



KQ **New Generation "E"** Condensing Units

PRODUCT DATA & SPECIFICATIONS

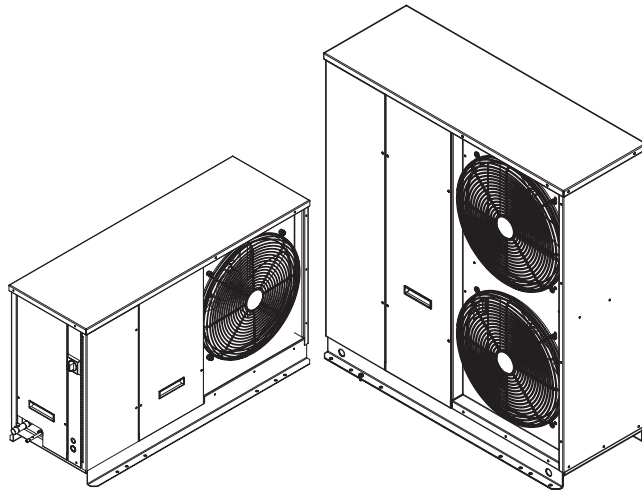
Part # 1112441

60
Hz

**Outdoor Air-Cooled
Condensing Units**

3/4 to 6 HP -
High, Medium and Low
Temperature Refrigeration

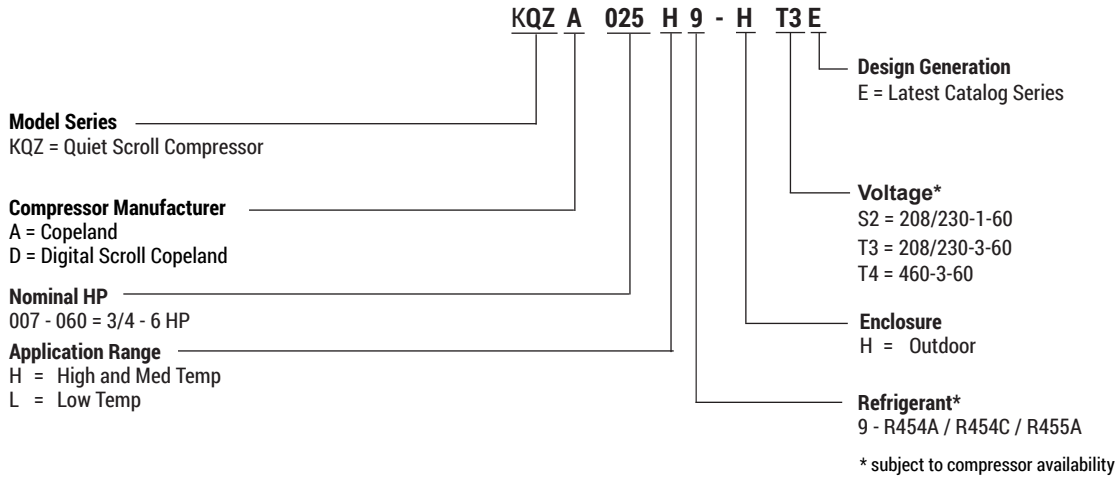
	PRODUCT SUPPORT	<i>scan:</i>
	web: www.k-rp.com/kq	
	email: smcu@k-rp.com	
	call: 1-844-893-3222 x521	



QUIETUNIT
REFRIGERATION DUTY CONDENSING UNITS

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STANDARD FEATURES

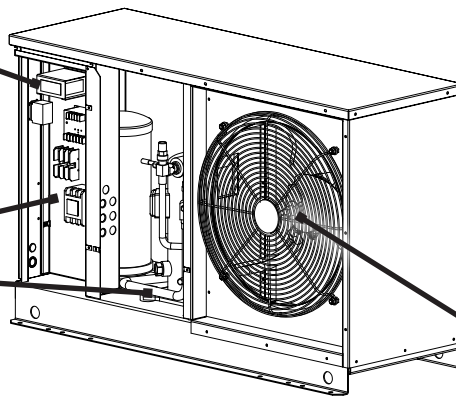
- Compatible with low GWP refrigerants
- Copeland scroll compressors
- Heavy duty weatherproof construction
- Painted cabinet
- High efficiency enhanced tube and fin condenser design
- Gold Coat™ fins (epoxy coating)
- High efficiency variable speed EC motor as head pressure control
- Sealed liquid line filter drier and sight glass
- Heated and insulated receiver
- Receiver with fusible plug and liquid shut-off valve
- Suction & discharge service valves
- Suction accumulator (low temperature models)
- Liquid injection (low temperature models)
- Discharge temp sensor (low temperature models)
- Crankcase heater
- Fixed high pressure control
- Dixell XC35CX condensing unit controller with Real Time Clock
- Unit leak tested and shipped with helium holding charge
- Insulated suction accumulator with heat exchanger (**QZD DIGITAL UNITS**)
- Oil separator (**QZD - DIGITAL UNITS**)
- Heated +insulated receiver (**QZD - DIGITAL UNITS**)
- All service connections marked red to indicate A2L refrigerants



XC35CX CONTROLLER

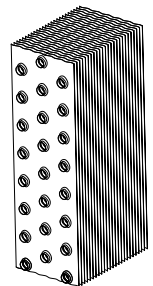


GENEROUSLY SIZED CONTROL PANEL FOR EASY ACCESS AND AMPLE ROOM FOR SERVICEABILITY



GOLD COAT™ FINNS

High corrosion resistance and heat exchange efficiency, epoxy aluminum foil.



VARIABLE SPEED EC MOTORS



AVAILABLE OPTIONS

- Suction accumulator (optional on high and medium temp models)
- Sealed suction filter
- Flooded head pressure control (adjustable)
- Non-fused disconnect switch
- Sound insulated compressor compartment
- Wall mount kit
- Extended leg kit
- Wind guard
- Oil separator (2 fan models only and digitals)
- QuickVac evacuation and refrigerant recovery valves
- Over-sized receiver
- Electronic voltage / phase monitor
- Digital Scroll on certain models (consult factory)

SELECTION CAPACITY DATA

KQ - QUIET CONDENSING UNITS

HIGH TEMPERATURE - R454A

Model KQ	Saturated Suction Temp.		Selection Capacity BTU/h						
	°F	°C	Ambient Temperature						
			85°F (29.4°C)	90°F (32.2°C)	95°F (35°C)	100°F (37.8°C)	105°F (40.6°C)	110°F (43.3°C)	
KQZA007H9 Compressor Model YB06KAE	40	4.4	11300	11000	10600	10200	9870	9490	
	35	1.7	10300	9950	9620	9280	8940	8590	
	30	-1.1	9300	9000	8700	8400	8090	7770	
	25	-3.9	8400	8130	7850	7580	7300	7010	
	20	-6.7	7560	7320	7080	6830	6570	6320	
	15	-9.4	6800	6580	6360	6140	5910	5680	
	10	-12.2	6100	5900	5700	5500	5300	5100	
	5	-15.0	5450	5280	5100	4920	4740	4560	
	0	-17.8	4870	4710	4550	4390	4240	4080	
KQZA008H9 Compressor Model YB07KAE	40	4.4	13500	13000	12600	12100	11700	11200	
	35	1.7	12200	11800	11400	11000	10600	10200	
	30	-1.1	11100	10700	10400	9990	9620	9240	
	25	-3.9	10000	9700	9370	9040	8700	8350	
	20	-6.7	9040	8750	8450	8150	7850	7540	
	15	-9.4	8130	7870	7610	7340	7070	6790	
	10	-12.2	7300	7070	6830	6590	6350	6100	
	5	-15.0	6540	6330	6120	5910	5690	5480	
	0	-17.8	5840	5660	5470	5280	5090	4900	
KQZA009H9 Compressor Model YB08KAE	40	4.4	15500	15000	14500	13900	13400	12900	
	35	1.7	14100	13600	13100	12700	12200	11700	
	30	-1.1	12800	12300	11900	11500	11000	10600	
	25	-3.9	11500	11200	10800	10400	9990	9590	
	20	-6.7	10400	10100	9730	9380	9020	8660	
	15	-9.4	9380	9080	8770	8450	8130	7810	
	10	-12.2	8430	8160	7880	7600	7320	7030	
	5	-15.0	7560	7310	7070	6820	6570	6320	
	0	-17.8	6760	6540	6330	6110	5890	5670	
KQZA010H9 Compressor Model YS09KAE	40	4.4	17100	16500	15900	15400	14800	14200	
	35	1.7	15500	15000	14500	14000	13400	12900	
	30	-1.1	14100	13600	13200	12700	12200	11700	
	25	-3.9	12800	12300	11900	11500	11000	10600	
	20	-6.7	11500	11100	10700	10400	9960	9560	
	15	-9.4	10400	10000	9680	9330	8970	8620	
	10	-12.2	9310	9000	8700	8380	8070	7750	
	5	-15.0	8340	8070	7790	7520	7240	6960	
	0	-17.8	7450	7210	6970	6730	6490	6250	
KQZA011H9 Compressor Model YS11KAE	40	4.4	19700	19100	18400	17700	17000	16400	
	35	1.7	18000	17400	16700	16100	15500	14900	
	30	-1.1	16300	15800	15200	14600	14100	13500	
	25	-3.9	14800	14300	13800	13300	12700	12200	
	20	-6.7	13400	12900	12400	12000	11500	11100	
	15	-9.4	12000	11600	11200	10800	10400	9970	
	10	-12.2	10800	10400	10100	9710	9340	8980	
	5	-15.0	9690	9370	9040	8720	8390	8070	
	0	-17.8	8670	8380	8090	7810	7530	7250	
KQZA015H9 Compressor Model YS12KAE	40	4.4	22900	22100	21400	20600	19800	19000	
	35	1.7	20900	20200	19500	18800	18100	17300	
	30	-1.1	19000	18400	17700	17100	16400	15800	
	25	-3.9	17200	16600	16100	15500	14900	14300	
	20	-6.7	15600	15100	14500	14000	13500	12900	
	15	-9.4	14100	13600	13100	12700	12200	11700	
	10	-12.2	12700	12200	11800	11400	11000	10600	
	5	-15.0	11400	11000	10600	10300	9880	9500	
	0	-17.8	10200	9850	9520	9200	8870	8540	
KQZA020H9 Compressor Model YS14KAE	40	4.4	26900	26000	25100	24200	23300	22300	
	35	1.7	24600	23800	23000	22100	21300	20400	
	30	-1.1	22400	21700	20900	20200	19400	18600	
	25	-3.9	20400	19700	19000	18300	17600	16900	
	20	-6.7	18500	17900	17300	16600	16000	15400	
	15	-9.4	16700	16200	15600	15100	14500	13900	
	10	-12.2	15100	14600	14100	13600	13100	12600	
	5	-15.0	13600	13100	12700	12200	11800	11300	
	0	-17.8	12200	11800	11400	11000	10600	10200	

Model KQ	Saturated Suction Temp.		Selection Capacity BTU/h						
	°F	°C	Ambient Temperature						
			85°F (29.4°C)	90°F (32.2°C)	95°F (35°C)	100°F (37.8°C)	105°F (40.6°C)	110°F (43.3°C)	
KQZA025H9 Compressor Model YS16KAE	40	4.4	29600	28600	27600	26600	25600	24500	
	35	1.7	27100	26200	25300	24300	23400	22400	
	30	-1.1	24700	23900	23000	22200	21300	20400	
	25	-3.9	22500	21700	21000	20200	19400	18600	
	20	-6.7	20400	19700	19000	18300	17600	16900	
	15	-9.4	18500	17900	17200	16600	16000	15300	
	10	-12.2	16700	16100	15600	15000	14400	13800	
	5	-15.0	15000	14500	14000	13500	13000	12500	
	0	-17.8	13500	13100	12600	12200	11700	-	
KQZA030H9 Compressor Model YS21KAE	40	4.4	38400	37100	35700	34200	32800	31300	
	35	1.7	35200	33900	32700	31400	30000	28700	
	30	-1.1	32200	31000	29800	28700	27500	26200	
	25	-3.9	29300	28300	27200	26100	25000	23900	
	20	-6.7	26700	25700	24800	23800	22800	21800	
	15	-9.4	24200	23300	22500	21600	20700	19800	
	10	-12.2	21900	21100	20400	19600	18800	18000	
	5	-15.0	19700	19100	18400	17700	17000	-	
	0	-17.8	17800	17200	16600	16000	15300	-	
KQZA035H9 Compressor Model YS24KAE	40	4.4	44800	43300	41800	40300	38700	37200	
	35	1.7	40900	39600	38200	36800	35400	34000	
	30	-1.1	37300	36100	34800	33600	32300	31000	
	25	-3.9	33900	32800	31700	30500	29400	28200	
	20	-6.7	30800	29800	28800	27700	26700	25600	
	15	-9.4	27900	27000	26000	25100	24200	23200	
	10	-12.2	25200	24400	23500	22700	21800	21000	
	5	-15.0	22700	21900	21200	20500	19700	18900	
	0	-17.8	20300	19700	19100	18400	17700	17100	
KQZA040H9 Compressor Model YS26KAE	40	4.4	50100	48400	46800	45000	43300	41500	
	35	1.7	45900	44300	42800	41200	39600	38000	
	30	-1.1	41900	40500	39100	37600	36200	34700	
	25	-3.9	38100	36900	35600	34300	32900	31600	
	20	-6.7	34600	33500	32300	31100	29900	28700	
	15	-9.4	31300	30300	29300	28200	27100	26000	
	10	-12.2	28300	27400	26500	25500	24500	23500	
	5	-15.0	25500	24700	23800	23000	22100	21200	
	0	-17.8	22900	22200	21400	20700	19900	-	
KQZA045H9 Compressor Model YS30KAE	40	4.4	56400	54500	52500	50600	48500	46500	
	35	1.7	51600	49800	48100	46300	44400	42600	
	30	-1.1	47100	45500	43900	42200	40600	38900	
	25	-3.9	42900	41400	40000	38500	37000	35400	
	20	-6.7	39000	37700	36300	35000	33600	32300	
	15	-9.4	35300	34100	33000	31800	30500	29300	
	10	-12.2	31900	30900	29800	28800	27700	26600	
	5	-15.0	28800	27900	26900	26000	25000	24100	
	0	-17.8	25900	25100	24200	23400	22600	-	
KQZA050H9 Compressor Model YB34KAE	40	4.4	63200	61000	58800	56500	54100	-	
	35	1.7	57900	55800	53800	51700	49600	-	
	30	-1.1	52800	51000	49100	47200	45300	43300	
	25	-3.9	48100	46400	44800	43000	41300	39500	
	20	-6.7	43700	42200	40700	39100	37500	35900	
	15	-9.4	39600	38200	36900	35500	34100	32600	
	10	-12.2	35800	34600	33300	32100	30800	29500	
	5	-15.0	32200	31200	30100	29000	27900	26700	
	0	-17.8	29000	28000	27100	26100	25100	-	
KQZA060H9 Compressor Model YB40KAE	40	4.4	74500	71800	69100	66400	63600	-	
	35	1.7	68200	65800	63300	60800	58300	-	
	30	-1.1	62300	60100	57900	55600	53300	-	
	25	-3.9	56800	54800	52800	50700	48700	46500	
	20	-6.7	51600	49800	48000	46200	44300	42400	
	15	-9.4	46800	45200	43600	41900	40300	38600	
	10	-12.2	42300	40900	39500	38000	36500	35000	
	5	-15.0	38200	36900	35600	34300	33000	-	
	0	-17.8	34300	33200	32100	31000	29800	-	

- All dashes are out of operating envelope.

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HIGH TEMPERATURE - R454A

Model KQ	Saturated Suction Temp.		Selection Capacity BTU/h						Ambient Temperature	
	° F	° C	85°F	90°F	95°F	100°F	105°F	110°F		
			(29.4°C)	(32.2°C)	(35°C)	(37.8°C)	(40.6°C)	(43.3°C)		
KQZD030H9 Compressor Model YBD20KSE	40	4.4	39300	38000	36700	35400	34000	32600		
	35	1.7	35900	34700	33500	32300	31000	29800		
	30	-1.1	32700	31600	30500	29400	28300	27100		
	25	-3.9	29700	28700	27700	26700	25700	24700		
	20	-6.7	26900	26000	25100	24200	23300	22400		
	15	-9.4	24300	23600	22700	21900	21100	20300		
	10	-12.2	22000	21200	20500	19800	19100	18300		
	5	-15.0	19800	19100	18500	17800	17200	16500		
	0	-17.8	17700	17200	16600	16000	15500	14900		
	KQZD040H9 Compressor Model YBD28KAE	40	4.4	52700	51000	49100	47300	45400	43500	
35		1.7	48200	46600	44900	43200	41500	39800		
30		-1.1	43900	42400	41000	39400	37900	36300		
25		-3.9	39900	38600	37300	35900	34500	33000		
20		-6.7	36200	35000	33800	32600	31300	30000		
15		-9.4	32800	31700	30600	29500	28400	27200		
10		-12.2	29600	28700	27700	26700	25700	24700		
5		-15.0	26700	25800	25000	24100	23200	22300		
0		-17.8	24000	23200	22500	21700	20900	20100		
KQZD050H9 Compressor Model YBD34KAE		40	4.4	63200	61000	58800	56500	54100	-	
	35	1.7	57900	55800	53800	51700	49600	-		
	30	-1.1	52800	51000	49100	47200	45300	43300		
	25	-3.9	48100	46400	44800	43000	41300	39500		
	20	-6.7	43700	42200	40700	39100	37500	35900		
	15	-9.4	39600	38200	36900	35500	34100	32600		
	10	-12.2	35800	34600	33300	32100	30800	29500		
	5	-15.0	32200	31200	30100	29000	27900	26700		
	0	-17.8	29000	28000	27100	26100	25100	-		
	KQZD060H9 Compressor Model YBD40KAE	40	4.4	74500	71800	69100	66400	63600	-	
35		1.7	68200	65800	63300	60800	58300	-		
30		-1.1	62300	60100	57900	55600	53300	-		
25		-3.9	56800	54800	52800	50700	48700	46500		
20		-6.7	51600	49800	48000	46200	44300	42400		
15		-9.4	46800	45200	43600	41900	40300	38600		
10		-12.2	42300	40900	39500	38000	36500	35000		
5		-15.0	38200	36900	35600	34300	33000	-		
0		-17.8	34300	33200	32100	31000	29800	-		

- All dashes are out of operating envelope.

