

# HELUPOWER® 1000 RV-K

flexible, color coded, meter marking



HELUKABEL HELUPOWER 1000 RV-K

## Technical data

- XLPE / PVC power cable acc. to IEC 60502 and UNE 21123-2
- **Temperature range**  
flexing -5°C to +90°C  
fixed installation -15°C to +90°C
- **Nominal voltage**  
U<sub>0</sub>/U 600/1000V
- **Test voltage**  
4000 V
- **Minimum bending radius**  
flexing 10x cable Ø  
fixed up to 25mm : 4 x cable Ø  
>25 - 50mm : 5 x cable Ø  
>50mm : 6 x cable Ø

## Cable structure

- Bare copper-conductor to DIN VDE 0295 cl.5, fine wire, BS 6360 cl.5, IEC 60228 cl.5
- Core insulation of XLPE type DIX3 according to HD 603-1
- Core identification for  
≤ 5 cores color coding acc. to HD 308 S2  
> 5 cores number coded acc. to EN 50334
- With or without GN-YE conductor
- Cables up to 10mm<sup>2</sup> are produced without filler
- Outer sheath of PVC compound type DMV18 according to UNE HD603-1
- Outer sheath colour black
- With meter marking

## Properties

- Max. permissible operating temperature at conductor max. +90°C and short circuit temperature for 5 seconds +250°C
- Suitable for direct burial or laying in tubes
- UV-resistant
- Oil resistant
- The materials used during manufacturing are cadmium-free, contain no silicone and are free from substances harmful to the wetting properties of lacquers

## Tests

- Flame retardant according to DIN 0482-332-1-2 / DIN EN 60332-1-2 / IEC 60332-1-2

## Note

- G = with green-yellow conductor  
X = without green-yellow conductor (OB)
- R (XLPE insulation) V (PVC sheath) - K (flexible conductor)
- RoHS compliant

## Application

These cables are designed for flexible multi purpose power supply connections which can withstand medium mechanical stress when moving freely. Suitable for use in dry, moist and wet rooms. Also suitable for direct burial or underground installation areas. Typical application areas range from general production machinery, to machine tool applications, conveyor belt systems, air-conditioning units, steel plants installations and factory automation. Ideal as power or control cable especially if increased temperature and/or voltage is required. UV resistant due to its special PVC outer sheath compound and therefore also ideal as power connection cable for outdoor mobile and portable devices and machinery. Alternatively also for use as power connection cable in the stage and lighting industry.

CE = Product complies to the Low-Voltage Directive 2014/35/EU.

| Part no. | No. cores x cross-sec. mm <sup>2</sup> | Outer Ø app. mm | Copper weight kg / km | Weight app. kg / km |
|----------|--|-----------------|-----------------------|---------------------|
| 11003798 | 1 x 1,5                                | 5,7             | 14,4                  | 50                  |
| 11003799 | 2 x 1,5                                | 9,4             | 28,8                  | 145                 |
| 11003800 | 3 G 1,5                                | 9,9             | 43,2                  | 165                 |
| 11003801 | 3 x 1,5                                | 9,9             | 43,2                  | 165                 |
| 11003802 | 4 G 1,5                                | 10,6            | 57,6                  | 190                 |
| 11003803 | 4 x 1,5                                | 10,6            | 57,6                  | 190                 |
| 11003804 | 5 G 1,5                                | 11,5            | 72,0                  | 215                 |
| 11003805 | 5 x 1,5                                | 11,5            | 72,0                  | 215                 |
| 11003806 | 7 G 1,5                                | 12,2            | 100,8                 | 300                 |
| 11003807 | 7 x 1,5                                | 12,2            | 100,8                 | 300                 |
| 11003808 | 10 G 1,5                               | 14,0            | 144,0                 | 390                 |
| 11003809 | 10 x 1,5                               | 14,0            | 144,0                 | 390                 |
| 11003810 | 12 G 1,5                               | 15,0            | 172,8                 | 440                 |
| 11003811 | 12 x 1,5                               | 15,0            | 172,8                 | 440                 |
| 11003812 | 16 G 1,5                               | 16,8            | 230,4                 | 550                 |
| 11003813 | 16 x 1,5                               | 16,8            | 230,4                 | 550                 |
| 11003816 | 19 G 1,5                               | 17,7            | 273,6                 | 620                 |
| 11003817 | 19 x 1,5                               | 17,7            | 273,6                 | 620                 |
| 11003818 | 24 G 1,5                               | 19,6            | 345,6                 | 760                 |
| 11003819 | 24 x 1,5                               | 19,6            | 345,6                 | 760                 |
| 11003822 | 1 x 2,5                                | 6,2             | 24,0                  | 65                  |
| 11003823 | 2 x 2,5                                | 10,3            | 48,0                  | 195                 |
| 11003824 | 3 G 2,5                                | 10,9            | 72,0                  | 210                 |
| 11003825 | 3 x 2,5                                | 10,9            | 72,0                  | 210                 |
| 11003826 | 4 G 2,5                                | 11,7            | 96,0                  | 250                 |
| 11003827 | 4 x 2,5                                | 11,7            | 96,0                  | 250                 |
| 11003828 | 5 G 2,5                                | 12,7            | 120,0                 | 285                 |
| 11003829 | 5 x 2,5                                | 12,7            | 120,0                 | 285                 |
| 11003830 | 7 G 2,5                                | 13,5            | 168,0                 | 390                 |
| 11003831 | 7 x 2,5                                | 13,5            | 168,0                 | 390                 |
| 11003832 | 10 G 2,5                               | 15,6            | 240,0                 | 520                 |
| 11003833 | 10 x 2,5                               | 15,6            | 240,0                 | 520                 |
| 11003834 | 12 G 2,5                               | 16,7            | 288,0                 | 290                 |
| 11003835 | 12 x 2,5                               | 16,7            | 288,0                 | 290                 |

