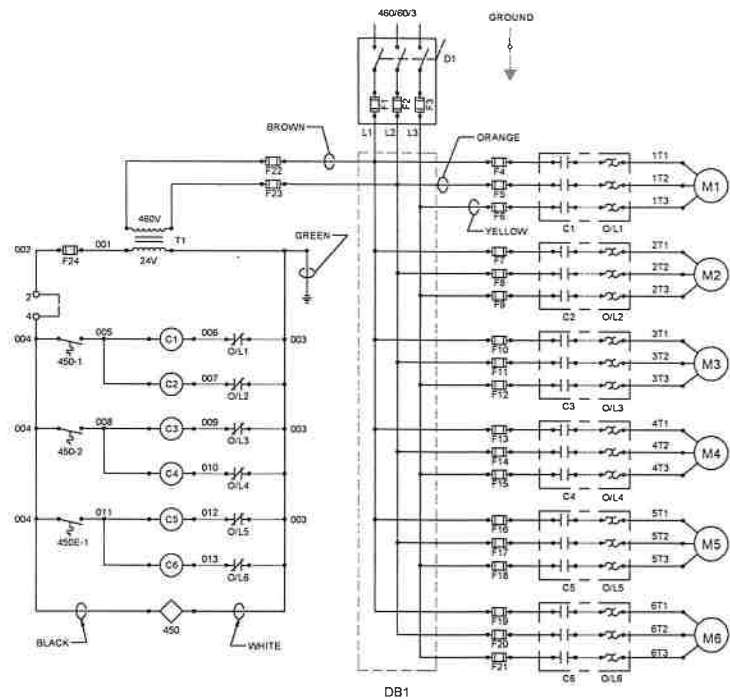


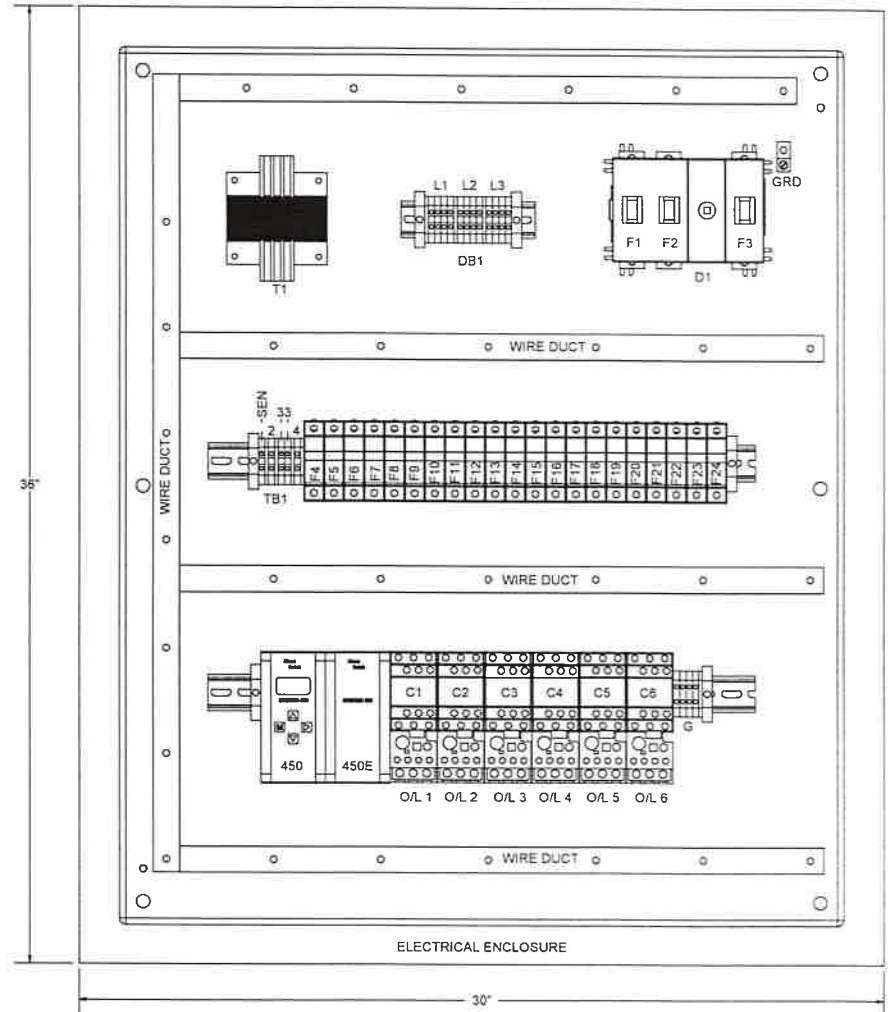


NOTES:

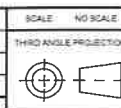
1. TOTAL AMPACITY OF PANEL IS 18.2 AMPS.
2. INCOMING LINE CONDUCTORS WILL BE COPPER WIRE WITH 75° C INSULATION.
3. TORQUE CONTROL TERMINALS ON TB1 AND DB1 TO 4.4 - 7.1 IN-LB.
4. TERMINALS 2 & 4 ON TB1 ARE PROVIDED FOR A RUN PERMISSIVE SUPPLIED BY OTHERS. IF NO RUN PERMISSIVE IS REQUIRED, JUMPER ACROSS 2 & 4.
5. CONTROL POWER CIRCUIT TAPS ARE TO BE #14 AWG WIRE. MOTOR BRANCH CIRCUIT TAPS ARE TO BE #12 AWG WIRE. FEEDER CIRCUIT CONDUCTORS BETWEEN D1 AND DB1 ARE TO BE #12 AWG WIRE.

LEGEND:

- M1 THRU M6 - MOTOR, 1 1/2HP, 460/60/3 (3.0 FLA EA PER TABLE 50.1 OF UL 508a PROCEDURE)
WITHOUT INTERNAL THERMAL OVERLOAD PROTECTION.
C1 THRU C6 - CONTACTOR W/ 24V CONTROL.
TB1 - TERMINAL BLOCK
DB1 - DISTRIBUTION TERMINAL BLOCK
