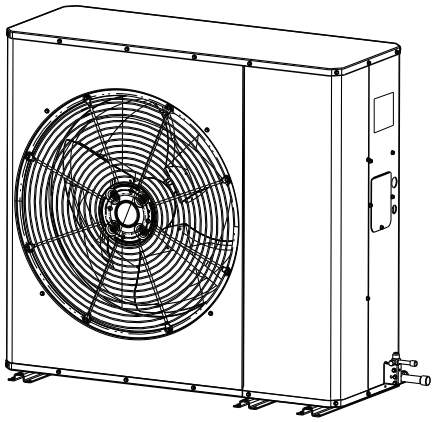
Product Data

Variable Speed
ComfortLink™ II
Side Discharge Heat Pump

For coastal applications where units are installed within one (1) mile of salt water, epoxy coated models are recommended. These models have an 8 week lead time after order.

	Epoxy Coated Model
4TWL9024A1000B	4TWL9024A1COTB
4TWL9036A1000B	4TWL9036A1COTB
4TWL9048A1000B	4TWL9048A1COTB
4TWL9060A1000B	4TWL9060A1COTB



Note: *"Graphics in this document are for representation only. Actual model may differ in appearance."*

October 2021

22-1940-1D-EN

Mechanical Specification Options

General

The outdoor condensing units are factory charged with the system charge required for the outdoor condensing unit, ten (10) feet of tested connecting line, and the smallest rated indoor evaporative coil match. This unit is designed to operate at outdoor ambient temperatures from 55° F to 120° F in cooling. From —10° F to 66° F in heating. Only AHRI approved indoor matches are approved for use with these models.

This outdoor unit contains the ComfortLink™ II digital communication with 2 wire connection to outdoor and Plug-n-Play set up.

Casing

Unit is painted with a glossy corrosion resistant finish on all panels.

Refrigerant Controls

Refrigeration system controls include condenser fan, high and low pressure switches. A factory supplied, field installed filter drier is standard.

Compressor

Output Capacity by Tonnage	
024, 036	50 to 100%
048	35 to 100%
060	30 to 100%

Noise enclosure minimizes sound levels and built in compressor protection will reduce operating speed and current draw to maintain operation while protecting the compressor.

Condenser Coil

The copper tube, aluminum fin outdoor coil provides low airflow resistance and efficient heat transfer. The coil is protected by a wire guard.

Low Ambient Cooling

As manufactured, this system has built in freeze protection that will allow cooling operation down to 45°F but will reduce capacity or shut down completely to prevent operation under adverse conditions.

Comfort Control

The 1050/950/850 Control is required and provides Plug-n-Play setup and 3 wire connection.

Product Specifications

OUTDOOR UNIT [a] [b]	4TWL9024A1XXXB	4TWL9036A1XXXB
POWER CONNS. — V/PH/HZ [c]	208–230/1/60	208–230/1/60
MIN. BRCH. CIR. AMPACITY	19.1	26.9
BR. CIR. PROT. RTG. — MAX. (AMPS)	25	30
COMPRESSOR	CLIMATUFF®- SCROLL	CLIMATUFF®- SCROLL
NO. USED — NO. STAGES	1 — Variable	1 — Variable
VOLTS/PH/HZ	208–230/1/60	208–230/1/60
R.L. AMPS [d] / L.R. AMPS	8.5 / 48.9	12.4 / 48.9
FACTORY INSTALLED		
START COMPONENTS	NO	NO
INSULATION/SOUND BLANKET	YES	YES
SUMP HEAT	YES	YES
OUTDOOR FAN	PROPELLER	PROPELLER
DIA. (IN.) — NO. USED	27.5 – 1	27.5 — 1
TYPE DRIVE — NO. SPEEDS	DIRECT — VARIABLE	DIRECT — VARIABLE
CFM @ 0.0 IN. W.G. [e]	2400	2400
NO. MOTORS — HP	1 — 1/2	1 — 1/2
MOTOR SPEED R.P.M.	200–1050	200–1050
VOLTS/PH/HZ	325–385 VDC/3/60	325–385 VDC/3/60
F.L. AMPS	2.3	2.3
OUTDOOR COIL — TYPE	PLATE FIN	PLATE FIN
ROWS — F.P.I.	1 — 16	2 — 16
FACE AREA (SQ. FT.)	12.88	12.88
TUBE SIZE (IN.)	5/16	5/16
REFRIGERANT		
LBS. — R-410A (O.D. UNIT) [f]	6LBS., 8 OZ	8 LBS, 0 OZ
FACTORY SUPPLIED	YES	YES
LINE SIZE — IN. O.D. GAS [g]	5/8	3/4
LINE SIZE — IN. O.D. LIQ.	3/8	3/8
CHARGING SPECIFICATIONS		
SUBCOOLING COOLING MODE	10°F	10° F
DIMENSIONS	H X W X D	H X W X D
CRATED (IN.)	42 x 56 x 24	42 x 56 x 24
UNCRATED (IN.)	36–3/4 X 47 X 17–1/2	36–3/4 X 47 X 17–1/2
WEIGHT		
SHIPPING (LBS.)	229	250
NET (LBS.)	204	226

