

5kV NONSHIELDED 3/C XLPE TECK90 Armortek™

Medium Voltage Commercial & Industrial Cables



Applications

Three copper conductors, each with a semiconducting conductor shield, high dielectric strength VOLTALENE® TRXLPE insulation, assembled with fillers and a bare copper bonding conductor, binder tape, black inner PVC jacket, aluminum interlocking armour (AIA), and an overall PVC Jacket.

Specifications

CSA- CSA C22.2 No. 131

Ratings

FT4
 -40°C
 Sunlight Resistant
 AG14

CSA- CSA C22.2 No.174

HL

IEEE- IEEE 383

Flame Test

For 90°C continuous, 130°C emergency,
 250°C short-circuit operation.

Options

- Super smooth conductor shield
- Galvanised steel interlocking armour (GSIA)
- Colored outer jacket
- No outer jacket
- Aluminum phase conductor and bonding conductor
- Three bonding conductors
- Fully filled core
- Strandseal®

Design Parameters

CONDUCTOR: Three soft drawn, bare, Class B compact or compressed strand copper conductors per ASTM.

CONDUCTOR SHIELD: Extruded thermosetting semiconducting shield which is free stripping from the conductor and bonded to the insulation.

INSULATION: High dielectric strength tree-retardant crosslinked polyethylene (TRXLPE) VOLTALENE® insulation, exhibiting an optimum balance of mechanical and electrical properties, insuring resistance to treeing.

ASSEMBLY: Three conductors are twisted together with a soft drawn, bare copper bonding conductor and fillers, and covered with a binder tape.

INNER JACKET: Sunlight resistant polyvinyl chloride (PVC) jacket tightly applied over the binder tape.

ARMOUR: Flexible aluminum interlocking armour (AIA) applied over the inner jacket for mechanical protection.

OUTER JACKET: Low-temperature, sunlight-resistant polyvinyl chloride (PVC) jacket applied over the armour.

Installation



In Cable Tray



Conduit in Air



Direct Buried



Underground Duct



Isolated in Air



Wet Locations



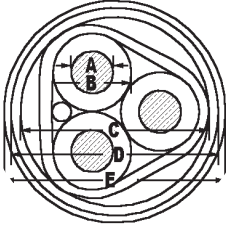
Dry Locations



Industrial

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Product Number	Conductor	Insulation Thickness (mils)	Inner Jacket Thickness (mils)	Conductor Diameter (mm)	Insulation Diameter (mm)	Inner Jacket Diameter (mm)	Armour Diameter (mm)	Overall Diameter (mm)	Cable Weight (kg/km)	Minimum Bending Radius (mm)	†Ampacity (Amps)	**Inductive Reactance (Ω/km)
				(A)	(B)	(C)	(D)	(E)			90°C	90°C
5kV Copper Three Conductor												
Q3261CC	4 AWG CU	90	80	5.41	11.20	28.51	34.10	36.44	1638	305	105	0.13
Q3461CC	2 AWG CU	90	80	6.81	12.60	31.53	37.12	39.46	2134	305	140	0.12
Q3661CC	1 AWG CU	90	80	7.59	13.39	33.23	38.82	41.16	2438	305	160	0.12
Q3861CC	1/0 AWG CU	90	80	8.59	14.38	35.37	40.96	43.75	2864	305	185	0.12
Q3961CC	2/0 AWG CU	90	80	9.60	15.39	37.57	43.15	45.95	3327	305	215	0.11
Q3A61CC	3/0 AWG CU	90	80	10.82	16.61	40.20	46.55	49.34	4107	305	250	0.11
Q3B61CC	4/0 AWG CU	90	80	12.14	17.93	43.05	49.40	52.20	4828	305	285	0.11
Q3C61CC	250 MCM CU	90	110	13.28	19.28	47.48	53.83	56.63	5676	356	320	0.10
Q3D61CC	350 MCM CU	90	110	15.72	21.72	52.75	59.10	62.50	7424	381	395	0.10
Q3E61CC	500 MCM CU	90	110	18.77	24.77	59.33	65.68	69.09	9798	432	485	0.10

PRODUCT NOTES:

[§] Items are Prysmian authorized stock.
The above dimensions are approximate and subject to normal manufacturing tolerances.
All metric (SI) dimensions are derived from a soft conversion.

†Ampacities are based on the following:

Isolated in Air or Uncovered Cable Tray per 2011 NEC Table 310.60(C)(71) and 392.80(B)(1)(b): Three single cables, spaced one cable diameter (minimum) horizontally, 90°C conductor temperature, and 40°C ambient temperature.

**Increase by approximately 15% for steel armoured cables.