* Shaded temperatures measure to 20°F Superheat

SELECTION CAPACITY DATA

KQ - QUIET CONDENSING UNITS

HIGH TEMPERATURE - R454C

Model KQ	Saturated Suction Temp.		Selection Capacity BTU/h						Ambient Temperature								
			85°F	90°F	95°F	100°F	105°F	110°F	85°F	100°F	105°F	110°F					
	° F	° C	(29.4°C)	(32.2°C)	(35°C)	(37.8°C)	(40.6°C)	(43.3°C)	° F	° C	(29.4°C)	(32.2°C)	(35°C)	(37.8°C)	(40.6°C)	(43.3°C)	
KQZA007H9 Compressor Model YB06KAE	40	4.4	9790	9480	9170	8850	8530	8200	KQZA025H9 Compressor Model YS16KAE	40	4.4	26000	25100	24200	23300	22400	21500
	35	1.7	8880	8600	8310	8020	7720	7420		35	1.7	23700	22900	22100	21300	20500	19600
	30	-1.1	8030	7770	7510	7250	6980	6700		30	-1.1	21600	20900	20100	19400	18600	17900
	25	-3.9	7250	7010	6780	6530	6290	6040		25	-3.9	19600	19000	18300	17600	16900	16200
	20	-6.7	6530	6310	6100	5880	5660	5440		20	-6.7	17800	17200	16600	16000	15300	14700
	15	-9.4	5860	5670	5470	5280	5080	4880		15	-9.4	16100	15500	15000	14400	13900	13300
	10	-12.2	5250	5080	4900	4730	4550	4370		10	-12.2	14500	14000	13500	13000	12500	12000
	5	-15.0	4690	4530	4380	4220	4060	3910		5	-15.0	13000	12600	12100	11700	11300	10800
	0	-17.8	4170	4040	3900	3760	3620	3480		0	-17.8	11700	11300	10900	10500	10100	-
KQZA008H9 Compressor Model YB07KAE	40	4.4	11600	11300	10900	10500	10100	9730	KQZA030H9 Compressor Model YS21KAE	40	4.4	33800	32600	31500	30300	29100	27800
	35	1.7	10600	10200	9890	9540	9180	8820		35	1.7	30900	29800	28800	27700	26500	25400
	30	-1.1	9570	9260	8950	8630	8310	7980		30	-1.1	28200	27200	26200	25200	24200	23200
	25	-3.9	8650	8370	8090	7800	7510	7210		25	-3.9	25600	24800	23900	23000	22000	21100
	20	-6.7	7800	7540	7290	7030	6770	6500		20	-6.7	23300	22500	21700	20800	20000	19100
	15	-9.4	7010	6780	6550	6320	6090	5850		15	-9.4	21100	20300	19600	18900	18100	17300
	10	-12.2	6290	6080	5880	5670	5460	5250		10	-12.2	19000	18400	17700	17100	16400	15700
	5	-15.0	5620	5440	5260	5070	4890	4700		5	-15.0	17100	16500	16000	15400	14800	14100
	0	-17.8	5010	4850	4690	4520	4360	4200		0	-17.8	15400	14900	14300	13800	13300	-
KQZA009H9 Compressor Model YB08KAE	40	4.4	13400	13000	12500	12100	11600	11200	KQZA035H9 Compressor Model YS24KAE	40	4.4	39100	37900	36600	35200	33900	32600
	35	1.7	12200	11800	11400	11000	10600	10100		35	1.7	35700	34600	33400	32200	31000	29700
	30	-1.1	11000	10700	10300	9940	9570	9190		30	-1.1	32500	31500	30400	29300	28200	27100
	25	-3.9	9990	9660	9330	8990	8650	8310		25	-3.9	29600	28600	27600	26600	25600	24600
	20	-6.7	9010	8710	8410	8110	7800	7500		20	-6.7	26800	25900	25000	24100	23200	22300
	15	-9.4	8100	7840	7570	7300	7020	6750		15	-9.4	24200	23400	22600	21800	21000	20200
	10	-12.2	7270	7030	6790	6550	6310	6060		10	-12.2	21800	21100	20400	19700	19000	18200
	5	-15.0	6510	6290	6080	5870	5650	5440		5	-15.0	19600	19000	18400	17700	17000	16400
	0	-17.8	5800	5620	5430	5240	5050	4860		0	-17.8	17600	17000	16500	15900	15300	14700
KQZA010H9 Compressor Model YS09KAE	40	4.4	14800	14300	13800	13300	12800	12300	KQZA040H9 Compressor Model YS26KAE	40	4.4	43600	42200	40800	39300	37800	36300
	35	1.7	13500	13000	12600	12100	11700	11200		35	1.7	39900	38600	37300	35900	34600	33200
	30	-1.1	12200	11800	11400	11000	10600	10200		30	-1.1	36400	35200	34000	32800	31500	30300
	25	-3.9	11100	10700	10300	9960	9570	9190		25	-3.9	33100	32000	30900	29800	28700	27500
	20	-6.7	9990	9660	9320	8980	8640	8290		20	-6.7	30000	29000	28000	27000	26000	25000
	15	-9.4	8990	8690	8390	8080	7780	7470		15	-9.4	27100	26300	25400	24500	23500	22600
	10	-12.2	8060	7800	7530	7250	6980	6710		10	-12.2	24500	23700	22900	22100	21300	20400
	5	-15.0	7210	6970	6740	6500	6250	6010		5	-15.0	22000	21300	20600	19900	19100	18400
	0	-17.8	6430	6220	6010	5800	5590	5380		0	-17.8	19700	19100	18500	17800	17200	-
KQZA011H9 Compressor Model YS11KAE	40	4.4	17200	16600	16100	15500	14900	14300	KQZA045H9 Compressor Model YS30KAE	40	4.4	49200	47600	45900	44300	42600	40900
	35	1.7	15700	15100	14600	14100	13500	13000		35	1.7	45000	43500	42000	40500	38900	37400
	30	-1.1	14200	13800	13300	12800	12300	11800		30	-1.1	41000	39700	38300	36900	35500	34100
	25	-3.9	12900	12400	12000	11600	11100	10700		25	-3.9	37300	36100	34800	33600	32300	31000
	20	-6.7	11600	11200	10800	10400	10000	9620		20	-6.7	33800	32700	31600	30500	29300	28200
	15	-9.4	10500	10100	9760	9390	9030	8670		15	-9.4	30600	29600	28600	27600	26600	25500
	10	-12.2	9400	9080	8760	8440	8110	7790		10	-12.2	27600	26800	25800	24900	24000	23100
	5	-15.0	8410	8120	7840	7560	7270	6990		5	-15.0	24900	24100	23300	22500	21600	20800
	0	-17.8	7500	7250	7000	6760	6510	6260		0	-17.8	22300	21600	20900	20200	19400	18700
KQZA015H9 Compressor Model YS12KAE	40	4.4	20000	19300	18600	18000	17300	16600	KQZA050H9 Compressor Model YB34KAE	40	4.4	55500	53600	51700	49700	47800	-
	35	1.7	18200	17600	17000	16300	15700	15100		35	1.7	50700	49000	47300	45500	43700	41800
	30	-1.1	16500	16000	15400	14800	14300	13700		30	-1.1	46300	44700	43100	41500	39800	38100
	25	-3.9	15000	14500	14000	13400	12900	12400		25	-3.9	42100	40700	39200	37700	36200	34700
	20	-6.7	13500	13100	12600	12200	11700	11200		20	-6.7	38200	36900	35600	34200	32900	31500
	15	-9.4	12200	11800	11400	11000	10500	10100		15	-9.4	34500	33400	32200	31000	29700	28500
	10	-12.2	10900	10600	10200	9850	9480	9120		10	-12.2	31100	30100	29100	28000	26900	25700
	5	-15.0	9810	9490	9160	8840	8520	8190		5	-15.0	28000	27100	26200	25200	24200	23200
	0	-17.8	8760	8480	8200	7920	7630	7350		0	-17.8	25200	24400	23500	22700	21800	-
KQZA020H9 Compressor Model YS14KAE	40	4.4	23600	22800	22000	21200	20400	19500	KQZA060H9 Compressor Model YB40KAE	40	4.4	65400	63100	60800	58400	56000	-
	35	1.7	21500	20800	20000	19300	18600	17800		35	1.7	59800	57800	55600	53500	51300	-
	30	-1.1	19600	18900	18200	17600	16900	16200		30	-1.1	54600	52700	50800	48800	46800	44800
	25	-3.9	17700	17200	16500	15900	15300	14700		25	-3.9	49700	48000	46200	44500	42600	40800
	20	-6.7	16100	15500	15000	14400	13900	13300		20	-6.7	45100	43600	42000	40400	38800	37100
	15	-9.4	14500	14000	13500	13000	12500	12000		15	-9.4	40900	39500	38100	36600	35200	33700
	10	-12.2	13100	12600	12200	11700	11300	10800		10	-12.2	36900	35700	34400	33100	31800	30500
	5	-15.0	11700	11300	10900	10500	10200	9750		5	-15.0	33300	32200	31100	29900	28800	27600
	0	-17.8	10500	10100	9800	9450	9100	8750		0	-17.8	29900	28900	27900	26900	25900	-

- All dashes are out of operating envelope.

Continues on next page

SELECTION CAPACITY DATA - KQ DIGITAL

KQ - QUIET CONDENSING UNITS

HIGH TEMPERATURE - R454C

Model KQ	Saturated Suction Temp.		Selection Capacity BTU/h					
			Ambient Temperature					
	°F	°C	85°F (29.4°C)	90°F (32.2°C)	95°F (35°C)	100°F (37.8°C)	105°F (40.6°C)	110°F (43.3°C)
KQZD030H9 Compressor Model YBD20KSE	40	4.4	34200	33100	31900	30800	29600	28400
	35	1.7	31200	30200	29100	28100	27000	25900
	30	-1.1	28400	27400	26500	25500	24600	23600
	25	-3.9	25700	24900	24000	23200	22300	21400
	20	-6.7	23300	22500	21800	21000	20200	19400
	15	-9.4	21000	20400	19700	19000	18300	17500
	10	-12.2	18900	18300	17700	17100	16500	15800
	5	-15.0	17000	16500	15900	15400	14800	14200
	0	-17.8	15200	14800	14300	13800	13300	12800
	0	-17.8	15200	14800	14300	13800	13300	12800
KQZD040H9 Compressor Model YBD28KAE	40	4.4	46100	44600	43000	41400	39800	38200
	35	1.7	42100	40700	39300	37900	36400	34900
	30	-1.1	38300	37100	35800	34500	33200	31800
	25	-3.9	34800	33700	32500	31400	30200	28900
	20	-6.7	31600	30500	29500	28400	27400	26300
	15	-9.4	28500	27600	26700	25700	24800	23800
	10	-12.2	25700	24900	24100	23200	22400	21500
	5	-15.0	23100	22400	21700	20900	20100	19400
	0	-17.8	20800	20100	19500	18800	18100	17400
	0	-17.8	20800	20100	19500	18800	18100	17400
KQZD050H9 Compressor Model YBD34KAE	40	4.4	55500	53600	51700	49700	47800	-
	35	1.7	50700	49000	47300	45500	43700	41800
	30	-1.1	46300	44700	43100	41500	39800	38100
	25	-3.9	42100	40700	39200	37700	36200	34700
	20	-6.7	38200	36900	35600	34200	32900	31500
	15	-9.4	34500	33400	32200	31000	29700	28500
	10	-12.2	31100	30100	29100	28000	26900	25700
	5	-15.0	28000	27100	26200	25200	24200	23200
	0	-17.8	25200	24400	23500	22700	21800	-
	0	-17.8	25200	24400	23500	22700	21800	-
KQZD060H9 Compressor Model YBD40KAE	40	4.4	65400	63100	60800	58400	56000	-
	35	1.7	59800	57800	55600	53500	51300	-
	30	-1.1	54600	52700	50800	48800	46800	44800
	25	-3.9	49700	48000	46200	44500	42600	40800
	20	-6.7	45100	43600	42000	40400	38800	37100
	15	-9.4	40900	39500	38100	36600	35200	33700
	10	-12.2	36900	35700	34400	33100	31800	30500
	5	-15.0	33300	32200	31100	29900	28800	27600
	0	-17.8	29900	28900	27900	26900	25900	-
	0	-17.8	29900	28900	27900	26900	25900	-

- All dashes are out of operating envelope.

* Shaded temperatures measure to 20°F Superheat

SELECTION CAPACITY DATA

KQ - QUIET CONDENSING UNITS

HIGH TEMPERATURE - R455A

Model KQ	Saturated Suction Temp.		Selection Capacity BTU/h						Ambient Temperature							
			85°F	90°F	95°F	100°F	105°F	110°F	85°F	90°F	95°F	100°F	105°F	110°F		
	° F	° C	(29.4°C)	(32.2°C)	(35°C)	(37.8°C)	(40.6°C)	(43.3°C)	(29.4°C)	(32.2°C)	(35°C)	(37.8°C)	(40.6°C)	(43.3°C)		
KQZA007H9 Compressor Model YB06KAE	40	4.4	10400	10000	9690	9350	9000	8640	40	4.4	27300	26400	25400	24500	23500	22500
	35	1.7	9410	9100	8790	8480	8160	7830	35	1.7	25000	24100	23200	22400	21500	20600
	30	-1.1	8510	8240	7960	7670	7380	7080	30	-1.1	22800	22000	21200	20400	19600	18700
	25	-3.9	7690	7440	7180	6920	6660	6390	25	-3.9	20700	20000	19300	18500	17800	17000
	20	-6.7	6920	6700	6470	6230	6000	5760	20	-6.7	18800	18100	17500	16800	16100	15500
	15	-9.4	6220	6020	5810	5600	5390	5170	15	-9.4	17000	16400	15800	15200	14600	14000
	10	-12.2	5570	5390	5200	5020	4830	4640	10	-12.2	15300	14800	14300	13700	13200	12700
	5	-15.0	4980	4820	4650	4480	4320	4150	5	-15.0	13800	13300	12900	12400	11900	-
	0	-17.8	4440	4290	4140	4000	3850	3700	0	-17.8	12400	12000	11500	11100	10700	-
KQZA008H9 Compressor Model YB07KAE	40	4.4	12300	11900	11500	11100	10700	10200	40	4.4	35700	34400	33100	31800	30500	29100
	35	1.7	11200	10800	10500	10100	9690	9300	35	1.7	32600	31400	30300	29100	27800	26600
	30	-1.1	10100	9810	9470	9130	8790	8430	30	-1.1	29700	28700	27600	26500	25400	24200
	25	-3.9	9170	8870	8570	8260	7940	7620	25	-3.9	27000	26100	25100	24100	23100	22100
	20	-6.7	8270	8000	7730	7450	7170	6880	20	-6.7	24500	23700	22800	21900	21000	20000
	15	-9.4	7440	7200	6950	6700	6450	6190	15	-9.4	22200	21400	20700	19800	19000	18200
	10	-12.2	6680	6460	6240	6020	5790	5560	10	-12.2	20100	19400	18700	17900	17200	16500
	5	-15.0	5970	5780	5590	5390	5190	4980	5	-15.0	18100	17500	16800	16200	15500	-
	0	-17.8	5330	5160	4980	4810	4630	4450	0	-17.8	16300	15700	15200	14600	-	-
KQZA009H9 Compressor Model YB08KAE	40	4.4	14200	13700	13200	12700	12200	11700	40	4.4	41300	39900	38500	37100	35600	34100
	35	1.7	12900	12500	12000	11600	11100	10700	35	1.7	37700	36400	35100	33800	32500	31100
	30	-1.1	11700	11300	10900	10500	10100	9680	30	-1.1	34300	33200	32000	30800	29600	28400
	25	-3.9	10600	10200	9860	9500	9130	8760	25	-3.9	31200	30100	29100	28000	26900	25800
	20	-6.7	9540	9230	8900	8580	8240	7910	20	-6.7	28300	27300	26400	25400	24400	23400
	15	-9.4	8590	8300	8010	7720	7430	7130	15	-9.4	25600	24700	23900	23000	22100	21200
	10	-12.2	7710	7460	7200	6940	6670	6410	10	-12.2	23100	22300	21500	20800	19900	19100
	5	-15.0	6900	6680	6450	6220	5990	5750	5	-15.0	20800	20100	19400	18700	18000	17200
	0	-17.8	6160	5960	5760	5560	5360	5150	0	-17.8	18600	18000	17400	16800	16100	-
KQZA010H9 Compressor Model YS09KAE	40	4.4	15700	15100	14600	14100	13500	13000	40	4.4	46000	44500	42900	41400	39800	38100
	35	1.7	14300	13800	13300	12800	12300	11800	35	1.7	42100	40700	39200	37800	36300	34800
	30	-1.1	12900	12500	12100	11600	11100	10700	30	-1.1	38400	37100	35800	34500	33100	31800
	25	-3.9	11700	11300	10900	10500	10100	9670	25	-3.9	34900	33700	32600	31400	30100	28900
	20	-6.7	10600	10200	9850	9480	9110	8730	20	-6.7	31700	30600	29500	28500	27400	26200
	15	-9.4	9510	9190	8870	8540	8210	7870	15	-9.4	28700	27700	26800	25800	24800	23800
	10	-12.2	8540	8250	7960	7670	7380	7080	10	-12.2	25900	25000	24200	23300	22400	21500
	5	-15.0	7640	7390	7130	6880	6620	6360	5	-15.0	23300	22500	21800	21000	20200	-
	0	-17.8	6820	6600	6370	6150	5920	5700	0	-17.8	20900	20200	19600	18800	18100	-
KQZA011H9 Compressor Model YS11KAE	40	4.4	18100	17500	16900	16200	15600	14900	40	4.4	51900	50100	48300	46500	44700	42800
	35	1.7	16500	15900	15400	14800	14200	13600	35	1.7	47400	45800	44200	42500	40800	39100
	30	-1.1	15000	14500	14000	13400	12900	12300	30	-1.1	43300	41800	40300	38800	37200	35700
	25	-3.9	13600	13100	12600	12200	11700	11200	25	-3.9	39400	38000	36700	35300	33900	32500
	20	-6.7	12300	11800	11400	11000	10500	10100	20	-6.7	35700	34500	33300	32100	30800	29500
	15	-9.4	11000	10700	10300	9890	9510	9120	15	-9.4	32400	31300	30200	29100	27900	26800
	10	-12.2	9920	9580	9230	8890	8550	8210	10	-12.2	29200	28300	27300	26300	25300	24200
	5	-15.0	8880	8580	8280	7970	7670	7370	5	-15.0	26300	25500	24600	23700	22800	21900
	0	-17.8	7930	7660	7400	7140	6880	-	0	-17.8	23700	22900	22100	21300	20500	-
KQZA015H9 Compressor Model YS12KAE	40	4.4	21000	20300	19600	18900	18100	17400	40	4.4	58500	56500	54400	52200	50000	-
	35	1.7	19100	18500	17800	17200	16500	15800	35	1.7	53500	51600	49700	47700	45700	-
	30	-1.1	17400	16800	16200	15600	15000	14400	30	-1.1	48800	47100	45300	43500	41700	-
	25	-3.9	15800	15200	14700	14100	13600	13000	25	-3.9	44400	42800	41200	39600	37900	-
	20	-6.7	14300	13800	13300	12800	12300	11800	20	-6.7	40200	38800	37400	35900	34400	32900
	15	-9.4	12900	12400	12000	11500	11100	10700	15	-9.4	36400	35100	33900	32500	31200	29800
	10	-12.2	11600	11200	10800	10400	10000	9600	10	-12.2	32900	31700	30600	29400	28200	26900
	5	-15.0	10400	10000	9680	9330	8990	8650	5	-15.0	29600	28600	27600	26500	25400	-
	0	-17.8	9270	8970	8670	8370	8070	-	0	-17.8	26600	25700	24800	23900	-	-
KQZA050H9 Compressor Model YB34KAE	40	4.4	24800	23900	23100	22200	21300	20400	40	4.4	68900	66400	63900	61300	-	-
	35	1.7	22600	21800	21100	20300	19500	18700	35	1.7	63000	60700	58400	56100	53700	-
	30	-1.1	20600	19900	19200	18500	17700	17000	30	-1.1	57500	55400	53300	51200	49100	-
	25	-3.9	18700	18100	17400	16800	16100	15400	25	-3.9	52300	50500	48600	46700	44700	-
	20	-6.7	16900	16400	15800	15200	14600	14000	20	-6.7	47500	45900	44100	42400	40700	-
	15	-9.4	15300	14800	14300	13700	13200	12700	15	-9.4	43100	41600	40000	38500	36900	35300
	10	-12.2	13800	13300	12900	12400	11900	11400	10	-12.2	38900	37600	36200	34800	33400	32000
	5	-15.0	12400	12000	11600	11100	10700	10300	5	-15.0	35100	33900	32700	31400	30200	-
	0	-17.8	11100	10700	10400	9990	9620	-	0	-17.8	31500	30500	29400	28300	-	-
KQZA060H9 Compressor Model YB40KAE	40	4.4	28000	27000	26000	25000	24000	23000	40	4.4	78000	75000	72000	69000	66000	63000
	35	1.7	25500	24500	23500	22500	21500	20500	35	1.7	71000	68000	65000	62000	59000	56000
	30	-1.1	23000	22000	21000	20000	19000	18000	30	-1.1	64000	61000	58000	55000	52000	49000
	25	-3.9	20500	19500	18500	17500	16500	15500	25	-3.9	57000	54000	51000	48000	45000	42000
	20	-6.7	18000	17000	16000	15000	14000	13000	20	-6.7	50000	47000	44000	41000	38000	35000
	15	-9.4	15500	14500	13500	12500	11500	10500	15	-9.4	43000	40000	37000	34000	31000	28000
	10	-12.2	13000	12000	11000	10000	9000	8000	10	-12.2	36000	33000	30000	27000	24000	21000
	5	-15.0	11000	10000	9000	8000	7000	6000	5	-15.0	29000	26000	23000	20000	17000	14000
	0	-17.8	9000	8000	7000	6000	5000	4000	0	-17.8	22000	19000	16000	13000	10000	7000

- All dashes are out of operating envelope.

