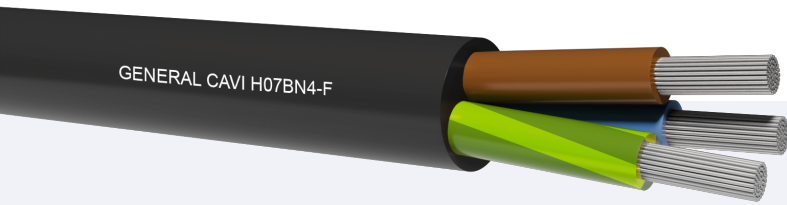


H07BN4-F

CPR Eca

Model Product: 274-275 - 20210324

Flexible conductor bare or tinned copper, class 5.
Special EI7 compounds insulation.
Special compounds sheath, EM7.

STANDARDS

CEI EN 50525-2-21 CEI 20-107/2-21 CEI 20-19/12
(CENELEC HD 22.12 S2) BS 7919 NF C 32-102-12 VDE
0282-12

EN 50575:2014 + EN 50575/A1:2016

Accordingly to the standards BT 2014/35/UE- 2011/65/EU (RoHS 3)

COMMON FEATURES

In dry, humid, or moist rooms, in open air, in workshop having an explosive atmosphere, for medium mechanical stresses (like for industrial and agricultural workshop appliances, large boiling installations, heating plates, inspection lamps, electrical tools such as drills, circular saws, domestic electric tools and also for trasportable motors or machines on buildings sites or agricultural workings etc, also for fixed installations, (like on rough-cast in temporary buildings huts, for accomodation purposes; suitable for the wiring of constructional components in lifting appliances, machinery etc. Use up to 1000V a.c. is permitted for fixed and protected installation (in conduit or appliances) and also for motor connections of hosting motors and similar. Maximum conductor temperature: 90°C. While high temperature use, skin contact must be avoided. Black sheath is required for permanent outdoor use. Supply of electricity and communications in buildings and other civil engineering works with the objective of limiting the generation and spread of fire and smoke

EMPLOYMENT

Minimum bending radius per D cable diameter (in mm):

Fixed installation $D < 8$ $D = 3D$ $< 3D$ $12 = D$ $< 20 = 4D$ $D > 20 = 4D$

Free Movement $D < 8$ $D = 4D$ $< 12 = 4D$ $D < 5D = 20 > 20 = 6D$

Maximum pulling stress: 15 N/mm² section of copper dynamic applications, for fixed 50 N/mm²

HEAVY HEAT RESISTANT CSP OR OTHER EQUIVALENT
SYNTHETIC ELASTOMER SHEATHED CABLES FOR
MAXIMUM CONDUCTOR TEMPERATURE OF 90°C

Nominal voltage U0: 450 V

Nominal voltage U: 750 V

Test voltage: 2500 V

Maximum operating temperature: +90°C

Maximum short circuit temperature: +250°C

Minimum installation and laying temperature: -20°C

Min. operating temperature (without mechanical shocks): -35°C

Minimum installation and laying temperature: -20°C

CORE COLOURS

Single core: black

Two cores: blue-brown

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

Four cores: blue-brown-black-gray (or Y/G instead blue)

Five cores: Y/G-blue-brown-black-gray (black no Y/G)

Multicores: black with numbers and Y/G

SHEATH COLOUR

Black

INK MARKING

year GENERAL CAVI - IEMMEQU <HAR> - H07BN4-F

NOTE

Special features :

OZONE RESISTANT" according to the standards CEI EN 60811-2-1 (Test method A) and CEI EN 50396 (Test method B).RI (Hydrocarbon Resistant) CEI 20-34 / 0-1 and PQA to OIL & GAS specifications.



