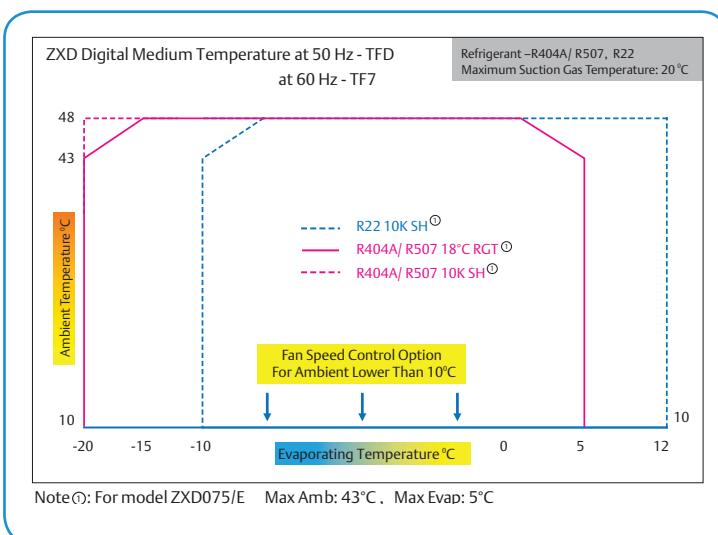
- 1: Mid-Coil Temp Sensor
- 2: Suction Pressure Transducer
- 3: Discharge Temp Sensor

## Envelope

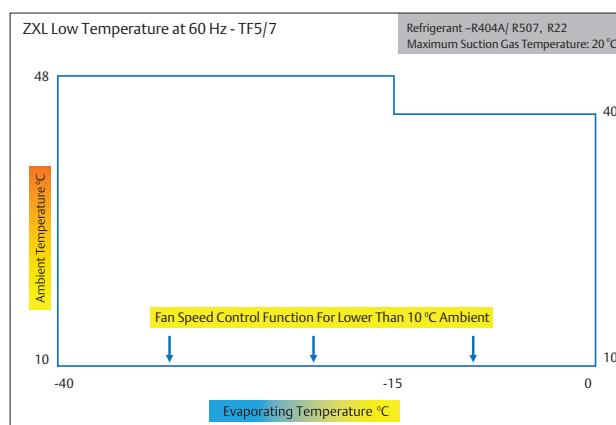
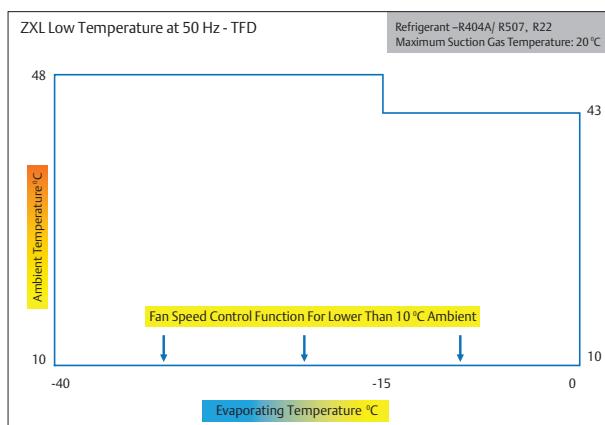
### ZX Family : Medium Temperature



### ZXD Family : Digital Medium Temperature



### ZXL Family : Low Temperature



# ZX Family: Medium Temperature

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

# R22 - 50 Hz

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
ZX0200	27	2.84	3.61	4.18	4.95	5.87	7.03	7.45	1.33	1.37	1.41	1.47	1.53	1.70	1.79
	32	2.65	3.33	4.01	4.75	5.61	6.54	6.96	1.45	1.50	1.58	1.64	1.71	1.84	1.88
	38	2.38	3.11	3.81	4.55	5.37	6.19	6.68	1.62	1.74	1.83	1.87	1.91	2.03	2.08
	43	1.93	2.74	3.48	4.23	5.06	5.99	6.33	1.78	1.83	1.95	2.05	2.11	2.20	2.25
	48	1.68	2.30	3.18	3.87	4.69	5.51	5.80	2.21	2.31	2.44	2.51	2.54	2.55	2.64
ZX0250 <sup>1</sup>	27	2.72	3.64	4.39	5.09	5.83	6.71	8.36	1.79	1.90	1.94	1.95	1.95	1.98	2.12
	32	2.56	3.45	4.18	4.83	5.52	6.33	7.87	2.02	2.14	2.18	2.19	2.19	2.21	2.34
	38	2.11	3.00	3.71	4.33	4.98	5.74	7.18	2.35	2.47	2.51	2.51	2.51	2.52	2.64
	43	1.62	2.53	3.25	3.88	4.51	5.25	6.64	2.67	2.78	2.83	2.83	2.82	2.83	2.93
	48	2.08	2.83	3.48	4.13	4.86	7.37	6.23	3.15	3.19	3.18	3.17	3.17	2.29	3.25
ZX0300	27	4.30	5.20	6.28	7.57	9.09	10.22	10.80	1.95	2.04	2.17	2.20	2.23	2.43	2.49
	32	4.12	4.90	5.95	7.28	8.69	9.79	10.31	2.10	2.20	2.32	2.34	2.46	2.70	2.77
	38	3.68	4.62	5.65	6.85	8.29	9.06	9.63	2.37	2.48	2.59	2.60	2.76	3.06	3.12
	43	3.27	4.22	5.27	6.50	7.97	8.63	9.08	2.64	2.75	2.84	2.94	3.04	3.32	3.36
	48	2.40	3.55	4.65	5.67	6.86	7.97	8.50	2.98	3.18	3.28	3.35	3.50	3.64	3.69
ZX0400	27	5.98	7.20	8.57	10.03	11.54	13.82	14.64	2.64	2.71	2.83	2.98	3.08	3.34	3.36
	32	5.46	6.73	8.13	9.62	11.16	13.01	13.85	2.81	2.90	3.06	3.19	3.33	3.68	3.68
	38	4.72	6.01	7.42	8.93	10.48	12.09	13.04	3.08	3.27	3.39	3.49	3.65	4.09	4.07
	43	4.09	5.37	6.78	8.27	9.80	11.61	12.25	3.29	3.52	3.68	3.80	3.95	4.38	4.39
	48	3.55	4.50	6.20	7.57	9.08	10.68	11.23	4.16	4.46	4.49	4.72	4.80	5.07	5.18
ZX0500 <sup>2</sup>	27	7.13	8.76	10.44	12.22	14.12	17.28	18.22	2.88	3.03	3.18	3.29	3.47	4.16	4.28
	32	6.77	8.31	9.96	11.72	13.68	16.62	17.47	3.37	3.35	3.57	3.67	3.97	4.50	4.58
	38	6.24	7.69	9.28	11.06	13.06	15.31	16.34	3.77	3.87	4.07	4.27	4.47	4.98	5.10
	43	5.44	6.80	8.36	10.15	12.21	14.60	15.47	4.27	4.27	4.47	4.66	4.96	5.46	5.56
	48	3.96	5.80	7.62	9.49	11.47	13.49	14.40	5.14	5.21	5.44	5.61	5.80	6.01	6.04
ZX0600 <sup>2</sup>	27	8.50	10.41	12.49	14.72	17.66	19.64	20.60	3.51	3.70	3.88	4.16	4.43	4.98	5.32
	32	7.71	9.93	11.71	13.94	16.30	18.87	20.10	3.88	4.07	4.25	4.43	4.71	5.29	5.47
	38	6.81	8.42	10.57	12.85	15.26	17.77	18.92	4.34	4.53	4.71	4.90	5.08	5.86	5.98
	43	5.91	7.23	9.40	11.78	14.26	16.33	17.86	4.90	5.17	5.45	5.64	5.73	6.57	6.66
	48	4.97	7.00	9.25	11.15	13.08	15.09	16.06	6.02	6.22	6.46	6.69	6.96	7.22	7.45
ZX0750 <sup>2</sup>	27	10.03	12.20	14.41	17.23	20.87			4.34	4.54	4.76	4.98	5.22		
	32	9.45	11.24	13.90	16.63	20.21			4.77	4.95	5.19	5.51	5.91		
	38	8.83	10.85	13.25	15.50	19.42			5.36	5.53	5.83	6.25	6.80		
	43	8.18	10.00	12.29	14.30	18.49			5.95	6.10	6.43	6.93	7.62		
ZX0760 <sup>2</sup>	27	10.23	12.44	14.70	17.60	21.29	25.49	27.01	4.25	4.45	4.66	4.88	5.12	5.47	5.64
	32	9.64	11.46	14.18	16.96	20.61	24.03	25.58	4.67	4.85	5.09	5.40	5.79	5.86	5.97
	38	9.01	11.07	13.52	15.80	19.81	22.85	24.65	5.26	5.42	5.72	6.12	6.67	6.64	6.81
	43	8.34	10.20	12.54	14.60	18.86	22.34	23.57	5.83	5.98	6.30	6.79	7.47	7.34	7.48
	48	7.24	8.55	11.46	14.09	17.47	20.55	21.61	6.79	7.04	7.40	7.89	8.43	8.74	8.78

**Notes:** <sup>1</sup> Available on PFJ models only

<sup>2</sup> Available on TFD models only

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

## R404A/R507 - 50 Hz

Model	Ambient Temperature (°C)	Capacity Evaporating Temperature (°C)						Power Evaporating Temperature (°C)					
		-20	-15	-10	-5	0	5	-20	-15	-10	-5	0	5
ZX020E	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
ZX025E <sup>1</sup>	27	3.01	3.01	4.01	4.85	5.62	6.44	1.68	1.68	1.78	1.82	1.83	1.83
	32	2.83	2.83	3.81	4.61	5.33	6.09	1.90	1.90	2.01	2.05	2.05	2.05
	38	2.33	2.33	3.31	4.09	4.78	5.50	2.20	2.20	2.31	2.36	2.36	2.36
	43	1.78	1.78	2.79	3.59	4.28	4.98	2.50	2.50	2.61	2.65	2.66	2.64
ZX030E	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
ZX040E	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
ZX050E <sup>2</sup>	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
ZX060E <sup>2</sup>	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
ZX075E <sup>2</sup>	27	9.04	10.86	12.75	15.07	17.76	20.13	4.08	4.26	4.50	4.80	5.13	5.46
	32	8.33	10.01	11.82	13.86	16.20	18.92	4.88	5.03	5.27	5.54	5.86	6.17
	38	7.30	8.74	10.62	12.47	14.54	16.92	5.46	5.61	5.82	6.06	6.35	6.63
	43	6.26	7.93	9.61	11.38	13.32	15.50	6.20	6.32	6.49	6.71	6.96	7.22
ZX076E <sup>2</sup>	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: <sup>1</sup> Available on PFJ models only

