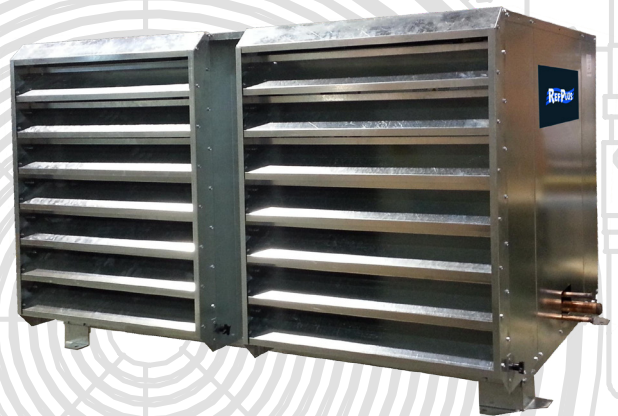


REF PLUS

AIR COOLED CONDENSING UNIT



ICZ



OCZ

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AIR COOLED CONDENSER

INDOOR AND OUTDOOR

ICZ

OCZ

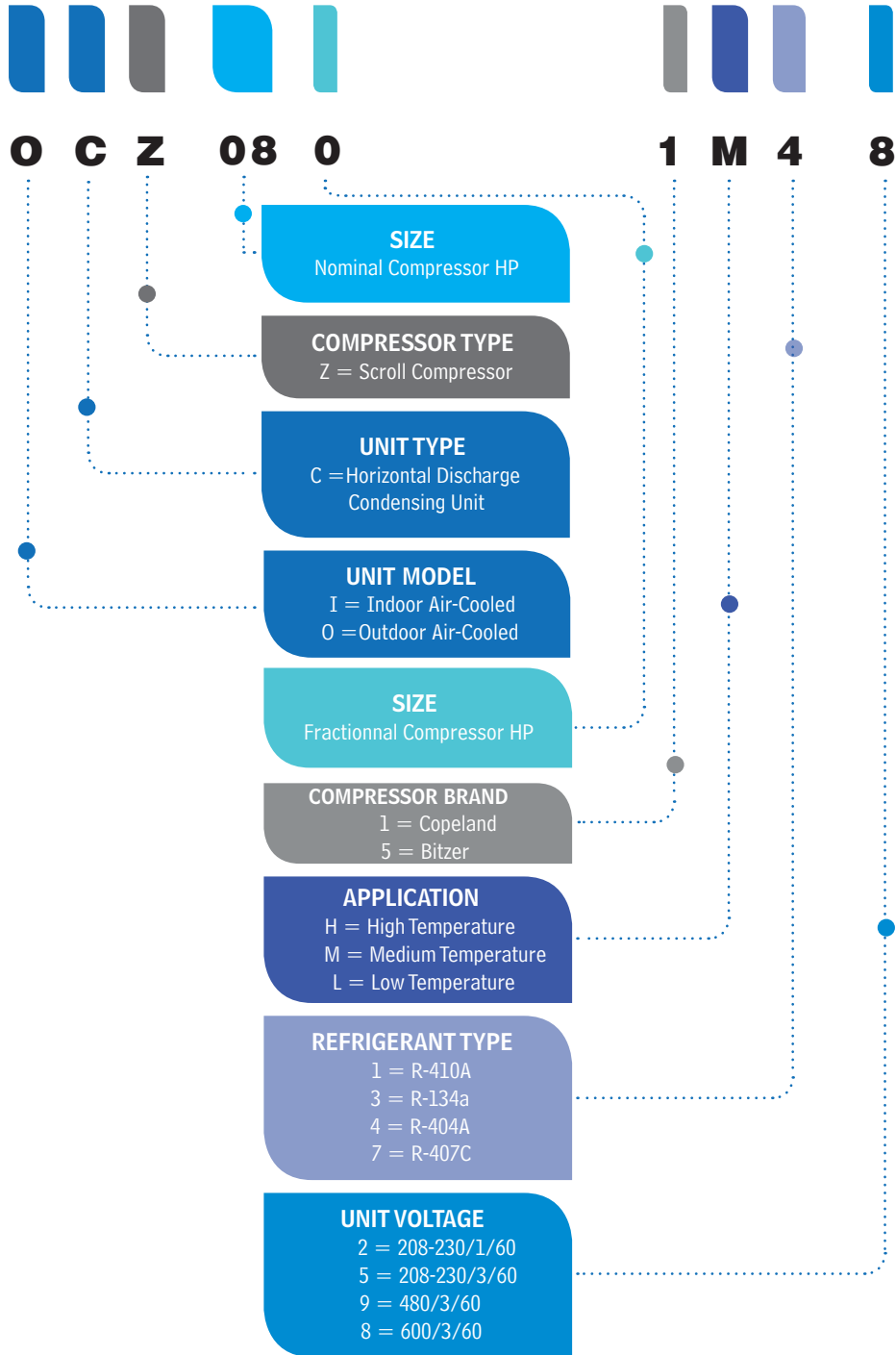


- From 1 HP to 10 HP
- High, medium and low temperature application
- For indoor use
- Copeland Scroll compressors



- From 1 HP to 10 HP
- High, medium and low temperature application
- For outdoor use
- Copeland Scroll compressors

NOMENCLATURE



FEATURES

STANDARD FEATURES

- Heavy-gauge galvanized steel base
- Galvanized outdoor protective cabinet
- Fixed head pressure flooding valve (OCZ)
- True subcooling circuits integrated into the condenser coil
- Liquid receiver with isolating valves and safety relief or fusible plug
- Direct-drive thermally protected condenser fan motors
- Aluminum fan blade
- Baked-on powder epoxy coated fan guards
- Rubber-mounted Scroll compressor
- Crankcase heaters
- Compressor discharge thermostat
- Electrical control panel complete with compressor and fan contactors, control transformer, pump-down switch, and terminal block
- Manual reset, fix, high pressure switch
- Automatic reset, adjustable low pressure switch with flexible hose
- Liquid temperature fan cycling thermostat
- 208-230/1/60 control circuit
- Suction accumulator
- Discharge check valve

FACTORY INSTALLED OPTIONS

- Low ambient kit: heated and insulated receiver
- Liquid line kit: liquid drier (sealed or replaceable), sight glass/moisture indicator (installed) and liquid line solenoid valve (shipped loose)
- Suction filter (sealed or replaceable)
- Oil separator, recommended for -10°F/-23°C room and lower (ICZ)
- Oil separator including check valve, insulation and heater, recommended for -10°F/-23°C room and lower (OCZ)
- Adjustable head pressure flooding valves
- Fixed or adjustable flooding valves (ICZ)
- Liquid temperature fan cycling thermostat (ICZ)
- Non-fused disconnect switch
- Fused disconnect switch
- Adjustable dual pressure switch with flexible hoses
- 3-pipe hot gas defrost kit, single evaporator
- 3-pipe hot gas defrost kit, multiple evaporators, (recommended with medium temperature application)
- Electric defrost timer
- Electric defrost kit complete with timer, heater and fan contactors, fuses and compressor/heaters interlock switch
- Air defrost timer
- Fan speed control
- 115/1/60 or 24/1/60 control circuit
- Hot gas bypass

CAPACITY TABLE

COPELAND HIGH R-410A

ICZ/OCZ (010 to 100) High Temperature, R-410A

Model Compressor	Amb. Temp.	Saturated Suction Temp. °F (MBH)					Line Size		Receiver (Lb.)		Ref. Charge (Lb.)		Shipping Weight (Lb.)*	
		25°F	30°F	35°F	40°F	45°F	Suc.	Liq.	Std.	Opt.	Summer	Winter	ICZ	OCZ
010-1H1 ZP16K3E	90°F	11.8	13.0	14.3	15.8	17.2	1/2	3/8	14	24.6	1.06	2.6	284	338
	95°F	11.2	12.4	13.8	15.0	16.5								
	100°F	10.7	11.9	13.1	14.4	15.8								
	105°F	10.2	11.2	12.4	13.7	14.9								
015-1H1 ZP20K5E	90°F	15.0	16.5	18.1	19.6	21.3	5/8	3/8	14	24.6	1.06	2.6	297	365
	95°F	14.4	15.8	17.2	18.8	20.4								
	100°F	13.7	15.0	16.4	17.9	19.3								
	105°F	12.9	14.2	15.5	16.9	18.3								
020-1H1 ZP24K5E	90°F	18.7	20.7	22.8	25.0	27.4	5/8	3/8	14	24.6	1.43	3.51	424	492
	95°F	17.9	19.8	21.8	23.9	26.3								
	100°F	17.0	18.9	20.9	22.9	25.1								
	105°F	16.2	18.0	19.8	21.8	23.9								
025-1H1 ZP31K5E	90°F	23.4	25.9	28.6	31.3	34.1	7/8	3/8	14	24.6	1.43	3.51	438	506
	95°F	22.4	24.8	27.3	29.9	32.7								
	100°F	21.2	23.5	25.9	28.5	31.1								
	105°F	20.1	22.3	24.6	27.0	29.5								
030-1H1 ZP34K5E	90°F	26.9	29.6	32.4	35.5	38.6	7/8	1/2	14.0	24.6	2.14	5.26	464	532
	95°F	25.9	28.5	31.2	34.1	37.1								
	100°F	24.9	27.3	29.9	32.7	35.5								
	105°F	23.7	26.0	28.6	31.2	33.8								
035-1H1 ZP42K5E	90°F	32.2	35.7	39.4	43.3	47.4	7/8	1/2	24.6	53	3.07	7.55	539	624
	95°F	30.9	34.2	37.8	41.5	45.4								
	100°F	29.5	32.7	36.1	39.6	43.4								
	105°F	28.0	31.1	34.3	37.7	41.3								
040-1H1 ZP51K5E	90°F	39.5	43.3	47.3	51.3	55.8	7/8	1/2	24.6	53	3.07	7.55	543	628
	95°F	37.9	41.5	45.3	49.2	53.4								
	100°F	36.2	39.7	43.3	47.0	51.0								
	105°F	34.4	37.7	41.2	44.7	48.5								
050-1H1 ZP57K5E	90°F	43.2	47.7	52.5	57.4	62.7	7/8	1/2	24.6	53	4.1	10.07	569	654
	95°F	41.2	45.6	50.2	55.0	60.0								
	100°F	39.2	43.4	47.8	52.4	57.1								
	105°F	37.1	41.1	45.4	49.7	54.2								
060-1H1 ZP72KCE	90°F	54.4	59.1	64.2	69.3	74.7	7/8	1/2	24.6	53	4.1	10.07	575	660
	95°F	52.1	56.7	61.3	66.3	71.3								
	100°F	49.8	54.1	58.5	63.1	67.8								
	105°F	47.4	51.3	55.5	N/D	N/D								
070-1H1 ZP83KCE	90°F	65.9	71.9	78.3	85.2	92.4	1 1/8	5/8	53	68	6.05	14.86	819	950
	95°F	63.5	69.3	75.5	82.0	88.8								
	100°F	61.0	66.6	72.5	78.6	85.3								
	105°F	58.4	63.7	69.3	75.2	81.5								
075-1H1 ZP90KCE	90°F	69.9	76.7	83.8	91.5	99.4	1 1/8	5/8	53	68	6.05	14.86	859	990
	95°F	67.5	73.9	80.7	87.9	95.6								
	100°F	64.9	71.0	77.5	84.3	91.6								
	105°F	62.2	68.0	74.1	80.5	87.4								
085-1H1 ZP103KCE	90°F	79.6	87.3	95.2	103.6	112.5	1 3/8	5/8	53	68	6.05	14.86	867	998
	95°F	76.5	83.8	91.5	99.4	107.7								
	100°F	73.2	80.1	87.5	95.0	102.9								
	105°F	69.6	76.3	83.2	90.4	97.9								
100-1H1 ZP120KCE	90°F	92.7	101.9	111.4	121.4	131.7	1 3/8	7/8	53	68	8.07	19.82	891	1022
	95°F	88.4	97.2	106.4	115.8	125.6								
	100°F	84.0	92.4	101.1	110.0	119.4								
	105°F	79.6	87.5	95.7	104.2	112.9								

