

# 0.6/1KV-CV

IEC 60502-1

## 0.6/1 kV 90°C CROSS-LINKED POLYETHYLENE INSULATED PVC SHEATHED POWER CABLE



| CABLE STRUCTURE            |   | TECHNICAL DATA  |  |
|----------------------------|---|---|--|
| <b>Conductor</b>           | : Concentric Stranded and compacted round annealed copper<br>Single-core : Sizes 1.5 mm <sup>2</sup> up to 1,000 mm <sup>2</sup><br>Multi-cores : Sizes 1.5 mm <sup>2</sup> up to 400 mm <sup>2</sup> | <b>Classification</b>   | : Maximum conductor temperature 90°C<br>: Circuit voltage not exceeding 1,100 Volts<br>Rated voltage (U <sub>0</sub> /U) 0.6/1 kV<br>600 Volts between Line-to-Earth<br>1,000 Volts between Line-to-Line |
| <b>Insulation</b>          | : Cross-linked Polyethylene (XLPE)  | <b>Testing voltage</b>  | : 3,500 Volts  |
| <b>Core identification</b> | Single-core : Natural (Translucent)<br>2 Cores : Blue and Brown<br>3 Cores : Brown, Black and Grey<br>4 Cores : Blue, Brown, Black and Grey<br>Other colors are available on customer request         | <b>Reference standard</b>   | : IEC 60502-1, IEC 60228, IEC 60332-1  |
| <b>Sheath</b>              | : Black polyvinyl chloride (PVC/ST2)  | <b>APPLICATION</b>  |  |
|                            |   | Use for installation in open tray, conduit, underground duct trench or direct burial in ground, at wet or dry location. |  |

| Number of core | Nominal cross sectional area (mm <sup>2</sup> ) | Number of wires minimum (No./mm) | Insulation thickness nominal (mm) | Sheath thickness nominal (mm) | Overall diameter approx. (mm) | Conductor resistance at 20°C maximum (Ω/km) | Insulation resistance at 20°C minimum (MΩ-km) | Continuous current rating in free air maximum (A) | Cable weight approx. (kg/km) | Standard length (m) |
|----------------|---|----------------------------------|-----------------------------------|-------------------------------|-------------------------------|---|---|---|------------------------------|---------------------|
| 1              | 1.5   | 7/0.53                           | 0.7                               | 1.4                           | 6.3                           | 12.1  | 2,500   | 31  | 50                           | 500/D               |
|                | 2.5   | 7/0.67                           | 0.7                               | 1.4                           | 6.8                           | 7.41  | 2,100   | 42  | 60                           | 500/D               |
|                | 4   | 7/0.85                           | 0.7                               | 1.4                           | 7.3                           | 4.61  | 1,700   | 55  | 80                           | 500/D               |
|                | 6   | 7/1.04                           | 0.7                               | 1.4                           | 7.9                           | 3.08  | 1,450   | 69  | 100                          | 500/D               |
|                | 10  | 6                                | 0.7                               | 1.4                           | 8.4                           | 1.83  | 1,250   | 93  | 140                          | 500/D               |
|                | 16  | 6                                | 0.7                               | 1.4                           | 9.4                           | 1.15  | 1,000   | 123   | 200                          | 500/D               |
|                | 25  | 6                                | 0.9                               | 1.4                           | 11.0                          | 0.727                                       | 1,050   | 164   | 300                          | 500/D               |
|                | 35  | 6                                | 0.9                               | 1.4                           | 12.0                          | 0.524                                       | 900   | 202   | 400                          | 500/D               |
|                | 50  | 6                                | 1.0                               | 1.4                           | 13.5                          | 0.387                                       | 850   | 245   | 500                          | 500/D               |
|                | 70  | 12                               | 1.1                               | 1.4                           | 15.0                          | 0.268                                       | 800   | 309   | 750                          | 500/D               |
|                | 95  | 15                               | 1.1                               | 1.5                           | 17.5                          | 0.193                                       | 650   | 383   | 1,000                        | 500/D               |
|                | 120   | 18                               | 1.2                               | 1.5                           | 19.0                          | 0.153                                       | 650   | 446   | 1,200                        | 500/D               |
|                | 150   | 18                               | 1.4                               | 1.6                           | 21                            | 0.124                                       | 700   | 510   | 1,500                        | 500/D               |
|                | 185   | 30                               | 1.6                               | 1.6                           | 23                            | 0.0991                                      | 700   | 591   | 1,900                        | 500/D               |
|                | 240   | 34                               | 1.7                               | 1.7                           | 26                            | 0.0754                                      | 650   | 705   | 2,500                        | 500/D               |
|                | 300   | 34                               | 1.8                               | 1.8                           | 29                            | 0.0601                                      | 600   | 814   | 3,100                        | 500/D               |
|                | 400   | 53                               | 2.0                               | 1.9                           | 32                            | 0.0470                                      | 600   | 950   | 3,900                        | 500/D               |
|                | 500   | 53                               | 2.2                               | 2.0                           | 36                            | 0.0366                                      | 600   | 1,111   | 5,000                        | 500/D               |
| 630            | 53  | 2.4                              | 2.2                               | 40                            | 0.0283                        | 550   | 1,293   | 6,500   | 500/D                        |                     |
| 800            | 53  | 2.6                              | 2.3                               | 45                            | 0.0221                        | 550   | 1,486   | 8,500   | 300/D                        |                     |
| 1,000          | 53  | 2.8                              | 2.4                               | 51                            | 0.0176                        | 500   | 1,701   | 10,500  | 300/D                        |                     |