F1 THRU F3 - 20A, TIME DELAY, U.L. CLASS CC FUSE
F4 THRU F21 - 9A, TIME DELAY, U.L. CLASS CC FUSE
F22 THRU F23 - 1A, TIME DELAY, U.L. CLASS CC FUSE
F24 - 6A, TIME DELAY, U.L. CLASS CC FUSE
T1 - TRANSFORMER, 100 VA, 460-24V
D1 - FUSED DISCONNECT, 30A
450 - TEMPERATURE CONTROL (SYSTEM 450)
450E - EXPANSION MODULE (SYSTEM 450)
O/L1 THRU O/L6 - OVERLOAD RELAY 2.5-4A



REV	DATE	CHK	REVISION

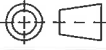
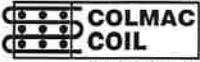


SCALE: NO SCALE
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES
TOLERANCES ARE:
FRACTIONS DECIMALS
± 1/16 .XX ±0.030
ANGLES .XXX ±0.010
±1° .XXXX ±0.005



DWG TITLE			
WRING DIAGRAM (Dual Fan Cycling) 6 Fan, 1 1/2HP, 460/60/3, 3.0A			
DRAWN BY	CHECKED BY	DATE	DATE
CWM	RSW	5/5/2015	5/5/2015
DATE	DATE	DATE	DATE
5/5/2015	5/5/2015	5/5/2015	5/5/2015
FAB00023005			