- Receiver holding charge (lb.) is based on 90% full at 90°F.
 - Refrigerant operating charge is based on 30% liquid, 70% vapor for summer operation and 70% liquid, 30% vapor for winter operation.
 - Capacity is based on 65°F return gas.
 - For 50 Hz operation, multiply capacity by 0.85
- * For standard units

NOTES

CAPACITY TABLE

COPELAND HIGH R-407C

ICZ/OCZ (010 to 100) High Temperature, R-407C

Model Compressor	Amb. Temp.	Saturated Suction Temp. °F (MBH)								Line Size		Receiver (Lb.)		Ref. Charge (Lb.)		Shipping Weight (Lb.)*	
		10°F	15°F	20°F	25°F	30°F	35°F	40°F	45°F	Suc.	Liq.	Std.	Opt.	Summer	Winter	ICZ	OCZ
010-1H7 ZS09KAE	90°F	8.3	9.2	10.4	11.6	12.7	14.0	15.2	16.6	1/2	3/8	16.9	23.2	1.09	2.72	293	347
	95°F	8.0	9.0	10.1	11.1	12.3	13.5	14.8	16.1								
	100°F	7.8	8.7	9.8	10.8	12.0	13.1	14.3	15.5								
	105°F	7.5	8.5	9.5	10.5	11.6	12.7	13.9	15.0								
011-1H7 ZS11KAE	90°F	9.8	11.0	12.3	13.5	15.0	16.4	18.0	19.4	1/2	3/8	16.9	23.2	1.09	2.72	299	367
	95°F	9.5	10.6	11.9	13.2	14.5	16.0	17.3	18.8								
	100°F	9.1	10.3	11.6	12.8	14.1	15.4	16.8	18.3								
	105°F	8.8	10.0	11.1	12.4	13.7	14.9	16.3	17.6								
015-1H7 ZS13KAE	90°F	10.5	11.8	13.2	14.6	16.1	17.6	19.2	20.8	1/2	3/8	16.9	23.2	1.09	2.72	299	367
	95°F	10.1	11.4	12.8	14.1	15.6	17.0	18.5	20.1								
	100°F	9.8	11.1	12.4	13.7	15.1	16.5	17.9	19.4								
	105°F	9.4	10.7	11.9	13.2	14.5	15.9	17.3	N/D								
020-1H7 ZB15KCE	90°F	11.9	13.6	15.4	17.3	19.3	21.5	23.7	26.1	5/8	3/8	16.9	23.2	1.47	3.66	432	500
	95°F	11.3	13.0	14.7	16.6	18.6	20.7	22.9	25.1								
	100°F	10.8	12.4	14.1	15.9	17.8	19.8	21.9	24.1								
	105°F	10.1	11.7	13.4	15.1	17.0	19.0	21.0	23.1								
025-1H7 ZB19KCE	90°F	12.9	14.7	16.6	18.7	21.0	23.5	26.1	28.9	5/8	3/8	16.9	23.2	1.47	3.66	450	518
	95°F	12.4	14.1	16.0	18.0	20.2	22.6	25.1	27.8								
	100°F	11.9	13.5	15.3	17.3	19.4	21.7	24.1	26.7								
	105°F	11.4	13.0	14.7	16.6	18.6	20.8	23.1	25.6								
030-1H7 ZB21KCE	90°F	17.9	20.3	22.9	25.6	28.5	31.6	34.8	38.1	7/8	3/8	16.9	23.2	2.2	5.5	463	531
	95°F	17.2	19.5	22.0	24.7	27.5	30.5	33.6	36.8								
	100°F	16.4	18.6	21.1	23.7	26.4	29.3	32.3	35.4								
	105°F	15.6	17.7	20.1	22.6	25.3	28.1	31.0	34.1								
035-1H7 ZB26KCE	90°F	21.4	24.1	27.0	30.0	33.2	36.6	40.2	44.1	7/8	1/2	29.6	62.3	3.16	7.89	535	620
	95°F	20.6	23.2	26.0	28.9	32.0	35.4	38.9	42.6								
	100°F	19.7	22.2	24.9	27.8	30.8	34.0	37.5	41.1								
	105°F	18.9	21.3	23.8	26.6	29.5	32.7	36.0	39.5								
040-1H7 ZB30KCE	90°F	25.2	28.2	31.4	34.8	38.5	42.3	46.5	50.9	7/8	1/2	29.6	62.3	3.16	7.89	550	635
	95°F	24.3	27.2	30.3	33.6	37.1	40.9	44.8	49.1								
	100°F	23.4	26.2	29.2	32.4	35.7	39.4	43.2	47.3								
	105°F	22.5	25.2	28.0	31.1	34.4	37.8	41.5	45.4								
050-1H7 ZB38KCE	90°F	30.4	34.1	38.0	42.2	46.7	51.5	56.6	62.0	7/8	1/2	29.6	62.3	4.22	10.52	569	654
	95°F	29.4	32.9	36.8	40.8	45.2	49.9	54.8	60.1								
	100°F	28.4	31.8	35.5	39.4	43.7	48.2	53.0	58.1								
	105°F	27.3	30.6	34.2	38.0	42.1	46.4	51.1	56.0								
060-1H7 ZB45KCE	90°F	37.7	42.2	47.0	52.2	57.6	63.5	69.6	75.9	1 1/8	5/8	29.6	62.3	4.22	10.52	574	659
	95°F	36.2	40.5	45.2	50.1	55.3	61.0	66.8	73.0								
	100°F	34.8	38.7	43.3	48.0	53.0	58.4	64.1	69.9								
	105°F	33.3	37.1	41.3	45.9	50.7	55.8	N/D	N/D								
065-1H7 ZB50KCE	90°F	41.6	46.9	52.5	58.6	65.1	72.0	79.3	87.1	1 1/8	5/8	62.3	82.37	6.22	15.53	858	989
	95°F	40.0	45.2	50.7	56.6	62.9	69.5	76.6	84.1								
	100°F	38.3	43.4	48.8	54.5	60.6	67.0	73.8	81.1								
	105°F	36.6	41.5	46.8	52.3	58.2	64.4	71.0	78.0								
070-1H7 ZB58KCE	90°F	48.1	54.1	60.5	67.4	74.8	82.7	91.2	100.2	1 1/8	5/8	62.3	82.37	6.22	15.53	858	989
	95°F	46.0	51.9	58.2	65.0	72.2	79.9	88.2	96.9								
	100°F	43.8	49.6	55.7	62.3	69.4	76.9	84.9	93.5								
	105°F	41.5	47.1	53.1	59.6	66.4	73.8	81.6	89.9								
075-1H7 ZB66KCE	90°F	54.5	61.0	68.1	75.7	83.9	92.7	102.2	112.3	1 3/8	5/8	62.3	82.37	6.22	15.53	864	995
	95°F	52.6	58.9	65.8	73.2	81.2	89.7	98.9	108.7								
	100°F	50.7	56.8	63.4	70.6	78.3	86.6	95.5	105.0								
	105°F	48.7	54.6	61.0	68.0	75.4	83.5	92.1	N/D								
085-1H7 ZB76KCE	90°F	64.2	71.5	79.4	87.9	97.0	106.7	117.0	128.0	1 3/8	5/8	62.3	82.37	6.22	15.53	867	998
	95°F	62.1	69.2	76.8	85.0	93.7	103.1	113.1	123.7								
	100°F	60.0	66.9	74.2	82.1	90.5	99.5	109.1	N/D								
	105°F	58.0	64.5	71.5	79.1	87.2	N/D	N/D	N/D								
100-1H7 ZB95KCE	90°F	77.5	87.2	97.5	108.7	120.6	133.4	146.9	161.3	1 5/8	7/8	62.3	82.37	8.3	20.71	899	1030
	95°F	74.1	83.5	93.5	104.3	115.8	128.1	141.1	155.0								
	100°F	70.7	79.6	89.3	99.6	110.8	122.6	N/D	N/D								
	105°F	67.2	75.8	85.1	95.0	105.7	N/D	N/D	N/D								

NOTES

- Receiver holding charge (lb.) is based on 90% full at 90°F.
 - Refrigerant operating charge is based on 30% liquid, 70% vapor for summer operation and 70% liquid, 30% vapor for winter operation.
 - Capacity is based on 65°F return gas.
 - For 50 Hz operation, multiply capacity by 0.85
- * For standard units