| Part no. | No. cores x cross-sec. mm <sup>2</sup> | Outer Ø app. mm | Copper weight kg / km | Weight app. kg / km |
|----------|--|-----------------|-----------------------|---------------------|
| 11003836 | 16 G 2,5                               | 18,8            | 384,0                 | 750                 |
| 11003837 | 16 x 2,5                               | 18,8            | 384,0                 | 750                 |
| 11003840 | 19 G 2,5                               | 19,9            | 456,0                 | 850                 |
| 11003841 | 19 x 2,5                               | 19,9            | 456,0                 | 850                 |
| 11003842 | 24 G 2,5                               | 22,0            | 576,0                 | 1040                |
| 11003843 | 24 x 2,5                               | 22,0            | 576,0                 | 1040                |
| 11003846 | 1 x 4                                  | 6,7             | 38,4                  | 80                  |
| 11003847 | 2 x 4                                  | 11,4            | 76,8                  | 235                 |
| 11003848 | 3 G 4                                  | 12,0            | 115,2                 | 275                 |
| 11003849 | 3 x 4                                  | 12,0            | 115,2                 | 275                 |
| 11003850 | 4 G 4                                  | 13,0            | 153,6                 | 325                 |
| 11003851 | 4 x 4                                  | 13,0            | 153,6                 | 325                 |
| 11003852 | 5 G 4                                  | 14,2            | 192,0                 | 390                 |
| 11003853 | 5 x 4                                  | 14,2            | 192,0                 | 390                 |
| 11003854 | 1 x 6                                  | 7,3             | 57,6                  | 105                 |
| 11003855 | 2 x 6                                  | 12,6            | 115,2                 | 300                 |
| 11003856 | 3 G 6                                  | 13,3            | 172,8                 | 355                 |
| 11003857 | 3 x 6                                  | 13,3            | 172,8                 | 355                 |
| 11003858 | 4 G 6                                  | 14,5            | 230,4                 | 445                 |
| 11003859 | 4 x 6                                  | 14,5            | 230,4                 | 445                 |
| 11003860 | 5 G 6                                  | 15,8            | 288,0                 | 515                 |
| 11003861 | 5 x 6                                  | 15,8            | 288,0                 | 515                 |
| 11003862 | 1 x 10                                 | 8,2             | 96,0                  | 155                 |
| 11003863 | 2 x 10                                 | 15,0            | 192,0                 | 460                 |
| 11003864 | 3 G 10                                 | 15,9            | 288,0                 | 560                 |
| 11003865 | 3 x 10                                 | 15,9            | 288,0                 | 560                 |
| 11003866 | 4 G 10                                 | 17,3            | 384,0                 | 685                 |
| 11003867 | 4 x 10                                 | 17,3            | 384,0                 | 685                 |
| 11003868 | 5 G 10                                 | 18,8            | 480,0                 | 810                 |
| 11003869 | 5 x 10                                 | 18,8            | 480,0                 | 810                 |
| 11003870 | 1 x 16                                 | 9,1             | 153,6                 | 220                 |
| 11003871 | 2 x 16                                 | 16,8            | 307,2                 | 635                 |
| 11003872 | 3 G 16                                 | 17,8            | 460,8                 | 780                 |
| 11003873 | 3 x 16                                 | 17,8            | 460,8                 | 780                 |

