

Copeland Scroll™ Indoor Condensing Units for Refrigeration

Copeland® air-cooled condensing units for medium temperature and low temperature applications.

Copeland Scroll™ condensing units are equipped with the latest refrigeration scroll compressors and build the widest range of its kind. The modular line concept offers base units which can be adapted to the target application by various options including weather housings and fan speed controls.

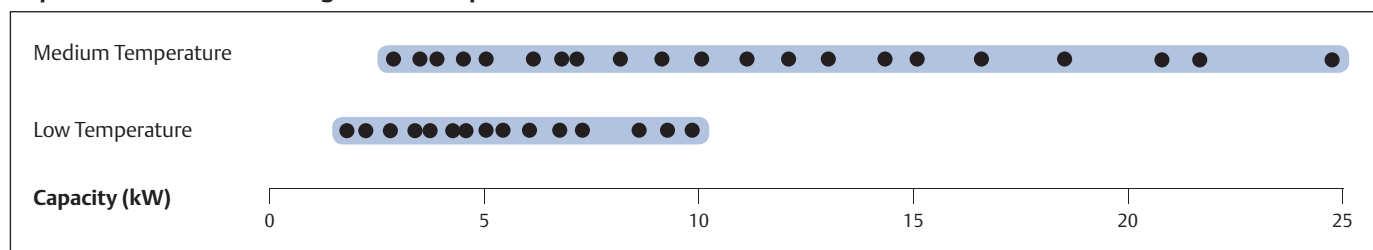
Copeland Scroll™ condensing units are available with normal or high capacity condensers to ensure optimum performance even under extreme conditions. They are equipped with dedicated medium or low temperature compressors which makes them suitable for all general refrigeration applications, such as:

- Mini markets and supermarkets
- Bars, restaurants and kitchens
- Beer cellars and beverage coolers
- Cold rooms
- Milk cooling tank



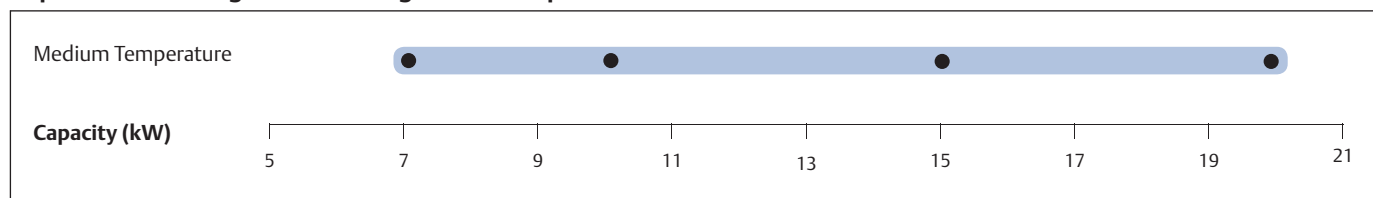
*Copeland Scroll™
Indoor Condensing Unit*

Copeland Scroll™ Condensing Units Line-up



Conditions EN13215 R404A: Evaporating Temperature MT -10°C/LT -35°C, Ambient Temperature 32°C, Suction Gas Return 20°C

Copeland Scroll™ Digital Condensing Units Line-up



Conditions EN13215 R404A: Evaporating Temperature -10°C, Ambient Temperature 32°C, Suction Gas Return 20°C

Features and Benefits

- Standard equipment: base plate, scroll compressor, crankcase heater, condenser with 1ph fan(s), HP and LP switch, liquid receiver with rotalock-valve, suction- and discharge shut-off valves
- Suitable for multiple refrigerants: R404A, R507, R134a, R407C, R22
- Wide range of quality accessories
- Excellent efficiency

Maximum Allowable Pressures (PS)

- Low Side PS 22.5 bar (g)
- High Side PS = 28 bar (g)

