



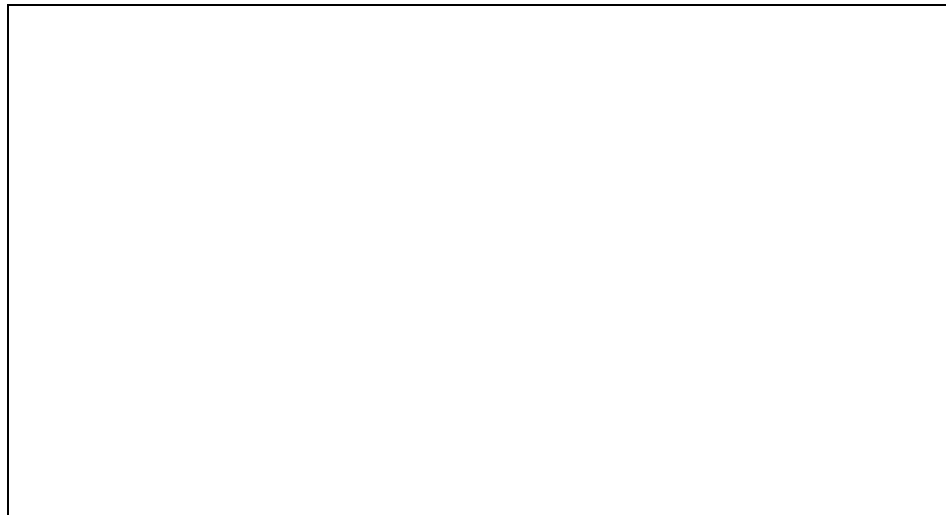
30HXC-8SB

# *ComfortLink*<sup>TM</sup>

**30HXC076-271**

## **WATER-COOLED LIQUID CHILLER**

- PERFORMANCE DATA**
- CERTIFIED DIMENSION PRINTS**
- SOUND ENCLOSURE DIMENSION PRINT**
- FIELD WIRING DIAGRAM**



Date:	Supersedes:	<b>30HXC076-271 WATER-COOLED LIQUID CHILLER</b>	30HXC	Rev: -8SB
JOB NAME:		LOCATION:		
BUYER:	BUYER P.O. #	CARRIER #		
UNIT NUMBER:	MODEL NUMBER:			
PERFORMANCE DATA CERTIFIED BY:			DATE:	
<b>DESCRIPTION</b>				
Packaged water-cooled liquid chillers are factory wired, piped, and charged with HFC-134a.				
<b>FEATURES</b>				
Cooler is mechanically cleanable shell-and-tube type with removable heads. It is tested and stamped in accordance with ASME Code for a refrigerant working side pressure of 235 psig (1620 kPa) and a minimum water side pressure of 300 psig (2068 kPa) (250 psig [1720 kPa] in Canada).	(1620 kPa) and a minimum water side pressure of 300 psig (2068 kPa) (250 psig [1720 kPa]) in Canada).			
Compressor is semi-hermetic twin screw design with refrigerant gas cooled motor and integral oil filter and discharge gas muffler.	Each refrigerant circuit includes oil separator, high side pressure relief device, liquid and discharge line shutoff valve, filter drier, moisture indicating sight glass, expansion valve.			
Complete thermal and electrical protection is provided.	Microprocessor control includes keypad, system status (including temperatures, pressures and % loading) and the alarm conditions.			
Water-cooled condenser is mechanically cleanable shell-and-tube type with removable heads and is tested and stamped in accordance with ASME Code for a refrigerant working side pressure of 235 psig	Automatic circuit lead/lag.			
	Capacity control based on leaving chilled water temperature with return water temperature sensing.			
	7-day time scheduling of pump(s) and chiller.			
<b>PERFORMANCE DATA</b>				
<b><u>UNIT:</u></b>	<b><u>CONDENSER:</u></b>			
Capacity _____	Condenser Fluid _____			
Compressor Input Power _____ kW	Entering Fluid Temperature _____			
Unit Input Power _____ kW	Leaving Fluid Temperature _____			
Minimum Capacity % _____ %	Flow Rate _____			
EER _____	Pressure Drop _____			
Weight _____	Fouling Factor _____			
	Total Heat Rejected _____			
<b><u>COOLER:</u></b>				
Cooler Fluid _____				
Entering Fluid Temperature _____				
Leaving Fluid Temperature _____				
Flow Rate _____				
Pressure Drop _____				
Fouling Factor _____				
<b>ELECTRICAL DATA</b>				
Power Supply to Unit _____ Volts _____ Ph _____ Hz	Maximum Fuse Amps _____ Amps			
Power Supply to Control Circuit _____ Volts _____ Ph _____ Hz	Control Circuit Fuse Amps _____ Amps			
Minimum Amps _____ Amps	Maximum Instantaneous Current Flow _____ Amps			
<b>FACTORY-INSTALLED OPTIONS</b>			<b>FIELD-INSTALLED ACCESSORIES</b>	
<input type="checkbox"/> _____			<input type="checkbox"/> _____	
<input type="checkbox"/> _____			<input type="checkbox"/> _____	
<input type="checkbox"/> _____			<input type="checkbox"/> _____	
<input type="checkbox"/> _____			<input type="checkbox"/> _____	



