



# Caledonian

Airport Flame Retardant And Fire Resistant Cables

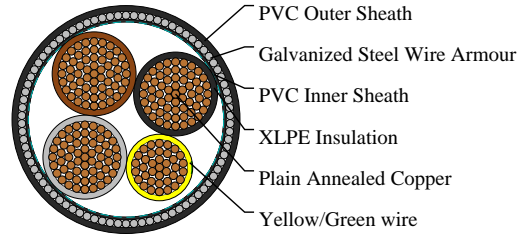
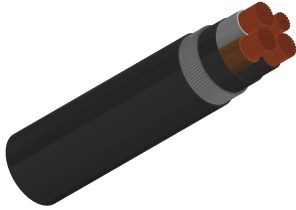
www.caledonian-cables.com

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## 600/1000V XLPE Insulated, PVC Sheathed, Armoured Power Cables (3+1 Cores)

FGD400 1RVMV-R 3G240/185 (CU/XLPE/PVC/SWA/PVC CLASS 2)

Outdoor Cabling



### 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 BS 5467

### FIRE PERFORMANCE

|   |  |
|---|--|
| Flame Retardance (Single Vertical Wire Test)(Optional)                            | 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)(Optional) | 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 |

### VOLTAGE RATING

600/1000V

### CABLE CONSTRUCTION

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

Insulation: Extruded cross-linked XLPE compound.

Inner Sheath: PVC Compound.

Armouring: Galvanized Steel Wire.

Outer Sheath: PVC Compound.

### COLOUR CODE

Insulation Colour as per BS7671

Insulation Colour: Yellow/Green, Brown, Gray, Black

Sheath Colour: Black (other colors upon request)



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## PHYSICAL AND THERMAL PROPERTIES

Temperature Range During Operation: -40°C ~ 70°C

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

Minimum Bending Radius : 8 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 | Nominal Armour Wire Diameter | Diameter under Armour | Nom. Overall Diameter | Approx. Weight |
|--------------------------------|-------------------------------------|---------------------------------|------------------------------|------------------------------|-----------------------|-----------------------|----------------|
|                                | No. × mm <sup>2</sup>               | no./mm                          | mm                           | mm                           | mm                    | mm                    | kg/km          |
| FGD400<br>1RVMV-R<br>3G240/185 | 3x240/185                           | 61/2.25                         | 1.7                          | 2.5                          | 62                    | 66.4                  | 13500          |

### Current-Carrying Capacities (Amp)

| Conductor Cross-sectional Area | Ref. Method A One 2C cable, 1-phase a.c. or d.c. | Ref. Method A One 3C or 4C cable, 3-phase a.c. | Ref. Method B One 2C cable, 1-phase a.c. or d.c. | Ref. Method B 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. |
|--------------------------------|--|--|--|--|--|--|--|--|
| mm <sup>2</sup>                | A  | A  | A  | A  | A  | A  | A  | A  |
| 240                            | 607  | 520  | 636  | 546  | 520  | 440  | 630  | 530  |

### Voltage Drop (Per Amp Per Meter)

| Nominal Cross sectional Area | 2C cable, d.c. | Ref. Methods A,B 2 cables, 1-phase a.c. | Ref. Methods A,B 3 or 4 cables, 3-phase a.c. | 2 cables, 1-phase a.c. (In ducts) | 2 cables, 1-phase a.c. (In ground) | 3 or 4 cables, 3-phase a.c. touching (In ducts) | 3 or 4 cables, 3-phase a.c. touching (In ground) |
|------------------------------|----------------|---|--|-----------------------------------|------------------------------------|---|--|
| mm <sup>2</sup>              | mV/A/m         | mV/A/m                                  | mV/A/m                                       | mV/A/m                            | mV/A/m                             | mV/A/m  | mV/A/m   |
| 240                          | 0.195          | r:0.2 x:0.14 z:0.24                     | r:0.175 x:0.125 z:0.21                       | 0.24                              | 0.24                               | 0.21  | 0.21   |



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Rated voltage



BS 5467



Flame Retardant  
NF C32-070-2, IEC2  
IEC60333-3-EN50266-2-1



Reduced Fire Propagation  
NF C32-070-2, IEC1  
IEC60333-3-24/EN50266-2-4