

Copeland Scroll™

ZX Condensing Unit for Refrigeration Applications



Product catalogue

COPELAND™


EMERSON™

CoreSense™ for ZX Platform Condensing Unit

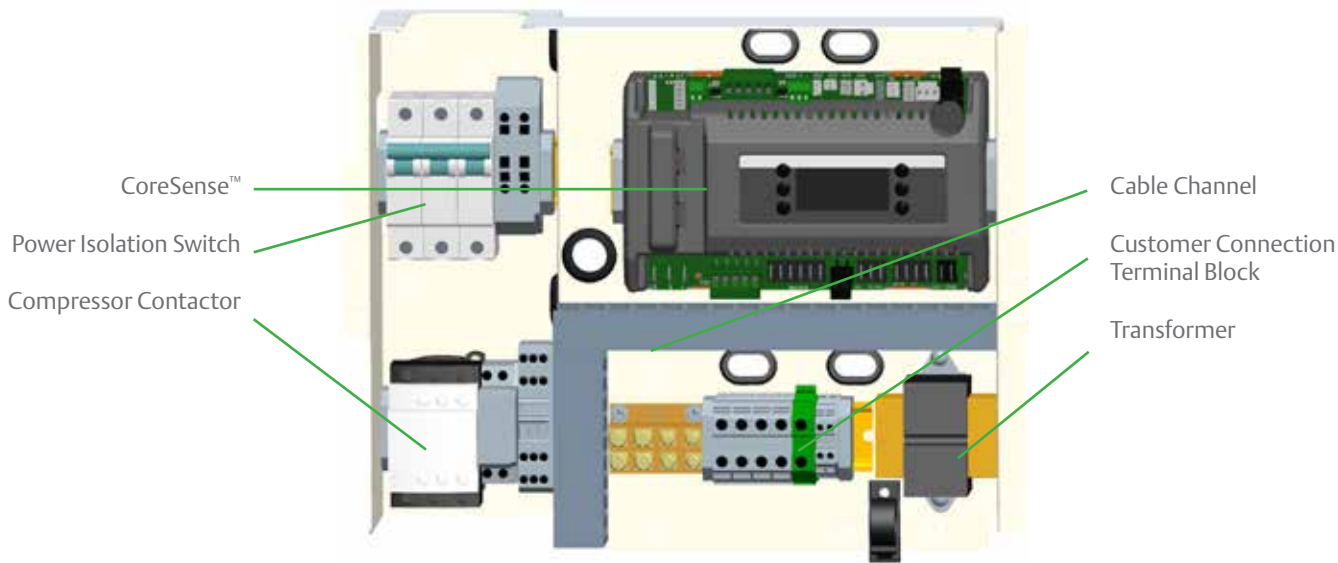
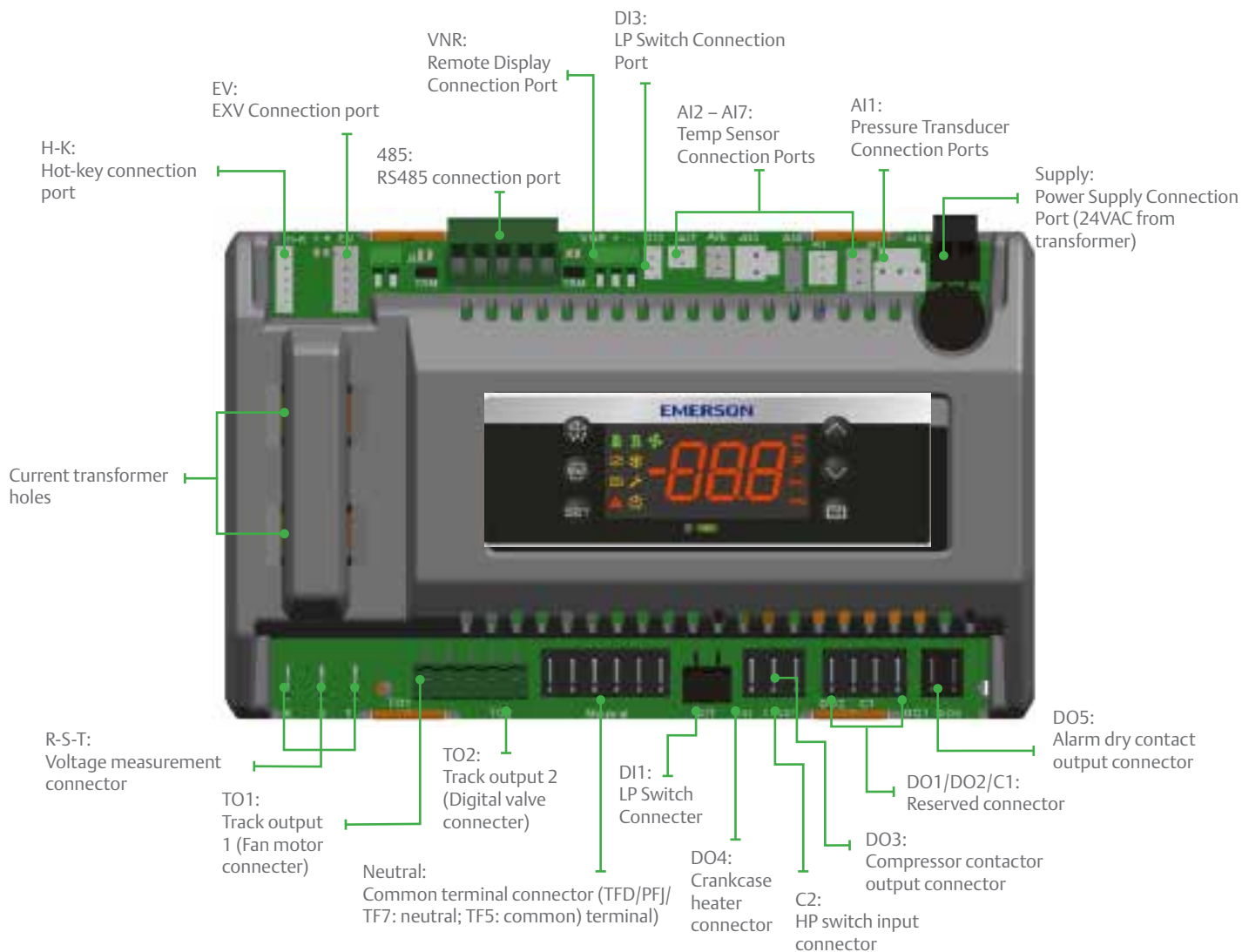