<sup>2</sup> Available on TFD models only

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 **60 Hz - TF5/TF7**

# R22 - 60 Hz

Model	Ambient Temperature (°C)	Capacity Evaporating Temperature (°C)					Power Evaporating Temperature (°C)				
		-15	-10	-5	0	5	-15	-10	-5	0	5
ZX0200	27	3.62	4.42	5.36	6.43	7.59	1.69	1.71	1.69	1.69	1.71
	32	3.41	4.22	5.17	6.20	7.29	1.89	1.91	1.90	1.89	1.90
	38	2.88	3.77	4.75	5.78	6.84	2.13	2.17	2.17	2.17	2.18
	43	2.20	3.19	4.24	5.31	6.38	2.35	2.41	2.42	2.43	2.45
	48	1.30	2.43	3.58	4.73	5.84	2.59	2.67	2.71	2.73	2.75
	50	0.88	2.07	3.27	4.46	5.60	2.69	2.78	2.83	2.85	2.89
ZX0300	27	5.12	6.20	7.29	8.90	10.54	2.42	2.53	2.69	2.73	2.77
	32	4.91	5.84	6.98	8.48	10.00	2.60	2.73	2.88	2.90	3.05
	38	4.39	5.51	6.53	7.96	9.38	2.94	3.08	3.21	3.22	3.42
	43	3.90	5.03	5.94	7.35	8.74	3.27	3.41	3.52	3.65	3.77
	48	2.86	4.23	5.01	6.45	7.86	3.70	3.94	4.07	4.15	4.34
	50	2.45	3.12	4.51	5.98	7.40	3.86	4.16	4.29	4.36	4.57
ZX0400	27	7.36	8.83	10.52	12.37	14.31	3.25	3.35	3.52	3.75	4.02
	32	7.06	8.54	10.21	12.02	13.92	3.55	3.63	3.79	4.01	4.28
	38	6.37	7.87	9.55	11.34	13.20	4.05	4.11	4.26	4.48	4.75
	43	5.62	7.16	8.86	10.66	12.50	4.55	4.60	4.73	4.95	5.22
	48	4.82	6.41	8.14	9.96	11.81	5.09	5.12	5.25	5.46	5.74
	50	4.50	6.12	7.87	9.70	11.55	5.30	5.33	5.46	5.67	5.95
ZX0500	27	8.55	10.51	12.53	14.66	16.95	3.54	3.72	3.91	4.05	4.27
	32	8.12	9.97	11.95	14.06	16.42	4.15	4.13	4.39	4.52	4.88
	38	7.49	9.23	11.14	13.28	15.68	4.64	4.76	5.00	5.25	5.49
	43	6.53	8.16	10.03	12.18	14.65	5.25	5.25	5.49	5.74	6.10
	48	4.75	6.96	9.14	11.39	13.76	6.33	6.40	6.69	6.90	7.13
	50	4.04	6.48	8.79	11.07	13.41	6.76	6.87	7.16	7.37	7.55
ZX0600	27	10.20	12.49	14.99	17.66	21.19	4.39	4.62	4.85	5.20	5.54
	32	9.25	11.92	14.05	16.73	19.56	4.85	5.08	5.31	5.54	5.89
	38	8.17	10.10	12.68	15.42	18.31	5.43	5.66	5.89	6.12	6.35
	43	7.09	8.68	11.28	14.14	17.11	6.12	6.47	6.81	7.04	7.16
	48	5.96	8.40	11.10	13.38	15.70	7.53	7.77	8.07	8.37	8.70
	50	5.51	8.29	11.03	13.08	15.13	8.09	8.16	8.44	8.75	9.00
ZX0750	27	11.25	14.06	16.61	19.89	24.05	5.10	5.34	5.59	5.86	6.14
	32	10.60	12.95	16.02	19.16	23.29	5.60	5.82	6.11	6.48	6.95
	38	9.91	12.51	15.28	17.85	22.38	6.31	6.51	6.86	7.35	8.00
	43	9.18	11.53	14.17	16.50	21.31	7.00	7.17	7.56	8.15	8.96
	48	7.96	9.66	12.95	15.92	19.74	8.15	8.45	8.88	9.47	10.12
	50	7.48	8.92	12.46	15.69	19.11	8.61	8.96	9.41	10.00	10.58

**Note:** Power include condenser fan.

Ambient 38°C and 43°C are typical design conditions for unit selection.

**ZX Family: Medium Temperature**  
 Capacity and Power (kW) at **60 Hz - TF5/TF7**
**R404A/R507 - 60 Hz**

Model	Ambient Temperature (°C)	Capacity Evaporating Temperature (°C)						Power Evaporating Temperature (°C)					
		-20	-15	-10	-5	0	5	-20	-15	-10	-5	0	5
ZX020E	27	3.50	4.26	4.98	5.77	6.71	7.89	1.84	1.87	1.90	1.95	2.00	2.05
	32	3.15	3.94	4.66	5.40	6.25	7.30	2.09	2.10	2.12	2.16	2.20	2.24
	38	2.69	3.52	4.24	4.93	5.69	6.60	2.42	2.42	2.44	2.47	2.50	2.54
	43	2.22	3.09	3.82	4.48	5.17	5.97	2.71	2.71	2.73	2.76	2.81	2.85
ZX030E	27	5.02	5.98	7.05	8.17	9.29	10.36	2.69	2.80	2.92	3.05	3.17	3.29
	32	4.62	5.56	6.63	7.75	8.88	9.97	2.98	3.06	3.16	3.26	3.36	3.45
	38	4.14	5.02	6.02	7.10	8.18	9.23	3.38	3.46	3.55	3.65	3.75	3.85
	43	3.78	4.56	5.47	6.46	7.47	8.44	3.74	3.84	3.95	4.08	4.21	4.33
ZX040E	27	6.71	8.02	9.60	11.30	13.00	14.59	3.72	3.79	3.89	3.99	4.10	4.18
	32	6.46	7.70	9.20	10.81	12.42	13.90	3.84	3.92	4.02	4.14	4.26	4.35
	38	5.90	7.05	8.45	9.95	11.43	12.76	4.32	4.40	4.50	4.62	4.74	4.84
	43	5.36	6.43	7.73	9.12	10.49	11.69	4.89	4.95	5.05	5.16	5.27	5.37
ZX050E	27	8.10	9.70	11.55	13.54	15.53	17.38	4.42	4.63	4.86	5.11	5.35	5.57
	32	8.05	9.56	11.33	13.21	15.09	16.83	4.59	4.78	4.99	5.22	5.45	5.66
	38	7.46	8.86	10.50	12.25	13.99	15.58	5.10	5.27	5.48	5.70	5.93	6.13
	43	6.81	8.10	9.63	11.26	12.88	14.33	5.62	5.80	6.01	6.24	6.47	6.69
ZX060E	27	9.84	11.77	13.96	16.31	18.74	21.15	5.06	5.24	5.49	5.76	6.01	6.20
	32	9.25	11.09	13.16	15.36	17.60	19.79	5.39	5.58	5.82	6.09	6.35	6.55
	38	8.30	10.09	12.06	14.13	16.19	18.16	6.09	6.25	6.48	6.74	6.99	7.19
	43	7.32	9.11	11.04	13.03	14.98	16.82	6.82	6.96	7.17	7.41	7.65	7.83
ZX075E	27	11.16	13.39	14.92	17.64	19.93	22.58	4.80	5.00	5.69	6.06	6.54	6.96
	32	10.29	12.35	13.84	16.23	18.18	21.23	5.74	5.92	6.66	7.00	7.46	7.87
	38	9.01	10.78	12.43	14.60	16.31	18.99	6.42	6.60	7.35	7.66	8.09	8.45
	43	7.73	9.79	11.25	13.33	14.95	17.39	7.28	7.43	8.20	8.48	8.87	9.19

**Notes:** 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

**R22 - 50 Hz**

Model	Ambient Temperature (°C)	Capacity Evaporating Temperature (°C)						Power Evaporating Temperature (°C)					
		-10	-5	0	5	10	12	-10	-5	0	5	10	12
ZXD0400	27	7.73	9.28	10.88	12.42	14.67	15.18	2.66	2.77	2.92	3.02	3.30	3.38
	32	7.29	8.91	10.61	12.33	14.29	14.98	2.84	3.00	3.12	3.26	3.60	3.70
	38	6.39	7.95	9.68	11.44	13.22	14.14	3.20	3.32	3.42	3.57	4.01	4.10
	43	5.71	7.27	8.97	10.70	12.69	13.29	3.44	3.60	3.72	3.86	4.29	4.40
	48		6.55	8.06	9.76	11.56	12.17		4.40	4.62	4.70	4.96	5.07
ZXD0500	27	8.76	10.44	12.22	14.12	17.28	18.22	3.03	3.18	3.29	3.47	3.95	4.10
	32	8.31	9.96	11.72	13.68	16.62	17.47	3.35	3.57	3.67	3.97	4.50	4.58
	38	7.69	9.28	11.06	13.06	15.31	16.34	3.87	4.07	4.27	4.47	4.98	5.10
	43	6.80	8.36	10.15	12.21	14.60	15.47	4.27	4.47	4.66	4.96	5.46	5.56
	48		7.62	9.49	11.47	13.49	14.40		5.44	5.61	5.80	6.01	6.04
ZXD0600	27	10.41	12.49	14.72	17.66	19.64	20.60	3.70	3.88	4.16	4.50	4.70	4.81
	32	9.93	11.71	13.94	16.30	18.87	20.10	4.07	4.25	4.43	4.75	5.29	5.47
	38	8.90	10.57	12.85	15.26	17.77	18.92	4.53	4.71	4.90	5.23	5.86	5.98
	43	7.60	9.40	11.78	14.26	16.33	17.86	5.17	5.45	5.64	6.10	6.57	6.66
	48		9.25	11.15	13.08	15.09	16.06		6.46	6.69	6.96	7.22	7.30
ZXD0750	27	12.37	14.91	17.73	20.87			4.54	4.76	4.98	5.22		
	32	11.24	13.90	16.96	20.21			4.95	5.19	5.51	5.91		
	38	10.85	13.25	16.08	19.42			5.53	5.83	6.25	6.80		
	43		12.29	15.09	18.49				6.43	6.93	7.62		
ZXD0760	27	12.62	15.21	18.08	21.29	24.47	25.93	4.45	4.66	4.88	5.12	5.47	5.64
	32	11.46	14.18	16.96	20.61	23.07	24.56	4.85	5.09	5.40	5.79	5.86	5.97
	38	11.07	13.52	15.80	19.81	21.94	23.66	5.42	5.72	6.12	6.67	6.64	6.81
	43	10.20	12.54	14.60	18.86	21.45	22.63	5.98	6.30	6.79	7.47	7.34	7.48
	48		11.46	14.09	17.47	19.73	20.75		7.40	7.89	8.43	8.74	8.78

**Notes:** Based on suction superheat of 10K.

Power include 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/R507-50Hz

Model	Ambient Temperature (°C)	Capacity Evaporating Temperature (°C)						Power Evaporating Temperature (°C)					
		-20	-15	-10	-5	0	5	-20	-15	-10	-5	0	5
ZXD040E	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	
ZXD050E	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	
ZXD060E	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	
ZXD075E	27	9.04	10.86	12.75	15.07	17.76	20.13	4.08	4.26	4.50	4.80	5.13	5.46
	32	8.33	10.01	11.82	13.86	16.20	18.92	4.88	5.03	5.27	5.54	5.86	6.17
	38	7.30	8.74	10.62	12.47	14.54	16.92	5.46	5.61	5.82	6.06	6.35	6.63
	43	6.26	7.93	9.61	11.38	13.32	15.50	6.20	6.32	6.49	6.71	6.96	7.22
ZXD076E	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	

**Notes:** Based on return gas temperature of 18.3°C.

at suction superheat of 10 K.

Power include 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 60 Hz - TF7 R404A/R507 - 60 Hz

Model	Ambient Temperature (°C)	Capacity Evaporating Temperature (°C)						Power Evaporating Temperature (°C)					
		-20	-15	-10	-5	0	5	-20	-15	-10	-5	0	5
ZXD040E	27	7.10	8.53	9.35	10.80	12.99	14.70	3.24	3.42	3.62	3.85	4.05	4.34
	32	6.64	8.03	8.70	10.20	12.27	13.87	3.59	3.74	4.00	4.13	4.30	4.57
	38	5.88	7.20	7.97	9.26	11.15	12.60	4.19	4.31	4.46	4.64	4.77	5.00
	43	5.21	6.34	7.09	8.29	10.01	11.32	4.82	4.92	5.05	5.21	5.31	5.52
	48	4.27	5.60	6.20	7.31	8.86		5.46	5.53	5.64	5.77	5.85	
ZXD050E	27	8.99	10.86	11.74	13.54	15.32	17.06	4.38	4.48	4.63	4.83	5.10	5.44
	32	7.87	9.75	10.77	12.57	14.41	16.21	4.93	5.04	5.11	5.40	5.66	6.00
	38	6.67	8.48	9.54	11.35	13.18	14.99	5.51	5.61	5.75	5.95	6.20	6.51
	43	5.86	7.54	8.57	10.31	12.08	13.84	6.14	6.21	6.32	6.48	6.71	6.97
	48	5.04	6.59	7.60	9.26	10.98		6.76	6.81	6.89	7.02	7.22	
ZXD060E	27	10.22	12.06	13.41	15.56	17.89	21.07	4.42	4.61	5.08	5.41	5.78	6.16
	32	9.34	11.23	12.54	14.72	16.78	19.61	5.28	5.45	5.93	6.26	6.61	6.96
	38	8.36	10.23	11.50	13.51	15.37	17.89	5.91	6.06	6.58	6.83	7.15	7.47
	43	7.44	9.27	10.61	12.57	14.33	16.68	6.71	6.83	7.32	7.57	7.85	8.34
	48	6.27	8.22	9.72	11.62	13.29		7.51	7.59	8.07	8.30	8.54	
ZXD075E	27	11.16	13.39	14.92	17.64	19.93	22.58	4.80	5.00	5.69	6.06	6.54	6.96
	32	10.29	12.35	13.84	16.23	18.18	21.23	5.74	5.92	6.66	7.00	7.46	7.87
	38	9.01	10.78	12.43	14.60	16.31	18.99	6.42	6.60	7.35	7.66	8.09	8.45
	43	7.73	9.79	11.25	13.33	14.95	17.39	7.28	7.43	8.20	8.48	8.87	9.19
	48	6.44	8.78	10.07	12.05			8.15	8.26	9.06	9.30		

**Notes:** Based on return gas temperature of 18.3°C.

at suction superheat of 10 K.

