SPECIFICATION CONTROL DRAWING

SCD **FLDW+0311**

Title: DUAL WALL HOOKUP WIRE, RADIATION-CROSSLINKED, POLYALKENE-INSULATED, 600 VOLT

Date: 8-6-19

Revision: R

The complete requirements for procuring the wire described herein shall consist of this document and the issue in effect of Raychem Specification WCD 3106, UL Subject 758, Style 3584, File E303150 and carries UL labels to this effect.

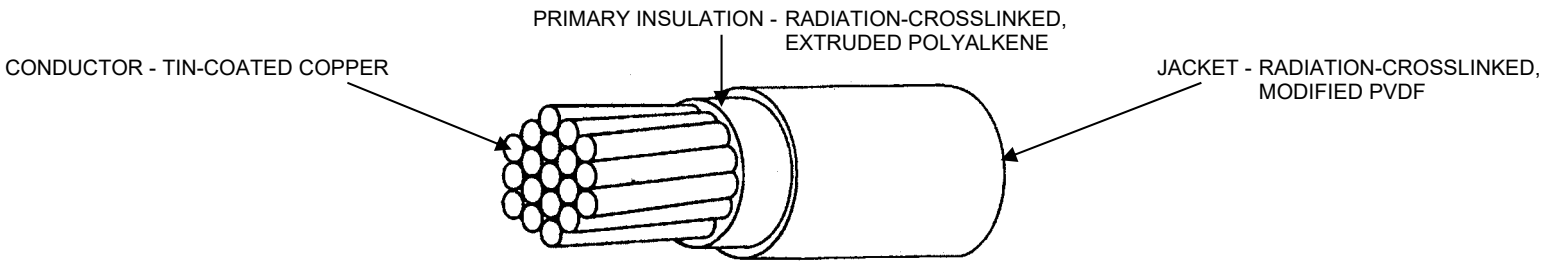

TABLE I. CONSTRUCTION DETAILS

PART NUMBER 1/	WIRE SIZE (AWG)	CONDUCTOR STRANDING (number x AWG)	NOMINAL CONDUCTOR DIAMETER (inch) *(mm)*	FINISHED WIRE				
				MAXIMUM RESISTANCE AT 20°C (ohms/1000 ft.) *(ohms/km)*	DIAMETER (inch) *(mm)*			MAXIMUM WEIGHT (lbs/1000 ft.) *(kg/km)*
					MINIMUM	NOMINAL	MAXIMUM	
FLDWC0311-26-*	26	19 x 38	.019 *(.483)*	45.8 *(150.)*	.038 *(.965)*	.040 *(1.02)*	.042 *(1.07)*	1.6 *(2.38)*
FLDWC0311-24-*	24	19 x 36	.024 *(.610)*	28.7 *(94.2)*	.044 *(1.12)*	.046 *(1.17)*	.048 *(1.22)*	2.4 *(3.57)*
FLDWC0311-22-*	22	19 x 34	.030 *(.762)*	18.1 *(59.4)*	.052 *(1.32)*	.054 *(1.37)*	.056 *(1.42)*	3.5 *(5.21)*
FLDWC0311-20-*	20	19 x 32	.038 *(.965)*	11.4 *(37.4)*	.060 *(1.52)*	.062 *(1.57)*	.064 *(1.63)*	5.1 *(7.59)*
FLDWC0311-18-*	18	19 x 30	.047 *(1.19)*	7.15 *(23.5)*	.070 *(1.78)*	.073 *(1.85)*	.076 *(1.93)*	7.7 *(11.5)*
FLDWC0311-16-*	16	19 x 29	.053 *(1.35)*	4.82 *(15.8)*	.078 *(1.98)*	.081 *(2.06)*	.084 *(2.13)*	9.8 *(14.6)*
FLDWC0311-14-*	14	19 x 27	.066 *(1.68)*	3.05 *(10.0)*	.094 *(2.39)*	.098 *(2.49)*	.102 *(2.59)*	14.7 *(21.9)*
FLDWC0311-12-*	12	19 x 25	.090 *(2.29)*	1.92 *(6.30)*	.118 *(3.00)*	.122 *(3.10)*	.126 *(3.20)*	24.5 *(36.5)*
FLDWD0311-12-*	12	37 x 28	.085 *(2.16)*	2.01 *(6.59)*	.113 *(2.87)*	.117 *(2.97)*	.121 *(3.07)*	22.1 *(32.9)*
FLDWD0311-10-*	10	37 x 26	.107 *(2.72)*	1.26 *(4.13)*	.142 *(3.61)*	.146 *(3.71)*	.150 *(3.81)*	35.6 *(53.0)*
FLDWE0311-8-*	8	133 x 29	.160 *(4.06)*	.701 *(2.30)*	.200 *(5.08)*	.206 *(5.23)*	.212 *(5.38)*	61.8 *(92.0)*

Users should evaluate the suitability of this product for their application. Specifications are subject to change without notice.
TE Connectivity also reserves the right to make changes in materials or processing, which do not affect compliance with any specification, without notification to Buyer.

