Electrical Notes

NOTES:

1. Minimum Circuit Ampacity (MCA) is based on 125% of the rated load amps for the largest motor plus 100% of the rated load amps for all other loads included in the circuit, per N.E.C. Article 430-24. If the optional Factory Mounted Control Transformer is provided, add the following MCA values to the electrical tables for the system providing power to the transformer: -17, add 2.5 amps; -28, add 2.3 amps; -40, add 1.5 amps, -46, add 1.3 amps; -58, add 1 amps.

2. The minimum recommended disconnect switch is based on 115% of the rated load amps for all loads included in the circuit, per N.E.C. Article 440.

3. Minimum fuse size is based upon 150% of the rated load amps for the largest motor plus 100% of the rated load amps for all other loads included in the circuit to avoid nuisance trips at start-up due to lock rotor amps. It is not recommended in applications where brown outs, frequent starting and stopping of the unit, and/or operation at ambient temperatures in excess of 95°F (35°C) is anticipated.

4. Maximum fuse size is based upon 225% of the rated load amps for the largest motor plus 100% of the rated load amps for all other loads included in the circuit, per N.E.C. Article 440-22.

5. Circuit breakers must be UL listed and CSA certified and maximum size is based on 225% of the rated load amps for the largest motor plus 100% of the rated load amps for all other loads included in the circuit. Otherwise, HACR-type circuit breakers must be used. Maximum HACR circuit breaker rating is based on 225% of the rated load amps for the largest motor plus 100% of the rated load amps for all other loads included in the circuit.

6. The "INCOMING WIRE RANGE" is the minimum and maximum wire size that can be accommodated by the unit wiring lugs. The (2) preceding the wire range indicates the number of termination points available per phase of the wire range specified. Actual wire size and number of wires per phase must be determined based on the National Electrical Code, **using copper connectors only**. Field wiring must also comply with local codes.

7. A ground lug is provided for each compressor system to accommodate a field grounding conductor per N.E.C. Table 250-95. A control circuit grounding lug is also supplied.

8. The supplied disconnect is a "Disconnecting Means" as defined in the N.E.C. 100, and is intended for isolating the unit for the available power supply to perform maintenance and troubleshooting. This disconnect is not intended to be a Load Break Device.

9. Field Wiring by others which complies to the National Electrical Code & Local Codes.

LEGEND

ACR-LINE	ACROSS THE LINE START
C.B.	CIRCUIT BREAKER
D.E.	DUAL ELEMENT FUSE
DISC SW	DISCONNECT SWITCH
FACT MOUNT CB	FACTORY MOUNTED CIRCUIT BREAKER
FLA	FULL LOAD AMPS
HZ	HERTZ
MAX	MAXIMUM
MCA	MINIMUM CIRCUIT AMPACITY
MIN	MINIMUM
MIN NF	MINIMUM NON FUSED
RLA	RATED LOAD AMPS
S.P. WIRE	SINGLE POINT WIRING
UNIT MTD SERV SW	UNIT MOUNTED SERVICE (NON-FUSED DISCONNECT SWITCH)
LRA	LOCKED ROTOR AMPS

VOLTAGE CODE

-50 = 380/415-3-50

Electrical Data

CHILLER MODEL	VOLT	HZ	Single Point Data				Dual Point Data							
							System 1				System 2			
			MINIMUM CIRCUIT AMPS	MIN N/F DISC SW	MIN DUAL ELEM FUSE & MIN CB	MAX DUAL ELEM FUSE & MAX CB	MINIMUM CIRCUIT AMPS	MIN N/F DISC SW	MIN DUAL ELEM FUSE & MIN CB	MAX DUAL ELEM FUSE & MAX CB	MINIMUM CIRCUIT AMPS	MIN N/F DISC SW	MIN DUAL ELEM FUSE & MIN CB	MAX DUAL ELEM FUSE & MAX CB
YLAA0285SE	400	50	218	250	250	250	131	150	150	175	101	150	125	150
YLAA0320SE	400	50	248	400	300	300	131	150	150	175	131	150	150	175
YLAA0360SE	400	50	272	400	300	300	189	250	225	225	90	100	100	110
YLAA0400SE	400	50	306	400	350	350	189	250	225	225	131	150	150	175
YLAA0435SE	400	50	327	400	350	350	189	250	225	225	148	200	175	175
YLAA0485SE	400	50	365	600	400	400	189	250	225	225	189	250	225	225
YLAA0195HE	400	50	136	150	150	150	90	100	100	110	52	60	60	70
YLAA0220HE	400	50	159	200	175	200	101	150	125	150	64	100	80	80
YLAA0260HE	400	50	189	250	225	225	101	150	125	150	101	150	125	150
YLAA0300HE	400	50	222	250	250	250	135	150	150	175	101	150	125	150
YLAA0350HE	400	50	256	400	300	300	135	150	150	175	135	150	150	175
YLAA0390HE	400	50	281	400	300	300	193	250	225	225	101	150	125	150
YLAA0440HE	400	50	314	400	350	350	193	250	225	225	135	150	150	175
YLAA0455HE	400	50	335	400	350	350	193	250	225	225	152	200	175	175
YLAA0515HE	400	50	373	600	400	400	193	250	225	225	193	250	225	225

