

## **DANFOSS LX CONSTANT WATTAGE HEATING CABLE SPECIFICATION FOR INDOOR FLOOR WARMING**

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### **1. GENERAL**

Supply and install a complete system comprised of heating cables, accessories, and controls.

### **2. MATERIAL**

- 2.1. Shall be Danfoss LX twin conductor heating cable.
- 2.2. Shall include 10' factory spliced and sealed cold lead, single point connection.
- 2.3. Conductor: Copper or copper alloy, with tin-nickel coating.
- 2.4. The cable is rated to produce 3 W/ft at 120V or 240V.
- 2.5. Insulation: DuPont FEP insulation with an average thickness not less than 0.35mm.
- 2.6. Shield: Tin-coated drain wire combined with 50 µm aluminium foil coated with 12 µm PBT, 100% coverage.
- 2.7. Jacket: PVC with an average thickness not less than 0.76 mm.
- 2.8. Shall operate on line voltage of (select: 120V, 208-240V).
- 2.9. Shall be approved to applicable UL and CSA standards.

### **3. SYSTEM CONTROLS**

- 3.1. The system temperature shall be controlled by a Danfoss thermostat with a floor or air sensor, or a combination of both.
- 3.2. The thermostat shall incorporate an integral 5mA Class A Ground Fault Circuit Interrupter (GFCI), a temperature set-back option to reduce energy consumption, and a digital readout.
- 3.3. Shall be approved to applicable UL and CSA standards.

## **4. EXECUTION**

### 4.1. Installation

- a. System must be installed per manufacturer's recommendation using method described in installation guide.
- b. Place the heating mats and sensors in the surface material as per the installation guide.
- c. Inspect the cable and controls upon receiving the shipment. Note any damage and ensure materials received match the order and shipping documents.

### 4.2. Tests

- a. Refer to the manufacturer's literature for requirements for testing and documenting cable resistance and insulation-to-ground readings.
- b. Take tests as outlined in the Installation Manual.
- c. If problems are discovered, consult the manufacturer.
- d. If unable to correct problems notify the engineer before proceeding with the installation.
- e. Keep a record of all readings for inspection by the engineer or for submittal to the manufacturer to ensure a valid warranty.

## **5. WARRANTY**

- 5.1. Manufacturer shall offer a 20-year, non-prorated warranty.