Technical Overview

R404A	Capacity (kW)	Receiver Capacity (l)	Number of fans	Total Fan Motor Power (W)	Suction Line Diameter (inch)	Liquid Line Diameter (inch)	Width/Depth/Heigh (mm)	Net Weight (kg)	Motor Version/ Code		Maximum Operating Current, A		Locked Rotor Current, A		Sound Pressure
									1 Ph*	3 Ph**	1 Ph*	3 Ph**	1 Ph*	3 Ph**	@10 m - d(BA)***
Medium Temperature Models															
MC-D8-ZB15KE	3.3	3.9	1	110	3/4"	1/2"	560/570/446	48	PFJ	TFD	13	5	58	26	46
MC-H8-ZB15KE	3.6	7.9	1	235	3/4"	1/2"	735/680/533	57	PFJ	TFD	13	5	58	26	49
MC-D8-ZB19KE	3.9	3.9	1	110	3/4"	1/2"	560/570/446	49	PFJ	TFD	13	7	61	32	46
MC-H8-ZB19KE	4.3	7.9	1	235	3/4"	1/2"	735/680/533	61	PFJ	TFD	13	7	61	32	49
MC-K9-ZB19KE	4.3	7.9	2	220	3/4"	1/2"	950/640/454	67	PFJ	TFD	13	7	61	32	48
MC-D8-ZB21KE	4.4	3.9	1	110	7/8"	1/2"	560/570/446	50	PFJ	TFD	16	7	82	40	46
MC-H8-ZB21KE	5.1	7.9	1	235	7/8"	1/2"	735/680/533	61	PFJ	TFD	16	7	82	40	49
MC-K9-ZB21KE	5.1	7.9	2	220	7/8"	1/2"	950/640/454	68	PFJ	TFD	16	7	82	40	48
MC-H8-ZB26KE	5.6	7.9	1	235	7/8"	1/2"	735/680/533	62	PFJ	TFD	18	9	97	46	49
MC-K9-ZB26KE	5.6	7.9	2	220	7/8"	1/2"	950/640/454	68	PFJ	TFD	18	9	97	46	48
MC-H8-ZB30KE	6.4	7.9	1	235	7/8"	1/2"	735/680/533	74	PFJ	TFD	26	10	142	49	49
MC-M8-ZB30KE	6.8	7.9	1	235	7/8"	1/2"	735/730/708	87	PFJ	TFD	26	10	142	49	49
MC-P8-ZB30KE	7.1	7.9	2	220	7/8"	1/2"	950/640/633	87		TFD		10		49	49
MC-H8-ZB38KE	7.3	7.9	1	235	7/8"	1/2"	735/680/533	77	PFJ	TFD	32	13	142	66	49
MC-M8-ZB38KE	8.0	7.9	1	235	7/8"	1/2"	735/730/708	89	PFJ	TFD	32	13	142	66	49
MC-P8-ZB38KE	8.4	7.9	2	220	7/8"	1/2"	950/640/633	89	PFJ	TFD	32	13	142	66	49
MC-M8-ZB42KE	8.7	7.9	1	235	7/8"	1/2"	735/730/708	91	PFJ		36		150		49
MC-M8-ZB45KE	8.9	7.9	1	235	7/8"	1/2"	735/730/708	91		TFD		13		74	49
MC-M9-ZB45KE	9.6	7.9	1	400	7/8"	1/2"	735/730/708	96		TFD		13		74	49
MC-R7-ZB42KE	9.8	7.9	2	470	7/8"	1/2"	1130/680/633	101	PFJ		36		150		53
MC-R7-ZB45KE	10.1	7.9	2	470	7/8"	1/2"	1130/680/633	101		TFD		13		74	50
MC-R7-ZB50KE	11.4	7.9	2	470	1 3/8"	1/2"	1130/820/621	110		TFD		15		100	49
MC-S9-ZB50KE	12.0	11.7	2	470	1 3/8"	5/8"	1130/820/707	113		TFD		15		100	49
MC-R7-ZB58KE	12.4	7.9	2	470	7/8"	1/2"	1130/680/633	110		TFD		15		95	49
MC-S9-ZB58KE	13.1	11.7	2	470	7/8"	1/2"	1130/820/703	113		TFD		15		95	50
MC-S9-ZB66KE	14.5	11.7	2	470	1 3/8"	5/8"	1130/820/707	116		TFD		18		111	50
MC-V9-ZB66KE	15.1	15.8	2	470	1 3/8"	3/4"	1330/820/821	150		TFD		18		111	50
MC-V9-ZB76KE	17.2	15.8	2	470	1 3/8"	3/4"	1330/820/835	151		TFD		20		118	50
MC-V6-ZB76KE	18.5	15.8	2	800	1 3/8"	3/4"	1330/820/835	168		TFD		20		118	55
MC-V9-ZB95KE	19.3	15.8	2	470	1 3/8"	3/4"	1330/820/835	155		TFD		28		140	51
MC-V6-ZB95KE	21.5	15.8	2	800	1 3/8"	3/4"	1330/820/835	172		TFD		28		140	55
MC-V6-ZB114KE	24.3	15.8	2	800	1 3/8"	3/4"	1330/820/835	174		TFD		33		174	55
MC-W9-ZB114KE	24.6	15.8	2	800	1 3/8"	3/4"	1640/820/864	174		TFD		33		174	55
Digital Medium Temperature Models															
MC-M8-ZBD30	6.9	11.7	1	235	7/8"	5/8"	735/730/708	87		TFD		8		52	49
MC-M9-ZBD45	9.9	11.7	1	400	7/8"	5/8"	735/730/708	96		TFD		12		74	49
MC-V6-ZBDT60	14.9	18.9	2	800	1 3/8"	3/4"	1330/820/835	207		TFD		8+10		52+49	55
MC-V6-ZBDT90	20.4	18.9	2	800	1 3/8"	3/4"	1330/820/835	218		TFD		11+13		2x74	55