CAPACITY TABLE

COPELAND HIGH R-134a

ICZ/OCZ (010 to 100) High Temperature, R-134A

Model Compressor	Amb. Temp.	Saturated Suction Temp. °F (MBH)											Line Size		Receiver (Lb.)		Ref. Charge (Lb.)		Shipping Weight (Lb.)*	
		0°F	5°F	10°F	15°F	20°F	25°F	30°F	35°F	40°F	45°F	50°F	Suc.	Liq.	Std.	Opt.	Summer	Winter	ICZ	OCZ
010-1H3 ZS09KAE	90°F	4.5	5.1	5.8	6.5	7.2	8.1	9.0	10.0	11.0	12.2	13.3	5/8	3/8	15.6	21.0	1.1	2.81	293	347
	95°F	4.4	5.0	5.7	6.3	7.0	7.9	8.7	9.7	10.7	11.8	13.0								
	100°F	4.3	4.8	5.5	6.1	6.8	7.7	8.5	9.3	10.4	11.4	12.6								
	105°F	4.2	4.7	5.3	6.0	6.6	7.4	8.2	9.0	10.1	11.0	12.2								
011-1H3 ZS11KAE	90°F	5.4	6.1	6.8	7.7	8.6	9.6	10.6	11.8	13.0	14.3	15.8	5/8	3/8	15.6	21.0	1.1	2.81	334	402
	95°F	5.3	5.9	6.7	7.5	8.4	9.3	10.3	11.4	12.6	13.9	15.2								
	100°F	5.1	5.8	6.5	7.2	8.1	9.0	10.0	11.0	12.2	13.4	14.8								
	105°F	4.9	5.6	6.3	7.0	7.9	8.7	9.7	10.7	11.9	13.0	14.3								
015-1H3 ZS13KAE	90°F	6.1	6.9	7.8	8.7	9.8	10.8	12.1	13.3	14.7	16.2	17.7	5/8	3/8	15.6	21.0	1.1	2.81	332	400
	95°F	6.0	6.7	7.6	8.5	9.5	10.5	11.7	12.9	14.3	15.6	17.2								
	100°F	5.8	6.5	7.4	8.2	9.1	10.2	11.3	12.5	13.8	15.1	16.7								
	105°F	5.6	6.3	7.1	8.0	8.9	9.9	10.9	12.1	13.3	14.6	16.1								
020-1H3 ZB15KCE	90°F	6.5	7.5	8.5	9.7	11.0	12.3	13.8	15.3	17.0	18.7	20.6	5/8	3/8	15.6	21.0	1.48	3.79	438	506
	95°F	6.3	7.2	8.3	9.4	10.6	11.9	13.3	14.8	16.5	18.2	20.0								
	100°F	6.1	7.0	8.0	9.1	10.3	11.5	12.9	14.4	15.9	17.6	19.4								
	105°F	5.9	6.8	7.7	8.8	9.9	11.1	12.5	13.9	15.4	17.0	18.8								
025-1H3 ZB19KCE	90°F	7.4	8.6	9.8	11.1	12.6	14.1	15.7	17.5	19.4	21.4	23.5	7/8	3/8	15.6	21.0	1.48	3.79	450	518
	95°F	7.2	8.3	9.5	10.8	12.2	13.7	15.3	17.0	18.8	20.8	22.8								
	100°F	7.0	8.0	9.2	10.4	11.7	13.2	14.7	16.4	18.2	20.1	22.1								
	105°F	6.7	7.8	8.9	10.0	11.3	12.7	14.2	15.8	17.6	19.4	21.4								
030-1H3 ZB21KCE	90°F	9.7	11.0	12.6	14.3	16.1	18.2	20.4	22.7	25.2	27.9	30.6	7/8	1/2	15.6	21.0	2.23	5.69	455	523
	95°F	9.4	10.7	12.2	13.8	15.7	17.7	19.8	22.1	24.5	27.1	29.8								
	100°F	9.0	10.3	11.8	13.4	15.2	17.1	19.2	21.4	23.8	26.3	28.9								
	105°F	8.7	9.9	11.4	12.9	14.7	16.5	18.6	20.7	23.0	25.5	28.0								
035-1H3 ZB26KCE	90°F	11.2	12.8	14.5	16.5	18.7	21.1	23.6	26.4	29.3	32.3	35.5	7/8	1/2	26.7	56.7	3.2	8.16	475	543
	95°F	10.9	12.4	14.1	16.0	18.1	20.5	23.0	25.6	28.5	31.4	34.6								
	100°F	10.5	12.0	13.6	15.5	17.6	19.8	22.3	24.9	27.6	30.5	33.6								
	105°F	10.1	11.5	13.2	15.0	17.0	19.2	21.6	24.1	26.8	29.6	32.5								
040-1H3 ZB30KCE	90°F	13.1	14.9	17.0	19.3	21.8	24.6	27.5	30.7	34.1	37.6	41.3	7/8	1/2	26.7	56.7	3.2	8.16	550	635
	95°F	12.7	14.4	16.4	18.7	21.2	23.8	26.7	29.8	33.1	36.5	40.1								
	100°F	12.2	13.9	15.9	18.1	20.5	23.1	25.9	28.9	32.1	35.4	38.9								
	105°F	11.7	13.4	15.3	17.5	19.8	22.3	25.1	28.0	31.1	34.3	37.7								
050-1H3 ZB38KCE	90°F	16.0	18.3	20.8	23.6	26.7	30.1	33.7	37.5	41.6	45.9	50.4	7/8	1/2	26.7	56.7	4.26	10.88	564	649
	95°F	15.5	17.7	20.1	22.9	25.9	29.2	32.7	36.4	40.4	44.6	48.9								
	100°F	14.9	17.0	19.4	22.1	25.1	28.2	31.7	35.3	39.1	43.2	47.4								
	105°F	14.3	16.4	18.7	21.3	24.2	27.3	30.6	34.1	37.9	41.8	45.9								
060-1H3 ZB45KCE	90°F	19.2	21.8	24.7	28.0	31.5	35.3	39.4	43.7	48.3	53.2	58.3	1 1/8	5/8	26.7	56.7	4.26	10.88	574	659
	95°F	18.4	21.0	23.8	26.9	30.4	34.0	38.0	42.2	46.7	51.4	56.3								
	100°F	17.7	20.1	22.9	25.9	29.2	32.8	36.6	40.7	45.0	49.5	54.3								
	105°F	16.9	19.3	21.9	24.9	28.0	31.5	35.2	39.1	43.3	47.6	52.2								
065-1H3 ZB50KCE	90°F	22.5	25.7	29.2	32.9	36.9	41.2	45.8	50.7	56.0	61.6	67.6	1 1/8	5/8	56.7	75.6	6.29	16.06	850	981
	95°F	21.7	24.9	28.3	31.9	35.8	40.0	44.4	49.2	54.3	59.7	65.5								
	100°F	20.9	24.0	27.3	30.8	34.6	38.7	43.0	47.6	52.6	57.8	63.4								
	105°F	20.1	23.1	26.3	29.8	33.4	37.4	41.5	46.0	50.8	55.9	61.3								
070-1H3 ZB58KCE	90°F	25.2	28.7	32.5	36.6	41.1	45.9	51.1	56.6	62.5	68.8	75.4	1 1/8	5/8	56.7	75.6	6.29	16.06	850	981
	95°F	24.4	27.8	31.4	35.4	39.8	44.5	49.5	54.8	60.6	66.6	73.1								
	100°F	23.6	26.9	30.4	34.3	38.5	43.0	47.8	53.0	58.6	64.5	70.7								
	105°F	22.9	25.9	29.3	33.1	37.1	41.5	46.2	51.2	56.6	62.2	68.3								
075-1H3 ZB66KCE	90°F	28.5	32.3	36.5	41.1	46.1	51.6	57.4	63.5	70.1	77.1	84.4	1 3/8	5/8	56.7	75.6	6.29	16.06	856	987
	95°F	27.5	31.2	35.3	39.8	44.7	49.9	55.5	61.5	67.9	74.6	81.7								
	100°F	26.5	30.1	34.1	38.4	43.2	48.2	53.7	59.5	65.6	72.2	79.0								
	105°F	25.5	29.0	32.9	37.1	41.6	46.5	51.8	57.4	63.3	69.6	76.2								
085-1H3 ZB76K5E	90°F	32.8	37.1	41.9	47.1	52.8	58.9	65.4	72.4	79.8	87.6	95.8	1 3/8	5/8	56.7	75.6	6.29	16.06	867	998
	95°F	31.7	35.9	40.5	45.6	51.1	57.0	63.4	70.2	77.3	84.8	92.7								
	100°F	30.5	34.6	39.1	44.0	49.4	55.2	61.3	67.8	74.7	82.0	89.6								
	105°F	29.2	33.2	37.6	42.4	47.6	53.2	59.2	65.5	72.1	79.1	86.4								
100-1H3 ZB95K5E	90°F	39.6	45.6	51.9	58.6	65.7	73.3	81.4	90.0	99.2	108.9	119.2	1 5/8	7/8	56.7	75.6	8.39	21.42	939	1070
	95°F	37.9	43.8	50.0	56.5	63.5	70.8	78.7	87.0	95.8	105.2	115.1								
	100°F	36.1	41.9	48.0	54.4	61.1	68.3	75.9	83.9	92.4	101.4	110.9								
	105°F	34.2	40.0	45.9	52.2	58.8	65.7	73.0	80.7	88.9	97.5	106.6								

- Receiver holding charge (lb.) is based on 90% full at 90°F.
- Refrigerant operating charge is based on 30% liquid, 70% vapor for summer operation and 70% liquid, 30% vapor for winter operation.
- Capacity is based on 65°F return gas.
- For 50 Hz operation, multiply capacity by 0.85
- * For standard units

