NOTES:

1.0 CONTACT INFORMATION AVAILABLE AT: CONSIDERED BLEECKER STREET, JERSEY CITY, NJ 07309, PHONE 212-969-2000.

1.2 CONTRACT SYMBOLS INCLUDE:

1.2.1 NUMERICAL

1.2.2 LETTER

1.2.3 PICTURE

2.0 INSTRUCTIONS CONCERNING THE INSTALLATION OF THIS UNIT IN A TRAILER OR BOXCAR MUST BE FOLLOWED TO PREVENT DAMAGE TO THE UNIT OR SOCIAL INTEGRITY.

3.0 INSTALLATION:

3.1 UNIT INSTALLATION:

3.2 BATTERY INSTALLATION:

3.3 CHUTE DIMENSIONAL INFORMATION:

3.4 TRAILER OR BOXCAR PREPARATION:

3.5 UNIT INSTALLATION:

3.6 UNIT LIFTING LOCATION:

3.7 BATTERY INSTALLATION:

3.8 CHUTE DIMENSIONAL INFORMATION:

3.9 INSTALLATION:

3.10 DRAWING NO.

4.0 WEIGHTS:

VECTOR NDKA REEFER UNIT (WET, LESS BATTERY): 2132 LBS [967 kg]

BATTERY: 80 LBS [36 kg] MAXIMUM

5.0 UNIT MOUNTING SURFACES OF THE TRAILER OR BOXCAR THAT CONTACT THE UNIT MOUNTING PADS MUST BE UNI-PLANAR TO WITHIN 0.13 [3] TO PREVENT DISTORTION OF THE UNIT AND/OR TRAILER.

6.0 TRAILER OR BOXCAR SURFACES THAT CONTACT THE UNIT MOUNTING GASKET SHOULD NOT PROTRUDE MORE THAN 0.19 [5] ABOVE THE PLANE DEFINED BY THE MOUNTING PAD SURFACES TO ENSURE PROPER AIR SEAL.

5.0 DIMENSIONS SHOWN ARE IN INCHES, WITH THE METRIC CONVERSIONS IN [MILLIMETERS].

6.0 PRE-DELIVERY INSPECTION AND WARRANTY REGISTRATION DOCUMENTS ARE SHIPPED WITH UNIT AND ARE LOCATED IN THE SIDE DOOR POCKET WITH UNIT MANUAL AND SCHEMATIC.
CAUTION: UNIT MOUNTING SURFACES OF TRAILER OR BOXCAR THAT CONTACT THE UNIT MOUNTING GASKET SHOULD NOT PROTRude MORE THAN 0.19" ABOVE THE PLANE DEFINED BY THE MOUNTING PAD SURFACES TO ENSURE PROPER GASKET SEAL.

NOTE: USE CURBSIDE MOUNTING LOCATION. PLUG UNUSED HOLE AFTER INSTALLATION.
BATTERY INSTALLATION INSTRUCTIONS

UNITS SUPPLIED WITH BATTERY INSTALLED
1.0  CUT WIRE TIES THAT HOLD BATTERY CABLES TO EACH OTHER.
2.0  CONNECT RED BATTERY CABLE TO THE POSITIVE (+) BATTERY TERMINAL; CONNECT BLACK CABLE TO THE NEGATIVE (-) BATTERY TERMINAL (USE OF CORROSION INHIBITOR IS RECOMMENDED).
3.0  POSITION TERMINAL COVERS SUPPLIED WITH CABLES OVER TERMINALS.

UNITS SUPPLIED WITHOUT BATTERY INSTALLED
1.0  USE THE FOLLOWING INFORMATION TO CORRECTLY SELECT THE BATTERY PERFORMANCE NEEDED FOR REFRIGERATION UNITS:
GROUP SIZE: GROUP 31
VOLTS: 12 VOLTS DC
AMPERAGE: MINIMUM 700 COLD CRANKING AMPS @ 85°F
MINIMUM 545 COLD CRANKING AMPS @ -20°F
NOTE: WHEN SELECTING A SPECIFIC BRAND OF BATTERY, ALWAYS ENSURE THAT THE BATTERY WHICH IS SELECTED FITS IN THE BATTERY AREA AND THAT IT WILL FIT INTO THE BATTERY CABLE AND TERMINAL COVER PROPERLY. THE BATTERY SHOULD BE TOTAL CRANKING AMPS RATED AT 0°F (0 DEGREES FAHRENHEIT) AND NOT 0°C (0 DEGREES CELSIUS).

