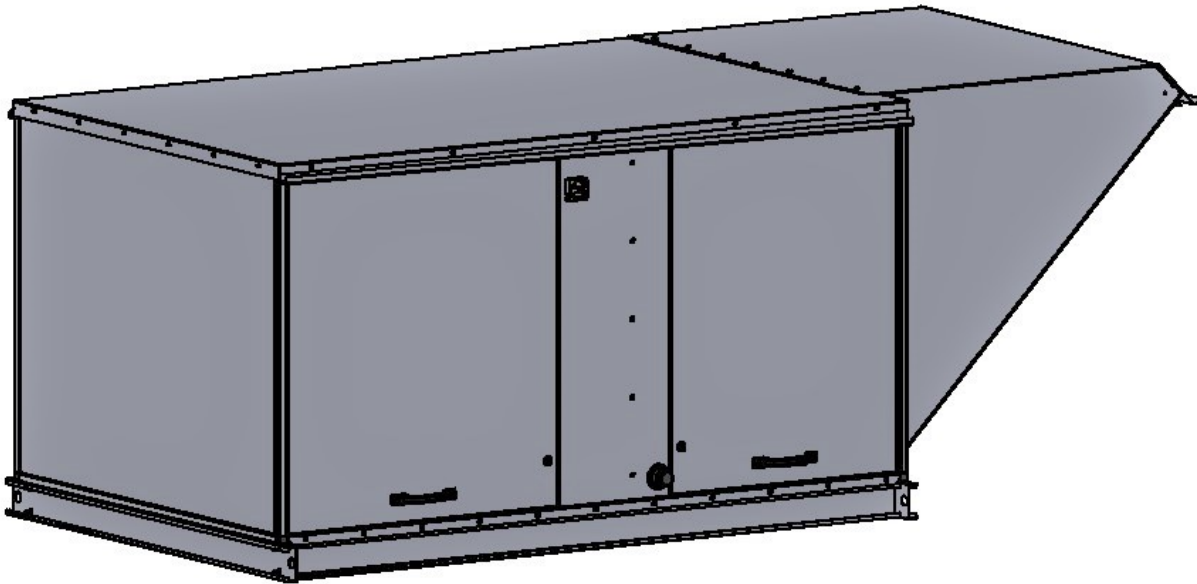


Gas-Fired Tempered Make-Up Air Unit / EVAP

Model:

T2-EVN-3400-230-3

3-Phase, 230V, 2.00 HP, Belt driven with Motorized Damper and 12" Blower. MAX 3,400 CFM





T2-HOXEVN Direct Fired EVAP (625 lbs.)

Supply Motor:

Model EM3558T, 2.00 HP, 230-3-60, 5.80 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 | AK54 x 3/4 | |
| Motor Pulley | 1 | 1VP40 x 7/8 | 1.5 |

Burner:

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

Supply Performance:

Volume: 3400 cfm Volume Range: 1400-3400 cfm
RPM 1090
TS: 3674 ft/min
SP: 1.75" w.g.
0.50" Ext. + 0.80" Int. + 0.45" Opt.
BHP: 1.78

Heating Schedule:

Altitude: 0'
Winter Entering Air Dry Bulb Temp: 0°F
Temp Rise: 100°F
Output BTU: 345,000
Input BTU: 375,000
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: 8 in. w.c. - 14 in. w.c.
Insurance: FM/ETL

Unit Main Input: 10.25 Amps MCA, 15 Amps MOP, 230V,
14 AWG Wire Min.
Supply Unit Voltage: 230v-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:

12" forward curved, centrifugal blower. Permanently lubricated ballbearings. Galvanized finish. 3/4" Shaft. 2,500 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 EVN2 CELdek Evaporative Cooler for T2 Modular Make-Up Air Heater. 38" Wide x 62" Long x 30" High. Includes intake hood with filters. For outdoor installation. Use with water softener recommended.

Filters:

4x MV EZ Kleen Metal Mesh Filter. 16"x 20"x 2" Used for heater and supply fan intakes.