Continuation ▶

# HELUPOWER® 1000 RV-K

flexible, color coded, meter marking

| Part no. | No. cores x cross-sec. mm <sup>2</sup> | Outer Ø app. mm | Copper weight kg / km | Weight app. kg / km |
|----------|--|-----------------|-----------------------|---------------------|
| 11003874 | 4 G 16                                 | 19,4            | 614,4                 | 970                 |
| 11003875 | 4 x 16                                 | 19,4            | 614,4                 | 970                 |
| 11003876 | 5 G 16                                 | 21,3            | 768,0                 | 1150                |
| 11003877 | 5 x 16                                 | 21,3            | 768,0                 | 1150                |
| 11003878 | 1 x 25                                 | 10,7            | 240,0                 | 320                 |
| 11003879 | 2 x 25                                 | 20,0            | 480,0                 | 930                 |
| 11003880 | 3 G 25                                 | 21,2            | 720,0                 | 1160                |
| 11003881 | 3 x 25                                 | 21,2            | 720,0                 | 1160                |
| 11003882 | 4 G 25                                 | 23,3            | 960,0                 | 1450                |
| 11003883 | 4 x 25                                 | 23,3            | 960,0                 | 1450                |
| 11003884 | 5 G 25                                 | 26,0            | 1200,0                | 1760                |
| 11003885 | 5 x 25                                 | 26,0            | 1200,0                | 1760                |
| 11003886 | 1 x 35                                 | 11,9            | 336,0                 | 420                 |
| 11003887 | 2 x 35                                 | 22,4            | 672,0                 | 1220                |
| 11003888 | 3 G 35                                 | 23,8            | 1008,0                | 1535                |
| 11003889 | 3 x 35                                 | 23,8            | 1008,0                | 1535                |
| 11003890 | 4 G 35                                 | 26,6            | 1344,0                | 1960                |
| 11003891 | 4 x 35                                 | 26,6            | 1344,0                | 1960                |
| 11003892 | 5 G 35                                 | 29,2            | 1680,0                | 2345                |
| 11003893 | 5 x 35                                 | 29,2            | 1680,0                | 2345                |
| 11003894 | 1 x 50                                 | 13,6            | 480,0                 | 560                 |
| 11003895 | 2 x 50                                 | 26,2            | 960,0                 | 1665                |
| 11003896 | 3 G 50                                 | 27,9            | 1440,0                | 2090                |
| 11003897 | 3 x 50                                 | 27,9            | 1440,0                | 2090                |
| 11003898 | 4 G 50                                 | 30,9            | 1920,0                | 2640                |
| 11003899 | 4 x 50                                 | 30,9            | 1920,0                | 2640                |
| 11003900 | 5 G 50                                 | 34,2            | 2400,0                | 3175                |
| 11003901 | 5 x 50                                 | 34,2            | 2400,0                | 3175                |
| 11003902 | 1 x 70                                 | 15,7            | 672,0                 | 785                 |
| 11003903 | 2 x 70                                 | 30,4            | 1344,0                | 2320                |
| 11003904 | 3 G 70                                 | 32,6            | 2016,0                | 2945                |
| 11003905 | 3 x 70                                 | 32,6            | 2016,0                | 2945                |
| 11003906 | 4 G 70                                 | 36,6            | 2688,0                | 3790                |
| 11003907 | 4 x 70                                 | 36,6            | 2688,0                | 3790                |
| 11003908 | 5 G 70                                 | 40,6            | 3360,0                | 4560                |
| 11003909 | 5 x 70                                 | 40,6            | 3360,0                | 4560                |
| 11003910 | 1 x 95                                 | 17,3            | 912,0                 | 1050                |
| 11003911 | 2 x 95                                 | 33,6            | 1824,0                | 3025                |

