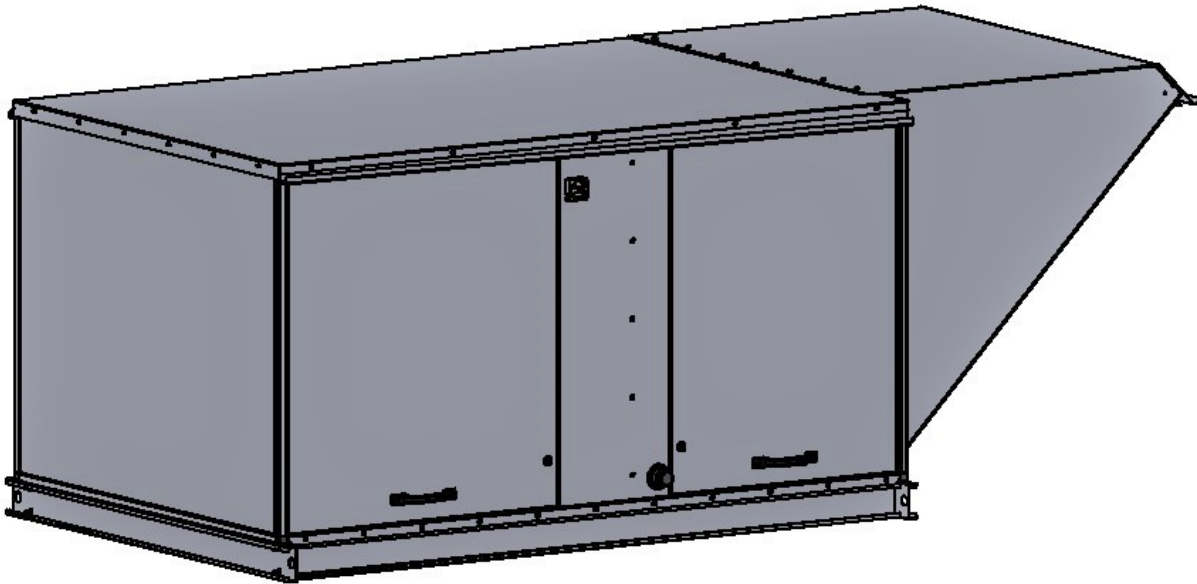


## Gas-Fired Tempered Make-Up Air Unit / EVAP

Model:

T1-EVN-1200-208-3

3-Phase, 208V, 0.50 HP, Belt driven with Motorized Damper and 10-8" Blower. MAX 2,200 CFM





T1-HOXEVN Direct Fired EVAP (475 lbs.)

**Supply Motor:**

Model K158, 0.50 HP, 208-3-60, 2.10 FLA,  
TEFC (Totally Enclosed Fan Cooled)

**Supply Motor Pulleys:**

<u>Part Type</u>	<u>Qty</u>	<u>Browning #</u>	<u>Turns Out</u>
Blower Pulley	1	MA38 x 3/4	
Motor Pulley	1	1VP34 x 5/8	3.5

**Burner:**

Min Output BTU: 18,000 BTU/Hr  
Max Output BTU: 375,000 BTU/Hr  
Size: 6" long  
Gas Type: Natural

**Supply Performance:**

Volume: 1200 cfm Volume Range: 800-2200 cfm  
RPM 1071  
TS: 3119 ft/min  
SP: 1.21" w.g.  
0.50" Ext. + 0.40" Int. + 0.31" Opt.  
BHP: 0.40

**Heating Schedule:**

Altitude: 0'  
Winter Entering Air Dry Bulb Temp: 0°F  
Temp Rise: 100°F  
Output BTU: 123,000  
Input BTU: 134,000  
BTUs BASED OFF STANDARD AIR DENSITY

**Cooling Schedule:**

Intake Entering Dry Bulb Temperature: 90°F  
Intake Entering Wet Bulb Temperature: 70°F  
Intake Entering Relative Humidity: 37%  
Intake Leaving Dry Bulb Temperature: 76°F  
Intake Leaving Wet Bulb Temperature: 70°F  
Temperature drop calculations are based on tested data.

