Caledonian

FIREGUARD Flame Retardant Power & Control Cables

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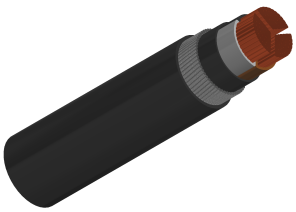
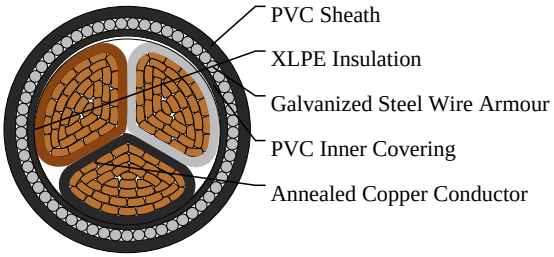
600/1000V XLPE Insulated, PVC Sheathed, Armoured Power Cables to BS 5467 (3 Cores)

FGD400 1RVMV-R 3C150 (CU/XLPE/PVC/SWA/PVC 600/1000V Class 2)
BS Code: 6943X





APPLICATIONS

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

STANDARDS

Basic design to BS 5467

APPROVALS

TUV Certification (Z1 17 01 98200 003)

FIRE PERFORMANCE

Flame Retardance (Single Vertical Wire Test)	BS EN 60332-1-2

VOLTAGE RATING

600/1000V

CABLE CONSTRUCTION

Conductor: Annealed copper wire,shaped stranded according to BS EN 60228 class 2.
Insulation: Extruded XLPE GP 8 according to BS 7655-1.3.
Bedding: PVC.
Armouring: Galvanized steel wire
Outer Sheath: PVC Type 9 according to BS 7655-4.2.
Outer Sheath Option: UV resistance, hydrocarbon resistance, oil resistance, anti rodent and anti termite properties can be offered as option. Compliance to fire performance standard (IEC 60332-1, IEC 60332-3, UL 1581, UL 1666 etc) depends on the oxygen index of the PVC compound and the overall cable design. LSPVC can also be provided upon request.

COLOUR CODE

Insulation Colour:
Two-core: Brown, blue

Three-core: Brown, black, grey
Four-core: Blue, brown, black, grey
Five-core: Green-and-yellow, blue, brown, black, grey
Sheath Colour: Black, other colours can be offered upon request.

PHYSICAL AND THERMAL PROPERTIES

Maximum temperature range during operation (XLPE): 90°C
Maximum short circuit temperature (5 Seconds): 250°C
Minimum bending radius:
Circular copper conductors: 6 x Overall Diameter
Shaped copper conductors: 8 x Overall Diameter

Electrical Properties

Conductor Operating Temperature: 90°C
Ambient Temperature: 30°C

DIMENSION AND PARAMETERS

No. of Cores × Cross-sectional Area	Conductor Class	Nominal Insulation Thickness	Nominal Thickness of Inner Covering	Nominal Sheath Thickness	Nominal Steel Wire Armour Diameter	Approx. Overall Diameter	Approx. Weight
No.×mm²		mm	mm	mm	mm	mm	kg/km
3x150S	2	1.4	1.4	2.3	2.5	45.5	7160

Current-Carrying Capacities (Amp) according to BS7671:2008 table 4E4A

Conductor Cross-sectional Area	Ref. Method C One 1C cable, 1-phase a.c. or d.c.	Ref. Method C One 3C or 4C cable, 3-phase a.c.	Ref. Method D One 2C cable, 1-phase a.c. or d.c.	Ref. Method D One 3C or 4C cable, 3-phase a.c.	Ref. Method E One 2C cable, 1-phase a.c. or d.c.	Ref. Method E One 3C or 4C cable, 3-phase a.c.
mm²	A	A	A	A	A	A
150	451	386	306	251	472	406

Voltage Drop (Per Amp Per Meter) according to BS7671:2008 table 4E4B

Conductor Cross-sectional Area	2C cable, d.c.	2C cable, 1-phase a.c.	3C or 4C cable, 3-phase a.c.
mm²	mV/A/m	mV/A/m	mV/A/m
150	0.31	r:0.32 x:0.145 z:0.35	r:0.38 x:0.125 z:0.3

Rated voltage

BS 5467


Flame Retardancy
BS EN 60332-1-2