



Description

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

Ratings

CSA	CSA C22.2 No. 131	FT4 -40°C Sunlight Resistant AG14
CSA	CSA C22.2 No. 174	HL
IEEE	IEEE 383 Flame Test	
ICEA	ICEA T-29-520	210,000 Btu Vertical Flame Test
ICEA	ICEA T-30-520	70,000 Btu Vertical Flame Test

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



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

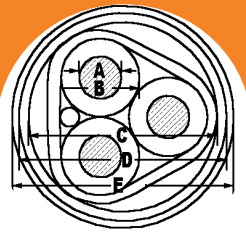
- Low-temperature, sunlight-resistant polyvinyl chloride (PVC) jacket applied over the armour.

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®

Installations

- In Cable Tray
- Conduit in Air
- Direct Buried
- Underground Duct
- Isolated in Air
- Wet Locations
- Dry Locations
- Industrial



NONSHIELDED 3/C XLPE TECK90 Armortek™

5 kV
100% | 133%

Product Number	Conductor	Insulation Thickness (mils)	Inner Jacket Thickness (mils)	Conductor Diameter (mm)		Insulation 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 100%/133% 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			
Q3F61ØC	750 MCM CU	90	110	24.59	30.78	74.01	80.36	84.28	14453	610	615	0.10			
Q3G61ØC	1000 MCM CU	90	140	28.37	34.57	82.19	88.54	92.45	18437	610	705	0.09			

†Ampacities are based on the following:

Information Subject to Change without Notice.

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.

Isolated in Air or Uncovered Cable Tray: Single three-conductor cable, spaced one cable diameter (minimum) horizontally, 90°C conductor temperature, and 40°C ambient temperature.

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