**Supply Installation Information:**

Gas Inlet Pressure: 7 in. w.c. - 14 in. w.c.  
Insurance: FM/ETL

Unit Main Input: 5.63 Amps MCA, 7 Amps MOP, 208V,  
14 AWG Wire Min.  
Supply Unit Voltage: 208v-3ph-60hz

**Construction Features:**

Housing constructed of heavy duty G90 galvanized steel • Forward curved centrifugal blower wheel • Vibration isolation • Adjustable drive assemblies • Adjustable motor mount • Ball bearing motors • Heavy duty, pre-lubricated bearings L10 rated for 100,000 hours of operation • Static resistant belts • Service doors on both sides • Horizontal & down discharge • Large intake area ensures low pressure drop across unit • Electronic Burner Profiler System automatically adjusts for any airflow - no manual setting required! • Weatherproof safety disconnect switch • Modular design provides design flexibility • Fully insulated casing

**Blower:**

10-8" forward curved, centrifugal blower. Permanently lubricated ball bearings. Galvanized finish. 3/4" Shaft. 3,000 max. RPM. Used in heated and non-heated supply fans.

**Temp Control:**

Maxitrol Series 14 • 40-90°F Discharge Temp Control • Field Wired On/Off Start Command; Temperature set point dial at main panel.

**Intake:**

Size EVN1 CELdek Evaporative Cooler for T1 Modular Make-Up Air Heater. 30" Wide x 56" Long x 28" High. Includes intake hood with filters. For outdoor installation. Use with water softener recommended.

**Filters:**

2x MV EZ Kleen Metal Mesh Filter. 16"x 25"x 2" Used for heater and supply fan intakes.

**Selected Options:**

\* Motorized Inlet Damper 21"W x 22"H for EVN1/T1 Modular Heating Units w/Extended Shaft, Standard Galvanized Construction, 3/4" Rear Flange, LMX24-3-S Actuator Included (with end switch).

\* Low Fire Start. Allows the burner circuit to energize when the modulation control is in a low fire position.

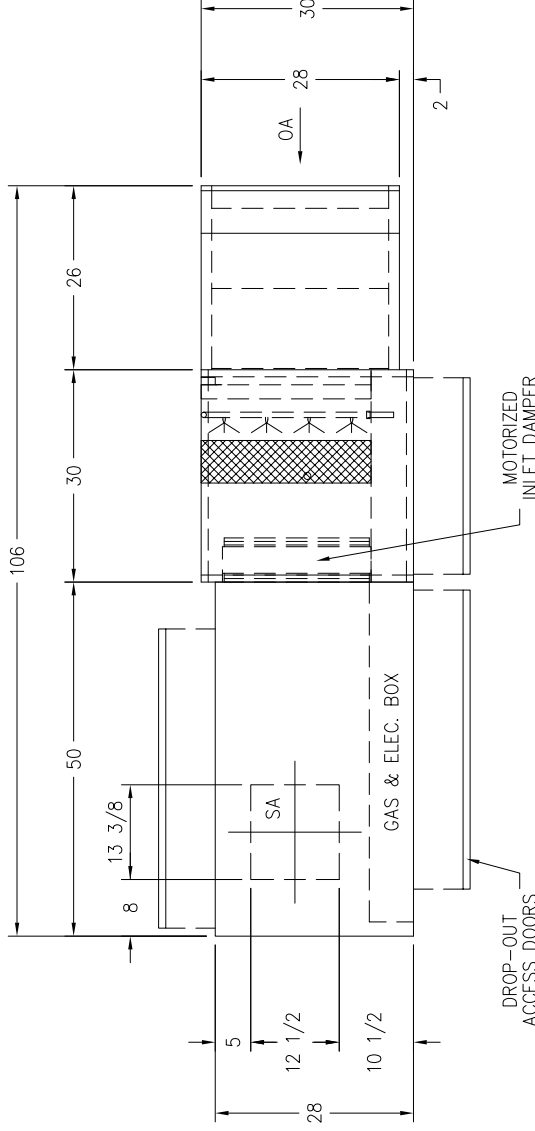
\* Freeze Protection Drain Control Kit for Evaporative Coolers. Includes (2) 2-Way water solenoid valves ZONE215N-10+ZONE24 (NO & NC; shipped loose), Drain Stat, Overflow Water Sensor, and Liquid Level Controller installed upstream of 2-Way solenoid in unit, 1/2" PVC piping & fittings, and Outdoor Air Stat T6031A1136. Field wiring required by others for (2) 2-way valves. Includes 6"D CELdek evaporative media.