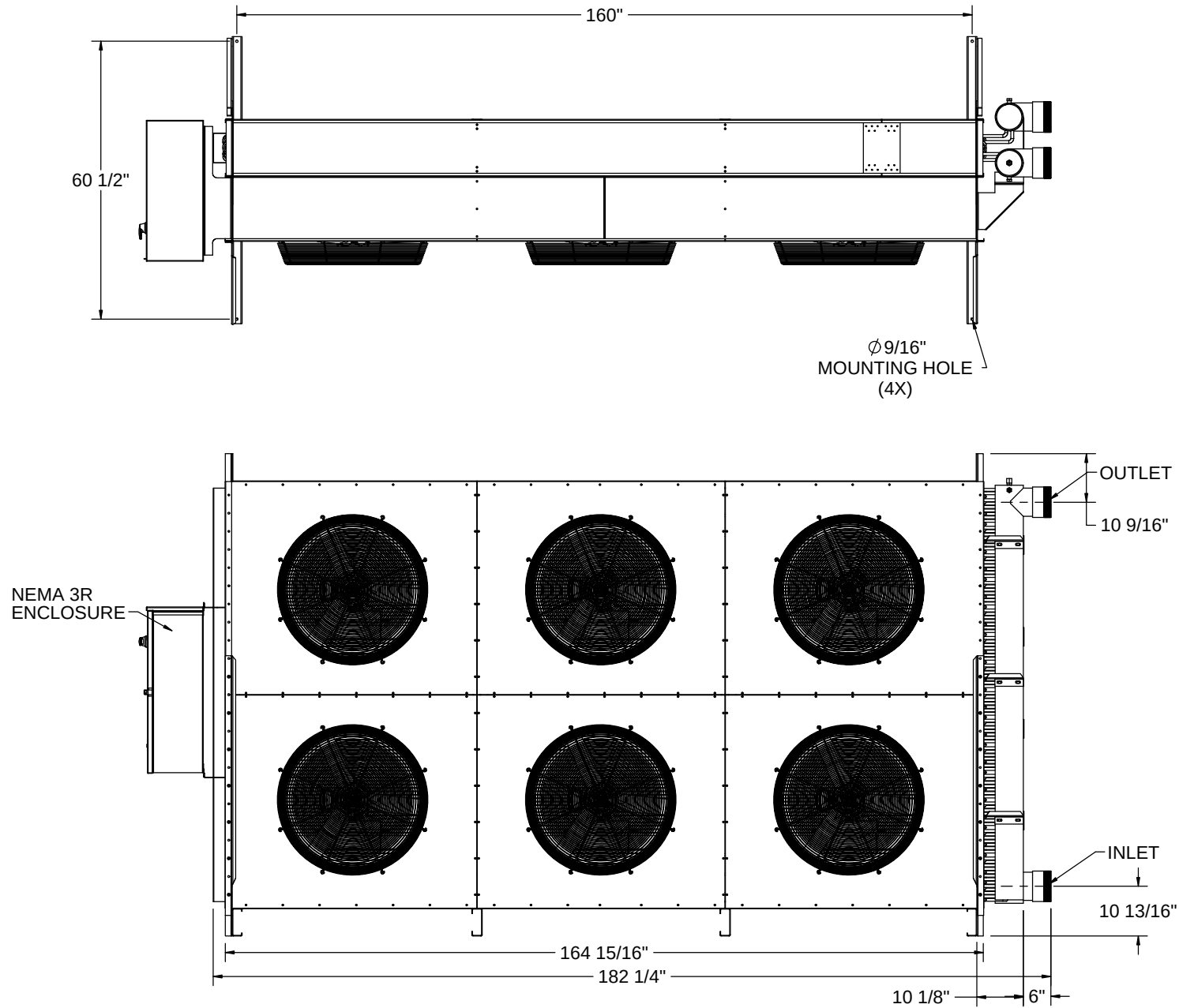
ITEM	STATUS	M-QTY	M-U/M	QTY	U/M	PART NUMBER	DESCRIPTION
1	P			1	EA	PUR00002906	Electrical Enclosure, 36H x 30W x 12D, NEMA 3R, Use Back Panel ()
2	P			1	EA	PUR00002907	Back Panel, 33H X 27W, Steel
3	P			3	A/R	PUR00020388	DIN Rail
4	P			6	EA	PUR00020386	End Stop for ABB Terminal Block
5	P			5	A/R	PUR00013979	Wire Duct
6	P			6	EA	D1538140	Contact, IEC, 9A, 24 V
7	P			2	EA	PUR00019505	Ground Lug
8	P			21	EA	PUR00020421	LPCC Fuse Block
9	P			4	EA	PUR00020385	Ground Terminal Block, M4/6 Yellow & Green
10	P			1	EA	PUR00020387	Ground Terminal Block, End Section, Yellow, Full
11	P			17	EA	PUR00020412	Terminal Block, M4/6 Grey
12	P			7	EA	PUR00020423	Terminal Block, End Section
13	P			2	A/R	PUR00020413	Jumper Bar, M4/6, 10 Pole
14	P			1	EA	B1536812	Transformer, 100VA, 208/240/277/380/480V-24V
15	P			2	EA	B1538002	Fuse, 1A, UL Class CC
16	P			1	EA	B1538008	Fuse, 6A, UL Class CC
17	P			18	EA	B1538011	Fuse, 9A, UL Class CC
18	P			3	EA	B1538015	Fuse, 20A, UL Class CC
19	P			1	EA	PUR00022957	Disconnect Switch, Fusible, 3-Pole, 30A-Rating, Class CC Fuses
20	P			1	EA	PUR00021702	Handle, Disconnect Switch, Black; NEMA 1, 3R, 12, 4, & 4X; Defeatable, Padlockable
21	P			1	EA	PUR00022719	Disconnect Operating Shaft, 0.24" x 0.24", 11.4" Long
22	P			6	EA	D1538101	Overload Relay, 2.5-4A, Class 20
23	P			1	EA	PUR00023044	Control Module, System 450 (Two Relay Outputs)
24	P			1	EA	PUR000224968	Relay Output Expansion Module, System 450 (One Relay Output)
25	P			1	EA	PUR00024977	Temperature Sensor, System 450, Range: -40 to 120°C (-40 to 250°F) (9 3/4" Cable Length)