H07BN4-F

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Model Product: 274-275 - 20210324



| Cores number (N°) | Cross section (mm²) | Approx conductor diameter (mm) | Insulation medium thickness (mm) | External diameter | | Approx cable weight (kg/km) | Electric resistance at 20°C (Ohm/km) | Mobile service Current carrying capacities (A) | Current carrying air free (A) |
|----------------------|------------------------|-----------------------------------|-------------------------------------|-------------------|-----------------|--------------------------------|---|---|----------------------------------|
| | | | | Minimum (mm) | maximum (mm) | | | | |
| Single core | | | | | | | | | |
| 1x | 1.5 | 1.6 | 0.8 | 5.7 | 7.1 | 50 | 13.3 | 16 | 24 |
| 1x | 2.5 | 2 | 0.9 | 6.3 | 7.9 | 65 | 7.98 | 25 | 33 |
| 1x | 4 | 2.6 | 1 | 7.2 | 9.0 | 89 | 4.95 | 30 | 45 |
| 1x | 6 | 3.4 | 1 | 7.9 | 9.8 | 115 | 3.30 | 38 | 58 |
| 1x | 10 | 4.4 | 1.2 | 9.5 | 11.9 | 190 | 1.91 | 53 | 80 |
| 1x | 16 | 5.7 | 1.2 | 10.8 | 13.4 | 259 | 1.21 | 71 | 107 |
| 1x | 25 | 6.9 | 1.4 | 12.7 | 15.8 | 375 | 0.780 | 94 | 135 |
| 1x | 35 | 8.1 | 1.4 | 14.3 | 17.9 | 492 | 0.554 | 117 | 169 |
| 1x | 50 | 9.8 | 1.6 | 16.5 | 20.6 | 675 | 0.386 | 148 | 207 |
| 1x | 70 | 11.6 | 1.6 | 18.6 | 23.3 | 908 | 0.272 | 185 | 268 |
| 1x | 95 | 13.3 | 1.8 | 20.8 | 26.0 | 1171 | 0.206 | 222 | 328 |
| 1x | 120 | 15.1 | 1.8 | 22.8 | 28.6 | 1445 | 0.161 | 260 | 383 |
| 1x | 150 | 16.8 | 2.0 | 25.2 | 31.4 | 1783 | 0.129 | 300 | 444 |
| 1x | 185 | 18.6 | 2.2 | 27.6 | 34.4 | 2125 | 0.106 | 341 | 510 |
| 1x | 240 | 21.4 | 2.4 | 30.6 | 38.3 | 2733 | 0.0801 | 407 | 607 |
| 1x | 300 | 23.9 | 2.6 | 33.5 | 41.9 | 3348 | 0.0641 | 468 | 703 |
| 1x | 400 | 27.5 | 2.8 | 37.4 | 46.8 | 3870 | 0.0486 | 553 | 823 |
| 1x | 500 | 35.0 | 3.0 | 41.3 | 52.0 | 4233 | 0.0384 | 634 | 946 |
| 1x | 630 | 39.0 | 3.0 | 45.5 | 57.0 | 6800 | 0.0287 | 742 | 1088 |
| Two cores | | | | | | | | | |
| 2X | 1 | 1.3 | 0.8 | 7.7 | 10.0 | 90 | 19.5 | 10 | 19 |
| 2x | 1.5 | 1.6 | 0.8 | 8.5 | 11.0 | 109 | 13.3 | 18 | 27 |
| 2x | 2.5 | 2 | 0.9 | 10.2 | 13.1 | 158 | 7.98 | 27 | 37 |
| 2x | 4 | 2.6 | 1.0 | 11.8 | 15.1 | 217 | 4.95 | 34 | 50 |
| 2x | 6 | 3.4 | 1.0 | 13.1 | 16.8 | 282 | 3.3 | 43 | 64 |
| 2x | 10 | 4.4 | 1.2 | 17.7 | 22.6 | 539 | 1.91 | 60 | 88 |
| 2x | 16 | 5.7 | 1.2 | 20.2 | 25.7 | 722 | 1.21 | 79 | 119 |
| 2x | 25 | 6.9 | 1.4 | 24.3 | 30.7 | 1043 | 0.78 | 105 | 161 |
| Three cores | | | | | | | | | |
| 3G | 1 | 1.3 | 0.8 | 8.3 | 10.7 | 110 | 19.5 | 10 | 18 |
| 3G | 1.5 | 1.6 | 0.8 | 9.2 | 11.9 | 134 | 13.3 | 16 | 24 |
| 3G | 2.5 | 2.0 | 0.9 | 10.9 | 14.0 | 196 | 7.98 | 25 | 33 |
| 3G | 4 | 2.6 | 1.0 | 12.7 | 16.2 | 271 | 4.95 | 29 | 45 |
| 3G | 6 | 3.4 | 1.0 | 14.1 | 18.0 | 355 | 3.30 | 36 | 58 |
| 3G | 10 | 4.4 | 1.2 | 19.1 | 24.2 | 674 | 1.91 | 51 | 80 |