**PERFORMANCE & SPECIFICATIONS**

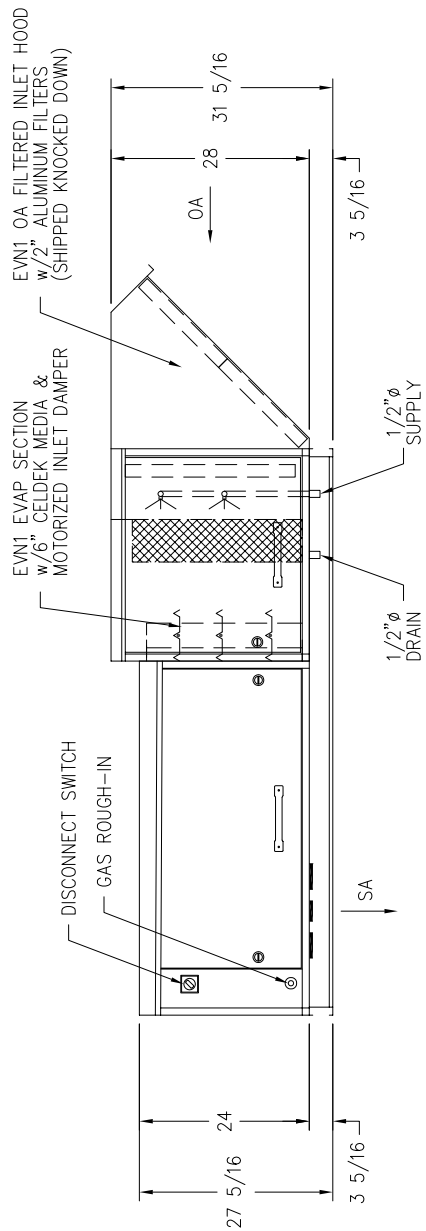
<b>MODEL:</b>	T1-HOXEWN	<b>QUANTITY:</b>	1
<b>CONTROLS SIDE:</b>	LEFT (STD)	<b>DISCHARGE:</b>	BOTTOM
1,200 CFM @ 0.50" WC ESP (1.21" WC TSP) @ 0' ELEV.			
<b>BLOWER SIZE:</b>	G10-8 CANARM/DELHI		
<b>MOTOR HORSEPOWER:</b>	0.50 HP (IMF)		
<b>MOTOR TYPE:</b>	PREM-EFF TEFC		
<b>VOLTAGE:</b>	208/3/60		
<b>UNIT FLA / MCA / MOP:</b>	5.10 AMPS / 5.63 AMPS / 7 AMPS		
<b>GAS TYPE:</b>	NATURAL		
<b>HEATING CAPACITY:</b>	134 MBH (≈ 100.0° F ΔT)		
<b>GAS PRESSURE - MIN.:</b>	7" WC	<b>MAX.:</b>	14" WC
<b>GAS LINE SIZE:</b>	1/2"		
<b>INSURANCE TYPE:</b>	FM/ETL		
<b>MOUNTING LOCATION:</b>	OUTDOOR		
<b>UNIT MATERIAL:</b>	GALVANIZED		
<b>PAINT COLOR:</b>	NONE		

FEATURES & ACCESSORIES	WEIGHT
* Unit Mounting By Others	-
* EVN1 OA Filtered Inlet Hood (shipped knocked down) with: - 2" Aluminum Cleanable Filters (MERY 6)	40 LBS.
* Base Unit	285 LBS.
* Motorized Inlet Damper	-
* (2) Drop-Out Access Doors	-
* Unit Insulation (1" foil face)	-
* Internal Fan/Motor Vibration Isolators (rubber)	-
* Maxon NP-1-LE Cost Alum. Direct Fired Burner w/Stainless Steel Mixing Plates	-
* Maxitrol 14 DTC (55°-90°F) w/TD @ Unit	-
* Direct Spark Ign. w/Flame Rod Burner Supervision	-
* Non-Fused Disconnect Switch	-
* Mild Weather Stat	-
* EL5 Circuit - No Remote Control Panel, Fan Enable Jumper, & MWS (heat enable)	-
* Main Control Panel	-
(meets NEMA 1,2,3R,3S,4,5 & 12 requirements)	
* Auto-Profiler System	-
* EVN1 Evaporative Cooler w/6" CELdek Media	150 LBS.
* Fill & Drain Valves (shipped loose)	-
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<b>TOTAL APPROXIMATE WEIGHT:</b>	
	475 LBS.