NOTES

CAPACITY TABLE

COPELAND MEDIUM R-404A

ICZ/OCZ (010 to 100) Medium Temperature, R-404A																				
Model Compressor	Amb. Temp.	Saturated Suction Temp. °F (MBH)											Line Size		Receiver (Lb.)		Ref. Charge (Lb.)		Shipping Weight (Lb.)*	
		-10°F	-5°F	0°F	5°F	10°F	15°F	20°F	25°F	30°F	35°F	40°F	Suc.	Liq.	Std.	Opt.	Summer	Winter	ICZ	OCZ
010-1M4 ZS09KAE	90°F	6.3	7.0	7.9	8.8	9.8	10.8	11.8	12.9	14.1	15.3	16.5	5/8	3/8	14	19.0	1.05	2.55	293	347
	95°F	5.9	6.7	7.6	8.5	9.4	10.3	11.3	12.3	13.4	14.5	15.7								
	100°F	5.6	6.5	7.3	8.1	9.0	9.9	10.9	11.9	12.9	13.9	15.0								
	105°F	5.4	6.2	7.0	7.8	8.7	9.6	10.5	11.3	12.3	13.3	14.3								
011-1M4 ZS11KAE	90°F	7.5	8.5	9.5	10.7	11.8	13.0	14.3	15.5	16.8	18.2	19.7	5/8	3/8	14	19.0	1.05	2.55	299	367
	95°F	7.1	8.2	9.2	10.2	11.4	12.4	13.6	14.8	16.1	17.4	18.7								
	100°F	6.8	7.8	8.9	9.9	10.9	12.0	13.1	14.3	15.4	16.6	17.8								
	105°F	6.6	7.5	8.5	9.5	10.6	11.5	12.7	13.7	14.7	15.9	17.0								
015-1M4 ZS13KAE	90°F	8.4	9.5	10.6	11.9	13.1	14.4	15.8	17.1	18.6	20.0	21.6	5/8	3/8	14	19.0	1.05	2.55	299	367
	95°F	8.0	9.1	10.2	11.4	12.7	13.9	15.1	16.5	17.8	19.2	20.6								
	100°F	7.6	8.7	9.9	11.0	12.2	13.3	14.6	15.8	17.0	18.3	19.6								
	105°F	7.3	8.4	9.5	10.6	11.8	12.9	14.0	15.2	16.4	17.6	18.8								
020-1M4 ZB15KCE	90°F	9.8	11.1	12.5	14.0	15.5	17.2	18.9	20.8	22.8	24.9	27.1	5/8	3/8	14	19.0	1.41	3.44	432	500
	95°F	9.2	10.6	11.9	13.3	14.7	16.4	18.0	19.8	21.7	23.7	25.7								
	100°F	8.7	9.9	11.2	12.5	14.0	15.5	17.1	18.7	20.6	22.4	24.3								
	105°F	8.0	9.2	10.5	11.8	13.2	14.6	16.1	17.7	19.4	21.1	23.0								
025-1M4 ZB19KCE	90°F	12.1	13.5	15.0	16.6	18.4	20.2	22.1	24.2	26.3	28.5	30.9	7/8	3/8	14	19.0	1.41	3.44	450	518
	95°F	11.6	12.9	14.3	15.9	17.4	19.2	21.0	23.0	25.0	27.2	29.4								
	100°F	10.9	12.2	13.5	15.0	16.6	18.3	20.0	21.8	23.7	25.8	27.9								
	105°F	10.3	11.6	12.8	14.3	15.8	17.2	18.9	20.7	22.5	24.4	26.5								
030-1M4 ZB21KCE	90°F	15.3	17.1	19.0	21.1	23.2	25.5	28.1	30.6	33.3	36.2	39.3	7/8	1/2	14	19.0	2.12	5.16	463	531
	95°F	14.6	16.3	18.2	20.1	22.2	24.4	26.7	29.2	31.8	34.5	37.4								
	100°F	13.9	15.5	17.3	19.1	21.1	23.2	25.4	27.7	30.1	32.8	35.5								
	105°F	13.1	14.6	16.3	18.0	19.9	21.9	24.0	26.3	28.6	31.0	33.7								
035-1M4 ZB26KCE	90°F	17.1	19.2	21.3	23.6	26.0	28.7	31.5	34.4	37.5	40.7	44.2	7/8	1/2	24.0	51	3.04	7.41	535	620
	95°F	16.4	18.3	20.4	22.6	24.9	27.4	30.0	32.9	35.8	38.9	42.1								
	100°F	15.5	17.4	19.3	21.4	23.6	26.0	28.6	31.2	34.0	37.0	40.0								
	105°F	14.7	16.5	18.3	20.3	22.5	24.7	27.1	29.6	32.2	35.0	37.9								
040-1M4 ZB30KCE	90°F	19.4	21.7	24.2	26.7	29.5	32.3	35.5	38.7	42.1	45.8	49.5	7/8	1/2	24.0	51	3.04	7.41	550	635
	95°F	18.5	20.7	23.0	25.5	28.0	30.9	33.8	36.9	40.1	43.6	47.1								
	100°F	17.5	19.6	21.8	24.2	26.7	29.3	32.1	35.0	38.1	41.4	44.7								
	105°F	16.6	18.6	20.7	22.9	25.2	27.7	30.3	33.1	36.0	39.1	42.3								
050-1M4 ZB38KCE	90°F	24.7	27.5	30.6	33.8	37.3	40.8	44.7	48.7	52.9	57.3	61.9	7/8	1/2	24.0	51	4.05	9.88	569	654
	95°F	23.4	26.2	29.1	32.2	35.4	38.9	42.4	46.3	50.3	54.4	58.9								
	100°F	22.2	24.8	27.5	30.5	33.6	36.8	40.3	43.8	47.6	51.6	55.7								
	105°F	21.0	23.4	26.0	28.7	31.6	34.8	38.0	41.4	44.9	48.7	52.6								
060-1M4 ZB45KCE	90°F	30.6	34.0	37.7	41.6	45.8	50.1	54.7	59.5	64.4	69.6	75.0	1 1/8	5/8	24.0	51	4.05	9.88	574	659
	95°F	29.0	32.3	35.9	39.6	43.5	47.6	51.9	56.4	61.1	66.0	71.1								
	100°F	27.4	30.6	33.8	37.4	41.1	45.0	49.0	53.2	57.7	62.3	67.2								
	105°F	25.8	28.8	31.9	35.2	38.6	42.3	46.1	50.1	54.3	58.7	63.1								
065-1M4 ZB50KCE	90°F	30.6	35.9	41.3	46.6	52.0	57.5	63.2	69.2	75.5	82.0	89.0	1 1/8	5/8	51.0	68	5.98	14.58	858	989
	95°F	27.8	33.3	38.6	44.0	49.4	54.8	60.3	66.0	72.0	78.3	84.9								
	100°F	24.9	30.5	35.9	41.2	46.5	51.8	57.2	62.8	68.6	74.6	80.9								
	105°F	21.7	27.4	32.9	38.1	43.4	48.7	54.0	59.3	64.9	70.7	76.8								
070-1M4 ZB58KCE	90°F	34.2	39.0	43.9	49.0	54.2	59.7	65.5	71.6	78.0	84.7	91.8	1 1/8	5/8	51.0	68	5.98	14.58	858	989
	95°F	32.0	36.7	41.5	46.5	51.6	56.9	62.4	68.2	74.3	80.7	87.5								
	100°F	29.6	34.3	39.0	43.8	48.8	53.9	59.2	64.8	70.6	76.7	83.1								
	105°F	27.1	31.7	36.4	41.1	45.9	50.8	55.9	61.2	66.7	72.5	78.6								
075-1M4 ZB66KCE	90°F	43.2	48.4	53.8	59.5	65.4	71.8	78.4	85.3	92.6	100.1	107.9	1 3/8	5/8	51.0	68	5.98	14.58	864	995
	95°F	41.1	46.0	51.2	56.7	62.4	68.4	74.6	81.2	88.0	95.1	102.5								
	100°F	38.9	43.6	48.6	53.8	59.2	64.9	70.7	77.0	83.4	90.1	97.0								
	105°F	36.6	41.3	45.9	50.9	55.9	61.3	66.9	72.7	78.7	85.0	91.5								
085-1M4 ZB76KCE	90°F	50.1	55.7	61.5	67.7	74.3	81.2	88.4	96.0	104.0	112.1	120.8	1 3/8	5/8	51.0	68	5.98	14.58	867	998
	95°F	48.1	53.3	58.9	64.8	71.0	77.4	84.2	91.4	98.8	106.5	114.6								
	100°F	46.0	51.0	56.3	61.7	67.6	73.6	80.0	86.6	93.6	100.8	108.4								
	105°F	44.0	48.7	53.7	58.8	64.2	69.8	75.7	81.9	88.4	95.1	102.2								
100-1M4 ZB95KCE	90°F	61.8	69.9	78.4	87.1	96.0	105.2	114.7	124.4	134.6	144.9	155.5	1 5/8	7/8	51.0	68	7.97	19.45	899	1030
	95°F	57.6	65.7	73.8	82.1	90.6	99.5	108.4	117.6	127.1	136.9	146.9								
	100°F	53.4	61.2	69.0	77.1	85.1	93.5	101.9	110.6	119.6	128.7	138.0								
	105°F	48.9	56.5	64.1	71.6	79.5	87.3	95.3	103.5	111.9	N/D	N/D								

NOTES

- Receiver holding charge (lb.) is based on 90% full at 90°F.
 - Refrigerant operating charge is based on 30% liquid, 70% vapor for summer operation and 70% liquid, 30% vapor for winter operation.
 - Capacity is based on 65°F return gas.
 - For 50 Hz operation, multiply capacity by 0.85
- * For standard units

CAPACITY TABLE

COPELAND LOW R-404A

ICZ/OCZ (013 to 100) Low Temperature, R-404A																		
Model Compressor	Amb. Temp.	Saturated Suction Temp. °F (MBH)									Line Size		Receiver (Lb.)		Ref. Charge (Lb.)		Shipping Weight (Lb.)*	
		-40°F	-35°F	-30°F	-25°F	-20°F	-15°F	-10°F	-5°F	0°F	Suc.	Liq.	Std.	Opt.	Summer	Winter	ICZ	OCZ
013-1L4 ZF06K4E	90°F	5.1	5.8	6.7	7.5	8.4	9.4	10.3	11.3	12.4	5/8	3/8	14	19.0	1.05	2.55	307	361
	95°F	4.8	5.6	6.4	7.3	8.0	8.9	9.9	10.9	11.9								
	100°F	4.6	5.4	6.2	6.9	7.7	8.6	9.5	10.3	11.3								
	105°F	4.5	5.2	5.9	6.6	7.4	8.1	9.0	9.9	10.8								
015-1L4 ZF08K4E	90°F	6.8	7.7	8.6	9.7	10.8	12.0	13.2	14.5	15.9	5/8	3/8	14	19.0	1.05	2.55	312	380
	95°F	6.4	7.4	8.3	9.2	10.2	11.4	12.5	13.8	15.1								
	100°F	6.1	7.0	7.8	8.7	9.8	10.8	11.8	13.0	14.3								
	105°F	5.8	6.6	7.5	8.3	9.2	10.2	11.2	12.3	13.3								
020-1L4 ZF09K4E	90°F	7.1	8.2	9.2	10.3	11.6	12.8	14.3	15.8	17.3	7/8	3/8	14	19.0	1.41	3.44	452	520
	95°F	6.9	7.9	8.8	10.0	11.1	12.3	13.7	15.0	16.6								
	100°F	6.6	7.6	8.5	9.6	10.6	11.8	13.0	14.4	15.8								
	105°F	6.3	7.1	8.1	9.1	10.1	11.2	12.4	13.7	15.0								
025-1L4 ZF11K4E	90°F	8.8	10.0	11.2	12.6	14.1	15.6	17.3	19.2	21.1	7/8	1/2	14	19.0	1.41	3.44	452	520
	95°F	8.5	9.7	10.8	12.2	13.5	15.0	16.6	18.3	20.1								
	100°F	8.1	9.2	10.4	11.6	12.9	14.3	15.9	17.4	19.1								
	105°F	7.8	8.8	9.9	11.0	12.3	13.7	15.0	16.5	18.1								
030-1L4 ZF13K4E	90°F	9.8	11.1	12.7	14.4	16.2	18.2	20.2	22.5	24.8	7/8	1/2	14	19.0	2.12	5.16	480	548
	95°F	9.2	10.6	12.2	13.8	15.4	17.3	19.3	21.4	23.6								
	100°F	8.8	10.2	11.6	13.1	14.8	16.5	18.4	20.4	22.5								
	105°F	8.5	9.8	11.0	12.5	14.1	15.8	17.5	19.3	21.3								
035-1L4 ZF15K4E	90°F	12.4	14.0	15.9	17.7	19.8	22.1	24.5	27.0	29.8	7/8	1/2	24.0	51	3.04	7.41	557	642
	95°F	11.9	13.4	15.1	17.0	19.0	21.1	23.4	25.8	28.5								
	100°F	11.3	12.9	14.5	16.3	18.2	20.2	22.3	24.6	27.0								
	105°F	10.8	12.3	13.9	15.4	17.2	19.1	21.1	23.3	25.6								
040-1L4 ZF18K4E	90°F	14.7	16.8	18.9	21.2	23.6	26.1	29.0	31.8	35.0	7/8	1/2	24.0	51	3.04	7.41	559	644
	95°F	14.2	16.2	18.2	20.4	22.7	25.1	27.7	30.5	33.3								
	100°F	13.7	15.5	17.5	19.5	21.7	23.9	26.5	29.0	31.7								
	105°F	13.1	14.9	16.8	18.7	20.7	22.9	25.1	27.5	30.0								
050-1L4 ZF25K4E	90°F	18.2	20.6	23.1	25.9	28.9	32.1	35.7	39.4	43.4	1 3/8	5/8	24.0	51	4.05	9.88	574	659
	95°F	17.6	19.8	22.3	24.9	27.7	30.8	34.1	37.7	41.5								
	100°F	17.1	19.2	21.4	23.9	26.6	29.5	32.6	35.9	39.5								
	105°F	16.6	18.6	20.6	22.9	25.4	28.1	31.1	34.2	37.6								
070-1L4 ZF34K4E	90°F	23.4	27.0	30.7	34.5	38.7	43.2	47.9	52.9	58.2	1 3/8	5/8	51.0	68	5.98	14.58	871	1002
	95°F	22.6	25.9	29.5	33.2	37.2	41.4	45.9	50.6	55.7								
	100°F	21.5	24.8	28.2	31.8	35.5	39.5	43.8	48.2	52.9								
	105°F	20.6	23.7	26.9	30.3	33.8	37.6	41.6	45.8	50.2								
090-1L4 ZF41K4E	90°F	30.7	35.1	39.6	44.4	49.5	54.8	60.3	66.2	72.5	1 5/8	7/8	51.0	68	5.98	14.58	871	1002
	95°F	29.5	33.7	38.0	42.6	47.4	52.4	57.7	63.3	69.1								
	100°F	28.2	32.2	36.4	40.7	45.3	50.0	55.0	60.2	65.7								
	105°F	26.8	30.7	34.7	38.8	43.0	47.4	52.1	57.0	62.1								