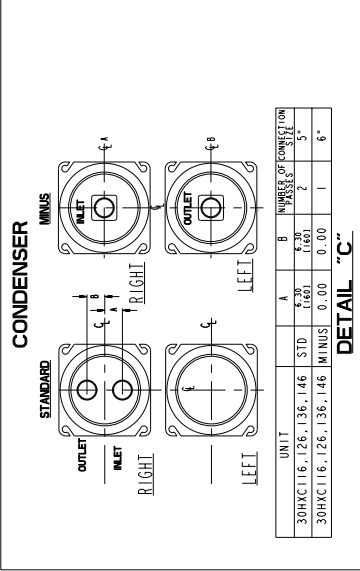
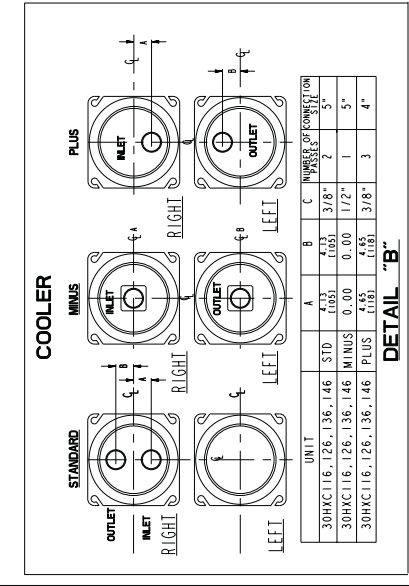
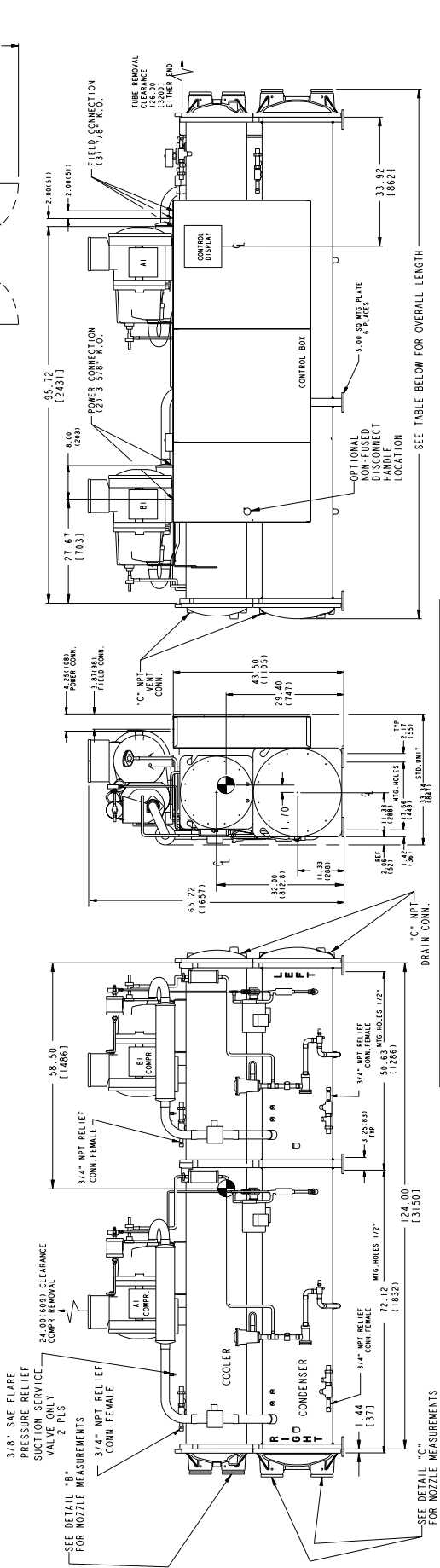
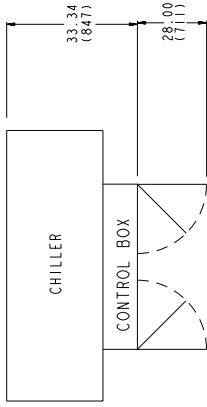
# CERTIFIED DIMENSION PRINT