Power include 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 - TFD

## R22 - 50 Hz

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		
ZXL0200	20	1.35	1.57	1.90	2.28	2.76	3.30	3.93	4.64	5.41	0.94	1.03	1.12	1.19	1.26	1.31	1.36	1.40	1.43		
	27	1.32	1.55	1.87	2.26	2.73	3.27	3.89	4.59	5.36	1.10	1.20	1.29	1.36	1.43	1.49	1.55	1.59	1.63		
	32	1.32	1.55	1.86	2.24	2.70	3.24	3.85	4.54	5.31	1.26	1.36	1.45	1.53	1.61	1.67	1.73	1.78	1.81		
	38	1.26	1.48	1.78	2.15	2.61	3.13	3.74	4.42	5.18	1.51	1.61	1.71	1.79	1.87	1.94	2.00	2.05	2.09		
	43	1.15	1.36	1.66	2.03	2.47	2.99	3.59	4.27	5.02	1.76	1.87	1.97	2.05	2.13	2.21	2.27	2.32	2.37		
	48	0.99	1.20	1.49	1.85	2.29	2.81				2.05	2.16	2.26	2.35	2.44	2.51					
ZXL0250	20	1.65	1.90	2.20	2.70	3.40	4.10	4.85	5.73	6.72	1.18	1.28	1.38	1.48	1.57	1.65	1.74	1.81	1.89		
	27	1.61	1.87	2.12	2.67	3.31	4.03	4.84	5.72	6.69	1.32	1.40	1.49	1.57	1.64	1.71	1.78	1.84	1.90		
	32	1.56	1.82	2.09	2.63	3.26	3.97	4.76	5.63	6.58	1.51	1.59	1.66	1.72	1.79	1.85	1.90	1.95	2.00		
	38	1.42	1.68	1.97	2.49	3.10	3.79	4.56	5.42	6.36	1.85	1.91	1.97	2.02	2.07	2.11	2.15	2.19	2.22		
	43	1.23	1.48	1.79	2.30	2.89	3.57	4.33	5.17	6.09	2.22	2.27	2.31	2.35	2.39	2.43	2.45	2.48	2.50		
	48	1.10	1.28	1.54	2.03	2.61	3.27				2.66	2.70	2.74	2.77	2.79	2.82					
ZXL0300	20	1.94	2.29	2.67	3.17	3.78	4.48	5.40	6.52	8.06	1.28	1.45	1.60	1.74	1.87	1.99	2.09	2.18	2.26		
	27	1.90	2.19	2.58	3.08	3.69	4.40	5.20	6.44	7.85	1.36	1.52	1.67	1.80	1.92	2.03	2.13	2.21	2.28		
	32	1.80	2.09	2.49	2.99	3.60	4.32	5.14	6.06	7.63	1.55	1.70	1.85	1.98	2.09	2.20	2.29	2.37	2.43		
	38	1.58	1.87	2.27	2.77	3.39	4.10	4.92	5.85	7.30	1.92	2.07	2.21	2.33	2.45	2.54	2.63	2.70	2.76		
	43	1.31	1.59	1.99	2.50	3.11	3.83	4.65	5.58	6.95	2.36	2.51	2.64	2.76	2.86	2.96	3.04	3.11	3.16		
	48	1.21	1.35	1.63	2.13	2.75	3.47				2.91	3.05	3.18	3.29	3.39	3.48					
ZXL0350	20	2.56	2.90	3.44	4.15	5.01	5.98	7.03	8.14	9.26	1.68	1.73	1.79	1.88	1.98	2.09	2.22	2.37	2.52		
	27	2.29	2.64	3.19	3.91	4.76	5.71	6.75	7.83	8.92	1.81	1.87	1.95	2.05	2.17	2.30	2.44	2.60	2.76		
	32	2.12	2.47	3.02	3.72	4.56	5.49	6.50	7.55	8.62	2.08	2.16	2.25	2.36	2.48	2.62	2.78	2.94	3.11		
	38	1.93	2.27	2.80	3.48	4.28	5.19	6.16	7.16	8.18	2.52	2.60	2.71	2.82	2.96	3.11	3.27	3.44	3.63		
	43	1.78	2.09	2.59	3.25	4.02	4.89	5.81	6.77	7.73	2.88	2.97	3.09	3.21	3.35	3.51	3.68	3.86	4.05		
	48	1.61	1.90	2.37	2.98	3.71	4.53				3.18	3.28	3.40	3.53	3.68	3.84					
ZXL0400	20	3.18	3.85	4.64	5.56	6.60	7.77	9.06	10.48	12.03	1.94	2.08	2.22	2.38	2.54	2.70	2.88	3.06	3.25		
	27	2.80	3.42	4.16	5.03	6.02	7.14	8.39	9.76	11.26	2.27	2.43	2.59	2.76	2.94	3.12	3.32	3.52	3.73		
	32	2.58	3.17	3.87	4.71	5.67	6.76	7.97	9.31	10.77	2.58	2.75	2.93	3.11	3.30	3.50	3.71	3.92	4.15		
	38	2.39	2.93	3.59	4.39	5.31	6.35	7.52	8.82	10.25	3.04	3.23	3.42	3.62	3.83	4.04	4.27	4.50	4.73		
	43	2.27	2.78	3.41	4.17	5.06	6.07	7.21	8.47	9.86	3.50	3.69	3.90	4.11	4.33	4.56	4.80	5.04	5.30		
	48	2.21	2.68	3.28	4.01	4.86	5.83				4.01	4.22	4.44	4.67	4.91	5.15					
ZXL0500	20	3.50	4.30	5.30	6.40	7.73	9.08	10.62	12.33	14.21	2.05	2.24	2.42	2.59	2.77	2.96	3.16	3.37	3.60		
	27	3.12	3.84	4.73	5.79	7.01	8.39	9.92	11.60	13.42	2.56	2.72	2.87	3.03	3.20	3.38	3.57	3.79	4.02		
	32	2.79	3.56	4.48	5.56	6.77	8.12	9.60	11.21	12.94	2.89	3.04	3.19	3.35	3.53	3.71	3.92	4.15	4.41		
	38	2.65	3.43	4.35	5.38	6.53	7.79	9.15	10.61	12.17	3.30	3.46	3.62	3.79	3.99	4.20	4.43	4.70	4.99		
	43	2.56	3.31	4.16	5.00	6.16	7.30	8.52	9.81	11.18	3.68	3.85	4.04	4.24	4.46	4.70	4.98	5.28	5.62		
	48	2.30	2.97	3.73	4.56	5.57	6.60				4.12	4.32	4.54	4.78	5.04	5.33					
ZXL0600	20	3.70	4.70	5.84	7.14	8.63	10.32	12.23	14.38	16.78	2.56	2.72	2.89	3.09	3.32	3.57	3.85	4.16	4.50		
	27	3.51	4.44	5.51	6.72	8.09	9.66	11.42	13.41	15.64	3.21	3.37	3.55	3.75	3.97	4.22	4.49	4.78	5.11		
	32	3.44	4.35	5.37	6.53	7.85	9.34	11.02	12.91	15.03	3.58	3.76	3.96	4.17	4.40	4.66	4.94	5.24	5.56		
	38	3.28	4.17	5.17	6.29	7.55	8.98	10.58	12.37	14.38	4.05	4.27	4.51	4.76	5.02	5.30	5.60	5.93	6.28		
	43	2.96	3.86	4.85	5.96	7.19	8.57	10.12	11.85	13.78	4.58	4.85	5.13	5.42	5.72	6.04	6.38	6.73	7.11		
	48	2.71	3.50	4.29	5.39	6.60	7.96				5.32	5.65	5.98	6.33	6.68	7.05					
ZXL0750	20	4.20	5.60	6.90	8.00	9.50	11.43	13.31	15.49	17.97	3.02	3.17	3.34	3.53	3.74	3.99	4.27	4.60	4.96		
	27	4.00	5.16	6.18	7.43	8.91	10.80	12.58	14.78	17.24	3.51	3.68	3.87	4.08	4.33	4.61	4.93	5.29	5.70		
	32	3.76	4.71	5.84	7.17	8.68	10.40	12.31	14.44	16.78	3.88	4.06	4.28	4.52	4.79	5.10	5.45	5.84	6.28		
	38	3.52	4.55	5.71	7.02	8.48	10.09	11.86	13.80	15.90	4.40	4.61	4.85	5.12	5.43	5.77	6.16	6.59	7.08		
	43	3.41	4.42	5.53	6.75	8.07	9.52	11.08	12.76	14.58	4.93	5.17	5.43	5.73	6.07	6.45	6.87	7.34	7.86		
	48	3.12	4.04	5.01	6.06	7.50	8.70				5.58	5.85	6.14	6.47	6.84	7.25					

**Note:** Based on the return gas temperature of 5°C.

Power include 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 - TFD

## R404A/R507 - 50 Hz

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
ZXL020E	20	1.83	2.17	2.55	2.97	3.42	3.92	4.46	5.04	5.66	1.22	1.36	1.50	1.65	1.70	1.95	2.12	2.28	2.38
	27	1.66	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			
ZXL025E	20	2.00	2.36	2.86	3.44	4.10	4.83	5.64	6.53	7.49	1.34	1.46	1.55	1.66	1.76	2.10	2.33	2.44	2.54
	27	1.89	2.31	2.80	3.37	4.02	4.74	5.54	6.42	7.37	1.59	1.68	1.77	1.87	1.97	2.23	2.36	2.50	2.64
	32	1.80	2.26	2.74	3.30	3.94	4.65	5.44	6.31	7.25	1.84	1.90	1.99	2.08	2.18	2.35	2.48	2.61	2.74
	38	1.63	2.03	2.50	3.05	3.68	4.38	5.15	6.01	6.94	2.12	2.16	2.22	2.31	2.41	2.61	2.72	2.84	2.96
	43	1.31	1.70	2.16	2.70	3.31	4.01	4.77	5.62	6.54	2.44	2.45	2.50	2.57	2.67	2.90	3.01	3.11	3.22
	48	1.20	1.24	1.69	2.22	2.82	3.51				2.89	2.90	2.91	2.98	3.08	3.28			
ZXL030E	20	2.23	2.87	3.62	4.45	5.35	6.30	7.29	8.30	9.31	1.55	1.73	1.90	2.07	2.10	2.39	2.53	2.60	2.70
	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			
ZXL035E	20	2.70	3.47	4.25	5.07	5.95	6.92	8.00	9.22	10.62	1.91	1.95	2.03	2.30	2.50	2.70	2.80	3.00	3.20
	27	2.55	3.31	4.07	4.85	5.69	6.61	7.63	8.78	10.09	2.26	2.33	2.43	2.56	2.72	2.90	3.08	3.27	3.47
	32	2.47	3.20	3.94	4.68	5.48	6.35	7.31	8.40	9.63	2.59	2.67	2.79	2.93	3.11	3.31	3.52	3.74	3.96
	38	2.37	3.08	3.75	4.45	5.17	5.97	6.85	7.84	8.98	3.00	3.09	3.22	3.38	3.58	3.79	4.03	4.28	4.53
	43	2.28	2.94	3.57	4.20	4.86	5.59	6.38	7.29	8.33	3.31	3.40	3.58	3.70	3.91	4.14	4.39	4.66	4.94
	48	2.17	2.76	3.33	3.89	4.48	5.12				4.00	4.15	4.30	4.45	4.50	4.60			
ZXL040E	20	3.78	4.51	5.38	6.38	7.49	8.71	10.01	11.39	12.84	2.45	2.70	2.75	3.01	3.05	3.12	3.90	4.07	4.20
	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			
ZXL050E	20	4.42	5.18	6.21	7.47	8.91	10.50	12.20	13.98	15.78	2.70	3.00	3.20	3.40	3.65	3.80	4.20	4.50	4.70
	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			
ZXL060E	20	4.84	5.80	6.92	8.19	9.59	11.11	12.72	14.41	16.16	3.00	3.20	3.50	3.76	3.90	4.15	4.41	4.67	5.20
	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	4.64	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			
ZXL075E	20	5.50	6.64	7.94	9.41	11.06	12.91	14.96	17.24	19.75	3.47	3.73	4.01	4.31	4.64	4.98	5.34	5.70	6.09
	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:** Based on the return gas temperature of 5°C.