| Part no. | No. cores x cross-sec. mm <sup>2</sup> | Outer Ø app. mm | Copper weight kg / km | Weight app. kg / km |
|----------|--|-----------------|-----------------------|---------------------|
| 11003912 | 3 G 95                                 | 36,3            | 2736,0                | 3925                |
| 11003913 | 3 x 95                                 | 36,3            | 2736,0                | 3925                |
| 11003914 | 4 G 95                                 | 40,2            | 3648,0                | 4985                |
| 11003915 | 4 x 95                                 | 40,2            | 3648,0                | 4985                |
| 11003916 | 5 G 95                                 | 44,8            | 4560,0                | 6035                |
| 11003917 | 5 x 95                                 | 44,8            | 4560,0                | 6035                |
| 11003918 | 1 x 120                                | 19,2            | 1152,0                | 1305                |
| 11003919 | 2 x 120                                | 38,1            | 2304,0                | 3845                |
| 11003920 | 3 G 120                                | 40,6            | 3456,0                | 4905                |
| 11003921 | 3 x 120                                | 40,6            | 3456,0                | 4905                |
| 11003922 | 4 G 120                                | 45,2            | 4608,0                | 6255                |
| 11003923 | 4 x 120                                | 45,2            | 4608,0                | 6255                |
| 11003924 | 1 x 150                                | 21,3            | 1440,0                | 1610                |
| 11003925 | 2 x 150                                | 42,1            | 2880,0                | 4720                |
| 11003926 | 3 G 150                                | 45,1            | 4320,0                | 6055                |
| 11003927 | 3 x 150                                | 45,1            | 4320,0                | 6055                |
| 11003928 | 4 G 150                                | 50,5            | 5760,0                | 7775                |
| 11003929 | 4 x 150                                | 50,5            | 5760,0                | 7775                |
| 11003930 | 1 x 185                                | 23,3            | 1776,0                | 1985                |
| 11003931 | 2 x 185                                | 46,8            | 3552,0                | 5910                |
| 11003932 | 3 G 185                                | 50,1            | 5328,0                | 7570                |
| 11003933 | 3 x 185                                | 50,1            | 5328,0                | 7570                |
| 11003934 | 4 G 185                                | 55,7            | 7104,0                | 9640                |
| 11003935 | 4 x 185                                | 55,7            | 7104,0                | 9640                |
| 11003936 | 1 x 240                                | 26,2            | 2304,0                | 2610                |
| 11003937 | 2 x 240                                | 52,6            | 4608,0                | 7665                |
| 11003938 | 3 G 240                                | 56,3            | 6912,0                | 9865                |
| 11003939 | 3 x 240                                | 56,3            | 6912,0                | 9865                |
| 11003940 | 4 G 240                                | 62,6            | 9216,0                | 12585               |
| 11003941 | 4 x 240                                | 62,6            | 9216,0                | 12585               |
| 11003942 | 1 x 300                                | 28,6            | 2880,0                | 3225                |
| 11003944 | 3 G 300                                | 61,4            | 8640,0                | 12120               |
| 11003945 | 3 x 300                                | 61,4            | 8640,0                | 12120               |
| 11003946 | 4 G 300                                | 68,3            | 11520,0               | 15475               |
| 11003947 | 4 x 300                                | 68,3            | 11520,0               | 15475               |
| 11003948 | 1 x 400                                | 33,1            | 3840,0                | 3500                |
| 11003949 | 1 x 500                                | 37,1            | 4800,0                | 5060                |
| 11003950 | 1 x 630                                | 42,7            | 6048,0                | 6760                |

Dimensions and specifications may be changed without prior notice.