Continues on next page

SELECTION CAPACITY DATA - KQ DIGITAL

KQ - QUIET CONDENSING UNITS

HIGH TEMPERATURE - R455A

Model KQ	Saturated Suction Temp.		Selection Capacity BTU/h					
			Ambient Temperature					
	°F	°C	85°F (29.4°C)	90°F (32.2°C)	95°F (35°C)	100°F (37.8°C)	105°F (40.6°C)	110°F (43.3°C)
KQZD030H9 Compressor Model YBD20KSE	40	4.4	36100	34900	33700	32400	31200	29900
	35	1.7	32900	31800	30700	29600	28400	27300
	30	-1.1	30000	29000	27900	26900	25900	24800
	25	-3.9	27200	26300	25400	24400	23500	22500
	20	-6.7	24600	23800	23000	22100	21300	20400
	15	-9.4	22200	21500	20800	20000	19200	18500
	10	-12.2	20000	19400	18700	18000	17400	16700
	5	-15.0	18000	17400	16800	16200	15600	15000
	0	-17.8	16100	15600	15100	14600	14000	-
KQZD040H9 Compressor Model YBD28KAE	40	4.4	48600	47000	45300	43600	41800	-
	35	1.7	44400	42900	41300	39800	38200	36500
	30	-1.1	40400	39000	37600	36200	34800	33300
	25	-3.9	36700	35500	34200	32900	31600	30300
	20	-6.7	33300	32200	31000	29900	28700	27500
	15	-9.4	30100	29100	28100	27100	26000	24900
	10	-12.2	27200	26300	25400	24400	23500	22500
	5	-15.0	24500	23700	22900	22000	21200	20300
	0	-17.8	22000	21300	20500	19800	19100	-
KQZD050H9 Compressor Model YBD34KAE	40	4.4	58500	56500	54400	52200	50000	-
	35	1.7	53500	51600	49700	47700	45700	-
	30	-1.1	48800	47100	45300	43500	41700	-
	25	-3.9	44400	42800	41200	39600	37900	-
	20	-6.7	40200	38800	37400	35900	34400	32900
	15	-9.4	36400	35100	33900	32500	31200	29800
	10	-12.2	32900	31700	30600	29400	28200	26900
	5	-15.0	29600	28600	27600	26500	25400	-
	0	-17.8	26600	25700	24800	23900	-	-
KQZD060H9 Compressor Model YBD40KAE	40	4.4	68900	66400	63900	61300	-	-
	35	1.7	63000	60700	58400	56100	53700	-
	30	-1.1	57500	55400	53300	51200	49100	-
	25	-3.9	52300	50500	48600	46700	44700	-
	20	-6.7	47500	45900	44100	42400	40700	-
	15	-9.4	43100	41600	40000	38500	36900	35300
	10	-12.2	38900	37600	36200	34800	33400	32000
	5	-15.0	35100	33900	32700	31400	30200	-
	0	-17.8	31500	30500	29400	28300	-	-

- All dashes are out of operating envelope.

* Shaded temperatures measure to 20°F Superheat

SELECTION CAPACITY DATA

KQ - QUIET CONDENSING UNITS

LOW TEMPERATURE - R454A

Model KQ	Saturated Suction Temp.		Selection Capacity BTU/h						Ambient Temperature							
	° F	° C	85°F	90°F	95°F	100°F	105°F	110°F	85°F	90°F	95°F	100°F	105°F	110°F		
			(29.4°C)	(32.2°C)	(35°C)	(37.8°C)	(40.6°C)	(43.3°C)	(29.4°C)	(32.2°C)	(35°C)	(37.8°C)	(40.6°C)	(43.3°C)		
KQZA008L9 Compressor Model YF03KAE	0	-17.8	5650	5470	5290	5110	4920	4740	0	-17.8	24200	23400	22600	21800	20900	20000
	-5	-20.6	5020	4860	4710	4550	4390	4220	-5	-20.6	21800	21100	20400	19600	18900	18100
	-10	-23.3	4450	4310	4180	4040	3900	3760	-10	-23.3	19500	18900	18300	17600	17000	16300
	-15	-26.1	3930	3810	3700	3580	3460	3330	-15	-26.1	17500	16900	16400	15800	15200	14600
	-20	-28.9	3460	3360	3260	3160	3060	2960	-20	-28.9	15600	15100	14600	14100	13600	13100
	-25	-31.7	3050	2960	2880	2790	2700	2620	-25	-31.7	13800	13400	13000	12500	12100	11600
	-30	-34.4	2680	2600	2530	2460	2390	2320	-30	-34.4	12200	11900	11500	11100	10700	10300
	-35	-37.2	2350	2290	2230	2170	2110	2050	-35	-37.2	10700	10400	10100	9800	9470	9130
-40	-40.0	2070	2010	1960	1920	1870	1820	-40	-40.0	9400	9130	8850	8580	8300	8010	
KQZA010L9 Compressor Model YF04KAE	0	-17.8	7430	7190	6960	6720	6470	6230	0	-17.8	29900	28900	27900	26800	25800	24700
	-5	-20.6	6630	6420	6210	6000	5790	5580	-5	-20.6	26800	26000	25100	24200	23200	22200
	-10	-23.3	5890	5710	5530	5350	5160	4980	-10	-23.3	24100	23300	22500	21700	20900	20000
	-15	-26.1	5220	5070	4910	4750	4590	4430	-15	-26.1	21500	20900	20200	19500	18700	18000
	-20	-28.9	4610	4480	4340	4210	4070	3930	-20	-28.9	19200	18600	18000	17400	16700	16100
	-25	-31.7	4060	3950	3830	3710	3600	3480	-25	-31.7	17100	16500	16000	15500	14900	14300
	-30	-34.4	3570	3470	3370	3270	3170	3070	-30	-34.4	15100	14600	14200	13700	13200	12800
	-35	-37.2	3130	3050	2960	2880	2790	2710	-35	-37.2	13300	12900	12500	12100	11700	11300
-40	-40.0	2740	2670	2600	2530	2460	2390	-40	-40.0	11600	11300	11000	10600	10300	9900	
KQZA015L9 Compressor Model YF05KAE	0	-17.8	8620	8340	8060	7770	7490	7200	0	-17.8	34800	33600	32400	31200	29900	28600
	-5	-20.6	7700	7460	7210	6960	6710	6450	-5	-20.6	31300	30300	29200	28100	27000	25800
	-10	-23.3	6860	6650	6430	6210	5990	5770	-10	-23.3	28100	27200	26200	25300	24300	23300
	-15	-26.1	6100	5910	5720	5530	5340	5150	-15	-26.1	25100	24300	23500	22600	21800	-
	-20	-28.9	5400	5240	5070	4910	4750	4580	-20	-28.9	22400	21700	21000	20200	19500	-
	-25	-31.7	4760	4630	4490	4350	4210	4070	-25	-31.7	19900	19300	18700	18000	17400	16700
	-30	-34.4	4190	4070	3960	3840	3720	3600	-30	-34.4	17600	17100	16500	16000	15400	14900
	-35	-37.2	3680	3580	3480	3380	3280	3180	-35	-37.2	15500	15100	14600	14100	13700	13200
-40	-40.0	3220	3140	3050	2960	2880	2790	-40	-40.0	13600	13200	12800	12400	12000	11600	
KQZA020L9 Compressor Model YF07KAE	0	-17.8	12900	12500	12100	11700	11200	10700	0	-17.8	48000	46200	44400	42600	40800	39000
	-5	-20.6	11600	11200	10800	10500	10100	9660	-5	-20.6	43000	41400	39800	38200	36600	35000
	-10	-23.3	10400	10100	9710	9370	9020	8660	-10	-23.3	39000	37600	36200	34800	33400	32000
	-15	-26.1	9260	8970	8670	8370	8060	-	-15	-26.1	35000	33800	32600	31400	30200	29000
	-20	-28.9	8230	7980	7720	7450	7180	6910	-20	-28.9	31000	29900	28800	27700	26600	25500
	-25	-31.7	7290	7070	6850	6610	6380	6140	-25	-31.7	27000	26000	25000	24000	23000	22000
	-30	-34.4	6440	6250	6050	5850	5640	5430	-30	-34.4	23000	22100	21200	20300	19400	18500
	-35	-37.2	5670	5500	5330	5150	4970	4790	-35	-37.2	19000	18200	17400	16600	15800	15000
-40	-40.0	4970	4820	4670	4510	4350	4190	-40	-40.0	15000	14300	13600	12900	12200	11500	
KQZA025L9 Compressor Model YF06KSE	0	-17.8	14800	14300	13800	13300	12800	12300	0	-17.8	52000	50200	48400	46600	44800	43000
	-5	-20.6	13300	12900	12400	12000	11500	11100	-5	-20.6	47000	45400	43800	42200	40600	39000
	-10	-23.3	11900	11500	11200	10800	10400	9940	-10	-23.3	42000	40600	39200	37800	36400	35000
	-15	-26.1	10700	10300	9990	9640	9280	8910	-15	-26.1	38000	36800	35600	34400	33200	32000
	-20	-28.9	9490	9200	8910	8600	8290	7970	-20	-28.9	34000	32900	31800	30700	29600	28500
	-25	-31.7	8420	8170	7910	7650	7380	7100	-25	-31.7	30000	29000	28000	27000	26000	25000
	-30	-34.4	7450	7230	7010	6780	6540	6300	-30	-34.4	26000	25100	24200	23300	22400	21500
	-35	-37.2	6550	6360	6170	5970	5770	5560	-35	-37.2	22000	21200	20400	19600	18800	18000
-40	-40.0	5730	5560	5390	5220	5050	4860	-40	-40.0	18000	17300	16600	15900	15200	14500	
KQZA030L9 Compressor Model YF07KSE	0	-17.8	16400	15900	15300	14800	14200	13600	0	-17.8	56000	54200	52400	50600	48800	47000
	-5	-20.6	14800	14300	13800	13300	12800	12200	-5	-20.6	51000	49400	47800	46200	44600	43000
	-10	-23.3	13200	12800	12400	11900	11500	11000	-10	-23.3	46000	44600	43200	41800	40400	39000
	-15	-26.1	11800	11500	11100	10700	10300	-	-15	-26.1	42000	40800	39600	38400	37200	36000
	-20	-28.9	10500	10200	9890	9560	9210	8850	-20	-28.9	38000	37000	36000	35000	34000	33000
	-25	-31.7	9360	9080	8800	8500	8200	7890	-25	-31.7	34000	33100	32200	31300	30400	29500
	-30	-34.4	8270	8030	7790	7530	7270	7010	-30	-34.4	30000	29200	28400	27600	26800	26000
	-35	-37.2	7280	7070	6860	6640	6420	6190	-35	-37.2	26000	25300	24600	23900	23200	22500
-40	-40.0	6360	6180	6000	5810	5620	5420	-40	-40.0	22000	21400	20800	20200	19600	19000	
KQZA035L9 Compressor Model YF09KSE	0	-17.8	19900	19200	18500	17800	17100	16300	0	-17.8	60000	58200	56400	54600	52800	51000
	-5	-20.6	17900	17300	16700	16100	15400	14800	-5	-20.6	55000	53400	51800	50200	48600	47000
	-10	-23.3	16100	15600	15100	14500	13900	-	-10	-23.3	51000	49600	48200	46800	45400	44000
	-15	-26.1	14400	14000	13500	13000	12500	-	-15	-26.1	47000	45800	44600	43400	42200	41000
	-20	-28.9	12900	12500	12100	11700	11200	-	-20	-28.9	43000	42000	41000	40000	39000	38000
	-25	-31.7	11500	11100	10800	10400	10000	-	-25	-31.7	39000	38100	37200	36300	35400	34500
	-30	-34.4	10200	9870	9550	9230	8900	-	-30	-34.4	35000	34200	33400	32600	31800	31000
	-35	-37.2	8970	8700	8430	8150	7870	7580	-35	-37.2	31000	30300	29600	28900	28200	27500
-40	-40.0	7850	7620	7390	7150	6900	6650	-40	-40.0	27000	26400	25800	25200	24600	24000	

- All dashes are out of operating envelope.

SELECTION CAPACITY DATA

KQ - QUIET CONDENSING UNITS

LOW TEMPERATURE - R454C

Model KQ	Saturated Suction Temp.		Selection Capacity BTU/h						Ambient Temperature							
	° F	° C	85°F	90°F	95°F	100°F	105°F	110°F	85°F	90°F	95°F	100°F	105°F	110°F		
			(29.4°C)	(32.2°C)	(35°C)	(37.8°C)	(40.6°C)	(43.3°C)	(29.4°C)	(32.2°C)	(35°C)	(37.8°C)	(40.6°C)	(43.3°C)		
KQZA008L9 Compressor Model YF03KAE	0	-17.8	4830	4670	4510	4350	4190	4030	0	-17.8	17200	16700	16100	15500	14900	14200
	-5	-20.6	4280	4150	4010	3870	3730	3580	-5	-20.6	15500	15000	14500	13900	13400	12800
	-10	-23.3	3790	3670	3550	3430	3300	3180	-10	-23.3	13900	13400	13000	12500	12000	-
	-15	-26.1	3340	3240	3130	3030	2920	2820	-15	-26.1	12400	12000	11600	11200	10800	-
	-20	-28.9	2940	2850	2760	2670	2580	2490	-20	-28.9	11100	10700	10400	9990	9620	-
	-25	-31.7	2580	2500	2430	2350	2270	2200	-25	-31.7	9810	9510	9200	8880	8550	-
	-30	-34.4	2260	2200	2130	2070	2010	1940	-30	-34.4	8660	8400	8130	7850	7570	-
	-35	-37.2	1980	1930	1870	1820	1770	1720	-35	-37.2	7610	7380	7140	6900	6650	6400
	-40	-40.0	1740	1690	1650	1610	1570	1530	-40	-40.0	6640	6440	6230	6020	5800	5570
KQZA010L9 Compressor Model YF04KAE	0	-17.8	6380	6170	5960	5750	5540	5320	0	-17.8	20800	20200	19500	18800	18000	17300
	-5	-20.6	5670	5490	5310	5120	4930	4740	-5	-20.6	18700	18100	17500	16800	16200	15500
	-10	-23.3	5030	4870	4710	4550	4380	4220	-10	-23.3	16700	16200	15600	15100	14500	13900
	-15	-26.1	4450	4310	4170	4030	3890	3740	-15	-26.1	14900	14400	14000	13500	13000	12400
	-20	-28.9	3920	3800	3680	3560	3440	3310	-20	-28.9	13200	12800	12400	12000	11500	11100
	-25	-31.7	3450	3350	3240	3140	3030	2930	-25	-31.7	11700	11400	11000	10600	10200	9860
	-30	-34.4	3020	2940	2850	2760	2670	2590	-30	-34.4	10300	10000	9710	9390	9060	8720
	-35	-37.2	2650	2570	2500	2430	2360	2280	-35	-37.2	9060	8790	8520	8240	7960	7670
	-40	-40.0	2310	2250	2190	2130	2080	2020	-40	-40.0	7900	7670	7430	7190	6950	6690
KQZA015L9 Compressor Model YF05KAE	0	-17.8	7440	7190	6950	6700	6440	6190	0	-17.8	25700	24900	24000	23100	22200	21300
	-5	-20.6	6630	6410	6190	5970	5750	5520	-5	-20.6	23100	22300	21500	20800	20000	19100
	-10	-23.3	5890	5700	5510	5310	5120	4920	-10	-23.3	20600	20000	19300	18600	17900	17200
	-15	-26.1	5210	5050	4880	4710	4540	4370	-15	-26.1	18400	17800	17200	16600	16000	15400
	-20	-28.9	4600	4460	4320	4170	4030	3880	-20	-28.9	16400	15800	15300	14800	14300	13700
	-25	-31.7	4050	3930	3810	3690	3560	3430	-25	-31.7	14500	14000	13600	13100	12700	12200
	-30	-34.4	3560	3460	3350	3250	3140	3030	-30	-34.4	12800	12400	12000	11600	11200	10800
	-35	-37.2	3110	3030	2940	2850	2770	2680	-35	-37.2	11200	10900	10500	10200	9840	9470
	-40	-40.0	2720	2650	2570	2500	2430	2360	-40	-40.0	9790	9490	9200	8900	8590	8270
KQZA020L9 Compressor Model YF07KAE	0	-17.8	11200	10900	10500	10100	9690	9280	0	-17.8	30100	29100	28100	27000	25900	24800
	-5	-20.6	10000	9700	9360	9010	8660	8300	-5	-20.6	27000	26100	25200	24300	23300	22400
	-10	-23.3	8930	8640	8340	8030	7720	7400	-10	-23.3	24200	23400	22600	21800	20900	20100
	-15	-26.1	7930	7680	7410	7150	6870	-	-15	-26.1	21600	20900	20200	19500	18700	-
	-20	-28.9	7020	6800	6570	6340	6100	5860	-20	-28.9	19200	18600	18000	17400	16700	16100
	-25	-31.7	6200	6010	5810	5610	5400	5190	-25	-31.7	17000	16500	16000	15400	14900	14300
	-30	-34.4	5460	5300	5130	4950	4770	4590	-30	-34.4	15000	14600	14100	13600	13200	12700
	-35	-37.2	4800	4660	4510	4360	4210	4050	-35	-37.2	13200	12800	12400	12000	11600	11100
	-40	-40.0	4210	4080	3960	3830	3700	3560	-40	-40.0	11500	11200	10800	10500	10100	9730
KQZA025L9 Compressor Model YF06KSE	0	-17.8	12800	12400	11900	11500	11100	10600	0	-17.8	12800	12400	11900	11500	11100	10600
	-5	-20.6	11500	11100	10700	10300	9930	9530	-5	-20.6	11500	11100	10700	10300	9930	9530
	-10	-23.3	10200	9920	9590	9240	8890	8530	-10	-23.3	10200	9920	9590	9240	8890	8530
	-15	-26.1	9130	8850	8550	8250	7940	7620	-15	-26.1	9130	8850	8550	8250	7940	7620
	-20	-28.9	8110	7860	7610	7340	7070	6790	-20	-28.9	8110	7860	7610	7340	7070	6790
	-25	-31.7	7180	6960	6740	6510	6270	6030	-25	-31.7	7180	6960	6740	6510	6270	6030
	-30	-34.4	6330	6140	5950	5750	5540	5330	-30	-34.4	6330	6140	5950	5750	5540	5330
	-35	-37.2	5560	5390	5220	5050	4870	4690	-35	-37.2	5560	5390	5220	5050	4870	4690
	-40	-40.0	4850	4710	4560	4410	4250	4090	-40	-40.0	4850	4710	4560	4410	4250	4090
KQZA030L9 Compressor Model YF07KSE	0	-17.8	14100	13700	13200	12700	12300	11800	0	-17.8	14100	13700	13200	12700	12300	11800
	-5	-20.6	12700	12300	11900	11400	11000	10600	-5	-20.6	12700	12300	11900	11400	11000	10600
	-10	-23.3	11300	11000	10600	10200	9860	9470	-10	-23.3	11300	11000	10600	10200	9860	9470
	-15	-26.1	10100	9800	9480	9150	8810	-	-15	-26.1	10100	9800	9480	9150	8810	-
	-20	-28.9	8990	8710	8430	8140	7850	7540	-20	-28.9	8990	8710	8430	8140	7850	7540
	-25	-31.7	7960	7720	7470	7220	6960	6700	-25	-31.7	7960	7720	7470	7220	6960	6700
	-30	-34.4	7010	6810	6590	6370	6150	5920	-30	-34.4	7010	6810	6590	6370	6150	5920
	-35	-37.2	6150	5970	5780	5600	5400	5200	-35	-37.2	6150	5970	5780	5600	5400	5200
	-40	-40.0	5370	5210	5040	4880	4710	4540	-40	-40.0	5370	5210	5040	4880	4710	4540

