PATTON PAK Slimline

SCMREF THAI

CZBD Microchannel Series

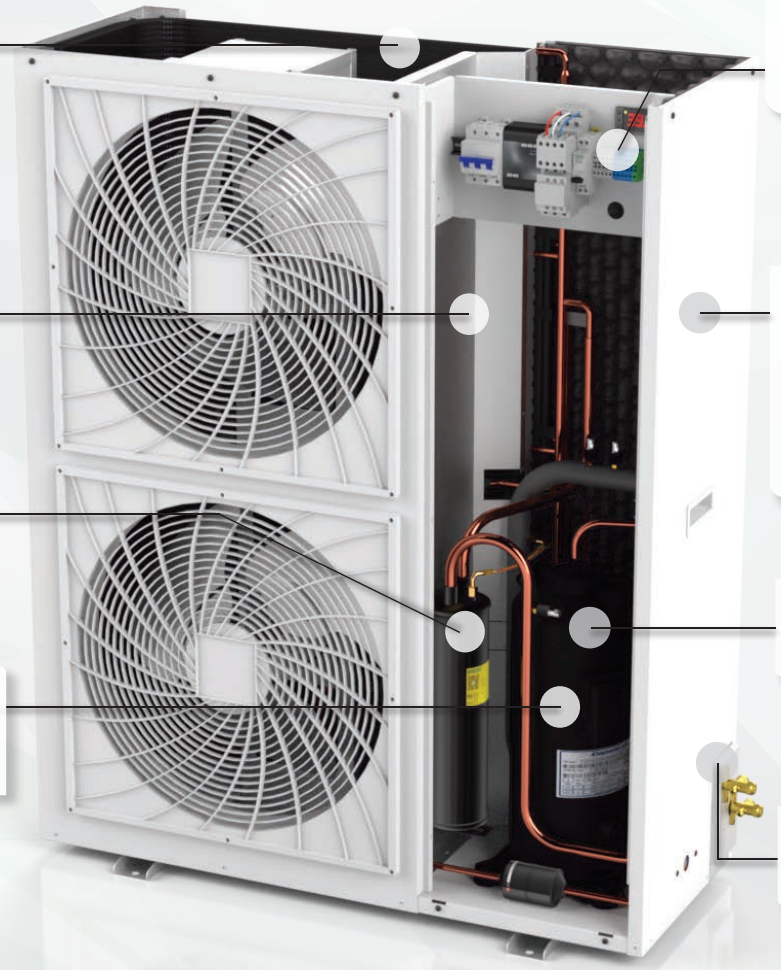
Powered by Copeland Digital Scroll

- Microchannel condenser
- Generous low noise level condensers
- Web monitoring readiness
- 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
- Phase protection
- Discharge gas overheat protection
- Hi/Low pressure protection
- Web monitoring readiness
- Easy access front door design
- Galvanized steel casing with powder coating
  -High corrosion resistance
- Stainless steel casing SUS304 (optional)
- Additional oil pre-charged
- Copeland digital scroll compressor
- Compressor sound jacket
- Sound insulation casing
- 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

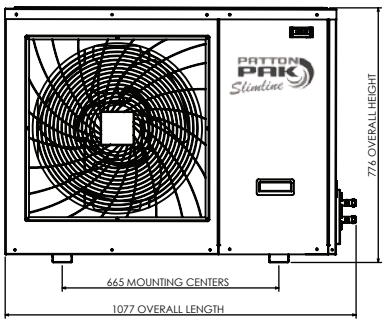
Note: The rating condition is based on a suction return gas 20°C, Subcool with the limits of the condensing unit.

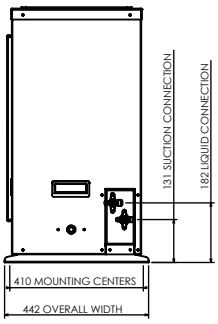
TECHNICAL DATA

	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	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

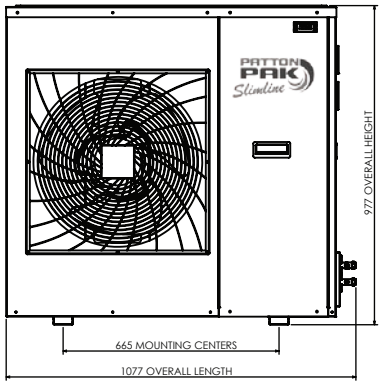
DIMENSION

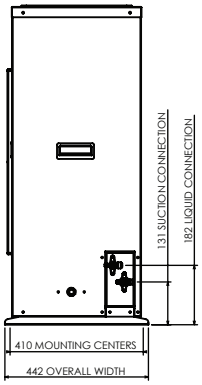
CZBDM300



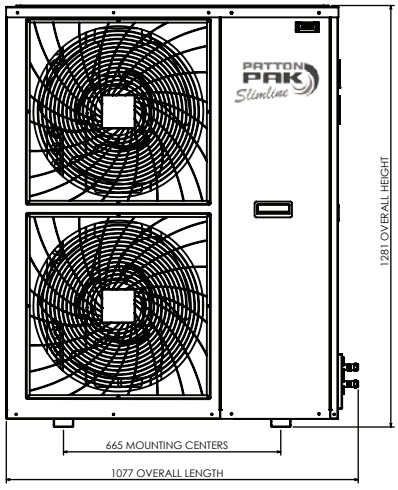


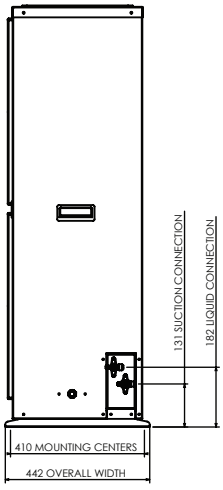
CZBDM399





CZBDM400
CZBDM500
CZBDM600
CZBDM750





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