D : Packing in drum



# 0.6/1KV-CV

IEC 60502-1

0.6/1 kV 90°C CROSS-LINKED POLYETHYLENE INSULATED PVC SHEATHED POWER CABLE



| CABLE STRUCTURE   | TECHNICAL DATA  |
|---|---|
| <b>Conductor</b> : Concentric Stranded and compacted round annealed copper<br>Single-core : Sizes 1.5 mm <sup>2</sup> up to 1,000 mm <sup>2</sup><br>Multi-cores : Sizes 1.5 mm <sup>2</sup> up to 400 mm <sup>2</sup><br><b>Insulation</b> : Cross-linked Polyethylene (XLPE)<br><b>Core identification</b><br>Single-core : Natural (Translucent)<br>2 Cores : Blue and Brown<br>3 Cores : Brown, Black and Grey<br>4 Cores : Blue, Brown, Black and Grey<br>Other colors are available on customer request<br><b>Sheath</b> : Black polyvinyl chloride (PVC/ST2) | <b>Classification</b> : Maximum conductor temperature 90°C<br>: Circuit voltage not exceeding 1,100 Volts<br>Rated voltage ( $U_0/U$ ) 0.6/1 kV<br>600 Volts between Line-to-Earth<br>1,000 Volts between Line-to-Line<br><b>Testing voltage</b> : 3,500 Volts<br><b>Reference standard</b> : IEC 60502-1, IEC 60228, IEC 60332-1 |
| <b>APPLICATION</b>  |   |
| Use for installation in open tray, conduit, underground duct trench or direct burial in ground, at wet or dry location.   |   |

| Number of core | Nominal cross sectional area (mm <sup>2</sup> ) | A.C. Resistance | Inductance | Reactance | Impedance |
|----------------|---|-----------------|------------|-----------|-----------|
|                |   | R (Ω/km)        | L (mH/km)  | XL (Ω/km) | Z (Ω/km)  |
| 1              | 1.5   | 15.4287         | 0.5005     | 0.1572    | 15.4295   |
|                | 2.5   | 9.4485          | 0.4665     | 0.1466    | 9.4496    |
|                | 4   | 5.8782          | 0.4339     | 0.1363    | 5.8798    |
|                | 6   | 3.9273          | 0.4103     | 0.1289    | 3.9295    |
|                | 10  | 2.3335          | 0.3916     | 0.1230    | 2.3367    |
|                | 16  | 1.4665          | 0.3670     | 0.1153    | 1.4710    |
|                | 25  | 0.9272          | 0.3540     | 0.1112    | 0.9338    |
|                | 35  | 0.6684          | 0.3410     | 0.1070    | 0.6769    |
|                | 50  | 0.4938          | 0.3300     | 0.1037    | 0.5046    |
|                | 70  | 0.3423          | 0.3200     | 0.1005    | 0.3567    |
|                | 95  | 0.2469          | 0.3120     | 0.0982    | 0.2657    |
|                | 120   | 0.1961          | 0.3070     | 0.0965    | 0.2185    |
|                | 150   | 0.1594          | 0.3070     | 0.0965    | 0.1863    |
|                | 185   | 0.1279          | 0.3050     | 0.0958    | 0.1598    |
|                | 240   | 0.0983          | 0.3000     | 0.0943    | 0.1362    |
|                | 300   | 0.0793          | 0.2970     | 0.0934    | 0.1225    |
|                | 400   | 0.0633          | 0.2950     | 0.0927    | 0.1122    |
| 500            | 0.0510  | 0.2920          | 0.0914     | 0.1050    |           |
| 630            | 0.0415  | 0.2900          | 0.0911     | 0.1001    |           |
| 800            | 0.0348  | 0.2870          | 0.0903     | 0.0967    |           |
| 1,000          | 0.0303  | 0.2830          | 0.0889     | 0.0939    |           |

Laying Type : Touching



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| CABLE STRUCTURE            |   | TECHNICAL DATA  |  |
|----------------------------|---|---|--|
| <b>Conductor</b>           | : Concentric Stranded and compacted round annealed copper<br>Single-core : Sizes 1.5 mm <sup>2</sup> up to 1,000 mm <sup>2</sup><br>Multi-cores : Sizes 1.5 mm <sup>2</sup> up to 400 mm <sup>2</sup> | <b>Classification</b>   | : Maximum conductor temperature 90°C<br>: Circuit voltage not exceeding 1,100 Volts<br>Rated voltage ( $U_0/U$ ) 0.6/1 kV<br>600 Volts between Line-to-Earth<br>1,000 Volts between Line-to-Line |
| <b>Insulation</b>          | : Cross-linked Polyethylene (XLPE)  | <b>Testing voltage</b>  | : 3,500 Volts  |
| <b>Core identification</b> | Single-core : Natural (Translucent)<br>2 Cores : Blue and Brown<br>3 Cores : Brown, Black and Grey<br>4 Cores : Blue, Brown, Black and Grey<br>Other colors are available on customer request         | <b>Reference standard</b>   | : IEC 60502-1, IEC 60228, IEC 60332-1  |
| <b>Sheath</b>              | : Black polyvinyl chloride (PVC/ST2)  | <b>APPLICATION</b>  |  |
|                            |   | Use for installation in open tray, conduit, underground duct trench or direct burial in ground, at wet or dry location. |  |

