

# SPECIFICATION CONTROL DRAWING

**55AC1833**

TITLE THREE CONDUCTOR CABLE, SHIELDED, JACKETED, GENERAL PURPOSE, 600 VOLT

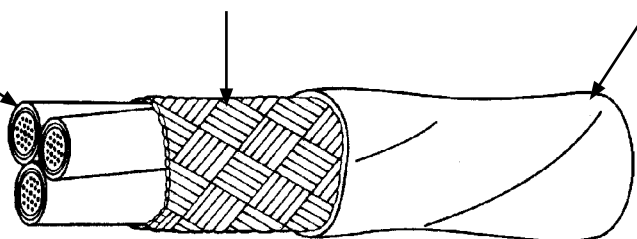
Date 2-6-13

Revision A

This specification sheet forms a part of the latest issue of Raychem Specification 55A.

COMPONENT WIRES - 55A0813

SHIELD - NICKEL-COATED COPPER

JACKET - RADIATION-CROSSLINKED,  
MODIFIED ETFE

## CABLE CONSTRUCTION DETAILS

| PART NUMBER<br>1/ | CONDUCTOR<br>SIZE<br>(AWG) | SHIELD<br>SIZE<br>(AWG) | JACKET THICKNESS<br>(inches) |         | OUTSIDE DIAMETER<br>(inches) |         | MAXIMUM<br>WEIGHT<br>(lbs/1000 ft.) |
|-------------------|----------------------------|-------------------------|------------------------------|---------|------------------------------|---------|-------------------------------------|
|                   |                            |                         | MINIMUM                      | NOMINAL | NOMINAL                      | MAXIMUM |                                     |
| 55AC1833-26-*     | 26                         | 38                      | .006                         | .008    | .119                         | .125    | 12.6                                |
| 55AC1833-24-*     | 24                         | 38                      | .006                         | .008    | .130                         | .137    | 15.2                                |
| 55AC1833-22-*     | 22                         | 38                      | .006                         | .008    | .141                         | .150    | 18.9                                |
| 55AC1833-20-*     | 20                         | 38                      | .006                         | .008    | .158                         | .167    | 25.0                                |
| 55AC1833-18-*     | 18                         | 38                      | .006                         | .008    | .184                         | .193    | 34.3                                |
| 55AC1833-16-*     | 16                         | 38                      | .006                         | .008    | .199                         | .212    | 41.5                                |
| 55AC1833-14-*     | 14                         | 38                      | .007                         | .009    | .238                         | .252    | 60.6                                |
| 55AC1833-12-*     | 12                         | 38                      | .007                         | .009    | .275                         | .291    | 85.0                                |
| 55AC1833-10-*     | 10                         | 38                      | .008                         | .010    | .326                         | .348    | 126.                                |
| 55AC1833-8-*      | 8                          | 36                      | .009                         | .011    | .464                         | .487    | 238.                                |
| 55AC1833-6-*      | 6                          | 34                      | .010                         | .012    | .571                         | .602    | 359.                                |

## CABLE RATINGS AND ADDITIONAL REQUIREMENTS

### TEMPERATURE RATING: 200°C

Maximum continuous conductor temperature

VOLTAGE RATING: 600 volts (rms) at sea level

ACCELERATED AGING: 300 ± 3°C for 7 hours

BLOCKING: 200 ± 3°C for 6 hours

DIELECTRIC WITHSTAND: 1500 volts (rms), 60 Hz

FLAMMABILITY (Procedure 1): 3 seconds (maximum);

3 in. (maximum); no flaming of facial tissue

JACKET COLOR: White preferred

JACKET ELONGATION AND TENSILE STRENGTH:

Elongation, 50% (minimum)

Tensile Strength, 5000 lbf/in<sup>2</sup> (minimum)

JACKET FLAWS:

Spark Test, 1000 volts (rms)

Impulse Dielectric Test, 6.0 kV (peak)

LIFE CYCLE: 230 ± 3°C for 500 hours

LOW TEMPERATURE-COLD BEND: -65 ± 2°C for 4 hours

SHIELD COVERAGE: 90% (minimum)

VOLTAGE WITHSTAND (Post Environmental):

1000 volts (rms), 60 Hz, 1 minute

### PART NUMBER:

The "\*" in the part numbers above shall be replaced by color code designators with a slash separating the component wire colors and a dash separating the component wire colors from the jacket color. Colors shown do not necessarily reflect the sequence of manufacturing.

1/ Example: AWG 20, black, brown and red component wires;  
white jacket: 55AC1833-20-0/1/2-9

NOTE: Nominal values are for information only.  
Nominal values are not requirements.

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

1/ COLORS AND COLOR CODE DESIGNATORS SHALL BE IN ACCORDANCE WITH MIL-STD-681. HOWEVER, DUE TO LENGTH LIMITATIONS OF THE RAYCHEM PART NUMBER, AN ALTERNATIVE COLOR CODE MAY REPLACE MIL-STD-681 COLOR CODE DESIGNATORS. (EXAMPLE: "901/902..." MAY BE REPLACED BY "Axxx".) OTHER CODES AND SUFFIXES MAY BE ADDED TO THE PART NUMBER AS NECESSARY, TO CAPTURE ANY ADDITIONAL REQUIREMENTS IMPOSED BY THE PURCHASE ORDER.