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 13221  
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UNIT	1	2	3	4	5	6
30HXC116	6415 (2811)	1114 (505)	777 (352)	1053 (478)	1615 (735)	1127 (511)
30HXC126	6495 (2931)	1386 (624)	1071 (484)	1061 (481)	1628 (739)	1131 (513)
30HXC136	6588 (3004)	1526 (694)	1176 (535)	1083 (491)	1680 (766)	1171 (531)
30HXC146	6718 (3048)	1621 (741)	1182 (538)	1085 (492)	1697 (770)	1172 (532)

- NOTES
- OPERATING WEIGHT INCLUDES WEIGHT OF WATER AND REFRIGERANT.
  - ⊙ DENOTES CENTER OF GRAVITY.
  - DIMENSIONS IN ( ) ARE IN MILLIMETERS AND WEIGHT ( ) ARE IN KILOGRAMS.
  - 36" (91.4) RECOMMENDED SERVICE CLEARANCE AROUND MACHINE.
  - VICTAULIC NOZZLES ARE STANDARD ON ALL MODELS.
  - FLOW SWITCH FACTORY INSTALLED IN COOLER OUTLET VICTAULIC NOZZLE.

## DOOR SWING CLEARANCE



### OVERALL LENGTH TABLE

COOLER	CONDENSER	OVERALL LENGTH
STANDARD	CONDENSER	134.99 [3429]
COOLER	CONDENSER	134.99 [3429]
PLUS ONE	CONDENSER	137.39 [3438]
MINUS ONE	CONDENSER	134.99 [3429]
STANDARD	CONDENSER	144.00 [3658]
PLUS ONE	CONDENSER	141.05 [3583]
MINUS ONE	CONDENSER	144.00 [3658]

DATE: 09/19/02  
 SUPERSEDES: 06/14/00  
 HERMETIC SCREW LIQUID CHILLING PACKAGE WITH COMFORT LINK™ CONTROLS-30HXC116, 126, 136, 146  
 30HX502311  
 REV 2.0



# CERTIFIED DIMENSION PRINT

UNIT	OPERATING WEIGHT	A	1	WGT. DISTRIBUTION AT EACH MTG. PLATE	2	3	4	5	6
30HXC206	10591 (4799)	33.88 (1607)	948 (430)	2406 (1091)	1243 (564)	1201 (545)	3133 (1427)	1650 (748)	
30HXC246	10969 (4916)	34.38 (1613)	985 (447)	2515 (1141)	1306 (592)	1154 (523)	3276 (1486)	1733 (786)	
30HXC261	10992 (4909)	34.38 (1613)	985 (447)	2520 (1141)	1311 (593)	1154 (523)	3283 (1489)	1739 (789)	
30HXC271	13033 (5903)	48.33 (2283)	1447 (657)	3522 (1598)	1747 (792)	1598 (723)	4284 (1944)	2284 (1034)	

