PATTON PAK Slimline

SCMREF THAI

CZBD Microchannel Series

Powered by Copeland Digital Scroll

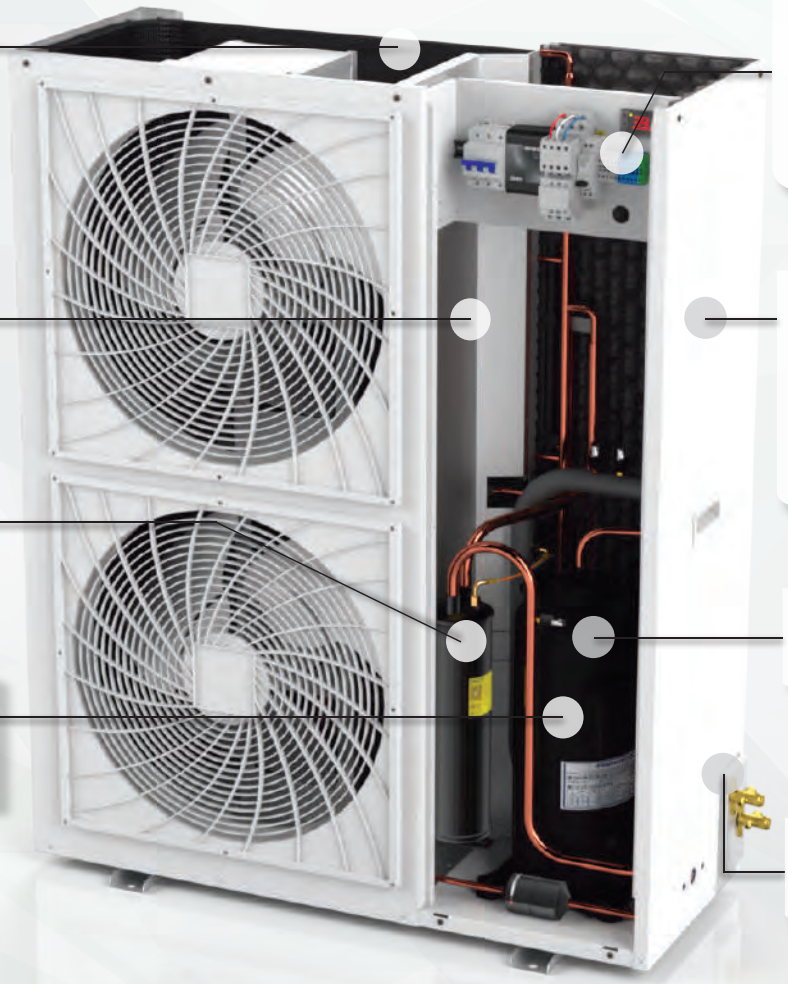
- Microchannel condenser
- Generous low noise level condensers
- X-web communication feature
- Reliable and efficient Copeland ZB digital scroll compressors
- Fully wired in a waterproof powder coated enclosure
- Better energy efficiency

PATTON PAK Slimline

CZBD Microchannel Series

Condensing Units

- Microchannel condenser heat exchanger
- Easy access front door design
- Additional oil pre-charged
- Compressor sound jacket
- Sound insulation casing



- Phase protection
- Discharge gas overheat protection
- Hi/Low pressure protection
- Compressor minimum off time control
- X-web communication
- Galvanized steel casing with powder coating
  - -High corrosion resistance
- Stainless steel casing SUS304 (optional)
- Copeland digital scroll compressor
- Easy access liquid sight glass with moisture indicator

Microchannel Benefits

- Improve heat transfer efficiency.
- Low refrigerant charge
- No risk of galvanic corrosion
- Low weight
- Easy cleaning

PATTON PAK Slimline

CZBD Microchannel Series

Condensing Units

Powered by Copeland Digital Scroll

R404A

3.0 ▶ 7.5 HP

MEDIUM TEMP

Model	Amb. (°C)	Capacity (kW)						Power Input (kW)					
		Evaporating Temperature (°C)						Evaporating Temperature (°C)					
		-20	-15	-10	-5	0	5	-20	-15	-10	-5	0	5
CZBDM300	32	3.82	4.61	5.51	6.49	7.55	8.67	2.18	2.29	2.39	2.50	2.60	2.70
	38	3.49	4.25	5.08	5.97	6.90	7.86	2.42	2.54	2.67	2.78	2.90	3.00
	43	3.19	3.91	4.66	5.46	6.28	7.13	2.64	2.78	2.92	3.05	3.16	3.26
CZBDM399	32	5.41	6.50	7.71	9.07	10.59	12.27	2.77	2.90	3.03	3.13	3.25	3.38
	38	4.94	5.92	7.02	8.24	9.63	11.15	3.09	3.26	3.40	3.53	3.65	3.79
	43	4.53	5.41	6.40	7.52	8.77	10.15	3.43	3.63	3.79	3.93	4.07	4.21
CZBDM400	32	5.54	6.68	7.96	9.43	11.06	12.89	2.93	3.04	3.14	3.22	3.32	3.43
	38	5.08	6.11	7.28	8.60	10.09	11.78	3.23	3.37	3.49	3.59	3.69	3.79
	43	4.67	5.61	6.67	7.88	9.25	10.79	3.55	3.72	3.85	3.96	4.06	4.17
CZBDM500	32	6.77	8.15	9.71	11.47	13.41	15.53	3.70	3.90	4.10	4.29	4.48	4.67
	38	6.24	7.50	8.92	10.51	12.27	14.20	4.04	4.25	4.47	4.68	4.89	5.09
	43	5.78	6.92	8.22	9.65	11.25	13.02	4.36	4.59	4.81	5.04	5.26	5.48
CZBDM600	32	8.02	9.65	11.50	13.56	15.85	18.33	4.34	4.58	4.82	5.06	5.29	5.52
	38	7.39	8.87	10.55	12.41	14.48	16.76	4.75	5.00	5.26	5.53	5.78	6.02
	43	6.85	8.19	9.72	11.41	13.30	15.35	5.14	5.41	5.67	5.95	6.22	6.49
CZBDM750	32	8.95	10.75	12.77	15.03	17.54	20.24	4.77	5.04	5.32	5.60	5.87	6.14
	38	8.23	9.87	11.70	13.75	16.02	18.46	5.22	5.51	5.81	6.11	6.40	6.70
	43	7.63	9.10	10.77	12.61	14.67	16.88	5.65	5.96	6.27	6.59	6.89	7.21

Note: The rating condition is based on a suction return gas 20°C, Subcool with the limits of the condensing unit.