- All dashes are out of operating envelope.

SELECTION CAPACITY DATA

KQ - QUIET CONDENSING UNITS

LOW TEMPERATURE - R455A

Model KQ	Saturated Suction Temp.		Selection Capacity BTU/h						Ambient Temperature								
	° F	° C	85°F	90°F	95°F	100°F	105°F	110°F	85°F	90°F	95°F	100°F	105°F	110°F			
			(29.4°C)	(32.2°C)	(35°C)	(37.8°C)	(40.6°C)	(43.3°C)							(29.4°C)	(32.2°C)	(35°C)
KQZA008L9 Compressor Model YF03KAE	0	-17.8	5150	4990	4820	4640	4470	4290	KQZA035L9 Compressor Model YF09KSE	0	-17.8	18200	17600	17000	16300	15600	14900
	-5	-20.6	4570	4430	4280	4120	3970	3810		-5	-20.6	16400	15800	15300	14700	14100	-
	-10	-23.3	4050	3920	3790	3650	3520	3380		-10	-23.3	14700	14200	13700	13200	12700	-
	-15	-26.1	3570	3460	3340	3230	3110	2990		-15	-26.1	13200	12700	12300	11800	-	-
	-20	-28.9	3140	3040	2950	2850	2750	2650		-20	-28.9	11700	11300	11000	10600	-	-
	-25	-31.7	2760	2680	2590	2510	2420	2340		-25	-31.7	10400	10100	9740	9390	9040	-
	-30	-34.4	2420	2350	2280	2210	2140	2070		-30	-34.4	9200	8910	8620	8320	8010	-
	-35	-37.2	2120	2060	2010	1950	1890	1840		-35	-37.2	8090	7840	7590	7320	7050	-
	-40	-40.0	1870	1820	1770	1730	1680	1640		-40	-40.0	7070	6850	6630	6400	6160	-
KQZA010L9 Compressor Model YF04KAE	0	-17.8	6780	6560	6340	6110	5880	5640	KQZA045L9 Compressor Model YF10KAE	0	-17.8	22100	21400	20600	19800	19000	18200
	-5	-20.6	6040	5850	5650	5450	5240	5030		-5	-20.6	19800	19200	18500	17800	17100	16300
	-10	-23.3	5360	5190	5020	4840	4660	4470		-10	-23.3	17800	17200	16600	16000	15300	14700
	-15	-26.1	4740	4600	4440	4290	4130	3970		-15	-26.1	15800	15300	14800	14300	13700	-
	-20	-28.9	4180	4060	3920	3790	3660	3520		-20	-28.9	14100	13700	13200	12700	12200	-
	-25	-31.7	3680	3570	3460	3340	3230	3110		-25	-31.7	12500	12100	11700	11300	10900	-
	-30	-34.4	3230	3140	3050	2950	2850	2750		-30	-34.4	11000	10700	10400	10000	9630	9250
	-35	-37.2	2840	2760	2680	2600	2520	2440		-35	-37.2	9690	9400	9100	8790	8480	8150
	-40	-40.0	2490	2430	2360	2300	2230	2160		-40	-40.0	8450	8190	7940	7670	7390	7110
KQZA015L9 Compressor Model YF05KAE	0	-17.8	7880	7620	7360	7090	6810	6530	KQZA055L9 Compressor Model YF13KAE	0	-17.8	27200	26300	25400	24400	23400	22400
	-5	-20.6	7030	6800	6560	6320	6080	5840		-5	-20.6	24400	23600	22800	21900	21100	20200
	-10	-23.3	6250	6040	5840	5630	5420	5200		-10	-23.3	21900	21200	20400	19700	18900	18100
	-15	-26.1	5540	5360	5180	5000	4820	4630		-15	-26.1	19500	18900	18300	17600	16900	-
	-20	-28.9	4900	4740	4590	4430	4270	4110		-20	-28.9	17400	16900	16300	15700	15100	-
	-25	-31.7	4320	4190	4050	3920	3780	3650		-25	-31.7	15400	15000	14500	14000	13500	-
	-30	-34.4	3800	3690	3570	3460	3350	3230		-30	-34.4	13600	13200	12800	12400	11900	11400
	-35	-37.2	3330	3240	3140	3050	2950	2860		-35	-37.2	12000	11600	11200	10900	10500	10100
	-40	-40.0	2920	2840	2760	2680	2610	2530		-40	-40.0	10500	10100	9810	9480	9140	8790
KQZA020L9 Compressor Model YF07KAE	0	-17.8	11900	11500	11000	10600	10200	9760	KQZA060L9 Compressor Model YF15KAE	0	-17.8	31800	30700	29600	28400	27300	26100
	-5	-20.6	10600	10300	9890	9510	9130	8740		-5	-20.6	28600	27600	26600	25600	24500	23500
	-10	-23.3	9470	9150	8830	8500	8160	-		-10	-23.3	25600	24700	23900	23000	22100	-
	-15	-26.1	8420	8140	7860	7570	7270	-		-15	-26.1	22900	22100	21400	20600	19800	-
	-20	-28.9	7470	7230	6980	6720	6470	-		-20	-28.9	20400	19700	19000	18400	17700	-
	-25	-31.7	6600	6390	6180	5960	5730	-		-25	-31.7	18100	17500	16900	16300	15700	-
	-30	-34.4	5820	5640	5460	5270	5070	-		-30	-34.4	16000	15500	15000	14500	13900	-
	-35	-37.2	5120	4960	4800	4640	4470	-		-35	-37.2	14100	13600	13200	12700	12300	-
	-40	-40.0	4480	4350	4210	4070	3930	3780		-40	-40.0	12300	11900	11500	11100	10700	10300
KQZA025L9 Compressor Model YF06KSE	0	-17.8	13600	13100	12600	12200	11700	11200	KQZA030L9 Compressor Model YF07KSE	0	-17.8	15000	14500	14000	13500	12900	12400
	-5	-20.6	12200	11800	11300	10900	10500	10000		-5	-20.6	13500	13000	12600	12100	11600	11100
	-10	-23.3	10900	10500	10200	9780	9390	8990		-10	-23.3	12100	11700	11300	10900	10400	-
	-15	-26.1	9700	9380	9060	8730	8390	-		-15	-26.1	10800	10400	10100	9710	9340	-
	-20	-28.9	8620	8350	8070	7780	7480	-		-20	-28.9	9580	9280	8970	8660	8330	-
	-25	-31.7	7640	7400	7160	6900	6640	-		-25	-31.7	8490	8230	7960	7680	7400	-
	-30	-34.4	6740	6530	6320	6100	5870	5640		-30	-34.4	7490	7260	7030	6790	6540	-
	-35	-37.2	5920	5740	5550	5360	5160	4960		-35	-37.2	6570	6370	6160	5950	5740	5520
	-40	-40.0	5170	5010	4850	4680	4510	4330		-40	-40.0	5710	5540	5360	5180	4990	4800

- All dashes are out of operating envelope.

High and Medium Temperature Models

Model KQ	Compressor Model No.	Power Supply	Compressor		Condenser Fan Motor			Unit	
			RLA	LRA	Quantity	Watts	FLA	MCA	MOP
KQZA007H9-HS2E	YB06KAE-PFV	208-230/1/60	6.0	35.7	1	165	1.7	9.2	15
KQZA007H9-HT3E	YB06KAE-TF5	208-230/3/60	4.8	37.8	1	165	1.7	7.7	15
KQZA008H9-HS2E	YB07KAE-PFV	208-230/1/60	6.3	48	1	165	1.7	9.6	15
KQZA008H9-HT3E	YB07KAE-TF5	208-230/3/60	5.2	37.8	1	165	1.7	8.2	15
KQZA009H9-HS2E	YB08KAE-PFV	208-230/1/60	8.0	47.2	1	165	1.7	11.7	15
KQZA009H9-HT3E	YB08KAE-TF5	208-230/3/60	5.3	37.8	1	165	1.7	8.3	15
KQZA010H9-HS2E	YS09KAE-PFV	208-230/1/60	10.0	40.3	1	165	1.7	14.2	20
KQZA010H9-HT3E	YS09KAE-TF5	208-230/3/60	8.0	55.4	1	165	1.7	11.7	15
KQZA010H9-HT4E	YS09KAE-TFD	460/3/60	3.8	28	1	165	0.9	5.7	15
KQZA011H9-HS2E	YS11KAE-PFV	208-230/1/60	12.6	55	1	165	1.7	17.5	30
KQZA011H9-HT3E	YS11KAE-TF5	208-230/3/60	10.4	58	1	165	1.7	14.7	25
KQZA011H9-HT4E	YS11KAE-TFD	460/3/60	4.3	28	1	165	0.9	6.3	15
KQZA015H9-HS2E	YS12KAE-PFV	208-230/1/60	12.0	56	1	165	1.7	16.7	25
KQZA015H9-HT3E	YS12KAE-TF5	208-230/3/60	9.7	58	1	165	1.7	13.8	20
KQZA015H9-HT4E	YS12KAE-TFD	460/3/60	4.8	29	1	165	0.9	6.9	15
KQZA020H9-HS2E	YS14KAE-PFV	208-230/1/60	15.7	68	1	165	1.7	21.3	35
KQZA020H9-HT3E	YS14KAE-TF5	208-230/3/60	10.6	58	1	165	1.7	15.0	25
KQZA020H9-HT4E	YS14KAE-TFD	460/3/60	5.4	29	1	165	0.9	7.7	15
KQZA025H9-HS2E	YS16KAE-PFV	208-230/1/60	18.0	75	1	165	1.7	24.2	40
KQZA025H9-HT3E	YS16KAE-TF5	208-230/3/60	13.7	73	1	165	1.7	18.8	30
KQZA025H9-HT4E	YS16KAE-TFD	460/3/60	6.5	38	1	165	0.9	9.0	15
KQZA030H9-HS2E	YS21KAE-PFV	208-230/1/60	23.2	112	1	165	1.7	30.7	50
KQZA030H9-HT3E	YS21KAE-TF5	208-230/3/60	15.2	93	1	165	1.7	20.7	35
KQZA030H9-HT4E	YS21KAE-TFD	460/3/60	6.9	48	1	165	0.9	9.5	15
KQZA035H9-HS2E	YS24KAE-PFV	208-230/1/60	23.6	104	2	330	3.4	32.9	50
KQZA035H9-HT3E	YS24KAE-TF5	208-230/3/60	15.5	93	2	330	3.4	22.8	35
KQZA035H9-HT4E	YS24KAE-TFD	460/3/60	6.9	48	2	330	1.8	10.4	15
KQZA040H9-HS2E	YS26KAE-PFV	208-230/1/60	26.1	137	2	330	3.4	36.0	60
KQZA040H9-HT3E	YS26KAE-TF5	208-230/3/60	20.5	114	2	330	3.4	29.0	45
KQZA040H9-HT4E	YS26KAE-TFD	460/3/60	9.4	58	2	330	1.8	13.6	20
KQZA045H9-HS2E	YS30KAE-PFV	208-230/1/60	25.6	146	2	330	3.4	35.4	60
KQZA045H9-HT3E	YS30KAE-TF5	208-230/3/60	22.3	114	2	330	3.4	31.3	50
KQZA045H9-HT4E	YS30KAE-TFD	460/3/60	10.0	52	2	330	1.8	14.3	20
KQZA050H9-HS2E	YB34KAE-PFV	208-230/1/60	31.1	175	2	330	3.4	42.3	70
KQZA050H9-HT3E	YB34KAE-TF5	208-230/3/60	22.1	128	2	330	3.4	31.0	50
KQZA050H9-HT4E	YB34KAE-TFD	460/3/60	9.6	63	2	330	1.8	13.8	20
KQZA060H9-HT3E	YB40KAE-TF5	208-230/3/60	22.5	156	2	330	3.4	31.5	50
KQZA060H9-HT4E	YB40KAE-TFD	460/3/60	10.1	75	2	330	1.8	14.4	20
KQZD030H9-HS2E	YBD20KSE-PFV	208-230/1/60	18.9	95	2	330	3.4	27.0	45
KQZD030H9-HT3E	YBD20KSE-TF5	208-230/3/60	12.6	77	2	330	3.4	19.2	30
KQZD030H9-HT4E	YBD20KSE-TFD	460/3/60	7.1	39	2	330	1.8	10.7	15
KQZD040H9-HT3E	YBD28KAE-TF5	208-230/3/60	15.7	99	2	330	3.4	23.0	35
KQZD040H9-HT4E	YBD28KAE-TFD	460/3/60	7.4	47.5	2	330	1.8	11.1	15
KQZD050H9-HS2E	YBD34KAE-PFV	208-230/1/60	34.3	148	2	330	3.4	46.3	80
KQZD050H9-HT3E	YBD34KAE-TF5	208-230/3/60	23.7	137	2	330	3.4	33.0	50
KQZD050H9-HT4E	YBD34KAE-TFD	460/3/60	11.3	62	2	330	1.8	15.9	25
KQZD060H9-HT3E	YBD40KAE-TF5	208-230/3/60	22.5	156	2	330	3.4	31.5	50
KQZD060H9-HT4E	YBD40KAE-TFD	460/3/60	10.0	75	2	330	1.8	14.3	20

Above listed RLA value is based on UL rating method and may differ from published compressor RLA data.

Low Temperature Models

Model KQ	Compressor Model No.	Power Supply	Compressor		Condenser Fan Motor			Unit	
			RLA	LRA	Quantity	Watts	FLA	MCA	MOP
KQZA008L9-HS2E	YF03KAE-PFV	208-230/1/60	6.1	42.3	1	165	1.7	9.3	15
KQZA008L9-HT3E	YF03KAE-TF5	208-230/3/60	4.1	31.7	1	165	1.7	6.8	15
KQZA008L9-HT4E	YF03KAE-TFD	460/3/60	2.5	19.6	1	165	0.9	4.0	15
KQZA010L9-HS2E	YF04KAE-PFV	208-230/1/60	7.4	40.3	1	165	1.7	11.0	15
KQZA010L9-HT3E	YF04KAE-TF5	208-230/3/60	6.6	55.4	1	165	1.7	10.0	15
KQZA010L9-HT4E	YF04KAE-TFD	460/3/60	3.4	28	1	165	0.9	5.2	15
KQZA015L9-HS2E	YF05KAE-PFV	208-230/1/60	8.7	55	1	165	1.7	12.6	20
KQZA015L9-HT3E	YF05KAE-TF5	208-230/3/60	7.4	58	1	165	1.7	11.0	15
KQZA015L9-HT4E	YF05KAE-TFD	460/3/60	3.2	28	1	165	0.9	4.9	15
KQZA020L9-HS2E	YF07KAE-PFV	208-230/1/60	14.3	88	1	165	1.7	19.6	30
KQZA020L9-HT3E	YF07KAE-TF5	208-230/3/60	8.6	58	1	165	1.7	12.5	20
KQZA020L9-HT4E	YF07KAE-TFD	460/3/60	4.0	28	1	165	0.9	5.9	15
KQZA025L9-HS2E	YF06KSE-PFV	208-230/1/60	16.4	73	1	165	1.7	22.2	35
KQZA025L9-HT3E	YF06KSE-TF5	208-230/3/60	9.6	63	1	165	1.7	13.7	20
KQZA025L9-HT4E	YF06KSE-TFD	460/3/60	5.0	31	1	165	0.9	7.2	15
KQZA030L9-HS2E	YF07KSE-PFV	208-230/1/60	14.3	88	1	165	1.7	19.6	30
KQZA030L9-HT3E	YF07KSE-TF5	208-230/3/60	9.6	77	1	165	1.7	13.7	20
KQZA030L9-HT4E	YF07KSE-TFD	460/3/60	5.0	39	1	165	0.9	7.2	15
KQZA035L9-HS2E	YF09KSE-PFV	208-230/1/60	18.2	109	1	165	1.7	24.5	40
KQZA035L9-HT3E	YF09KSE-TF5	208-230/3/60	12.1	88	1	165	1.7	16.8	25
KQZA035L9-HT4E	YF09KSE-TFD	460/3/60	6.4	44	1	165	0.9	8.9	15
KQZA045L9-HS2E	YF10KAE-PFV	208-230/1/60	25.0	129	2	330	3.4	34.7	50
KQZA045L9-HT3E	YF10KAE-TF5	208-230/3/60	13.2	99	2	330	3.4	19.9	30
KQZA045L9-HT4E	YF10KAE-TFD	460/3/60	7.9	49.5	2	330	1.8	11.7	15
KQZA055L9-HS2E	YF13KAE-PFV	208-230/1/60	27.5	169	2	330	3.4	37.8	60
KQZA055L9-HT3E	YF13KAE-TF5	208-230/3/60	18.9	123	2	330	3.4	27.0	45
KQZA055L9-HT4E	YF13KAE-TFD	460/3/60	8.9	62	2	330	1.8	12.9	20
KQZA060L9-HT3E	YF15KAE-TF5	208-230/3/60	23.9	156	2	330	3.4	33.3	50
KQZA060L9-HT4E	YF15KAE-TFD	460/3/60	9.3	75	2	330	1.8	13.4	20

Above listed RLA value is based on UL rating method and may differ from published compressor RLA data.

