



# 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-9	1	QTC3125TSE46XFBSXXX	126.1	460-3-60	R410A

PIN:								
QTC3125TSE	46XFBSXXXH	XXBLXCXX44	XEXXXHXHXX	YAXXXXXXXXX	AXXXXXXXXXXX			
....5...10	....5...20	....5...30	....5...40	....5...50	....5...60	....5...70	....5...80	....5...90

Evaporator Data		Evaporator Data (Cont.)		Performance Data	
EWT (°F)	54	Fluid Volume (USGAL)	10	EER (EER)	9.6
LWT (°F)	44	Min. Flow Rate (USGPM)	120	IPLV (EER)	15.7
Design Flow Rate (USGPM)	302.5	Max. Flow Rate (USGPM)	625		
Evap. Press. Drop (ft H2O)	12.6	Condenser Data		Physical Data	
Strainer Press. Drop (ft H2O)	2.3	Ambient Temp. Design (°F)	95	Rigging Wt. (lb)	6103
Ext. Kit Press. Drop (ft H2O)	5.5	Altitude (ft)	0	Operating Wt. (lb)	6187
Total Press. Drop (ft H2O)	20.4	User Min. Operating Air Temp. (°F)	41	Refrigerant Charge (lb)	146
Fluid	Water	User Max. Operating Air Temp. (°F)	100		
Fouling Factor (h.ft <sup>2</sup> .F/Btu)	0.0001	Compressor Type	Scroll - Hermetic		

Electrical Data				
Circuit	1	2	3	4
Compressor RLA	53 / 53 / 53	27 / 27 / 27		
Fan QTY/FLA (each)	4 / 4	4 / 4		
High LRA Current	290 / 290 / 290	180 / 180 / 180		

Single Point				
Min. Circuit Ampacity	285			
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)	#4 - 500 kcmil		Compressor kW	144
Starter Type	Across The Line		Total Fan kW	13.4
			Total kW	157.5

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](http://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	126.1	157.5	9.6
2	86.4	108	106.2	12.2
3	80.5	95.6	86.2	13.3
4	67	67.3	48.6	16.6
5	59.8	52.1	34.8	18
6	55	34.9	21.9	19.1

Sound Power Levels										
Stage	Ambient (°F)	63	125	250	500	1K	2K	4K	8K	LWA
1	95	99	98	94	94	90	87	84	80	96
2	86.4	99	98	94	94	90	87	83	80	96
3	80.5	98	97	93	93	90	86	83	80	95
4	67	96	95	91	91	87	84	80	77	93
5	59.8	96	95	91	91	87	84	80	77	93
6	55	49	38	56	69	76	74	70	65	79

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)	9.6
LWT (°F)	44	Altitude (ft)	0	IPLV (EER)	15.7
Flow Rate (USGPM)	302.5			Net Cooling Capacity (TR)	126.1
Pressure Drop (ft H2O)	12.6				
Fluid	Water				
Fouling Factor (h.ft <sup>2</sup> .F/Btu)	0.0001				
Fluid Volume (USGAL)	10				