Conditions EN13215: R404A, Evaporating Temperature MT -10°C/ LT -35°C, Ambient Temperature 32°C, Suction Gas Return 20°C

* 1 Ph: 230V/ 50Hz

** 3 Ph: 380-420V/ 50Hz

*** @ 10m: sound pressure level at 10m distance from the compressor, free field condition

Technical Overview

R404A	Capacity (kW)	Receiver Capacity (l)	Number of fans	Total Fan Motor Power (W)	Suction Line Diameter (inch)	Liquid Line Diameter (inch)	Width/Depth/Height (mm)	Net Weight (kg)	Motor Version/ Code		Maximum Operating Current, A		Locked Rotor Current, A		Sound Pressure
									1 Ph*	3 Ph**	1 Ph*	3 Ph**	1 Ph*	3 Ph**	@10 m d(BA)***
Low Temperature Models															
MC-B8-ZF06KE	1.3	3.3	1	85	7/8"	1/2"	560/570/396	64		TFD		5		26	47
MC-D8-ZF09KE	1.9	3.9	1	110	7/8"	1/2"	560/570/446	64		TFD		6		40	47
MC-H8-ZF09KE	2.0	7.9	1	235	7/8"	1/2"	735/680/533	66		TFD		6		40	49
MC-H8-ZF11KE	2.5	7.9	1	235	7/8"	1/2"	735/680/533	67		TFD		7		46	49
MC-H8-ZF13KE	2.8	7.9	1	235	7/8"	1/2"	735/680/533	77		TFD		8		52	50
MC-M8-ZF13KE	2.8	7.9	1	235	7/8"	1/2"	735/730/708	85		TFD		8		52	49
MC-H8-ZF15KE	3.3	7.9	1	235	7/8"	1/2"	735/680/533	83		TFD		10		64	50
MC-M8-ZF15KE	3.4	7.9	1	235	7/8"	1/2"	735/730/708	86		TFD		10		64	50
MC-M8-ZF18KE	4.1	7.9	1	235	7/8"	1/2"	735/730/708	88		TFD		13		74	50
MC-M9-ZF18KE	4.2	7.9	1	400	7/8"	1/2"	735/730/708	96		TFD		13		74	50
MC-P8-ZF24KE	5.0	7.9	2	220	1 3/8"	1/2"	950/640/633	146		TWD		16		99	52
MC-S9-ZF24KE	5.3	11.7	2	470	1 3/8"	1/2"	1130/820/708	170		TWD		16		99	54
MC-R7-ZF33KE	6.8	11.7	2	470	1 3/8"	5/8"	1130/820/633	160		TWD		22		127	55
MC-V9-ZF33KE	7.1	11.7	2	470	1 3/8"	5/8"	1330/820/835	195		TWD		22		127	55
MC-S9-ZF40KE	8.4	11.7	2	470	1 3/8"	5/8"	1130/820/708	180		TWD		25		167	55
MC-V6-ZF40KE	8.9	11.7	2	800	1 3/8"	5/8"	1330/820/835	218		TWD		25		167	57
MC-S9-ZF48KE	9.6	11.7	2	470	1 3/8"	5/8"	1130/820/708	189		TWD		29		198	55

