

Copeland

F-series hermetic condensing units - 50Hz



Product Catalogue

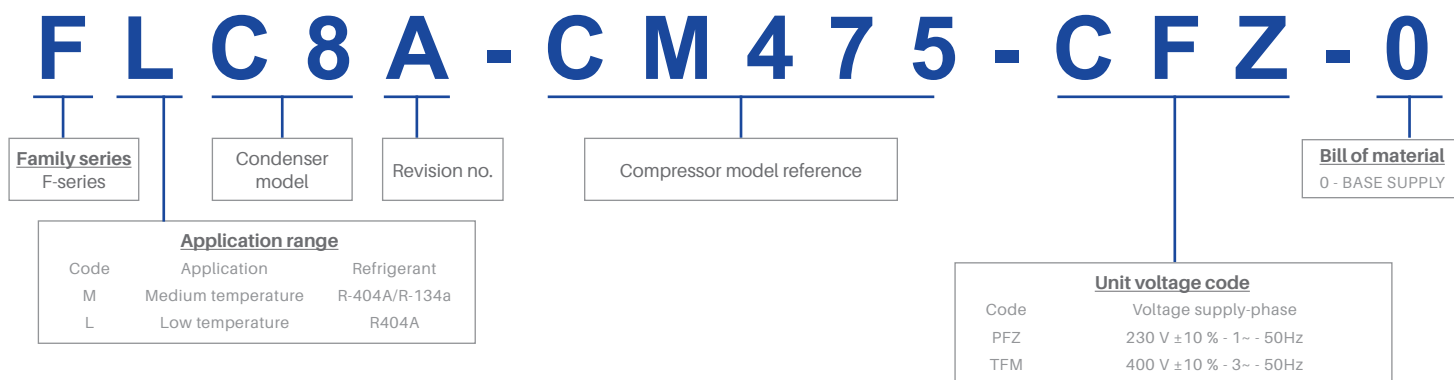
For medium and low temperature applications

COPELAND

Key features of scroll units

- Compact design
- High efficiency Copeland™ compressors
- Energy efficient silent fans
- Condenser coils designed for high ambient
- Liquid receiver as standard feature
- Optimal layout of components for easy serviceability

Nomenclature



Scroll compressor features

- HP/LP switch
- Crankcase heater

Performance data

Medium temperature

R22

Model (no. of fans)	Ambient temperature (°C)	Capacity (kW)						Total power input (kW)					
		-15	-10	-5	0	5	7	-15	-10	-5	0	5	7
FMC8A-CJ513-CFZ 1	32	1.69	1.93	2.29	2.80	3.45	3.76	1.14	1.19	1.26	1.34	1.44	1.48
	38	1.51	1.72	2.06	2.54	3.17	3.47	1.17	1.22	1.29	1.38	1.48	1.53
	43	1.38	1.56	1.88	2.34	2.95	3.25	1.19	1.25	1.33	1.42	1.52	1.57
	46	1.31	1.48	1.78	2.23	2.83	3.12	1.21	1.27	1.35	1.44	1.55	1.60
FMD8A-CR 22-CFZ 1	32	2.14	2.81	3.50	4.25	5.09	5.45	1.20	1.36	1.50	1.63	1.77	1.83
	38	1.87	2.51	3.16	3.84	4.60	4.93	1.19	1.37	1.53	1.68	1.83	1.90
	43	1.63	2.25	2.86	3.50	4.20	4.50	1.16	1.36	1.54	1.71	1.88	1.95
	46		2.10	2.68	3.29	3.95	4.23		1.35	1.54	1.72	1.90	1.97
FMD8A-CR 30-CFZ 1	32	2.65	3.42	4.27	5.18	6.14	6.54	1.43	1.67	1.91	2.15	2.38	2.46
	38	2.31	3.05	3.85	4.70	5.60	5.96	1.41	1.69	1.96	2.23	2.47	2.56
	43		2.74	3.50	4.31	5.15	5.49		1.70	2.00	2.28	2.53	2.63
	46		2.56	3.30	4.08	4.89	5.22		1.70	2.01	2.30	2.56	2.66
FMH8A-CR 36-CFZ 1	32	3.49	4.48	5.57	6.76	8.06	8.60	1.83	2.05	2.27	2.48	2.68	2.77
	38	3.01	3.98	5.02	6.16	7.37	7.87	1.85	2.10	2.35	2.59	2.84	2.93
	43	2.62	3.57	4.58	5.67	6.81	7.28	1.85	2.12	2.40	2.68	2.95	3.06
	46		3.34	4.33	5.39	6.49	6.95		2.13	2.42	2.72	3.01	3.13
FMH8A-CR 36-TFM 1	32	3.47	4.47	5.55	6.74	8.01	8.54	1.83	2.05	2.26	2.47	2.68	2.76
	38	3.06	4.00	5.03	6.14	7.33	7.82	1.83	2.09	2.35	2.59	2.83	2.93
	43	2.70	3.61	4.60	5.65	6.77	7.24	1.82	2.11	2.40	2.68	2.95	3.06
	46		3.38	4.34	5.37	6.45	6.90		2.12	2.42	2.72	3.02	3.13
FMM8A-CR 42-TFM 1	32	4.30	5.38	6.64	8.07	9.66	10.34	2.12	2.37	2.64	2.92	3.20	3.31
	38	3.88	4.89	6.05	7.36	8.82	9.45	2.14	2.43	2.75	3.07	3.38	3.50
	43	3.54	4.47	5.55	6.77	8.13	8.70	2.14	2.47	2.81	3.16	3.51	3.64
	46		4.22	5.25	6.42	7.71	8.26		2.48	2.84	3.21	3.57	3.71
FMR6A-CR 53-TFM 2	32	5.82	7.08	8.58	10.29	12.22	13.05	2.83	3.10	3.40	3.71	4.01	4.12
	38	5.35	6.56	7.96	9.57	11.37	12.13	3.00	3.31	3.67	4.04	4.41	4.54
	43		6.11	7.46	8.98	10.68	11.40		3.53	3.92	4.33	4.73	4.88
	46		5.87	7.18	8.66	10.30	11.00		3.67	4.07	4.50	4.92	5.08
FMR7A-CR 62-TFM 2	32	6.76	8.28	10.03	11.99	14.19	15.13	3.70	4.02	4.32	4.61	4.88	4.98
	38	6.29	7.73	9.36	11.20	13.23	14.11	3.94	4.32	4.68	5.03	5.36	5.49
	43		7.26	8.80	10.52	12.44	13.25		4.53	4.95	5.35	5.73	5.88
	46		6.97	8.46	10.13	11.96	12.75		4.64	5.09	5.52	5.94	6.10