NOTES

- Receiver holding charge (lb.) is based on 90% full at 90°F.
- Refrigerant operating charge is based on 30% liquid, 70% vapor for summer operation and 70% liquid, 30% vapor for winter operation.
- Capacity is based on 65°F return gas.
- For 50 Hz operation, multiply capacity by 0.85
- * For standard units

ICZ/OCZ High Temperature R-410A

Model Number	Voltage	Compressor				Condenser Fan			MCA(1)	MOP(1)	Disc. Sw.
		Model	Qty	RLA	LRA	Qty	HP	FLA			
010-1H1-2	208-230/1/60	ZP16K3E-PFV	1	11.4	51	1	1/4	2.0	16.3	25.0	30
015-1H1-2	208-230/1/60	ZP20K5E-PFV	1	15	58.3	1	1/4	2.0	20.8	35.0	30
015-1H1-5	208-230/3/60	ZP20K5E-TF5	1	7.9	55.4	1	1/4	2.0	11.9	15.0	30
015-1H1-9	480/3/60	ZP20K5E-TFD	1	3.9	28	1	1/4	0.9	5.8	15.0	30
015-1H1-8	600/3/60	ZP20K5E-TFE	1	3.3	24.5	1	1/4	0.4	4.5	15.0	30
020-1H1-2	208-230/1/60	ZP24K5E-PFV	1	14.3	64	1	1/2	3.5	21.4	35.0	30
020-1H1-5	208-230/3/60	ZP24K5E-TF5	1	9.3	58	1	1/2	3.5	15.1	20.0	30
020-1H1-9	480/3/60	ZP24K5E-TFD	1	5.7	28	1	1/2	1.7	8.8	15.0	30
020-1H1-8	600/3/60	ZP24K5E-TFE	1	3.7	23.7	1	1/2	1.2	5.8	15.0	30
025-1H1-2	208-230/1/60	ZP31K5E-PFV	1	18.6	79	1	1/2	3.5	26.8	45.0	30
025-1H1-5	208-230/3/60	ZP31K5E-TF5	1	11.6	73	1	1/2	3.5	18.0	25.0	30
025-1H1-9	480/3/60	ZP31K5E-TFD	1	6.4	38	1	1/2	1.7	9.7	15.0	30
025-1H1-8	600/3/60	ZP31K5E-TFE	1	4.2	36.5	1	1/2	1.2	6.5	15.0	30
030-1H1-2	208-230/1/60	ZP34K5E-PFV	1	20	112	1	1/2	3.5	28.5	45.0	30
030-1H1-5	208-230/3/60	ZP34K5E-TF5	1	14.7	88	1	1/2	3.5	21.9	35.0	30
030-1H1-9	480/3/60	ZP34K5E-TFD	1	6.6	44	1	1/2	1.7	10.0	15.0	30
030-1H1-8	600/3/60	ZP34K5E-TFE	1	4.6	30	1	1/2	1.2	7.0	15.0	30
035-1H1-2	208-230/1/60	ZP42K5E-PFV	1	24.3	117	1	1/2	3.5	33.9	50.0	60
035-1H1-5	208-230/3/60	ZP42K5E-TF5	1	15.3	83.1	1	1/2	3.5	22.6	35.0	30
035-1H1-9	480/3/60	ZP42K5E-TFD	1	6.9	41	1	1/2	1.7	10.3	15.0	30
035-1H1-8	600/3/60	ZP42K5E-TFE	1	5.4	33	1	1/2	1.2	8.0	15.0	30
040-1H1-2	208-230/1/60	ZP51K5E-PFV	1	29.4	134	1	1/2	3.5	40.3	60.0	60
040-1H1-5	208-230/3/60	ZP51K5E-TF5	1	17.8	110	1	1/2	3.5	25.8	40.0	30
040-1H1-9	480/3/60	ZP51K5E-TFD	1	8.6	52	1	1/2	1.7	12.5	15.0	30
040-1H1-8	600/3/60	ZP51K5E-TFE	1	6.4	38.9	1	1/2	1.2	9.2	15.0	30
050-1H1-2	208-230/1/60	ZP57K5E-PFV	1	31.6	178	1	1/2	3.5	43.0	80.0	60
050-1H1-5	208-230/3/60	ZP57K5E-TF5	1	21.4	136	1	1/2	3.5	30.3	50.0	60
050-1H1-9	480/3/60	ZP57K5E-TFD	1	9.7	66.1	1	1/2	1.7	13.8	20.0	30
050-1H1-8	600/3/60	ZP57K5E-TFE	1	7.6	55.3	1	1/2	1.2	10.7	15.0	30
060-1H1-2	208-230/1/60	ZP72KCE-PFV	1	41.1	185	1	1/2	3.5	54.9	90.0	60
060-1H1-5	208-230/3/60	ZP72KCE-TF5	1	25.9	164	1	1/2	3.5	35.9	60.0	60
060-1H1-9	480/3/60	ZP72KCE-TFD	1	12.5	75	1	1/2	1.7	17.3	25.0	30
060-1H1-8	600/3/60	ZP72KCE-TFE	1	8.8	54	1	1/2	1.2	12.2	20.0	30
070-1H1-5	208-230/3/60	ZP83KCE-TF5	1	27.9	164	2	1/2	3.5	41.9	60.0	60
070-1H1-9	480/3/60	ZP83KCE-TFD	1	13.6	100	2	1/2	1.7	20.4	30.0	30
070-1H1-8	600/3/60	ZP83KCE-TFE	1	10	78	2	1/2	1.2	14.9	20.0	30
075-1H1-5	208-230/3/60	ZP90KCE-TF5	1	32.9	195	2	1/2	3.5	48.1	80.0	60
075-1H1-9	480/3/60	ZP90KCE-TFD	1	16.4	95	2	1/2	1.7	23.9	40.0	30
075-1H1-8	600/3/60	ZP90KCE-TFE	1	13.6	80	2	1/2	1.2	19.4	30.0	30
085-1H1-5	208-230/3/60	ZP103KCE-TF5	1	33.6	225	2	1/2	3.5	49.0	80.0	60
085-1H1-9	480/3/60	ZP103KCE-TFD	1	18.6	114	2	1/2	1.7	26.7	45.0	30
085-1H1-8	600/3/60	ZP103KCE-TFE	1	13.6	80	2	1/2	1.2	19.4	30.0	30
100-1H1-5	208-230/3/60	ZP120KCE-TF5	1	37.1	239	2	1/2	3.5	53.4	90.0	60
100-1H1-9	480/3/60	ZP120KCE-TFD	1	20	125	2	1/2	1.7	28.4	45.0	30
100-1H1-8	600/3/60	ZP120KCE-TFE	1	14.3	80	2	1/2	1.2	20.3	30.0	30