PATTON PAK Slimline

CZBD Microchannel Series

Condensing Units

Powered by Copeland Digital Scroll

R407F

3.0 ▶ 7.5 HP

MEDIUM TEMP

Model	Amb. (°C)	Capacity (kW)						Power Input (kW)					
		Evaporating Temperature (°C)						Evaporating Temperature (°C)					
		-20	-15	-10	-5	0	5	-20	-15	-10	-5	0	5
CZBDM300	32			5.01	6.06	7.18	8.41			2.43	2.53	2.65	2.76
	38				5.43	6.49	7.64				2.89	3.02	3.15
	43												
CZBDM399	32		6.07	7.39	8.89	10.60	12.58		3.07	3.16	3.27	3.39	3.51
	38			6.77	8.15	9.73	11.59			3.63	3.75	3.87	3.98
	43				7.52	9.00					4.19	4.32	4.45
CZBDM400	32	5.01	6.25	7.64	9.23	11.08	13.22	3.10	3.16	3.23	3.30	3.39	3.47
	38			7.04	8.51	10.22	12.22			3.66	3.74	3.83	3.91
	43			6.49	7.87	9.48	11.36			4.09	4.17	4.25	4.33
CZBDM500	32	6.17	7.55	9.13	10.92	12.95	15.23	3.40	3.67	3.92	4.16	4.37	4.56
	38		7.07	8.54	10.19	12.06	14.16		3.98	4.28	4.57	4.83	5.07
	43			8.06	9.60	11.33	13.27			4.57	4.90	5.21	5.50
CZBDM600	32	7.13	8.95	10.99	13.24	15.68	18.30	3.99	4.28	4.58	4.90	5.22	5.55
	38		8.05	10.11	12.30	14.61	17.06		4.72	5.05	5.40	5.77	6.14
	43			9.19	11.39	13.65				5.47	5.85	6.26	
CZBDM750	32	7.95	9.97	12.21	14.68	17.35	20.21	4.38	4.71	5.05	5.42	5.79	6.17
	38			11.21	13.63	16.16	18.78			5.58	5.97	6.39	6.83
	43				12.59						6.48		

Note: The rating condition is based on a suction return gas 20°C, Subcool with the limits of the condensing unit.

PATTON PAK Slimline

CZBD Microchannel Series

Condensing Units

Powered by Copeland Digital Scroll

R448A / R449A

3.0 ▶ 7.5 HP

MEDIUM TEMP

Model	Amb. (°C)	Capacity (kW)						Power Input (kW)					
		Evaporating Temperature (°C)						Evaporating Temperature (°C)					
		-20	-15	-10	-5	0	5	-20	-15	-10	-5	0	5
CZBDM300	32	3.50	4.32	5.24	6.26	7.40	8.64	2.04	2.19	2.36	2.54	2.74	2.96
	38	3.25	4.02	4.87	5.81	6.86	8.01	2.28	2.45	2.63	2.82	3.03	3.26
	43	3.03	3.75	4.54	5.42	6.39	7.46	2.52	2.70	2.90	3.10	3.31	3.55
CZBDM399	32	4.91	5.98	7.20	8.59	10.14	11.87	2.52	2.70	2.86	3.00	3.16	3.32
	38	4.56	5.55	6.68	7.94	9.37	10.96	2.72	2.96	3.17	3.36	3.54	3.72
	43	4.27	5.19	6.23	7.40	8.71	10.19	2.85	3.15	3.41	3.65	3.86	4.07
CZBDM400	32	5.00	6.12	7.41	8.88	10.54	12.40	2.70	2.85	2.97	3.08	3.20	3.33
	38	4.66	5.70	6.89	8.23	9.78	11.50	2.90	3.11	3.28	3.43	3.57	3.72
	43	4.37	5.33	6.44	7.69	9.12	10.73	3.04	3.31	3.54	3.73	3.90	4.06
CZBDM500	32	6.12	7.61	9.30	11.20	13.32	15.70	3.35	3.59	3.82	4.07	4.35	4.65
	38	5.66	7.09	8.68	10.46	12.46	14.67	3.71	3.98	4.24	4.51	4.79	5.10
	43	5.26	6.62	8.13	9.81	11.69	13.78	4.05	4.35	4.64	4.93	5.23	5.54
CZBDM600	32	7.16	8.92	10.90	13.11	15.58	18.32	3.74	4.01	4.29	4.58	4.89	5.23
	38	6.62	8.30	10.16	12.24	14.56	17.13	4.14	4.45	4.76	5.07	5.39	5.74
	43	6.14	7.75	9.51	11.48	13.66	16.09	4.53	4.87	5.21	5.54	5.89	6.25
CZBDM750	32	7.98	9.94	12.10	14.53	17.24	20.24	4.11	4.42	4.73	5.07	5.42	5.82
	38	7.38	9.23	11.26	13.56	16.10	18.87	4.55	4.90	5.26	5.61	5.97	6.39
	43	6.84	8.61	10.54	12.70	15.07	17.69	4.98	5.37	5.75	6.13	6.53	6.94

Note: The rating condition is based on a suction return gas 20°C, Subcool with the limits of the condensing unit.