P.O. BOX 488  
UNITED TECHNOLOGIES STRACORE, NY  
CARRIER 13221

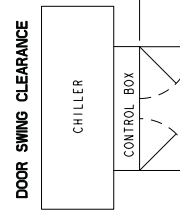
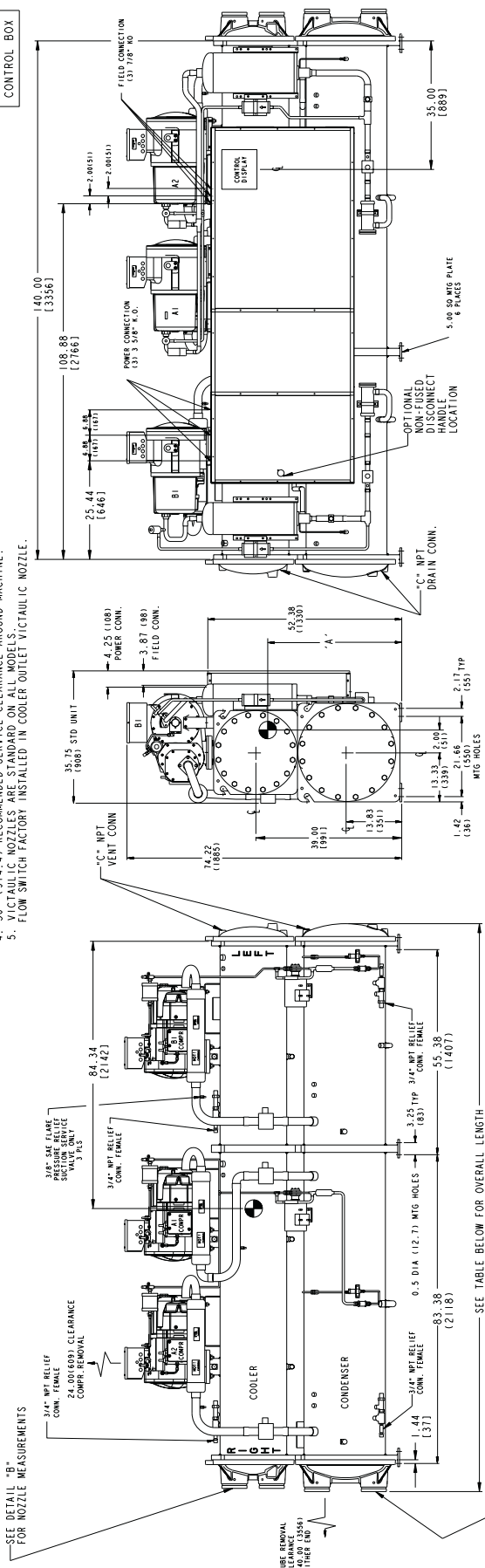
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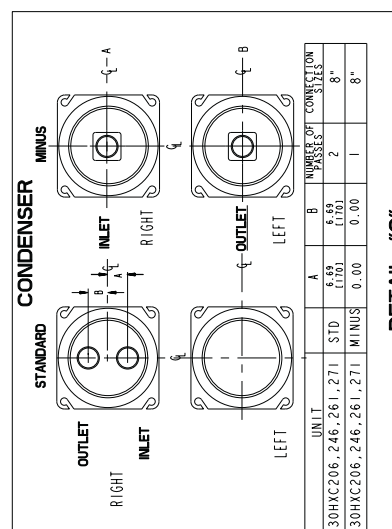
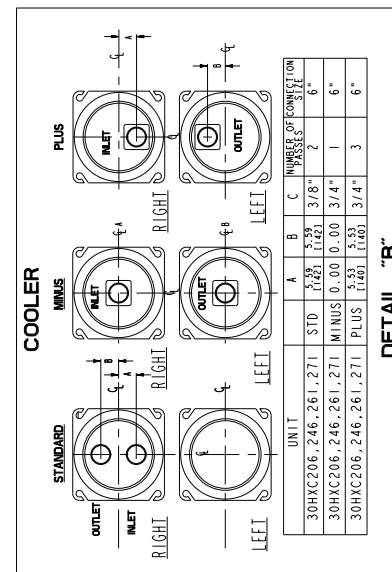


