



AIR-COOLED SCROLL CHILLER

Form QTC3-NM1 (515)

035-24487-000

QTC3055T - QTC3160T WITH BRAZED PLATE HEAT EXCHANGER STYLE B (60 HZ) 4-10 FAN 55 - 160 TON



LD18971a

R-410A



Issue Date:
May 20, 2015



Design Conditions Datasheet

Unit Tag	Qty	Model No	Net Cooling Capacity (TR)	Nominal Voltage	Refrigerant Type
CH-7	1	QTC3110TSE46XFBSXXX	118.1	460-3-60	R410A

PIN:								
QTC3110TSE	46XFBSXXXH	XXBLXCXX44	XEXXXHXHXX	YAXXXXXXXXX	AXXXXXXXXXXX			
....5...105...205...305...405...505...605...705...805...90


Evaporator Data		Evaporator Data (Cont.)		Performance Data	
EWT (°F)	54	Fluid Volume (USGAL)	13.2	EER (EER)	9.8
LWT (°F)	44	Min. Flow Rate (USGPM)	150	IPLV (EER)	15
Design Flow Rate (USGPM)	283.4	Max. Flow Rate (USGPM)	625		
Evap. Press. Drop (ft H2O)	8.3	Condenser Data		Physical Data	
Strainer Press. Drop (ft H2O)	7.7	Ambient Temp. Design (°F)	95	Rigging Wt. (lb)	4993
Ext. Kit Press. Drop (ft H2O)	0	Altitude (ft)	0	Operating Wt. (lb)	5104
Total Press. Drop (ft H2O)	15.9	User Min. Operating Air Temp. (°F)	41	Refrigerant Charge (lb)	127
Fluid	Water	User Max. Operating Air Temp. (°F)	100		
Fouling Factor (h.ft ² .F/Btu)	0.0001	Compressor Type	Scroll - Hermetic		

Electrical Data				
Circuit	1	2	3	4
Compressor RLA	53 / 53	53 / 53		
Fan QTY/FLA (each)	3 / 4	3 / 4		
High LRA Current	290 / 290	290 / 290		

Single Point				
Min. Circuit Ampacity	250			
Recommended Fuse/CB Rating	300			
Max. Inverse Time CB Rating	300			
Max. Dual Element Fuse Size (A)	300			
Unit Short Circuit Withstand (STD)	5 [kA]			
Wire Lugs Per Phase	1		Operating Condition Electrical Data	
Wire Range (Lug Size)	#6 - 500 kcmil		Compressor kW	134.6
Starter Type	Across The Line		Total Fan kW	10.1
			Total kW	144.6

Notes:

Certified in accordance with the AHRI Air-Cooled Water-Chilling Packages Using Vapor Compression Cycle Certification Program, which is based on AHRI Standard 550/590 (I-P) and AHRI Standard 551/591 (SI). Certified units may be found in the AHRI Directory at www.ahridirectory.org. Auxiliary components included in total KW - Oil heaters, Chiller controls. Auxiliary power is already included in the compressor and fan power





