# ARE4H5E 18/30 kV

MT


## CARATTERISTICHE TECNICHE
TECHNICAL FEATURES

CONFORME CPR REG.305/2011/UE
CPR COMPLIANT REG.305/2011/UE

| | | | |
|---|---|---|---|
| **CONDUTTORE**<br>CONDUCTOR | Conduttore in alluminio compatto a trefoli tondi, classe 2 secondo IEC 60228<br>Round stranded compacted aluminium conductor, class 2 acc. to IEC 60228 | **TENSIONE DI ESERCIZIO**<br>OPERATING VOLTAGE | 18 / 30 (36) kV |
| **SEMICONDUTTORE**<br>SEMICONDUCTOR | Semiconduttore estruso, incollato<br>Extruded semiconductor, bonded type | **TEMP. MASSIMA DI ESERCIZIO**<br>MAX OPERATING TEMPERATURE | 90°C |
| **ISOLAMENTO**<br>INSULATION | Polietilene Reticolato XLPE secondo IEC 60502-2<br>Cross-Linked Polyethylene XLPE acc.to IEC 60502-2 | **TEMP. MASSIMA DI CORTOCIRCUITO**<br>MAX SHORT-CIRCUIT TEMPERATURE | 250°C |
| **SEMICONDUTTORE**<br>SEMICONDUCTOR | Semiconduttore estruso, incollato<br>Extruded semiconductor, bonded type | **TEMP. MASSIMA DI CC DELLO SCHERMO**<br>MAX S.C. TEMPERATURE OF THE SCREEN | 180°C |
| **SEMICONDUTTORE**<br>SEMICONDUCTOR | Nastro semiconduttore impermeabile<br>Semiconductive waterblocking tape | **CONFORME CPR**<br>CONFORME CPR | Fca |
| **SCHERMATURA**<br>SHIELD | Nastro di Alluminio (spessore 0,15mm)<br>Aluminium tape (thickness 0,15mm) | **SFORZO DI TRAZIONE**<br>PULLING TENSION | 30 N/mm² |
| **GUAINA ESTERNA**<br>OUTER SHEATH | MDPE, colore rosso<br>MDPE, colore rosso | | |

## CONDIZIONI DI POSA IN PIANO A CONTATTO
LAYING CONDITIONS AT FLAT TOUCHING FORMATION

| | |
|---|---|
| **RESISTIVITÀ TERMICA DEL SUOLO**<br>THERMAL RESISTIVITY OF THE SOIL | 100 °C.Cm/Watt |
| **PROFONDITÀ DI INTERRAMENTO**<br>BURIAL DEPTH | 0.8m |
| **TEMPERATURA DEL TERRENO**<br>SOIL TEMPERATURE | 20°C |
| **TEMPERATURA DELL'ARIA**<br>AIR TEMPERATURE | 30°C |
| **FREQUENZA**<br>FREQUENCY | 50Hz |

## MARCATURA
MARKING

SADA CAVI SPA NxS mm2 12/20 kV ARE4H5E YEAR Meter Marking

# ARE4H5E 18/30 kV

## USO
USE

Questi cavi sono adatti per la posa interrata diretta a una profondità ≥ 0,8m
These cables are suitable for direct burial at buring depth ≥ 0,8m

| CORES X SIZE (N x mm²) | OUTER DIAMETER (mm)±4mm | CABLE WEIGHT (kg/km)±5% | MIN BENDING RADIUS (mm) | MAX CONDUCTOR DC RESISTANCE AT 20°C (Ω/km) | COND. AC RESISTANCE AT MAX OPERATING TEMP. AND 50 Hz (Ω/km) | CONDUCTOR S.C.C FOR 1 sec (kA) |
|---|---|---|---|---|---|---|
| 1 x 50 | 30.6 | 808 | 460 | 0.641 | 0.822 | 4.72 |
| 1 x 70 | 32.2 | 924 | 485 | 0.443 | 0.5682 | 6.61 |
| 1 x 95 | 33.7 | 1035 | 510 | 0.32 | 0.4106 | 8.98 |
| 1 x 120 | 35.1 | 1155 | 530 | 0.253 | 0.3248 | 11.34 |
| 1 x 150 | 37.5 | 1319 | 565 | 0.206 | 0.2646 | 14.17 |
| 1 x 185 | 38.4 | 1442 | 580 | 0.164 | 0.2109 | 17.48 |
| 1 x 240 | 41 | 1681 | 615 | 0.125 | 0.1612 | 22.68 |
| 1 x 300 | 43.6 | 1944 | 655 | 0.1 | 0.1295 | 28.35 |
| 1 x 400 | 46.3 | 2299 | 695 | 0.0778 | 0.1014 | 37.79 |
| 1 x 500 | 49.5 | 2703 | 745 | 0.0605 | 0.0799 | 47.24 |
| 1 x 630 | 54.6 | 3350 | 820 | 0.0469 | 0.0631 | 59.52 |

| CORES X SIZE (N x mm²) | CAPACITANCE (µF/km) | REACTANCE AT 50 Hz (Ω/km) | CURRENT CARRYING CAPACITY | | | NOMINAL INSULATION THICKNESS (mm) | NOMINAL SHEATING THICKNESS (mm) |
|---|---|---|---|---|---|---|---|
| | | | LAID IN GROUND | LAID IN DUCT* | LAID IN FREE AIR | | |
| 1 x 50 | 0.141 | 0.144 | 180 | 145 | 185 | 8 | 2 |
| 1 x 70 | 0.157 | 0.136 | 218 | 181 | 232 | 8 | 2 |
| 1 x 95 | 0.171 | 0.130 | 267 | 213 | 282 | 8 | 2.1 |
| 1 x 120 | 0.184 | 0.125 | 303 | 248 | 324 | 8 | 2.1 |
| 1 x 150 | 0.205 | 0.118 | 339 | 278 | 367 | 8 | 2.2 |
| 1 x 185 | 0.213 | 0.116 | 384 | 309 | 425 | 8 | 2.2 |
| 1 x 240 | 0.236 | 0.111 | 432 | 366 | 499 | 8 | 2.3 |
| 1 x 300 | 0.258 | 0.107 | 485 | 418 | 575 | 8 | 2.4 |
| 1 x 400 | 0.281 | 0.103 | 555 | 484 | 672 | 8 | 2.5 |
| 1 x 500 | 0.309 | 0.100 | 638 | 557 | 786 | 8 | 2.6 |
| 1 x630 | 0.354 | 0.097 | 725 | 646 | 909 | 8 | 2.7 |

* = posati a trifoglio / at trefoil formation