Power include condenser fan.

Ambient 38°C and 43°C are typical design conditions for unit selection.

# ZXL Family: Low Temperature Capacity and Power (kW) at 60 Hz - TF5 / TF7

# R22 - 60 Hz

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
ZXL0200	20	1.51	1.95	2.44	3.02	3.69	4.48	5.41	6.50	7.76	1.40	1.46	1.51	1.56	1.61	1.66	1.71	1.77	1.84
	32	1.28	1.78	2.30	2.86	3.49	4.19	5.00	5.92	6.99	1.74	1.80	1.86	1.92	1.98	2.05	2.12	2.20	2.30
	38	1.21	1.74	2.28	2.84	3.44	4.11	4.85	5.70	6.67	1.95	2.01	2.07	2.14	2.21	2.29	2.37	2.47	2.58
	43	1.11	1.67	2.22	2.78	3.36	4.00				2.17	2.23	2.30	2.37	2.45	2.54			
	48	0.92	1.51	2.07	2.63	3.20	3.81				2.45	2.52	2.59	2.67	2.76	2.85			
ZXL0250	20	2.37	2.52	2.93	3.56	4.37	5.33	6.41	7.56	8.77	1.85	1.89	1.91	1.98	1.99	2.02	2.07	2.14	2.23
	32	2.36	2.48	2.82	3.38	4.11	4.99	5.97	7.03	8.13	2.23	2.25	2.29	2.33	2.40	2.48	2.58	2.70	2.84
	38	2.34	2.46	2.75	3.26	3.93	4.75	5.67	6.67	7.70	2.62	2.65	2.68	2.73	2.80	2.88	2.98	3.10	3.25
	43	2.38	2.50	2.71	3.16	3.78	4.54				3.01	3.02	3.05	3.09	3.14	3.21			
	48	2.39	2.51	2.69	3.08	3.64	4.34				3.38	3.39	3.39	3.41	3.44	3.49			
ZXL0300	20	2.70	2.87	3.34	4.06	4.98	6.08	7.31	8.62	9.99	1.92	1.97	1.99	2.06	2.07	2.10	2.15	2.22	2.32
	32	2.69	2.83	3.22	3.85	4.69	5.69	6.81	8.02	9.27	2.32	2.34	2.38	2.43	2.49	2.58	2.68	2.80	2.95
	38	2.67	2.81	3.14	3.71	4.48	5.42	6.47	7.60	8.78	2.73	2.75	2.79	2.84	2.91	2.99	3.10	3.23	3.38
	43	2.71	2.85	3.09	3.60	4.31	5.18				3.13	3.14	3.17	3.21	3.27	3.34			
	48	2.72	2.86	3.07	3.52	4.15	4.95				3.52	3.52	3.53	3.54	3.58	3.63			
ZXL0350	20	3.26	3.48	4.04	4.91	6.03	7.36	8.84	10.43	12.09	2.25	2.30	2.32	2.41	2.42	2.46	2.52	2.60	2.72
	32	3.26	3.42	3.90	4.66	5.67	6.88	8.24	9.70	11.22	2.71	2.74	2.78	2.84	2.92	3.01	3.14	3.28	3.46
	38	3.23	3.40	3.80	4.49	5.43	6.55	7.83	9.20	10.62	3.19	3.22	3.26	3.33	3.40	3.50	3.63	3.78	3.95
	43	3.28	3.45	3.74	4.36	5.22	6.27				3.66	3.68	3.71	3.76	3.82	3.91			
	48	3.30	3.46	3.72	4.25	5.03	5.98				4.11	4.12	4.13	4.15	4.19	4.25			
ZXL0400	20	4.57	4.88	5.55	6.54	7.83	9.39	11.19	13.21	15.43	2.84	2.87	2.96	3.06	3.14	3.19	3.17	3.06	2.83
	32	3.61	4.21	5.07	6.17	7.48	8.97	10.62	12.41	14.29	3.25	3.38	3.55	3.72	3.88	3.98	4.01	3.93	3.72
	38	3.36	4.02	4.90	5.98	7.22	8.60	10.10	11.68	13.33	3.71	3.88	4.07	4.27	4.45	4.57	4.60	4.53	4.33
	43	3.16	3.83	4.69	5.70	6.85	8.10				4.17	4.36	4.58	4.80	4.98	5.11			
	48	2.88	3.53	4.33	5.25	6.27	7.35				4.68	4.89	5.13	5.35	5.54	5.67			
ZXL0500	20	4.80	6.02	6.84	7.99	9.47	11.27	13.38	15.79	18.50	2.77	2.97	3.19	3.41	3.60	3.73	3.79	3.74	3.56
	32	3.90	4.71	5.73	6.97	8.42	10.06	11.88	13.88	16.04	3.57	3.76	3.98	4.21	4.42	4.58	4.67	4.67	4.55
	38	3.73	4.62	5.67	6.86	8.20	9.66	11.25	12.95	14.76	4.01	4.22	4.47	4.73	4.97	5.17	5.31	5.36	5.29
	43	3.64	4.55	5.56	6.67	7.87	9.15				4.47	4.71	5.00	5.29	5.58	5.83			
	48	3.38	4.27	5.22	6.20	7.22	8.27				5.07	5.36	5.69	6.04	6.38	6.69			
ZXL0600	20	5.71	7.17	8.14	9.51	11.27	13.41	15.92	18.79	22.02	3.58	3.83	4.12	4.40	4.64	4.82	4.89	4.83	4.60
	32	4.64	5.60	6.82	8.30	10.02	11.97	14.13	16.51	19.09	4.60	4.85	5.14	5.43	5.70	5.91	6.03	6.03	5.87
	38	4.44	5.50	6.75	8.17	9.76	11.50	13.39	15.41	17.56	5.17	5.44	5.76	6.10	6.41	6.67	6.85	6.91	6.83
	43	4.33	5.41	6.62	7.94	9.37	10.89				5.76	6.08	6.45	6.83	7.20	7.52			
	48	4.03	5.09	6.21	7.38	8.60	9.84				6.54	6.91	7.34	7.79	8.23	8.62			
ZXL0750	20	6.05	7.60	8.62	10.08	11.94	14.21	16.88	19.92	23.34	3.93	4.22	4.53	4.84	5.11	5.30	5.38	5.31	5.06
	32	4.91	5.93	7.23	8.80	10.62	12.68	14.98	17.50	20.23	5.06	5.34	5.65	5.97	6.27	6.50	6.63	6.63	6.46
	38	4.71	5.83	7.15	8.66	10.34	12.19	14.19	16.34	18.61	5.68	5.99	6.34	6.71	7.05	7.34	7.54	7.60	7.51
	43	4.59	5.74	7.02	8.42	9.93	11.54				6.34	6.69	7.09	7.51	7.92	8.27			
	48	4.27	5.39	6.58	7.82	9.11	10.43				7.19	7.60	8.07	8.57	9.05	9.49			

**Notes:** Based on a 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 60 Hz - TF5 / TF7

# R404A /R507 - 60 Hz

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		
ZXL020E	20	1.85	2.31	2.89	3.56	4.31	5.12	5.99	6.90	7.83	1.59	1.65	1.71	1.78	1.86	1.94	2.02	2.11	2.19		
	32	1.51	2.04	2.65	3.32	4.03	4.77	5.53	6.30	7.05	2.03	2.10	2.18	2.27	2.36	2.46	2.57	2.67	2.78		
	38	1.46	2.01	2.61	3.26	3.93	4.62	5.31	5.98	6.62	2.29	2.37	2.46	2.56	2.66	2.77	2.89	3.00	3.12		
	43	1.37	1.92	2.52	3.14	3.78	4.41				2.54	2.63	2.73	2.83	2.95	3.07					
	48	1.18	1.73	2.30	2.89	3.48	4.05				2.84	2.93	3.04	3.15	3.27	3.40					
ZXL025E	20	2.06	2.60	3.28	4.11	5.09	6.24	7.58	9.11	10.84	1.65	1.78	1.91	2.03	2.13	2.19	2.21	2.17	2.07		
	32	1.93	2.46	3.08	3.80	4.64	5.61	6.72	7.98	9.41	2.27	2.39	2.53	2.66	2.79	2.89	2.97	2.99	2.97		
	38	1.92	2.42	3.00	3.65	4.41	5.27	6.25	7.36	8.62	2.63	2.75	2.90	3.05	3.20	3.34	3.44	3.51	3.53		
	43	1.86	2.33	2.85	3.45	4.12	4.88				2.98	3.11	3.27	3.45	3.62	3.78					
	48	1.68	2.11	2.58	3.11	3.69	4.35				3.40	3.55	3.73	3.92	4.12	4.32					
ZXL030E	20	2.79	3.39	4.15	5.04	6.02	7.06	8.10	9.13	10.10	1.98	2.09	2.22	2.35	2.47	2.54	2.54	2.46	2.26		
	32	2.56	3.13	3.81	4.59	5.42	6.26	7.07	7.83	8.49	2.52	2.60	2.74	2.90	3.08	3.25	3.38	3.45	3.45		
	38	2.41	2.95	3.60	4.32	5.07	5.81	6.51	7.13	7.64	2.88	2.94	3.06	3.24	3.44	3.64	3.82	3.97	4.05		
	43	2.20	2.73	3.35	4.02	4.71	5.37				3.31	3.34	3.45	3.63	3.84	4.07					
	48	1.89	2.41	3.00	3.62	4.25	4.83				3.91	3.91	4.00	4.17	4.39	4.65					
ZXL035E	20	3.14	3.93	4.91	6.04	7.32	8.71	10.19	11.74	13.32	2.37	2.45	2.55	2.65	2.77	2.89	3.01	3.14	3.27		
	32	2.57	3.47	4.51	5.64	6.85	8.12	9.41	10.71	11.98	3.02	3.12	3.25	3.38	3.52	3.67	3.83	3.98	4.14		
	38	2.48	3.41	4.44	5.54	6.69	7.86	9.03	10.17	11.26	3.41	3.53	3.66	3.81	3.97	4.13	4.30	4.47	4.65		
	43	2.33	3.27	4.28	5.34	6.42	7.50				3.79	3.92	4.06	4.22	4.39	4.57					
	48	2.00	2.94	3.92	4.92	5.92	6.89				4.23	4.37	4.53	4.70	4.88	5.07					
ZXL040E		3.75	4.74	5.97	7.48	9.27	11.37	13.80	16.58	19.74	2.56	2.76	2.96	3.14	3.30	3.40	3.43	3.37	3.21		
	32	3.52	4.48	5.60	6.92	8.45	10.21	12.23	14.53	17.12	3.52	3.70	3.91	4.13	4.32	4.49	4.60	4.64	4.60		
	38	3.50	4.41	5.45	6.65	8.02	9.59	11.37	13.40	15.68	4.07	4.27	4.49	4.73	4.96	5.17	5.34	5.44	5.47		
	43	3.38	4.23	5.19	6.27	7.50	8.89				4.62	4.83	5.07	5.34	5.61	5.86					
	48	3.05	3.84	4.70	5.66	6.72	7.92				5.27	5.50	5.78	6.08	6.39	6.69					
ZXL050E	20	5.36	5.97	6.95	8.27	9.92	11.86	14.08	16.54	19.21	3.56	3.85	4.06	4.20	4.32	4.42	4.53	4.68	4.87		
	32	4.78	5.61	6.70	8.00	9.49	11.15	12.95	14.86	16.86	3.91	4.19	4.45	4.71	5.00	5.32	5.72	6.20	6.80		
	38	4.32	5.23	6.31	7.55	8.92	10.39	11.93	13.52	15.14	4.80	5.03	5.27	5.53	5.85	6.24	6.72	7.32	8.07		
	43	3.99	4.93	5.99	7.16	8.39	9.68				5.62	5.79	5.98	6.22	6.54	6.96					
	48	3.79	4.74	5.75	6.82	7.90	8.98				6.35	6.42	6.55	6.75	7.05	7.47					
ZXL060E	20	5.85	7.17	8.69	10.36	12.14	14.01	15.92	17.83	19.70	4.57	4.65	4.93	5.34	5.79	6.20	6.49	6.56	6.35		
	32	5.51	6.71	8.06	9.51	11.03	12.59	14.14	15.64	17.07	5.53	5.62	5.94	6.42	6.97	7.50	7.94	8.19	8.19		
	38	5.25	6.38	7.63	8.97	10.35	11.74	13.10	14.40	15.59	6.36	6.42	6.73	7.21	7.77	8.33	8.81	9.13	9.19		
	43	4.98	6.04	7.21	8.45	9.71	10.95				7.25	7.27	7.56	8.02	8.58	9.15					
	48	4.65	5.65	6.73	7.86	8.99	10.09				8.35	8.32	8.56	8.99	9.53	10.09					
ZXL075E	20	6.81	7.58	8.82	10.50	12.60	15.07	17.88	21.00	24.40	4.99	5.39	5.68	5.89	6.05	6.19	6.34	6.55	6.82		
	32	6.07	7.13	8.50	10.15	12.05	14.16	16.44	18.87	21.42	5.48	5.87	6.24	6.60	6.99	7.45	8.00	8.68	9.51		
	38	5.49	6.64	8.02	9.59	11.33	13.19	15.15	17.18	19.23	6.72	7.04	7.37	7.74	8.18	8.73	9.41	10.25	11.30		
	43	5.07	6.26	7.61	9.09	10.66	12.29				7.87	8.10	8.37	8.71	9.16	9.74					
	48	4.81	6.01	7.31	8.66	10.04	11.40				8.89	8.99	9.16	9.44	9.86	10.45					

