

ENVIROLEX® Flexible Single Core 110°C

CU ENVIRO RHE-1-FLEX 300 BK 110

Contact

OLEX CUSTOMER SERVICE - Purchase orders, invoices, general enquiries
Phone: 1300 CABLES
olex.customerservice@nexans.com

Nexans ref.: BZHE91AA001CXNA

GTIN: 9319215401880

1X300mm2 Envirolex Black

DESCRIPTION

- 0.6/1kV cables,
- Flexible, X-HF-110 insulated to AS/NZS 5000.1
- HFS-110-TP sheathed to AS/NZS 5000.1
- 110°C continuous, LSOH.

*Also known as Envirolex Single Core

110; Flexible; LSOH, LSZH; Envirolex; Green Star; Mains; Sub Mains; Flame Retardant



STANDARDS

National AS/NZS 5000.1



Rated Voltage Uo/U (Um)
0.6/1 kV



Cable flexibility
Flexible



Maximum operating temperature
110 °C

All drawings, designs, specifications, plans and particulars of weights, size and dimensions contained in the technical or commercial documentation of Nexans is indicative only and shall not be binding on Nexans or be treated as constituting a representation on the part of Nexans.

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CHARACTERISTICS

Construction characteristics

| | |
|--------------------------------|------------|
| Conductor material | Copper |
| With Green/Yellow core | No |
| Colour | Black |
| Type of conductor | Copper |
| With smaller neutral conductor | No |
| Insulation | X-HF-110 |
| Outer sheath | HFS-110-TP |

Dimensional characteristics

| | |
|---------------------------|---------------------|
| Maximum diameter of wires | 0.51 mm |
| Number of cores | 1 |
| Nominal overall diameter | 30.8 mm |
| Approximate weight | 292.0 kg/100m |
| Conductor cross-section | 300 mm ² |

Electrical characteristics

| | |
|---|---------------|
| Max. DC resistance of the conductor at 20°C | 0.0641 Ohm/km |
| Inductive reactance at 50Hz - trefoil | 0.08 Ohm/km |
| Conductor AC resistance at 50 Hz | 0.09 Ohm/km |
| Inductive reactance at 50Hz - flat touching | 0.0953 Ohm/km |
| Insulation resistance at 20°C | 190.0 MOhm.km |
| Rated Voltage U _o /U (Um) | 0.6/1 kV |

Mechanical characteristics

| | |
|-------------------|----------|
| Cable flexibility | Flexible |
|-------------------|----------|

Usage characteristics

| | |
|-------------------------------|--------------------------------|
| Maximum operating temperature | 110 °C |
| Bending factor when installed | D>25mm: 6 (xD); D<25mm: 4 (xD) |

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ENVIROLEX® FLEXIBLE SINGLE CORE 110°C - CURRENT CARRYING CAPACITY TABLE SINGLE PHASE (IN AMPS)

Insulation type: R-HF-110, R-E-110 OR X-HF-110 Maximum conductor temperature: 110°C Reference ambient temperature: 40°C IN AIR, 25°C IN GROUND

| Conductor cross-section [mm ²] |  |  |  |  |  |  |  |  |  |
|---|---|---|---|---|---|--|---|---|---|
| | Cu | Cu | Cu | Cu | Cu | Cu | Cu | Cu | Cu |
| 10 | 102 | 98 | 80 | 77 | 51 | 40 | 117 | 86 | 96 |
| 16 | 135 | 129 | 105 | 102 | 82 | 53 | 151 | 112 | 125 |
| 25 | 178 | 170 | 139 | 133 | 106 | 70 | 192 | 143 | 158 |
| 35 | 221 | 210 | 172 | 167 | 133 | 86 | 232 | 176 | 195 |
| 50 | 279 | 263 | 218 | 207 | 165 | - | 284 | 215 | 237 |
| 70 | 351 | 329 | 273 | 263 | 210 | - | 345 | 266 | 287 |
| 95 | 422 | 395 | 329 | 312 | 250 | - | 403 | 312 | 341 |
| 120 | 500 | 466 | 390 | 364 | 291 | - | 464 | 359 | 392 |
| 150 | 577 | 536 | 450 | 426 | 341 | - | 524 | 414 | 451 |
| 185 | 660 | 611 | 516 | 481 | 385 | - | 585 | 464 | 503 |
| 240 | 794 | 732 | 621 | 583 | 467 | - | 682 | 548 | 599 |
| 300 | 916 | 841 | 716 | - | - | - | 769 | 631 | 675 |
| 400 | 1105 | 1006 | 860 | - | - | - | 893 | 734 | 784 |
| 500 | 1290 | 1164 | 999 | - | - | - | 1009 | 855 | 909 |
| 630 | 1529 | 1359 | 1168 | - | - | - | 1154 | 977 | 1046 |

 Unenclosed spaced

 Unenclosed spaced from surface

 Unenclosed touching

 Enclosed conduit in air

 Enclosed, partially surrounded by thermal insulation

 Enclosed, completely surrounded by thermal insulation

 Buried direct

 Underground Wiring Enclosure

 Individual wiring enclosure

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ENVIROLEX® FLEXIBLE SINGLE CORE 110°C - CURRENT CARRYING CAPACITY TABLE THREE PHASE (IN AMPS)

Insulation type: R-HF-110, R-E-110 OR X-HF-110 Maximum conductor temperature: 110°C Reference ambient temperature: 40°C IN AIR, 25°C IN GROUND

| Conductor cross-section [mm ²] |  |  |  |  |  |  |  |  |  |
|---|---|---|---|---|---|---|---|---|---|
| | Cu | Cu | Cu | Cu | Cu | Cu | Cu | Cu | Cu |
| 10 | 99 | 85 | 80 | 70 | 56 | 40 | 99 | 76 | 87 |
| 16 | 130 | 112 | 105 | 91 | 73 | 53 | 127 | 97 | 113 |
| 25 | 173 | 149 | 139 | 121 | 97 | 70 | 162 | 125 | 143 |
| 35 | 214 | 184 | 172 | 148 | 118 | 86 | 196 | 151 | 176 |
| 50 | 270 | 233 | 217 | 190 | 152 | - | 238 | 188 | 213 |
| 70 | 340 | 292 | 273 | 234 | 187 | - | 290 | 229 | 257 |
| 95 | 410 | 353 | 329 | 277 | 221 | - | 338 | 268 | 306 |
| 120 | 487 | 418 | 390 | 331 | 265 | - | 388 | 316 | 350 |
| 150 | 562 | 482 | 450 | 378 | 302 | - | 438 | 357 | 403 |
| 185 | 644 | 553 | 516 | 438 | 350 | - | 489 | 404 | 448 |
| 240 | 775 | 665 | 620 | 538 | 430 | - | 569 | 481 | 534 |
| 300 | 895 | 766 | 714 | 612 | 489 | - | 641 | 542 | 600 |
| 400 | 1079 | 918 | 855 | 757 | 606 | - | 742 | 648 | 693 |
| 500 | 1260 | 1064 | 990 | 864 | 691 | - | 835 | 729 | 803 |
| 630 | 1493 | 1240 | 1154 | 993 | 794 | - | 950 | 828 | 918 |



Unenclosed spaced



Unenclosed spaced from surface



Unenclosed touching



Enclosed conduit in air



Enclosed, partially surrounded by thermal insulation



Enclosed, completely surrounded by thermal insulation



Buried direct



Underground Wiring Enclosure



Individual wiring enclosure