

**0.6/1 kV**

# HALOGEN-FREE CABLES



## SABIX® A 812 C FRNC

Motor connection cable with numbered conductors, improved fire performance, inner jacket, overall copper screen and extended temperature range



Marking for SABIX® A 812 C FRNC 68120715:

SAB BRÖCKSKES · D-VIERSEN · SABIX® A 812 C FRNC rf 0,6/1 kV 7 x 1,5 mm<sup>2</sup> CE

SABIX® A 812 FRNC is a flexible, halogen free, shielded motor power supply cable which has been designed for automation technology, control machinery, machine and industrial factory, motor construction and drive systems. An overall tinned copper braid is recommended whenever electrical interference distorts signal transmission, or when EMI emission needs to be suppressed.

### Construction:

|                         |  |
|-------------------------|--|
| <b>Conductor:</b>       | bare copper strands acc. to DIN VDE 0295 class 5 + IEC 60228 class 5 HD 383 class 5                      |
| <b>Insulation:</b>      | SABIX® 336   |
| <b>Color code:</b>      | black conductors with consecutive numbers acc. to EN 50334;<br>green-yellow earth wire from 3 conductors |
| <b>Stranding:</b>       | in layers  |
| <b>Inner jacket:</b>    | SABIX® FRNC  |
| <b>Screen:</b>          | tinned copper braiding   |
| <b>Jacket material:</b> | SABIX® 230   |
| <b>Jacket color:</b>    | gray   |

### Outstanding features:

- ▶ halogen-free
- ▶ good EMC characteristics\*
- ▶ no flame propagation
- ▶ flame retardant and self-extinguishing

\* Copper braiding should be connected circularly to optimize the EMC characteristics

### Technical data:

|                                       |  |
|---------------------------------------|--|
| <b>Nominal voltage:</b>               | Uo/U 0.6/1 kV  |
| <b>Testing voltage U:</b>             | 4000 V acc. to DIN VDE 0281 part 2 + HD 21.2 conductor/screen 2000 V   |
| <b>Min. bending radius</b>            |  |
| <i>fixed installation:</i>            | 5 x O.D.   |
| <i>free movement:</i>                 | 10 x O.D.  |
| <b>Temperature range</b>              |  |
| <i>static:</i>                        | -40/+85 °C   |
| <i>flexing:</i>                       | -30/+85 °C   |
| <b>Zero halogen:</b>                  | acc. to DIN VDE 0472 part 815 and IEC 60754-1  |
| <b>Burning characteristics:</b>       | no flame propagation acc. to IEC 60332 + EN 50266 cat. C resp. D.<br>Flame retardant and self-extinguishing acc. to IEC 60332-1-2 and EN 60332-1-2 |
| <b>Corrosivity:</b>                   | in compliance with IEC 60754-2 and EN 50267-2-2 + VDE 0482 part 267-2-2 - no development of corrosive conflagration gases                          |
| <b>Smoke density:</b>                 | acc. to IEC 61034 + EN 61034   |
| <b>Flexibility:</b>                   | good   |
| <b>Weather resistance:</b>            | good   |
| <b>Absence of harmful substances:</b> | acc. to RoHS-guideline 2002/95/EG as well as GefStoffV appendix IV-no. 24, see page N/25   |

| item no.                                   | no. of conductors incl. ground | nominal outer-ø inch | outer-ø mm | cable weight ≈ lbs/mft | item no.                                | no. of conductors incl. ground | nominal outer-ø inch | outer-ø mm | cable weight ≈ lbs/mft | item no.   | no. of conductors incl. ground | nominal outer-ø inch | outer-ø mm | cable weight ≈ lbs/mft |
|--|--------------------------------|----------------------|------------|------------------------|---|--------------------------------|----------------------|------------|------------------------|--|--------------------------------|----------------------|------------|------------------------|
| ▶ 16 AWG (27-29/30) • 1.50 mm <sup>2</sup> |                                |                      |            |                        | ▶ 10 AWG (78/28) • 6.00 mm <sup>2</sup> |                                |                      |            |                        | ▶ 6 AWG (119/26) • 16.00 mm <sup>2</sup>             |                                |                      |            |                        |
| 68120315                                   | 3                              | 0.476                | 12.1       | 156                    | 68120360                                | 3                              | 0.685                | 17.4       | 341                    | 68120380   | 3                              | 1.031                | 26.2       | 785                    |
| 68120415                                   | 4                              | 0.504                | 12.8       | 174                    | 68120460                                | 4                              | 0.740                | 18.8       | 413                    | 68120480   | 4                              | 1.122                | 28.5       | 936                    |
| 68120515                                   | 5                              | 0.555                | 14.1       | 207                    | 68120560                                | 5                              | 0.807                | 20.5       | 487                    | 68120580   | 5                              | 1.197                | 30.4       | 1081                   |
| 68120715                                   | 7                              | 0.610                | 15.5       | 253                    | 68120760                                | 7                              | 0.874                | 22.2       | 593                    | 68120780   | 7                              | 1.362                | 34.6       | 1468                   |
| ▶ 14 AWG (46/36) • 2.50 mm <sup>2</sup>    |                                |                      |            |                        | ▶ 8 AWG (77/26) • 10.00 mm <sup>2</sup> |                                |                      |            |                        | ▶ 4 AWG (169/26) • 25.00 mm <sup>2</sup>             |                                |                      |            |                        |
| 68120325                                   | 3                              | 0.531                | 13.5       | 196                    | 68120370                                | 3                              | 0.835                | 21.2       | 523                    | 68120390   | 3                              | 1.197                | 30.4       | 1111                   |
| 68120425                                   | 4                              | 0.571                | 14.5       | 230                    | 68120470                                | 4                              | 0.906                | 23.0       | 622                    | 68120490   | 4                              | 1.331                | 33.8       | 1423                   |
| 68120525                                   | 5                              | 0.626                | 15.9       | 271                    | 68120570                                | 5                              | 0.992                | 25.2       | 743                    | 68120590   | 5                              | 1.469                | 37.3       | 1715                   |
| 68120725                                   | 7                              | 0.677                | 17.2       | 323                    | 68120770                                | 7                              | 1.083                | 27.5       | 935                    | Other dimensions and colors are possible on request. |                                |                      |            |                        |
| ▶ 12 AWG (52/28) • 4.00 mm <sup>2</sup>    |                                |                      |            |                        |   |                                |                      |            |                        |  |                                |                      |            |                        |
| 68120340                                   | 3                              | 0.626                | 15.9       | 276                    |   |                                |                      |            |                        |  |                                |                      |            |                        |
| 68120440                                   | 4                              | 0.677                | 17.2       | 322                    |   |                                |                      |            |                        |  |                                |                      |            |                        |
| 68120540                                   | 5                              | 0.736                | 18.7       | 389                    |   |                                |                      |            |                        |  |                                |                      |            |                        |
| 68120740                                   | 7                              | 0.787                | 20.0       | 459                    |   |                                |                      |            |                        |  |                                |                      |            |                        |

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