				SCALE: NO SCALE	THIRD ANGLE PROJECTION 	UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: FRACTIONS DECIMALS ± 1/16 XX ±0.030 ANGLES XXX ±0.010 ±1° XXXX ±0.005	 Manufacturing Inc. P.O. Box 571 COLVILLE, WASHINGTON 99114	DWG. TITLE WIRING DIAGRAM (Dual Fan Cycling) 6 Fan, 1 1/2HP, 460/60/3, 3.0A				
REV	DATE	CHK	REVISION									

DRAWN BY CWM	CHECKED BY RSW	ENG APPR CWM	DWG NO FAB00023005	SHEET 1 OF 2
DATE 5/5/2015	DATE 5/5/2015	DATE 5/5/2015		

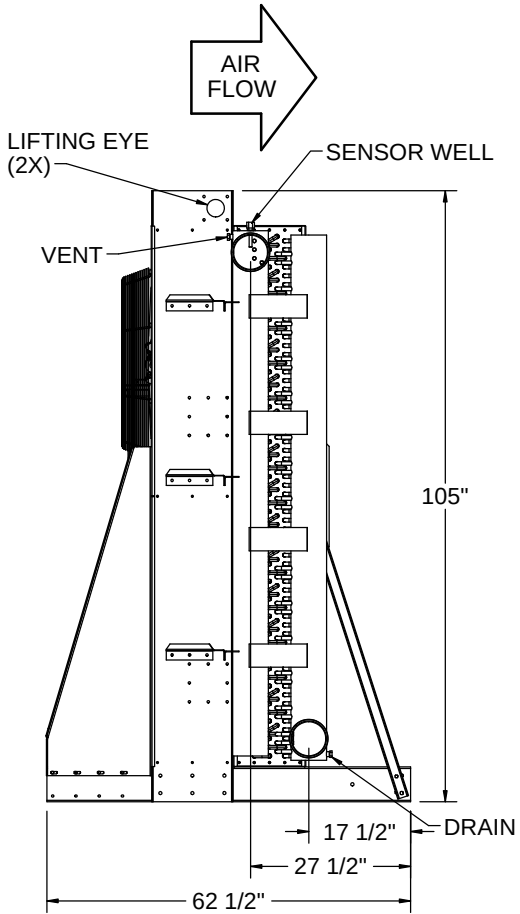
NOTICE OF CONFIDENTIAL INFORMATION

INFORMATION CONTAINED HEREIN IS CONFIDENTIAL AND IS THE PROPERTY OF COLMAC. WHERE FURNISHED WITH A PROPOSAL, THE RECIPIENT SHALL USE IT SOLELY FOR EVALUATION. WHERE FURNISHED TO A CUSTOMER, IT SHALL BE USED SOLELY FOR PURPOSE OF INSPECTION, INSTALLATION, OR MAINTENANCE. WHERE FURNISHED TO A SUPPLIER, IT SHALL BE USED SOLELY IN THE PERFORMANCE OF WORK CONTRACTED FOR BY THIS COMPANY. THE INFORMATION SHALL NOT BE USED OR DISCLOSED BY RECIPIENT FOR ANY OTHER PURPOSE.



NOTES:

1. FAN CYCLING (2 FANS/STAGE) AND MOTOR PROTECTION WIRED TO FUSED-DISCONNECT IN NEMA 3R ENCLOSURE.
2. PROTECT FROM FREEZING. NO GLYCOL.
3. PROTECTIVE SCREEN REQUIRED ON AIR LEAVING SIDE OF COIL.



COIL SPECIFICATIONS:

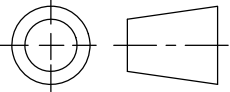
CONNECTION SIZE: 6" STEEL MPT INLET/OUTLET
HEADER SIZE: 6 1/8" OD TYPE "L" COPPER INLET/OUTLET