1/ COLOR CODE DESIGNATORS SHALL BE IN ACCORDANCE WITH MIL-STD-681. OTHER CODES AND SUFFIXES MAY BE ADDED TO THE PART NUMBER, AS NECESSARY, TO CAPTURE ANY ADDITIONAL REQUIREMENTS IMPOSED BY THE PURCHASE ORDER.

DIMENSIONS ARE IN INCHES AND, UNLESS OTHERWISE DESIGNATED, ARE NOMINAL.

THIS SPECIFICATION SHEET TAKES PRECEDENCE OVER DOCUMENTS REFERENCED HEREIN.
REFERENCED DOCUMENTS SHALL BE OF THE ISSUE IN EFFECT ON DATE OF INVITATION FOR BID.

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TABLE II. PERFORMANCE DETAILS		
PART NUMBER 1/	CROSSLINK VERIFICATION - BEND TESTING	
	MANDREL DIAMETER (inch) *(mm)* (± 3%)	WEIGHT (lb) *(kg)* (± 3%)
FLDWC0311-26-*	.500 *(12.7)*	.375 *(.170)*
FLDWC0311-24-*	.500 *(12.7)*	.375 *(.170)*
FLDWC0311-22-*	.750 *(19.1)*	.375 *(.170)*
FLDWC0311-20-*	.750 *(19.1)*	.500 *(.227)*
FLDWC0311-18-*	1.00 *(25.4)*	.500 *(.227)*
FLDWC0311-16-*	1.00 *(25.4)*	1.00 *(.454)*
FLDWC0311-14-*	1.50 *(38.1)*	1.00 *(.454)*
FLDWC0311-12-*	2.00 *(50.8)*	1.50 *(.680)*
FLDWD0311-12-*	2.00 *(50.8)*	1.50 *(.680)*
FLDWD0311-10-*	3.00 *(76.2)*	2.00 *(.907)*
FLDWE0311-8-*	3.00 *(76.2)*	3.00 *(1.36)*

WIRE RATINGS AND ADDITIONAL REQUIREMENTS

TEMPERATURE RATING: 125°C
VOLTAGE RATING: 600 volts (rms) at sea level
CROSSLINK VERIFICATION: 300 ± 3°C for 1 hour
FLAME RATING: VW-1
INSULATION ELONGATION AND TENSILE STRENGTH:
  Primary Insulation,
    Elongation, 150% (minimum)
    Tensile Strength, 2500 lbf/in^2 *(17.2 MPa)* (minimum)
INSULATION FLAWS:
  Finished Wire,
    Spark Test, 6.0 kV (rms)
    Impulse Dielectric Test, 8.0 kV (peak)
INSULATION THICKNESS:
  Primary Insulation,
    .004 inch *(.102 mm)* (minimum), .005 inch *(.127 mm)* (minimum average)
  Jacket, .002 inch *(.051 mm)* (minimum) for AWGs 12 and smaller
  Jacket, .004 inch *(.102 mm)* (minimum) for AWGs 10 and larger
SHRINKAGE: 125°C for 1 hour, 0.125 in. *(3.18 mm)* (maximum) per end

THERMAL STABILITY: 158°C for 168 hours
  Elongation Retention, 70% (minimum)
  Tensile Strength Retention, 70% (minimum)
VOLTAGE WITHSTAND (Post Environmental): 2500 volts (rms), 60 Hz, 5 minutes

1/ PART NUMBER:
The "+" in the part number in the upper right hand corner of pages 1 and 2 shall be replaced with a letter designator to define conductor stranding (see part numbers in Tables I and II).
C = 19 Strands D = 37 Strands E = Rope Lay

The "*" in the part numbers in Tables I and II shall be replaced by a color code designator.
Example: AWG 18, 19 strands, white: FLDWC0311-18-9
AWG 18, 19 strands, white with a black stripe: FLDWC0311-18-90

All spool/reel labels shall include the following: "Reinforced Insulation"

1/ See footer section on page 1