NOTES

1. MCA : Minimum Circuit Ampacity, MOP: Maximum Overcurrent Protection

ICZ/OCZ High Temperature R-407C

Model Number	Voltage	Compressor				Condenser Fan			MCA(1)	MOP(1)	Disc. Sw.
		Model	Qty	RLA	LRA	Qty	HP	FLA			
010-1H7-2	208-230/1/60	ZS09KAE-PFV	1	10	40.3	1	1/4	2.0	14.5	20.0	30
010-1H7-5	208-230/3/60	ZS09KAE-TF5	1	8	55.4	1	1/4	2.0	12.0	20.0	30
010-1H7-9	480/3/60	ZS09KAE-TFD	1	3.8	28	1	1/4	0.9	5.7	15.0	30
011-1H7-2	208-230/1/60	ZS11KAE-PFV	1	12.6	55	1	1/4	2.0	17.8	30.0	30
011-1H7-5	208-230/3/60	ZS11KAE-TF5	1	10.4	58	1	1/4	2.0	15.0	25.0	30
011-1H7-9	480/3/60	ZS11KAE-TFD	1	4.3	28	1	1/4	0.9	6.3	15.0	30
015-1H7-2	208-230/1/60	ZS13KAE-PFV	1	12	56	1	1/4	2	17.0	25.0	30
015-1H7-5	208-230/3/60	ZS13KAE-TF5	1	9.7	58	1	1/4	2	14.1	20.0	30
015-1H7-9	480/3/60	ZS13KAE-TFD	1	4.8	29	1	1/4	0.9	6.9	15.0	30
020-1H7-2	208-230/1/60	ZB15KCE-PFV	1	15.7	61	1	1/2	3.5	23.1	35.0	30
020-1H7-5	208-230/3/60	ZB15KCE-TF5	1	8.9	55	1	1/2	3.5	14.6	20.0	30
020-1H7-9	480/3/60	ZB15KCE-TFD	1	5	27	1	1/2	1.7	8.0	15.0	30
025-1H7-2	208-230/1/60	ZB19KCE-PFV	1	17.9	73	1	1/2	3.5	25.9	40.0	30
025-1H7-5	208-230/3/60	ZB19KCE-TF5	1	10	63	1	1/2	3.5	16.0	25.0	30
025-1H7-9	480/3/60	ZB19KCE-TFD	1	5	31	1	1/2	1.7	8.0	15.0	30
030-1H7-2	208-230/1/60	ZB21KCE-PFV	1	20.7	100	1	1/2	3.5	29.4	50.0	60
030-1H7-5	208-230/3/60	ZB21KCE-TF5	1	12.1	77	1	1/2	3.5	18.6	30.0	30
030-1H7-9	480/3/60	ZB21KCE-TFD	1	6.1	39	1	1/2	1.7	9.3	15.0	30
030-1H7-8	600/3/60	ZB21KCE-TFE	1	5	31	1	1/2	1.2	7.5	15.0	30
035-1H7-2	208-230/1/60	ZB26KCE-PFV	1	23.6	127	1	1/2	3.5	33.0	50.0	60
035-1H7-5	208-230/3/60	ZB26KCE-TF5	1	13.2	88	1	1/2	3.5	20.0	30.0	30
035-1H7-9	480/3/60	ZB26KCE-TFD	1	6.4	44	1	1/2	1.7	9.7	15.0	30
035-1H7-8	600/3/60	ZB26KCE-TFE	1	5.7	34	1	1/2	1.2	8.3	15.0	30
040-1H7-2	208-230/1/60	ZB30KCE-PFV	1	26.8	132	1	1/2	3.5	37.0	60.0	60
040-1H7-5	208-230/3/60	ZB30KCE-TF5	1	15.7	115	1	1/2	3.5	23.1	35.0	30
040-1H7-9	480/3/60	ZB30KCE-TFD	1	7.5	47.5	1	1/2	1.7	11.1	15.0	30
040-1H7-8	600/3/60	ZB30KCE-TFE	1	6.4	40	1	1/2	1.2	9.2	15.0	30
050-1H7-2	208-238/1/60	ZB38KCE-PFV	1	31.1	175	1	1/2	3.5	42.4	70.0	60
050-1H7-5	208-238/3/60	ZB38KCE-TF5	1	22.1	128	1	1/2	3.5	31.1	50.0	60
050-1H7-9	480/3/60	ZB38KCE-TFD	1	9.6	63	1	1/2	1.7	13.7	20.0	30
050-1H7-8	600/3/60	ZB38KCE-TFE	1	7.1	50	1	1/2	1.2	10.1	15.0	30
060-1H7-5	208-245/3/60	ZB45KCE-TF5	1	22.5	156	1	1/2	3.5	31.6	50.0	60
060-1H7-9	480/3/60	ZB45KCE-TFD	1	10.1	75	1	1/2	1.7	14.3	20.0	30
060-1H7-8	600/3/60	ZB45KCE-TFE	1	7.9	54	1	1/2	1.2	11.1	15.0	30
065-1H7-5	208-245/3/60	ZB50KCE-TF5	1	28.6	196	2	1/2	3.5	42.8	70.0	60
065-1H7-9	480/3/60	ZB50KCE-TFD	1	15	100	2	1/2	1.7	22.2	35.0	30
065-1H7-8	600/3/60	ZB50KCE-TFE	1	11.1	90	2	1/2	1.2	16.3	25.0	30
070-1H7-5	208-245/3/60	ZB58KCE-TF5	1	30.7	195	2	1/2	3.5	45.4	70.0	60
070-1H7-9	480/3/60	ZB58KCE-TFD	1	16.4	95	2	1/2	1.7	23.9	40.0	30
070-1H7-8	600/3/60	ZB58KCE-TFE	1	12.9	80	2	1/2	1.2	18.5	30.0	30
075-1H7-5	208-245/3/60	ZB66KCE-TF5	1	30	225	2	1/2	3.5	44.5	70.0	60
075-1H7-9	480/3/60	ZB66KCE-TFD	1	17.5	114	2	1/2	1.7	25.3	40.0	30
075-1H7-8	600/3/60	ZB66KCE-TFE	1	12.5	80	2	1/2	1.2	18.0	30.0	30
085-1H7-5	208-245/3/60	ZB76KCE-TF5	1	41.4	239	2	1/2	3.5	58.8	100.0	100
085-1H7-9	480/3/60	ZB76KCE-TFD	1	20	125	2	1/2	1.7	28.4	45.0	30
085-1H7-8	600/3/60	ZB76KCE-TFE	1	13.2	80	2	1/2	1.2	18.9	30.0	30
100-1H7-5	208-245/3/60	ZB95KCE-TW5	1	61.4	300	2	1/2	3.5	83.8	125.0	100
100-1H7-9	480/3/60	ZB95KCE-TWD	1	31.4	150	2	1/2	1.7	42.7	70.0	60
100-1H7-8	600/3/60	ZB95KCE-TWE	1	22.9	109	2	1/2	1.2	31.0	50.0	60

1. MCA : Minimum Circuit Ampacity, MOP: Maximum Overcurrent Protection

NOTES

ICZ/OCZ High Temperature R-134A

Model Number	Voltage	Compressor				Condenser Fan			MCA(1)	MOP(1)	Disc. Sw.
		Model	Qty	RLA	LRA	Qty	HP	FLA			
010-1H3-2	208-230/1/60	ZS09KAE-PFV	1	10	40.3	1	1/4	2.0	14.5	20.0	30
010-1H3-5	208-230/3/60	ZS09KAE-TF5	1	8	55.4	1	1/4	2.0	12.0	20.0	30
010-1H3-9	480/3/60	ZS09KAE-TFD	1	3.8	28	1	1/4	0.9	5.7	15.0	30
011-1H3-2	208-230/1/60	ZS11KAE-PFV	1	12.6	55	1	1/4	2.0	17.8	30.0	30
011-1H3-5	208-230/3/60	ZS11KAE-TF5	1	10.4	58	1	1/4	2.0	15.0	25.0	30
011-1H3-9	480/3/60	ZS11KAE-TFD	1	4.3	28	1	1/4	0.9	6.3	15.0	30
015-1H3-2	208-230/1/60	ZS13KAE-PFV	1	12	56	1	1/4	2	17.0	25.0	30
015-1H3-5	208-230/3/60	ZS13KAE-TF5	1	9.7	58	1	1/4	2	14.1	20.0	30
015-1H3-9	480/3/60	ZS13KAE-TFD	1	4.8	29	1	1/4	0.9	6.9	15.0	30
020-1H3-2	208-230/1/60	ZB15KCE-PFV	1	15.7	61	1	1/2	3.5	23.1	35.0	30
020-1H3-5	208-230/3/60	ZB15KCE-TF5	1	8.9	55	1	1/2	3.5	14.6	20.0	30
020-1H3-9	480/3/60	ZB15KCE-TFD	1	5	27	1	1/2	1.7	8.0	15.0	30
025-1H3-2	208-230/1/60	ZB19KCE-PFV	1	17.9	73	1	1/2	3.5	25.9	40.0	30
025-1H3-5	208-230/3/60	ZB19KCE-TF5	1	10	63	1	1/2	3.5	16.0	25.0	30
025-1H3-9	480/3/60	ZB19KCE-TFD	1	5	31	1	1/2	1.7	8.0	15.0	30
030-1H3-2	208-230/1/60	ZB21KCE-PFV	1	20.7	100	1	1/2	3.5	29.4	50.0	60
030-1H3-5	208-230/3/60	ZB21KCE-TF5	1	12.1	77	1	1/2	3.5	18.6	30.0	30
030-1H3-9	480/3/60	ZB21KCE-TFD	1	6.1	39	1	1/2	1.7	9.3	15.0	30
030-1H3-8	600/3/60	ZB21KCE-TFE	1	5	31	1	1/2	1.2	7.5	15.0	30
035-1H3-2	208-230/1/60	ZB26KCE-PFV	1	23.6	127	1	1/2	3.5	33.0	50.0	60
035-1H3-5	208-230/3/60	ZB26KCE-TF5	1	13.2	88	1	1/2	3.5	20.0	30.0	30
035-1H3-9	480/3/60	ZB26KCE-TFD	1	6.4	44	1	1/2	1.7	9.7	15.0	30
035-1H3-8	600/3/60	ZB26KCE-TFE	1	5.7	34	1	1/2	1.2	8.3	15.0	30
040-1H3-2	208-230/1/60	ZB30KCE-PFV	1	26.8	132	1	1/2	3.5	37.0	60.0	60
040-1H3-5	208-230/3/60	ZB30KCE-TF5	1	15.7	115	1	1/2	3.5	23.1	35.0	30
040-1H3-9	480/3/60	ZB30KCE-TFD	1	7.5	47.5	1	1/2	1.7	11.1	15.0	30
040-1H3-8	600/3/60	ZB30KCE-TFE	1	6.4	40	1	1/2	1.2	9.2	15.0	30
050-1H3-2	208-238/1/60	ZB38KCE-PFV	1	31.1	175	1	1/2	3.5	42.4	70.0	60
050-1H3-5	208-238/3/60	ZB38KCE-TF5	1	22.1	128	1	1/2	3.5	31.1	50.0	60
050-1H3-9	480/3/60	ZB38KCE-TFD	1	9.6	63	1	1/2	1.7	13.7	20.0	30
050-1H3-8	600/3/60	ZB38KCE-TFE	1	7.1	50	1	1/2	1.2	10.1	15.0	30
060-1H3-5	208-245/3/60	ZB45KCE-TF5	1	22.5	156	1	1/2	3.5	31.6	50.0	60
060-1H3-9	480/3/60	ZB45KCE-TFD	1	10.1	75	1	1/2	1.7	14.3	20.0	30
060-1H3-8	600/3/60	ZB45KCE-TFE	1	7.9	54	1	1/2	1.2	11.1	15.0	30
065-1H3-5	208-245/3/60	ZB50KCE-TF5	1	28.6	196	2	1/2	3.5	42.8	70.0	60
065-1H3-9	480/3/60	ZB50KCE-TFD	1	15	100	2	1/2	1.7	22.2	35.0	30
065-1H3-8	600/3/60	ZB50KCE-TFE	1	11.1	90	2	1/2	1.2	16.3	25.0	30
070-1H3-5	208-245/3/60	ZB58KCE-TF5	1	30.7	195	2	1/2	3.5	45.4	70.0	60
070-1H3-9	480/3/60	ZB58KCE-TFD	1	16.4	95	2	1/2	1.7	23.9	40.0	30
070-1H3-8	600/3/60	ZB58KCE-TFE	1	12.9	80	2	1/2	1.2	18.5	30.0	30
075-1H3-5	208-245/3/60	ZB66KCE-TF5	1	30	225	2	1/2	3.5	44.5	70.0	60
075-1H3-9	480/3/60	ZB66KCE-TFD	1	17.5	114	2	1/2	1.7	25.3	40.0	30
075-1H3-8	600/3/60	ZB66KCE-TFE	1	12.5	80	2	1/2	1.2	18.0	30.0	30
085-1H3-5	208-245/3/60	ZB76KCE-TF5	1	41.4	239	2	1/2	3.5	58.8	100.0	100
085-1H3-9	480/3/60	ZB76KCE-TFD	1	20	125	2	1/2	1.7	28.4	45.0	30
085-1H3-8	600/3/60	ZB76KCE-TFE	1	13.2	80	2	1/2	1.2	18.9	30.0	30
100-1H3-5	208-245/3/60	ZB95KCE-TW5	1	61.4	300	2	1/2	3.5	83.8	125.0	100
100-1H3-9	480/3/60	ZB95KCE-TWD	1	31.4	150	2	1/2	1.7	42.7	70.0	60
100-1H3-8	600/3/60	ZB95KCE-TWE	1	22.9	109	2	1/2	1.2	31.0	50.0	60