- NOTES
- OPERATING WEIGHT INCLUDES WEIGHT OF WATER AND REFRIGERANT.
  - ⊙ DENOTES CENTER OF GRAVITY.
  - DIMENSIONS IN ( ) ARE IN MILLIMETERS AND WEIGHT ( ) ARE IN KILOGRAMS.
  - 36" (912.4) RECOMMENDED SERVICE CLEARANCE AROUND MACHINE.
  - FLUIDIC NOZZLES ARE STANDARD ON ALL MODELS. FLOW SWITCH FACTORY INSTALLED IN COOLER OUTLET VICTAULIC NOZZLE.



OVERALL LENGTH TABLE

COOLER	CONDENSER	OVERALL LENGTH
STANDARD COOLER	STANDARD CONDENSER	152.54 (3875)
STANDARD COOLER	MINUS ONE PASS CONDENSER	160.00 (4064)
PLUS ONE PASS COOLER	PLUS ONE PASS CONDENSER	160.00 (4064)
MINUS ONE PASS COOLER	MINUS ONE PASS CONDENSER	160.00 (4064)
MINUS ONE PASS COOLER	STANDARD CONDENSER	160.00 (4064)
MINUS ONE PASS COOLER	MINUS ONE PASS CONDENSER	160.00 (4064)



DATE	SUPERSEDES	REV
09/25/02	10/18/00	2.0

HERMETIC SCREW LIQUID CHILLING PACKAGE WITH COMFORT LINK™ CONTROLS-30HXC 206,246,261,271

CUT ALONG DOTTED LINE

CUT ALONG DOTTED LINE

# SOUND ENCLOSURE DIMENSION PRINT

**NOTES:**

1. DIMENSIONS IN ( ) ARE IN MILLIMETERS.
2. 36" (914.4) RECOMMENDED SERVICE CLEARANCE AROUND MACHINE.
3. UNUSED PORTION OF PIPING OPENINGS TO BE CLOSED AND INSULATED FOR ACOUSTIC PURPOSES. USE FILLER PANEL IN ACCESSORY PACKAGE.
4. FIELD FABRICATED HOLES MUST BE CLOSED AND INSULATED FOR ACOUSTIC PURPOSES.
5. RECOMMENDED ELECTRICAL POWER SUPPLY AREA. NOTCH TO SUIT AND COVER/INSULATE REMAINING OPEN AREA FOR ACOUSTIC PURPOSES.
6. RECOMMENDED CONTROL WIRING ENTRY AREA. NOTCH TO SUIT AND COVER/INSULATE REMAINING OPEN AREA FOR ACOUSTIC PURPOSES.
7. RECOMMENDED COOLER RELIEF VALVE VENT LINE AND 30HK CONDENSER RELIEF VALVE ENTRY AREA, 30HKA DISCHARGE AND LIQUID LINE ENTRY AREA ON OPPOSITE SIDE. NOTCH ENCLOSURE TO SUIT PARTICULAR INSTALLATION.
8. MODEL IN DRAWING IS TYPICAL AND REPRESENTS 30HX116-146 SIZES IN THE 30HX-900--001 ACCESSORY.
9. SOUND ENCLOSURE ACCESSORY SHOULD BE ALIGNED TO THE CENTER LINES OF THE CONTROL PANEL ACCESS AND PIPING OPENINGS.