Figure 2. Layout of the CoreSense™, Intelligent Store Module

CoreSense™ Layout



ZXL 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
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			
ZXL025BE	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			
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			
ZXL035BE	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			
ZXL040BE	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	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	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	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: 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.

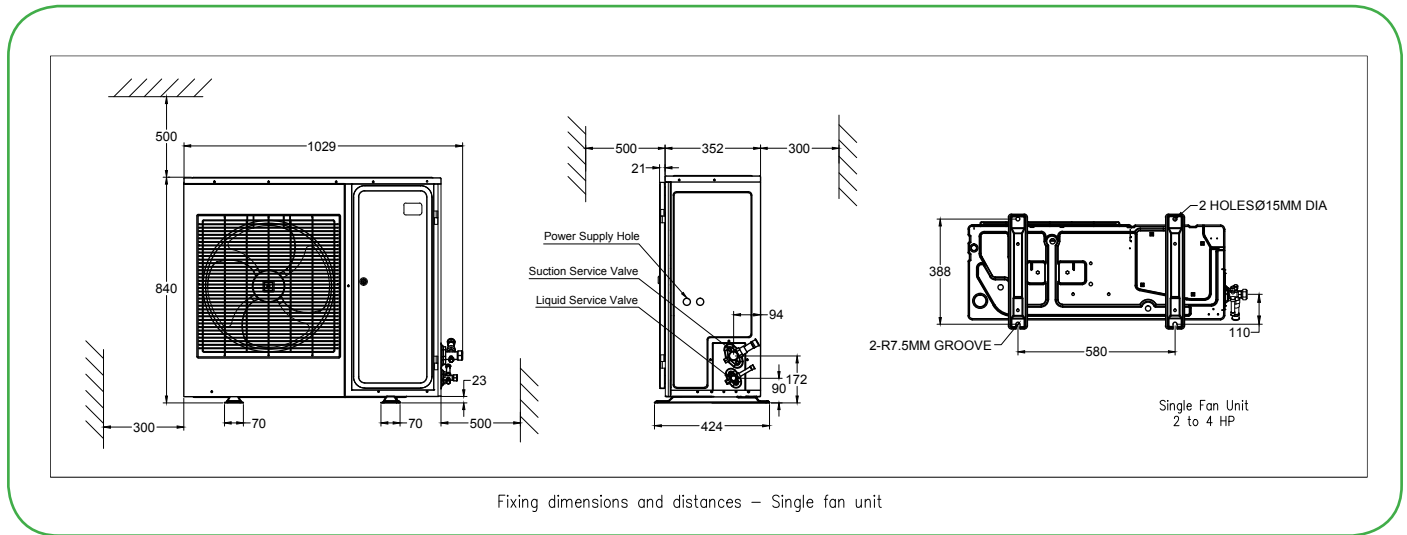
ZXL Family: Low Temperature

Technical Data at 50 Hz - TFD

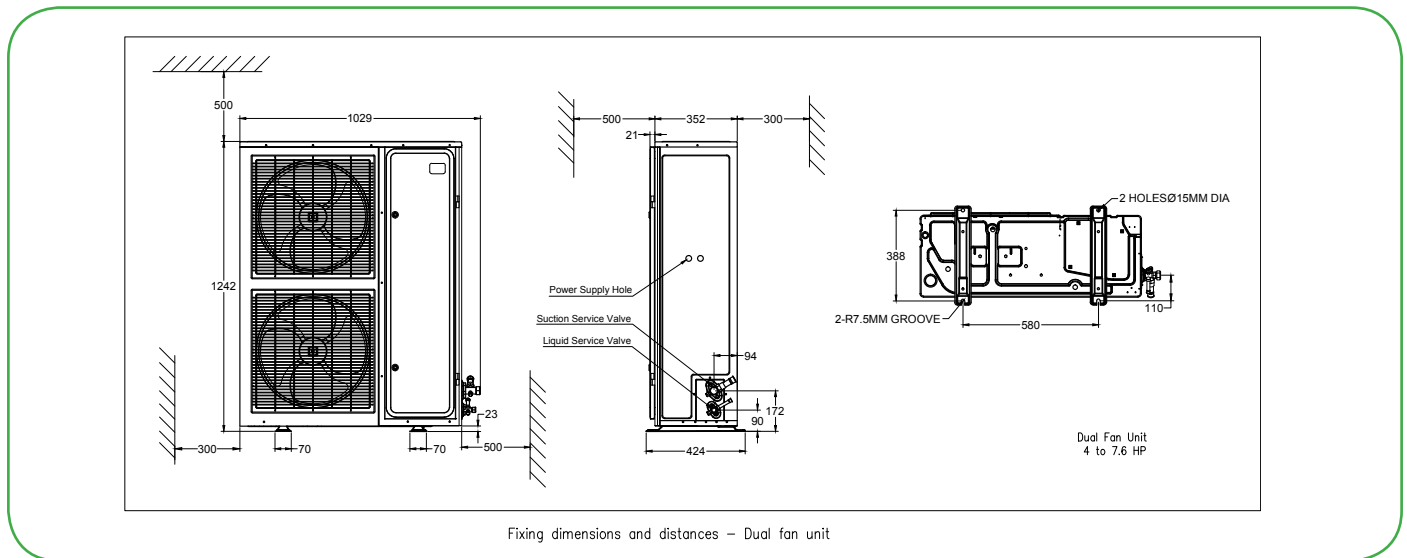
Family				ZXL							
Nominal Rating	Horsepower	HP	2	2.5	3	3.5	4	5	6	7.5	
Model Name			ZXL020B0	ZXL025B0	ZXL030B0	ZXL035B0	ZXL040B0	ZXL050B0	ZXL060B0	ZXL075B0	
			ZXL020BE	ZXL025BE	ZXL030BE	ZXL035BE	ZXL040BE	ZXL050BE	ZXL060BE	ZXL075BE	
Performance	R22	ET/AT/RGT	°C	-32/32/5°C							
		Capacity	kW	1.72	1.91	2.34	2.78	3.57	4.05	4.96	5.39
		COP	W/W	1.20	1.17	1.28	1.26	1.24	1.29	1.27	1.28
	R404A	ET/AT/RGT	°C	-32/32/5°C							
		Capacity	kW	2.11	2.51	2.8	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
	R407F	ET/AT/RGT	°C	-32/32/5°C							
		Capacity	kW	1.86	2.29	2.60	3.61	4.25	4.61	5.66	6.25
		COP	W/W	0.99	1.02	1.02	1.34	1.29	1.26	1.27	1.29
	Sound Pressure Level	@1m	dB(A)	56					60		
Compressor	Model Name	R22		ZXI06KC-TFD	ZXI08KC-TFD	ZXI09KC-TFD	ZXI11KC-TFD	ZXI14KC-TFD	ZXI15KC-TFD	ZXI18KC-TFD	ZXI21KC-TFD