NOTES

1. MCA : Minimum Circuit Ampacity, MOP: Maximum Overcurrent Protection

ICZ/OCZ Medium Temperature R-404A

Model Number	Voltage	Compressor				Condenser Fan			MCA(1)	MOP(1)	Disc. Sw.
		Model	Qty	RLA	LRA	Qty	HP	FLA			
010-1M4-2	208-230/1/60	ZS09KAE-PFV	1	10	40.3	1	1/4	2.0	14.5	20.0	30
010-1M4-5	208-230/3/60	ZS09KAE-TF5	1	8	55.4	1	1/4	2.0	12.0	20.0	30
010-1M4-9	480/3/60	ZS09KAE-TFD	1	3.8	28	1	1/4	0.9	5.7	15.0	30
011-1M4-2	208-230/1/60	ZS11KAE-PFV	1	12.6	55	1	1/4	2.0	17.8	30.0	30
011-1M4-5	208-230/3/60	ZS11KAE-TF5	1	10.4	58	1	1/4	2.0	15.0	25.0	30
011-1M4-9	480/3/60	ZS11KAE-TFD	1	4.3	28	1	1/4	0.9	6.3	15.0	30
015-1M4-2	208-230/1/60	ZS13KAE-PFV	1	12	56	1	1/4	2	17.0	25.0	30
015-1M4-5	208-230/3/60	ZS13KAE-TF5	1	9.7	58	1	1/4	2	14.1	20.0	30
015-1M4-9	480/3/60	ZS13KAE-TFD	1	4.8	29	1	1/4	0.9	6.9	15.0	30
020-1M4-2	208-230/1/60	ZB15KCE-PFV	1	15.7	61	1	1/2	3.5	23.1	35.0	30
020-1M4-5	208-230/3/60	ZB15KCE-TF5	1	8.9	55	1	1/2	3.5	14.6	20.0	30
020-1M4-9	480/3/60	ZB15KCE-TFD	1	5	27	1	1/2	1.7	8.0	15.0	30
025-1M4-2	208-230/1/60	ZB19KCE-PFV	1	17.9	73	1	1/2	3.5	25.9	40.0	30
025-1M4-5	208-230/3/60	ZB19KCE-TF5	1	10	63	1	1/2	3.5	16.0	25.0	30
025-1M4-9	480/3/60	ZB19KCE-TFD	1	5	31	1	1/2	1.7	8.0	15.0	30
030-1M4-2	208-230/1/60	ZB21KCE-PFV	1	20.7	100	1	1/2	3.5	29.4	50.0	60
030-1M4-5	208-230/3/60	ZB21KCE-TF5	1	12.1	77	1	1/2	3.5	18.6	30.0	30
030-1M4-9	480/3/60	ZB21KCE-TFD	1	6.1	39	1	1/2	1.7	9.3	15.0	30
030-1M4-8	600/3/60	ZB21KCE-TFE	1	5	31	1	1/2	1.2	7.5	15.0	30
035-1M4-2	208-230/1/60	ZB26KCE-PFV	1	23.6	127	1	1/2	3.5	33.0	50.0	60
035-1M4-5	208-230/3/60	ZB26KCE-TF5	1	13.2	88	1	1/2	3.5	20.0	30.0	30
035-1M4-9	480/3/60	ZB26KCE-TFD	1	6.4	44	1	1/2	1.7	9.7	15.0	30
035-1M4-8	600/3/60	ZB26KCE-TFE	1	5.7	34	1	1/2	1.2	8.3	15.0	30
040-1M4-2	208-230/1/60	ZB30KCE-PFV	1	26.8	132	1	1/2	3.5	37.0	60.0	60
040-1M4-5	208-230/3/60	ZB30KCE-TF5	1	15.7	115	1	1/2	3.5	23.1	35.0	30
040-1M4-9	480/3/60	ZB30KCE-TFD	1	7.5	47.5	1	1/2	1.7	11.1	15.0	30
040-1M4-8	600/3/60	ZB30KCE-TFE	1	6.4	40	1	1/2	1.2	9.2	15.0	30
050-1M4-2	208-230/1/60	ZB38KCE-PFV	1	31.1	175	1	1/2	3.5	42.4	70.0	60
050-1M4-5	208-230/3/60	ZB38KCE-TF5	1	22.1	128	1	1/2	3.5	31.1	50.0	60
050-1M4-9	480/3/60	ZB38KCE-TFD	1	9.6	63	1	1/2	1.7	13.7	20.0	30
050-1M4-8	600/3/60	ZB38KCE-TFE	1	7.1	50	1	1/2	1.2	10.1	15.0	30
060-1M4-5	208-230/3/60	ZB45KCE-TF5	1	22.5	156	1	1/2	3.5	31.6	50.0	60
060-1M4-9	480/3/60	ZB45KCE-TFD	1	10.1	75	1	1/2	1.7	14.3	20.0	30
060-1M4-8	600/3/60	ZB45KCE-TFE	1	7.9	54	1	1/2	1.2	11.1	15.0	30
065-1M4-5	208-230/3/60	ZB50KCE-TF5	1	28.6	196	2	1/2	3.5	42.8	70.0	60
065-1M4-9	480/3/60	ZB50KCE-TFD	1	15	100	2	1/2	1.7	22.2	35.0	30
065-1M4-8	600/3/60	ZB50KCE-TFE	1	11.1	90	2	1/2	1.2	16.3	25.0	30
070-1M4-5	208-230/3/60	ZB58KCE-TF5	1	30.7	195	2	1/2	3.5	45.4	70.0	60
070-1M4-9	480/3/60	ZB58KCE-TFD	1	16.4	95	2	1/2	1.7	23.9	40.0	30
070-1M4-8	600/3/60	ZB58KCE-TFE	1	12.9	80	2	1/2	1.2	18.5	30.0	30
075-1M4-5	208-230/3/60	ZB66KCE-TF5	1	30	225	2	1/2	3.5	44.5	70.0	60
075-1M4-9	480/3/60	ZB66KCE-TFD	1	17.5	114	2	1/2	1.7	25.3	40.0	30
075-1M4-8	600/3/60	ZB66KCE-TFE	1	12.5	80	2	1/2	1.2	18.0	30.0	30
085-1M4-5	208-230/3/60	ZB76KCE-TF5	1	41.4	239	2	1/2	3.5	58.8	100.0	100
085-1M4-9	480/3/60	ZB76KCE-TFD	1	20	125	2	1/2	1.7	28.4	45.0	30
085-1M4-8	600/3/60	ZB76KCE-TFE	1	13.2	80	2	1/2	1.2	18.9	30.0	30
100-1M4-5	208-230/3/60	ZB95KCE-TW5	1	61.4	300	2	1/2	3.5	83.8	125.0	100
100-1M4-9	480/3/60	ZB95KCE-TWD	1	31.4	150	2	1/2	1.7	42.7	70.0	60
100-1M4-8	600/3/60	ZB95KCE-TWE	1	22.9	109	2	1/2	1.2	31.0	50.0	60

