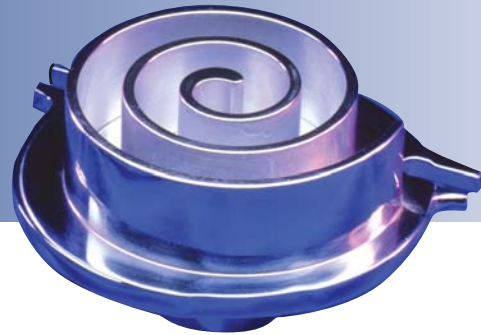


Copeland Scroll™ Condensing Units

Medium and Low
Temperature

1.5 - 10 HP
for use with R-404A

This product being released between June and October 2004



- HFC Refrigerant
- Better Reliability, quieter, and less weight
- Units are featured with Best-in-Class Flow Controls components
 - EK Filter Drier
 - Hermetic Moisture Indicator (HMI)
 - Liquid Solenoid with Coil

Copeland®


EMERSON™
Climate Technologies

Medium Temperature R-404A Scroll Condensing Units Capacity Data

MEDIUM TEMP MODEL	H.P.	COMP MODEL	CAPACITY(BTU/HR) - EVAPORATOR TEMP (°F)				
			0	+10	+15	+20	+25
90°F Ambient							
FJAM-A15Z	1.5	ZB11KCE	7730	9620	10600	11600	12700
FJAM-A20Z	2.0	ZB15KCE	11200	13700	15000	16400	17900
FJAM-A25Z	2.5	ZB19KCE	14300	17500	19200	21000	22900
FJAM-A30Z	3.0	ZB21KCE	16700	20400	22300	24400	26600
FJAM-A35Z	3.5	ZB26KCE	18900	23100	25200	27500	29900
FJAM-A40Z	4.0	ZB30KCE	23400	28700	31500	34600	37800
FJAM-A50Z	5.0	ZB38KCE	28500	34800	38200	41800	45600
FJAM-A60Z	6.0	ZB45KCE	33100	40300	44100	48200	52400
FPAN-070Z	7.0	ZB50KCE	37700	46800	51500	56500	61700
FPAN-080Z	8.0	ZB58KCE	40600	50400	55500	60800	66200
FPAN-091Z	9.0	ZB66KCE	48600	59000	64400	70100	76000
FPAN-101Z	10.0	ZB76KCE	56500	67800	73800	80000	86400
100°F Ambient							
FJAM-A15Z	1.5	ZB11KCE	6830	8630	9540	10500	11500
FJAM-A20Z	2.0	ZB15KCE	10200	12500	13700	15000	16300
FJAM-A25Z	2.5	ZB19KCE	13000	16000	17600	19200	21000
FJAM-A30Z	3.0	ZB21KCE	15200	18600	20400	22300	24300
FJAM-A35Z	3.5	ZB26KCE	17200	21000	23000	25100	27300
FJAM-A40Z	4.0	ZB30KCE	21400	26300	29000	31800	34700
FJAM-A50Z	5.0	ZB38KCE	26100	31900	35000	38300	41800
FJAM-A60Z	6.0	ZB45KCE	30200	36700	40300	44000	47900
FPAN-070Z	7.0	ZB50KCE	33800	42300	46700	51300	56200
FPAN-080Z	8.0	ZB58KCE	36100	45000	49700	54500	59400
FPAN-091Z	9.0	ZB66KCE	44500	54000	59000	64200	69500
FPAN-101Z	10.0	ZB76KCE	51400	61600	66900	72500	78200
110°F Ambient							
FJAM-A15Z	1.5	ZB11KCE	5800	7520	8370	9250	10200
FJAM-A20Z	2.0	ZB15KCE	9130	11200	12300	13500	14700
FJAM-A25Z	2.5	ZB19KCE	11700	14400	15900	17400	19000
FJAM-A30Z	3.0	ZB21KCE	13600	16700	18300	20000	21900
FJAM-A35Z	3.5	ZB26KCE	15300	18800	20600	22500	24600
FJAM-A40Z	4.0	ZB30KCE	19400	23900	26300	28900	31600
FJAM-A50Z	5.0	ZB38KCE	23500	28800	31600	34700	37900
FJAM-A60Z	6.0	ZB45KCE	27100	33100	36300	39700	43300
FPAN-070Z	7.0	ZB50KCE	29600	37500	41700	45900	50400
FPAN-080Z	8.0	ZB58KCE	31300	39500	43600	47900	52300
FPAN-091Z	9.0	ZB66KCE	40100	48900	53400	58100	62900
FPAN-101Z	10.0	ZB76KCE	46100	55100	59800	64700	69800