| Number of core | Nominal cross sectional area (mm <sup>2</sup> ) | A.C. Resistance | Inductance | Reactance | Impedance |
|----------------|---|-----------------|------------|-----------|-----------|
|                |   | R (Ω/km)        | L (mH/km)  | XL (Ω/km) | Z (Ω/km)  |
| 1              | 1.5   | 15.4287         | 0.6391     | 0.2008    | 15.4300   |
|                | 2.5   | 9.4485          | 0.6051     | 0.1901    | 9.4500    |
|                | 4   | 5.9782          | 0.5726     | 0.1799    | 5.8810    |
|                | 6   | 3.9273          | 0.5489     | 0.1724    | 3.9311    |
|                | 10  | 2.3335          | 0.5302     | 0.1666    | 2.3394    |
|                | 16  | 1.4664          | 0.5056     | 0.1589    | 1.4750    |
|                | 25  | 0.9271          | 0.4930     | 0.1547    | 0.9399    |
|                | 35  | 0.6683          | 0.4790     | 0.1506    | 0.6851    |
|                | 50  | 0.4937          | 0.4690     | 0.1473    | 0.5152    |
|                | 70  | 0.3420          | 0.4590     | 0.1441    | 0.3711    |
|                | 95  | 0.2465          | 0.4510     | 0.1417    | 0.2844    |
|                | 120   | 0.1957          | 0.4460     | 0.1400    | 0.2406    |
|                | 150   | 0.1588          | 0.4460     | 0.1400    | 0.2117    |
|                | 185   | 0.1272          | 0.4440     | 0.1394    | 0.1887    |
|                | 240   | 0.0973          | 0.4390     | 0.1379    | 0.1688    |
|                | 300   | 0.0781          | 0.4360     | 0.1369    | 0.1576    |
|                | 400   | 0.0618          | 0.4340     | 0.1362    | 0.1496    |
| 500            | 0.0490  | 0.4310          | 0.1353     | 0.1439    |           |
| 630            | 0.0390  | 0.4290          | 0.1347     | 0.1402    |           |
| 800            | 0.0318  | 0.4260          | 0.1338     | 0.1375    |           |
| 1,000          | 0.0268  | 0.4210          | 0.1324     | 0.1351    |           |

Laying type : Spacing



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| CABLE STRUCTURE            |   | TECHNICAL DATA  |  |
|----------------------------|---|---|--|
| <b>Conductor</b>           | : Concentric Stranded and compacted round annealed copper<br>Single-core : Sizes 1.5 mm <sup>2</sup> up to 1,000 mm <sup>2</sup><br>Multi-cores : Sizes 1.5 mm <sup>2</sup> up to 400 mm <sup>2</sup> | <b>Classification</b>   | : Maximum conductor temperature 90°C<br>: Circuit voltage not exceeding 1,100 Volts<br>Rated voltage ( $U_0/U$ ) 0.6/1 kV<br>600 Volts between Line-to-Earth<br>1,000 Volts between Line-to-Line |
| <b>Insulation</b>          | : Cross-linked Polyethylene (XLPE)  | <b>Testing voltage</b>  | : 3,500 Volts  |
| <b>Core Identification</b> | Single-core : Natural (Translucent)<br>2 Cores : Blue and Brown<br>3 Cores : Brown, Black and Grey<br>4 Cores : Blue, Brown, Black and Grey<br>Other colors are available on customer request         | <b>Reference standard:</b>  | IEC 60502-1, IEC 60228, IEC 60332-1  |
| <b>Sheath</b>              | : Black polyvinyl chloride (PVC/ST2)  | <b>APPLICATION</b>  |  |
|                            |   | Use for installation in open tray, conduit, underground duct trench or direct burial in ground, at wet or dry location. |  |

| Number of core | Nominal cross sectional area (mm <sup>2</sup> ) | A.C. Resistance | Inductance | Reactance | Impedance |
|----------------|---|-----------------|------------|-----------|-----------|
|                |   | R (Ω/km)        | L (mH/km)  | XL (Ω/km) | Z (Ω/km)  |
| 1              | 1.5   | 15.4287         | 0.4542     | 0.1427    | 15.4294   |
|                | 2.5   | 9.4485          | 0.4203     | 0.1320    | 9.4494    |
|                | 4   | 5.8782          | 0.3877     | 0.1218    | 5.8795    |
|                | 6   | 3.9273          | 0.3640     | 0.1144    | 3.9280    |
|                | 10  | 2.3335          | 0.3453     | 0.1085    | 2.3360    |
|                | 16  | 1.4665          | 0.3208     | 0.1008    | 1.4699    |
|                | 25  | 0.9272          | 0.3080     | 0.0967    | 0.9322    |
|                | 35  | 0.6684          | 0.2950     | 0.0925    | 0.6748    |
|                | 50  | 0.4938          | 0.2840     | 0.0892    | 0.5018    |
|                | 70  | 0.3423          | 0.2740     | 0.0860    | 0.3529    |
|                | 95  | 0.2469          | 0.2660     | 0.0836    | 0.2607    |
|                | 120   | 0.1961          | 0.2610     | 0.0820    | 0.2125    |
|                | 150   | 0.1594          | 0.2610     | 0.0819    | 0.1792    |
|                | 185   | 0.1279          | 0.2590     | 0.0813    | 0.1516    |
|                | 240   | 0.0983          | 0.2540     | 0.0798    | 0.1266    |
|                | 300   | 0.0793          | 0.2510     | 0.0788    | 0.1118    |
|                | 400   | 0.0633          | 0.2490     | 0.0781    | 0.1006    |
| 500            | 0.0501  | 0.2460          | 0.0772     | 0.0925    |           |
| 630            | 0.0415  | 0.2440          | 0.0766     | 0.0871    |           |
| 800            | 0.0348  | 0.2410          | 0.0757     | 0.0834    |           |
| 1,000          | 0.0303  | 0.2370          | 0.0743     | 0.0803    |           |