[a] Certified in accordance with the Air-Source Unitary Air-conditioner Equipment certification program, which is based on AHRI standard 210/240.

[b] Rated in accordance with AHRI standard 275.

[c] Calculated in accordance with Natl. Elec. Codes. Use only HACR circuit breakers or fuses.

[d] This value shown for compressor RLA on the unit nameplate and on this specification sheet is used to compute minimum branch circuit ampacity and max. fuse size. The value shown is the branch circuit selection current.

[e] Standard Air — Dry Coil — Outdoor

[f] This value approximate. For more precise value see unit nameplate.

[g] Reference the outdoor unit ship-with literature for refrigerant piping length and lift guidelines. Reference the refrigerant piping software pub # 32-3312-xx or refrigerant piping application guide SS-APG006-xx for long line sets or specialty applications (xx denotes latest revision).

Product Specifications

OUTDOOR UNIT [a] [b]	4TWL9048A1XXXB	4TWL9060A1XXXB
POWER CONNS. — V/PH/HZ [c]	208–230/1/60	208–230/1/60
MIN. BRCH. CIR. AMPACITY	31.8	36.1
BR. CIR. PROT. RTG. — MAX. (AMPS)	35	40
COMPRESSOR	CLIMATUFF®- SCROLL	CLIMATUFF®- SCROLL
NO. USED — NO. STAGES	1 — Variable	1 — Variable
VOLTS/PH/HZ	208–230/1/60	208–230/1/60
R.L. AMPS [d] / L.R. AMPS	12.4 / 48.9	12.4 / 48.9
FACTORY INSTALLED		
START COMPONENTS	NO	NO
INSULATION/SOUND BLANKET	YES	YES
SUMP HEAT	YES	YES
OUTDOOR FAN	PROPELLER	PROPELLER
DIA. (IN.) — NO. USED	27.5 — 1	27.5 — 1
TYPE DRIVE — NO. SPEEDS	DIRECT — VARIABLE	DIRECT — VARIABLE
CFM @ 0.0 IN. W.G. [e]	3500	4000
NO. MOTORS — HP	1 — 1/2	1 — 1/2
MOTOR SPEED R.P.M.	200–1050	200–1050
VOLTS/PH/HZ	325–385 VDC/3/60	325–385 VDC/3/60
F.L. AMPS	2.3	2.3
OUTDOOR COIL — TYPE	PLATE FIN	PLATE FIN
ROWS — F.P.I.	2 — 16	2 — 16
FACE AREA (SQ. FT.)	15.02	15.02
TUBE SIZE (IN.)	5/16	5/16
REFRIGERANT		
LBS. — R-410A (O.D. UNIT) [f]	9 LBS, 0 OZ.	9 LBS, 0 OZ.
FACTORY SUPPLIED	YES	YES
LINE SIZE — IN. O.D. GAS	7/8	7/8[g]
LINE SIZE — IN. O.D. LIQ. [h]	3/8	3/8
CHARGING SPECIFICATIONS		
SUBCOOLING COOLING MODE	10° F	10°F
DIMENSIONS	H X W X D	H X W X D
CRATED (IN.)	48 x 56 x 24	48 x 56 x 24
UNCRATED (IN.)	42–3/4 X 47 X 17–1/2	42–3/4 X 47 X 17–1/2
WEIGHT		
SHIPPING (LBS.)	269	269
NET (LBS.)	245	245