H07BN4-F

CPR Eca

Model Product: 274-275 - 20210324



| Cores number | Cross section | Approx conductor diameter | Insulation medium thickness | External diameter | | Approx cable weight | Electric resistance at 20°C | Mobile service Current carrying capacities | Current carrying air free |
|--------------|---------------|---------------------------|-----------------------------|-------------------|---------|---------------------|-----------------------------|--|---------------------------|
| | | | | Minimum | maximum | | | | |
| (N°) | (mm²) | (mm) | (mm) | (mm) | (mm) | (kg/km) | (Ohm/km) | (A) | (A) |
| 3G | 16 | 5.7 | 1.2 | 21.8 | 27.6 | 913 | 1.21 | 67 | 107 |
| 3G | 25 | 6.9 | 1.4 | 26.1 | 33.0 | 1324 | 0.780 | 89 | 135 |
| 3G | 35 | 8.1 | 1.4 | 29.3 | 37.1 | 1754 | 0.554 | 110 | 169 |
| 3G | 50 | 9.8 | 1.6 | 34.1 | 42.9 | 2409 | 0.386 | 138 | 207 |
| 3G | 70 | 11.6 | 1.6 | 38.4 | 48.3 | 3211 | 0.272 | 172 | 268 |
| 3G | 95 | 13.3 | 1.8 | 43.3 | 54 | 4210 | 0.206 | 204 | 328 |
| 3G | 120 | 15.1 | 1.8 | 47.4 | 60 | 5205 | 0.161 | 238 | 383 |
| 3G | 150 | 16.8 | 2.0 | 52 | 66 | 6389 | 0.129 | 273 | 444 |
| 3G | 185 | 18.6 | 2.2 | 57 | 72 | 7591 | 0.106 | 309 | 510 |
| 3G | 240 | 21.4 | 2.4 | 65 | 82 | 9944 | 0.0801 | 365 | 607 |
| 3G | 300 | 23.9 | 2.6 | 72 | 90 | 11545 | 0.0641 | 415 | 703 |
| Four cores | | | | | | | | | |
| 4G | 1 | 1.3 | 0.8 | 9.2 | 11.9 | 136 | 19.5 | 10 | 18 |
| 4G | 1.5 | 1.6 | 0.8 | 10.2 | 13.1 | 166 | 13.3 | 16 | 24 |
| 4G | 2.5 | 2.0 | 0.9 | 12.1 | 15.5 | 241 | 7.98 | 20 | 33 |
| 4G | 4 | 2.6 | 1.0 | 14.0 | 17.9 | 336 | 4.95 | 30 | 45 |
| 4G | 6 | 3.4 | 1.0 | 15.7 | 20.0 | 449 | 3.30 | 37 | 58 |
| 4G | 10 | 4.4 | 1.2 | 20.9 | 26.5 | 833 | 1.91 | 52 | 80 |
| 4G | 16 | 5.7 | 1.2 | 23.8 | 30.1 | 1138 | 1.21 | 69 | 107 |
| 4G | 25 | 6.9 | 1.4 | 28.9 | 36.6 | 1714 | 0.78 | 92 | 135 |
| 4G | 35 | 8.1 | 1.4 | 32.5 | 41.1 | 2204 | 0.554 | 114 | 169 |
| 4G | 50 | 9.8 | 1.6 | 37.7 | 47.5 | 3029 | 0.386 | 143 | 207 |
| 4G | 70 | 11.6 | 1.6 | 42.7 | 54 | 4121 | 0.272 | 178 | 268 |
| 4G | 95 | 13.3 | 1.8 | 48.4 | 61 | 5361 | 0.206 | 210 | 328 |
| 4G | 120 | 15.1 | 1.8 | 53 | 66 | 6546 | 0.161 | 246 | 383 |
| 4G | 150 | 16.8 | 2.0 | 58 | 73 | 8095 | 0.129 | 282 | 444 |
| 4G | 185 | 18.6 | 2.2 | 64 | 80 | 9652 | 0.106 | 319 | 510 |
| 4G | 240 | 21.4 | 2.4 | 72 | 91 | 12614 | 0.0801 | 377 | 607 |
| 4G | 300 | 23.9 | 2.6 | 80 | 101 | 17045 | 0.0641 | 430 | 703 |
| Five cores | | | | | | | | | |
| 5G | 1 | 1.3 | 0.8 | 10.2 | 13.1 | 168 | 19.5 | 10 | 18 |
| 5G | 1.5 | 1.6 | 0.8 | 11.2 | 14.4 | 206 | 13.3 | 16 | 24 |
| 5G | 2.5 | 2.0 | 0.9 | 13.3 | 17 | 297 | 7.98 | 20 | 33 |
| 5G | 4 | 2.6 | 1.0 | 15.6 | 19.9 | 422 | 4.95 | 30 | 45 |
| 5G | 6 | 3.4 | 1.0 | 17.5 | 22.2 | 567 | 3.30 | 38 | 58 |
| 5G | 10 | 4.4 | 1.2 | 22.9 | 29.1 | 1010 | 1.91 | 54 | 80 |