Laying Type : Trefoil



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| CABLE STRUCTURE            |   | TECHNICAL DATA  |  |
|----------------------------|---|---|--|
| <b>Conductor</b>           | : Concentric Stranded and compacted round annealed copper<br>Single-core : Sizes 1.5 mm <sup>2</sup> up to 1,000 mm <sup>2</sup><br>Multi-cores : Sizes 1.5 mm <sup>2</sup> up to 400 mm <sup>2</sup> | <b>Classification</b>   | : Maximum conductor temperature 90°C<br>: Circuit voltage not exceeding 1,100 Volts<br>Rated voltage ( $U_0/U$ ) 0.6/1 kV<br>600 Volts between Line-to-Earth<br>1,000 Volts between Line-to-Line |
| <b>Insulation</b>          | : Cross-linked Polyethylene (XLPE)  | <b>Testing voltage</b>  | : 3,500 Volts  |
| <b>Core identification</b> | Single-core : Natural (Translucent)<br>2 Cores : Blue and Brown<br>3 Cores : Brown, Black and Grey<br>4 Cores : Blue, Brown, Black and Grey<br>Other colors are available on customer request         | <b>Reference standard</b>   | : IEC 60502-1, IEC 60228, IEC 60332-1  |
| <b>Sheath</b>              | : Black polyvinyl chloride (PVC/ST2)  | <b>APPLICATION</b>  |  |
|                            |   | Use for installation in open tray, conduit, underground duct trench or direct burial in ground, at wet or dry location. |  |

| Number of core | Nominal cross sectional area (mm <sup>2</sup> ) | Number of wires minimum (No./mm) | Insulation thickness nominal (mm) | Sheath thickness nominal (mm) | Overall diameter approx. (mm) | Conductor resistance at 20°C maximum (Ω/km) | Insulation resistance at 20°C minimum (MΩ-km) | Continuous current rating in free air maximum (A) | Cable weight approx. (kg/km) | Standard length (m) |
|----------------|---|----------------------------------|-----------------------------------|-------------------------------|-------------------------------|---|---|---|------------------------------|---------------------|
| 2              | 1.5   | 7/0.53                           | 0.7                               | 1.8                           | 11.0                          | 12.1  | 2,500   | 27  | 130                          | 500/D               |
|                | 2.5   | 7/0.67                           | 0.7                               | 1.8                           | 12.0                          | 7.41  | 2,100   | 35  | 160                          | 500/D               |
|                | 4   | 7/0.85                           | 0.7                               | 1.8                           | 13.0                          | 4.61  | 1,700   | 46  | 200                          | 500/D               |
|                | 6   | 7/1.04                           | 0.7                               | 1.8                           | 14.0                          | 3.08  | 1,450   | 59  | 260                          | 500/D               |
|                | 10  | 6                                | 0.7                               | 1.8                           | 15.0                          | 1.83  | 1,250   | 79  | 340                          | 500/D               |
|                | 16  | 6                                | 0.7                               | 1.8                           | 17.0                          | 1.15  | 1,000   | 106   | 480                          | 500/D               |
|                | 25  | 6                                | 0.9                               | 1.8                           | 20                            | 0.727                                       | 1,050   | 141   | 700                          | 500/D               |
|                | 35  | 6                                | 0.9                               | 1.8                           | 23                            | 0.524                                       | 900   | 173   | 900                          | 500/D               |
|                | 50  | 6                                | 1.0                               | 1.8                           | 25                            | 0.387                                       | 850   | 213   | 1,200                        | 500/D               |
|                | 70  | 12                               | 1.1                               | 1.8                           | 29                            | 0.268                                       | 800   | 268   | 1,700                        | 500/D               |
|                | 95  | 15                               | 1.1                               | 2.0                           | 33                            | 0.193                                       | 650   | 329   | 2,300                        | 500/D               |
|                | 120   | 18                               | 1.2                               | 2.1                           | 37                            | 0.153                                       | 650   | 381   | 2,800                        | 500/D               |
|                | 150   | 18                               | 1.4                               | 2.2                           | 41                            | 0.124                                       | 700   | 436   | 3,500                        | 500/D               |
|                | 185   | 30                               | 1.6                               | 2.3                           | 45                            | 0.0991                                      | 700   | 503   | 4,300                        | 500/D               |
|                | 240   | 34                               | 1.7                               | 2.5                           | 51                            | 0.0754                                      | 650   | 593   | 5,500                        | 500/D               |
|                | 300   | 34                               | 1.8                               | 2.7                           | 56                            | 0.0601                                      | 600   | 676   | 7,000                        | 300/D               |
| 400            | 53  | 2.0                              | 2.9                               | 63                            | 0.0470                        | 600   | 777   | 9,000   | 300/D                        |                     |

