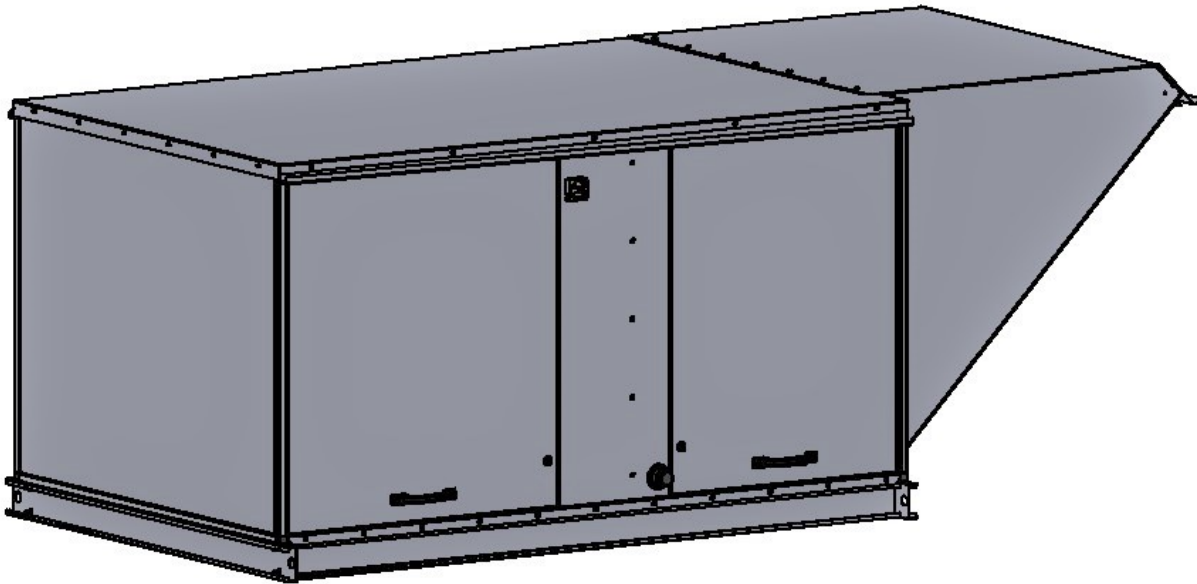


## Gas-Fired Tempered Make-Up Air Unit / EVAP

Model:

T4-EVN-7800-208-3

3-Phase, 208V, 5.00 HP, Belt driven with Motorized Damper and 18" Blower. MAX 7,800 CFM





T4-HOXEVN Direct Fired EVAP (1,185 lbs.)

**Supply Motor:**

Model GT0013A, 5.00 HP, 208-3-60, 13.9 FLA, ODP (Open Drip Proof)

**Supply Motor Pulleys:**

<u>Part Type</u>	<u>Qty</u>	<u>Browning #</u>	<u>Turns Out</u>
Blower Pulley	1	MB103 x 1	
Motor Pulley	1	1VP50 x 1-1/8	3.0

**Burner:**

Min Output BTU: 43,000 BTU/Hr  
Max Output BTU: 1,125,000 BTU/Hr  
Size: 18" long  
Gas Type: Natural

**Supply Performance:**

Volume: 7800 cfm Volume Range: 3700-7800 cfm  
RPM: 758  
TS: 3671 ft/min  
SP: 1.83" w.g.  
0.50" Ext. + 0.80" Int. + 0.53" Opt.  
BHP: 4.20

**Heating Schedule:**

Altitude: 0'  
Winter Entering Air Dry Bulb Temp: 0°F  
Temp Rise: 100°F  
Output BTU: 803,000  
Input BTU: 873,000  
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: 14 in. w.c. - 1 p.s.i.  
Insurance: FM/ETL

Unit Main Input: 20.38 Amps MCA, 30 Amps MOP, 208V,  
10 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:**

18" forward curved, centrifugal blower. Permanently lubricated ballbearings. Galvanized finish. 1" Shaft. 1,450 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 EVN4 CELdek Evaporative Cooler for T4 Modular Make-Up Air Heater. 54" Wide x 68" Long x 44" High. Includes intake hood with filters. For outdoor installation. Use with water softener recommended.