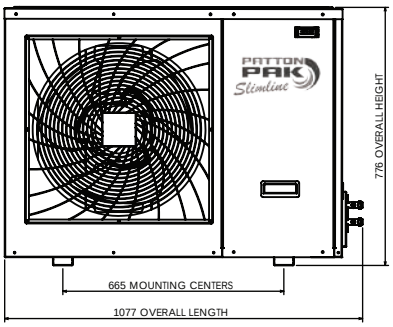
TECHNICAL DATA

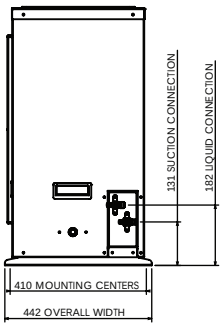
	MODEL NAME	CZBDM300	CZBDM399	CZBDM400	CZBDM500	CZBDM600	CZBDM750
Compressor	MODEL	ZBD21KQE-TFD	ZBD29KQE-TFD	ZBD29KQE-TFD	ZBD38KQE-TFD	ZBD45KQE-TFD	ZBD48KQE-TFD
	Rated Input Voltage	AC 380-420V/3PH/50Hz					
	RLA Amps	4.3	5.6	5.6	7.5	8.8	10.4
	MCC Amps	5.5	7.9	7.9	11.3	11.4	14.0
	LRA Amps	40	48	48	64	74	100
	Oil Type	POE(32cSt)					
	Oil Precharge (L)	0.6					
	Oil Quantity (L)	1.24	1.36	1.36	1.89	1.89	1.89
Condenser	Air Flow (m^3/h)	3400	5200	7350	7350	8700	8700
	Fan Motor (1)	1x20"	1x20"	2x18"	2x18"	2x20"	2x20"
	Total Fan Power (W)	236	236	472	472	472	472
	Reciever (L)	4.7	7.9	7.9	7.9	7.9	7.9
	Suction Tube Size	3/4"	7/8"	7/8"	7/8"	7/8"	7/8"
	Liquid Tube Size	1/2"	1/2"	1/2"	1/2"	1/2"	1/2"
	Weight (kg)	76	80	82	114	116	119

Note : 1. All Fan 220-240V/1PH/50Hz (5 uf Capacitor)

DIMENSION

CZBDM300





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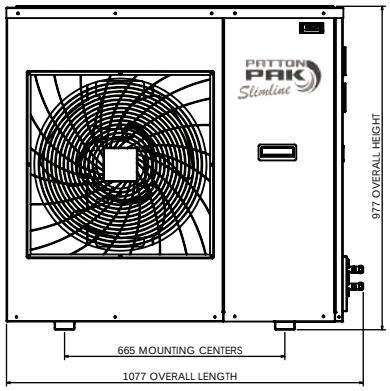
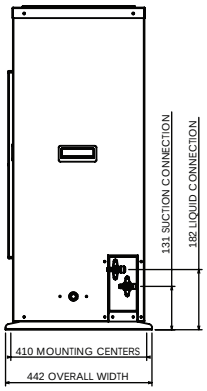
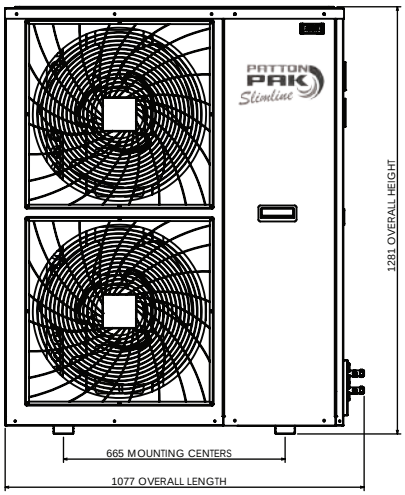
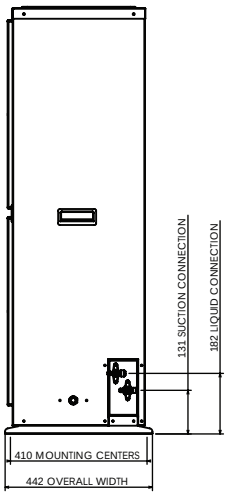




CZBDM400
CZBDM500
CZBDM600
CZBDM750





CDU-2020-002/TH. 28-07-20 Rev.2

PATTON PAK Slimline

SCMREF THAI

CZB Microchannel Series

Powered by Copeland Scroll

- Microchannel condenser
- Generous low noise level condensers
- Better energy efficiency
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PATTON PAK Slimline

CZB Microchannel Series
Condensing Units

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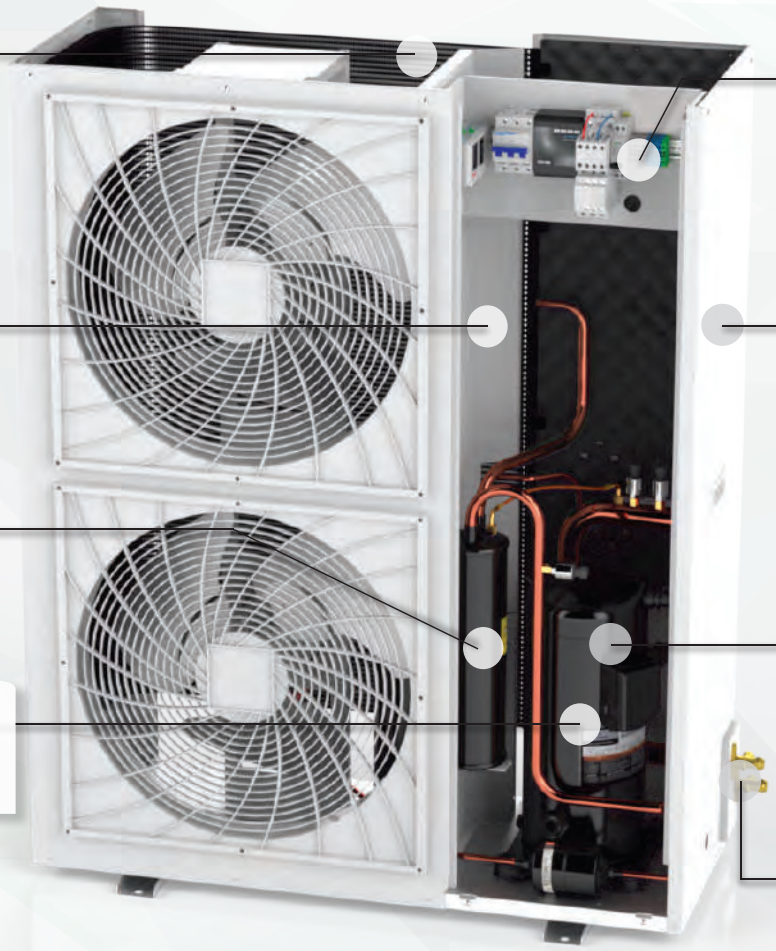
- Easy access front door design
- Additional oil pre-charged
- Compressor sound jacket
- Sound insulation casing



