



THE CIRCUITS

APPROVED 2006-05-04


REVISED *
 RIFLED TUBE.
 CORRUGATED FIN.
 END PLATES 2.0 mm ALLUM.
 TOTAL WEIGHT=13.7 Kg

Description:		15/3x38x890/13-10>5(4)	
Cat. No.		815 FN312R.T.COR.	
design	date	proj	SCALE
draw	09-11-05	IGOR	
check			
app.		DrAN	FN312
			LEV D
Customer Model No.		FRIGADON 21 KW	
D 26.04.06	LEONID		
C 30.11.05	NATALI		
B 13/11/05	IGOR		
NO.	DATE	BY	REVISIONS
TOLERANCE UNLESS SPECIFIED			
LINEAR DIMENSIONS	ANGULAR	FINS DENSITY	DENSITY
UP TO 400 mm - ±2	OVER 400 - ISO 2768-C	±4°	±4%



Condensers: Air Cooled- Metric units

Project Name:
Customer: FRIGADON

Customer Reference:
Lordan Reference:

Coil Model: 15 / 3 x 38 x 890 / 13 - 10

Results

Total Heat Rejected (QTR):	20.125 KW
Tubes with 100% Vapor (TV):	21
Tubes with 100% Liquid (TL):	3
Refrigerant Flow Rate (LB/HR):	375.6 kg/min
Face Area:	0.645 m ²
Resistance to Air-Flow (WG):	62 Pascal
Air Out Temp. Dry Bulb (DBL):	35.50 °C
Header Pressure Drop (HDR/DP):	6.9 kPa
Refrigerant Pressure Drop (COIL/DP):	33.8 kPa
Airflow Velocity:	3.0 m/s

Input

Coil Construction		Number of Ridges (NR)	60
Coil Pattern No. (N)	Corrugated	Lead Helix Angle (B)	18 Degrees
Number of Coils (QTY)	1	Operating Conditions	
No. of Rows Deep (ROWS)	3	Air In Dry Bulb Temp.(TAE)	27 °C
Fin height(FH)	725 mm	Air In Wet Bulb Temp.(TWB)	15 °C
Finned Length (FL)	890 mm	Air Flow (CFM)	7000 m ³ /h
No.of Circuits (CKT1)	10	Standard Air (SA)	Standard
No.of Circuits secondary Circuits (CKT2)	10	Refrigerant (FNO)	R-404A
No.of Tubes in praimary circuits (NT1)	110	Vapor Temp. To The Cond. (VT)	107 °C
No.of Tubes in second Circuits (NT2)	0	Condensing Temp. (CT)	40 °C
Fin Distance (FPI)	13 FPI	Sub Colling Temp. (ISUB)	3 °K
Fin Material (MTL)	Aluminum	Advanced	
Fin Thickness (FIN)	0.12 mm	Fin Coating Factor (FC)	Bare Fins
Header Fabricating Technique (HDR)	Extruded	Fin Coating Thickness (FCT)	0 mm
Vapor Header Diameter (HDR)	16 mm	Wet Coil Selection (DC)	Dry Coil
Connection OD (CON)	16 mm	KW from evaporated condensate (QL)	N/A
Tube Treatment (T)	Standard Rifled	Heat Pipe (HTP)	Without Heat Pipe
Tube Wall thickness (T)	0.254 mm		
Groove Depth (GD)	0.1524 mm		
Ridge Apex Angle (A)	44 Degrees		