Selected Options:

- * Motorized Inlet Damper 27"W x 26"H for EVN2/T2 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

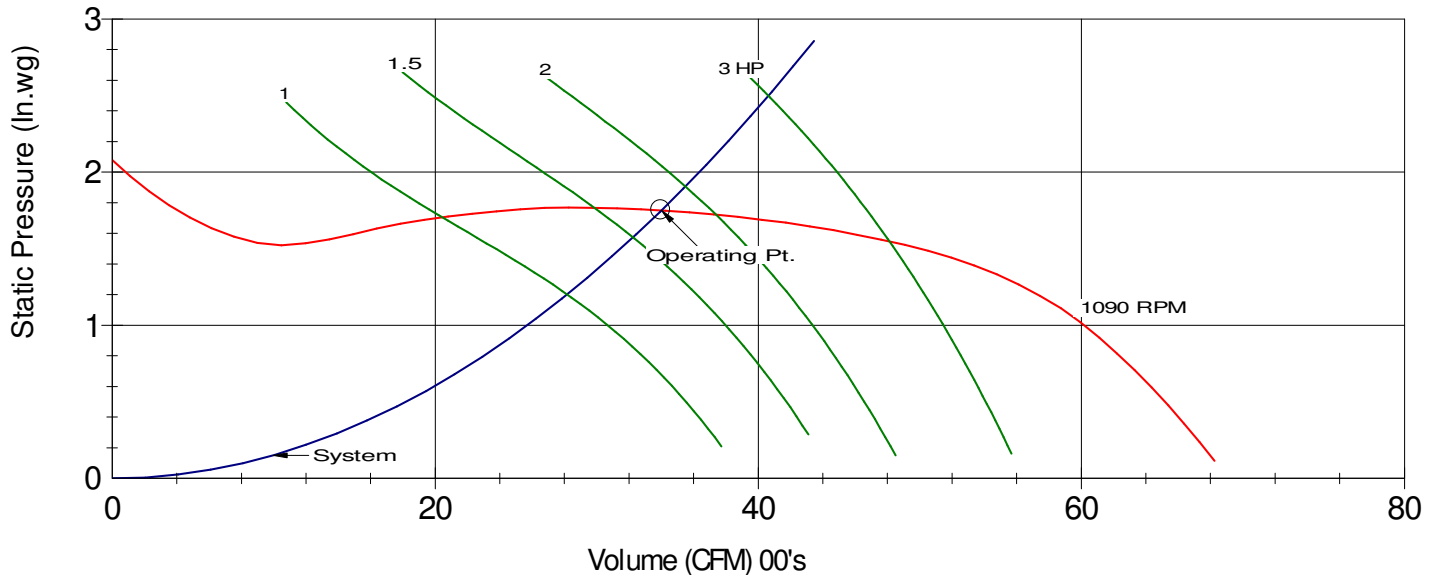
| | | |
|------------|---------------------------|-----------------|
| Model: G12 | Part Number: 9005464 | |
| CFM: 3400 | Shaft Diameter: 0.75 | Unit Weight: 48 |
| SP: 1.75 | Wheel Diameter: 12.875 | Ship Weight: 52 |
| RPM: 1090 | Tip Speed: 3674 FPM | |
| BHP: 1.78 | Static Efficiency: 53 | Elevation: 0 |
| | Outlet Velocity: 2332 FPM | Temperature: 70 |

Sound Data

| | | | | | | | | | | |
|---|--|-----|-----|-----|------|---|------|------|------|-------------|
| | 63 | 125 | 250 | 500 | 1000 | 2000 | 4000 | 8000 | (Hz) | LwA: 86 |
| Sound Power Level @ Frequency, re: 10 ⁻¹² Watts | 89 | 92 | 87 | 83 | 77 | 77 | 74 | 71 | (dB) | SONES: 25.7 |
| | Ducted inlet <u>or</u> ducted outlet dBA @5 ft. 75 | | | | | Ducted inlet <u>and</u> ducted outlet dBA @5 ft. 55 | | | | |