Capacities are at 60 Hertz with 65°F return gas and 5°F Subcooling. Multiply by .83 for 50 Hertz. Capacities are based on single phase units if ≤ 3 HP. If > 3 HP, capacities are based on three phase units.
This information is preliminary and subject to change.

Please visit copeland-corp.com for more information.

Low Temperature R-404A Scroll Condensing Units Capacity Data

LOW TEMP MODELS	H.P.	COMP MODEL	CAPACITY(BTU/HR) - EVAPORATOR TEMP (°F)								
			-40	-35	-30	-25	-20	-15	-10	-5	0
90°F Ambient											
DJAL-015Z	1.5	ZF06K4E	4750	5460	6220	7020	7870	8770	9730	10700	11800
DJAL-020Z	2.0	ZF08K4E	6040	6870	7770	8740	9780	10900	12100	13300	14600
DJAL-022Z	2.2	ZF09K4E	6680	7580	8540	9560	10600	11800	13000	14300	15600
DJAL-026Z	2.5	ZF11K4E	8420	9580	10800	12200	13600	15200	16800	18600	20400
DJAL-030Z	3.0	ZF13K4E	9280	10600	12100	13600	15300	17100	18900	20900	22900
DJAL-041Z	4.0	ZF15K4E	12000	13700	15400	17300	19400	21600	24000	26500	29200
DJAL-051Z	5.0	ZF18K4E	14300	16300	18500	20700	23100	25700	28400	31400	34400
DJAL-060Z	6.0	ZF24K4E	17000	19400	22000	24700	27600	30600	33900	37300	40900
100°F Ambient											
DJAL-015Z	1.5	ZF06K4E	4310	5020	5760	6540	7340	8180	9070	10000	10900
DJAL-020Z	2.0	ZF08K4E	5490	6310	7180	8110	9090	10100	11200	12300	13500
DJAL-022Z	2.2	ZF09K4E	6210	7050	7940	8870	9860	10900	12000	13200	14400
DJAL-026Z	2.5	ZF11K4E	7710	8840	10000	11300	12700	14100	15600	17200	18900
DJAL-030Z	3.0	ZF13K4E	8530	9770	11100	12600	14100	15700	17400	19300	21100
DJAL-041Z	4.0	ZF15K4E	11200	12700	14400	16100	18000	20000	22200	24500	26900
DJAL-051Z	5.0	ZF18K4E	13500	15400	17300	19400	21600	23900	26400	29100	31800
DJAL-060Z	6.0	ZF24K4E	15900	18100	20500	23000	25700	28500	31400	34500	37700
110°F Ambient											
DJAL-015Z	1.5	ZF06K4E	3940	4650	5370	6110	6860	7640	8450	9290	10100
DJAL-020Z	2.0	ZF08K4E	4960	5760	6590	7460	8370	9310	10300	11300	12300
DJAL-022Z	2.2	ZF09K4E	5710	6490	7300	8150	9040	9970	11000	12000	13100
DJAL-026Z	2.5	ZF11K4E	7010	8100	9240	10400	11700	13000	14400	15800	17200
DJAL-030Z	3.0	ZF13K4E	7910	9030	10200	11500	12900	14400	15900	17500	19200
DJAL-041Z	4.0	ZF15K4E	10400	11700	13200	14800	16500	18300	20300	22400	24600
DJAL-051Z	5.0	ZF18K4E	12600	14300	16100	18000	20000	22000	24300	26700	29100
DJAL-060Z	6.0	ZF24K4E	14600	16700	18900	21200	23600	26100	28700	31500	34300

Capacities are at 60 Hertz with 65°F return gas and 5°F Subcooling. Multiply by .83 for 50 Hertz. Capacities are based on single phase units if ≤ 3 HP. If > 3 HP, capacities are based on three phase units.
This information is preliminary and subject to change.