PROPRIETARY



**PLAN VIEW**



**CONTROLS SIDE VIEW**

		<b>PROJECT NAME:</b>		-	
<b>REV.</b>	<b>DATE</b>	<b>BY</b>	<b>DESCRIPTION OF REVISION</b>	<b>MODEL:</b>	T1-HOXEWN
-	-	-	-	<b>REF. NO./JOB NO.:</b>	-
-	-	-	-	<b>DRAWN BY:</b>	BMA
-	-	-	-	<b>CERTIFIED BY:</b>	
				<b>DATE:</b>	08-2020
				<b>DRAWING NO.:</b>	T1-EVN-1200-208-3
				<b>TAG:</b>	-
				<b>SCALE:</b>	NONE



Project No:  
Project Name:  
Location:  
Engineer:  
Architect:  
Reference:

Submitted by:

**Equipment Tag**

Contractor:

**Model Information**

Model: G10-8  
CFM: 1200  
SP: 1.21  
RPM: 1071  
BHP: 0.4

Part Number:  
Shaft Diameter: 0.75  
Wheel Diameter: 11.125  
Tip Speed: 3119 FPM  
Static Efficiency: 57  
Outlet Velocity: 1447 FPM  
Unit Weight: 0  
Ship Weight: 0  
Elevation: 0  
Temperature: 70

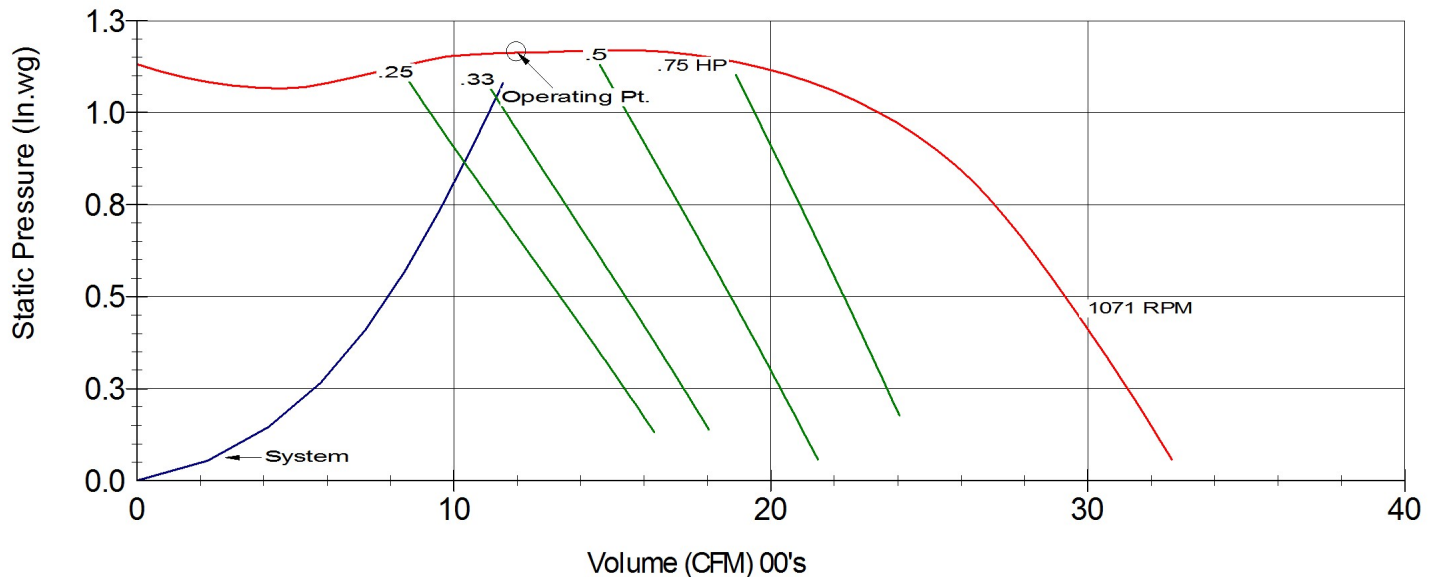
**Sound Data**

Sound Power Level @ Frequency, re: 10^-12 Watts	63	125	250	500	1000	2000	4000	8000	(Hz)	LwA:	81
	86	84	81	77	74	73	69	67	(dB)	SONES:	18.3

