

## **ATTACHMENT-A**

### **Heat Trace Tape Technical Ordering Data**

4540-LL-R83-0065 (rev-17 of MIF)

HEAT TRACING STRIP, TAPE, 5 WATT, SELF REGULATING:

SHALL OPERATE WITH 115/120 VOLTS AC, 60 CYCLES, SINGLE PHASE.

HEAT OUTPUT SHALL BE 5 WATTS PER FOOT AT 50 DEGREES F.

MUST BE A FLAT, RIBBON TYPE, TAPE, WITH A MAXIMUM WIDTH OF 1/2 INCH ACROSS OUTER JACKET.

BUSS WIRES SHALL BE A MINIMUM 16 A.W.G. COPPER OR COATED COPPER WIRE.

MUST HAVE A SHIELD OVER THE INNER JACKET MADE OF COPPER OR TINNED COPPER BRAID, 14 A.W.G. EQUIVALENT.

MUST HAVE AN OUTER JACKET OF POLYOLEFIN OR POLYOLEFIN MODIFIED TO MEET THE REQUIREMENTS OF THIS SPECIFICATION AND HAVE A MINIMUM THICKNESS OF .010 INCH.

BOTH INNER AND OUTER JACKETS MUST BE CONTINUOUS WITHOUT NICKS, CUTS, OR CRACKS WHICH EXPOSE THE HEATING CORE.

SELF-REGULATING HEATING CORE MUST HAVE A POSITIVE TEMPERATURE COEFFICIENT WHICH CAUSES ITS RESISTANCE TO INCREASE WITH AN INCREASE IN TEMPERATURE.

MUST BE CAPABLE OF REGULATING AND MAINTAINING A MINIMUM OF 250 LINEAR FEET OF TAPE AT A CONSTANT TEMPERATURE.

MUST BE CAPABLE OF BEING FIELD-CUT TO LENGTH AT ANY POINT WITHOUT CREATING COLD SPOTS.

MUST BE CAPABLE OF BEING OVERLAPPED OR CROSSED AT ALL POWER OUTLETS WITHOUT DAMAGE TO THE HEATER.

SHALL NOT EXCEED 160 DEGREES F WHEN INSTALLED IN ANY AMBIENT TEMPERATURE.

MUST BE SUITABLE FOR HEAVY INDUSTRIAL APPLICATION IN AN OUTDOOR MARINE ENVIRONMENT.

JACKETS MUST BE WATERTIGHT.

TAPE MUST BE CAPABLE OF BEING BENT A MINIMUM OF 180 DEGREES IN A 1-INCH RADIUS AT 10 DEGREES F WITHOUT CRACKING THE INSULATION.

RESISTANCE OF THE INNER AND OUTER JACKETS MUST BE A MINIMUM OF 400 MEGOHMS PER 1000 LINEAR FEET AFTER THE TAPE HAS BEEN IMMersed IN WATER FOR A MINIMUM OF 24 HOURS.

MUST BE CAPABLE OF WITHSTANDING A 2500 VOLT DIELECTRIC TEST FOR A MINIMUM DURATION OF 1 MINUTE AFTER ALL BEND TESTS, ALL WATER IMMERSION TESTS, AND ALL AGING TESTS HAVE BEEN COMPLETED.