Annual Walk-In Energy Factor Ratings - High and Medium Temperature Models

If a numerical value is listed in the table below, the following statement applies to that corresponding model: "This refrigeration system is designed and certified for use in walk-in cooler applications."

Model KQ	Power Supply	Outdoor Models		
		R454A	R454C	R455A
KQZA007H9-HS2E	208-230/1/60	7.600	7.600	7.600
KQZA007H9-HT3E	208-230/3/60	7.600	7.600	7.600
KQZA008H9-HS2E	208-230/1/60	7.600	7.600	7.600
KQZA008H9-HT3E	208-230/3/60	7.600	7.600	7.600
KQZA009H9-HS2E	208-230/1/60	7.600	7.600	7.600
KQZA009H9-HT3E	208-230/3/60	7.600	7.600	7.600
KQZA010H9-HS2E	208-230/1/60	7.600	7.600	7.600
KQZA010H9-HT3E	208-230/3/60	7.600	7.600	7.600
KQZA010H9-HT4E	460/3/60	7.600	7.600	7.600
KQZA011H9-HS2E	208-230/1/60	7.600	7.600	7.600
KQZA011H9-HT3E	208-230/3/60	7.600	7.600	7.600
KQZA011H9-HT4E	460/3/60	7.600	7.600	7.600
KQZA015H9-HS2E	208-230/1/60	7.600	7.600	7.600
KQZA015H9-HT3E	208-230/3/60	7.600	7.600	7.600
KQZA015H9-HT4E	460/3/60	7.600	7.600	7.600
KQZA020H9-HS2E	208-230/1/60	7.600	7.600	7.600
KQZA020H9-HT3E	208-230/3/60	7.600	7.600	7.600
KQZA020H9-HT4E	460/3/60	7.600	7.600	7.600
KQZA025H9-HS2E	208-230/1/60	7.600	7.600	7.600
KQZA025H9-HT3E	208-230/3/60	7.600	7.600	7.600
KQZA025H9-HT4E	460/3/60	7.600	7.600	7.600
KQZA030H9-HS2E	208-230/1/60	7.600	7.600	7.600
KQZA030H9-HT3E	208-230/3/60	7.600	7.600	7.600
KQZA030H9-HT4E	460/3/60	7.600	7.600	7.600
KQZA035H9-HS2E	208-230/1/60	7.600	7.600	7.600
KQZA035H9-HT3E	208-230/3/60	7.600	7.600	7.600
KQZA035H9-HT4E	460/3/60	7.600	7.600	7.600
KQZA040H9-HS2E	208-230/1/60	7.600	7.600	7.600
KQZA040H9-HT3E	208-230/3/60	7.600	7.600	7.600
KQZA040H9-HT4E	460/3/60	7.600	7.600	7.600
KQZA045H9-HS2E	208-230/1/60	7.600	7.600	7.600
KQZA045H9-HT3E	208-230/3/60	7.600	7.600	7.600
KQZA045H9-HT4E	460/3/60	7.600	7.600	7.600
KQZA050H9-HS2E	208-230/1/60	7.600	7.600	7.600
KQZA050H9-HT3E	208-230/3/60	7.600	7.600	7.600
KQZA050H9-HT4E	460/3/60	7.600	7.600	7.600
KQZA060H9-HT3E	208-230/3/60	7.600	7.600	7.600
KQZA060H9-HT4E	460/3/60	7.600	7.600	7.600
KQZD030H9-HS2E	208-230/1/60	7.600	7.600	7.600
KQZD030H9-HT3E	208-230/3/60	7.600	7.600	7.600
KQZD030H9-HT4E	460/3/60	7.600	7.600	7.600
KQZD040H9-HT3E	208-230/3/60	7.600	7.600	7.600
KQZD040H9-HT4E	460/3/60	7.600	7.600	7.600
KQZD050H9-HS2E	208-230/1/60	7.600	7.600	7.600
KQZD050H9-HT3E	208-230/3/60	7.600	7.600	7.600
KQZD050H9-HT4E	460/3/60	7.600	7.600	7.600
KQZD060H9-HT3E	208-230/3/60	7.600	7.600	7.600
KQZD060H9-HT4E	460/3/60	7.600	7.600	7.600

Annual Walk-In Energy Factor Ratings - Low Temperature Models

If a numerical value is listed in the table below, the following statement applies to that corresponding model: "This refrigeration system is designed and certified for use in walk-in freezer applications."

Model KQ	Power Supply	Outdoor Models		
		R454A	R454C	R455A
KQZA008L9-HS2E	208-230/1/60	2.894	2.866	2.872
KQZA008L9-HT3E	208-230/3/60	2.894	2.866	2.872
KQZA008L9-HT4E	460/3/60	2.894	2.866	2.872
KQZA010L9-HS2E	208-230/1/60	2.945	2.908	2.922
KQZA010L9-HT3E	208-230/3/60	2.945	2.908	2.922
KQZA010L9-HT4E	460/3/60	2.945	2.908	2.922
KQZA015L9-HS2E	208-230/1/60	2.984	2.939	2.956
KQZA015L9-HT3E	208-230/3/60	2.984	2.939	2.956
KQZA015L9-HT3E	460/3/60	2.984	2.939	2.956
KQZA020L9-HS2E	208-230/1/60	3.114	3.047	3.070
KQZA020L9-HT3E	208-230/3/60	3.114	3.047	3.070
KQZA020L9-HT4E	460/3/60	3.114	3.047	3.070
KQZA025L9-HS2E	208-230/1/60	3.150	3.098	3.124
KQZA025L9-HT3E	208-230/3/60	3.150	3.098	3.124
KQZA025L9-HT4E	460/3/60	3.150	3.098	3.124
KQZA030L9-HS2E	208-230/1/60	3.150	3.141	3.150
KQZA030L9-HT3E	208-230/3/60	3.150	3.141	3.150
KQZA030L9-HT4E	460/3/60	3.150	3.141	3.150
KQZA035L9-HS2E	208-230/1/60	3.150	3.150	3.150
KQZA035L9-HT3E	208-230/3/60	3.150	3.150	3.150
KQZA035L9-HT4E	460/3/60	3.150	3.150	3.150
KQZA045L9-HS2E	208-230/1/60	3.150	3.150	3.150
KQZA045L9-HT3E	208-230/3/60	3.150	3.150	3.150
KQZA045L9-HT4E	460/3/60	3.150	3.150	3.150
KQZA055L9-HS2E	208-230/1/60	3.150	3.150	3.150
KQZA055L9-HT3E	208-230/3/60	3.150	3.150	3.150
KQZA055L9-HT4E	460/3/60	3.150	3.150	3.150
KQZA060L9-HT3E	208-230/3/60	3.150	3.150	3.150
KQZA060L9-HT4E	460/3/60	3.150	3.150	3.150

SOUND DATA

High and Medium Temp. Models

Model KQ	dBA @ 10 ft.	
	with Sound Insulated Compressor Compartment	without Sound Insulated Compressor Compartment
KQZA007H9	55	58
KQZA008H9	55	58
KQZA009H9	55	58
KQZA010H9	55	58
KQZA011H9	56	59
KQZA015H9	56	59
KQZA020H9	56	59
KQZA025H9	56	59
KQZA030H9 *	58	61
KQZA035H9	58	61
KQZA040H9 *	58	61
KQZA045H9	58	61
KQZA050H9 *	59	62
KQZA060H9 *	59	62

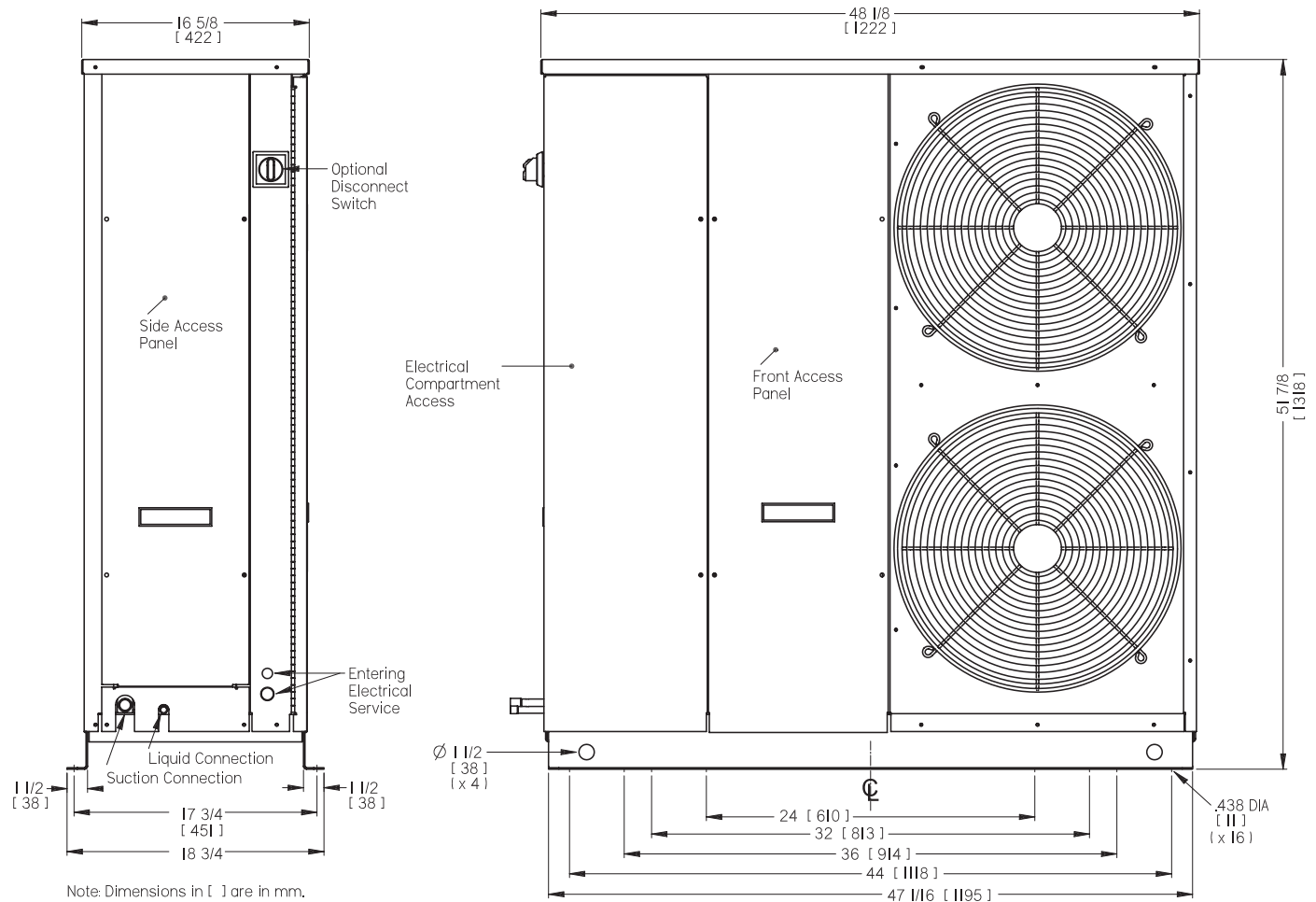
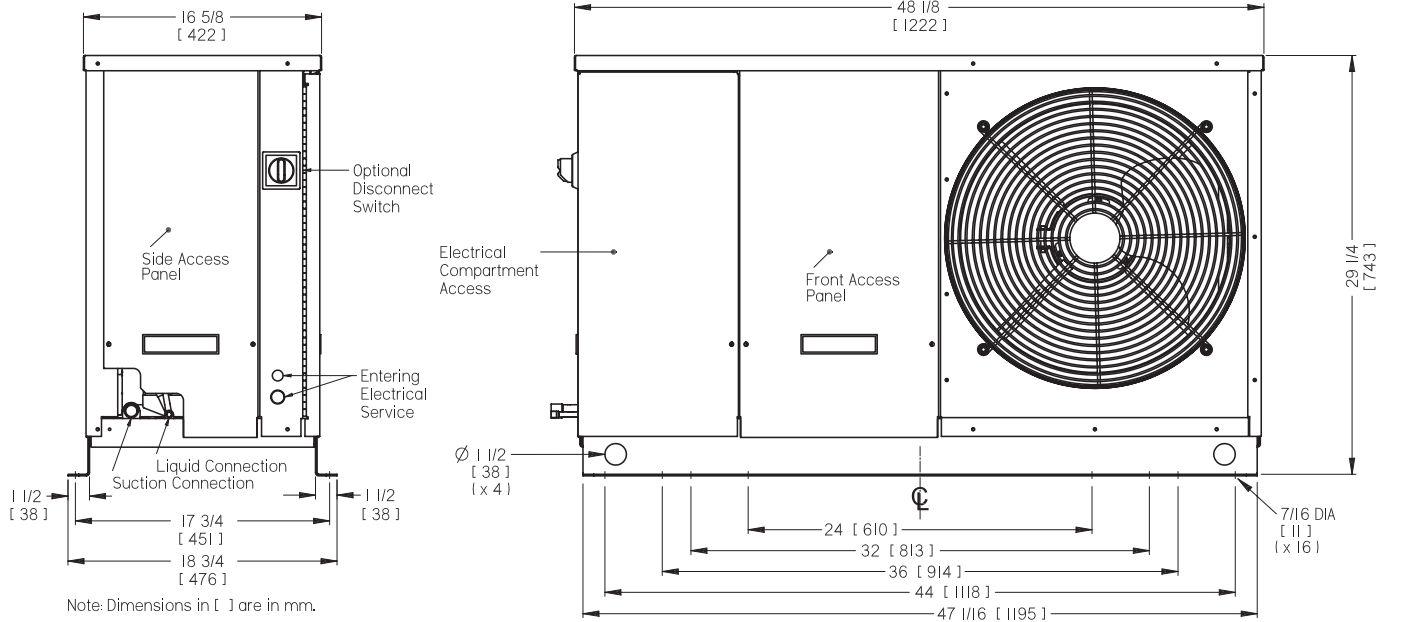
Low Temperature Models

Model KQ	dBA @ 10 ft.	
	with Sound Insulated Compressor Compartment	without Sound Insulated Compressor Compartment
KQZA008L9	53	56
KQZA010L9	53	56
KQZA015L9	53	56
KQZA020L9	53	56
KQZA025L9	54	57
KQZA030L9	55	58
KQZA035L9	55	58
KQZA045L9	59	61
KQZA055L9	59	61
KQZA060L9	59	61

- *Sound ratings include KQZD-Digital compressor models
- Data is typical of "free field" conditions. Factors such as reflecting wall, background noise and installation may have significant influence on data
- Testing performed according to AHRI Standard 270
- For more accurate ratings refer to AHRI Standard 275 for correction factors due to reflecting planes
- Data is for 100% fan speed. Further sound reductions of approx. 4-6 dBA can be expected at ambients below 70°F

DIMENSIONAL DATA

KQ - QUIET CONDENSING UNITS



DIMENSIONAL DATA

KQ - QUIET CONDENSING UNITS

High and Medium Temperature Models

Model KQ	Width		Depth		Height	
	Inches	mm	Inches	mm	Inches	mm
KQZA007H9	48 1/8	1222	18 3/4	476	29 1/4	743
KQZA008H9	48 1/8	1222	18 3/4	476	29 1/4	743
KQZA009H9	48 1/8	1222	18 3/4	476	29 1/4	743
KQZA010H9	48 1/8	1222	18 3/4	476	29 1/4	743
KQZA011H9	48 1/8	1222	18 3/4	476	29 1/4	743
KQZA015H9	48 1/8	1222	18 3/4	476	29 1/4	743
KQZA020H9	48 1/8	1222	18 3/4	476	29 1/4	743
KQZA025H9	48 1/8	1222	18 3/4	476	29 1/4	743
KQZA030H9	48 1/8	1222	18 3/4	476	29 1/4	743
KQZA035H9	48 1/8	1222	18 3/4	476	51 7/8	1318
KQZA040H9	48 1/8	1222	18 3/4	476	51 7/8	1318
KQZA045H9	48 1/8	1222	18 3/4	476	51 7/8	1318
KQZA050H9	48 1/8	1222	18 3/4	476	51 7/8	1318
KQZA060H9	48 1/8	1222	18 3/4	476	51 7/8	1318
KQZD030H9	48 1/8	1222	18 3/4	476	51 7/8	1318
KQZD040H9	48 1/8	1222	18 3/4	476	51 7/8	1318
KQZD050H9	48 1/8	1222	18 3/4	476	51 7/8	1318
KQZD060H9	48 1/8	1222	18 3/4	476	51 7/8	1318

Low Temperature Models

Model KQ	Width		Depth		Height	
	Inches	mm	Inches	mm	Inches	mm
KQZA008L9	48 1/8	1222	18 3/4	476	29 1/4	743
KQZA010L9	48 1/8	1222	18 3/4	476	29 1/4	743
KQZA015L9	48 1/8	1222	18 3/4	476	29 1/4	743
KQZA020L9	48 1/8	1222	18 3/4	476	29 1/4	743
KQZA025L9	48 1/8	1222	18 3/4	476	29 1/4	743
KQZA030L9	48 1/8	1222	18 3/4	476	29 1/4	743
KQZA035L9	48 1/8	1222	18 3/4	476	29 1/4	743
KQZA045L9	48 1/8	1222	18 3/4	476	51 7/8	1318
KQZA055L9	48 1/8	1222	18 3/4	476	51 7/8	1318
KQZA060L9	48 1/8	1222	18 3/4	476	51 7/8	1318