**Filters:**

6x MV EZ Kleen Metal Mesh Filter. 16"x 25"x 2" Used for heater and supply fan intakes.

**Selected Options:**

\* Motorized Inlet Damper 43"W x 36"H for EVN4/T4 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.



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

Submitted by:

**Equipment Tag**

Contractor:

**Model Information**

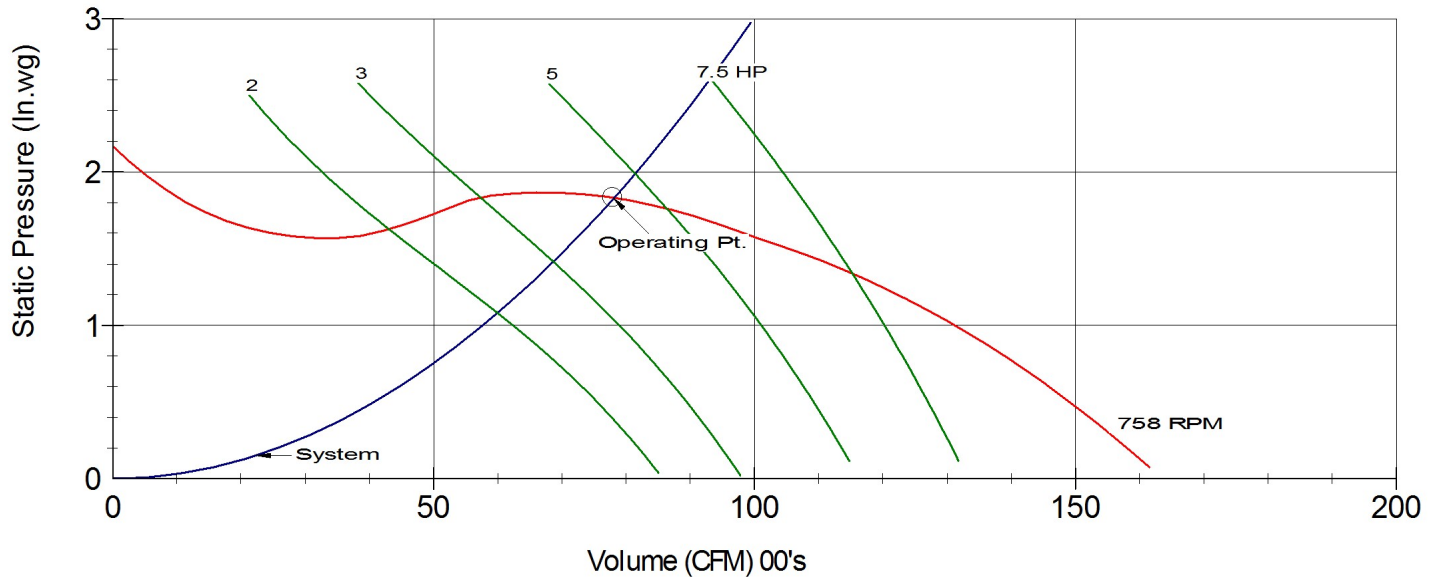
Model: G18	Part Number: 9005493	
CFM: 7800	Shaft Diameter: 1	Unit Weight: 87
SP: 1.83	Wheel Diameter: 18.5	Ship Weight: 99
RPM: 758	Tip Speed: 3671 FPM	
BHP: 4.2	Static Efficiency: 53	Elevation: 0
	Outlet Velocity: 2720 FPM	Temperature: 70

