

# 8BCM0025.1034C-0

## 1 General information

- Can be used in cable drag chains
- Assembled specifically for use with ACOPOSmicro, ACOPOS servo drives and B&R servo motors with series 915 built-in connectors
- itec - Innovative connector system for fast and secure connections

## 2 Order data

| Model number     | Short description                                                                                                                                                                 | Figure                                                                              |
|------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| 8BCM0025.1034C-0 | <b>Motor cables</b><br>Motor cable, length 25 m, 4x 0.75 mm <sup>2</sup> + 2x 2x 0.34 mm <sup>2</sup> , 8-pin female series 915 power connector, can be used in cable drag chains |  |

Table 1: 8BCM0025.1034C-0 - Order data

## 3 Technical data

| Model number                               | 8BCM0025.1034C-0                                                                                                                |
|--------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------|
| <b>General information</b>                 |                                                                                                                                 |
| Cable cross section                        | 4x 0.75 mm <sup>2</sup> + 2x 2x 0.34 mm <sup>2</sup>                                                                            |
| Durability                                 | Oil resistance per HD 22.10 appendix A, DIN EN 60811-404 <sup>1)</sup>                                                          |
| Certification                              | E170315 cRUus AWM STYLE 21223 AWM I/II A/B 80°C 1000 V FT1 <sup>1)</sup>                                                        |
| Certifications                             |                                                                                                                                 |
| CE                                         | Yes                                                                                                                             |
| UL                                         | cULus E225616                                                                                                                   |
| EAC                                        | Power conversion equipment                                                                                                      |
|                                            | Yes                                                                                                                             |
| <b>Cable construction</b>                  |                                                                                                                                 |
| Power lines                                |                                                                                                                                 |
| Quantity                                   | 4                                                                                                                               |
| Wire insulation                            | PP                                                                                                                              |
| Wire colors                                | Black, brown, blue, yellow/green                                                                                                |
| Variant                                    | Tinned copper stranded wire                                                                                                     |
| Cross section                              | 0.75 mm <sup>2</sup>                                                                                                            |
| Shield                                     | No                                                                                                                              |
| Stranding                                  | No                                                                                                                              |
| Signal line                                |                                                                                                                                 |
| Quantity                                   | 4                                                                                                                               |
| Wire insulation                            | PP                                                                                                                              |
| Wire colors                                | White, white/red, white/blue, white/green                                                                                       |
| Variant                                    | Tinned copper stranded wire                                                                                                     |
| Cross section                              | 0.34 mm <sup>2</sup>                                                                                                            |
| Shield                                     | Individually shielded in pairs, tinned copper braiding, optical coverage >85% and foil shield                                   |
| Stranding                                  | White with white/red and white/blue with white/green                                                                            |
| Cable stranding                            | With filler elements and foil shield                                                                                            |
| Cable shield                               | Tinned copper braiding, optical coverage >85% and foil shield                                                                   |
| Outer jacket                               |                                                                                                                                 |
| Material                                   | PUR                                                                                                                             |
| Color                                      | Orange, similar to RAL 2003 flat                                                                                                |
| Labeling                                   | B&R 4 G 0.75 + 2 x (2x0.34)C C E170315 cRUus AWM STYLE 21223 AWM I/II A/B 80°C 1000 V FT1 production order number <sup>1)</sup> |
| <b>Connector</b>                           |                                                                                                                                 |
| Type                                       | 8-pin female series 915 power connector                                                                                         |
| Mating cycles                              | <500                                                                                                                            |
| Contacts                                   | 8 (4 power and 4 signal contacts)                                                                                               |
| Degree of protection per EN 60529          | IP66/67 when connected                                                                                                          |
| <b>Electrical properties <sup>1)</sup></b> |                                                                                                                                 |
| Operating voltage                          | Max. 1000 VAC (UL)                                                                                                              |