**Notes:** Based on a 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	2.5	3	4	
Model Name			ZX0200	ZX0250	ZX0300	ZX0400	
			ZX020E	ZX025E	ZX030E	ZX040E	
Performance	R22	ET/AT/RGT	°C	-6.7/32/18.3			
		Capacity	kW	3.85	4.58	5.5	7.3
		COP	W/W	2.41	2.18	2.5	2.52
	R404A/R507A	ET/AT/RGT	°C	-6.7/32/18.3			
		Capacity	kW	4.30	5.05	6.00	7.80
		COP	W/W	2.26	2.05	2.35	2.29
	Sound Pressure Level	@1m	dB(A)	60			
Compressor	Model Name	R22		ZX15KC-PFJ	ZX19KC-PFJ	ZX21KC-PFJ	ZX29KC-PFJ
		R404A/R507A		ZX15KCE-PFJ	ZX19KCE-PFJ	ZX21KCE-PFJ	ZX29KCE-PFJ
	Rated Load Ampere	R22	Amp	13.2	14.6	16.4	20.0
		R404A/R507A		13.2	14.6	16.4	20.0
	Locked Rotor Ampere	R22	Amp	58.0	61.0	82.0	114.0
		R404A/R507A		58.0	61.0	82.0	114.0
	Oil Type	R22		MINERAL			
		R404A/R507A		POE			
Fan Motor	Oil Recharge Volume	R22/R404A /R507A	Liters	1.18	1.33	1.33	1.83
	Number of Fan	Pieces		1	1	1	1
	Diameter	mm		450	450	450	450
	Fan Speed	rpm		933	933	933	933
	Air Flow	Total	m <sup>3</sup> /h	3483	3483	3483	3483
Others	Total Fan Motor Power	Input	W	116	116	116	116
	Oil Separator	Volume	Liters	0.5			
	Receiver Volume	R22	kg	5.1	5.1	5.1	5.1
		R404A/R507A	kg	4.4	4.4	4.4	4.4
	Pipes	Suction OD	Inch	3/4	3/4	3/4	3/4
		Liquid OD	Inch	1/2	1/2	1/2	1/2
	Dimension	W x D x H	mm	1029X424X840			
Weight	Net	kg		76	79	79	100
	Gross	kg		114	117	117	138

# ZX Family: Medium Temperature

Technical Data at 50 Hz - TFD

Family			ZX						
Nominal Rating		Horsepower HP	2	3	4	5	6	7.5	7.6
Model Name			ZX0200 ZX020E	ZX0300 ZX030E	ZX0400 ZX040E	ZX0500 ZX050E	ZX0600 ZX060E	ZX0750 ZX075E	ZX0760 ZX076E
Performance	R22	ET/AT/RGT °C	-6.7/32/18.3						
	R404A/R507A	Capacity kW	3.85	5.50	7.30	9.30	11.20	12.60	12.85
		COP W/W	2.41	2.50	2.52	2.66	2.60	2.57	2.65
		ET/AT/RGT °C	-6.7/32/18.3						
Compressor	R22	Capacity kW	4.30	6.00	7.80	10.70	11.80	13.20	13.46
		COP W/W	2.26	2.35	2.29	2.43	2.41	2.40	2.50
	Sound Pressure Level	@1m dB(A)	60						
	Model Name	R22	ZX15KC-TFD	ZX21KC-TFD	ZX30KC-TFD	ZX38KC-TFD	ZX45KC-TFD	ZX51KC-TFD	ZX51KC-TFD
		R404A/R507A	ZX15KCE-TFD	ZX21KCE-TFD	ZX30KCE-TFD	ZX38KCE-TFD	ZX45KCE-TFD	ZX51KCE-TFD	ZX51KCE-TFD
	Rated Load Ampere	R22 Amp	4.3	5.7	7.4	8.9	11.5	12.0	12.0
		R404A/R507A Amp	5.0	6.1	7.5	9.6	11.5	11.8	11.8
Compressor	Locked Rotor Ampere	R22 Amp	26.0	36.0	44.3	58.6	67.0	101.0	101.0
		R404A/R507A Amp	26.0	36.0	44.3	58.6	67.0	101.0	101.0
	Oil Type	R22	MINERAL						
		R404A/R507A	POE						
	Oil Recharge Volume	R22/R404A Liters / R507A	1.18	1.33	1.83	1.83	1.66	1.66	1.66
Fan Motor	Number of Fan	Pieces	1	1	1	2	2	2	2
		mm	450	450	450	450	450	450	450
	Fan Speed	rpm	830	830	830	830	830	830	830
		Total m3/h	2922	2922	2922	5910	5910	5910	5910
	Total Fan Motor Power	Input W	116	116	116	246	246	246	246
Others	Oil Separator	Volume Liters	0.5	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	7.2
		R404A/R507A kg	4.4	4.4	4.4	6.3	6.3	6.3	6.3
	Pipes Suction	OD Inch	3/4	3/4	7/8	7/8	7/8	7/8	7/8
		Liquid OD Inch	1/2	1/2	1/2	1/2	1/2	1/2	1/2
	Dimension	W x D x H mm	1029X424X840				1029X424X1242		
Weight	Net kg	76	79	100	108	112	118	121	
	Gross kg	113.5	116.5	121	152	156	162	154	

## ZX Family: Medium Temperature

Technical Data at **60 Hz - TF5/TF7**

Family			ZX						
Nominal Rating	Horsepower	HP	2	3	4	5	6	7.5	
Model Name			ZX0200	ZX0300	ZX0400	ZX0500	ZX0600	ZX0750	
			ZX020E	ZX030E	ZX040E	ZX050E	ZX060E	ZX075E	
Performance	R22	ET/AT/RGT	°C	-7/32/18.3					
		Capacity	kW	4.6	6.49	9.52	10.76	12.77	14.18
		COP	W/W	2.42	2.37	2.56	2.51	2.45	2.37
	R404A/R507A	ET/AT/RGT	°C	-7/32/18.3					
		Capacity	kW	5.10	7.30	10.16	12.46	14.48	15.28
		COP	W/W	2.37	2.27	2.48	2.43	2.42	2.22
Sound Pressure Level @1m			dB(A)	60					
Compressor	Model Name	R22		ZX15KC-TF5/TF7	ZX21KC-TF5/TF7	ZX29KC-TF5/TF7	ZX38KC-TF5/TF7	ZX45KC-TF5/TF7	ZX51KC-TF5/TF7
		R404A/R507A		ZX15KCE-TF5/TF7	ZX21KCE-TF5/TF7	ZX29KCE-TF5/TF7	ZX38KCE-TF5/TF7	ZX45KCE-TF5/TF7	ZX51KCE-TF5/TF7
	Rated Load Ampere	R22	Amp	8.9/5	11.4/7.5	15/9.3	20.7/10.7	20.7/10.7	25/12.1
		R404A/R507A	Amp	8.9/5.1	12.1/7.4	15.7/9.6	24/12.4	23.1/12.6	26/14.1
	Locked Rotor Ampere	R22	Amp	55/27	77/39	115/54	128/64	156/70	164/100
		R404A/R507A	Amp	55/27	77/39	115/54	128/64	156/70	164/100
	Oil Type	R22		MINERAL					
		R404A/R507A		POE					
	Oil Recharge Volume	R22/R404A	Liters	1.18	1.33	1.83	1.83	1.66	1.66
		/R507A							
	Number of Fan	Pieces		1	1	2	2	2	2
	Diameter	mm		450	450	450	450	450	450
Fan Motor	Fan Speed	rpm		933	933	933	933	933	933
	Air Flow	Total	m3/h	3483	3483	6966	6966	6966	6966
	Total Fan Motor Power	Input	W	145	145	290	290	290	290
	Oil Separator	Volume	Liters	0.5	0.5	0.5	0.5	0.5	0.5
	Receiver Volume	R22	kg	5.1	5.1	7.2	7.2	7.2	7.2
		R404A/R507A	kg	4.4	4.4	6.3	6.3	6.3	6.3
Others	Pipes	Suction OD	Inch	3/4	3/4	3/4	3/4	3/4	3/4
		Liquid OD	Inch	1/2	1/2	1/2	1/2	1/2	1/2
	Dimension	W x D x H	mm	1029X424X840			1029X424X1242		
	Weight	Net	kg	76	79	100	108	112	121
		Gross	kg	113.5	116.5	135	152	156	162