- Phase protection
- Discharge gas overheat protection
- Hi/Low pressure protection
- Compressor minimum off time control
- Galvanized steel casing with powder coating
  - -High corrosion resistance
- Stainless steel casing SUS304 (optional)
- Copeland scroll compressor
- Easy access liquid sight glass with moisture indicator

Microchannel Benefits

- Improve heat transfer efficiency.
- Low refrigerant charge
- No risk of galvanic corrosion
- Low weight
- Easy cleaning

PATTON PAK Slimline

CZB Microchannel Series

Condensing Units

Powered by Copeland Scroll

R404A

2.0 ▶ 7.5 HP

MEDIUM TEMP

Model	Amb. (°C)	Capacity (kW)						Power Input (kW)					
		Evaporating Temperature (°C)						Evaporating Temperature (°C)					
		-20	-15	-10	-5	0	5	-20	-15	-10	-5	0	5
CZBM200	32	2.62	3.21	3.88	4.61	5.42	6.31	1.79	1.80	1.79	1.79	1.80	1.82
	38	2.31	2.86	3.46	4.13	4.86	5.66	2.08	2.08	2.06	2.05	2.05	2.06
	43	2.02	2.54	3.10	3.71	4.38	5.10	2.40	2.36	2.33	2.31	2.29	2.29
CZBM250	32	3.27	3.95	4.70	5.54	6.47	7.50	2.05	2.09	2.13	2.18	2.23	2.28
	38	2.97	3.58	4.26	5.02	5.87	6.80	2.32	2.36	2.41	2.46	2.51	2.56
	43	2.70	3.26	3.88	4.58	5.35	6.21	2.58	2.63	2.67	2.72	2.76	2.81
CZBM300	32	3.85	4.63	5.49	6.46	7.52	8.66	2.48	2.53	2.60	2.66	2.73	2.81
	38	3.48	4.18	4.97	5.83	6.79	7.84	2.82	2.88	2.94	3.01	3.08	3.15
	43	3.15	3.79	4.51	5.29	6.17	7.12	3.14	3.20	3.26	3.34	3.40	3.48
CZBM350	32	4.40	5.28	6.24	7.31	8.46	9.72	2.94	3.02	3.11	3.20	3.31	3.41
	38	3.96	4.75	5.62	6.57	7.62	8.75	3.35	3.44	3.53	3.62	3.72	3.83
	43	3.58	4.29	5.07	5.93	6.88	7.91	3.74	3.83	3.92	4.02	4.12	4.22
CZBM400	32	4.99	5.96	7.03	8.19	9.45	10.80	3.41	3.52	3.63	3.76	3.89	4.04
	38	4.48	5.35	6.30	7.35	8.48	9.69	3.89	4.00	4.12	4.24	4.38	4.52
	43	4.02	4.81	5.67	6.60	7.62	8.71	4.34	4.46	4.58	4.71	4.84	4.98
CZBM500	32	6.83	8.24	9.85	11.65	13.64	15.87	4.02	4.09	4.16	4.23	4.32	4.40
	38	6.21	7.51	8.96	10.60	12.42	14.44	4.56	4.62	4.70	4.77	4.86	4.93
	43	5.66	6.84	8.19	9.68	11.35	13.22	5.07	5.14	5.21	5.29	5.37	5.44
CZBM600	32	7.99	9.64	11.52	13.61	15.93	18.50	4.49	4.58	4.66	4.75	4.85	4.94
	38	7.26	8.78	10.48	12.38	14.49	16.86	5.11	5.18	5.27	5.36	5.46	5.55
	43	6.63	8.00	9.56	11.32	13.26	15.42	5.67	5.77	5.86	5.93	6.03	6.12
CZBM750	32	8.71	10.51	12.52	14.78	17.27	20.02	4.96	5.05	5.16	5.27	5.39	5.51
	38	7.92	9.54	11.38	13.42	15.71	18.20	5.63	5.74	5.84	5.95	6.06	6.18
	43	7.20	8.69	10.36	12.25	14.32	16.61	6.28	6.38	6.49	6.59	6.71	6.83

Note: The rating condition is based on a suction return gas 20°C, Subcool with the limits of the condensing unit.

PATTON PAK Slimline

CZB Microchannel Series

Condensing Units

Powered by Copeland Scroll

R407F

2.0 ▶ 7.5 HP

MEDIUM TEMP

Model	Amb. (°C)	Capacity (kW)						Power Input (kW)					
		Evaporating Temperature (°C)						Evaporating Temperature (°C)					
		-20	-15	-10	-5	0	5	-20	-15	-10	-5	0	5
CZBM200	32	2.21	2.82	3.49	4.24	5.05	5.96	1.78	1.80	1.81	1.83	1.86	1.89
	38		2.44	3.09	3.79	4.56	5.40		2.09	2.11	2.13	2.16	2.19
	43			2.69	3.36	4.10	4.88			2.41	2.42	2.44	2.48
CZBM250	32	2.71	3.41	4.18	5.04	6.00	7.07	2.05	2.10	2.17	2.25	2.32	2.39
	38		3.01	3.74	4.57	5.47	6.48		2.39	2.48	2.56	2.65	2.73
	43			3.33	4.11	4.98				2.75	2.85	2.95	
CZBM300	32	3.18	4.01	4.93	5.92	7.00	8.19	2.47	2.56	2.66	2.78	2.90	3.01
	38			4.37	5.30	6.31	7.41			3.03	3.17	3.31	3.44
	43				4.71						3.53		
CZBM350	32	3.58	4.50	5.51	6.62	7.83	9.17	2.94	3.06	3.20	3.36	3.54	3.70
	38			4.84	5.89	7.03				3.64	3.83	4.02	
	43												
CZBM400	32		5.20	6.45	7.81	9.27	10.85		3.34	3.55	3.74	3.95	4.17
	38			5.74	7.02					3.93	4.17		
	43												
CZBM500	32	5.82	7.38	9.13	11.10	13.29	15.75	3.97	4.04	4.12	4.21	4.34	4.48
	38		6.65	8.33	10.22	12.32	14.64		4.60	4.69	4.80	4.93	5.10
	43			7.60	9.41	11.43	13.66			5.24	5.36	5.50	5.67
CZBM600	32	6.87	8.62	10.62	12.91	15.51	18.44	4.44	4.56	4.67	4.80	4.94	5.12
	38		7.91	9.79	11.94	14.35	17.10		5.22	5.35	5.49	5.65	5.83
	43			9.08	11.10	13.39	15.99			6.00	6.16	6.32	6.50
CZBM750	32	7.60	9.77	12.13	14.76	17.65	20.85	5.02	5.28	5.51	5.70	5.90	6.12
	38		8.71	10.99	13.48	16.21	19.19	5.60	5.95	6.24	6.49	6.72	6.96
	43			9.88	12.24	14.85		6.05	6.51	6.88	7.20	7.46	7.73