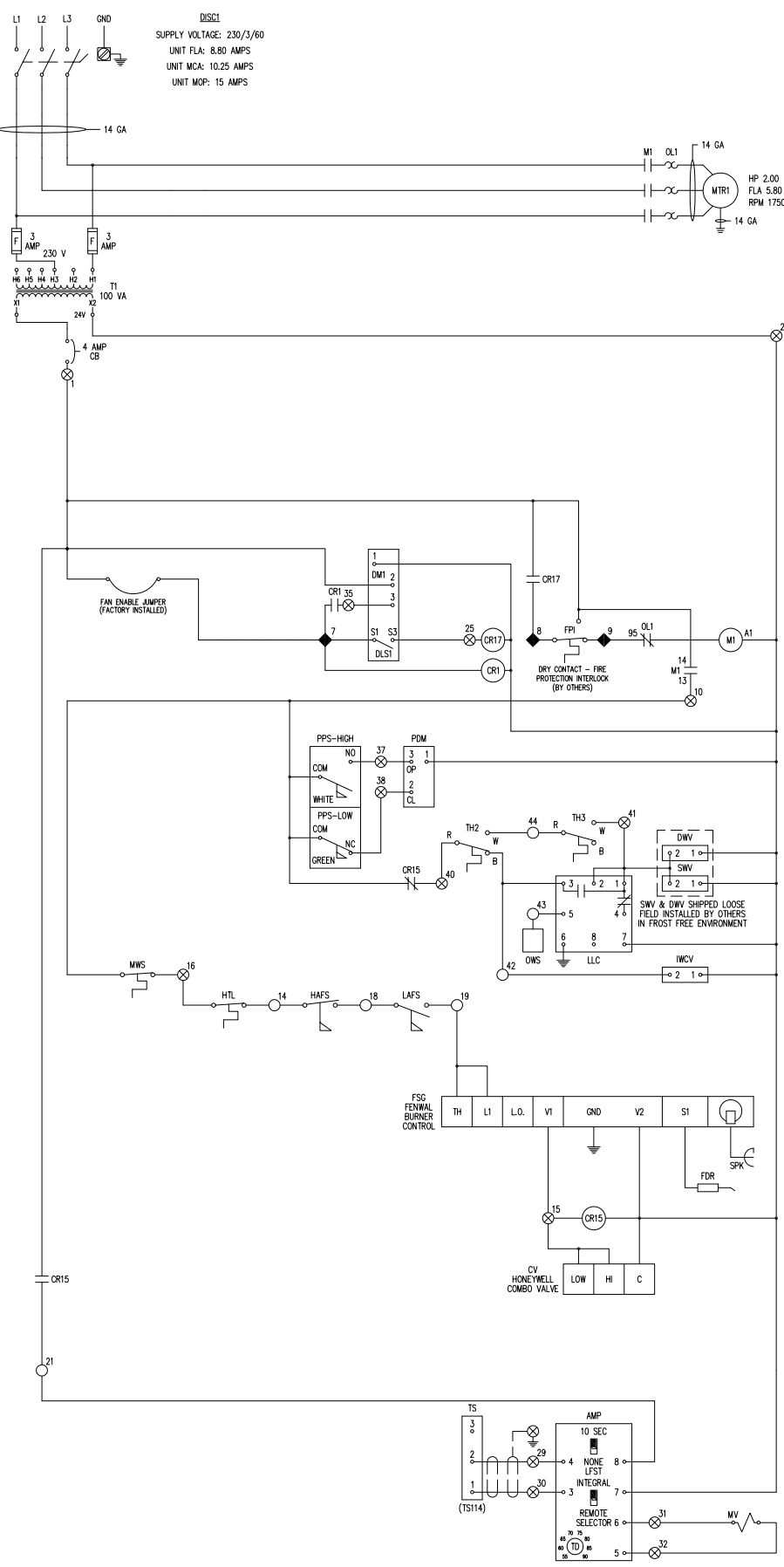
Performance Curve

DELHI Model G12
CFM=3400 SP=1.75 BHP=1.78 S. Eff=53% RPM=1090



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 (O.W.S.)
- 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) |
| - | - |
| - | - |
| - | - |
| - | - |