**Sound Data**

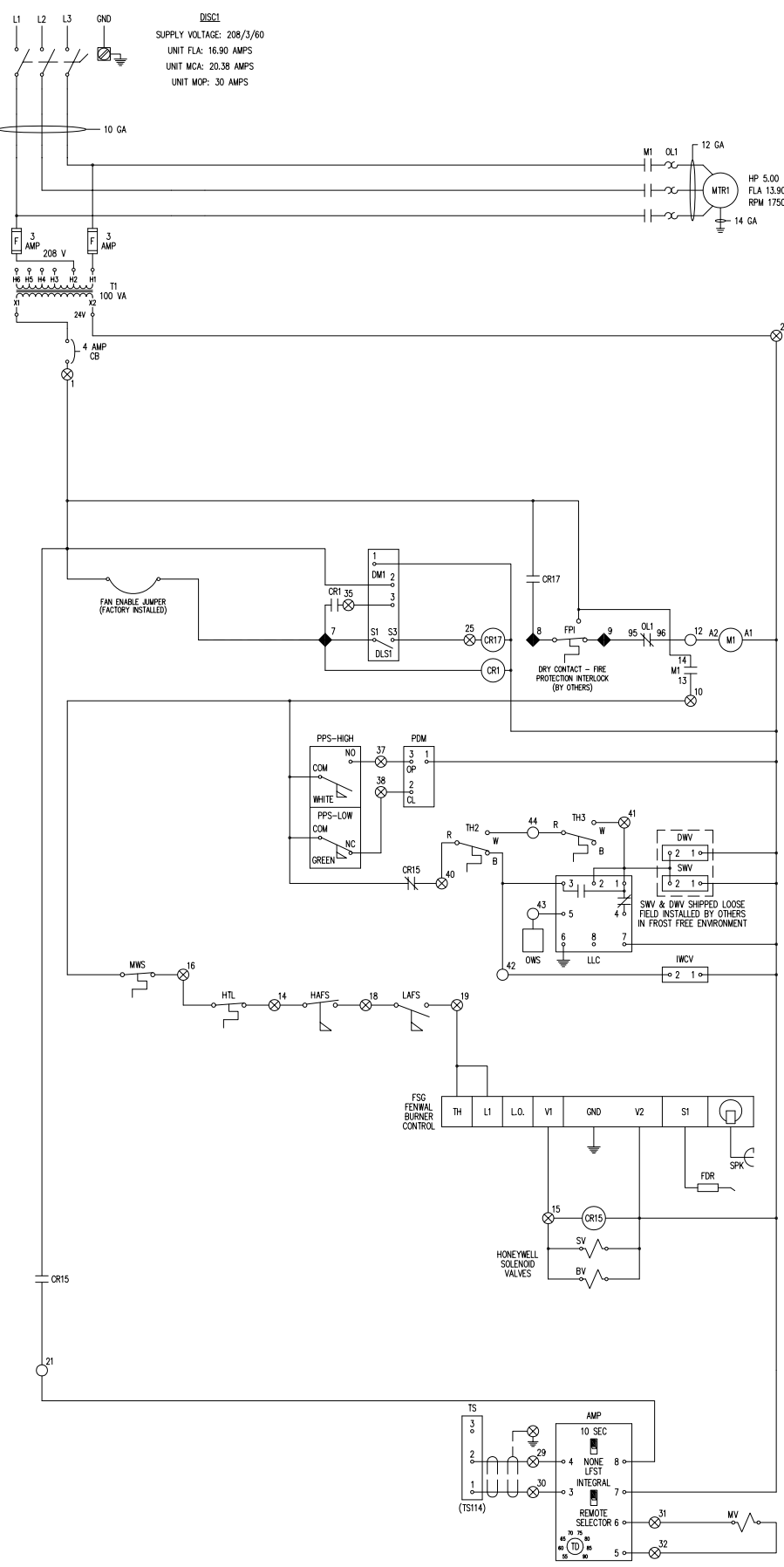
	63	125	250	500	1000	2000	4000	8000	(Hz)	LwA: 82
Sound Power Level @ Frequency, re: 10 <sup>-12</sup> Watts	87	86	82	79	76	72	68	66	(dB)	SONES: 19.1
	Ducted inlet <u>or</u> ducted outlet dBA @5 ft. 71					Ducted inlet <u>and</u> ducted outlet dBA @5 ft. 51				