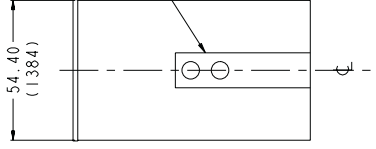
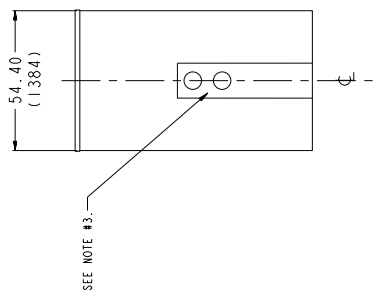
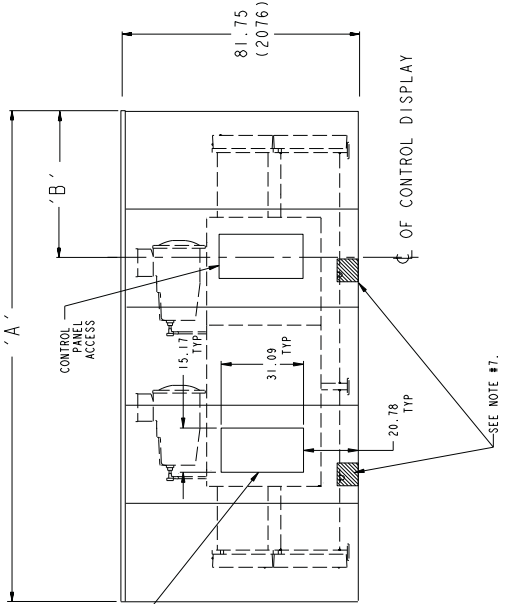
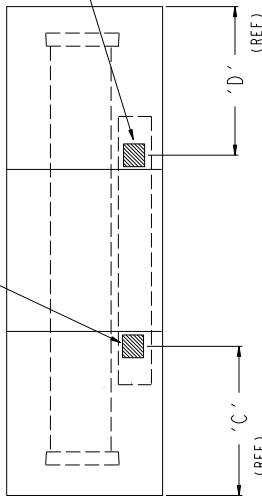
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UNIT	A'	B'	C'	D'
30HX076, 086, 096, 106	170.00 [3048]	36.00 [915]	21.16 [538]	17.84 [453]
30HX116, 126, 136, 146, 161, 171, 186	168.00 [4267]	60.00 [1525]	36.67 [931]	29.84 [758]
30HX206, 246, 261, 271	168.00 [4267]	60.00 [1525]	37.32 [948]	32.68 [830]

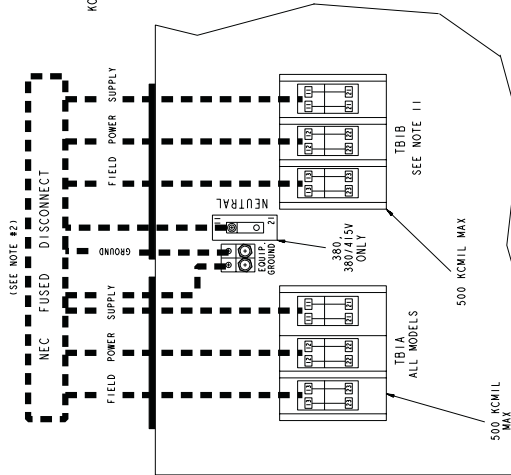


DATE	06/27/00	SUPERSEDES	01/27/00	30HX502354	REV	A
SOUND ENCLOSURE HERMETIC SCREW LIQUID CHILLING PACKAGE WITH COMFORT LINK™ CONTROLS						