REVISIONS

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

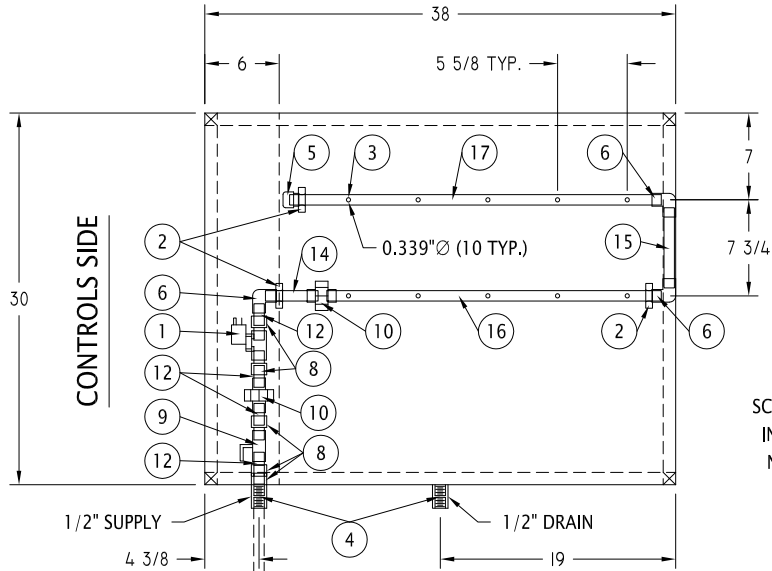


PROJECT INFORMATION

| | |
|---------------|-------------------|
| PROJECT NAME: | - |
| MODEL NO.: | T2-HOXEWN |
| SERIAL NO.: | - |
| TAG: | - |
| DATE: | 06-2020 |
| SCALE: | NONE |
| DRAWN BY: | BMA |
| DRAWING NO.: | T2-EVN-3400-230-3 |

