

# I.C.M. INDUSTRIA CAVI MERLOTTI S.R.L.

## H07V2-K

Flexible unipolar cable, PVC insulated for maximum conductor temperature of 90°C

EU Regulation N.305/2011 – Classe Eca – DoP 18ICM004

### CONSTRUCTION FEATURES

|                  |  |
|------------------|--|
| <b>Conductor</b> | Annealed red copper class 5  |
| <b>Isolation</b> | TI3 quality PVC compound   |
| <b>Color</b>     | Black, blue, brown, gray, orange, pink, red, light blue, purple, white, yellow, green, yellow / green. |
| <b>Marking</b>   | I.C.M. S.R.L. – H07V2-K – Eca  |

### ELECTRICAL CHARACTERISTICS

|  |           |
|--|-----------|
| <b>Nominal tension U<sub>0</sub>/U</b> | 450/750 V |
|--|-----------|

### MECHANICAL CHARACTERISTICS

|                                      |                         |
|--------------------------------------|-------------------------|
| <b>Max operating temperature</b>     | 90 °C                   |
| <b>Max short circuit temperature</b> | 160 °C                  |
| <b>Min operating temperature</b>     | -10 °C                  |
| <b>Min laying temperature</b>        | 5 °C                    |
| <b>Max traction effort</b>           | 50 N/mm <sup>2</sup>    |
| <b>Min bending radius</b>            | 4 x $\varnothing_{ext}$ |

### REFERENCE STANDARDS

50525-2-31; CEI 20-40; Directive 2014/35/UE; Directive 2011/65/UE

### USE CONDITIONS

Cable for internal wiring and fixed installation protected inside equipment and in lighting devices. Maximum temperature of the conductor in normal use conditions 90°C. Not to be used in contact with objects with temperatures above 85°C. Not suitable for fixed installations in distribution systems, except when limited to a maximum conductor temperature of 70°C. Suitable for fixed protected installation in or on lighting or control devices for voltages up to 1,000V in a.c. and up to 750V in d.c. in relation to the earth.

| Formation | Maximum electrical resistance at 20°C | Prescribed insulation thickness | Average outer $\varnothing$ Lower limit | Average outer $\varnothing$ Upper limit | Nominal outer $\varnothing$ | Nominal weight | Minimum insulation resistance at nominal temperature | Current flow at 30°C in tube in air (*) |
|-----------|---------------------------------------|---------------------------------|---|---|-----------------------------|----------------|--|---|
|           | Ohm/km                                | mm                              | mm                                      | mm                                      | mm                          | Kg/km          | MOhm x km  | A                                       |
| 1x1.50    | 13.3                                  | 0.7                             | 2.8                                     | 3.4                                     | 2.9                         | 18             | 0.010  | 15.5                                    |
| 1x2.50    | 7.98                                  | 0.8                             | 3.4                                     | 4.1                                     | 3.6                         | 30             | 0.0095   | 21                                      |
| 1x4       | 4.95                                  | 0.8                             | 3.9                                     | 4.4                                     | 4.2                         | 45             | 0.0078   | 28                                      |
| 1x6       | 3.30                                  | 0.8                             | 4.4                                     | 5.3                                     | 5.2                         | 60             | 0.0068   | 36                                      |
| 1x10      | 1.91                                  | 1.0                             | 5.7                                     | 6.8                                     | 6.0                         | 108            | 0.0065   | 50                                      |

(\*) Calculation of the current flow carried out by considering a circuit with 3 active conductors