

Part Number: 29522C



600V VFD, (3) 12 AWG (7 x 20) BC+Grd, XLPE/PVC, Dual Cu Tape Shld, TC-ER

Product Description

Three 12 AWG stranded (7x20) bare copper circuit conductors plus three symmetrical ground wires, cross-linked polyethylene insulation, two helical copper tape shields (100% Coverage), PVC jacket.

Technical Specifications

Product Overview

Suitable Applications:	AC Motor drives, VFD, Variable Frequency drives
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Physical Characteristics (Overall)

Conductor

Element	AWG	Stranding	Material	No. of Conductors
	12	7x20	BC - Bare Copper	3
Ground Wire	16	7x24	BC - Bare Copper	3

Conductor Count:	3
AWG Size:	12

Insulation

Material	Nominal Wall Thickness
XLP - Cross Linked Polyolefin	0.031 in

Color Chart

Number	Color
1	Black and Numbered 1
2	Black and Numbered 2
3	Black and Numbered 3

Outer Shield Material

Type	Description	Layer	Material	Coverage [%]
Tape	.002"	1	Spiral Copper	100 %
Tape	.002"	2	Spiral Copper	100 %

Outer Jacket Material

Material	Nominal Diameter	Nominal Wall Thickness
PVC - Polyvinyl Chloride	0.46 in	0.06 in

Construction and Dimensions

Stranding

Lay Length
Y mm

Electrical Characteristics

Conductor DCR

Nominal Conductor DCR
1.6 Ohm/1000ft

Current

Max. Recommended Current [A]

30 Amps per conductor @ 25°C

Voltage

Description	UL Description	UL Voltage Rating	Voltage Rating [V]
CSA AWM I/II A/B	NEC Type TC	600V RMS (NEC Type TC)	1000 V RMS (CSA AWM I/II A/B)
		1000V RMS (WTTC)	

Temperature Range

UL Temp Rating:	90°C Wet/Dry
Operating Temp Range:	-40C To +90C Wet/Dry
Wet Temp Range:	-40°C To +90 °C
Dry Temp Range:	-40°C To +90 °C

Mechanical Characteristics

Bulk Cable Weight:	146 lbs/1000ft
Max Recommended Pulling Tension:	258 lbs
Min Bend Radius/Minor Axis:	4.6 in

Standards

NEC Articles:	336 - ER
NEC/(UL) Specification:	TC-ER, WTTC, XHHW-2 Singles
CSA AWM Specification:	1000 V AWM I/II A/B
PMSHA Specification:	P-07-KA070003-MSHA

Applicable Environmental and Other Programs

EU Directive 2000/53/EC (ELV):	Yes
EU Directive 2003/96/EC (BFR):	Yes
EU Directive 2011/65/EU (ROHS II):	Yes
EU Directive 2012/19/EU (WEEE):	Yes
EU Directive 2015/863/EU:	Yes
EU Directive Compliance:	EU Directive 2003/11/EC (BFR)
EU CE Mark:	Yes
EU RoHS Compliance Date (yyyy-mm-dd):	2007-08-15
CA Prop 65 (CJ for Wire & Cable):	Yes
MII Order #39 (China RoHS):	Yes

Suitability

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

Flammability, LSOH, Toxicity Testing

UL Flammability:	UL1685 UL Loading, VW-1 (Singles)
CSA Flammability:	FT4
IEEE Flammability:	1202

Part Number

Plenum (Y/N):	No
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Variants

Item #	Color
29522C 0105000	BLACK

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