Note: Operating conditions : 20°C suction gas return temperature and 0 K subcooling

1. At 3K Subcooling, capacity increases by approximately 5%
2. Stated power values are inclusive of fan power

Performance data

Low temperature

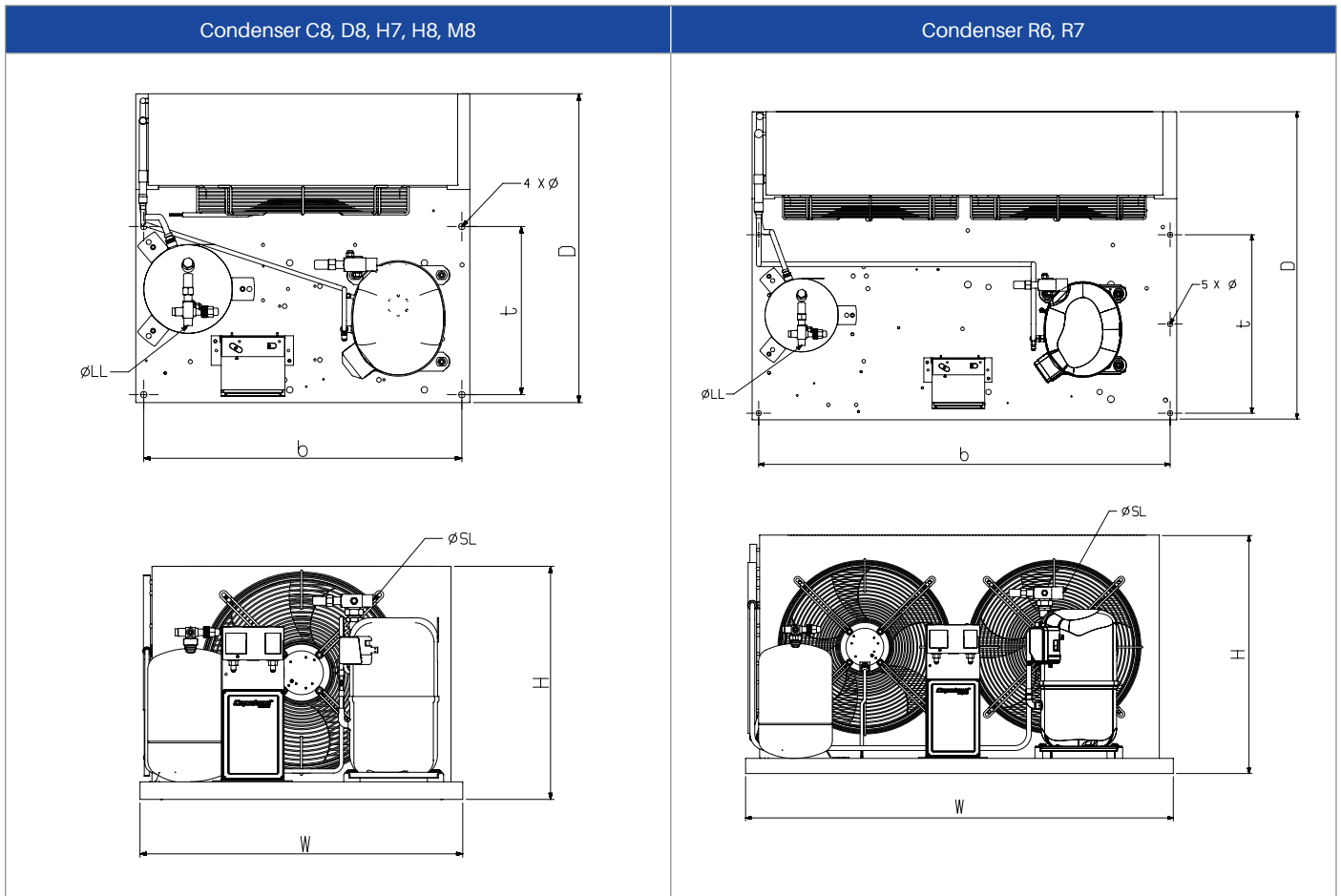
R404A

Model (no. of fans)	Ambient temperature (°C)	Capacity (kW)						Total power input (kW)					
		-35	-30	-25	-20	-15	-10	-35	-30	-25	-20	-15	-10
FLC8A-CM475-CFZ 1	32	1.08	1.38	1.77	2.27	2.89	3.63	0.89	0.96	1.05	1.19	1.43	1.81
	38	0.92	1.24	1.64	2.13	2.73	3.42	0.99	1.07	1.17	1.32	1.57	1.94
	43	0.79	1.12	1.52	2.00	2.56	3.18	1.08	1.17	1.27	1.42	1.66	2.02
	46	0.68	1.03	1.42	1.89	2.42		1.14	1.23	1.33	1.48	1.71	
FLH7A-CM512-TFM 1	32	1.42	2.12	2.89	3.71	4.59	5.52	1.40	1.65	2.04	2.51	3.00	3.47
	38	1.28	1.87	2.55	3.30	4.14	5.06	1.51	1.73	2.11	2.58	3.09	3.58
	43	0.97	1.54	2.19	2.94	3.78	4.72	1.62	1.81	2.17	2.64	3.16	3.67