Ducted inlet or ducted outlet dBA @5 ft. 70                      Ducted inlet and ducted outlet dBA @5 ft. 50

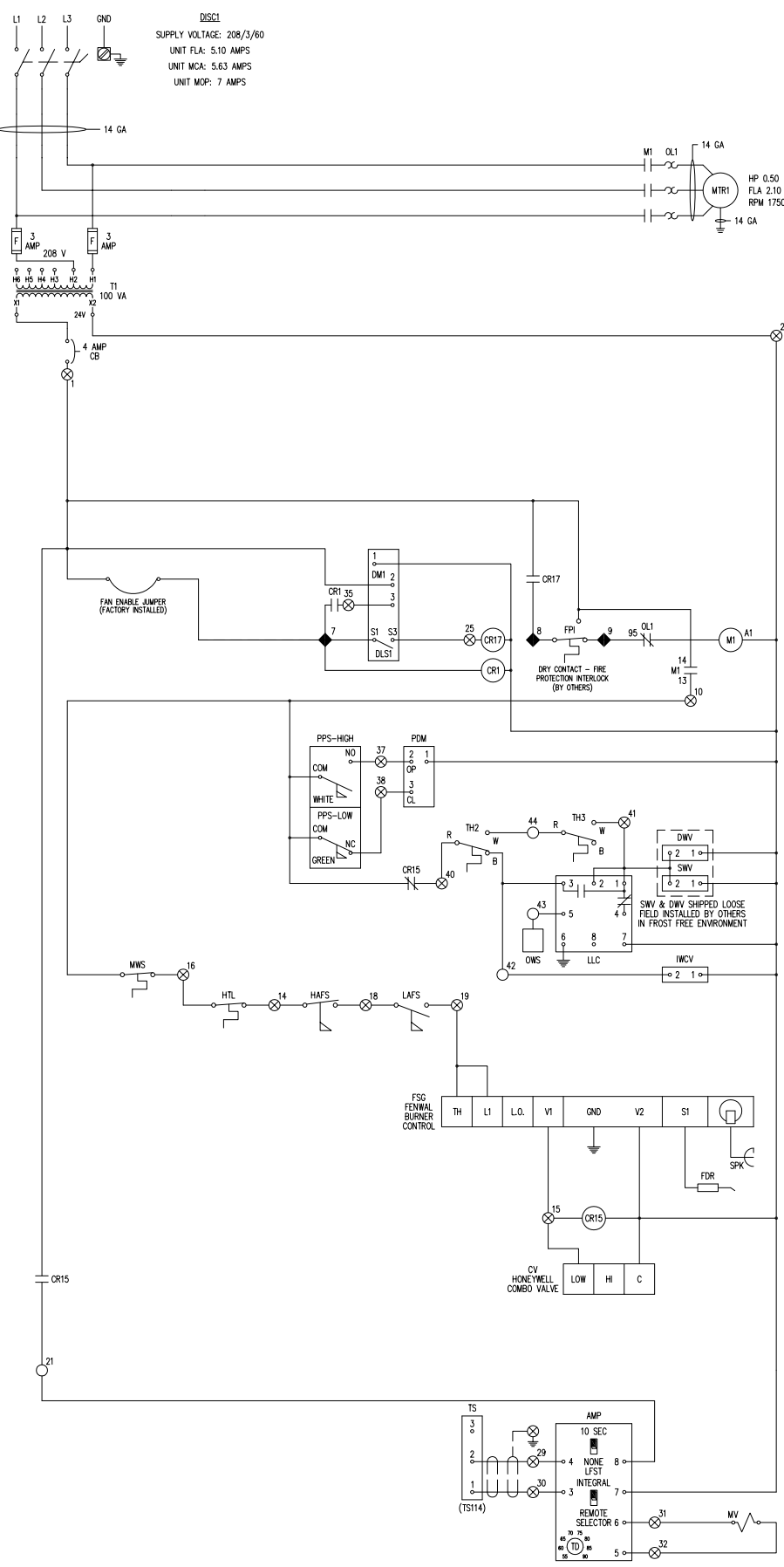
**Performance Curve**

DELHI Model G10-8  
CFM=1200 SP=1.21 BHP=0.4 S. Eff=57% RPM=1071



Performance shown is for installation Type B: Free inlet, Ducted outlet. Power rating bhp does not include transmission losses. Performance ratings do not include the effects of appurtenances (accessories).  
v: 13.0.35