D : Packing in drum



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| CABLE STRUCTURE            |   | TECHNICAL DATA  |  |
|----------------------------|---|---|--|
| <b>Conductor</b>           | : Concentric Stranded and compacted round annealed copper<br>Single-core : Sizes 1.5 mm <sup>2</sup> up to 1,000 mm <sup>2</sup><br>Multi-cores : Sizes 1.5 mm <sup>2</sup> up to 400 mm <sup>2</sup> | <b>Classification</b>   | : Maximum conductor temperature 90°C<br>: Circuit voltage not exceeding 1,100 Volts<br>Rated voltage ( $U_0/U$ ) 0.6/1 kV<br>600 Volts between Line-to-Earth<br>1,000 Volts between Line-to-Line |
| <b>Insulation</b>          | : Cross-linked Polyethylene (XLPE)  | <b>Testing voltage</b>  | : 3,500 Volts  |
| <b>Core identification</b> | Single-core : Natural (Translucent)<br>2 Cores : Blue and Brown<br>3 Cores : Brown, Black and Grey<br>4 Cores : Blue, Brown, Black and Grey<br>Other colors are available on customer request         | <b>Reference standard</b>   | : IEC 60502-1, IEC 60228, IEC 60332-1  |
| <b>Sheath</b>              | : Black polyvinyl chloride (PVC/ST2)  | <b>APPLICATION</b>  |  |
|                            |   | Use for installation in open tray, conduit, underground duct trench or direct burial in ground, at wet or dry location. |  |

| Number of core | Nominal cross sectional area (mm <sup>2</sup> ) | A.C. Resistance | Inductance | Reactance | Impedance |
|----------------|---|-----------------|------------|-----------|-----------|
|                |   | R (Ω/km)        | L (mH/km)  | XL (Ω/km) | Z (Ω/km)  |
| 2              | 1.5   | 15.3997         | 0.3270     | 0.1028    | 15.4000   |
|                | 2.5   | 9.4495          | 0.3000     | 0.0941    | 9.4500    |
|                | 4   | 5.8803          | 0.2790     | 0.0876    | 5.8810    |
|                | 6   | 3.9301          | 0.2660     | 0.0837    | 3.9310    |
|                | 10  | 2.3296          | 0.2570     | 0.0806    | 2.3310    |
|                | 16  | 1.4700          | 0.2440     | 0.0767    | 1.4720    |
|                | 25  | 0.9272          | 0.2440     | 0.0768    | 0.9304    |
|                | 35  | 0.6232          | 0.2380     | 0.0748    | 0.6277    |
|                | 50  | 0.4939          | 0.2340     | 0.0736    | 0.4994    |
|                | 70  | 0.3424          | 0.2310     | 0.0726    | 0.3500    |
|                | 95  | 0.2456          | 0.2250     | 0.0725    | 0.2561    |
|                | 120   | 0.1963          | 0.2240     | 0.0706    | 0.2086    |
|                | 150   | 0.1599          | 0.2250     | 0.0702    | 0.1747    |
|                | 185   | 0.1283          | 0.2270     | 0.0712    | 0.1468    |
|                | 240   | 0.0987          | 0.2240     | 0.0704    | 0.1212    |
| 300            | 0.0799  | 0.2220          | 0.0698     | 0.1061    |           |
| 400            | 0.0640  | 0.2220          | 0.0696     | 0.0946    |           |



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| CABLE STRUCTURE            |   | TECHNICAL DATA  |  |
|----------------------------|---|---|--|
| <b>Conductor</b>           | : Concentric Stranded and compacted round annealed copper<br>Single-core : Sizes 1.5 mm <sup>2</sup> up to 1,000 mm <sup>2</sup><br>Multi-cores : Sizes 1.5 mm <sup>2</sup> up to 400 mm <sup>2</sup> | <b>Classification</b>   | : Maximum conductor temperature 90°C<br>: Circuit voltage not exceeding 1,100 Volts<br>Rated voltage (U <sub>0</sub> /U) 0.6/1 kV<br>600 Volts between Line-to-Earth<br>1,000 Volts between Line-to-Line |
| <b>Insulation</b>          | : Cross-linked Polyethylene (XLPE)  | <b>Testing voltage</b>  | : 3,500 Volts  |
| <b>Core identification</b> | Single-core : Natural (Translucent)<br>2 Cores : Blue and Brown<br>3 Cores : Brown, Black and Grey<br>4 Cores : Blue, Brown, Black and Grey<br>Other colors are available on customer request         | <b>Reference standard</b>   | : IEC 60502-1, IEC 60228, IEC 60332-1  |
| <b>Sheath</b>              | : Black polyvinyl chloride (PVC/ST2)  | <b>APPLICATION</b>  |  |
|                            |   | Use for installation in open tray, conduit, underground duct trench or direct burial in ground, at wet or dry location. |  |