	46	0.75	1.31	1.97	2.73	3.59		1.70	1.87	2.22	2.68	3.20	
FLH7A-CM515-TFM 1	32	1.55	2.31	3.11	3.97	4.86	5.80	1.61	2.00	2.37	2.73	3.12	3.57
	38	1.34	1.97	2.69	3.49	4.36	5.30	1.66	2.04	2.40	2.77	3.19	3.68
	43	1.03	1.62	2.32	3.12	4.01		1.70	2.06	2.42	2.81	3.25	
	46	0.84	1.42	2.12	2.94			1.74	2.09	2.45	2.84		
FLH8A-CM517-TFM 1	32	1.97	2.81	3.65	4.55	5.57	6.72	2.13	2.58	3.02	3.46	3.92	4.42
	38	1.74	2.47	3.22	4.05	4.99	6.09	2.12	2.58	3.03	3.50	3.99	4.53
	43	1.43	2.12	2.85	3.65	4.59		2.13	2.59	3.06	3.55	4.07	
	46	1.25	1.94	2.66	3.47			2.15	2.61	3.09	3.60		
FLH8A-CM520-TFM 1	32	2.09	2.96	3.88	4.87	5.94	7.10	2.18	2.62	3.19	3.82	4.45	4.98
	38	1.93	2.72	3.57	4.48	5.46	6.54	2.25	2.76	3.39	4.06	4.70	5.24
	43	1.67	2.44	3.24	4.11	5.05		2.34	2.88	3.53	4.22	4.85	
	46	1.48	2.23	3.02	3.87			2.37	2.93	3.59	4.27		

Note: Operating conditions : 20°C suction gas return temperature and 0 K subcooling