H07BN4-F

CPR Eca

Model Product: 274-275 - 20210324



| Cores number | Cross section | Approx conductor diameter | Insulation medium thickness | External diameter | | Approx cable weight | Electric resistance at 20°C | Mobile service Current carrying capacities | Current carrying air free |
|--------------|--------------------|---------------------------|-----------------------------|-------------------|---------|---------------------|-----------------------------|--|---------------------------|
| | | | | Minimum | maximum | | | | |
| (N°) | (mm ²) | (mm) | (mm) | (mm) | (mm) | (kg/km) | (Ohm/km) | (A) | (A) |
| 5G | 16 | 5.7 | 1.2 | 26.4 | 33.3 | 1400 | 1.21 | 71 | 107 |
| 5G | 25 | 6.9 | 1.4 | 32 | 40 | 2096 | 0.780 | 94 | 135 |
| Multicores | | | | | | | | | |
| 7G | 1.5 | 1.6 | 0.8 | 13.4 | 17.2 | 315 | 13.3 | 16 | 24 |
| 7G | 2.5 | 2.0 | 0.9 | 15.7 | 20 | 445 | 7.98 | 20 | 33 |
| 7G | 4* | 2.6 | 1.0 | 18.2 | 23.2 | 618 | 4.95 | 25 | 45 |
| 10G | 1.5 | 1.6 | 0.8 | 15.95 | 20.2 | 420 | 13.3 | 16 | 24 |
| 12G | 1.5 | 1.6 | 0.8 | 17.6 | 22.4 | 493 | 13.3 | 16 | 24 |
| 12G | 2.5 | 2.0 | 0.9 | 20.6 | 26.2 | 702 | 7.98 | 20 | 33 |
| 12G | 4* | 2.6 | 1.0 | 24.4 | 30.9 | 1004 | 4.95 | 25 | 45 |
| 19G | 1.5 | 1.6 | 0.8 | 20.7 | 26.3 | 710 | 13.4 | 16 | 24 |
| 19G | 2.5 | 2.0 | 0.9 | 24.4 | 30.9 | 1030 | 7.98 | 20 | 33 |
| 24G | 1.5 | 1.6 | 0.8 | 24.3 | 30.7 | 898 | 13.3 | 16 | 24 |
| 24G | 2.5 | 2.0 | 0.9 | 28.8 | 36.4 | 1312 | 7.98 | 20 | 33 |
| 36G | 1.5* | 1.6 | 0.8 | 27.8 | 35.2 | 1246 | 13.3 | 16 | 24 |
| 36G | 2.5* | 2.0 | 0.9 | 33.2 | 41.8 | 1851 | 7.98 | 20 | 33 |

Current carrying capacities for unipolar cables are calculated on 3 spanned cables. Cables marked by (*) require a minimum quantity.

Special bending radius

At the entrance to a portable device or a mobile device

mechanical stress with D <8 = 6D D <12 = 6D D <20 = 6D D > 20 = 8D

Festoons eg. gantry crane for D <8 = 6D D <12 = 6D D <20 = 6D D > 20 = 8D

Winding repeated D <8 = 6D D <12 = 6D D <20 = 6D D > 20 = 8D

Diverted to pulley D <8 = 8D D <12 = 8D D <20 = 8D D > 20 = 8D