| Number of core | Nominal cross sectional area (mm <sup>2</sup> ) | Number of wires minimum (No./mm) | Insulation thickness nominal (mm) | Sheath thickness nominal (mm) | Overall diameter approx. (mm) | Conductor resistance at 20°C maximum (Ω/km) | Insulation resistance at 20°C minimum (MΩ-km) | Continuous current rating in free air maximum (A) | Cable weight approx. (kg/km) | Standard length (m) |
|----------------|---|----------------------------------|-----------------------------------|-------------------------------|-------------------------------|---|---|---|------------------------------|---------------------|
| 3              | 1.5   | 7/0.53                           | 0.7                               | 1.8                           | 11.5                          | 12.1  | 2,500   | 22  | 150                          | 500/D               |
|                | 2.5   | 7/0.67                           | 0.7                               | 1.8                           | 12.5                          | 7.41  | 2,100   | 29  | 190                          | 500/D               |
|                | 4   | 7/0.85                           | 0.7                               | 1.8                           | 13.5                          | 4.61  | 1,700   | 39  | 240                          | 500/D               |
|                | 6   | 7/1.04                           | 0.7                               | 1.8                           | 15.0                          | 3.08  | 1,450   | 49  | 320                          | 500/D               |
|                | 10  | 6                                | 0.7                               | 1.8                           | 16.0                          | 1.83  | 1,250   | 66  | 440                          | 500/D               |
|                | 16  | 6                                | 0.7                               | 1.8                           | 18.0                          | 1.15  | 1,000   | 88  | 650                          | 500/D               |
|                | 25  | 6                                | 0.9                               | 1.8                           | 22                            | 0.727                                       | 1,050   | 118   | 950                          | 500/D               |
|                | 35  | 6                                | 0.9                               | 1.8                           | 24                            | 0.524                                       | 900   | 145   | 1,300                        | 500/D               |
|                | 50  | 6                                | 1.0                               | 1.8                           | 27                            | 0.387                                       | 850   | 176   | 1,600                        | 500/D               |
|                | 70  | 12                               | 1.1                               | 1.9                           | 31                            | 0.268                                       | 800   | 222   | 2,300                        | 500/D               |
|                | 95  | 15                               | 1.1                               | 2.0                           | 36                            | 0.193                                       | 650   | 272   | 3,100                        | 500/D               |
|                | 120   | 18                               | 1.2                               | 2.1                           | 39                            | 0.153                                       | 650   | 320   | 4,000                        | 500/D               |
|                | 150   | 18                               | 1.4                               | 2.3                           | 44                            | 0.124                                       | 700   | 366   | 4,900                        | 500/D               |
|                | 185   | 30                               | 1.6                               | 2.4                           | 49                            | 0.0991                                      | 700   | 422   | 6,000                        | 500/D               |
|                | 240   | 34                               | 1.7                               | 2.6                           | 55                            | 0.0754                                      | 650   | 498   | 8,000                        | 300/D               |
| 300            | 34  | 1.8                              | 2.8                               | 61                            | 0.0601                        | 600   | 567   | 10,000  | 300/D                        |                     |
| 400            | 53  | 2.0                              | 3.1                               | 68                            | 0.0470                        | 600   | 652   | 12,500  | 200/D                        |                     |

D : Packing in drum



# 0.6/1KV-CV

IEC 60502-1

## 0.6/1 kV 90°C CROSS-LINKED POLYETHYLENE INSULATED PVC SHEATHED POWER CABLE



| CABLE STRUCTURE            |   | TECHNICAL DATA  |  |
|----------------------------|---|---|--|
| <b>Conductor</b>           | : Concentric Stranded and compacted round annealed copper<br>Single-core : Sizes 1.5 mm <sup>2</sup> up to 1,000 mm <sup>2</sup><br>Multi-cores : Sizes 1.5 mm <sup>2</sup> up to 400 mm <sup>2</sup> | <b>Classification</b>   | : Maximum conductor temperature 90°C<br>: Circuit voltage not exceeding 1,100 Volts<br>Rated voltage ( $U_0/U$ ) 0.6/1 kV<br>600 Volts between Line-to-Earth<br>1,000 Volts between Line-to-Line |
| <b>Insulation</b>          | : Cross-linked Polyethylene (XLPE)  | <b>Testing voltage</b>  | : 3,500 Volts  |
| <b>Core identification</b> | Single-core : Natural (Translucent)<br>2 Cores : Blue and Brown<br>3 Cores : Brown, Black and Grey<br>4 Cores : Blue, Brown, Black and Grey<br>Other colors are available on customer request         | <b>Reference standard</b>   | : IEC 60502-1, IEC 60228, IEC 60332-1  |
| <b>Sheath</b>              | : Black polyvinyl chloride (PVC/ST2)  | <b>APPLICATION</b>  |  |
|                            |   | Use for installation in open tray, conduit, underground duct trench or direct burial in ground, at wet or dry location. |  |

