



Nexans Ref.: 10559879  
EAN 13: 5413404321612

### FIRE PERFORMANCE CLASS



Dca-s2,d2,a3



### CONTACT

Product Management  
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VO-YMvKas Dca-s2 is a braided power cable according to fire classification Dca-s2,d2,a3 for connection in low voltage installation up to 0.6/1 kV.

### STANDARDS

**Product** HD 604.4D; IEC 60228

**Test** KEMA 42 C-1-4-D

### KEY CHARACTERISTICS

| Dimensional characteristics           |                   |
|---------------------------------------|-------------------|
| Conductor cross-section               | 6 mm <sup>2</sup> |
| Number of cores                       | 2                 |
| Cross-section of the protection cores | 6 mm <sup>2</sup> |

### APPLICATIONS

VO-YMvKas Dca-s2 0.6/1 kV is a braided power cable according to fire classification Dca-s2,d2,a3 for usage in low voltage installations up to 0.6/1 kV in housing, residential and similar installations with a medium fire hazard level. VO-YMvKas Dca-s2 is suitable for direct burial and is advised if protection against mechanical damage and EMI is demanded. This cable has a reduced propagation of fire in cable bundles.

### Design

1. Conductor: Bare copper, solid, class1
2. Insulation: XLPE
3. Inner covering: PVC
4. Armour: Galvanized steel wire braiding with an underlying drainwire of tinned copper
5. Outer sheath: PVC  
Colour: grey  
UV resistance: Yes

### CORE IDENTIFICATION

- 2 cores : brown - blue
- 3 cores : brown - black - grey
- 4 cores : brown - blue - black - grey
- 5 cores : black - blue - brown - black - grey



Conductor flexibility  
Solid class 1



Lead free  
Yes



Rated Voltage Uo/U  
(Um)  
0,6/1 kV



Mechanical  
resistance to  
impacts  
Excellent



Max. conductor  
temp. in service  
90 °C



Minimum  
installation  
temperature  
0 °C



Operating temp.  
-20 ... 80 °C



Electro magnetic  
interference  
resistance  
Yes

### CHARACTERISTICS

#### Construction characteristics

|                        |                                |
|------------------------|--------------------------------|
| Conductor material     | Bare copper                    |
| Conductor flexibility  | Solid class 1                  |
| Conductor shape        | Round solid                    |
| Insulation             | XLPE (chemical)                |
| Core identification    | Blue, brown                    |
| Inner sheath           | PVC                            |
| Armour type            | Galvanized steel wire braiding |
| Outer sheath           | PVC                            |
| Sheath colour          | Grey                           |
| Lead free              | Yes                            |
| With Green/Yellow core | No                             |

#### Dimensional characteristics

|                                       |                   |
|---------------------------------------|-------------------|
| Conductor cross-section               | 6 mm <sup>2</sup> |
| Number of cores                       | 2                 |
| Cross-section of the protection cores | 6 mm <sup>2</sup> |
| Nominal outer diameter                | 15.6 mm           |
| Approximate weight                    | 459 kg/km         |
| Average insulation thickness          | 0.7 mm            |
| Inner sheath thickness                | 0.8 mm            |
| Diameter over filler / inner sheath   | 10.4 mm           |
| Armour thickness                      | 0.3 mm            |
| Nominal outer sheath thickness        | 1.8 mm            |

#### Electrical characteristics

|   |             |
|---|-------------|
| DC permissible current rating                     | 56 A        |
| Loop resistance, max. at 20°C                     | 3.08 Ohm/km |
| Rated Voltage U <sub>0</sub> /U (U <sub>m</sub> ) | 0,6/1 kV    |













#### Mechanical characteristics

|                                  |           |
|----------------------------------|-----------|
| Mechanical resistance to impacts | Excellent |
|----------------------------------|-----------|









#### Usage characteristics

|  |                                  |
|--|----------------------------------|
| Field of application                     | -                                |
| One single bending at each end minimum   | 8 (xD)                           |
| Max. conductor temperature in service    | 90 °C                            |
| Minimum installation temperature         | 0 °C                             |
| Operating temperature, range             | -20 ... 80 °C                    |
| Electro magnetic interference resistance | Yes                              |
| U.V resistance                           | EN 50289-4-17 method A, for 720h |













### CURRENT CAPACITY TABLE PR SINGLE PHASE MULTICORE

| Conductor cross-section<br>[mm <sup>2</sup> ]  |  Cu  |  Cu   |  Cu                               |  Cu |  Cu |  Cu |
|--|---|--|--|--|--|--|
| 6  | 42  | 51   | 53   | 58   | 58   | 53   |
|  A2 Multi-core cable in conduit in a thermally insulated wall |  B2 Multi-core cable in conduit on a wooden wall                   |  C Single-core or multi-core cable on a wooden wall |  |  |  |  |
|  D1 Multi-core cable in ducts in the ground                   |  D2 Multi-core cables designed to be buried directly in the ground |  |  E Multi-core cable in free air |  |  |  |















### CURRENT CAPACITY TABLE PR SINGLE PHASE SINGLE CORE

| Conductor cross-section<br>[mm <sup>2</sup> ]  |  Cu  |  Cu |  Cu   |  Cu |
|--|---|--|--|--|
| 6  | 45  | 54   | 58   | -  |
|  A1 Insulated conductors in conduit in a thermally insulated wall |  B1 Insulated conductors in conduit on a wooden wall |  |  C Single-core or multi-core cable on a wooden wall |  |
|  F Single-core flat cables, touching in free air                 |   |  |  |  |

### CURRENT CAPACITY TABLE PR THREE PHASE MULTICORE NL

| Conductor cross-section<br>[mm <sup>2</sup> ]  |  Cu  |  Cu   |  Cu                               |  Cu |  Cu |  Cu |
|--|---|--|--|--|--|--|
| 6  | 38  | 44   | 52   | 44   | 49   | 54   |
|  A2 Multi-core cable in conduit in a thermally insulated wall |  B2 Multi-core cable in conduit on a wooden wall                   |  D1 Multi-core cable in ducts in the ground |  |  |  |  |
|  C Single-core or multi-core cable on a wooden wall           |  D2 Multi-core cables designed to be buried directly in the ground |  |  E Multi-core cable in free air |  |  |  |

### CURRENT CAPACITY TABLE PR THREE PHASE SINGLE CORE

| Conductor cross-section<br>[mm <sup>2</sup> ]  |  Cu  |  Cu |  Cu   |  Cu |  Cu |  Cu |  Cu |
|--|---|--|--|--|--|--|--|
| 6  | 40  | 48   | 52   | 44   | 49   | -  | -  |
|  A1 Insulated conductors in conduit in a thermally insulated wall |  B1 Insulated conductors in conduit on a wooden wall                         |  |  D1 Single or Multi-core cable in ducts in the ground |  |  |  |  |
|  C Single-core or multi-core cable on a wooden wall               |  D2 Single or Multi-core cables designed to be buried directly in the ground |  |  F Single-core trefoil cables, touching in free air   |  |  |  |  |
|  F Single-core flat cables, touching in free air                  |   |  |  |  |  |  |  |

## SELLING AND DELIVERY INFORMATION

### Marking

VO-YMvKas Dca n x s mm<sup>2</sup>  
NEXANS BENELUX  
KEMA KEUR  
Meter Marking