Please visit copeland-corp.com for more information.

MEDIUM TEMP MODELS	COMP MODEL	DIMENSIONS (IN.)			CONNECTING LINES				MIN CIRCUIT AMPACITY / MAX FUSE SIZE						PUMP DOWN CAPACITY (lb)	SHIP WEIGHT (lb)
									CFV		TFC		TFD			
		L	W	H	Suction	Liquid	208/230-1-60	230-3-60	460-3-60							
FJAM-A15Z	ZB11KCE	24.0	18.3	16.3	7/8 S	3/8 S	13.9	20					8.9	116		
FJAM-A20Z	ZB15KCE	25.2	34.0	19.0	7/8 S	3/8 S	21.9	35	13.4	20	7.7	15	15.2	220		
FJAM-A25Z	ZB19KCE	25.2	34.0	19.0	1 1/8 S	3/8 S	25.2	40	15.3	20	9.5	15	17.2	220		
FJAM-A30Z	ZB21KCE	25.2	34.0	19.0	1 1/8 S	3/8 S	28.7	45	17.9	25	10.8	15	17.2	235		
FJAM-A35Z	ZB26KCE	25.2	34.0	19.0	1 1/8 S	3/8 S	32.3	50	20.2	30	12.1	15	17.2	235		
FJAM-A40Z	ZB30KCE	28.2	44.1	26.8	1 1/8 S	1/2 S	37.1	60	23.2	35	11.8	15	29.4	337		
FJAM-A50Z	ZB38KCE	28.2	44.1	26.8	1 1/8 S	1/2 S	42.5	60	31.2	45	14.4	20	29.4	339		
FJAM-A60Z	ZB45KCE	28.2	44.1	26.8	1 1/8 S	1/2 S			31.7	50	16.8	25	29.4	342		
FPAN-070Z	ZB50KCE	28.5	44.0	36.8	1 3/8 S	5/8 S			44.8	60	23.2	30	60.4	495		
FPAN-080Z	ZB58KCE	28.5	44.0	36.8	1 3/8 S	5/8 S			49.1	70	24.9	35	60.4	497		
FPAN-091Z	ZB66KCE	28.5	44.0	36.8	1 3/8 S	5/8 S			51.0	70	26.3	35	60.4	498		
FPAN-101Z	ZB76KCE	28.5	44.0	36.8	1 3/8 S	5/8 S			60.8	90	28.4	40	67.8	528		

S - Sweat

*50 Hz (230-1-50 & 380-3-50) available upon request

LOW TEMP MODELS	COMP MODEL	DIMENSIONS (IN.)			CONNECTING LINES				MIN CIRCUIT AMPACITY / MAX FUSE SIZE						PUMP DOWN CAPACITY (lb)	SHIP WEIGHT (lb)
									CFV		TFC		TFD			
		L	W	H	Suction	Liquid	208/230-1-60	230-3-60	460-3-60							
DJAL-015Z	ZF06K4E	25.2	34.3	19.0	7/8 S	3/8 S	19.3	30	13.9	20	6.8	15	15.2	220		
DJAL-020Z	ZF08K4E	25.2	34.3	19.0	7/8 S	3/8 S	22.8	35	14.4	20	7.7	15	15.2	222		
DJAL-022Z	ZF09K4E	25.2	34.3	19.0	7/8 S	3/8 S	22.8	35	16.2	20	8.6	15	15.2	222		
DJAL-026Z	ZF11K4E	25.2	34.3	19.0	1 1/8 S	3/8 S	28.7	45	19.8	30	12.1	15	17.2	235		
DJAL-030Z	ZF13K4E	25.2	34.3	19.0	1 1/8 S	3/8 S	36.3	60	21.6	30	13.5	15	17.2	254		
DJAL-041Z	ZF15K4E	28.2	44.1	26.8	1 1/8 S	1/2 S	43.4	70	30.4	45	14.4	20	29.4	339		
DJAL-051Z	ZF18K4E	28.2	44.1	26.8	1 1/8 S	1/2 S			33.5	50	14.0	20	29.4	342		
DJAL-060Z	ZF24K4E	28.2	44.1	26.8	1 1/8 S	1/2 S			41.1	60	22.0	35	29.4	476		