# ZXD Family: Digital Medium Temperature

Technical Data at 50 Hz - TFD

Family			ZXD					
Nominal Rating	Horsepower	HP	4	5	6	7.5	7.6	
Model Name			ZXD0400	ZXD0500	ZXD0600	ZXD0750	ZXD0760	
			ZXD040E	ZXD050E	ZXD060E	ZXD075E	ZXD076E	
Performance	R22	ET/AT/RGT	°C	-6.7/32/18.3				
	Capacity	kW	7.76	9.3	11.2	12.6	12.85	
	COP	W/W	2.67	2.66	2.6	2.57	2.67	
	R404A/R507A	ET/AT/RGT	°C	-6.7/32/18.3				
	Capacity	kW	8.30	10.70	11.80	13.20	13.46	
	COP	W/W	2.47	2.43	2.41	2.4	2.49	
Sound Pressure Level			@1m	dB(A)	60			
Compressor	Model Name	R22	ZBD29KQ-TFD	ZBD38KQ-TFD	ZBD45KQ-TFD	ZBD48KQ-TFD	ZBD48KQ-TFD	
			ZBD29KQE-TFD	ZBD38KQE-TFD	ZBD45KQE-TFD	ZBD48KQE-TFD	ZBD48KQE-TFD	
	Rated Load Ampere	R22	Amp	7.9	10	10	12.1	12.1
		R404A/R507A	Amp	7.7	10.4	9.6	12.4	12.4
	Locked Rotor Ampere	R22	Amp	48.0	64.0	74.0	100.0	100.0
		R404A/R507A	Amp	48.0	64.0	74.0	100.0	100.0
	Oil Type			MINERAL				
	R22			POE				
	Oil Recharge Volume	R22/R404A /R507A	Liters	1.24	1.77	1.77	1.77	1.77
Fan Motor	Number of Fan		Pieces	2	2	2	2	2
	Diameter		mm	450	450	450	450	450
	Fan Speed		rpm	830	830	830	830	830
	Air Flow	Total	m3/h	5910	5910	5910	5910	5910
	Total Fan Motor Power	Input	W	246	246	246	246	246
Others	Oil Separator	Volume	Liters	0.5	0.5	0.5	0.5	0.5
	Receiver Volume	R22	kg	7.2	7.2	7.2	7.2	7.2
		R404A/R507A	kg	6.3	6.3	6.3	6.3	6.3
	Pipes	Suction OD	Inch	7/8	7/8	7/8	7/8	7/8
		Liquid OD	Inch	1/2	1/2	1/2	1/2	1/2
	Dimension	W x D x H	mm	1029X424X1242				
	Weight	Net	kg	104	112	114	119	122
		Gross	kg	148	156	158	163	171

## ZXD Family: Digital Medium Temperature

Technical Data at **60 Hz - TF7**

Family			ZX			
Nominal Rating	Horsepower	HP	4	5	6	7.5
Model Name			ZXD040E	ZXD050E	ZXD060E	ZXD075E
Performance	R22	ET/AT/RGT °C	n/a	n/a	n/a	n/a
	Capacity kW		n/a	n/a	n/a	n/a
	COP W/W		n/a	n/a	n/a	n/a
	R404A/R507A	ET/AT/RGT °C		-10/32/18.3		
	Capacity kW		8.70	10.77	12.54	13.84
	COP W/W		2.18	2.11	2.12	2.08
	Sound Pressure Level @1m	dB(A)		60		
Compressor	Model Name	R22	n/a	n/a	n/a	n/a
		R404A/R507A	ZBD29KQE-TF7	ZBD38KQE-TF7	ZBD45KQE-TF7	ZBD48KQE-TF7
	Rated Load Ampere	R22 Amp	n/a	n/a	n/a	n/a
		R404A/R507A Amp	9.6	11.6	12.9	14.6
	Locked Rotor Ampere	R22 Amp	n/a	n/a	n/a	n/a
		R404A/R507A Amp	54.0	64.0	70.0	78.0
Fan Motor	Oil Type	R22		n/a		
		R404A/R507A		POE 3MAF		
	Oil Recharge Volume	R22/R404A Liters /R507A	1.24	1.77	1.77	1.77
Others	Number of Fan	Pieces	2	2	2	2
	Diameter	mm	450	450	450	450
	Fan Speed	rpm	933	933	933	933
	Air Flow	Total m3/h	6966	6966	6966	6966
	Total Fan Motor Power	Input W	290	290	290	290
	Oil Separator	Volume	Liters	0.5	0.5	0.5
	Receiver Volume	R22 kg	n/a	n/a	n/a	n/a
		R404A/R507A kg	6.3	6.3	6.3	6.3
	Pipes	Suction OD Inch	7/8	7/8	7/8	7/8
		Liquid OD Inch	1/2	1/2	1/2	1/2
	Dimension	W x D x H mm		1029X424X1242		
	Weight	Net kg	109	117	121	127
		Gross kg	148	156	158	163

# ZXL Family: Low Temperature

## Technical Data at 50 Hz - TFD

Family			ZX							
Nominal Rating	Horsepower	HP	2	2.5	3	3.5	4	5	6	7.5
Model Name	ZXL0200	ZXL0250	ZXL0300	ZXL0350	ZXL0400	ZXL0500	ZXL0600	ZXL0750	ZXL075E	ZXL020E
ZXL025E	ZXL030E	ZXL035E	ZXL040E	ZXL050E	ZXL060E	ZXL075E				
Performance	R22	ET/AT/RGT °C					-32/32/5°C			
	Capacity kW	1.7	1.91	2.34	2.78	3.57	4.05	4.96	5.39	
	COP W/W	1.2	1.17	1.28	1.26	1.24	1.29	1.27	1.28	
R404A/R507A	ET/AT/RGT °C						-32/32/5°C			
	Capacity kW	2.11	2.51	2.80	3.65	4.26	4.99	5.91	6.65	
	COP W/W	1.24	1.28	1.29	1.34	1.29	1.36	1.33	1.38	
Sound Pressure Level	@1m	dB(A)		60				61		
Compressor	Model Name	R22	ZXI06KCTFD	ZXI08KC-TFD	ZXI09KC-TFD	ZXI11KC-TFD	ZXI14KC-TFD	ZXI15KC-TFD	ZXI18KC-TFD	ZXI21KC-TFD
		R404A/R507A	ZXI06KCE-TFD	ZXI08KCE-TFD	ZXI09KCE-TFD	ZXI11KCE-TFD	ZXI14KCE-TFD	ZXI15KCE-TFD	ZXI18KCE-TFD	ZXI21KCE-TFD
Rated Load Ampere	R22	Amp	5.4	5.5	5.7	7.4	8.1	8.8	11.1	12.1
	R404A/R507A	Amp	5.6	6.2	6.0	8.3	8.6	10.0	11.1	14.6
Locked Rotor Ampere	R22	Amp	39.2	39.2	39.2	51.5	51.5	51.5	74.0	101.0
	R404A/R507A	Amp	39.2	39.2	39.2	51.5	51.5	51.5	74.0	101.0
Oil Type	R22						MINERAL			
	R404A/R507A						POE			
Oil Recharge Volume	R22/R404A	Liters	0.56	0.56	0.56	1.24	1.24	1.24	1.77	1.77
	/R507A									
Fan Motor	Number of Fan	Pieces	1	1	1	1	1	2	2	2
	Diameter	mm	450	450	450	450	450	450	450	450
	Fan Speed	rpm	830	830	830	830	830	830	830	830
	Air Flow	Total m3/h	2922	2922	2922	2922	2922	5910	5910	5910
	Total Fan Motor Power	Input W	116	116	116	116	116	246	246	246
Others	Oil Separator	Volume	Liters	0.5	0.5	0.5	0.5	0.5	0.5	0.5
	Receiver Volume	R22	kg	5.1	5.1	5.1	5.1	7.2	7.2	7.2
		R404A/R507A	kg	4.4	4.4	4.4	4.4	6.3	6.3	6.3
Pipes	Suction OD	Inch	3/4	3/4	3/4	7/8	7/8	7/8	7/8	7/8
	Liquid OD	Inch	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
Dimension	WxDxH	mm				1029X424X840				1029X424X1242
Weight	Net	kg	79	81	81	93	93	106	116	121
	Gross	kg	117	119	119	131	131	150	165	170

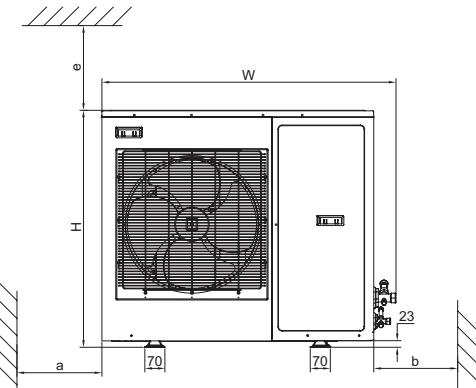
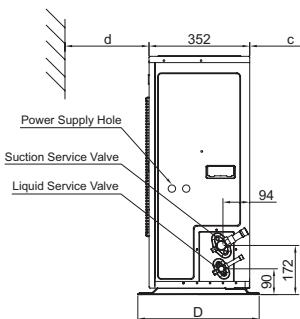
## ZXL Family: Low Temperature

Technical Data at **60 Hz - TF5/TF7**

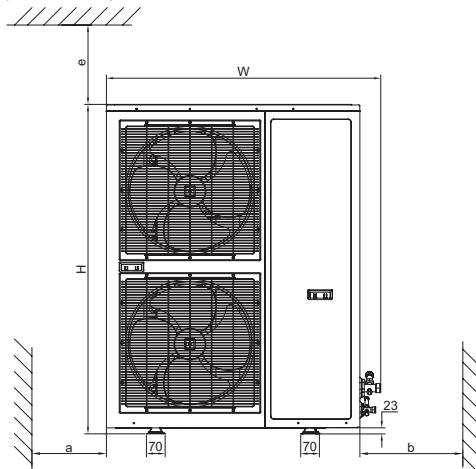
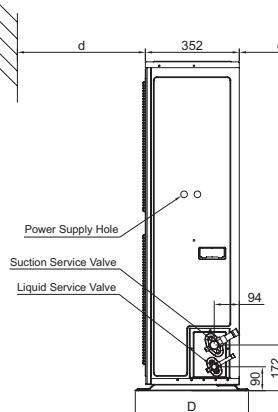
Family			ZX								
Nominal Rating	Horsepower	HP	2	2.5	3	3.5	4	5	6	7.5	
Model Name			ZXL0200	ZXL0250	ZXL0300	ZXL0350	ZXL0400	ZXL0500	ZXL0600	ZXL0750	
			ZXL020E	ZXL025E	ZXL030E	ZXL035E	ZXL040E	ZXL050E	ZXL060E	ZXL075E	
Performance	R22	ET/AT/RGT	°C	-32/32/5°C							
		Capacity	kW	2.09	2.69	2.99	2.59	4.72	5.32	6.34	6.81
		COP	W/W	1.14	1.18	1.28	1.31	1.36	1.37	1.27	1.24
	R404A/R507A	ET/AT/RGT	°C	-32/32/5°C							
		Capacity	kW	2.41	2.83	3.54	4.19	5.18	6.26	7.52	7.98
		COP	W/W	1.12	1.15	1.32	1.33	1.33	1.44	1.29	1.32
	Sound Pressure Level	@1m	dB(A)	60				61			
Compressor	Model Name	R22	ZX106KCTF5/7	ZX108KCTF5/7	ZX109KCTF5/7	ZX111KCTF5/7	ZX114KCTF5/7	ZX115KCTF5/7	ZX118KCTF5/7	ZX121KCTF5/7	
			ZX106KCE-TF5/7	ZX108KCE-TF5/7	ZX109KCE-TF5/7	ZX111KCE-TF5/7	ZX114KCE-TF5/7	ZX115KCE-TF5/7	ZX118KCE-TF5/7	ZX121KCE-TF5/7	
	Rated Load Ampere	R22	Amp	12.1	12.6	12.9	19.1	20	21.4	25.5	28.9
		TF5	R404A/R507A	Amp	12.1	12.6	12.9	19.1	20	21.4	25.5
	Rated Load Ampere	R22	Amp	5.4	5.5	6.9	7.7	9.9	12.6	14.1	14.4
		TF7	R404A/R507A	Amp	5.6	6.2	6.9	8.6	9.9	12.6	14.1
	Locked Rotor Ampere	R22	Amp	73.0	73.0	73.0	110.0	110.0	110.0	186.6	191.0
		R404A/R507A	Amp	34.8	34.8	38.6	47.0	66.0	73.5	94.3	94.3
	Oil Type	R22		MINERAL							
		R404A/R507A		POE							
Fan Motor	Oil Recharge Volume	R22/R404A	Liters	0.56	0.56	0.56	1.24	1.24	1.24	1.77	1.77
	/R507A										
	Number of Fan	Pieces		1	1	1	1	2	2	2	2
	Diameter	mm		450	450	450	450	450	450	450	450
	Fan Speed	rpm		933	933	933	933	933	933	933	933
	Air Flow	Total	m <sup>3</sup> /h	3483	3483	3483	3483	6966	6966	6966	6966
Others	Total Fan Motor Power	Input	W	145	145	145	145	290	290	290	290
	Oil Separator	Volume	Liters	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
	Receiver Volume	R22	kg	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1
		R404A/R507A	kg	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4
	Pipes	Suction OD	Inch	3/4	3/4	3/4	7/8	7/8	7/8	7/8	7/8
		Liquid OD	Inch	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
	Dimension	W x D x H	mm	1029X424X840				1029X424X1242			
	Weight	Net	kg	79	81	81	93	93	106	116	121
		Gross	kg	117	119	119	131	143	150	165	170