		R404A		ZXI06KC-TFD	ZXI08KC-TFD	ZXI09KC-TFD	ZXI11KC-TFD	ZXI14KC-TFD	ZXI15KC-TFD	ZXI18KC-TFD	ZXI21KC-TFD
		R407F		ZXI06KC-TFD	ZXI08KC-TFD	ZXI09KC-TFD	ZXI11KC-TFD	ZXI14KC-TFD	ZXI15KC-TFD	ZXI18KC-TFD	ZXI21KC-TFD
	Rated Load Ampere	R22	Amp	5.4	5.5	5.7	7.4	8.1	8.8	11.1	12.1
		R404A	Amp	5.6	6.2	6.0	8.3	8.6	10.0	11.1	14.6
		R407F	Amp	5.6	6.2	6.5	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	Amp	39.2	39.2	39.2	51.5	51.5	51.5	74.0	101.0
		R407F	Amp	39.2	39.2	39.2	51.5	51.5	51.5	74.0	101.0
	Oil Type	R22		Mineral							
R404A			POE								
R407F			POE								
Oil Recharge Volume	R22/R404A/R407F	Liters	0.56	0.56	0.56	1.24	1.24	1.24	1.77	1.77	
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	m ³ /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	5.1	7.2	7.2	7.2
		R404A	kg	4.4	4.4	4.4	4.4	4.4	6.3	6.3	6.3
		R407F	kg	4.5	4.5	4.5	4.5	4.5	6.4	6.4	6.4
	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	1029 x 424 x 840					1029 x 424 x 1242		
Weight	Net	kg	79	81	81	93	93	106	116	121	
	Gross	kg	117	119	119	131	131	150	165	170	

Dimensional Drawings

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



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



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) ZXB-TFD (1.5HP-3.5HP) ZXL-PFJ (2HP-3HP) ZXL-TFD (2HP-4HP) ZXL-TF5/7 (2HP-3.5HP) ZXD-TFD (3HP) ZXD-TF7 (3HP)	1029	840	424	580	388	3/4"	1/2"	300	500	300	500	500
ZX-TFD (5HP-7.6HP) ZX-TF5/7 (4HP-7.5HP) ZXB-TFD (4HP-6HP) ZXL-TFD (5HP-7.5HP) ZXL-TF5/7 (4HP-7.5HP) ZXD-TFD (4HP-7.6HP), ZXD-TF5/7 (4HP-7.5HP)	1029	1242	424	580	388	7/8"	1/2"	300	500	300	500	500