FAILURE TO USE THE PROPER BATTERY SIZE WILL RESULT IN REDUCED BATTERY LIFE AND A NO-START CONDITION. THE RECOMMENDED MAXIMUM BATTERY WEIGHT IS 80 LBS.
2.0  CUT WIRE TIE HOLDING THESE PARTS TO THE FRAME AND REMOVE PARTS.
PLACE BATTERY IN TRAY WITH POSITIVE (+) TERMINAL TO THE REAR OF THE UNIT (AS SHOWN). CONNECT BATTERY CABLES (THE USE OF A CORROSION INHIBITOR ON THE TERMINALS IS RECOMMENDED); RED CABLE TO POSITIVE (+) TERMINAL, BLACK CABLE TO THE NEGATIVE (-) TERMINAL. CABLES SHOULD BE ROUTED TOWARD THE COMPRESSOR (AS SHOWN). TIGHTEN TERMINAL CONNECTORS SECURELY.
3.0  INSTALL L-HK (2) AND J-HOOKS AND BOLT J-HOOKS TO THE TRAY. BOLTS HOLD-BACK CHANNEL USING NUTS, PLAIN AND LOCK WASHERS AS SHOWN. SECURELY TIGHTEN THE SCREWS TO PREVENT MOVEMENT OF THE BATTERY.
4.0  POSITION TERMINAL COVERS SUPPLIED WITH CABLES OVER TERMINALS.

SEE NEXT SHEET FOR PICTORIALS OR REFER TO BATTERY INSTALLATION DOCUMENT IN POLY BAG FASTENED TO FRAME RAIL.
NOTE:
1.0 CAUTION: DUE TO DIFFERENT BATTERY MFG. WHEN APPLYING TORQUE TO BATTERY U-BRACKET, MAKE SURE THERE IS NO BATTERY HOUSING DISTORTION OR CRUSHING.
2.0 WHEN INSTALLING POSITIVE BATTERY CABLE TO BATTERY POST ENSURE THERE IS CLEARANCE BETWEEN THE CABLE AND THE FRAME.
3.0 WHEN INSTALLING LEFT J-HOOK INTO L-BRACKET ROTATE OPPOSITE OF RIGHT J-HOOK.

BATTERY INSTALLATION PROCEDURE FOR UNITS SHIPPED WITHOUT BATTERY.

LOCATION STRAPPED TO VERTICAL REAR TUBE NEXT TO BATTERY TRAY AND REMOVE U-BRACKET, L-BRACKETS & MOUNTING HARDWARE.

RIGHT 5/16-18 J HOOK (1 EACH SIDE)
5/16-18 NUT (1 EACH SIDE)
TORQUE TO 5.0 MAX FT-LBS

SEE NOTE 3.0

NEGATIVE TERMINAL (BLACK)
TORQUE TO 19.0#1.0 FT-LBS

POSITIVE TERMINAL (RED)
TORQUE TO 19.0#1.0 FT-LBS

BATTERY CABLE ARRANGEMENT

SECION A-A
BATTERY CABLE ARRANGEMENT
NOTE: BULKHEAD, AIR CHUTE AND TRANSITION DUCT SHOWN ARE OPTIONAL FEATURES FOR BEST AIR CIRCULATION AND PRODUCT PROTECTION. CARRIER TRANSICOLD HIGHLY RECOMMENDS THE USE OF BULKHEADS, AIR CHUTES AND TRANSITION DUCTS. CONTACT YOUR DEALER OR CARRIER TRANSICOLD FOR RECOMMENDATIONS.

MINIMUM FROM BOTTOM EDGE OF EVAPORATOR NOZZLE TO TRANSITION FOR CHUTE.