| Number of core | Nominal cross sectional area (mm <sup>2</sup> ) | A.C. Resistance |           | Inductance |          | Reactance |  | Impedance |  |
|----------------|---|-----------------|-----------|------------|----------|-----------|--|-----------|--|
|                |   | R (Ω/km)        | L (mH/km) | XL (Ω/km)  | Z (Ω/km) |           |  |           |  |
| 3              | 1.5   | 15.4000         | 0.3273    | 0.1028     | 15.4000  |           |  |           |  |
|                | 2.5   | 9.4500          | 0.2996    | 0.0941     | 9.4500   |           |  |           |  |
|                | 4   | 5.8800          | 0.2787    | 0.0876     | 5.8810   |           |  |           |  |
|                | 6   | 3.9300          | 0.2663    | 0.0837     | 3.9310   |           |  |           |  |
|                | 10  | 2.3300          | 0.2567    | 0.0806     | 2.3310   |           |  |           |  |
|                | 16  | 1.4700          | 0.2440    | 0.0767     | 1.4720   |           |  |           |  |
|                | 25  | 0.9272          | 0.2445    | 0.0768     | 0.9304   |           |  |           |  |
|                | 35  | 0.6685          | 0.2381    | 0.0748     | 0.6727   |           |  |           |  |
|                | 50  | 0.4939          | 0.2342    | 0.0736     | 0.4994   |           |  |           |  |
|                | 70  | 0.3424          | 0.2308    | 0.0725     | 0.3500   |           |  |           |  |
|                | 95  | 0.2471          | 0.2248    | 0.0706     | 0.2561   |           |  |           |  |
|                | 120   | 0.1964          | 0.2235    | 0.0702     | 0.2086   |           |  |           |  |
|                | 150   | 0.1597          | 0.2251    | 0.0707     | 0.1747   |           |  |           |  |
|                | 185   | 0.1283          | 0.2267    | 0.0712     | 0.1468   |           |  |           |  |
|                | 240   | 0.0987          | 0.2240    | 0.0704     | 0.1212   |           |  |           |  |
|                | 300   | 0.0799          | 0.2222    | 0.0698     | 0.1061   |           |  |           |  |
| 400            | 0.0640  | 0.2216          | 0.0696    | 0.0946     |          |           |  |           |  |



# 0.6/1KV-CV

IEC 60502-1

## 0.6/1 kV 90°C CROSS-LINKED POLYETHYLENE INSULATED PVC SHEATHED POWER CABLE



| CABLE STRUCTURE            |   | TECHNICAL DATA  |  |
|----------------------------|---|---|--|
| <b>Conductor</b>           | : Concentric Stranded and compacted round annealed copper<br>Single-core : Sizes 1.5 mm <sup>2</sup> up to 1,000 mm <sup>2</sup><br>Multi-cores : Sizes 1.5 mm <sup>2</sup> up to 400 mm <sup>2</sup> | <b>Classification</b>   | : Maximum conductor temperature 90°C<br>: Circuit voltage not exceeding 1,100 Volts<br>Rated voltage ( $U_0/U$ ) 0.6/1 kV<br>600 Volts between Line-to-Earth<br>1,000 Volts between Line-to-Line |
| <b>Insulation</b>          | : Cross-linked Polyethylene (XLPE)  | <b>Testing voltage</b>  | : 3,500 Volts  |
| <b>Core identification</b> | Single-core : Natural (Translucent)<br>2 Cores : Blue and Brown<br>3 Cores : Brown, Black and Grey<br>4 Cores : Blue, Brown, Black and Grey<br>Other colors are available on customer request         | <b>Reference standard</b>   | : IEC 60502-1, IEC 60228, IEC 60332-1  |
| <b>Sheath</b>              | : Black polyvinyl chloride (PVC/ST2)  | <b>APPLICATION</b>  |  |
|                            |   | Use for installation in open tray, conduit, underground duct trench or direct burial in ground, at wet or dry location. |  |