# Dimensional Drawing

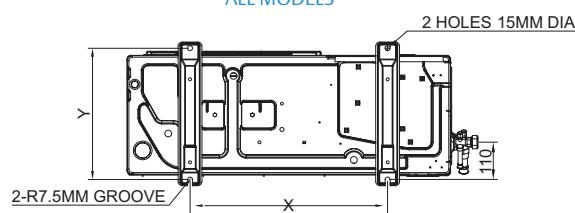
ZX-PFJ(2 HP-4 HP)  
 ZX-TFD(2HP-4HP) ZX-TF5/7(2HP-3HP)  
 ZXL-TFD(2HP-4HP) ZXL-TF5/7(2HP-3.5HP)



ZX-TFD(5HP-7.6HP) ZX-TF5/7(4HP-7.5HP)  
 ZXL-TFD(5HP-7.5HP) ZXL-TF5/7(4HP-7.5HP)  
 ZXD-TFD/TF7(4HP-7.6HP)



ALL MODELS



Model	Width	Height	Depth	Mtg	Centres	Conn. Size		Installation Clearances				
	W	H	D	X	Y	Suction*	Liquid*	A	B	C	D	E
	mm	mm	mm	mm	mm	M.Fi.	M.Fi.	mm	mm	mm	mm	mm
ZX-PFJ(2 HP-4 HP) ZX-TFD(2HP-4HP) ZX-TF5/7(2HP-3HP) ZXL-TFD(2HP-4HP) ZXL-TF5/7(2HP-3.5HP)	1029	840	424	580	388	3/4"	1/2"	300	500	300	500	500
ZX-TFD(5 HP-7.6 HP) ZX-TF5/7(4HP-7.5HP) ZXL-TFD(5 HP-7.5HP) ZXL-TF5/7(4HP-7.5HP) ZXD-TFD/TF7(4HP-7.6HP)	1029	1242	424	580	388	7/8"	1/2"	300	500	300	500	500

## Packing Information

Container Loading, ZX Platform Condensing Unit					
Family	Model	Motor Code	Fan Type	20FT	40FT/ 40FT H
ZX	ZX0200/E	PFJ/TFD/TF5/TF7	Single Fan	40	80
	ZX0250/E	PFJ		40	80
	ZX0300/E	PFJ/TFD/TF5/TF7		40	80
	ZX0400/E	PFJ/TFD		40	80
	ZX0400/E	TF5/TF7	Dual Fan	20	40
	ZX0500/E	TFD/TF5/TF7		20	40
	ZX0600/E	TFD/TF5/TF7		20	40
	ZX0750/E	TFD/TF5/TF7		20	40
ZXD	ZX0750/E	TFD/TF7	Dual Fan	20	40
	ZXD0500/E	TFD/TF7		20	40
	ZXD0600/E	TFD/TF7		20	40
	ZXD0750/E	TFD/TF7		20	40
ZXL	ZXL0200/E	TFD/TF5/TF7	Single Fan	40	80
	ZXL0250/E	TFD/TF5/TF7		40	80
	ZXL0300/E	TFD/TF5/TF7		40	80
	ZXL0350/E	TFD/TF5/TF7		40	80
	ZXL0400/E	TFD		40	80
	ZXL0400/E	TF5/TF7	Dual Fan	20	40
	ZXL0500/E	TFD/TF5/TF7		20	40
	ZXL0600/E	TFD/TF5/TF7		20	40
	ZXL0750/E	TFD/TF5/TF7		20	40

## Conversion Chart

Units Conversion Chart
KCALH x 3.9683 = BTUH
WATTS x 3.413 = BTU/H
1.80 x °C + 32 = °F
KILOGRAMS x 2.205 = POUNDS
MILLIMETERS x 0.0394 = INCHES
CUBIC CENTIMETERS x 0.06102 = CUBIC INCHES
CUBIC METERS x 35.3147 = CUBIC FEET
LITERS x 33.8181 = FLUID OUNCES
KILOWATTS x 1.341 = HORSEPOWER
BAR x 14.7 = PSI

**PRESSURE TEMPERATURE CHART AT SEA LEVEL**

**Red (Bar)=Vacuum**

**Black (Bar)=Vapor**

**Bold (Bar)=Liquid**

°C	R12	R22	R-134a	R407A Vapor	R407A Liquid	R404A HP 62	R407C Vapor	R407C Liquid	R408A	R409A	R410A	R502	R507A AZ50*	°F
-45.6	0.53	0.21	0.63	0.30	0.03	0.00	0.37	0.09	0.07	0.63	0.34	-0.03	0.06	-50.0
-44.4	0.49	0.16	0.61	0.26	0.03	0.05	0.33	0.04	0.02	0.61	0.41	0.02	0.12	-48.0
-43.3	0.47	0.12	0.59	0.22	0.08	0.11	0.29	0.01	0.04	0.58	0.48	0.08	0.18	-46.0
-42.2	0.44	0.06	0.56	0.17	0.14	0.17	0.25	0.07	0.10	0.56	0.57	0.14	0.24	-44.0
-41.1	0.41	0.01	0.53	0.12	0.21	0.23	0.20	0.13	0.15	0.53	0.65	0.19	0.30	-42.0
-40.0	0.37	0.04	0.50	0.07	0.27	0.30	0.16	0.19	0.21	0.50	0.74	0.26	0.37	-40.0
-38.9	0.34	0.10	0.47	0.01	0.34	0.37	0.11	0.26	0.28	0.47	0.83	0.32	0.44	-38.0
-37.8	0.30	0.15	0.44	0.04	0.41	0.43	0.06	0.32	0.34	0.44	0.92	0.39	0.52	-36.0
-36.7	0.27	0.21	0.41	0.10	0.48	0.51	0.00	0.39	0.41	0.41	1.01	0.46	0.59	-34.0
-35.6	0.23	0.28	0.37	0.16	0.56	0.59	0.06	0.46	0.48	0.37	1.12	0.53	0.68	-32.0
-34.4	0.19	0.34	0.33	0.23	0.63	0.66	0.11	0.53	0.55	0.34	1.22	0.60	0.75	-30.0
-33.3	0.15	0.41	0.29	0.29	0.72	0.74	0.17	0.61	0.63	0.30	1.33	0.68	0.84	-28.0
-32.2	0.10	0.48	0.25	0.36	0.80	0.83	0.23	0.69	0.71	0.26	1.44	0.76	0.93	-26.0
-31.1	0.06	0.55	0.21	0.43	0.89	0.92	0.30	0.77	0.79	0.22	1.56	0.84	1.02	-24.0
-30.0	0.01	0.63	0.17	0.51	0.98	1.01	0.37	0.86	0.88	0.17	1.68	0.93	1.12	-22.0
-28.9	0.03	0.70	0.13	0.59	1.08	1.10	0.45	0.94	0.97	0.13	1.81	1.01	1.21	-20.0
-27.8	0.09	0.79	0.08	0.67	1.17	1.20	0.52	1.04	1.06	0.08	1.94	1.11	1.32	-18.0
-26.7	0.14	0.87	0.03	0.75	1.28	1.30	0.60	1.14	1.15	0.03	2.07	1.20	1.42	-16.0
-25.6	0.19	0.96	0.02	0.84	1.38	1.41	0.68	1.23	1.25	0.02	2.21	1.30	1.53	-14.0
-24.4	0.25	1.05	0.08	0.93	1.49	1.52	0.77	1.34	1.35	0.07	2.35	1.40	1.64	-12.0
-23.3	0.31	1.14	0.13	1.03	1.60	1.63	0.85	1.44	1.46	0.12	2.50	1.51	1.76	-10.0
-22.2	0.37	1.23	0.19	1.12	1.72	1.74	0.94	1.55	1.57	0.18	2.66	1.61	1.88	-8.0
-21.1	0.43	1.34	0.25	1.23	1.83	1.86	1.03	1.67	1.68	0.24	2.81	1.73	2.00	-6.0
-20.0	0.50	1.44	0.32	1.33	1.96	1.99	1.13	1.79	1.79	0.30	2.98	1.84	2.13	-4.0
-18.9	0.56	1.54	0.38	1.44	2.09	2.12	1.23	1.91	1.91	0.37	3.15	1.96	2.26	-2.0
-17.8	0.63	1.66	0.45	1.55	2.22	2.25	1.34	2.03	2.03	0.43	3.32	2.08	2.40	0.0
-16.7	0.70	1.77	0.52	1.67	2.36	2.39	1.45	2.17	2.16	0.50	3.50	2.21	2.54	2.0
-15.6	0.77	1.89	0.59	1.79	2.50	2.52	1.56	2.30	2.29	0.57	3.69	2.34	2.68	4.0
-14.4	0.85	2.01	0.66	1.92	2.65	2.67	1.68	2.43	2.43	0.65	3.88	2.48	2.83	6.0
-13.3	0.92	2.14	0.74	2.05	2.80	2.82	1.80	2.58	2.57	0.72	4.08	2.61	2.99	8.0
-12.2	1.01	2.26	0.82	2.18	2.95	2.97	1.92	2.72	2.71	0.80	4.29	2.76	3.15	10.0
-11.1	1.09	2.40	0.90	2.32	3.11	3.13	2.05	2.88	2.86	0.88	4.50	2.90	3.31	12.0
-10.0	1.17	2.54	0.99	2.46	3.28	3.30	2.19	3.03	3.01	0.97	4.72	3.06	3.48	14.0
-8.9	1.26	2.68	1.08	2.61	3.45	3.46	2.32	3.19	3.17	1.06	4.94	3.21	3.66	16.0
-7.8	1.35	2.82	1.17	2.76	3.62	3.63	2.46	3.36	3.32	1.14	5.17	3.37	3.83	18.0
-6.7	1.45	2.97	1.27	2.92	3.80	3.81	2.61	3.53	3.49	1.24	5.41	3.53	4.01	20.0
-5.6	1.54	3.12	1.37	3.08	3.99	4.00	2.77	3.71	3.66	1.34	5.65	3.70	4.21	22.0
-4.4	1.64	3.28	1.47	3.25	4.18	4.19	2.92	3.89	3.84	1.43	5.90	3.88	4.40	24.0
-3.3	1.74	3.45	1.58	3.42	4.37	4.38	3.08	4.08	4.02	1.54	6.15	4.06	4.60	26.0
-2.2	1.85	3.61	1.69	3.60	4.57	4.58	3.25	4.27	4.21	1.65	6.42	4.23	4.80	28.0
-1.1	1.96	3.79	1.80	3.78	4.78	4.78	3.42	4.46	4.39	1.76	6.69	4.43	5.01	30.0
0.0	2.07	3.97	1.92	3.97	4.99	4.99	3.59	4.67	4.59	1.87	6.97	4.62	5.23	32.0
1.1	2.18	4.15	2.03	4.17	5.21	5.21	3.78	4.88	4.79	1.99	7.26	4.81	5.45	34.0
2.2	2.30	4.34	2.16	4.37	5.43	5.43	3.97	5.09	5.00	2.10	7.55	5.02	5.68	36.0
3.3	2.42	4.53	2.28	4.57	5.67	5.66	4.16	5.31	5.21	2.23	7.86	5.23	5.91	38.0
4.4	2.54	4.73	2.41	4.79	5.90	5.89	4.36	5.53	5.43	2.36	8.17	5.44	6.15	40.0
5.6	2.67	4.93	2.55	5.00	6.14	6.12	4.56	5.77	5.65	2.49	8.48	5.66	6.39	42.0
6.7	2.80	5.14	2.69	5.23	6.40	6.37	4.77	6.00	5.88	2.62	8.81	5.89	6.65	44.0
7.8	2.94	5.35	2.83	5.46	6.66	6.62	4.99	6.25	6.12	2.77	9.14	6.12	6.90	46.0
8.9	3.08	5.57	2.98	5.70	6.92	6.88	5.21	6.50	6.36	2.90	9.48	6.35	7.17	48.0