EVN2 w/F&D VALVES (LH) – EVAP. PIPING SCHEMATIC

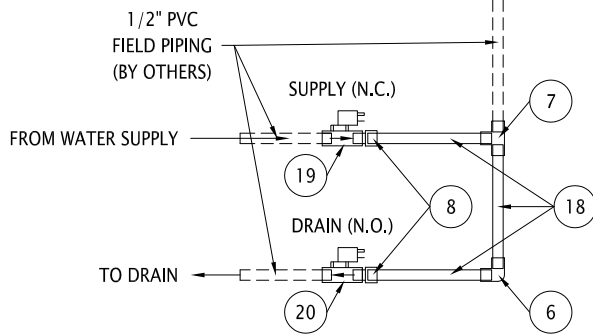
PLEASE NOTE
LEFT HAND (LH)
CONTROLS



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

ROOF LINE

ROOF LINE



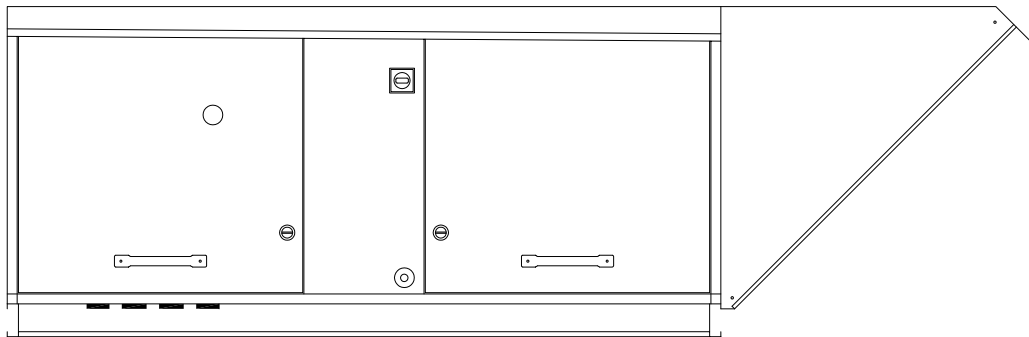
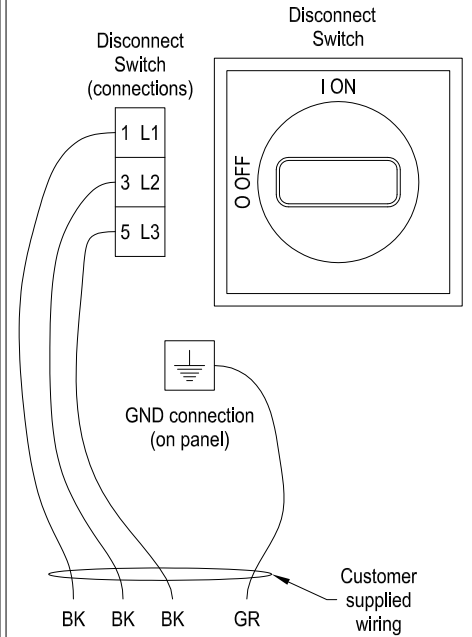
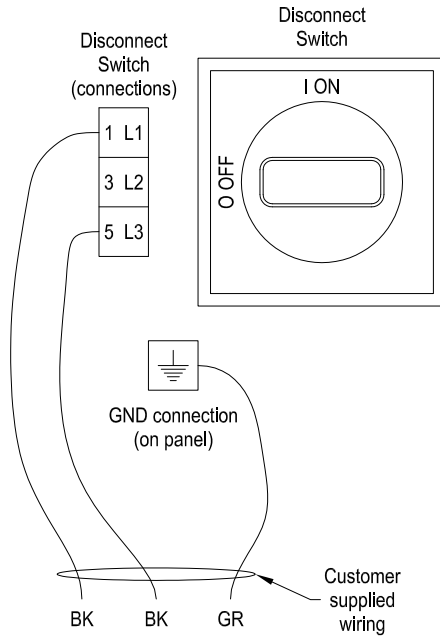
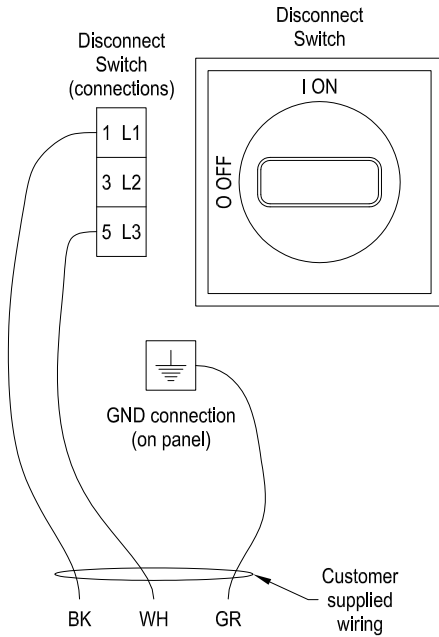
PLEASE NOTE
SUPPLY & DRAIN WATER VALVES SHIPPED LOOSE
INSTALL IN A FROST FREE ENVIRONMENT

| ITEM | QTY. | DESCRIPTION OF PART |
|------|------|---|
| 1 | 1 | INTERNAL WATER CONTROL VALVE (N.C.) |
| 2 | 3 | 1/2" PIPE GROMMET |
| 3 | 10 | 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 6-1/2" |
| 16 | 1 | 1/2" PVC PIPE x 27" (with holes) |
| 17 | 1 | 1/2" PVC PIPE x 29-7/8" (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

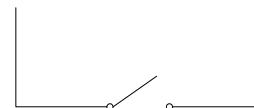


Power Connection
(see above for details)

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