CHILLER MODEL	VOLT	HZ	Electrical Data																	
			SYSTEM #1						SYSTEM #2						Sys 1			Sys 2		
			COMPR 1		COMPR 2		COMPR 3		COMPR 1		COMPR 2		COMPR 3		COND FANS			COND FANS		
			RLA	LRA	RLA	LRA	RLA	LRA	RLA	LRA	RLA	LRA	RLA	LRA	QTY	FLA	LRA	QTY	FLA	LRA
YLAA0285SE	400	50	54.5	310	54.5	310	N/A	N/A	54.5	310	25.1	198	N/A	N/A	2	4	19	2	4	19
YLAA0320SE	400	50	54.5	310	54.5	310	N/A	N/A	54.5	310	54.5	310	N/A	N/A	2	4	19	2	4	19
YLAA0360SE	400	50	54.5	310	54.5	310	54.5	310	25.1	198	25.1	198	25.1	198	3	4	19	2	4	19
YLAA0400SE	400	50	54.5	310	54.5	310	54.5	310	54.5	310	54.5	310	N/A	N/A	3	4	19	2	4	19
YLAA0435SE	400	50	54.5	310	54.5	310	54.5	310	41.9	272	41.9	272	41.9	272	3	4	19	3	4	19
YLAA0485SE	400	50	54.5	310	54.5	310	54.5	310	54.5	310	54.5	310	54.5	310	3	4	19	3	4	19
YLAA0195HE	400	50	25.1	198	25.1	198	25.1	198	21.8	140	21.8	140	N/A	N/A	2	4	19	2	1.4	3.4
YLAA0220HE	400	50	54.5	310	25.1	198	N/A	N/A	25.1	198	25.1	198	N/A	N/A	2	4	19	2	4	19
YLAA0260HE	400	50	54.5	310	25.1	198	N/A	N/A	54.5	310	25.1	198	N/A	N/A	2	4	19	2	4	19
YLAA0300HE	400	50	54.5	310	54.5	310	N/A	N/A	54.5	310	25.1	198	N/A	N/A	3	4	19	2	4	19
YLAA0350HE	400	50	54.5	310	54.5	310	N/A	N/A	54.5	310	54.5	310	N/A	N/A	3	4	19	3	4	19
YLAA0390HE	400	50	54.5	310	54.5	310	54.5	310	54.5	310	25.1	198	N/A	N/A	4	4	19	2	4	19
YLAA0440HE	400	50	54.5	310	54.5	310	54.5	310	54.5	310	54.5	310	N/A	N/A	4	4	19	3	4	19
YLAA0455HE	400	50	54.5	310	54.5	310	54.5	310	41.9	272	41.9	272	41.9	272	4	4	19	4	4	19
YLAA0515HE	400	50	54.5	310	54.5	310	54.5	310	54.5	310	54.5	310	54.5	310	4	4	19	4	4	19

Refrigerant R-410A	HIGH EFFICIENCY UNITS								
General Unit Data YLAA	**0195**	**0220**	**0260**	**0300**	**0350**	**0390**	**0440**	**0455**	**0515**
Nominal Kw, R-410A	191	213	253	310	346	386	429	451	521
Length (mm)	2949	2949	2949	3690	3690	3690	4807	4807	4807
Width (mm)	2235	2235	2235	2242	2242	2242	2242	2242	2242
Height (mm)	2393	2393	2393	2393	2393	2393	2393	2393	2393
Number of Refrigerant Circuits	2	2	2	2	2	2	2	2	2
Refrigerant Charge, Operating R-410A, ckt1 / ckt2, KG	22 / 13	22/22	26/26	28 / 26	29 / 30	40 / 34	36 / 32	37 / 35	40 / 41
Oil Charge, ckt1 / ckt2, LITERS	12.4 / 6.5	10.4 / 8.3	10.4 / 10.4	12.6 / 10.4	12.6 / 12.6	18.9 / 10.4	18.9 / 12.6	18.9 / 20.4	18.9 / 18.9
Shipping Weight	1921	2042	2134	2416	2598	2859	3171	3281	3488
Operating Weight	2106	2227	2328	2610	2805	3151	3421	3489	3779
Compressors, scroll type									
Compressors per circuit	3 / 2	2 / 2	2 / 2	2 / 2	2 / 2	3 / 2	3 / 2	3 / 3	3 / 3
Compressors per unit	5	4	4	4	4	5	5	6	**6**
Condenser									
Total Face Area M^2	7.5	10.0	10.0	12.6	15.1	15.1	17.6	20.1	20.1
Number of Rows	1	1	1	1	1	1	1	1	1
Condenser Fans, Low Sound									
Number of Fans, ckt1./ckt2.	2 / 2	2 / 2	2 / 2	3 / 2	3 / 3	3 / 3	4 / 3	4 / 4	4 / 4
Fan hp	2 / .5	2	2	2	2	2	2	2	2
Fan RPM	950 / 850	950	950	950	950	950	950	950	950
Total Chiller m^3/sec	19	26	26	32.5	39	39	45.5	52	52
Evaporator									
Water Volume, liters	185	185	194	193	208	293	250	208	293
Maximum Water Side Pressure, bar	10.3	10.3	10.3	10.3	10.3	10.3	10.3	10.3	10.3
Maximum Refrigerant Side Pressure, bar	43	31	31	31	31	31	31	31	31
Water Connections Size, inch	3	6	6	6	8	8	8	8	8