S - Sweat

*50 Hz (230-1-50 & 380-3-50) available upon request

Unit Features

60 Hertz Sweat	Filter Drier	Moisture Indicator	Liquid Solenoid Valve w/ Coil	Fan Cycle Control
015				X
020				
071	X	X		X
072	X	X		
073	X	X	X	X
074	X	X	X	

All models include: Suction Valve, Accumulator (except 1.5 HP), Receiver, BX Conduit, Fan Guard, Discharge Line Thermostat, High and Low Pressure Control, and Time Delay Relay (on the single phase units only).

BOM (Bill of Material) numbers apply only to the units listed in this brochure.

All models are UL Listed. UL/UR are registered trademarks of Underwriters Laboratories, Inc. UL/UR and CSA label does not apply at 50 Hertz.

Medium and Low Temperature R-404A Scroll Condensing Units

To place an order determine:

- (1) Model
- (2) Voltage
- (3) Bill of Material (BOM)

Example: FJAM-A15Z -CFV -020

Model Voltage BOM

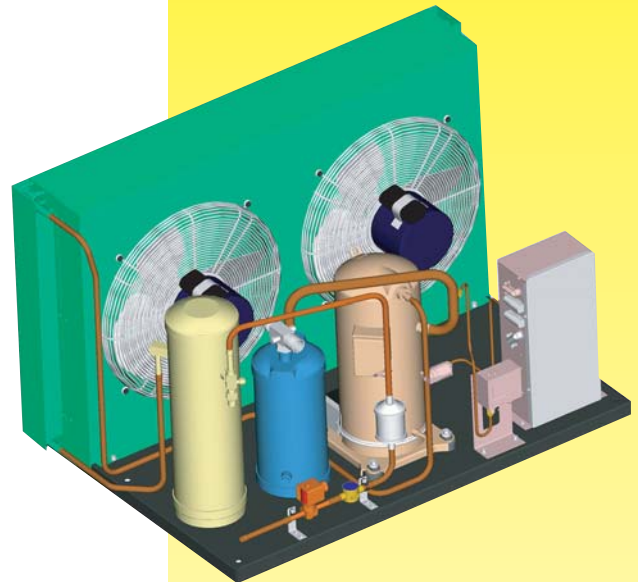
1+2+3 = complete model number

Application Engineering Bulletins

(Available on copeland-corp.com)

- 4-1255 U.L. and C.S.A. File Data
- 4-1273 Factors to Consider in Converting Compressor Rated Capacity to Actual Capacity
- 4-1299 Application Guidelines for "Glacier" K4 & KA Refrigeration Scroll Compressors 2 to 6 HP
- 4-1317 Application Guidelines for ZB*KC/ZB*KCE Refrigeration Scroll Compressors 1.3 to 6 HP
- 4-1318 Application Guidelines for ZB*KC/ZB*KCE Refrigeration Scroll Compressors 7 to 15 HP
- 11-1147 Suction Accumulators
- 11-1297 Liquid Line Filter Driers
- 17-1234 Low Ambient Compressor Operation
- 17-1260 Compressor Overheating
- 17-1268 Compression Ratio as it Affects Compressor Reliability
- 22-1182 Liquid Refrigerant Control in Refrigeration and Air Conditioning Systems

For more information, visit copeland-corp.com and login to OPI



copeland-corp.com

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