## PRESSURE TEMPERATURE CHART AT SEA LEVEL

°C	Red (Bar)=Vacuum						Black (Bar)=Vapor						Bold (Bar)=Liquid		
	R12	R22	R-134a	R407A Vapor	R407A Liquid	R404A HP 62	R407C Vapor	R407C Liquid	R408A	R409A	R410A	R502	R507A AZ50"	°F	
10.0	3.21	5.80	3.13	5.94	7.19	7.14	5.43	6.75	6.60	3.06	9.83	6.59	7.44	50.0	
11.1	3.36	6.03	3.29	6.19	<b>7.46</b>	<b>7.41</b>	5.67	<b>7.01</b>	6.86	<b>3.21</b>	10.20	6.84	7.72	52.0	
12.2	3.50	6.26	3.45	6.44	<b>7.74</b>	<b>7.70</b>	5.91	<b>7.28</b>	7.11	<b>3.36</b>	10.57	7.10	8.01	54.0	
13.3	3.66	6.51	3.61	6.71	<b>8.03</b>	<b>7.98</b>	6.16	<b>7.56</b>	7.38	<b>3.52</b>	10.94	7.35	8.30	56.0	
14.4	3.81	6.76	3.79	6.98	<b>8.33</b>	<b>8.27</b>	6.41	<b>7.84</b>	7.65	<b>3.68</b>	11.34	7.62	8.59	58.0	
15.6	3.97	7.01	3.96	7.26	<b>8.63</b>	<b>8.57</b>	6.68	<b>8.13</b>	7.93	<b>3.86</b>	11.73	7.89	8.90	60.0	
16.7	4.14	7.27	4.14	7.54	<b>8.94</b>	<b>8.88</b>	6.94	<b>8.43</b>	8.21	<b>4.03</b>	12.14	8.17	9.21	62.0	
17.8	4.30	7.54	4.32	7.83	<b>9.26</b>	<b>9.19</b>	7.22	<b>8.74</b>	8.50	<b>4.21</b>	12.56	8.46	9.54	64.0	
18.9	4.48	7.81	4.51	8.13	<b>9.59</b>	<b>9.50</b>	7.50	<b>9.05</b>	8.80	<b>4.39</b>	12.99	8.74	9.86	66.0	
20.0	4.66	8.09	4.70	8.44	<b>9.92</b>	<b>9.83</b>	7.79	<b>9.37</b>	9.10	<b>4.58</b>	13.42	9.04	10.20	68.0	
21.1	4.83	8.37	4.90	8.76	<b>10.26</b>	<b>10.17</b>	8.09	<b>9.69</b>	9.42	<b>4.77</b>	13.87	9.34	10.54	70.0	
22.2	5.01	8.67	5.11	9.08	<b>10.61</b>	<b>10.51</b>	8.39	<b>10.03</b>	9.74	<b>4.97</b>	14.32	9.66	10.89	72.0	
23.3	5.20	8.97	5.32	9.41	<b>10.97</b>	<b>10.86</b>	8.70	<b>10.37</b>	10.06	<b>5.17</b>	14.79	9.98	11.25	74.0	
24.4	5.39	9.28	5.53	9.75	<b>11.34</b>	<b>11.22</b>	9.03	<b>10.72</b>	10.40	<b>5.38</b>	15.27	10.30	11.62	76.0	
25.6	5.59	9.59	5.75	10.10	<b>11.71</b>	<b>11.59</b>	9.35	<b>11.07</b>	10.74	<b>5.59</b>	15.76	10.63	11.99	78.0	
26.7	5.79	9.90	5.98	10.46	<b>12.09</b>	<b>11.96</b>	9.69	<b>11.43</b>	11.09	<b>5.81</b>	16.26	10.97	12.38	80.0	
27.8	6.00	10.23	6.21	10.82	<b>12.48</b>	<b>12.34</b>	10.03	<b>11.81</b>	11.44	<b>6.03</b>	16.77	11.32	12.77	82.0	
28.9	6.21	10.57	6.45	11.19	<b>12.88</b>	<b>12.73</b>	10.39	<b>12.19</b>	11.81	<b>6.26</b>	17.29	11.67	13.17	84.0	
30.0	6.43	10.91	6.69	11.57	<b>13.28</b>	<b>13.13</b>	10.75	<b>12.58</b>	12.18	<b>6.50</b>	17.83	12.03	13.58	86.0	
31.1	6.64	11.26	6.94	11.97	<b>13.70</b>	<b>13.54</b>	11.12	<b>12.98</b>	12.56	<b>6.74</b>	18.37	12.40	13.99	88.0	
32.2	6.87	11.61	7.19	12.37	<b>14.12</b>	<b>13.96</b>	11.50	<b>13.39</b>	12.94	<b>6.99</b>	18.93	12.78	14.42	90.0	
33.3	7.10	11.98	7.46	12.78	<b>14.56</b>	<b>14.39</b>	11.88	<b>13.80</b>	13.34	<b>7.23</b>	19.50	13.16	14.86	92.0	
34.4	7.33	12.35	7.72	13.20	<b>15.01</b>	<b>14.82</b>	12.28	<b>14.23</b>	13.74	<b>7.50</b>	20.08	13.55	15.30	94.0	
35.6	7.57	12.73	7.99	13.63	<b>15.46</b>	<b>15.26</b>	12.69	<b>14.66</b>	14.16	<b>7.76</b>	20.68	13.95	15.76	96.0	
36.7	7.81	13.12	8.28	14.06	<b>15.92</b>	<b>15.72</b>	13.10	<b>15.10</b>	14.58	<b>8.03</b>	21.28	14.36	16.22	98.0	
37.8	8.06	13.51	8.57	14.51	<b>16.39</b>	<b>16.18</b>	13.52	<b>15.55</b>	15.01	<b>8.30</b>	21.90	14.78	16.70	100.0	
38.9	8.32	13.92	8.86	14.97	<b>16.87</b>	<b>16.66</b>	13.96	<b>16.01</b>	15.45	<b>8.59</b>	22.53	15.20	17.18	102.0	
40.0	8.58	14.32	9.15	15.44	<b>17.36</b>	<b>17.14</b>	14.41	<b>16.48</b>	15.90	<b>8.88</b>	23.18	15.63	17.67	104.0	
41.1	8.84	14.74	9.46	15.92	<b>17.86</b>	<b>17.63</b>	14.86	<b>16.96</b>	16.35	<b>9.17</b>	23.84	16.08	18.17	106.0	
42.2	9.11	15.17	9.77	16.41	<b>18.37</b>	<b>18.13</b>	15.32	<b>17.45</b>	16.82	<b>9.47</b>	24.51	16.52	18.69	108.0	
43.3	9.39	15.61	10.10	16.91	<b>18.89</b>	<b>18.65</b>	15.79	<b>17.95</b>	17.29	<b>9.78</b>	25.20	16.99	19.21	110.0	
44.4	9.67	16.06	10.42	17.43	<b>19.42</b>	<b>19.17</b>	16.28	<b>18.46</b>	17.78	<b>10.10</b>	25.90	17.45	19.74	112.0	
45.6	9.95	16.51	10.76	17.94	<b>19.97</b>	<b>19.70</b>	16.78	<b>18.97</b>	18.27	<b>10.42</b>	26.61	17.93	20.29	114.0	
46.7	10.25	16.97	11.10	18.48	<b>20.52</b>	<b>20.25</b>	17.28	<b>19.50</b>	18.77	<b>10.74</b>	27.34	18.41	20.85	116.0	
47.8	10.54	17.45	11.45	19.03	<b>21.08</b>	<b>20.81</b>	17.80	<b>20.04</b>	19.29	<b>11.08</b>	28.09	18.91	21.41	118.0	
48.9	10.85	17.93	11.81	19.59	<b>21.66</b>	<b>21.37</b>	18.33	<b>20.59</b>	19.81	<b>11.43</b>	28.85	19.41	21.99	120.0	
50.0	11.16	18.42	12.17	20.16	<b>22.23</b>	<b>21.95</b>	18.87	<b>21.15</b>	20.34	<b>11.78</b>	29.62	19.92	22.59	122.0	
51.1	11.47	18.92	12.54	20.74	<b>22.83</b>	<b>22.54</b>	19.42	<b>21.72</b>	20.89	<b>12.14</b>	30.41	20.45	23.19	124.0	
52.2	11.79	19.43	12.92	21.33	<b>23.44</b>	<b>23.14</b>	19.99	<b>22.30</b>	21.44	<b>12.50</b>	31.22	20.99	23.80	126.0	
53.3	12.12	19.94	13.31	21.94	<b>24.06</b>	<b>23.75</b>	20.56	<b>22.90</b>	22.01	<b>12.88</b>	32.04	21.52	24.43	128.0	
54.4	12.45	20.48	13.70	22.56	<b>24.68</b>	<b>24.38</b>	21.14	<b>23.50</b>	22.58	<b>13.26</b>	32.88	22.08	25.07	130.0	
55.6	12.79	21.01	14.11	23.19	<b>25.32</b>	<b>25.02</b>	21.75	<b>24.12</b>	23.17	<b>13.64</b>	33.74	22.65	25.72	132.0	
56.7	13.14	21.56	14.52	23.84	<b>25.98</b>	<b>25.67</b>	22.36	<b>24.74</b>	23.77	<b>14.04</b>	34.61	23.22	26.39	134.0	
57.8	13.49	22.12	14.94	24.50	<b>26.64</b>	<b>26.34</b>	22.99	<b>25.38</b>	24.37	<b>14.44</b>	35.50	23.81	27.06	136.0	
58.9	13.85	22.69	15.37	25.18	<b>27.32</b>	<b>27.01</b>	23.63	<b>26.03</b>	24.99	<b>14.86</b>	36.41	24.40	27.75	138.0	
60.0	14.21	23.27	15.81	25.87	<b>28.01</b>	<b>27.70</b>	24.28	<b>26.69</b>	25.62	<b>15.28</b>	37.34	25.01	28.46	140.0	
61.1	14.58	23.86	16.26	26.57	<b>28.71</b>	<b>28.41</b>	24.94	<b>27.36</b>	26.27	<b>15.70</b>	38.29	25.62	29.18	142.0	
62.2	14.96	24.46	16.71	27.29	<b>29.43</b>	<b>29.13</b>	25.63	<b>28.04</b>	26.92	<b>16.14</b>	39.26	26.26	29.92	144.0	
63.3	15.34	25.07	17.17	28.02	<b>30.15</b>	<b>29.87</b>	26.32	<b>28.74</b>	27.59	<b>16.59</b>	40.24	26.90	30.67	146.0	
64.4	15.73	25.69	17.65	28.77	<b>30.90</b>	<b>30.61</b>	27.03	<b>29.45</b>	28.27	<b>17.05</b>	41.25	27.54	31.43	148.0	
65.6	16.13	26.32	18.13	29.54	<b>31.65</b>	<b>31.39</b>	27.76	<b>30.17</b>	28.96	<b>17.51</b>	42.28	28.21	32.22	150.0	

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