Note: The rating condition is based on a suction return gas 20°C, Subcool with the limits of the condensing unit.

PATTON PAK Slimline

CZB Microchannel Series

Condensing Units

Powered by Copeland Scroll

R448A / R449A

2.0 ▶ 7.5 ▶ HP

MEDIUM TEMP

Model	Amb. (°C)	Capacity (kW)						Power Input (kW)					
		Evaporating Temperature (°C)						Evaporating Temperature (°C)					
		-20	-15	-10	-5	0	5	-20	-15	-10	-5	0	5
CZBM200	32	2.37	2.99	3.68	4.46	5.33	6.31	1.65	1.66	1.68	1.71	1.75	1.80
	38	2.15	2.73	3.37	4.09	4.90	5.80	1.94	1.94	1.95	1.97	2.00	2.05
	43	1.93	2.48	3.08	3.75	4.49	5.33	2.23	2.22	2.22	2.23	2.26	2.29
CZBM250	32	2.76	3.43	4.20	5.07	6.05	7.10	1.80	1.83	1.88	1.95	2.02	2.11
	38	2.53	3.14	3.85	4.65	5.54	6.51	2.09	2.11	2.15	2.21	2.28	2.37
	43	2.33	2.88	3.52	4.26	5.08	5.99	2.38	2.40	2.43	2.47	2.54	2.62
CZBM300	32	3.42	4.23	5.15	6.17	7.28	8.50	2.30	2.38	2.47	2.57	2.70	2.84
	38	3.14	3.90	4.74	5.68	6.69	7.82	2.66	2.74	2.83	2.93	3.06	3.20
	43	2.88	3.59	4.38	5.23	6.18		3.00	3.07	3.17	3.28	3.40	
CZBM350	32	3.80	4.70	5.71	6.84	8.09	9.45	2.70	2.79	2.90	3.02	3.16	3.31
	38	3.47	4.31	5.26	6.31	7.48	8.77	3.06	3.15	3.26	3.38	3.51	3.65
	43		4.00	4.89	5.89	6.98			3.49	3.60	3.71	3.84	
CZBM400	32	4.44	5.41	6.51	7.73	9.08	10.56	3.02	3.17	3.33	3.50	3.68	3.89
	38	4.12	5.02	6.03	7.16	8.40	9.75	3.47	3.62	3.78	3.95	4.14	4.35
	43		4.69	5.63	6.67				4.04	4.21	4.39		
CZBM500	32	6.02	7.55	9.21	11.06	13.15	15.51	3.71	3.79	3.88	3.99	4.12	4.28
	38	5.45	6.92	8.50	10.24	12.21	14.43	4.23	4.32	4.41	4.52	4.66	4.83
	43	4.98	6.40	7.91	9.56	11.43	13.53	4.71	4.81	4.91	5.02	5.15	5.32
CZBM600	32	7.04	8.82	10.76	12.93	15.36	18.13	4.14	4.25	4.35	4.47	4.62	4.81
	38	6.37	8.09	9.93	11.98	14.26	16.86	4.73	4.84	4.95	5.07	5.23	5.42
	43	5.82	7.48	9.25	11.18	13.35	15.81	5.28	5.39	5.51	5.63	5.80	5.99
CZBM750	32	7.97	9.99	12.17	14.59	17.30	20.36	4.83	4.96	5.11	5.27	5.48	5.72
	38	7.20	9.15	11.23	13.50	16.05	18.93	5.53	5.67	5.81	5.99	6.20	6.45
	43	6.58	8.45	10.43	12.61	15.00	17.73	6.17	6.32	6.48	6.65	6.87	7.13

Note: The rating condition is based on a suction return gas 20°C, Subcool with the limits of the condensing unit.