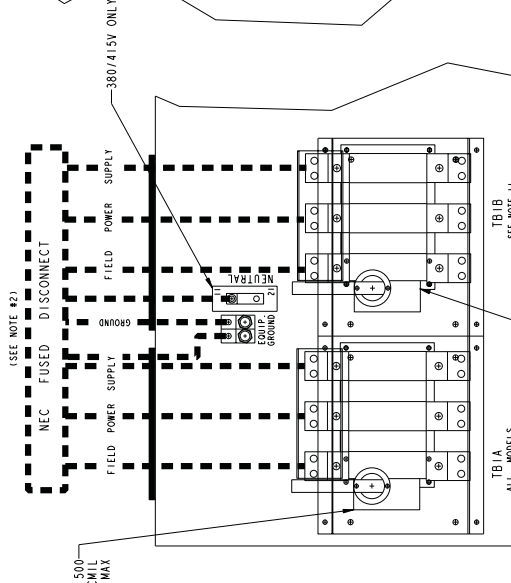
# FIELD WIRING DIAGRAM

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 CARRIER 15221  
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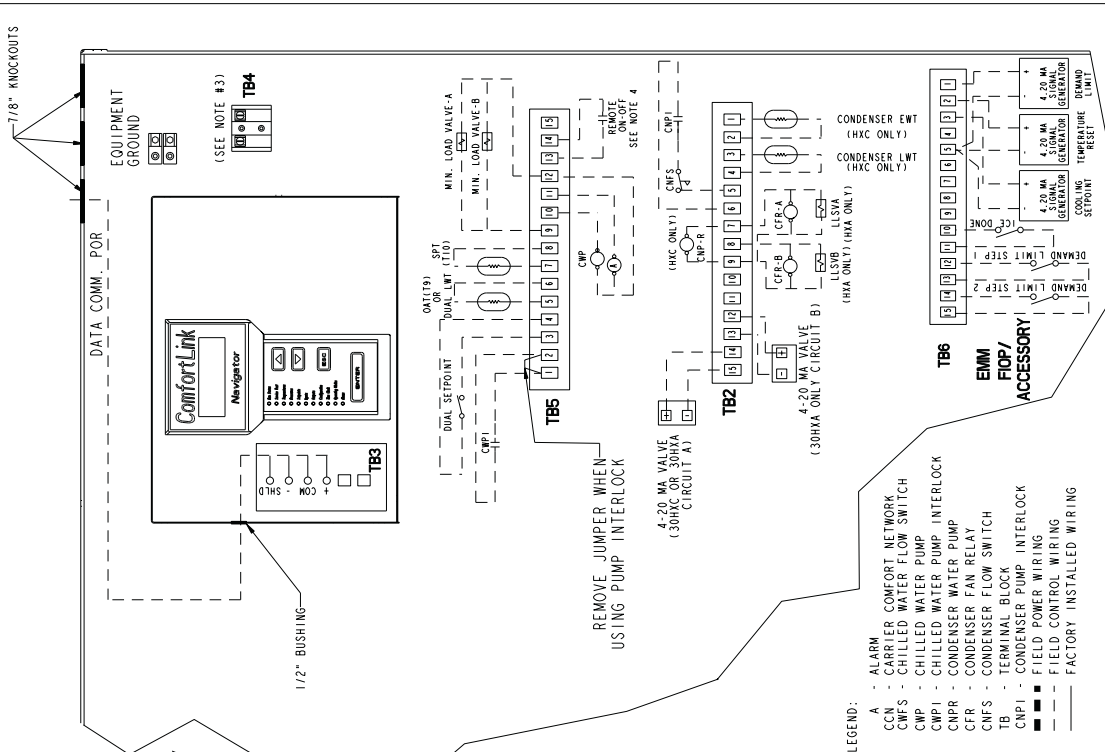
## STANDARD POWER