| Number of core | Nominal cross sectional area (mm <sup>2</sup> ) | Number of wires minimum (No./mm) | Insulation thickness nominal (mm) | Sheath thickness nominal (mm) | Overall diameter approx. (mm) | Conductor resistance at 20°C maximum (Ω/km) | Insulation resistance at 20°C minimum (MΩ-km) | Continuous current rating in free air maximum (A) | Cable weight approx. (kg/km) | Standard length (m) |
|----------------|---|----------------------------------|-----------------------------------|-------------------------------|-------------------------------|---|---|---|------------------------------|---------------------|
| 4              | 1.5   | 7/0.53                           | 0.7                               | 1.8                           | 12.0                          | 12.1  | 2,500   | 22  | 180                          | 500/D               |
|                | 2.5   | 7/0.67                           | 0.7                               | 1.8                           | 13.5                          | 7.41  | 2,100   | 29  | 230                          | 500/D               |
|                | 4   | 7/0.85                           | 0.7                               | 1.8                           | 14.5                          | 4.61  | 1,700   | 39  | 300                          | 500/D               |
|                | 6   | 7/1.04                           | 0.7                               | 1.8                           | 16.0                          | 3.08  | 1,450   | 49  | 400                          | 500/D               |
|                | 10  | 6                                | 0.7                               | 1.8                           | 17.5                          | 1.83  | 1,250   | 66  | 550                          | 500/D               |
|                | 16  | 6                                | 0.7                               | 1.8                           | 20                            | 1.15  | 1,000   | 88  | 800                          | 500/D               |
|                | 25  | 6                                | 0.9                               | 1.8                           | 24                            | 0.727                                       | 1,050   | 118   | 1,200                        | 500/D               |
|                | 35  | 6                                | 0.9                               | 1.8                           | 27                            | 0.524                                       | 900   | 145   | 1,600                        | 500/D               |
|                | 50  | 6                                | 1.0                               | 1.9                           | 30                            | 0.387                                       | 850   | 176   | 2,200                        | 500/D               |
|                | 70  | 12                               | 1.1                               | 2.0                           | 35                            | 0.268                                       | 800   | 222   | 3,000                        | 500/D               |
|                | 95  | 15                               | 1.1                               | 2.1                           | 39                            | 0.193                                       | 650   | 272   | 4,100                        | 500/D               |
|                | 120   | 18                               | 1.2                               | 2.3                           | 44                            | 0.153                                       | 650   | 320   | 5,000                        | 500/D               |
|                | 150   | 18                               | 1.4                               | 2.4                           | 49                            | 0.124                                       | 700   | 366   | 6,500                        | 500/D               |
|                | 185   | 30                               | 1.6                               | 2.6                           | 54                            | 0.0991                                      | 700   | 422   | 8,000                        | 300/D               |
|                | 240   | 34                               | 1.7                               | 2.8                           | 61                            | 0.0754                                      | 650   | 498   | 10,500                       | 300/D               |
|                | 300   | 34                               | 1.8                               | 3.0                           | 68                            | 0.0601                                      | 600   | 567   | 13,000                       | 200/D               |
| 400            | 53  | 2.0                              | 3.3                               | 76                            | 0.0470                        | 600   | 652   | 16,500  | 200/D                        |                     |

D : Packing in drum



# 0.6/1KV-CV

**IEC 60502-1**

## 0.6/1 kV 90°C CROSS-LINKED POLYETHYLENE INSULATED PVC SHEATHED POWER CABLE



| CABLE STRUCTURE            |   | TECHNICAL DATA  |  |
|----------------------------|---|---|--|
| <b>Conductor</b>           | : Concentric Stranded and compacted round annealed copper<br>Single-core : Sizes 1.5 mm <sup>2</sup> up to 1,000 mm <sup>2</sup><br>Multi-cores : Sizes 1.5 mm <sup>2</sup> up to 400 mm <sup>2</sup> | <b>Classification</b>   | : Maximum conductor temperature 90°C<br>: Circuit voltage not exceeding 1,100 Volts<br>Rated voltage ( $U_0/U$ ) 0.6/1 kV<br>600 Volts between Line-to-Earth<br>1,000 Volts between Line-to-Line |
| <b>Insulation</b>          | Cross-linked Polyethylene (XLPE)  | <b>Testing voltage</b>  | : 3,500 Volts  |
| <b>Core identification</b> | Single-core : Natural (Translucent)<br>2 Cores : Blue and Brown<br>3 Cores : Brown, Black and Grey<br>4 Cores : Blue, Brown, Black and Grey<br>Other colors are available on customer request         | <b>Reference standard</b>   | : IEC 60502-1, IEC 60228, IEC 60332-1  |
| <b>Sheath</b>              | : Black polyvinyl chloride (PVC/ST2)  | <b>APPLICATION</b>  |  |
|                            |   | Use for installation in open tray, conduit, underground duct trench or direct burial in ground, at wet or dry location. |  |

| Number of core | Nominal cross sectional area (mm <sup>2</sup> ) | A.C. Resistance | Inductance | Reactance | Impedance |
|----------------|---|-----------------|------------|-----------|-----------|
|                |   | R (Ω/km)        | L (mH/km)  | XL (Ω/km) | Z (Ω/km)  |
| 4              | 1.5   | 15.3996         | 0.3740     | 0.1175    | 15.4000   |
|                | 2.5   | 9.4504          | 0.3460     | 0.1088    | 9.4510    |
|                | 4   | 5.8801          | 0.3250     | 0.1022    | 5.8810    |
|                | 6   | 3.9298          | 0.3130     | 0.0983    | 3.9310    |
|                | 10  | 2.3301          | 0.3040     | 0.0953    | 2.3320    |
|                | 16  | 1.4702          | 0.2910     | 0.0913    | 1.4730    |
|                | 25  | 0.9272          | 0.2910     | 0.0915    | 0.9317    |
|                | 35  | 0.6684          | 0.2850     | 0.0895    | 0.6744    |
|                | 50  | 0.4939          | 0.2810     | 0.0882    | 0.5017    |
|                | 70  | 0.3423          | 0.2770     | 0.0872    | 0.3532    |
|                | 95  | 0.2470          | 0.2710     | 0.0853    | 0.2613    |
|                | 120   | 0.1962          | 0.2700     | 0.0849    | 0.2138    |
|                | 150   | 0.1595          | 0.2720     | 0.0854    | 0.1809    |
|                | 185   | 0.1280          | 0.2730     | 0.0859    | 0.1542    |
|                | 240   | 0.0983          | 0.2710     | 0.0850    | 0.1300    |
|                | 300   | 0.0794          | 0.2690     | 0.0845    | 0.1159    |
| 400            | 0.0634  | 0.2680          | 0.0843     | 0.1055    |           |