TRANSITION & CHUTE DETAILS

HARD RECTANGULAR CHUTE MIN. DIMENSIONS

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SOFT CHUTE MINIMUM DIMENSIONS

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TRANSITION DUCT (NOT SUPPLIED)

CHUTE (NOT SUPPLIED)

NOTE: BULKHEAD, AIR CHUTE AND TRANSITION DUCT SHOWN ARE OPTIONAL FEATURES FOR BEST AIR CIRCULATION AND PRODUCT PROTECTION. CARRIER TRANSICOLD HIGHLY RECOMMENDS THE USE OF BULKHEADS, AIR CHUTES AND TRANSITION DUCTS. CONTACT YOUR DEALER OR CARRIER TRANSICOLD FOR RECOMMENDATIONS.
## Electrical Specifications & Minimum Standby Infrastructure

### Carrier Transicold Trailer units equipped with Standby

<table>
<thead>
<tr>
<th>Specification</th>
<th>Vector NDKA</th>
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<tbody>
<tr>
<td>Operating Voltage</td>
<td>460V / 3ph / 60Hz</td>
</tr>
<tr>
<td>Full Load Amp Draw (FLA)</td>
<td>22 A</td>
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<tr>
<td>kVA</td>
<td>18.5</td>
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<tr>
<td>Locked Rotor Amp Draw (LRA)</td>
<td>90 A</td>
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<tr>
<td>Electrical Receptacle (installed on unit)</td>
<td>IEC IP 67 pin &amp; sleeve, 480V, 30A, 4 wire, 3 pole</td>
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<tr>
<td>Receptacle pin</td>
<td>22-04166-01</td>
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<tr>
<td>Phase reversal</td>
<td>Automatic</td>
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</table>

### Standby circuit breaker & cordset specifications

- Standby cable type & gauge (min 50' long, up to 75' long): SOOW, 600V, 90C, 10/4 (3ph + G)
- Recommended external circuit breaker: 30A
- Connector p/n: 22-02944-00

### Minimum Requirements for Standby Infrastructure

1. Ensure that the standby power installation is performed by a licensed electrician who is familiar with both local and national electric codes and requirements.
2. Each refrigeration unit must be protected by an individual circuit breaker sized per the appropriate unit electrical specification listed above.
3. A continuous earthing ground conductor must be provided at the plug and through the power cord to the refrigeration unit.
4. Carrier Transicold recommends that customers establish an Assured Equipment Grounding Conductor Program per the National Electric Code (NEC). Per the Assured Equipment Grounding Conductor Program, the NEC calls for all cordsets to be verified for ground continuity and correct wiring on a 3 month basis.
5. A neutral conductor MUST NOT be connected to the refrigeration units. All Carrier Transicold refrigeration units are balanced three phase systems; therefore, the unit only requires three phase wires and a ground conductor.
6. Standby power cordsets between the circuit breaker and the refrigeration unit MUST be constructed from 10/4 SOOW cable. Carrier recommends a minimum cable length of 50 feet to limit maximum fault currents and prevent damage to the power circuits within the unit.

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**WARNING:**

BE SURE POWER IS DIS-CONNECTED TO CUSTOMER CABLE. READ ENTIRE SUPPLIER DIRECTIONS SUPPLIED WITH PLUG BEFORE STARTING INSTALLATION.
**BOTTOM PANEL INSTALLATION**

**NOTES:**

1. Install (3) Mounting Angles (ITEM #80) and (1) Mounting Angle (ITEM #85) with riveted flange pointing down.

   Secure to frame using supplied screws (ITEM #75), keeping the bottom of the angles flush and parallel to the bottom of the frame.

2. Slide (5) openings in the bottom panel over the (5) rear mounting angles on the frame and secure bottom panel to the other (6) mounting angles using supplied screws (ITEM #75) and washers (ITEM #78).

**OPENING FOR CONDENSATE DRAIN**

**OPENING FOR LIFT GATE**

**BATTERY CABLE**

**OPENING FOR FUEL LINE ROUTING**

**OPENING FOR CONDENSATE DRAIN LINE AND OPTIONAL HARNESS CONNECTIONS**

**TORQUE TO 98 IN-LBS**

**TORQUE TO 6-8 FT-LBS**