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- DISCONNECT SWITCH
- SUPPLY FAN MOTOR OVERLOAD RELAY
- SUPPLY FAN MOTOR
- CONTROL TRANSFORMER
- CIRCUIT BREAKER
- INLET DAMPER MOTOR
- FAN ENABLE JUMPER
- DAMPER LIMIT SWITCH
- SUPPLY FAN MOTOR CONTACTOR
- DAMPER RELAY
- UNIT ENABLE RELAY
- PROFILE PRESSURE SWITCH (HIGH)
- PROFILE DAMPER MOTOR
- OUTDOOR AIR STAT (TH3)
- DRAIN STAT (TH2)
- PROFILE PRESSURE SWITCH (LOW)
- DRAIN WATER VALVE (N.O.)
- SUPPLY WATER VALVE (N.C.)
- LIQUID LEVEL CONTROLLER (LLC)
- OVERFLOW WATER SENSOR (OWS)
- MILD WEATHER STAT
- INTERNAL WATER CONTROL VALVE (N.C.)
- HIGH TEMPERATURE LIMIT SWITCH
- HIGH AIR FLOW SWITCH
- LOW AIR FLOW SWITCH
- FLAME SAFEGUARD CONTROL
- SPARK IGNITOR
- FLAME DETECTION ROD
- BURNER ON RELAY
- DIRECT IGNITION COMB. GAS VALVE
- TEMPERATURE CONTROL AMPLIFIER
- DISCHARGE TEMPERATURE SENSOR
- MODULATING GAS VALVE
- TEMPERATURE DIAL

PROPRIETARY

PLEASE NOTE

ALL FIELD WIRING SHALL BE THWN, THHN OR MTW WIRE TYPE (OR SHIELDED CABLE WHERE NOTED ON SCHEMATIC) RATED FOR 75° C AND LABELED OR IDENTIFIED AT EACH END FOR EACH CONNECTION BEING MADE. WIRING SHALL BE INSTALLED PER NEC AND LOCAL CODE REQUIREMENTS

ALL CONTROL WIRING SHALL BE AS FOLLOWS:

GAUGE	MAX. DISTANCE
18	50'
16	75'
14	150'
12	250'

\* DO NOT RUN LINE VOLTAGE WIRES WITH CONTROL WIRES \*

LEGEND

SYMBOL	DEFINED AS
	(GND) EARTH GROUND GALV. ZINC, MAGNESIUM ROD
	WIRE NUMBERS
	TERMINALS IN CONTROL PANEL
	TERMINALS IN REMOTE PANEL
	REMOTE PANEL WIRING
	FIELD WIRING BETWEEN TERMINALS IN REMOTE PANEL & TERMINALS IN UNIT CONTROL PANEL
	SHIELDED CABLE
	FIELD INSTALLED & WIRED
	FIELD CONNECTION

UNIT SET POINTS

DEVICE	RECOMMENDED SETTING:
HAFS / LAFS	1.00" / 0.40" WC
HTL	130° F
MWS	65° F
PPS-HIGH	CLOSES ABOVE 0.75" WC
PPS-LOW	CLOSES BELOW 0.60" WC
TH2	65° F (ADJUSTABLE)
TH3	75° F (ADJUSTABLE)
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REVISIONS