1. At 3K Subcooling, capacity increases by approximately 5%
2. Stated power values are inclusive of fan power

Medium and low temperature models



Mechanical data

Condensing unit model	Compressor model	Receiver capacity (l)	Air flow (m3/s)	Depth/width [D / W]	Height [H] (mm)	Base mounting Ø [b x t] (mm)	Suction Ø [SL] (")	Liquid Ø [LL] (")	Net weight (kg)	Gross weight (kg)
FMC8A-CJ513-CFZ	KCJ513HAE-S322H	3.3	0.46	570/560	445	530 x 330 (11)	1/2	1/2	46	56
FMD8A-CR 22-CFZ	CR22K6M-PF1-101	3.9	0.51	570/560	445	530 x 330 (11)	5/8	1/2	53	63
FMD8A-CR 30-CFZ	CR30K6M-PF1-101	3.9	0.51	570/560	445	530 x 330 (11)	5/8	1/2	56	66
FMH8A-CR 36-CFZ	CR36K6M-PFZ-101	7.9	1.00	680/735	531	700 x 370 (14)	3/4	1/2	74	89
FMH8A-CR 36-TFM	CR36K6M-TFM-121	7.9	1.00	680/735	531	700 x 370 (14)	3/4	1/2	70	85
FMM8A-CR 42-TFM	CR42K6M-TFM-101	7.9	0.92	730/735	708	700 x 390 (14)	7/8	1/2	80	97
FMR6A-CR 53-TFM	CR53KQM-TFD-201	7.9	1.29	820/1130	630	1095 x 475 (14)	7/8	1/2	102	142
FMR7A-CR 62-TFM	CR62KQM-TFD-201	7.9	1.97	820/1130	630	1095 x 475 (14)	1 1/8	1/2	102	142
FLC8A-CM475-CFZ	KCM475LAL-C312H	3.3	0.46	570/560	445	530 x 330 (11)	3/4	1/2	56	66
FLH7A-CM512-TFM	KCM512LAL-E512H	3.9	0.67	680/735	531	700 x 370 (14)	3/4	1/2	72	87
FLH7A-CM515-TFM	KCM515LAL-E512H	3.9	0.67	680/735	531	700 x 370 (14)	3/4	1/2	72	87
FLH8A-CM517-TFM	KCM517LAL-E514H	7.9	1.00	680/735	531	700 x 370 (14)	7/8	1/2	75	90
FLH8A-CM520-TFM	KCM520LAL-E514H	7.9	1.00	680/735	531	700 x 370 (14)	7/8	1/2	75	90

Electrical data

Condensing unit model	Compressor model	Compressor maximum operating current (A)	Compressor locked rotor current (A)	Condenser fan (qty x model)	Condenser fan current 230V/1/50Hz (A)
FMC8A-CJ513-CFZ	KCJ513HAE-S322H	7.5	36	1 X 121	0.6
FMD8A-CR 22-CFZ	CR22K6M-PF1-101	9.3	54	1 X 121	0.6
FMD8A-CR 30-CFZ	CR30K6M-PF1-101	12.6	72	1 X 121	0.6
FMH8A-CR 36-CFZ	CR36K6M-PFZ-101	16.3	85	1 X 271	1.25
FMH8A-CR 36-TFM	CR36K6M-TFM-101	5.9	41	1 X 271	1.25
FMM8A-CR 42-TFM	CR42K6M-TFM-101	7.0	45	1 X 271	1.25
FMR6A-CR 53-TFM	CR53KQM-TFD-201	9.1	61	2 X 121	0.6
FMR7A-CR 62-TFM	CR62KQM-TFD-201	9.6	55	2 X 271	1.25
FLC8A-CM475-CFZ	KCM475LAL-C312H	9.6	72	1 x 121	0.6
FLH7A-CM512-TFM	KCM512LAL-E512H	6.2	45	1 x 121	0.6
FLH7A-CM515-TFM	KCM515LAL-E512H	7.3	45	1 x 121	0.6
FLH8A-CM517-TFM	KCM517LAL-E514H	8.4	61	1 x 271	1.25
FLH8A-CM520-TFM	KCM520LAL-E514H	9.1	55	1 x 271	1.25

About Copeland

Copeland, a global provider of sustainable climate solutions, combines category-leading brands in compression, controls, software and monitoring for heating, cooling and refrigeration. With best-in-class engineering and design and the broadest portfolio of modulated solutions, we're not just setting the standard for compressor leadership; we're pioneering its evolution. Combining our technology with our smart energy management solutions, we can regulate, track and optimize conditions to help protect temperature-sensitive goods over land and sea, while delivering comfort in any space. Through energy-efficient products, regulation-ready solutions and expertise, we're revolutionizing the next generation of climate technology for the better. For more information, visit copeland.com.

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