[a] Certified in accordance with the Air-Source Unitary Air-conditioner Equipment certification program, which is based on AHRI standard 210/240.

[b] Rated in accordance with AHRI standard 275.

[c] Calculated in accordance with Natl. Elec. Codes. Use only HACR circuit breakers or fuses.

[d] This value shown for compressor RLA on the unit nameplate and on this specification sheet is used to compute minimum branch circuit ampacity and max. fuse size. The value shown is the branch circuit selection current.

[e] Standard Air — Dry Coil — Outdoor

[f] This value approximate. For more precise value see unit nameplate.

[g] Max. linear length 150 ft.; Max. lift — Suction 50 ft.; Max. lift — Liquid 50 ft.

[h] Reference the outdoor unit ship-with literature for refrigerant piping length and lift guidelines. Reference the refrigerant piping software pub # 32-3312-xx or refrigerant piping application guide SS-APG006-xx for long line sets or specialty applications (xx denotes latest revision).

Sound Pressure Level

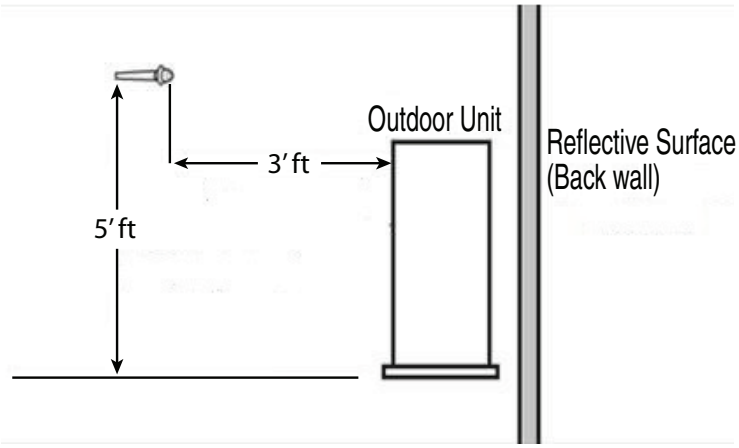


Table 1. 2.0 Ton Heating

Sound Pressure Level dB(A) per ARI 275 (Max Heating)			
# Reflective Surfaces	3′ from Property Line	5′ from Property Line	7′ from Property Line
0	46	41	
1	49[a]	44	
2	52	47	44

[a] Lab tested as per the illustration shown above

Table 2. 2.0 Ton Cooling

Sound Pressure Level dB(A) per ARI 275 (Max Cooling)			
# Reflective Surfaces	3′ from Property Line	5′ from Property Line	7′ from Property Line
0	47	42	
1	50[a]	45	
2	53	48	45

[a] Lab tested as per the illustration shown above

Table 3. 3.0 Ton Heating

Sound Pressure Level dB(A) per ARI 275 (Max Heating)			
# Reflective Surfaces	3′ from Property Line	5′ from Property Line	7′ from Property Line
0	46	41	
1	49[a]	44	
2	52	47	44

[a] Lab tested as per the illustration shown above

Table 4. 3.0 Ton Cooling

Sound Pressure Level dB(A) per ARI 275 (Max Cooling)			
# Reflective Surfaces	3′ from Property Line	5′ from Property Line	7′ from Property Line
0	45		
1	48[a]	43	
2	51	46	43

[a] Lab tested as per the illustration shown above

Sound Pressure Level

Table 5. 4.0 Ton Heating

Sound Pressure Level dB(A) per ARI 275 (Max Heating)				
# Reflective Surfaces	3′ from Property Line	5′ from Property Line	7′ from Property Line	9′ from Property Line
0	49	44		
1	52[a]	47	44	
2	55	50	47	45