## NON-FUSED DISCONNECT OPTION



- FACTORY WIRING IS IN ACCORDANCE WITH NATIONAL ELECTRICAL CODE (NEC). FIELD MODIFICATIONS OR ADDITIONS MUST BE IN COMPLIANCE WITH ALL APPLICABLE CODES.
- WIRING FOR MAIN FIELD SUPPLY MUST BE RATED 75°C MINIMUM. USE COPPER FOR ALL UNITS.
- A FIELD SUPPLIED DISCONNECT WITH 15 AMP MAXIMUM PROTECTION FOR 115 VOLT CONTROL CIRCUITS AND 15 AMP MAXIMUM PROTECTION FOR 230 VOLT CONTROL CIRCUIT. CONNECT CONTROL CIRCUIT POWER TO TERMINALS 1 AND 2 OF TB4. CONTROL CIRCUIT CONDUCTORS FOR ALL UNITS MUST BE COPPER ONLY. CONTROL CIRCUIT POWER IS FACTORY WIRING FOR 380/415V UNITS.
- TERMINALS 13 AND 14 OF TB5 ARE FOR FIELD EXTERNAL CONNECTION FOR REMOTE ON-OFF. THE CONTACTS MUST BE RATED FOR DRY CIRCUIT APPLICATION CAPABLE OF HANDLING A 24V AC LOAD UP TO 50 MA.
- IF ADDED, CHILLED WATER PUMP INTERLOCK (CWP1) FUNCTIONS. SERIES WITH FLOW SWITCH CONTACTS. THE CONTACTS MUST BE RATED FOR DRY CIRCUIT APPLICATION CAPABLE OF HANDLING A 24V AC TO 50 MA LOAD. CHILLED WATER FLOW SWITCH (CWFS) IS FACTORY INSTALLED.
- TERMINALS 10 & 12 OF TB5 ARE FOR CONTROL OF CHILLED WATER PUMP STARTER. THE MAXIMUM LOAD ALLOWED FOR THE CHILLED WATER PUMP RELAY IS 75 VA SEALED, 360 VA INRUSH AT 115 OR 230 VOLT. FIELD POWER SUPPLY IS NOT REQUIRED.
- TERMINALS 11 & 12 OF TB5 ARE FOR ALARM RELAY. THE MAXIMUM LOAD ALLOWED FOR THE ALARM RELAY IS 75 VA SEALED, 360 VA INRUSH AT 115 OR 230 VOLT. FIELD POWER SUPPLY IS NOT REQUIRED.
- TERMINAL 7 & 9 OF TB2 ARE FOR CONDENSER WATER PUMP (HCX ONLY) OR CIRCUIT A CONDENSER FAN CONTACTOR (HXA ONLY). TERMINALS 8 & 9 OF TB2 ARE FOR CIRCUIT B CONDENSER FAN CONTACTOR (HXA ONLY). THE MAXIMUM LOAD ALLOWED IS 75 VA SEALED, 360 VA INRUSH AT 115 OR 230 VOLT. SEPARATE FIELD POWER SUPPLY IS NOT REQUIRED. LIQUID LINE SOLENOID VALVES (HXA ONLY) MUST BE CONNECTED IN PARALLEL WITH CONDENSER FAN CONTACTORS AS SHOWN.
- TERMINALS 5 & 6 OF TB2 ARE FOR CONDENSER FLOW SWITCH (CNFS) AND/OR CONDENSER PUMP INTERLOCK (CNPI). THE CONTACTS MUST BE RATED FOR DRY CIRCUIT APPLICATION CAPABLE OF HANDLING A 24V AC LOAD UP TO 50 MA.
- MAKE APPROPRIATE CONNECTIONS TO TB6 AS SHOWN FOR ENERGY MANAGEMENT BOARD OPTIONS. THE CONTACTS FOR DEMAND LIMIT AND ICE DONE OPTIONS MUST BE RATED FOR DRY CIRCUIT APPLICATION CAPABLE OF HANDLING A 24V AC LOAD UP TO 50 MA.
- TBI B SUPPLIED ON 30HXA186-208/230 Y-DELTA, 30HXA206-271 Y-DELTA AND BY SPECIAL ORDER.



DATE	01/23/03	DATE	06/28/00
SUPERSEDES		SUPERSEDES	
REV	B	REV	B
30HX076-271 HERMETIC SCREW CHILLER WITH COMFORTLINK™ CONTROLS - FIELD WIRING DIAGRAM		30HX502308	