REV.	DATE	REV. BY
-	-	-
-	-	-
-	-	-
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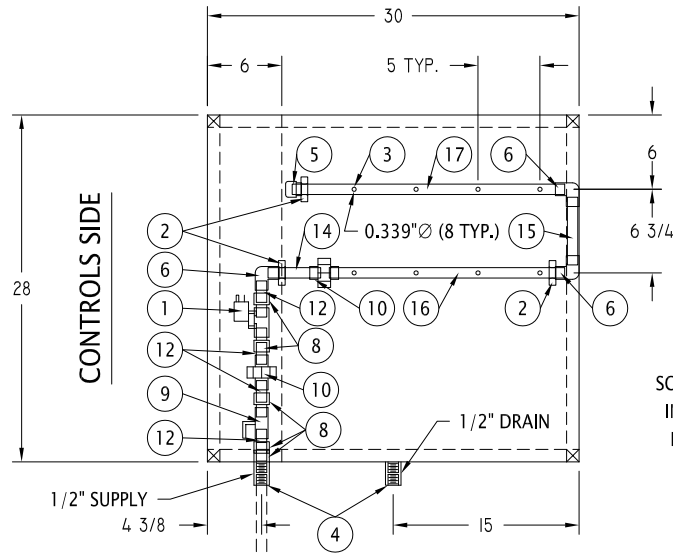


PROJECT INFORMATION

PROJECT NAME:	-
MODEL NO.:	T1-HOXEWN
SERIAL NO.:	-
TAG:	-
DATE:	08-2020
SCALE:	NONE
DRAWN BY:	BMA
DRAWING NO.:	T1-EVN-1200-208-3

# EVN1 w/F&D VALVES (LH) – EVAP. PIPING SCHEMATIC

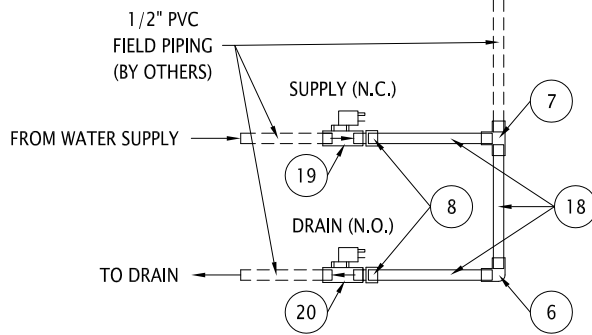
PLEASE NOTE  
LEFT HAND (LH)  
CONTROLS



PLEASE NOTE  
SCHEMATIC LAYOUT IS LOOKING  
INTO THE UNIT FROM THE OA.  
NOZZLE LOCATIONS ARE ON  
THE OPPOSITE SIDE.