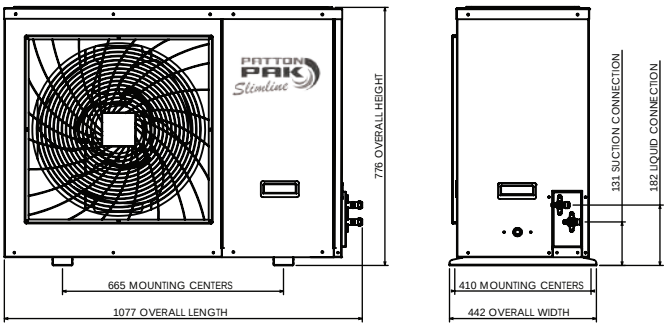
TECHNICAL DATA

	MODEL NAME	CZBM200	CZBM250	CZBM300	CZBM350	CZBM400	CZBM500	CZBM600	CZBM750
Compressor	MODEL	ZB15KQE-TFD	ZB19KQE-TFD	ZB21KQE-TFD	ZB26KQE-TFD	ZB29KQE-TFD	ZB38KQE-TFD	ZB45KQE-TFD	ZB48KQE-TFD
	Rated Input Voltage	AC 380-420V/3PH/50Hz							
	RLA Amps	3.2	4.4	4.5	5.8	7.2	6.8	9.5	9.5
	MCC Amps	4.9	6.5	7.15	8.9	10.0	12.8	13.1	14.0
	LRA Amps	26	32	40	46	50	65.5	74	101
	Oil Type	POE(32cSt)							
	Oil Precharge (L)	0.6							
	Oil Quantity (L)	1.24	1.36	1.45	1.45	1.36	2.07	1.9	1.8
Condenser	Air Flow (m^3/h)	4520	4490	4450	4450	4450	6380	6380	8750
	Fan Motor(1)	1x20"	1x20"	1x20"	1x20"	1x20"	2x18"	2x18"	2x20"
	Total Fan Power (W)	236	236	236	236	236	472	472	472
	Reciever (L)	4.7	4.7	4.7	4.7	4.7	7.9	7.9	7.9
	Suction Tube Size	3/4"	3/4"	3/4"	3/4"	7/8"	7/8"	7/8"	7/8"
	Liquid Tube Size	3/8"	3/8"	3/8"	1/2"	1/2"	1/2"	1/2"	1/2"
	Weight (kg)	72	74	76	77	82	110	111	113

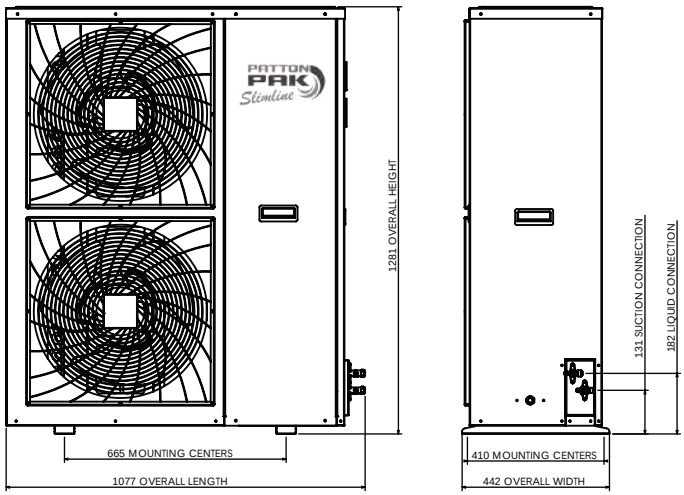
Note : 1. All Fan 220-240V/1PH/50Hz (5 uf Capacitor)

DIMENSION

CZBM200
CZBM250
CZBM300
CZBM350
CZBM400



CZBM500
CZBM600
CZBM750



CDU-2020-002/TH. 28-07-20 Rev.2

PATTON PAK Slimline

SCMREF THAI

CZF Microchannel Series

Powered by Copeland Scroll

- Microchannel condenser
- Generous low noise level condensers
- Better energy efficiency
- Reliable and efficient Copeland ZF scroll compressors
- Fully wired in a waterproof powder coated enclosure

PATTON PAK Slimline

CZF Microchannel Series

Condensing Units

Powered by Copeland Scroll

R404A

2.0 ▶ 7.5 HP

LOW TEMP

Model	Amb. (°C)	Capacity (kW)							Power Input (kW)						
		Evaporating Temperature (°C)							Evaporating Temperature (°C)						
		-40	-35	-30	-25	-20	-15	-10	-40	-35	-30	-25	-20	-15	-10
CZFM200	32	1.08	1.38	1.73	2.13	2.61	3.17	3.80	1.52	1.58	1.66	1.75	1.85	1.96	2.08
	38	0.97	1.24	1.56	1.93	2.37	2.87	3.45	1.67	1.74	1.82	1.90	2.00	2.11	2.23
	43	0.88	1.12	1.41	1.75	2.15	2.61	3.15	1.83	1.89	1.97	2.05	2.14	2.25	2.37
CZFM300	32	1.44	1.84	2.30	2.84	3.47	4.18	5.00	1.87	1.91	1.96	2.03	2.13	2.25	2.38
	38	1.30	1.66	2.08	2.56	3.13	3.78	4.53	2.08	2.11	2.16	2.23	2.32	2.43	2.56
	43	1.17	1.50	1.88	2.32	2.83	3.43	4.11	2.28	2.31	2.35	2.41	2.50	2.61	2.74
CZFM350	32	1.80	2.29	2.84	3.47	4.20	5.04	6.00	2.26	2.31	2.38	2.48	2.61	2.76	2.93
	38	1.62	2.06	2.55	3.12	3.78	4.54	5.41	2.49	2.53	2.61	2.71	2.83	2.98	3.16
	43	1.45	1.85	2.29	2.81	3.40	4.09	4.89	2.69	2.74	2.82	2.92	3.05	3.20	3.38
CZFM400	32	2.07	2.69	3.40	4.22	5.18	6.27	7.51	2.30	2.38	2.48	2.60	2.73	2.89	3.06
	38	1.89	2.42	3.05	3.80	4.66	5.66	6.81	2.56	2.65	2.75	2.87	3.01	3.16	3.34
	43	1.74	2.20	2.75	3.41	4.20	5.12	6.19	2.81	2.90	3.01	3.13	3.27	3.43	3.60
CZFM500	32	2.55	3.33	4.22	5.25	6.43	7.82	9.39	2.90	3.04	3.20	3.37	3.56	3.78	4.02
	38	2.31	3.00	3.79	4.71	5.78	7.03	8.48	3.20	3.36	3.53	3.71	3.90	4.12	4.36
	43	2.12	2.72	3.43	4.25	5.21	6.35	7.67	3.48	3.65	3.83	4.02	4.23	4.45	4.70
CZFM600	32	3.14	4.01	5.01	6.16	7.52	9.09	10.91	3.52	3.66	3.81	4.00	4.19	4.42	4.67
	38	2.84	3.63	4.53	5.57	6.79	8.21	9.86	3.84	3.99	4.15	4.34	4.55	4.78	5.04
	43	2.56	3.28	4.09	5.04	6.15	7.45	8.97	4.15	4.30	4.48	4.67	4.88	5.12	5.38
CZFM750	32	3.86	4.91	6.19	7.71	9.43	11.33	13.36	3.72	4.07	4.40	4.72	5.08	5.49	6.01
	38	3.51	4.43	5.58	6.96	8.52	10.27	12.14	3.96	4.37	4.75	5.11	5.51	5.95	6.49
	43	3.23	4.03	5.07	6.31	7.75	9.35	11.09	4.17	4.63	5.05	5.45	5.88	6.36	6.93

Note: The rating condition is based on a suction superheat of 10 K, Subcool with the limits of the condensing unit.