## RV-K CURRENT CARRYING CAPACITY

| Nominal size<br>mm <sup>2</sup> | in open air<br>at 40°C<br>A | In open air<br>at 30°C<br>A | In buried duct<br>at 25°C (**)<br>A |
|---------------------------------|-----------------------------|-----------------------------|-------------------------------------|
| 1X1,5                           | 21                          | 23                          | 21                                  |
| 1X2,5                           | 29                          | 32                          | 27,5                                |
| 1X4                             | 38                          | 42                          | 35                                  |
| 1X6                             | 49                          | 54                          | 44                                  |
| 1X10                            | 68                          | 74                          | 58                                  |
| 1X16                            | 91                          | 100                         | 75                                  |
| 1X25                            | 116                         | 127                         | 96                                  |
| 1X35                            | 144                         | 158                         | 117                                 |
| 1X50                            | 175                         | 192                         | 138                                 |
| 1X70                            | 224                         | 245                         | 170                                 |
| 1X95                            | 271                         | 297                         | 202                                 |
| 1X120                           | 314                         | 344                         | 230                                 |
| 1X150                           | 363                         | 398                         | 260                                 |
| 1X185                           | 415                         | 455                         | 291                                 |
| 1X240                           | 490                         | 537                         | 336                                 |
| 1X300                           | 630                         | 690                         | 380                                 |
| 1X400                           | 749                         | 820                         | 591                                 |
| 1X500                           | 860                         | 942                         | 670                                 |
| 1X630                           | 990                         | 1084                        | 740                                 |
| 2X1,5                           | 24                          | 26                          | 24                                  |
| 2X2,5                           | 33                          | 36                          | 32                                  |
| 2X4                             | 45                          | 49                          | 42                                  |
| 2X6                             | 57                          | 62                          | 53                                  |
| 2X10                            | 76                          | 83                          | 70                                  |
| 2X16                            | 105                         | 115                         | 91                                  |
| 2X25                            | 123                         | 135                         | 116                                 |
| 2X35                            | 154                         | 169                         | 140                                 |
| 2X50                            | 188                         | 206                         | 166                                 |
| 2X70                            | 244                         | 267                         | 204                                 |
| 2X95                            | 296                         | 324                         | 241                                 |
| 2X120                           | 348                         | 381                         | 275                                 |
| 2X150                           | 404                         | 443                         | 311                                 |
| 2X185                           | 464                         | 508                         | 348                                 |
| 2X240                           | 552                         | 605                         | 402                                 |
| 3X1,5                           | 24                          | 26                          | 21                                  |
| 3X2,5                           | 33                          | 36                          | 27,5                                |
| 3X4                             | 45                          | 49                          | 35                                  |
| 3X6                             | 57                          | 62                          | 44                                  |
| 3X10                            | 76                          | 83                          | 58                                  |
| 3X16                            | 105                         | 115                         | 75                                  |
| 3X25                            | 110                         | 120                         | 96                                  |
| 3X35                            | 137                         | 150                         | 117                                 |
| 3X50                            | 167                         | 183                         | 138                                 |
| 3X70                            | 214                         | 234                         | 170                                 |
| 3X95                            | 259                         | 284                         | 202                                 |
| 3X120                           | 301                         | 330                         | 230                                 |
| 3X150                           | 343                         | 376                         | 260                                 |
| 3X185                           | 391                         | 428                         | 291                                 |
| 3X240                           | 468                         | 513                         | 336                                 |
| 3X300                           | 547                         | 599                         | 380                                 |
| 4X1,5                           | 20                          | 22                          | 21                                  |
| 4X2,5                           | 26,5                        | 29                          | 27,5                                |
| 4X4                             | 36                          | 39                          | 35                                  |
| 4X6                             | 46                          | 50                          | 44                                  |
| 4X10                            | 65                          | 71                          | 58                                  |
| 4X16                            | 87                          | 95                          | 75                                  |
| 4X25                            | 110                         | 120                         | 96                                  |
| 4X35                            | 137                         | 150                         | 117                                 |
| 4X50                            | 167                         | 183                         | 138                                 |
| 4X70                            | 214                         | 234                         | 170                                 |
| 4X95                            | 259                         | 284                         | 202                                 |
| 4X120                           | 301                         | 330                         | 230                                 |
| 4X150                           | 343                         | 376                         | 260                                 |
| 4X185                           | 391                         | 428                         | 291                                 |
| 4X240                           | 468                         | 513                         | 336                                 |
| 4X300                           | 547                         | 599                         | 380                                 |
| 3X35+1X16                       | 137                         | 150                         | 117                                 |
| 3X50+1X25                       | 167                         | 183                         | 138                                 |
| 3X70+1X35                       | 214                         | 234                         | 170                                 |
| 3X95+1X50                       | 259                         | 284                         | 202                                 |
| 3X120+1X70                      | 301                         | 330                         | 230                                 |
| 3X150+1X70                      | 343                         | 376                         | 260                                 |
| 3X185+1X95                      | 391                         | 428                         | 291                                 |
| 3X240+1X120                     | 468                         | 513                         | 336                                 |
| 3X300+1X150                     | 547                         | 599                         | 380                                 |
| 5X1,5                           | 20                          | 22                          | 21                                  |
| 5X2,5                           | 26,5                        | 29                          | 27,5                                |
| 5X4                             | 36                          | 39                          | 35                                  |
| 5X6                             | 46                          | 50                          | 44                                  |
| 5X10                            | 65                          | 71                          | 58                                  |
| 5X16                            | 87                          | 95                          | 75                                  |
| 5X25                            | 110                         | 120                         | 96                                  |
| 5X35                            | 137                         | 150                         | 117                                 |
| 5X50                            | 167                         | 183                         | 138                                 |
| 5X70                            | 214                         | 234                         | 170                                 |
| 5X95                            | 259                         | 284                         | 202                                 |

### Note :

- (\*\*)Buried installation, directly or in tube, with standard thermal ground resistance of 2.5 K x m/W.
- Current carrying capacities for single cores cables are calculated assuming three loaded cables.
- Current carrying capacities for 3/4/5 cores cables are calculated assuming three loaded conductors.
- Standard reference: UNE 20460; CENELEC HD 384 ; IEC 364.