**Performance Curve**

DELHI Model G18  
CFM=7800 SP=1.83 BHP=4.2 S. Eff=53% RPM=758



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PROPRIETARY

PLEASE NOTE

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

SAFETY GAS VALVE  
BLOCKING GAS VALVE

TEMPERATURE CONTROL AMPLIFIER

DISCHARGE TEMPERATURE SENSOR

MODULATING GAS VALVE  
TEMPERATURE DIAL

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)
-	-
-	-
-	-

REVISIONS

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

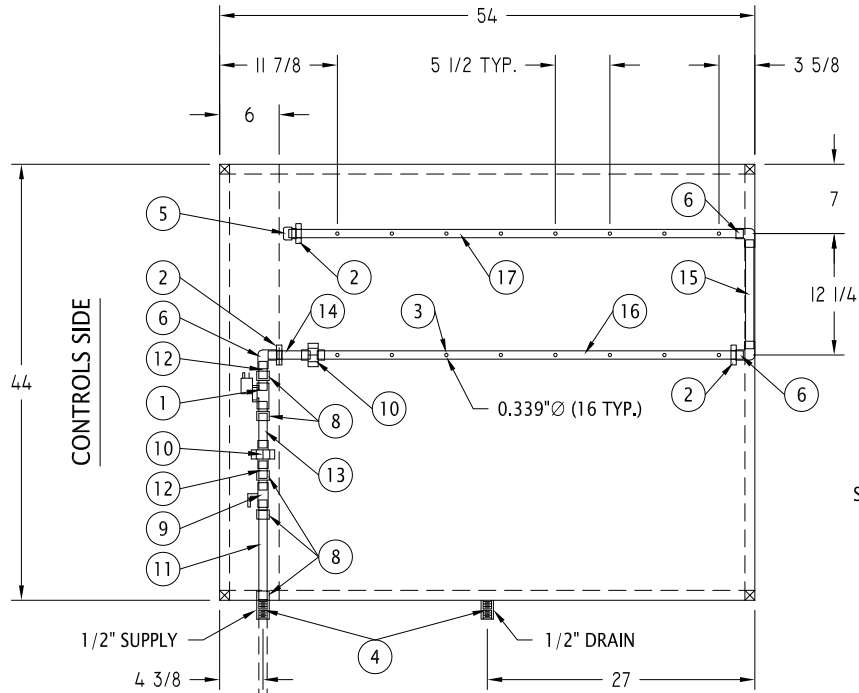


PROJECT INFORMATION

PROJECT NAME:	-
MODEL NO.:	T4-HOXEWN
SERIAL NO.:	-
TAG:	-
DATE:	08-2020
SCALE:	NONE
DRAWN BY:	BMA
DRAWING NO.:	T4-EVN-7800-208-3