PATTON PAK Slimline

CZF Microchannel Series

Condensing Units

Powered by Copeland Scroll

R407F

2.0 ▶ 7.5 HP

LOW TEMP

Model	Amb. (°C)	Capacity (kW)							Power Input (kW)						
		Evaporating Temperature (°C)							Evaporating Temperature (°C)						
		-40	-35	-30	-25	-20	-15	-10	-40	-35	-30	-25	-20	-15	-10
CZFM200	32	0.98	1.27	1.62	2.03	2.51	3.05	3.66	1.42	1.46	1.53	1.61	1.71	1.79	1.85
	38	0.90	1.17	1.50	1.88	2.32	2.83	3.39	1.60	1.63	1.70	1.79	1.89	1.98	2.05
	43	0.83	1.08	1.39	1.75	2.16	2.63	3.15	1.79	1.82	1.88	1.97	2.07	2.17	2.26
CZFM300	32	1.30	1.63	2.09	2.63	3.20	3.77	4.27	1.84	1.87	1.94	2.02	2.10	2.14	2.13
	38	1.19	1.50	1.94	2.44	2.97	3.47	3.91	2.05	2.10	2.18	2.27	2.35	2.39	2.36
	43	1.10	1.40	1.81	2.28	2.77	3.22	3.60	2.27	2.33	2.42	2.52	2.61	2.64	2.61
CZFM350	32	1.62	2.02	2.60	3.27	3.98	4.66	5.26	2.20	2.26	2.38	2.51	2.64	2.72	2.71
	38	1.48	1.86	2.40	3.03	3.67	4.28	4.79	2.47	2.55	2.69	2.84	2.98	3.06	3.04
	43	1.37	1.73	2.24	2.81				2.74	2.84	3.00	3.18			
CZFM400	32	1.92	2.40	3.07	3.90	4.85	5.87	6.95	2.10	2.21	2.33	2.46	2.58	2.71	2.81
	38	1.78	2.19	2.80	3.57	4.48	5.47	6.53	2.41	2.52	2.64	2.77	2.91	3.04	3.17
	43	1.67	2.00	2.56	3.29	4.16	5.13	6.16	2.74	2.84	2.96	3.09	3.23	3.37	3.51
CZFM500	32	2.40	2.93	3.69	4.66	5.81	7.09	8.49	2.70	2.84	3.01	3.18	3.34	3.47	3.55
	38	2.21	2.68	3.39	4.30	5.38	6.61	7.96	3.01	3.18	3.37	3.56	3.74	3.87	3.95
	43	2.03	2.46	3.11	3.98	5.02	6.20	7.50	3.33	3.53	3.75	3.96	4.15	4.29	4.37
CZFM600	32	2.89	3.56	4.50	5.66	7.01	8.51	10.11	3.21	3.36	3.58	3.83	4.06	4.22	4.30
	38	2.69	3.28	4.15	5.24	6.51	7.93	9.47	3.62	3.78	4.02	4.28	4.53	4.72	4.81
	43	2.50	3.04	3.85	4.87	6.09	7.46	8.93	4.02	4.19	4.43	4.71	4.97	5.17	5.28
CZFM750	32	3.64	4.46	5.63	7.10	8.79	10.65	12.66	3.86	4.06	4.34	4.64	4.93	5.16	5.26
	38	3.38	4.11	5.20	6.56	8.17	9.94	11.85	4.37	4.58	4.87	5.21	5.52	5.77	5.90
	43	3.13	3.80	4.82	6.11	7.64	9.33	11.16	4.87	5.08	5.39	5.73	6.06	6.33	6.49

Note: The rating condition is based on a suction superheat of 10 K, Subcool with the limits of the condensing unit.

PATTON PAK Slimline

CZF Microchannel Series

Condensing Units

Powered by Copeland Scroll

R448A / R449A

2.0 ▶ 7.5 HP

LOW TEMP

Model	Amb. (°C)	Capacity (kW)							Power Input (kW)						
		Evaporating Temperature (°C)							Evaporating Temperature (°C)						
		-40	-35	-30	-25	-20	-15	-10	-40	-35	-30	-25	-20	-15	-10
CZFM200	32	1.00	1.27	1.61	2.02	2.52	3.10	3.76	0.65	0.67	0.69	0.72	0.77	0.82	0.88
	38	0.93	1.18	1.50	1.90	2.36	2.90	3.52	0.74	0.75	0.78	0.81	0.85	0.90	0.96
	43	0.87	1.11	1.41	1.78	2.22	2.73	3.31	0.82	0.84	0.86	0.90	0.94	0.99	1.05
CZFM300	32	1.32	1.69	2.15	2.69	3.33	4.07	4.90	1.74	1.79	1.85	1.93	2.04	2.16	2.31
	38	1.23	1.58	2.01	2.51	3.11	3.79	4.56	2.00	2.04	2.10	2.18	2.27	2.39	2.54
	43	1.16	1.49	1.88	2.35	2.90	3.54	4.26	2.26	2.30	2.35	2.42	2.51	2.63	2.76
CZFM350	32	1.66	2.11	2.66	3.31	4.07	4.94	5.93	2.00	2.06	2.14	2.25	2.39	2.56	2.76
	38	1.54	1.97	2.48	3.08	3.78	4.58	5.50	2.29	2.35	2.44	2.55	2.68	2.85	3.04
	43	1.44	1.83	2.31	2.86	3.51	4.26	5.10	2.60	2.66	2.74	2.84	2.98	3.14	3.33
CZFM400	32	1.87	2.54	3.26	4.08	5.04	6.18	7.55	2.83	2.75	2.73	2.77	2.83	2.91	2.98
	38	1.71	2.33	2.99	3.73	4.61	5.68	6.94	3.35	3.23	3.17	3.18	3.22	3.28	3.34
	43	1.56	2.13	2.73	3.41	4.22	5.20	6.39	3.88	3.71	3.63	3.60	3.62	3.66	3.71
CZFM500	32	2.50	3.36	4.27	5.29	6.50	7.95	9.70	3.49	3.46	3.49	3.58	3.68	3.80	3.90
	38	2.42	3.22	4.06	5.00	6.10	7.43	9.05	4.10	4.03	4.03	4.08	4.17	4.28	4.37
	43	2.38	3.13	3.89	4.74	5.75	6.98	8.47	4.70	4.60	4.58	4.60	4.66	4.75	4.83
CZFM600	32	2.83	3.80	4.81	5.96	7.32	8.97	10.96	4.28	4.20	4.19	4.25	4.34	4.45	4.55
	38	2.56	3.48	4.43	5.48	6.73	8.23	10.06	4.98	4.83	4.78	4.80	4.87	4.96	5.05
	43	2.29	3.17	4.06	5.03	6.17	7.56	9.26	5.65	5.46	5.37	5.35	5.39	5.46	5.53
CZFM750	32	3.50	4.63	5.94	7.45	9.19	11.20	13.47	4.50	4.66	4.85	5.08	5.33	5.60	5.89
	38	3.20	4.25	5.45	6.85	8.47	10.32	12.42	5.06	5.24	5.46	5.70	5.96	6.26	6.58
	43	2.93	3.91	5.02	6.32	7.81	9.53	11.49	5.59	5.78	6.02	6.27	6.56	6.87	7.20