SPECIFICATIONS

High and Medium Temperature Models

Model KQ	Unit Connections				Receiver Capacity 90% Full *		Approx. Shipping Weight	
	Suction (OD)		Liquid (OD)					
	Inches	mm	Inches	mm	Lbs.	kg	Lbs.	kg
KQZA007H9	5/8	16	3/8	10	10.8	4.9	260	118
KQZA008H9	5/8	16	3/8	10	10.8	4.9	260	118
KQZA009H9	5/8	16	3/8	10	10.8	4.9	260	118
KQZA010H9	5/8	16	3/8	10	10.8	4.9	265	120
KQZA011H9	5/8	16	3/8	10	10.8	4.9	265	120
KQZA015H9	7/8	22	3/8	10	13.7	6.2	275	125
KQZA020H9	7/8	22	3/8	10	13.7	6.2	275	125
KQZA025H9	7/8	22	1/2	13	13.7	6.2	275	148
KQZA030H9	7/8	22	1/2	13	13.7	6.2	285	130
KQZA035H9	7/8	22	1/2	13	21.1	9.6	480	218
KQZA040H9	7/8	22	1/2	13	21.1	9.6	480	218
KQZA045H9	7/8	22	1/2	13	21.1	9.6	515	234
KQZA050H9	1 1/8	29	1/2	13	21.1	9.6	515	234
KQZA060H9	1 1/8	29	1/2	13	21.1	9.6	520	236
KQZD030H9	7/8	22	1/2	13	21.1	9.6	480	218
KQZD040H9	7/8	22	1/2	13	21.1	9.6	480	218
KQZD050H9	1 1/8	29	1/2	13	21.1	9.6	515	234
KQZD060H9	1 1/8	29	1/2	13	21.1	9.6	520	236

Low Temperature Models

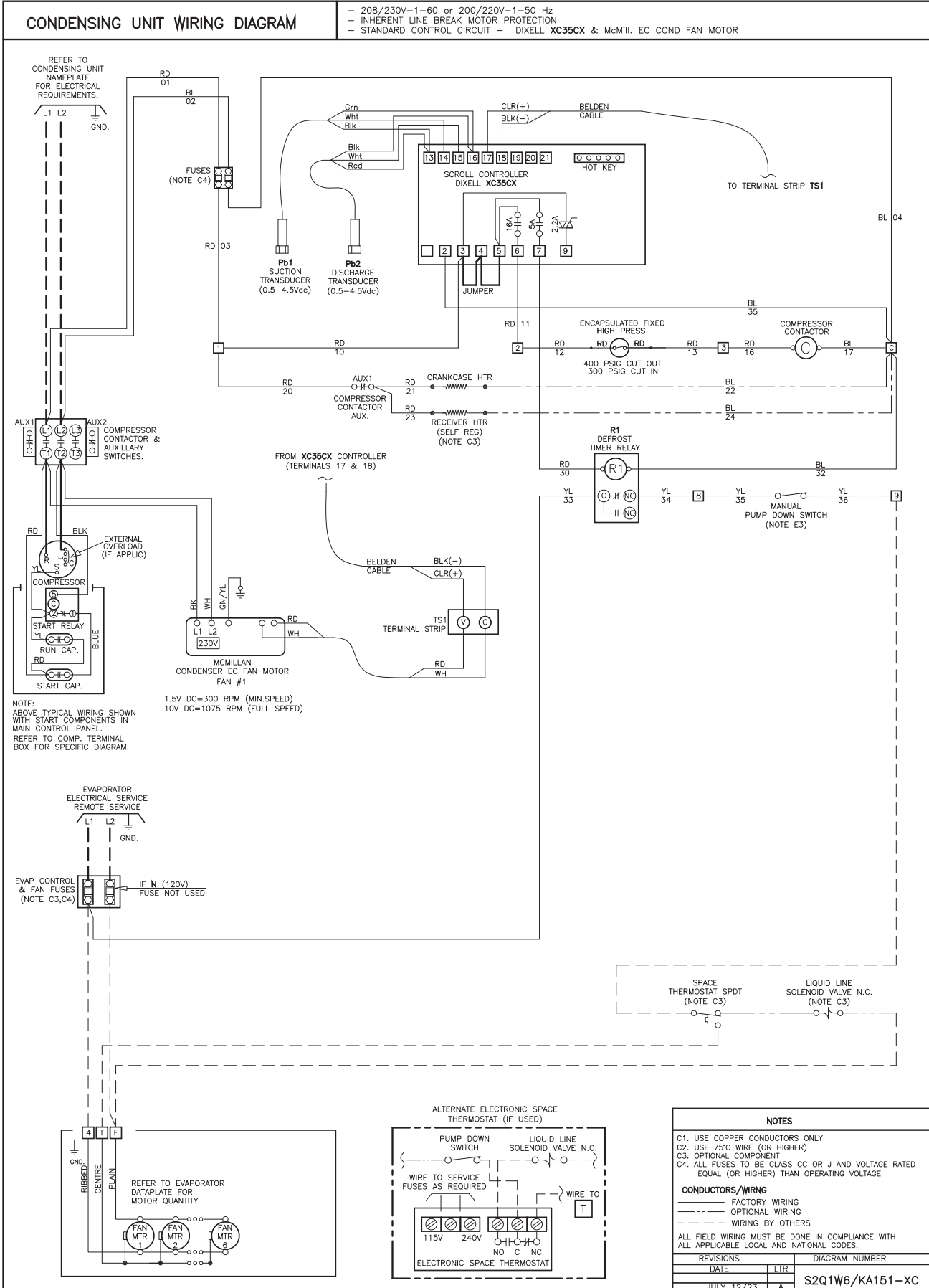
Model KQ	Unit Connections				Receiver Capacity 90% Full *		Approx. Shipping Weight	
	Suction (OD)		Liquid (OD)					
	Inches	mm	Inches	mm	Lbs.	kg	Lbs.	kg
KQZA008L9	5/8	16	3/8	10	10.8	4.9	280	127
KQZA010L9	5/8	16	3/8	10	10.8	4.9	280	127
KQZA015L9	5/8	16	3/8	10	10.8	4.9	280	127
KQZA020L9	7/8	22	3/8	10	10.8	4.9	280	127
KQZA025L9	7/8	22	3/8	10	13.7	6.2	290	132
KQZA030L9	7/8	22	3/8	10	13.7	6.2	290	132
KQZA035L9	7/8	22	1/2	13	13.7	6.2	290	132
KQZA045L9	7/8	22	1/2	13	21.1	9.6	490	223
KQZA055L9	1 1/8	29	1/2	13	21.1	9.6	500	227
KQZA060L9	1 1/8	29	1/2	13	21.1	9.6	510	232

* NOTE ON ALTERNATE REFRIGERANTS:

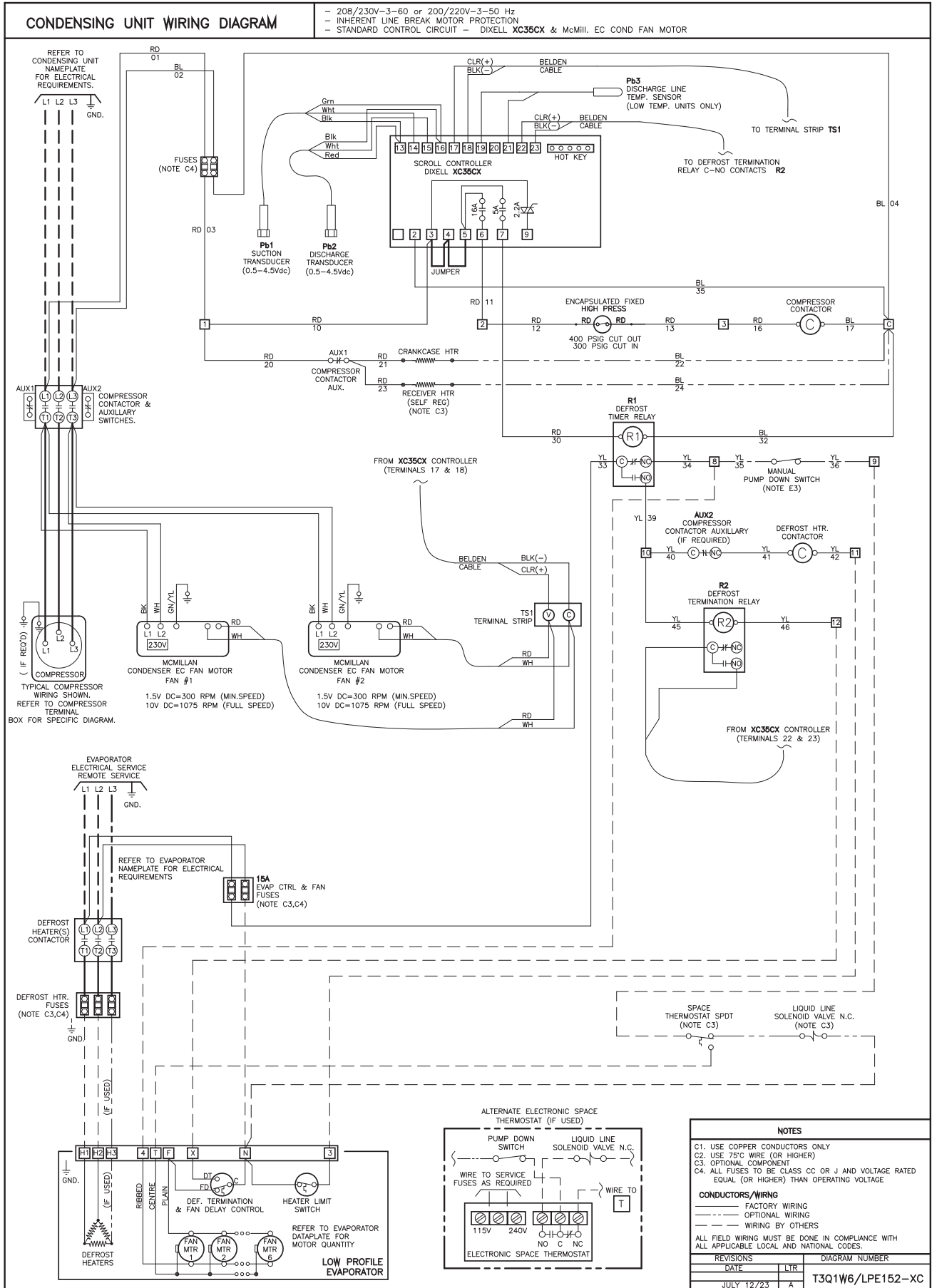
* VALUES ARE FOR R454A. MULTIPLY VALUES ABOVE BY VALUE BELOW FOR OTHER REFRIGERANTS.

R454A	R454CA	R455A
1	1.02	1.01

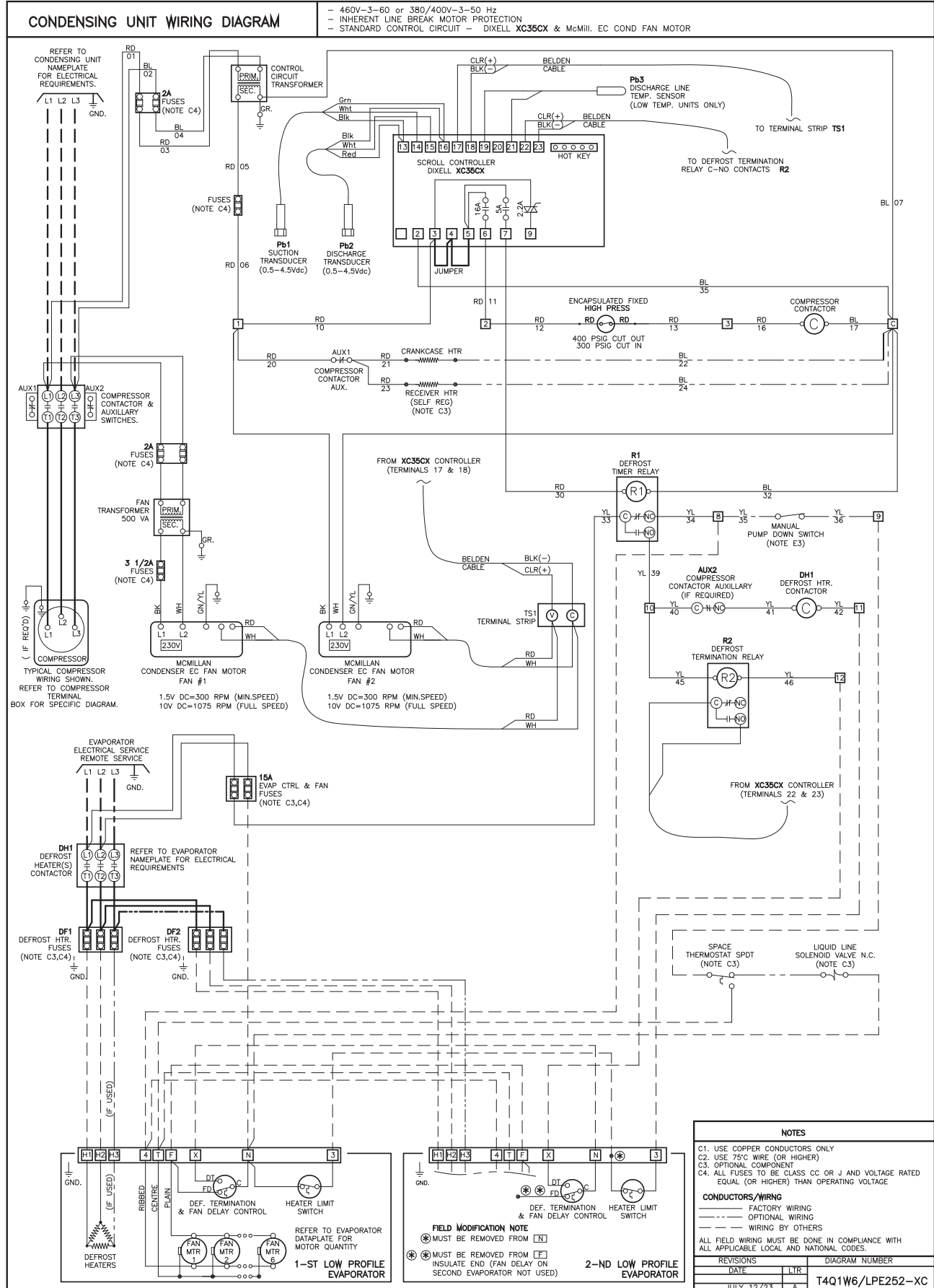
208-230/1/60 Models with (115V or 230V) Air Defrost Evaporator



208-230/3/60 Models with Electrical Defrost Evaporator



460/3/60 Models with Electrical Defrost Evaporator



CONTROLLER FUNCTIONS

XC35CX controller regulates and manages condensing unit functions:

- Drive ON/OFF (fixed capacity) compressors
- Drive ON/OFF (fixed speed) condenser fans
- Drive variable speed condenser fans (0-10V control)
- Provide relay output to run defrost events (*)
- Generates alarm codes for running conditions outside of specified range
- Provide programming options for condensing unit lock-out (Repetitive Alarm codes conditions)
- Provide display options for running parameters and alarm codes
- Provide means for communicating operating parameters and alarming conditions for remote monitoring systems

XC35CX replaces the following components:

- Low Pressure control
- Discharge Thermostat
- Compressor Time Delay
- Pressure/Temperature switch for staggering Fixed Speed Condenser Fans
- System 450 or P352 controllers for variable speed condenser fans
- Defrost Time Clock (*)

CONTROLLER & COMPONENTS

- XC35CX Controller
- Pressure Transducers (Ratiometric 0-5VDC)
- Temperature Sensors (NTC86k, NTC10k, PT1000)
- Monitoring Adapter Tool (RS485 output converter)



CONTROLLER INPUTS, PRESSURE AND TEMPERATURE SENSORS

Pb1 Suction pressure transducer (ratiometric transducer 0-5V), Terminals #13, #14 and #16

Pb2 Condensing pressure transducer (ratiometric transducer 0-5V), Terminals #13, #15 and #16

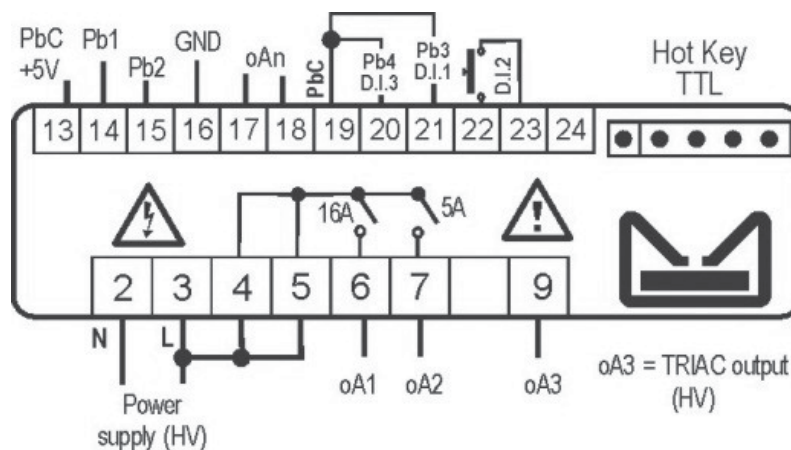
Pb3 Discharge temperature sensor, Terminals #19 and #21 (Low temp units only (L8))

CONTROLLER OUTPUTS

oA1 Relay Output (16A), Terminal #3 and #6

oA2 Relay Output (5A), Terminals #3 and #7 (*)

oAn Analogue Output, Terminals #17 & #18 (EC Fan speed control input)



(*) Controllers with firmware 3.8 and higher only

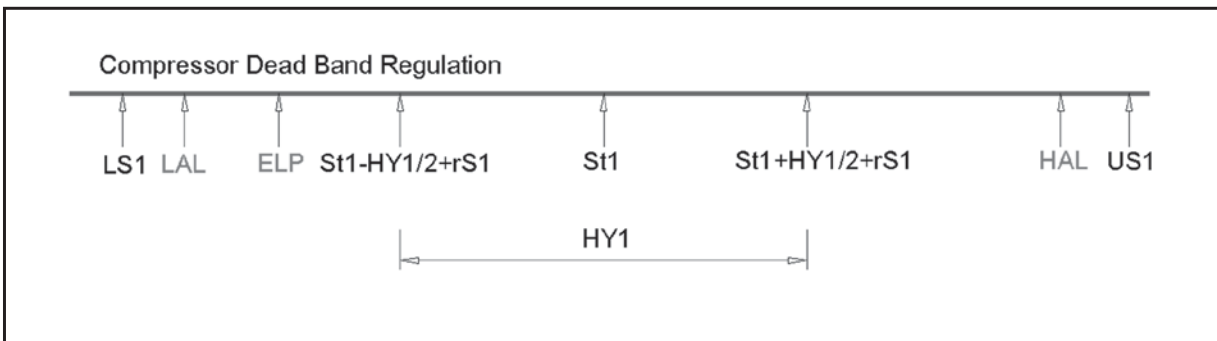
FIXED COMPRESSOR REGULATION (Controlling parameters: Configuration Setpoint and alarms)

Basic Setup Parameters and Settings "P1" programming level System Modes

Parameter	Description	Low	Med	Prog. Level
St1	SETPOINT 1 for compressor regulation (suction line)	7	27	Pr1
HY1	Regulation band for SETPOINT 1	14	20	Pr1
2on	Minimum delay between two compressor start-ups (min)	0		Pr1
2oF	Delay between compressor switch-off and start-up (min)	2		Pr1