ROOF LINE

ROOF LINE



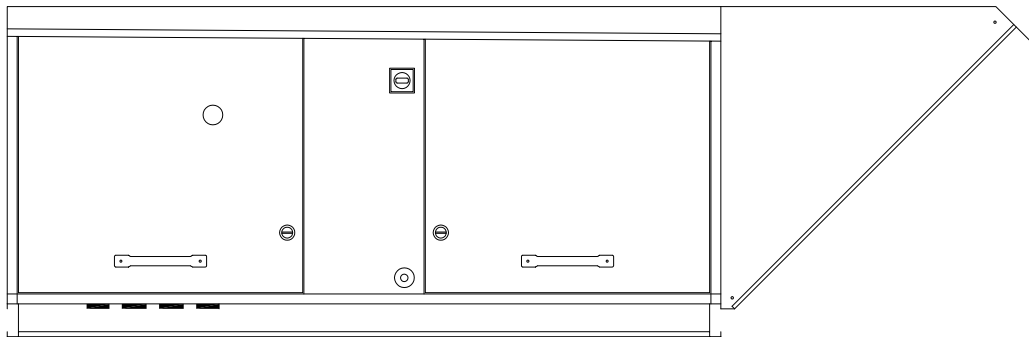
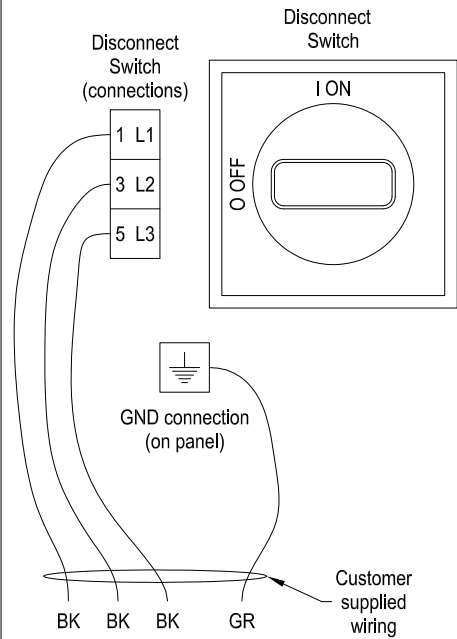
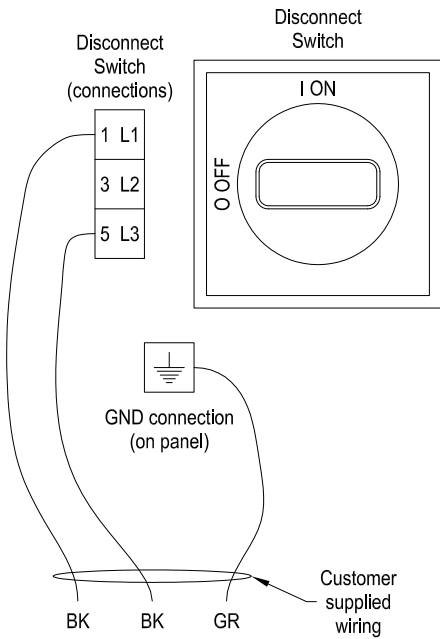
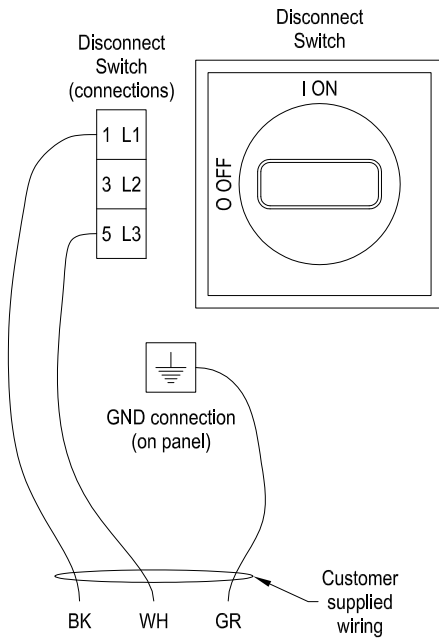
PLEASE NOTE  
SUPPLY & DRAIN WATER VALVES SHIPPED LOOSE  
INSTALL IN A FROST FREE ENVIRONMENT

ITEM	QTY.	DESCRIPTION OF PART
1	1	INTERNAL WATER CONTROL VALVE (N.C.)
2	3	1/2" PIPE GROMMET
3	8	WATER NOZZLE 115° w/FILTER
4	2	1/2" 304SS COUPLING (welded on)
5	1	1/2" PVC CAP
6	4	1/2" PVC ELBOW
7	1	1/2" PVC TEE
8	7	1/2" PVC MALE ADAPTER
9	1	1/2" PVC SHUT OFF COCK
10	2	1/2" PVC UNION – SCH 40
-	-	-
12	4	1/2" PVC PIPE x 1-1/2"
-	-	-
14	1	1/2" PVC PIPE x 4-1/4"
15	1	1/2" PVC PIPE x 5-1/2"
16	1	1/2" PVC PIPE x 19" (with holes)
17	1	1/2" PVC PIPE x 21-7/8" (with holes)
18	3	1/2" PVC PIPE x 10"
19	1	SUPPLY WATER VALVE (N.C.) – SHIPPED LOOSE & INSTALLED BY OTHERS
20	1	DRAIN WATER VALVE (N.O.) – SHIPPED LOOSE & INSTALLED BY OTHERS

115-1-60

208/230-1-60

208/230/460/575-3-60

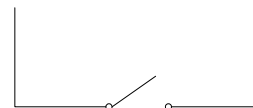


Power Connection  
(see above for details)

Control Connection  
(see below for details)

Connect to  
Terminal 1

Connect to  
Terminal 7



Fan Switch / Interlock  
Field provided BY OTHERS



PROJECT NAME: NAKS T1-T5 DIRECT FIRED MUA INSTALLATION WIRING

REF. NO./JOB NO.:

-

MODEL: T1-T5

TAG: -

DRAWN BY:

-

DATE: 06-2020

SCALE: NONE

CERTIFIED BY:

DRAWING NO.:

T1-T5\_INSTALL