Conditions EN13215: R404A, Evaporating Temperature MT -10°C/ LT -35°C, Ambient Temperature 32°C, Suction Gas Return 20°C

* 1 Ph: 230V/ 50Hz

** 3 Ph: 380-420V/ 50Hz

*** @ 10m: sound pressure level at 10m distance from the compressor, free field condition

Capacity Data

R404A	Cooling Capacity (kW)						
	Ambient Temperature: 32°C						
	Evaporating Temperature (°C)						
	-45	-35	-30	-20	-10	-5	5
Medium Temperature Models							
MC-D8-ZB15KE			1.2*	2.2	3.3	3.8	5.0
MC-H8-ZB15KE**			1.5	2.5	3.6	4.3	5.8
MC-D8-ZB19KE			1.7*	2.8	3.9	4.5	5.8
MC-H8-ZB19KE**			2.0	3.1	4.3	5.1	6.8
MC-K9-ZB19KE**			2.1	3.1	4.3	5.1	6.8
MC-D8-ZB21KE			1.9*	3.2	4.4	5.0	6.4
MC-H8-ZB21KE**			2.4	3.6	5.1	5.9	7.8
MC-K9-ZB21KE**			2.4	3.6	5.1	5.9	7.8
MC-H8-ZB26KE			2.4*	4.1	5.7	6.6	8.6
MC-K9-ZB26KE**			2.4*	4.1	5.7	6.6	8.7
MC-H8-ZB30KE		2.1*	2.7	4.6	6.4	7.4	9.6
MC-M8-ZB30KE**		2.2*	3.2	4.8	6.8	7.9	10.5
MC-P8-ZB30KE**		2.3*	3.3	5.0	7.1	8.3	11.1
MC-H8-ZB38KE		2.5*	3.2	5.3	7.3	8.4	10.7
MC-M8-ZB38KE**		2.7*	3.4	5.7	8.0	9.2	12.0
MC-P8-ZB38KE**		2.7*	3.4	5.7	8.0	9.2	12.0
MC-M8-ZB45KE		3.0*	3.9	6.5	8.9	10.3	13.2
MC-M9-ZB45KE**		3.2*	4.1	6.9	9.6	11.1	14.5
MC-R7-ZB45KE**		3.3*	4.8	7.1	10.1	11.8	15.6
MC-R7-ZB50KE			3.1*	7.5	11.4	13.4	17.7
MC-S9-ZB50KE**			3.3*	7.9	12.0	14.2	18.9
MC-R7-ZB58KE			4.1*	8.5	12.4	14.5	18.8
MC-S9-ZB58KE**			4.4*	8.9	13.1	15.4	20.3
MC-S9-ZB66KE			6.0*	10.3	14.5	16.8	21.7
MC-V9-ZB66KE**			6.2*	10.7	15.1	17.6	23.0
MC-V9-ZB76KE			6.9*	12.2	17.2	19.9	25.8
MC-V6-ZB76KE**			7.4*	12.9	18.5	21.6	28.7
MC-V9-ZB95KE				12.2*	19.3	22.3	28.7
MC-V6-ZB95KE**			7.8*	14.9	21.5	25.2	33.1
MC-V6-ZB114KE			8.4*	16.6	24.3	28.4	37.3
MC-W9-ZB114KE**			8.5*	16.8	24.6	28.8	38.0
Digital Medium Temperature Models							
MC-M8-ZBD30KE			3.0*	5.0	6.9	8.0	10.5
MC-M9-ZBD45KE			3.7*	6.7	9.9	11.8	16.1
MC-V6-ZBDT60KE			7.0	10.4	14.9	17.6	23.6
MC-V6-ZBDT90KE			8.0*	14.1	20.4	24.1	32.5

