



Caledonian

Airport Flame Retardant And Fire Resistant Cables

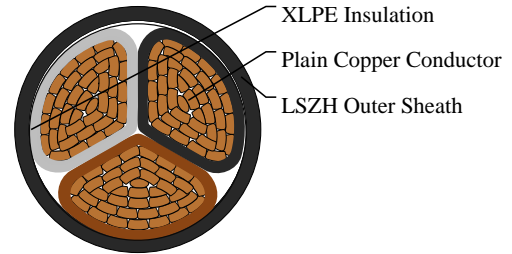
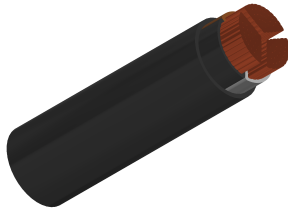
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600/1000V XLPE Insulated, LSZH Sheathed, Power Cables (3 Cores)

FTX400 1RZ1-R 3G50 (CU/XLPE/LSZH 600/1000V Class 2)

Indoor Lighting, Socket and UPS Outlet Power Cables



APPLICATIONS

This cables are mainly used in power stations, mass transit underground passenger systems, airports, petrochemical plants, hotels, hospitals, and high-rise buildings.

STANDARDS

Basic design to IEC 60502-1

FIRE PERFORMANCE

Flame Retardance (Single Vertical Wire Test)	EN 60332-1-2; IEC 60332-1-2; BS EN 60332-1-2; VDE 0482-332-1 ; NBN C 30-004 (cat. F1); NF C32-070-2.1(C2); CEI 20-35/1-2; EN 50265-2-1*; DIN VDE 0482-265-2-1*
Reduced Fire Propagation (Vertically-mounted bundled wires& cable test)	EN 60332-3-24 (cat. C); IEC 60332-3-24; BS EN 60332-3-24; VDE 0482-332-3; NBN C 30-004 (cat. F2); NF C32-070-2.2(C1); CEI 20-22/3-4; EN 50266-2-4*; DIN VDE 0482-266-2-4
Halogen Free	IEC 60754-1; EN 50267-2-1; DIN VDE 0482-267-2-1; CEI 20-37/2-1 ; BS 6425-1*
No Corrosive Gas Emission	IEC 60754-2; EN 50267-2-2; DIN VDE 0482-267-2-2; CEI 20-37/2-2 ; BS 6425-2*
Minimum Smoke Emission	IEC 61034-1&2; EN 61034 -1&2; DIN VDE 0482-1034-1&2; CEI 20-37/3-1&2; EN 50268-1&2*; BS 7622-1&2*
No Toxic Gases	NES 02-713; NF C 20-454

VOLTAGE RATING

600/1000V

CABLE CONSTRUCTION

Conductor: Plain annealed copper wire, shaped stranded according to IEC 60228 class 2.

Insulation: Extruded cross-linked XLPE compound.



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Outer Sheath: Thermoplastic LSZH compound type LTS3 as per BS 7655-6.1.

COLOUR CODE

Insulation Colour: Brown, Gray, Black

Sheath Colour: Black (other colors upon request)

PHYSICAL AND THERMAL PROPERTIES

Temperature Range During Operation: -30°C ~ 90°C

Temperature Range during Installation : -5°C ~ 50°C

Minimum Bending Radius : 6 x OD

Electrical Properties

Dielectric Test: 3500 V r.m.s. x 5' (core / core)

Insulation Resistance: 500 MΩ x km (at 20°C)

Short circuit Temperature : 250°C (up to 5 secs)

Conductor Operating Temperature : 90°C

Ambient Temperature : 30°C

DIMENSION AND PARAMETERS

Caledonian Cable Code	No. of Cores × Cross-sectional Area	No./Nominal Diameter of Strands	Nominal Insulation Thickness	Nom. Overall Diameter	Approx. Weight
	No. × mm ²	no./mm	mm	mm	kg/km
FTX400 1RZ1-R 3G50	3x50S	19/1.78	1	25.5	1600

Current-Carrying Capacities (Amp)

Conductor Cross-sectional Area	Ref. Method 4 2 cables, 1-phase a.c. or d.c.	Ref. Method 4 3/4 cables, 3-phase a.c.	Ref. Method 3 2 cables, 1-phase a.c. or d.c.	Ref. Method 3 3/4 cables, 3-phase a.c.	Ref. Method 1 2 cables, 1-phase a.c. or d.c. flat and touching	Ref. Method 1 3/4 cables, 3-phase a.c. flat and touching or trefoil	Ref. Method 11 2 cables, 1-phase a.c. or d.c. flat and touching	Ref. Method 11 3/4 cables, 3-phase a.c. flat and touching or trefoil	Ref. Method 12 2 cables, 1-phase a.c. or d.c. or 3 cables 3-phase Horizontal	Ref. Method 12 2 cables, 1-phase a.c. or d.c. or 3 cables 3-phase Vertical	Ref. Method 12 3 cables trefoil, 3-phase a.c.
mm ²	A	A	A	A	A	A	A	A	A	A	A
50	149	135	189	168	228	209	293	215	274	246	209

Voltage Drop (Per Amp Per Meter)

Nominal Cross sectional Area	2 cables d.c.	Ref. Methods 3,4 2 cables, 1-phase a.c.	Ref. Methods 1,11 2 cables, 1-phase a.c.	Ref. Methods 3,4 3 or 4 cables, 3-phase a.c.	Ref. Methods 1,11,12 3 or 4 cables, 3-phase a.c. (in trefoil)	Ref. Methods 1,11 3 or 4 cables, 3-phase a.c. (Flat and touching)
mm ²	mV/A/m	mV/A/m	mV/A/m	mV/A/m	mV/A/m	mV/A/m
50	0.99	r:1 x:0.29 z:1.05	r:0.99 x:0.18 z:1	r:0.87 x:0.25 z:0.9	r:0.86 x:0.155 z:0.87	r:0.86 x:0.18 z:0.87



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Rated voltage



Flame Retardant
NF C32-070-2.1(C2)
IEC60332-1-2/EN50266-2-1



Halogen Free
IEC 60754-1



IEC60502-1



Low Corrosivity
IEC60754-2/EN50267-2-2/3
NF C32-074/NF C20-453



Low Smoke Emission
IEC 61034-2 / EN 50268-2
NF C32-073/NF C 20-462



Low Toxicity
NES 02-713/NF C 20-454



Reduced Fire Propagation
NF C32-070-2.2(C1)
IEC60332-3-24/EN50266-2-4