

# A07BN4-F WIND HEAVY WORK

Model Product: 450 - 20170112



Class 5 flexible copper conductor.  
Elastomeric mixture Insulation special quality.  
Special Rubber outer sheath

## STANDARDS

According to DIN VDE 0282-12/HD 22.12

(Accordingly to the standards BT 2014/35/UE- 2011/65/EU (RoHS 2))

## COMMON FEATURES

WIND POWER APPLICATION in heavy duty. The outer sheath is acids and hydrocarbons resistant (chemical industry) and also moistness and mould resistant. This cable suitable for fixed and protected installation voltage until 1000V AC. A system exercise voltage can always overflow the 10% of its standard voltage.

## EMPLOYMENT

Minimum bending radius per D cable diameter (in mm):  
Normal use  $\leq 12D = 5D$   $> 20D = 6D$   
Accurate bending close to the terminal  $\leq 12D = 3D$   $> 20D = 4D$   
Festoon i.e. for support crane  $\leq 12D = 6D$   $> 20D = 8D$   
Repeated wiring  $\leq 12D = 6D$   $> 20D = 8D$   
Turned off on pulley  $\leq 12D = 8D$   $> 20D = 8D$   
Maximum pulling stress: Twist maximum:  $\pm 150^\circ/\text{m}$

## PACKING

The cable drum length may be decided at order time.

## RUBBER SHEATH FOR WIND POWER APPLICATION

Nominal voltage  $U_0$ : 450 V

Nominal voltage  $U$ : 750 V

Test voltage: 3000 V

Maximum voltage  $U_m$ : 1000V Installazioni Fisse / for fixed installation

Maximum operating temperature:  $+90^\circ\text{C}$

Maximum short circuit temperature:  $+250^\circ\text{C}$

Minimum installation and laying temperature:  $-30^\circ\text{C}$

Min. operating temperature (without mechanical shocks):  $-40^\circ\text{C}$

## CORE COLOURS

Single core: Light-Grey

Three cores: Brown - Black - Gray (or Y/G, Blue and Brown)

## SHEATH COLOUR

Black

## INK MARKING

GENERAL CAVI WINDHEAVYWORK A07BN4-F



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| Cores number | Nominal Section | Approx conductor diameter | Insulation minimum thickness | Maximum external diameter | Electric resistance at 20°C | Current carrying capacities 30°C |         | Current carrying capacities 40°C |         | Current carrying capacities 50°C |         |
|--------------|-----------------|---------------------------|------------------------------|---------------------------|-----------------------------|----------------------------------|---------|----------------------------------|---------|----------------------------------|---------|
|              |                 |                           |                              |                           |                             | Spaced                           | Trefoil | Spaced                           | Trefoil | Spaced                           | Trefoil |
| (N°)         | (mm²)           | (mm)                      | (mm)                         | (mm)                      | (Ohm/km)                    | (A)                              | (A)     | (A)                              | (A)     | (A)                              | (A)     |
| Single core  |                 |                           |                              |                           |                             |                                  |         |                                  |         |                                  |         |
| 1x           | 25              | 6                         | 1.4                          | 13.74                     | 0.78                        | 182                              | 135     | 165                              | 122     | 149                              | 110     |
| 1x           | 35              | 8.1                       | 1.4                          | 15.35                     | 0.554                       | 226                              | 169     | 205                              | 154     | 185                              | 138     |
| 1x           | 50              | 9.8                       | 1.6                          | 17.68                     | 0.386                       | 275                              | 207     | 250                              | 188     | 225                              | 169     |
| 1x           | 70              | 11.6                      | 1.6                          | 20.00                     | 0.272                       | 353                              | 268     | 321                              | 243     | 289                              | 219     |
| 1x           | 95              | 13.3                      | 1.8                          | 22.12                     | 0.206                       | 430                              | 328     | 391                              | 298     | 352                              | 268     |
| 1x           | 120             | 15.1                      | 1.8                          | 24.54                     | 0.161                       | 500                              | 383     | 455                              | 348     | 410                              | 314     |
| 1x           | 150             | 16.8                      | 2.0                          | 26.87                     | 0.129                       | 577                              | 444     | 525                              | 404     | 473                              | 364     |
| 1x           | 185             | 18.6                      | 2.2                          | 28.89                     | 0.106                       | 661                              | 510     | 601                              | 464     | 542                              | 418     |
| 1x           | 240             | 21.4                      | 2.4                          | 32.62                     | 0.0801                      | 781                              | 607     | 710                              | 552     | 640                              | 497     |
| 1x           | 300             | 23.9                      | 2.6                          | 36.46                     | 0.0641                      | 902                              | 703     | 820                              | 639     | 739                              | 576     |
| Three cores  |                 |                           |                              |                           |                             |                                  |         |                                  |         |                                  |         |
| 3x           | 25              | 6.9                       | 1.4                          | 28.70                     | 0.78                        | -                                | 127     | -                                | 116     | -                                | 105     |
| 3x           | 35              | 8.1                       | 1.4                          | 32.19                     | 0.554                       | -                                | 158     | -                                | 144     | -                                | 130     |
| 3x           | 50              | 9.8                       | 1.6                          | 37.02                     | 0.386                       | -                                | 192     | -                                | 175     | -                                | 158     |
| 3x           | 70              | 11.6                      | 1.6                          | 42.07                     | 0.272                       | -                                | 246     | -                                | 224     | -                                | 202     |
| 3x           | 95              | 13.3                      | 1.8                          | 46.58                     | 0.206                       | -                                | 298     | -                                | 272     | -                                | 245     |
| 3x           | 120             | 15.1                      | 1.8                          | 51.74                     | 0.161                       | -                                | 346     | -                                | 315     | -                                | 284     |
| 3x           | 150             | 16.8                      | 2.0                          | 57.21                     | 0.129                       | -                                | 399     | -                                | 364     | -                                | 328     |
| 3x           | 185             | 18.6                      | 2.2                          | 61.59                     | 0.106                       | -                                | 456     | -                                | 415     | -                                | 374     |

Correction factor to calculate:

40°C=0,91

50°C=0,82

Conductor at 90°C, Cable in free air