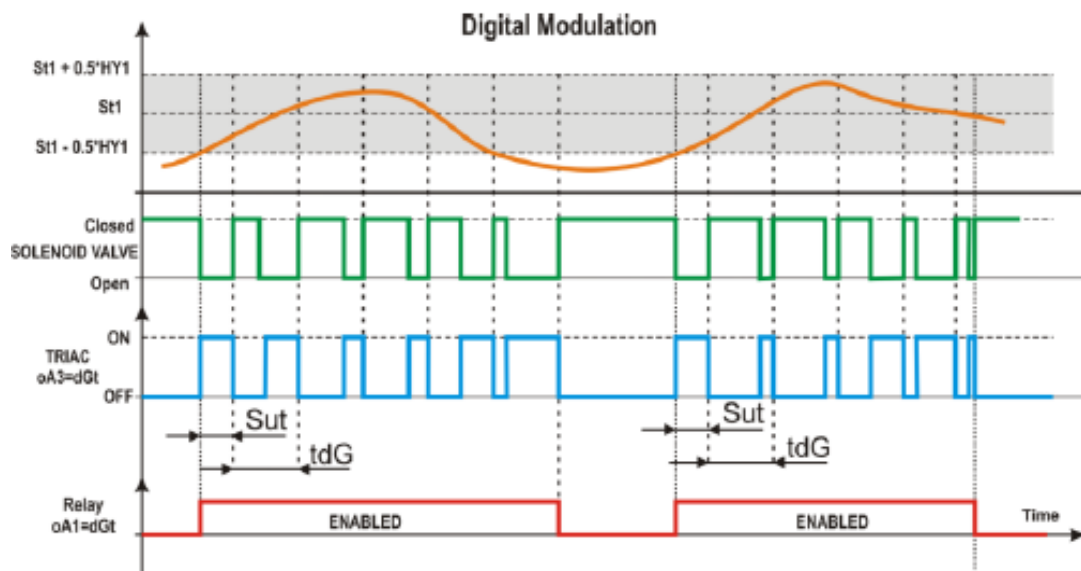
Advanced Setup Parameters and Settings "P2" programming level

Parameter	Description	Low	Med	Prog. Level
oA1	Digital output AUX1 configuration (Relay 16A)	CP1		Pr2
CPb	Compressor regulation probe (suction pressure transducer)	P1		Pr2
rtY	Type of regulation: dead band	db		Pr2
rS1	Offset for HY1, used to move the regulation band above and below the setpoint St1	0		Pr2
LS1	Minimum value for SETPOINT 1	-13		Pr2
US1	Maximum value for SETPOINT 1	135		Pr2
Con	Compressor ON in case of probe error (min)	5		Pr2
CoF	Compressor OFF in case of probe error (min)	5		Pr2
dnF	Minimum time for any compressor activation (min)	0	0.3	Pr2
dLP	DLT probe selection (Low temp units only)	P3		Pr2
dLt	Discharge line temperature for compressor (°F) (Low temp units only)	230		Pr2
dth	Differential for compressor restart after a dLt alarm (°F)	30		Pr2
dLd	DLT alarm activation delay (sec)	60		Pr2
dCt	Cooling time for compressor after DLT alarm (min)	3		Pr2
dLn	Number of DLT alarms in dLi hours before lock out	4		Pr2
dLi	Time interval (in hours) in which to check dLn number of DLT alarms	0		Pr2
LAL	Lower limit for pressure alarm on suction line (psi)	-13	8	Pr2
HAL	Higher limit for pressure alarm on suction line (psi)	130	130	Pr2
ELP	Electronic pressure control threshold (Low pressure alarm on suction line) (psi)	-2	10	Pr2
PEn	Max number of pressure control activations (ELP) before signaling an alarm	5	5	Pr2
PEi	Interval of time to count the actuations of the pressure control (ELP) before lock out	10	10	Pr2



- Compressor is activated when Suction pressure (Pb1) is higher than $St1 + HY1/2 + rS1$
- Compressor is inactivated when Suction pressure (Pb1) is lower than $St1 - HY1/2 + rS1$
- If Suction pressure is lower than LAL then LA alarm code generated (auto reset)
- If Suction pressure is higher than HAL then HA alarm code generated (auto reset)
- If Suction pressure is lower than ELP then ELP alarm code generated (auto reset)
- If ELP occurs PEn times within PEi then ELL (Electronic pressure switch lockout) alarm code generated (manual reset required)
- If Discharge Temperature (Pb3) is higher than dLt then dLt alarm code generated (auto reset)
- If dLt occurs dLn times within dLi then alarm code generated (manual reset required)

DIGITAL COMPRESSOR REGULATION (CONTROLLING PARAMETERS)



The regulation starts when the pressure on the suction line increases and reaches the value $[SET-0.5 \cdot HY1]$. Digital compressor will be activated and controlled by Digital modulation (PWM output TRIAC, set as $oA3=dGt$).

NOTE: after start-up the digital valve is energized for S_{ut} seconds to ensure the discharge of any liquid present in the compressor.

Within the range $[SET-0.5 \cdot HY1$ to $SET+0.5 \cdot HY1]$ Digital compressor is controlled by PWM according to the value of the control variable.

NOTE: when the TRIAC is ON the compressor is unloaded.

When the TRIAC is OFF, the compressor is operating.

When the pressure goes below the value $[SET-0.5 \cdot HY1]$ the Digital compressor will be controlled in PWM modulation, at the minimum allowable capacity, for the time doF .

The Digital compressor capacity can be limited both in maximum and minimum value by using parameters PMi e PMA

PMi : (%) is minimum activation time of the Digital compressor during the tdG cycle period.

PMA : (%) is maximum activation time of the Digital compressor during the tdG cycle period.

DIGITAL COMPRESSOR REGULATION

IGITAKQZ = QUIET SCRL COMPRESSOOLL COMPRESSORR REGULATION (CONTROLLING PARAMETERS)

Parameter	Description	Setting	Prog. Level	Unit
St1	Set point 1 (for COMPRESSOR)	47	Pr1	Psi
HY1	Hysteresis for set point 1	6	Pr1	Psi
CPb	Compressor regulation probe	P1	Pr2	
rtY	Type of regulation: dead band or proportional band	PrP	Pr2	
SUt	R454A, R454C, R455A: interval of time with digital valve (oA3=dGt) or inverter at 100% (oAn=inV) before starting regulation.	3.0	Pr2	sec
tdG	Modulation time interval (for digital compressor)Interval for calculating average temperature (for inverter)	15	Pr2	sec
PMi	Minimum power for compressor	60		%
PMA	Maximum power for compressor			%
doF	Delay between two different compressor switch off		Pr2	min
oA1	Digital output AUX1 configuration (Relay 16A)			
oA3	Modulating output AUX3 configuration (TRIAC)		Pr2	
i2F	Digital input 2 function		Pr2	
i2P	Digital input 2 polarity			
d2d	Activation delay for digital input 2	0	Pr2	min

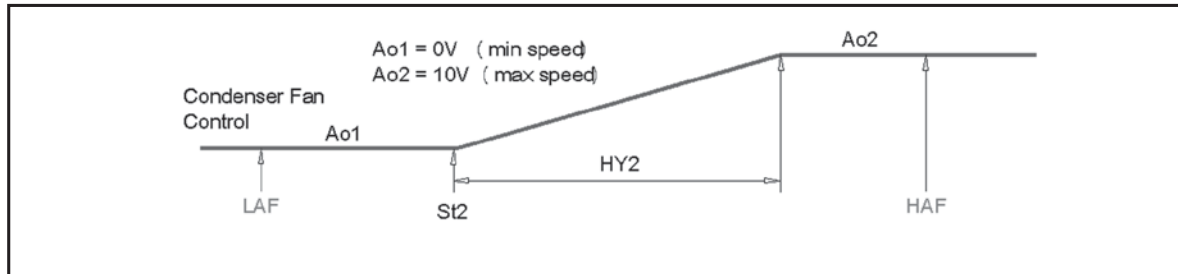
CONDENSER FAN REGULATION (Controlling parameters: configuration setpoint and alarms)

Basic Setup Parameters and settings "P1" programming level

Parameter	Description	Setting	Prog. Level
St2	Set point 2 (for CONDENSER FAN)	175	Pr1
HY2	Hysteresis for set point 2	15	Pr1








Advanced Setup Parameters and settings "P2" programming level


Parameter	Description	Setting	Prog. Level
oAn	Analogue output configuration (PWM or 0-10V)	EFn	Pr2
FPb	Fan probe	P2	Pr2
LS2	Minimum value for SETPOINT 2	125	Pr2
US2	Maximum value for SETPOINT 2	205	Pr2
LAF	Lower limit for pressure alarm on discharge line (psi)	100	Pr2
HAF	Higher limit pressure alarm on discharge line (psi)	410	Pr2
HFC	Compressor stop in case of alarm HAF	no	Pr2
dHF	Delay before stopping the compressor in case of an alarm due to high pressure	30	Pr2
PnF	Max number HAF alarms before lock out	5	Pr2
PiF	Interval of time to count the actuations HAF alarms before lock out (min)	60	Pr2



- Fan activated when Condensing pressure (Pb2) is higher than St2
- Fan runs at maximum speed when Condensing pressure (Pb2) is higher than St2 +HY2
- Fan runs at reduced speed proportional to Condensing pressure (Pb2) between St2 and St2 + HY2
- If Condensing pressure is lower than LAF then L2 alarm code is generated (auto reset)
- If Condensing pressure is higher than HAF then H2 alarm code is generated (auto reset)
- If HAF occurs PnF times within PiF then HLL (High pressure lockout alarm) alarm code is generated (manual reset required)

REAL TIME CLOCK SETTING:







1. Press and Hold  until "HUr" is displayed.
2. Press **SET** . Value for "HUr" will show in display.
3. Adjust with  or  to set hour.
4. Press **SET** . Parameter "Min" will show in display.
5. Press **SET** again. Value for "Min" will show in the display.
6. Adjust with  or  to set minutes.
7. Press **SET** . Parameter "dAY" will show in display.
8. Press **SET** again. Value for "dAY" will show in display.
9. Adjust with  or  to set day of the week.
10. Press **SET** . Parameter "Hd1" will show in the display

EXIT: Press both **SET** +  , or wait for 30 sec.

DEFROST AND PUMPDOWN DURATION SETTINGS:

- **Pdt = Pumpdown duration. Default setting 2 min**
If after defrost initiation (Relay oA2 activation), compressor continues to work beyond "Pdt" time then alarm code "ALP" will be generated. Compressor will be stopped and defrost will continue until "otd" time elapses or input i2F is activated.
- **otd = Defrost duration. Default setting 40 minutes.**

SETTING "Pdt" OR "otd"

1. Press **SET** and  for 3 sec
2. Scroll with  or  until "Pdt" or "otd" is displayed.
3. Press **SET** . Value for "Pdt" or "otd" will show in display (default values: 2 min / 40 min)
4. Change the value for "Pdt" or "otd" with  or  until desired value is displayed
5. Press **SET** again. New value for "Pdt" or "otd" will be stored and saved.
6. Press both **SET** and  or wait 30 seconds to EXIT









(*) Controllers with firmware 3.8 and higher only

REAL TIME CLOCK AND DEFROST FUNCTIONS (Controlling parameters: Configuration Setpoint, alarms and defrost schedule)



Parameter	Description	Low	Medium	Prog. Level
Std	Set point for Pump-down	7	27	Pr2
HYd	Hysteresis for Pump-down	14	20	Pr2
Pdt	Pump down duration	2		Pr1
otd	Off time defrost duration	40		Pr1
oA2	Digital output AUX2 configuration (Relay 5A)	PdU		Pr2
i2F	Digital input 2 function	PdE		Pr2
i2P	Digital input 2 polarity	CL		Pr2
dF1	1st Defrost Cycle starting time	nu		Pr1
dF2	2nd Defrost Cycle starting time	nu		Pr1
dF3	3rd Defrost Cycle starting time	nu		Pr1
dF4	4th Defrost Cycle starting time	nu		Pr1
dF5	5th Defrost Cycle starting time	nu		Pr1
dF6	6th Defrost Cycle starting time	nu		Pr1
dF7	7th Defrost Cycle starting time	nu		Pr1
dF8	8th Defrost Cycle starting time	nu		Pr1

DEFROST SCHEDULE CONFIGURATION (*)

- By default no defrost events are scheduled
- It is possible to program up to 8 Defrost events (setup parameters dF1 through dF8)
- To initiate Defrost events setup dF1 through dF8 parameters as shown below
- Setup as many defrost events as required (up to 8 events)
- Adjustment resolution for Defrost events is 10 min
- Any Dfx parameter with any value different than "nu" will initiate defrost at the time defined by Dfx value
- Set to "nu" all Dfx parameters that are not required to initiate any Defrost cycle (default setting)
- Example for Dfx settings to initiate four defrost cycles starting at 12:00 PM, 18:00 PM, 00:00 AM and 06: 00 AM
 - Set Df1 --> 12:00
 - Set Df2 --> 18:00
 - Set Df3 --> 00:00
 - Set Df4 --> 06:00
 - Set Df5 through Df8 --> "nu"
- Defrost Cycle by default is programmed for 40 min. ("otd" parameter)
- If new duration for defrost cycle is required change parameter "otd" accordingly
- Electrical Defrost termination is either by time ("otd" parameter) or by temperature with digital input provided by Defrost termination thermostat (see typical wiring diagrams for electrical defrost systems)
- Parameters i2F (Digital input function) and i2P (Digital input polarity) are preset to complete digital input termination of Defrost Cycle (see default settings for Defrost configuration parameters table)

1. Press and Hold  until "HUr" is displayed.
 2. Press  multiple times until parameter "dF1" shows in display.
 3. Press **SET**. Value for "dF1" will show in display.
 4. Adjust with  or  to set first defrost event. (in 10 min. increments)
 5. Press **SET** again. Parameter "dF2" will show in display.
 6. Adjust with  or  to set second defrost event. (in 10 min. increments)
 7. Press **SET** again. Parameter "dF3" will show in display.
 8. Adjust with  or  to set third defrost event. (in 10 min. increments)
- Continue with the same procedure to set all required defrost events.
To inactivate "x" Defrost event, set parameter "dFx" to "nu" value.

MANUAL INITIATION / TERMINATION OF THE DEFROST CYCLE

1. Press and Hold  when system is in refrigeration to start defrost.
2. Press and Hold  when system is in defrost to start refrigeration.

NOTES:

- Parameters "Std" and "Hyd" are set with the same values as "St1" and "HY1".
- It is recommended to re adjust accordingly if "St1" and "HY1" are modified.
- Parameter "Pdt" is set to 2 min.
- If after this time has elapsed and compressor has not stopped then compressor is forced, OFF and "ALP" label will be displayed. (Pressing any button on the keypad will erase "ALP")

(*) Controllers with firmware 3.8 and higher only

PROBE CONFIGURATIONS

Parameter	Description	Setting	Prog. Level
Suction Probe (Pb1), Suction Pressure Transducer			
P1P	Suction pressure probe P1 presence	Y	Pr2
P1C	Suction pressure transducer configuration	0-5	Pr2
P1i	Start of scaling for Suction pressure transducer (psi)	-15	Pr2
P1E	End of scaling for Suction pressure transducer (psi)	135	Pr2
P1F	Suction pressure transducer calibration (psi)	0	Pr2
P1d	Suction pressure transducer reading error delayed (min)	15	Pr2
Condensing Probe (Pb2), Condensing Pressure Transducer			
P2P	Condensing pressure probe P2 presence	Y	Pr2
P2C	Condensing pressure transducer configuration	0-5	Pr2
P2i	Start of scaling for Condensing pressure transducer (psi)	0	Pr2
P2E	End of scaling for Condensing pressure transducer (psi)	507	Pr2
P2F	Condensing pressure transducer calibration (psi)	0	Pr2
P2d	Probe P2 reading error delayed (if P2C=0-5) (min)	0	Pr2
Discharge Temperature Probe (Pb3), Discharge Temperature Sensor			
P3P	Discharge temperature P3 sensor presence	n *	Pr2
P3C	Probe P3 configuration	ntC	Pr2
P3F	Probe P3 calibration (°F)	0	Pr2
dEr	Delay before activating probe error (sec)	0	Pr2
PnF	Max number HAF alarms before lock out	5	Pr2
PiF	Interval of time to count the actuations HAF alarms before lock out	60	Pr2

* n - when probe is not active Y - when probe is active (low temp models only)

USER INTERFACE: Display, Icon description



LED	STATUS	MEANING
°C	ON	Unit of measurement for temperature is Celsius degrees
°F	ON	Unit of measurement for temperature is Fahrenheit degrees
bar	ON	Unit of measurement for pressure is Bar
PSI	ON	Unit of measurement for pressure is PSI
1	ON	Relay output oA1 enabled
	BLINKING	Delay in relay output oA1 activation
2	ON	Relay output oA2 enabled
	BLINKING	Delay in relay output oA2 activation
3	ON	Relay output oA3 enabled
	BLINKING	Delay in relay output oA3 activation
🔌	ON	Analogue output active
🔑	ON	(SER) Service menu
	BLINKING	(SER) Outputs in service mode
🔊	ON	(ALR) Alarm active
📖!	ON	(MEM) At least an alarm present into memory
	BLINKING	(MEM) A new alarm is occurred and need to be checked
🕒	ON	Real Time Clock Menu(*)

USER INTERFACE: Keyboard, Navigation modes

SET	<p>Standard visualization: Used to see and modify the SETPOINT values. In programming mode, it is used to modify a parameter or confirm an operation</p> <p>ALARM menu: Keep it pressed for 3 sec in order to reset an alarm</p>
▲	<p>(UP) Programming mode: Used to browse the parameter list</p> <p>With inserted HOT-KEY: start the parameter UPLOAD function (from HOT-KEY to internal memory)</p> <p>INFO menu: Used to browse the INFO menu</p>
▼	<p>(DOWN) Programming mode: Used to browse the parameter list</p> <p>With inserted HOT-KEY: start the parameter DOWNLOAD function (from internal memory to the HOT-KEY)</p> <p>INFO menu: Used to browse the INFO menu</p>
🔄	<p>Manual load restart: If parameter r1F=rSt, press this button to restart the loads and previously stopped due to safety alarm</p> <p>ON-OFF: If parameter r2F=onF, keep this button pressed for 3 sec to switch ON and OFF the instrument</p>
🔧	<p>SERVICE / CLOCK (*): to enter CLOCK (*) and SERVICE menu</p>
📖!	<p>STORED ALARMS: Gives access to the stored alarms (MEM)</p>

▲ + ▼	To lock and unlock the keyboard
SET + ▼	To enter the programming parameter menu
SET + ▲	To exit from INFO and ALARM menu and from programming parameter menu

(*) Controllers with firmware 3.8 and higher only

SET POINTS VISUALIZATION, MODIFICATION

Visualization:

1. Press and release the SET button
2. SUCTION: the display will show the label St1 (Suction Pressure)
3. Press the SET button again to show the value of St1
4. CONDENSING: press the SET button once again
5. The display shows label St2 (Condensing Pressure)
6. Press the SET button again to show the value of St2

EXIT: Press both SET + UP or wait for 30 sec

Modification:

1. Press the SET button for 3 sec
2. The display will show St1
3. Press the SET button again to show the value of St1 (Suction Pressure)
4. Change the value of St1 by pressing the UP or DOWN
5. Press the SET button to save the set value in memory and move to St2
6. The display will show St2 (Condensing Pressure)
7. Press the SET button again to show the value of St2
8. Change the value of St2 by pressing the UP or DOWN

EXIT: Press both SET + UP or wait for 30 sec

Parameter Programming: Accessing Programing menu level, Parameter modification:

1. Keep both SET+DOWN buttons pressed for 3 sec
2. The display will show the name of the first parameter in the Pr1 level menu
3. Keep both SET+DOWN buttons pressed for 7 sec (if required to enter Pr2 level)
4. The display will show the label Pr2
5. Select the parameter to modify by using UP or DOWN buttons
6. Press the SET key to access to the stored value
7. Change the value of the parameter using the UP and DOWN buttons
8. Press the SET button to store the new value and move to the next parameter

EXIT: Press both SET + UP or wait for 30 sec

Programming controller with HOT-KEY

1. Turn off the device
2. Insert HOT-KEY into the 5-pin port paying attention to the polarity and then turn the device on again
3. The list of parameters present in the HOT-KEY memory will be automatically downloaded into the device memory. The word "doL" will appear during this operation. At the end of this operation the display will blink the "End" label
4. After 10 sec the device will restart automatically
5. Remove the HOT-KEY


NOTE: the "Err" message on the display indicates that the operation is not successful (transfer error). In this case, turn off and then on again the device in order to restart the operation or remove the HOT-KEY to abort the operation.

