



**Product:** [28643CZ](#)

TC XLPE/PVC, 2+G C #10+10 Str BC, XLPE Ins E2, Blk PVC Jkt, 600V  
TC-ER 90C Dry/Wet SUN RES DIR BUR

## Product Description

UL Type TC (1277) XLPE/PVC, 2+G Conductor 10+10AWG (7x18) Bare Copper, XLPE Insulation E2 Color Code, Black PVC Outer Jacket, 600V TC-ER 90C Dry/Wet SUN RES DIR BUR

## Technical Specifications

### Physical Characteristics (Overall)

#### Conductor

Element	AWG	Stranding	Material	No. of Conductors
Conductor(s)	10	7x18	BC - Bare Copper	2
Ground	10	7x18	BC - Bare Copper	1

Conductor Count:	2
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#### Insulation

Material	Nominal Diameter
XLP, XLPO, XLPE (Thermoset)	0.174 in
XLP, XLPO, XLPE (Thermoset)	

#### Color Chart

Number	Color
1	Black
2	Red
3	Green

#### Outer Jacket

Material	Nominal Diameter	Nominal Wall Thickness
PVC - Polyvinyl Chloride	0.468 in	0.047 in

### Electrical Characteristics

#### Conductor DCR

Nominal Conductor DCR
1.04 Ohm/1000ft

#### Current

Max. Recommended Current [A]
40 Amps per Conductor at 30°C

#### Voltage

UL Description	UL Voltage Rating	Voltage Rating [V]
TC-ER	600 V RMS (Type TC)	600 V RMS (Type TC)

### Temperature Range

UL Temp Rating:	90°C Dry, 90°C Wet
Operating Temp Range:	-30°C To +90°C

Wet Temp Range:	-30°C To +90 °C
Dry Temp Range:	-30°C To +90 °C

## Mechanical Characteristics

Min Bend Radius (Overall):	3.744 in
Min. Bend Radius/Minor Axis:	1.87 in

## Standards

NEC/(UL) Compliance:	TC-ER, XHHW-2
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## Applicable Environmental and Other Programs

EU Directive 2000/53/EC (ELV):	Yes
EU Directive 2011/65/EU (RoHS 2):	Yes
EU Directive 2012/19/EU (WEEE):	Yes
EU Directive 2015/863/EU (RoHS 2 amendment):	Yes
EU Directive Compliance:	EU Directive 2003/11/EC (BFR)
EU CE Mark:	Yes
EU RoHS Compliance Date (yyyy-mm-dd):	2005-04-01

## Suitability

Suitability - Burial:	Yes
Suitability - Outdoor:	Yes
Suitability - Sunlight Resistance:	Yes

## Flammability, LSOH, Toxicity Testing

UL Flammability:	UL1685 Vertical Tray Flame Test
UL voltage rating:	600 V RMS (Type TC)

## Part Number

### Variants

Item #	Put-Up Type
28643CZ 0105000	Reel
28643CZ01010000	Reel
48643CZ 0085000	Reel

## History

Update and Revision:	Revision Number: 0.48 Revision Date: 08-27-2021
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