[a] Lab tested as per the illustration shown above

Table 6. 4.0 Ton Cooling

Sound Pressure Level dB(A) per ARI 275 (Max Cooling)					
# Reflective Surfaces	3′ from Property Line	5′ from Property Line	7′ from Property Line	9′ from Property Line	15′ from Property Line
0	51	46	43		
1	54[a]	49	46	44	
2	57	52	49	47	43

[a] Lab tested as per the illustration shown above

Table 7. 5.0 Ton Heating

Sound Pressure Level dB(A) per ARI 275 (Max Heating)						
# Reflective Surfaces	3′ from Property Line	5′ from Property Line	7′ from Property Line	9′ from Property Line	15′ from Property Line	20′ from Property Line
0	54	49	46	44		
1	57[a]	52	49	47	43	
2	60	55	52	50	46	43

[a] Lab tested as per the illustration shown above

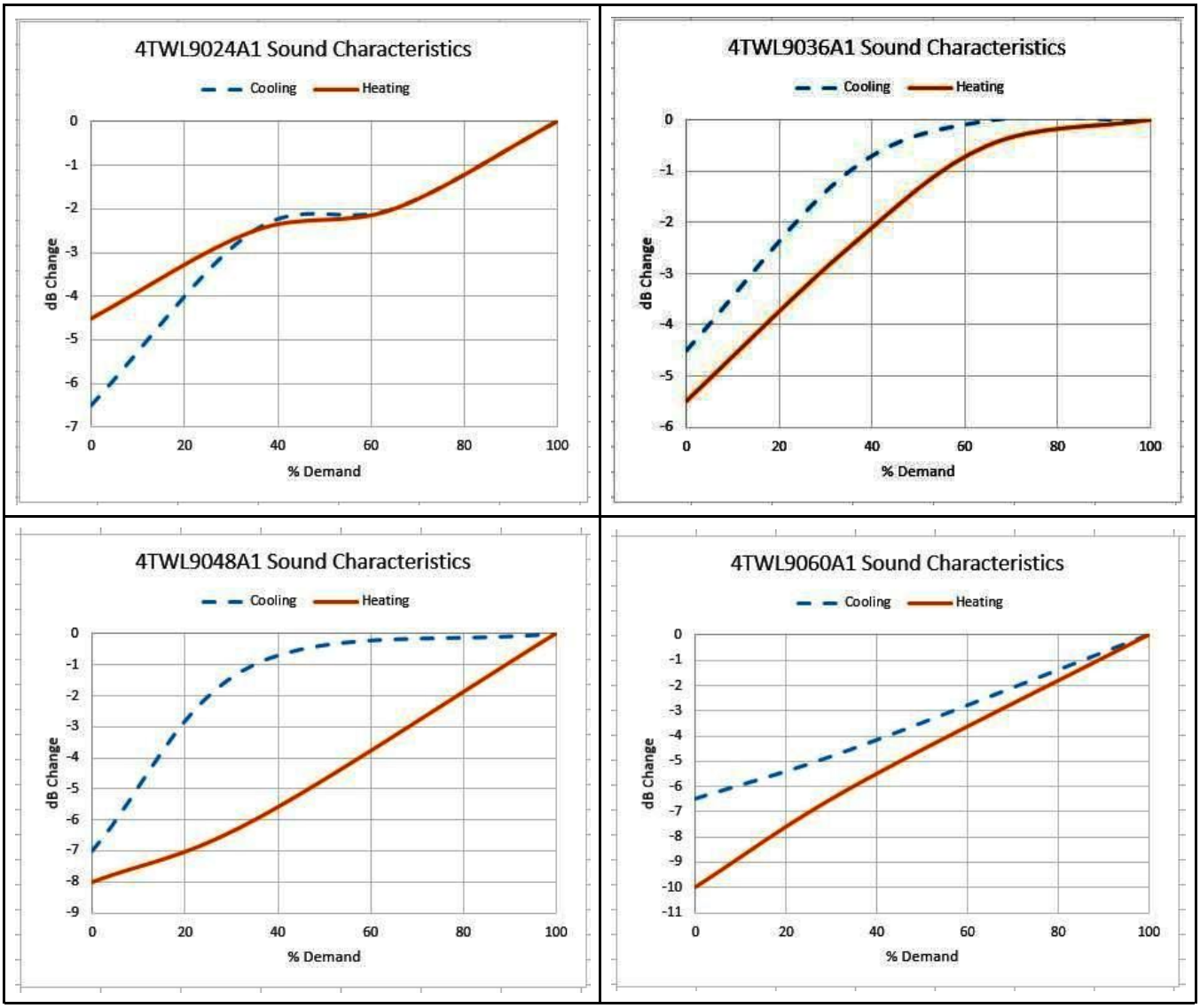
Table 8. 5.0 Ton Cooling

Sound Pressure Level dB(A) per ARI 275 (Max Cooling)					
# Reflective Surfaces	3′ from Property Line	5′ from Property Line	7′ from Property Line	9′ from Property Line	15′ from Property Line
0	53	48	45		
1	56[a]	51	48	46	42
2	59	54	51	49	45

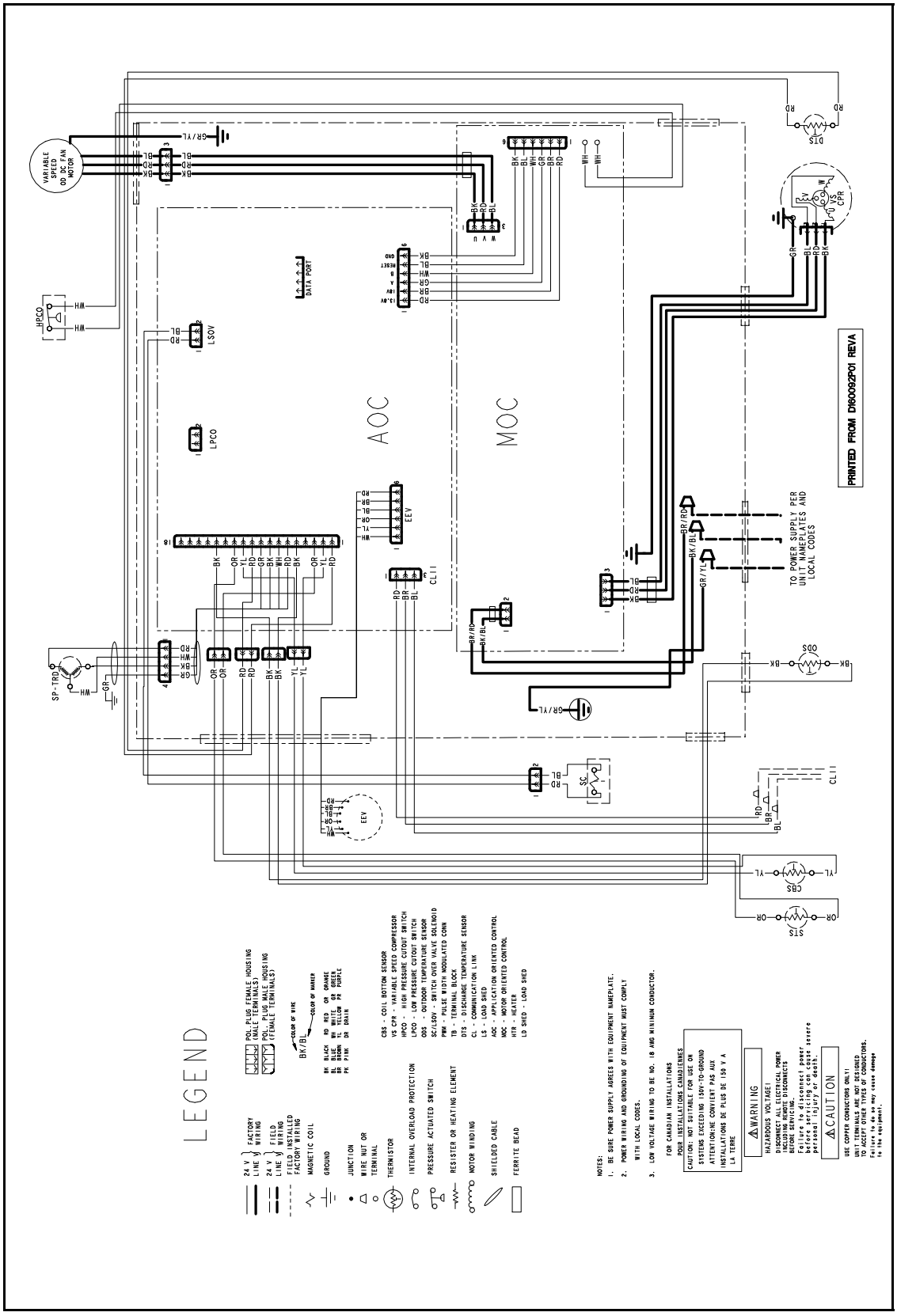
[a] Lab tested as per the illustration shown above