TUBING: 5/8" x 0.025 WALL: COPPER
FINS: 0.006 THICK: ALUM.
FIN PATTERN: WAFFLE/RIPPLE
HOUSING: GALV. STEEL
FERRULES: NO
FIN HEIGHT: 90"
FIN LENGTH: 162"
ROWS DEEP: 5
FINS PER INCH: 14
FACE AREA: 101.25 FT²

UNIT PERFORMANCE;

TOTAL CAPACITY: 2,431,357 BTUH
AIRFLOW: 51,108 CFM
FACE VELOCITY: 504.77 FPM
ELEVATION: 1,000 FT AMSL
ENT AIR DRY BULB: 97° F
LVG AIR DRY BULB: 144.9° F
ENT FLUID TEMP: 150° F
LVG FLUID TEMP: 130.18° F
FLUID FLOW RATE: 250 GPM
AIR PRESS DROP: 0.6 IWG
FLUID: WATER
FLUID PRESS. DROP: 9.3 FT H₂O
CIRCUITING: 75 FEED/ 4 PASS
MAWP: 150 PSIG @ 100° F
MDMT: -40° F @ 150 PSIG

UNIT SPECIFICATIONS;

DRAFT: BLOW-THRU
QTY. - DIA FANS: 6 - 30"
FAN SPEED: 1165 RPM
FAN TYPE: COMPOSITE
MOTOR QTY. - HP: 6 - 1 1/2HP
MOTOR VOLTAGE: 460/60/3
MOTOR FLA: 2.37A EA (EST)
MOTOR TYPE: TEFC
MOTOR S.F.: 1.25
INT. THERMAL O/L PROT.: NO
U.L. LISTED: PANEL ONLY
DRY WEIGHT: 3,526 LBS
INTERNAL VOL.: 11.3 FT³
FAN GUARDS: YES

REF: 57744A-A05	B	5/13/2015	DLS	ECO #23176
SCALE: NO SCALE	REV.	DATE	CHK	REVISION
THIRD ANGLE PROJECTION 	 P.O. Box 571 COLVILLE, WASHINGTON 99114			
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: FRACTIONS ± 1/4 ANGLES ±5°	DWG. TITLE AFH-90162-1465L-C-G-30-1 1/2-BT-R-D CUSTOMER: HYDRONIC ENERGY, INC. PROJECT: NEBRASKA PUBLIC POWER DISTRICT			
	DRAWN BY GWW	CHECKED BY DLS	ENG APPR DLS	DWG. NO. SUB00025470
	DATE 4/27/2015	DATE 4/27/2015	DATE 4/27/2015	SHEET 1 OF 1