Note: The rating condition is based on a suction superheat of 10 K, Subcool with the limits of the condensing unit.

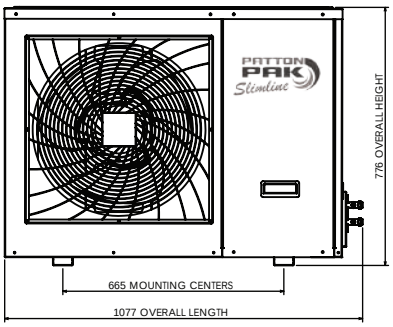
TECHNICAL DATA

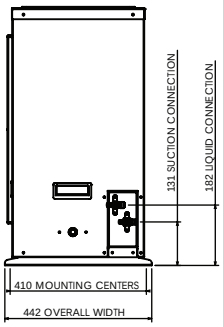
	MODEL NAME	CZFM200	CZFM300	CZFM350	CZFM400	CZFM500	CZFM600	CZFM750
Compressor	MODEL	ZF06KQE-TFD	ZF09KQE-TFD	ZF11KQE-TFD	ZF13KQE-TFD	ZF15KQE-TFD	ZF18KQE-TFD	ZF25KQE-TFD
	Rated Input Volt.	AC 380-420V/3PH/50Hz						
	RLA Amps	2.97	4.28	5.4	5.24	6.45	6.59	8.05
	MCC Amps	5	6	7.1	8	10.0	12.5	16.6
	LRA Amps	26	40	46	51.5	64	74	102
	Oil Type	POE(32cSt)						
	Oil Precharge (L)	0.6						
	Oil Quantity (L)	1.3	1.45	1.45	1.89	1.89	1.89	1.89
Condenser	Air Flow (m^3/h)	3400	3400	3400	5200	7350	7350	8700
	Fan Motor (1)	1x20"	1x20"	1x20"	1x20"	2x18"	2x18"	2x20"
	Total Fan Power (W)	236	236	236	236	472	472	472
	Reciever (L)	4.7	4.7	4.7	4.7	4.7	7.9	7.9
	Accumulator (L)	1.9	1.9	1.9	1.9	4.6	4.6	4.6
	Suction Tube Size	3/4"	3/4"	3/4"	3/4"	7/8"	7/8"	7/8"
	Liquid Tube Size	3/8"	3/8"	3/8"	3/8"	1/2"	1/2"	1/2"
	Weight (kg)	82	84	85	104	116	124	135

Note : 1. All Fan 220-240V/1PH/50Hz (5 uf Capacitor)

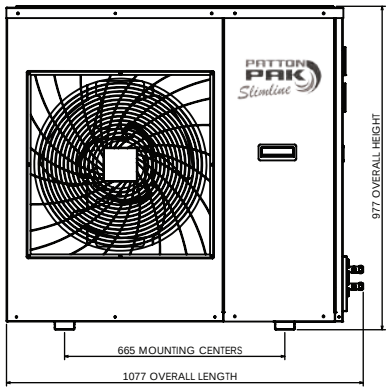
DIMENSION

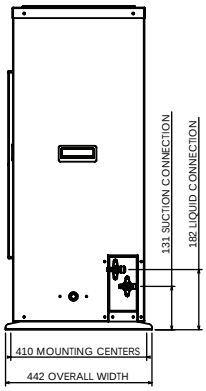
CZFM200
CZFM300
CZFM350



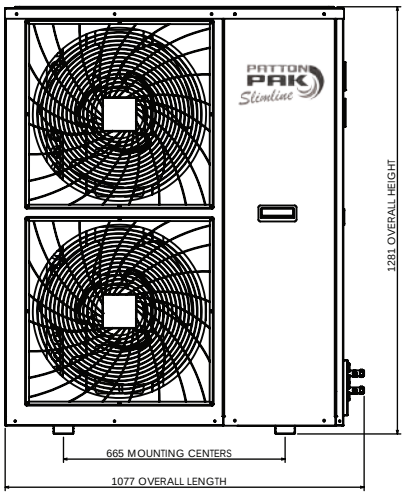


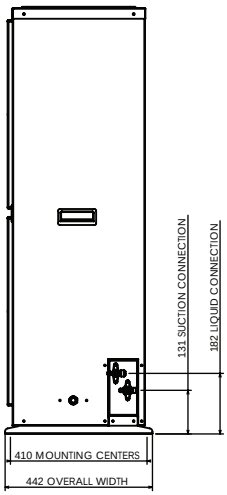
CZFM400





CZFM500
CZFM600
CZFM750





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