ALARM MENU: Alarm Codes, Alarm Logs, Alarm Reset

Alarm Codes

Code	Description
HA	High pressure alarm on the suction line
LA	Low pressure alarm on the suction line
H2	High pressure alarm on the discharge line
HLL	High pressure lockout alarm
L2	Low pressure alarm on the discharge line
dLt	High Discharge temperature alarm
dLL	Lockout due to DLT alarm
ELP	Electronic pressure switch (warning)
ELL	Electronic pressure switch (lockout)
HP	High pressure alarm from external sensor (warning)
LP	Low pressure alarm from external sensor (warning)
HPL	High pressure alarm from external sensor (lockout)
ALP (*)	Pump down time longer than programmed (*)

Alarm Visualization

1. Press the alarm archive (MEM) button 
2. Scroll with UP or DOWN button up to label AL0 (first alarm event memorized)
3. Press SET button to enter the event submenu
4. The encoding label relative to the logged event (Alarm Code) will be displayed
5. Press SET button again to display the duration of the alarm event recorded
6. Press the SET button to move to the next alarm event

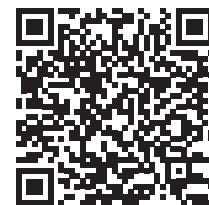
Alarm Reset

1. Enter the ALARM menu
2. To reset the alarm list, keep the SET button pressed for 5 sec until the message "CLr" blinks on the display
3. To reset the only event displayed, keep the ALR button pressed for 3 sec until the message "rSA" blinks on the display

NOTE: the current alarms will not reset

MORE INFORMATION AND FUNCTIONALITIES

For more controller functions and information please refer to controller instruction manual, available at <https://climate.emerson.com/documents/xc15cx-xc35cx-en-gb-3723474.pdf> or scan this QR code:



**CONTROLLER
INSTRUCTION
MANUAL**

(*) Controllers with firmware 3.8 and higher only

GENERAL SAFETY

IMPORTANT SAFETY NOTE

Only a qualified refrigeration mechanic who is familiar with refrigeration systems and components, including all controls should perform the installation and start-up of the system. To avoid potential injury, use care when working around coil surfaces (if applicable) or sharp edges of metal cabinets. All piping and electrical wiring should be installed in accordance with all applicable codes, ordinances and local by-laws.

WARNING

Always **disconnect and lock off** the main power supply on any system that will be worked on to avoid accidental start up of the equipment.

WARNING

Do not use means to accelerate the defrosting process or to clean, other than those recommended by the manufacturer.

The appliance shall be stored or in a room without continuously operating ignition sources (for example: open flames, an operating gas appliance or an operating electric heater).

Do not pierce or burn.

Be aware that refrigerants may not contain an odor.

MISE EN GARDE

Ne pas utiliser de moyens autres que ceux recommandés par le fabricant pour accélérer le processus de dégivrage ou pour nettoyer l'appareil.

L'appareil doit être entreposé dans un local ne contenant pas de sources d'inflammation permanentes (flammes nues, appareil à gaz ou dispositif de chauffage électrique en fonctionnement, par exemple).

Ne pas percer ou brûler.

Attention, les fluides frigorigènes peuvent ne pas dégager d'odeur.

INSPECTION

Inspect all equipment before unpacking for visible signs of damage or loss. Check shipping list against material received to ensure shipment is complete.

IMPORTANT: Remember, you, the consignee, must make any claim necessary against the transportation company. Shipping damage or missing parts, when discovered at the outset, will prevent later unnecessary and costly delays. **If damage or loss during transport is evident, make claim to carrier, as this will be their responsibility, not that of the manufacturer.**

Should carton be damaged, but damage to equipment is not obvious, a claim should be filed for "concealed damage" with the carrier.

IMPORTANT: Check the electrical ratings on the unit to make sure they correspond to those ordered and to electrical power available at the job site. Save all shipping papers, tags, and instruction sheets for reference by installer and owner.

Additional Installation, Service, and Decommissioning requirements for units charged with A2L refrigerants.

GENERAL A2L EQUIPMENT SERVICE REQUIREMENTS



Refrigerant class: A2L

Walk-in cooler or freezer split systems charged with A2L flammable refrigerant have special requirements for installation, service, and decommissioning.

WARNING: To reduce flammability hazards, installation and service may only be performed by qualified service personnel who have been licensed by their local and national authorities to perform work on refrigeration systems. Personnel must be trained on how to service equipment utilizing flammable refrigerant, and how to mitigate the hazards. Installation and service may only be performed as recommended by the manufacturer. When making repairs, only service parts recommended by the manufacturer may be used.

When installing, servicing, or decommissioning this equipment, procedures must be used to minimize the risk of flammable gas or vapor being present while the work is being performed. The area must be checked with an appropriate refrigerant detector prior to and during work to ensure that the technician is aware of potentially flammable atmospheres. Refrigerant detection equipment must be designed and sold for use with A2L refrigerants.

A2L EQUIPMENT SERVICE PROCEDURE

WARNING: Do not damage the refrigerating circuit.

All maintenance staff and others working in the local area must be instructed on the nature of the work being performed.

Ensure that no ignition sources are present in the area, including other appliances or cigarette smoking. Prior to work taking place, the area around the equipment shall be surveyed to make sure that there are no flammable hazard or ignition risks. "No Smoking" signs shall be displayed. A dry chemical or CO₂ fire extinguisher must be present when any hot work is performed.

Ensure that the area is adequately ventilated before opening the refrigeration system or conducting any hot work. Ventilation must continue for the duration of the work. The ventilation should safely disperse any released refrigerant to the outside atmosphere.

BEFORE STARTING WORK

- Verify that the markings on the equipment are legible.
- Check that refrigerant containing components and tubing are not excessively corroded or installed in a way that they may become corroded.
- Test the function of electrical systems, and repair if defective.
- Discharge capacitors in a safe manner to prevent sparking.

DURING WORK

- No live electrical components and wiring are exposed during charging, recovering, or purging the system.
- Check for continuity of ground bonding.
- Ensure that wires and cables are not subject to wear, corrosion, excess pressure vibration, or sharp edges.
- Do not attempt to repair any sealed electrical component or intrinsically safe component; these must be replaced.

LEAK DETECTION

When a leak in the refrigerant system is suspected, ensure that all open flames are extinguished. Only a chlorine-free leak detection fluid, or an electronic leak detector designed and sold for use with A2L refrigerants may be used.

NEVER USE AN OPEN FLAME TO FIND REFRIGERANT LEAK SOURCES.

If brazing is required to repair a leak, all refrigerant must be recovered from the system or isolated by means of a shutoff valve. The system or the isolated portion of the system must be purged with an inert gas. Ensure that the purging fluid outlet discharges into a well-ventilated area away from any sources of ignition.

SAFETY ISOLATION VALVES FOR FLAMMABLE REFRIGERANT

Walk-in cooler or freezer split systems utilizing A2L flammable refrigerant must be equipped with safety isolation valves to limit the releasable charge in the event of a leak. These safety isolation valves may be either

GENERAL A2L EQUIPMENT SERVICE REQUIREMENTS (CONT'D)

factory installed in the condensing unit or field. Both a liquid line solenoid valve and a suction line check valve are required. Additionally, a discharge line solenoid valve is required for external hot gas bypass or hot gas defrost systems. All safety isolation valves must be installed outside of the walk-in box.

Whether factory installed or field installed, the safety isolation solenoid valves are equipped with a 24VAC coil. This valve must be wired back to the leak mitigation controller in the mitigation controller in the evaporator using 18 AWG class 2 cable or equivalent. See wiring diagram for additional information.

Before proceeding with field installation of refrigerant tubing, verify if the system is equipped with safety isolation valves factory installed in the condensing unit or if they are field installed. Field installed valves must be located outside of the walk-in box.

Field installed safety isolation valves shall be Sporlan SSOV series for liquid and discharge and Sporlan CSOV for suction. Valves must be protected from overheating during installation. Solenoid valves shall be installed to avoid hydraulic shock.

See evaporator installation manual for applying field installed mitigation valves, including systems with multiple evaporators and hot gas systems.

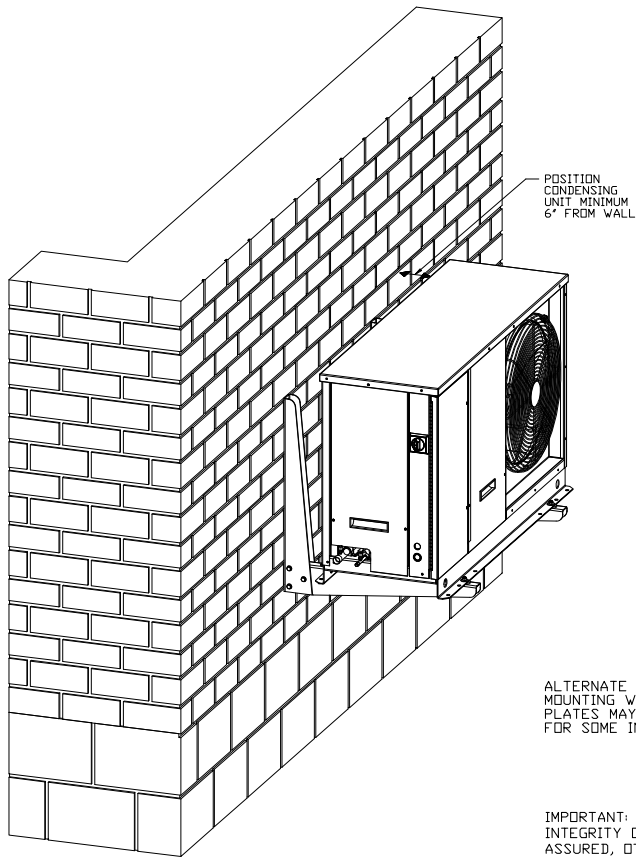
REFRIGERANT LEAK MITIGATION SYSTEM

Evaporators designed for A2L refrigerants are equipped with a leak mitigation system to minimize the hazard of refrigerant leaks. The leak mitigation system includes refrigerant leak sensors and mitigation controller in the evaporator to initiate mitigation actions in the event of a leak. Mitigation actions include activating fans for circulation, deactivating electric defrost heaters and closing safety isolation valves.

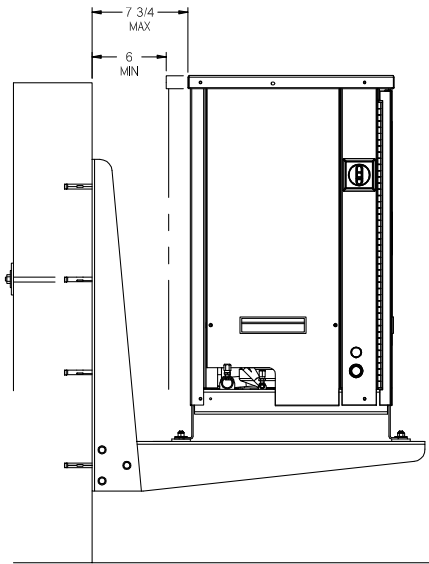
The mitigation system does not require any periodic maintenance. To test the operation of the mitigation system, disconnect one of the refrigerant leak sensors and verify that the safety isolation solenoid valves close, evaporator fans are energized, and defrost heaters are de-energized.

If a replacement refrigerant leak detector or controller is required, only manufacturer-approved components may be used. Replacement sensors must be installed in the same location as the sensors that were removed.

Wall Mount - Instructions



POSITION
CONDENSING
UNIT MINIMUM
6" FROM WALL



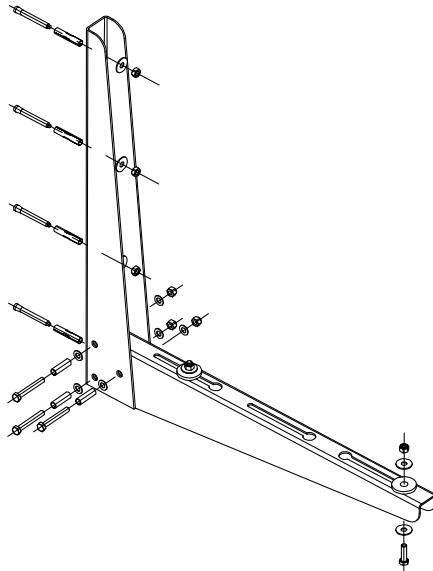
ALTERNATE THROUGH WALL
MOUNTING WITH BACK-UP
PLATES MAY BE REQUIRED
FOR SOME INSTALLATIONS

IMPORTANT: IF STRUCTURAL
INTEGRITY OF WALL CANNOT BE
ASSURED, OTHER INSTALLATION
METHODS MUST BE EMPLOYED

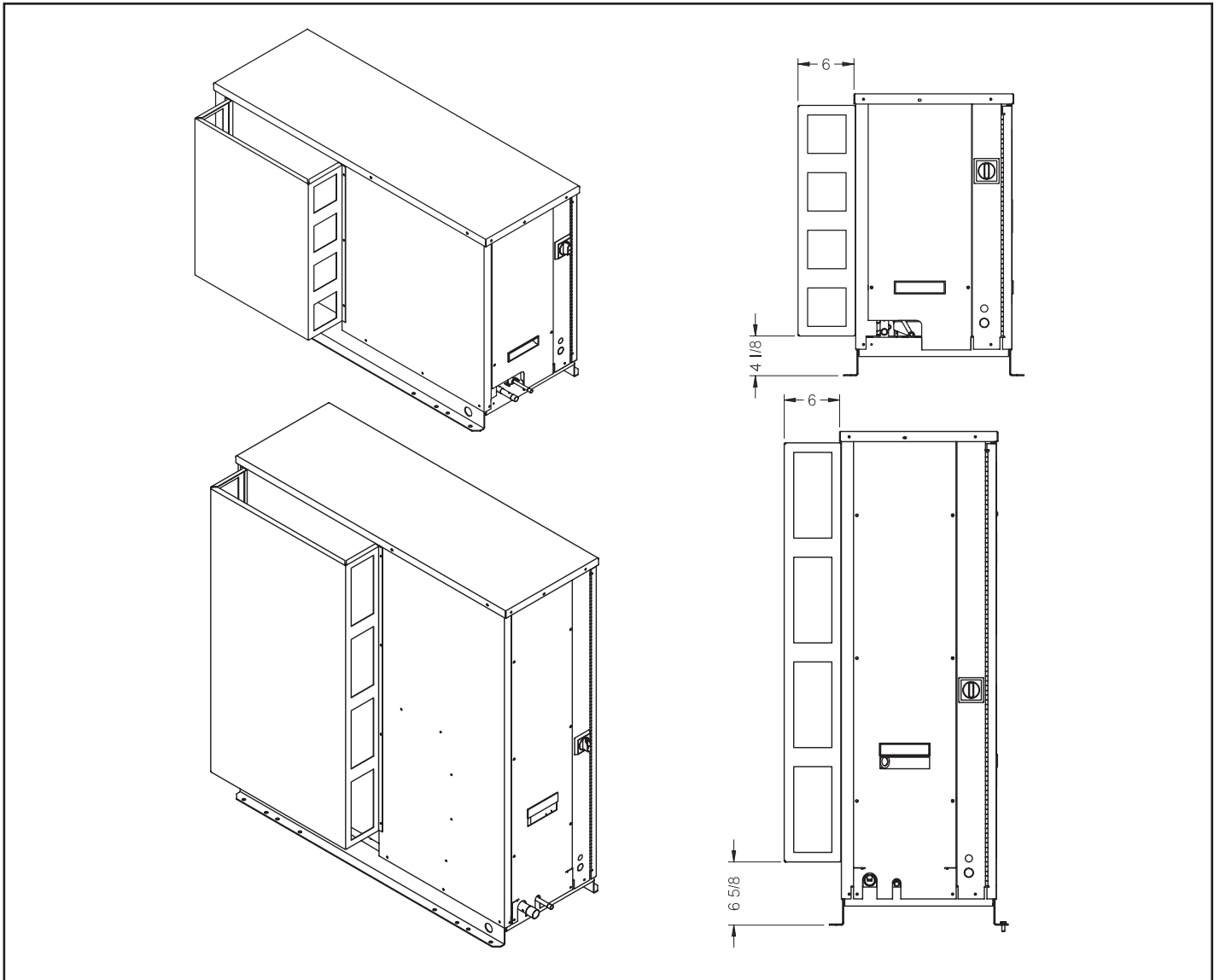
TYPICAL WALL MOUNT BRACKET (x2)

SEE ASSEMBLY INSTRUCTIONS
PROVIDED WITH WALL MOUNT KIT

IT IS THE RESPONSIBILITY OF THE
INSTALLER TO ENSURE THE STRUCTURAL
INTEGRITY OF THE WALL IS SUFFICIENT
TO CARRY THE WEIGHT OF THE
CONDENSING UNIT AND ALL APPLIED
OPTIONAL EQUIPMENT



Wind Guard - Dimensions



PROJECT INFORMATION**KQ - QUIET CONDENSING UNITS**

System	
Model Number	Date of Start-Up
Serial Number	Service Contractor
Refrigerant	Phone
Electrical Supply	E-mail

 <p>PRODUCT SUPPORT</p>	<p>web: www.k-rp.com/kq email: smcu@k-rp.com call: 1-844-893-3222 x521</p>
 <p>TROUBLESHOOTING</p>	<p>email: troubleshooting@k-rp.com call: 1-844-893-3222 x529</p>
 <p>SERVICE PARTS</p>	<p>web: www.k-rp.com/parts email: parts@k-rp.com call: 1-844-893-3222 x504</p>
 <p>WARRANTY</p>	<p>web: www.k-rp.com/warranty email: warranty@k-rp.com call: 1-844-893-3222 x507</p>
 <p>ORDERS</p>	<p>email: orders@k-rp.com call: 1-844-893-3222 x501</p>
 <p>SHIPPING</p>	<p>email: shipping@k-rp.com call: 1-844-893-3222 x503</p>



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