# EVN4 w/F&D VALVES (LH) – EVAP. PIPING SCHEMATIC

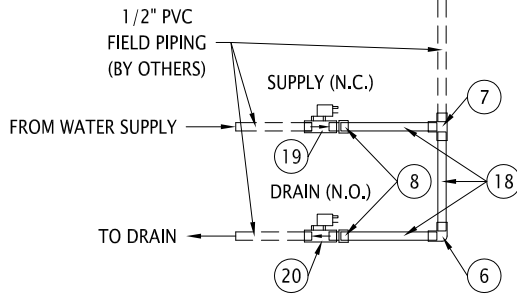
PLEASE NOTE  
LEFT HAND (LH)  
CONTROLS



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

ROOF LINE

ROOF LINE



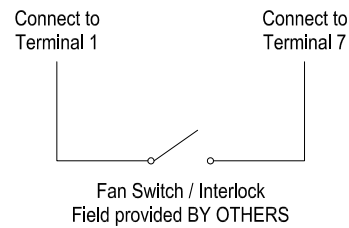
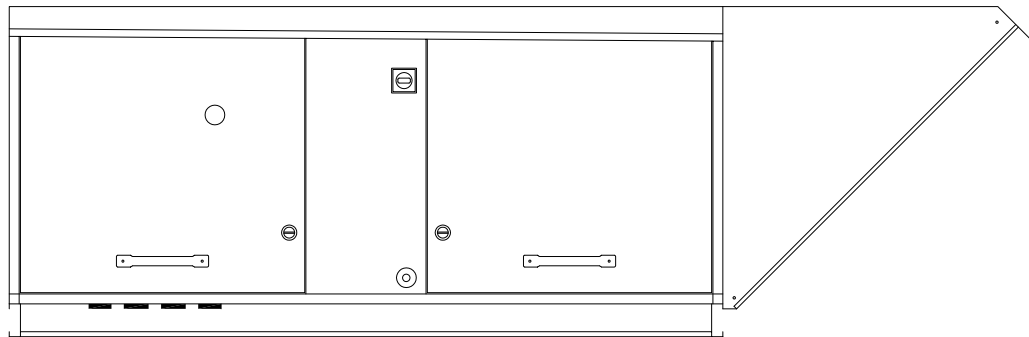
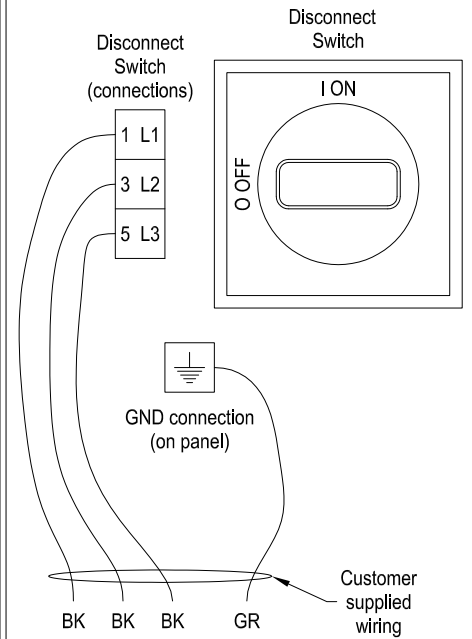
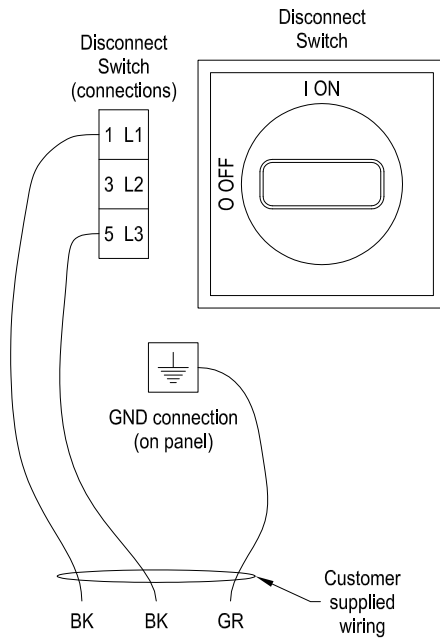
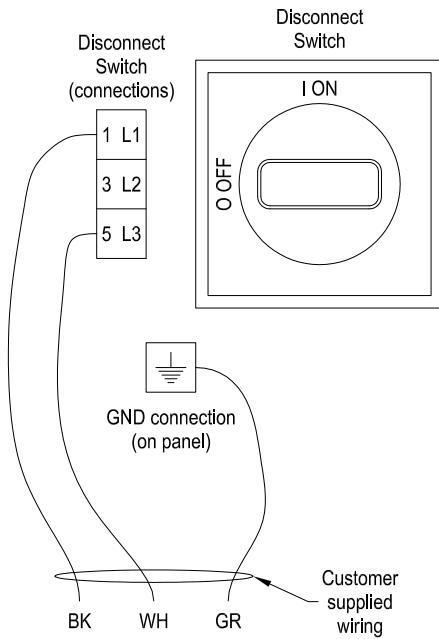
PLEASE NOTE  
SUPPLY & DRAIN WATER VALVES SHIPPED LOOSE  
INSTALL IN A FROST FREE ENVIRONMENT

ITEM	QTY.	DESCRIPTION OF PART
1	1	INTERNAL WATER CONTROL VALVE (N.C.)
2	3	1/2" PIPE GROMMET
3	16	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
11	1	1/2" PVC PIPE x 9"
12	2	1/2" PVC PIPE x 1-1/2"
13	1	1/2" PVC PIPE x 3-1/2"
14	1	1/2" PVC PIPE x 4-1/4"
15	1	1/2" PVC PIPE x 11"
16	1	1/2" PVC PIPE x 43" (with holes)
17	1	1/2" PVC PIPE x 45-7/8" (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



PROJECT NAME:	NAKS T1-T5 DIRECT FIRED MUA INSTALLATION WIRING		
REF. NO./JOB NO.:	-	MODEL:	T1-T5
DRAWN BY:	-	DATE:	06-2020
CERTIFIED BY:	-	TAG:	-
		SCALE:	NONE
		DRAWING NO.:	T1-T5_INSTALL