Notes:

- *Measuring place: Hemi-Anechoic chamber*
- *Sound pressure level will vary depending on a range of factors such as the construction of the particular room where the equipment is installed.*
- *Operation sound level may differ depending on operation and ambient conditions.*


4TWL9024A1 Sound Characteristics
Cooling
Heating
dB Change
0
-1
-2
-3
-4
-5
-6
-7
0
20
40
60
80
100
% Demand
4TWL9036A1 Sound Characteristics
Cooling
Heating
dB Change
0
-1
-2
-3
-4
-5
-6
0
20
40
60
80
100
% Demand
4TWL9048A1 Sound Characteristics
Cooling
Heating
dB Change
0
-1
-2
-3
-4
-5
-6
-7
-8
-9
0
20
40
60
80
100
% Demand
4TWL9060A1 Sound Characteristics
Cooling
Heating
dB Change
0
-1
-2
-3
-4
-5
-6
-7
-8
-9
-10
-11
0
20
40
60
80
100
% Demand

Wiring


LEGEND
NOTES:
1. BE SURE POWER SUPPLY AGREES WITH EQUIPMENT NAMEPLATE.
2. POWER WIRING AND GROUNDING OF EQUIPMENT MUST COMPLY WITH LOCAL CODES.
3. LOW VOLTAGE WIRING TO BE NO. 18 AWG MINIMUM CONDUCTOR.
FOR CANADIAN INSTALLATIONS
POUR INSTALLATIONS CANADIENNES
CAUTION: NOT SUITABLE FOR USE ON SYSTEMS EXCEEDING 150V-TO-GROUND
ATTENTION:NE CONVIENT PAS AUX INSTALLATIONS DE PLUS DE 150 V A LA TERRE
WARNING
HAZARDOUS VOLTAGE!
DISCONNECT ALL ELECTRICAL POWER INCLUDING REMOTE DISCONNECTS BEFORE SERVICING.
Failure to disconnect power before servicing can cause severe personal injury or death.
CAUTION
USE COPPER CONDUCTORS ONLY!
UNIT TERMINALS ARE NOT DESIGNED TO ACCEPT OTHER TYPES OF CONDUCTORS.
Failure to do so may cause damage to the equipment.
AOC
MOC
PRINTED FROM D160092P01 REVA
TO POWER SUPPLY PER UNIT NAMEPLATES AND LOCAL CODES
VARIABLE SPEED 2D DC FAN MOTOR
DATA PORT
LPCO
LSOV
EEV
CLII
DTS
ODS
CRS
STS
VS CPR

Notes

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The AHRI Certified mark indicates Trane U.S. Inc. participation in the AHRI Certification program. For verification of individual certified products, go to ahridirectory. org.

Trane has a policy of continuous data improvement and it reserves the right to change design and specifications without notice. We are committed to using environmentally conscious print practices.

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Supersedes 22-1940-1C-EN (March 2020)