R404A	Power Input (kW)						
	Ambient Temperature: 32°C						
	Evaporating Temperature (°C)						
	-45	-35	-30	-20	-10	-5	5
Medium Temperature Models							
MC-D8-ZB15KE			1.8*	1.9	2.0	2.0	
MC-H8-ZB15KE**			1.8	1.9	1.9	1.9	1.9
MC-D8-ZB19KE			2.1*	2.3	2.4	2.5	2.7
MC-H8-ZB19KE**			2.1	2.1	2.2	2.3	2.4
MC-K9-ZB19KE**			2.0	2.1	2.2	2.3	2.4
MC-D8-ZB21KE			2.5*	2.8	3.1	3.2	3.5
MC-H8-ZB21KE**			2.5	2.6	2.7	2.8	3.0
MC-K9-ZB21KE**			2.4	2.6	2.7	2.8	3.0
MC-H8-ZB26KE			2.9*	3.1	3.3	3.4	3.7
MC-K9-ZB26KE**			2.9*	3.1	3.3	3.4	3.6
MC-H8-ZB30KE		3.3*	3.4	3.7	3.9	4.1	4.4
MC-M8-ZB30KE**		3.1*	3.3	3.4	3.6	3.7	4.0
MC-P8-ZB30KE**		3.1*	3.2	3.3	3.5	3.5	3.8
MC-H8-ZB38KE		4.2*	4.3	4.8	5.2	5.4	6.0
MC-M8-ZB38KE**		4.0*	4.1	4.4	4.8	5.0	5.4
MC-P8-ZB38KE**		4.0*	4.1	4.4	4.8	5.0	5.4
MC-M8-ZB45KE		4.6*	4.8	5.3	5.7	6.0	6.5
MC-M9-ZB45KE**		4.6*	4.8	5.1	5.5	5.7	6.1
MC-R7-ZB45KE**		4.6*	4.7	5.0	5.3	5.4	5.8
MC-R7-ZB50KE			5.5*	6.0	6.5	6.7	7.2
MC-S9-ZB50KE**			5.3*	5.8	6.1	6.3	6.7
MC-R7-ZB58KE			6.1*	6.7	7.3	7.6	8.3
MC-S9-ZB58KE**			5.9*	6.4	6.9	7.1	7.7
MC-S9-ZB66KE			6.6*	7.4	7.9	8.2	8.9
MC-V9-ZB66KE**			6.5*	7.1	7.6	7.8	8.5
MC-V9-ZB76KE			7.5*	8.3	9.0	9.4	10.3
MC-V6-ZB76KE**			7.4*	8.0	8.6	8.9	9.6
MC-V9-ZB95KE				11.2*	12.4	13.0	14.3
MC-V6-ZB95KE**			10.2*	10.7	11.4	11.9	13.0
MC-V6-ZB114KE			12.5*	13.3	14.3	14.8	16.2
MC-W9-ZB114KE**			12.4*	13.2	14.1	14.7	16.0
Digital Medium Temperature Models							
MC-M8-ZBD30KE			2.5*	3.0	3.4	3.6	4.0
MC-M9-ZBD45KE			4.4*	4.9	5.5	5.8	6.7
MC-V6-ZBDT60KE			5.8	6.3	6.7	7.0	7.5
MC-V6-ZBDT90KE			8.8*	9.6	10.4	10.8	11.9

Conditions: EN13215: Suction Gas Return 20°C, Subcooling 0K

* Conditions: EN13215: Suction Superheat 10K

** Models for high ambient temperatures