Design Conditions Datasheet

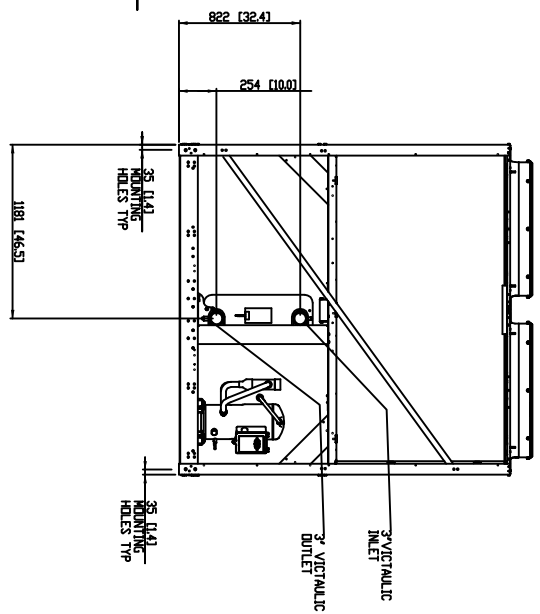
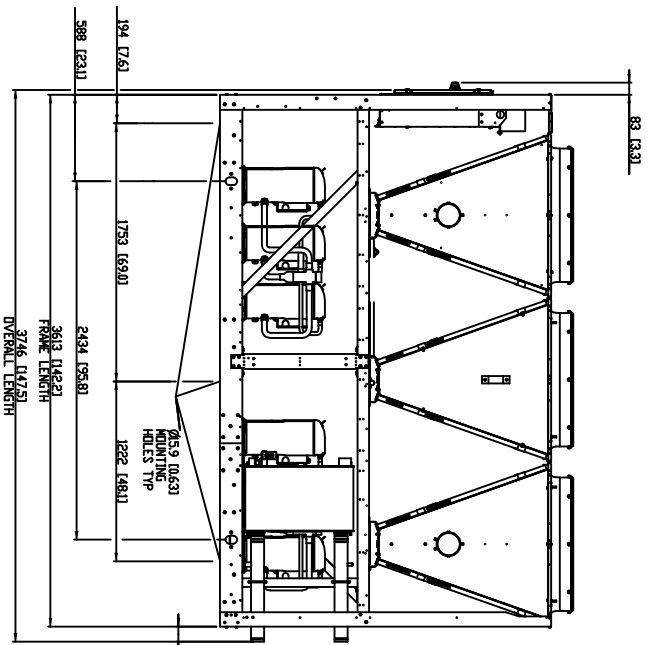
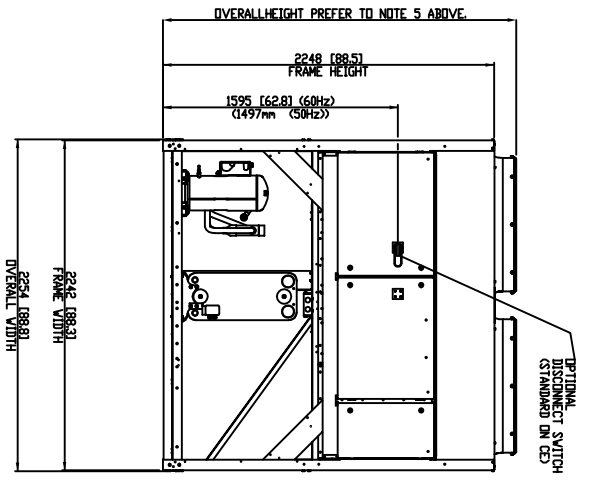
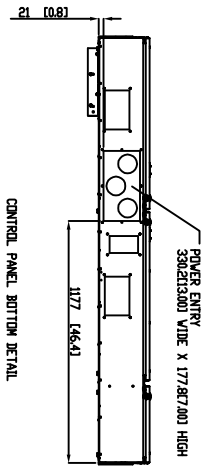
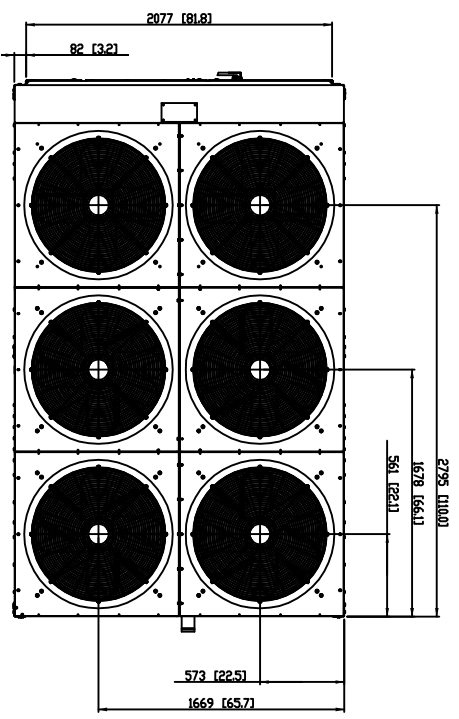
Part Load Rating Data				
Stage	Ambient (°F)	Capacity (TR)	Total kW	Unit Efficiency
1	95	118.1	144.6	9.8
2	84.1	96.6	94.2	12.3
3	71	70.9	53.2	16
4	55	33	23.7	16.7

Sound Power Levels										
Stage	Ambient (°F)	63	125	250	500	1K	2K	4K	8K	LWA
1	95	98	97	93	93	90	86	83	79	95
2	84.1	98	97	93	93	89	86	83	79	95
3	71	98	97	93	93	89	85	82	79	95
4	55	90	89	85	85	82	79	75	72	87

Note: Unit is equipped with Low Sound Fans.

Performance at AHRI Conditions					
Evaporator Data		Condenser Data		Performance Data	
EWT (°F)	54	Ambient Temp. (°F)	95	EER (EER)	9.8
LWT (°F)	44	Altitude (ft)	0	IPLV (EER)	15
Flow Rate (USGPM)	283.4			Net Cooling Capacity (TR)	118.1
Pressure Drop (ft H2O)	8.3				
Fluid	Water				
Fouling Factor (h.ft ² .F/Btu)	0.0001				
Fluid Volume (USGAL)	13.2				

- NOTES:
1. PLACE UNIT ON A LEVEL SURFACE FREE OF OBSTRUCTIONS (INCLUDING SNOW, FOR INTERIOR PLACEMENT) OR AN AIR-REGULATION SURFACE RATED PERFORMANCE. MINIMUM CLEARANCE FROM WALLS AND CEILING SHALL BE AS SHOWN. COMPROMISE MINIMUM CLEARANCES INDICATED BELOW, RESULTING IN UNPREDICTABLE AIR FLOW PATTERNS AND POSSIBLE DIMINISHED PERFORMANCE. UNIT CONTROLS WILL OPTIMIZE OPERATION WITHOUT MINIMUM CLEARANCES. MINIMUM CLEARANCES SHALL BE AS SHOWN.
 2. INSTALLING CONTRACTOR MUST INCLUDE VENT AND DRAIN ACCOMMODATIONS IN 4" MINIMUM CLEARANCE FROM BRAVING.
 3. NUMBER OF COMPRESSORS MAY VARY FROM BRAVING.
 4. REFER TO PRODUCT LITERATURE.
 5. OVERALL HEIGHT OF UNIT IS 2394.6mm (94.27') ON MONTERREY, MEXICO BUILD.
 6. ALL UNITS IN MM (INCHES)



THIS BRAVING PERTAINS TO THE FOLLOWING MODELS:

QTC3090T
QTC3100T
QTC3101T

REVISION	DATE	EC NUMBER	DRAWN BY	CHECKED BY	ENGINEERED BY

DESIGNED BY	REVISION	DATE	EC NUMBER	DRAWN BY	CHECKED BY	ENGINEERED BY

QUANTECH

0153 6-FM 64HZ

035-24512-004

66-8C-2812

66-8C-2813

66-8C-2814

66-8C-2815

66-8C-2816

66-8C-2817

66-8C-2818

66-8C-2819

66-8C-2820

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