



Nexans Ref.: 10560004  
EAN 13: 5413404322855

### FIRE PERFORMANCE CLASS



Dca-s2,d2,a3



### CONTACT

Product Management  
service.nnl@nexans.com

### STANDARDS

Product HD 604.4D; IEC 60228

Test KEMA 42 C-1-4-D

### KEY CHARACTERISTICS

Construction characteristics	
Core identification	Brown, black, grey
Dimensional characteristics	
Number of cores	3
Conductor cross-section	10 mm <sup>2</sup>
Cross-section of the protection cores	10 mm <sup>2</sup>

### APPLICATIONS

**VG-YMvKas Dca** is an armoured 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. **VG-YMvKas Dca** 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 bunches.

Available from 35 mm<sup>2</sup>: **VG-YMvKas Dca Flex**, provided with conductors having increased bendability.

### DESIGN

- Conductor**  
Bare copper, stranded, class 2  
Insulation: XLPE
- Inner covering**  
PVC with filler extruded or PET foil for more 5 cond and sector shaped types
- Armour**  
Galvanized steel wires and bare copper wire or Flat steel wires and flat bare copper wires covered with an open counter spiral of galvanized steel tape
- Outer sheath**  
PVC  
Colour: grey  
UV resistance: Yes



Conductor flexibility  
Stranded class 2



Lead free  
Yes



Rated Voltage U<sub>0</sub>/U  
(Um)  
0,6/1 kV



Mechanical  
resistance to  
impacts  
Excellent



Bending factor  
when laying  
16 (xD)



Minimum  
installation  
temperature  
0 °C



Operating temp.  
-20 ... 80 °C



Max. conductor  
temp. in service  
90 °C

## CHARACTERISTICS

### Construction characteristics

Conductor flexibility	Stranded class 2
Conductor shape	Round, stranded
Conductor material	Bare copper
Insulation	XLPE (chemical)
Core identification	Brown, black, grey
Inner sheath	Extruded inner covering
Armour type	Galvanized steel wires
Outer sheath	PVC
Sheath colour	Grey
Lead free	Yes
With Green/Yellow core	No

### Dimensional characteristics

Number of cores	3
Conductor cross-section	10 mm <sup>2</sup>
Nominal outer diameter	22.7 mm
Approximate weight	1107 kg/km
Cross-section of the protection cores	10 mm <sup>2</sup>
Average insulation thickness	0.7 mm
Inner sheath thickness	0.8 mm
Armour thickness	1.2 mm
Nominal outer sheath thickness	1.8 mm

### Electrical characteristics

DC permissible current rating	65 A
Loop resistance, max. at 20°C	1.83 Ohm/km
Rated Voltage U <sub>0</sub> /U (U <sub>m</sub> )	0,6/1 kV













### Mechanical characteristics

Mechanical resistance to impacts	Excellent
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




### Usage characteristics

Bending factor when laying	16 (xD)
One single bending at each end minimum	8 (xD)
Minimum installation temperature	0 °C
Operating temperature, range	-20 ... 80 °C
Max. conductor temperature in service	90 °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 [mm <sup>2</sup> ]	 Cu	 Cu	 Cu	 Cu	 Cu	 Cu
10	57	69	80	71	77	86
 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 [mm <sup>2</sup> ]	 Cu	 Cu	 Cu	 Cu
10	61	75	80	-
 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 [mm <sup>2</sup> ]	 Cu	 Cu	 Cu	 Cu	 Cu	 Cu
10	51	60	71	58	65	75
 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 [mm <sup>2</sup> ]	 Cu	 Cu	 Cu	 Cu	 Cu	 Cu	 Cu
10	54	66	71	58	65	-	-
 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**

VG-YMvKas Dca  
n x s  
NEXANS BENELUX  
KEMA KEUR  
Meter Marking