1. MCA : Minimum Circuit Ampacity, MOP: Maximum Overcurrent Protection

ICZ/OCZ Low Temperature R-404A

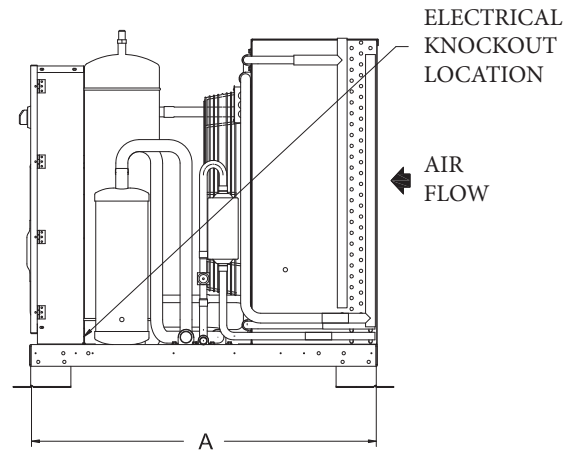
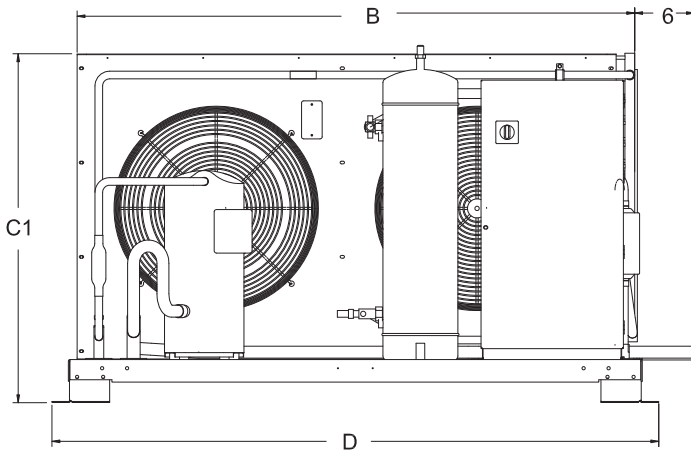
Model Number	Voltage	Compressor				Condenser Fan			MCA(1)	MOP(1)	Disc. Sw.
		Model	Qty	RLA	LRA	Qty	HP	FLA			
013-114-2	208-230/1/60	ZF06K4E-PFV	1	13.6	61	1	1/4	2.0	19.0	30.0	30
013-114-5	208-230/3/60	ZF06K4E-TF5	1	9.3	55	1	1/4	2.0	13.6	20.0	30
013-114-9	480/3/60	ZF06K4E-TFD	1	4.3	27	1	1/4	0.9	6.3	15.0	30
015-114-2	208-230/1/60	ZF08K4E-PFV	1	16.4	73	1	1/4	2.0	22.5	35.0	30
015-114-5	208-230/3/60	ZF08K4E-TF5	1	9.6	63	1	1/4	2.0	14.0	20.0	30
015-114-9	480/3/60	ZF08K4E-TFD	1	5	31	1	1/4	0.9	7.2	15.0	30
020-114-2	208-230/1/60	ZF09K4E-PFV	1	14.3	88	1	1/2	3.5	21.4	35.0	30
020-114-5	208-230/3/60	ZF09K4E-TF5	1	9.6	77	1	1/2	3.5	15.5	25.0	30
020-114-9	480/3/60	ZF09K4E-TFD	1	5	39	1	1/2	1.7	8.0	15.0	30
020-114-8	600/3/60	ZF09K4E-TFE	1	3.9	31	1	1/2	3.5	8.4	15.0	30
025-114-2	208-230/1/60	ZF11K4E-PFV	1	20.7	109	1	1/2	3.5	29.4	50.0	30
025-114-5	208-230/3/60	ZF11K4E-TF5	1	12.1	88	1	1/2	1.7	16.8	25.0	30
025-114-9	480/3/60	ZF11K4E-TFD	1	6.4	44	1	1/2	3.5	11.5	15.0	30
025-114-8	600/3/60	ZF11K4E-TFE	1	4.6	34	1	1/2	3.5	9.3	15.0	30
030-114-2	208-230/1/60	ZF13K4E-PFV	1	25	129	1	1/2	1.7	33.0	50.0	60
030-114-5	208-230/3/60	ZF13K4E-TF5	1	13.2	99	1	1/2	1.2	17.7	30.0	30
030-114-9	480/3/60	ZF13K4E-TFD	1	7.1	49.5	1	1/2	3.5	12.4	15.0	30
030-114-8	600/3/60	ZF13K4E-TFE	1	7.1	40	1	1/2	3.5	12.4	15.0	30
035-114-2	208-230/1/60	ZF15K4E-PFV	1	27.5	169	1	1/2	1.7	36.1	60.0	60
035-114-5	208-230/3/60	ZF15K4E-TF5	1	18.9	123	1	1/2	1.2	24.8	40.0	30
035-114-9	480/3/60	ZF15K4E-TFD	1	8.9	62	1	1/2	3.5	14.6	20.0	30
035-114-8	600/3/60	ZF15K4E-TFE	1	6.4	50	1	1/2	3.5	11.5	15.0	30
040-114-5	208-230/3/60	ZF18K4E-TF5	1	21.8	156	1	1/2	1.2	28.5	50.0	30
040-114-9	480/3/60	ZF18K4E-TFD	1	8.9	75	1	1/2	3.5	14.6	20.0	30
040-114-8	600/3/60	ZF18K4E-TFE	1	7.9	54	1	1/2	3.5	13.4	20.0	30
050-114-5	208-230/3/60	ZF25K4E-TF5	1	26.7	224	1	1/2	1.7	35.1	60.0	60
050-114-9	480/3/60	ZF25K4E-TFD	1	11.9	99	1	1/2	1.2	16.1	25.0	30
050-114-8	600/3/60	ZF25K4E-TFE	1	9.1	82.4	1	1/2	3.5	14.9	15.0	30
070-114-5	208-230/3/60	ZF34K5E-TFC	1	37.1	239	2	1/2	1.7	49.8	80.0	60
070-114-9	480/3/60	ZF34K5E-TFD	1	17.9	100	2	1/2	1.2	24.8	40.0	30
070-114-8	600/3/60	ZF34K5E-TFE	1	14.3	100	2	1/2	3.5	24.9	35.0	30
090-114-5	208-230/3/60	ZF41K5E-TFC	1	42.1	248	2	1/2	1.7	56.0	90.0	60
090-114-9	480/3/60	ZF41K5E-TFD	1	19.3	125	2	1/2	1.2	26.5	45.0	30
090-114-8	600/3/60	ZF41K5E-TFE	1	15.6	100	2	1/2	3.5	26.5	40.0	30

NOTES

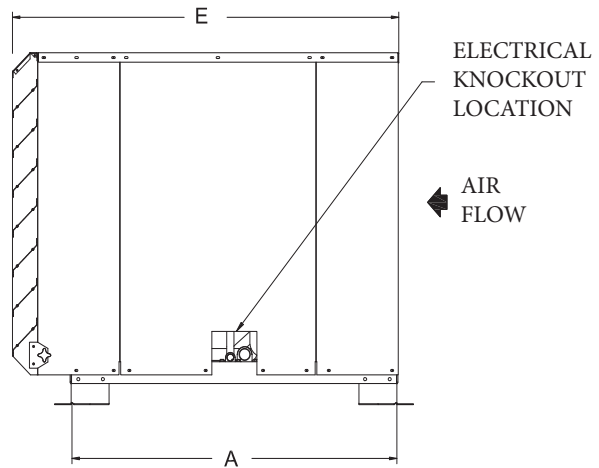
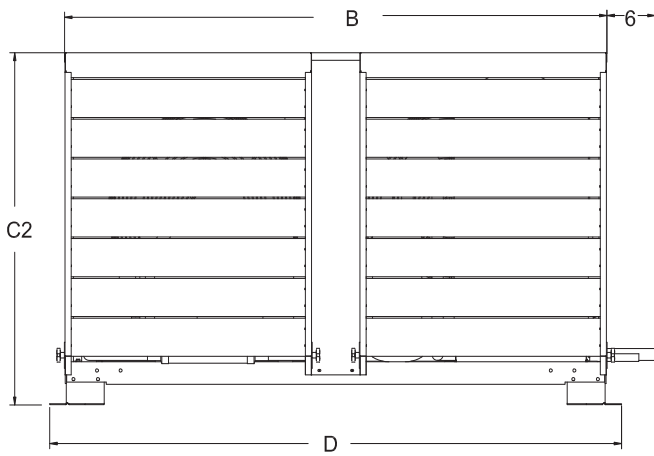
1. MCA : Minimum Circuit Ampacity, MOP: Maximum Overcurrent Protection

DRAWINGS

ICZ



OCZ



Dimensions are in inch

MODEL

MODEL		A	B	C1		C2		D	E
0 1 0	T o 0 1 5	2 7	3 5	3 0	1 / 8	3 0	1 / 2	3 8 3 / 4	3 4 1 / 8
0 2 0	T o 0 3 0	3 4	4 3	3 0	1 / 4	3 0	1 / 4	4 6 3 / 4	4 1 1 / 8
0 3 5	T o 0 6 0	3 4	4 3	4 0	1 / 4	4 0	5 / 8	4 6 3 / 4	4 1 1 / 8
0 6 5	T o 1 0 0	4 0	6 6	4 0	1 / 8	4 0	1 / 2	6 9 3 / 4	4 7 1 / 8

SPECIFICATIONS

Casings

Air-cooled condensing unit bases, condenser fan section, electrical boxes and OCZ cabinets are heavy-gauge galvanized steel (G90) with plated or stainless steel hardware.

Condenser coils

Condenser coils are manufactured with seamless, deoxidized, heavy wall, and smooth copper tubes. They are mechanically expanded in self-spaced, full-collared aluminum corrugated plate fins for permanent bond and maximum heat transfer. Connections and bends are brazed with a high temperature-brazing alloy. Coils are factory leak tested at 600 psig using -40°F/-40°C dew point dry air.

Fan guards and motor mounts

Fan guards and motor mounts are welded wire construction for full protection from moving parts. Baked-on powder epoxy-coating provides corrosion protection.

Fans

Fans are aluminum blades riveted to a steel hub. They are statically and dynamically balanced for smooth and vibration-free operation. Models ICZ and OCZ 010 to 015 use 16" fans and 020 to 100 use 20" fans.

Fan motors

Fan motors are low speed, permanently lubricated sealed ball bearings and inherent thermal protection for long life and dependable service. Model ICZ and OCZ are line voltage single phase.

Wiring

Fan motors are wired using flexible cord, type SOW 90°C #16 AWG. Compressor, fan motors and controls are wired using water and oil resistant wire, type TEW 105°C, protected by plastic or metallic conduit attached with certified connectors.

Electrical boxes

Electrical boxes are located on the front of the unit for easy access and service. They are weather protected and are manufactured of heavy-gauge galvanized steel and assembled with plated or stainless steel hardware for corrosion protection.

Control panels

Control panels are complete with terminal blocks, control transformer, control circuit fuses, compressor and fan contactors (multi fan units), liquid sensing fan cycling thermostats, fix high and adjustable low pressure control, and a pump-down switch. The wires are numbered, color-coded and conveniently routed in wiring ducts. All terminal blocks are identified and match the wiring diagram.

Compressors

Compressors are suction cooled, refrigeration or heat pump duty, Scroll. They are supplied with suction and discharge valves, solid state or line break thermal protection, crankcase heater, and Polyol Ester oil with HFC refrigerant.

Receivers

Receivers (6" dia. And smaller) are UL/CSA certified and are supplied with a fusible plug. Receivers (6 5/8" dia. and larger) are CRN or ASME "U" stamped and are supplied with relief valves. All receivers have inlet and outlet back-seated Rotalock valves. For low ambient operation, RefPlus offers a factory installed insulation and heating option.

Refrigeration flooding valves

Refrigeration flooding valves (model OCZ) are factory installed. They are of fixed pressures.

Refrigeration copper tubes

Refrigeration copper tubes are ASTM certified and are factory bent using a programmable CNC tube bender. They are manufactured with the minimum number of fittings and brazed joints to reduce the risk of leaks.

Factory tested

All RefPlus units are electrically tested. A Dielectric Voltage Withstand Strength Test is done on all units. The compressors are energized, and the operating sequence and all controls on each unit are factory tested. Refrigeration piping is leak tested and the system is pressurized and sealed with -40°F/-40°C dew point nitrogen.