Table 2: 8BCM0025.1034C-0 - Technical data

| Model number                                                | 8BCM0025.1034C-0                                                    |
|-------------------------------------------------------------|---------------------------------------------------------------------|
| Test voltage                                                |                                                                     |
| Wire - Wire                                                 | 4 kV                                                                |
| Wire - Shield                                               | 4 kV                                                                |
| Conductor resistance                                        |                                                                     |
| Power lines                                                 | ≤26.7 Ω/km                                                          |
| Signal line                                                 | ≤56 Ω/km                                                            |
| Insulation resistance                                       | ≥500 MΩ*km                                                          |
| Current-carrying capacity per DIN VDE 0298 part 4, table 11 |                                                                     |
| Wall mounting                                               | 13 A                                                                |
| Installed in conduit or cable duct                          | 11.5 A                                                              |
| Installed in cable tray                                     | 13.5 A                                                              |
| <b>Ambient conditions <sup>1)</sup></b>                     |                                                                     |
| Temperature                                                 |                                                                     |
| Moving                                                      | -20°C to +80°C                                                      |
| Static                                                      | -20°C to +90°C                                                      |
| <b>Mechanical properties <sup>1)</sup></b>                  |                                                                     |
| Dimensions                                                  |                                                                     |
| Length                                                      | 25 m                                                                |
| Diameter                                                    | 10.1 mm ±0.3 mm                                                     |
| Bend radius                                                 |                                                                     |
| Single bend                                                 | >32 mm                                                              |
| Moving                                                      | >78 mm                                                              |
| Drag chain data                                             |                                                                     |
| Acceleration                                                | Max. 50 m/s <sup>2</sup> (depends on the length of the travel path) |
| Flex cycles <sup>2)</sup>                                   | ≥5,000,000                                                          |
| Velocity                                                    | Max. 300 m/min                                                      |
| Weight                                                      | 2.23 kg                                                             |

Table 2: 8BCM0025.1034C-0 - Technical data

1) Values refer to the raw cable being used.

2) At an ambient temperature from -20°C to +60°C.

## 4 Wiring

### 4.1 Cable construction

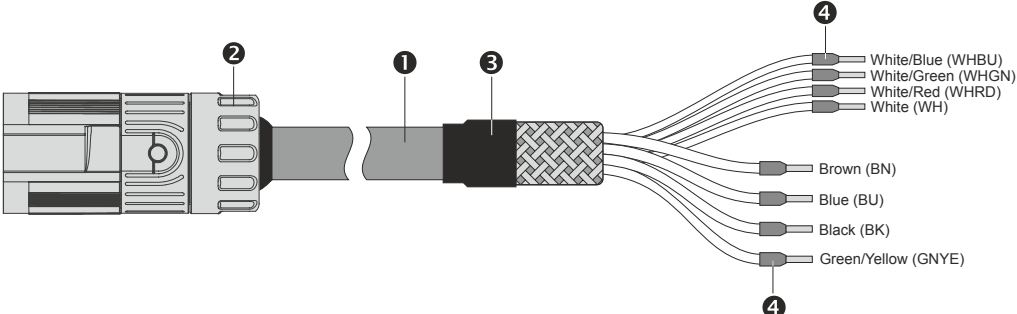
|  |                              |                                                     |
|--------------------------------------------------------------------------------------|------------------------------|-----------------------------------------------------|
| Pos.                                                                                 | Description                  | Note                                                |
| 1                                                                                    | Motor cable                  | 4x 0.75 mm <sup>2</sup> + 2x 2x 034 mm <sup>2</sup> |
| 2                                                                                    | 8-pin female motor connector | Dimensions: ø 19 x 42 mm                            |
| 3                                                                                    | Heat shrink tubing           |                                                     |
| 4                                                                                    | Wire end sleeves             |                                                     |

Table 3: 0.75 mm<sup>2</sup> motor cables - Cable construction

### 4.2 Pinout

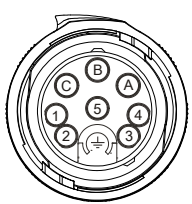
| Connector                                                                           | Pin | Description | Function                    |
|-------------------------------------------------------------------------------------|-----|-------------|-----------------------------|
|  | A   | U           | Motor connection U          |
|                                                                                     | B   | V           | Motor connection V          |
|                                                                                     | C   | W           | Motor connection W          |
|                                                                                     | D   | PE          | Protective ground conductor |
|                                                                                     | 1   | T+          | Temperature +               |
|                                                                                     | 2   | T-          | Temperature -               |
|                                                                                     | 3   | B+          | Brake +                     |
|                                                                                     | 4   | B-          | Brake -                     |
|                                                                                     | 5   | ---         | ---                         |

Table 4: 0.75 mm<sup>2</sup> motor cables - Pinout

### 4.3 Cable diagram

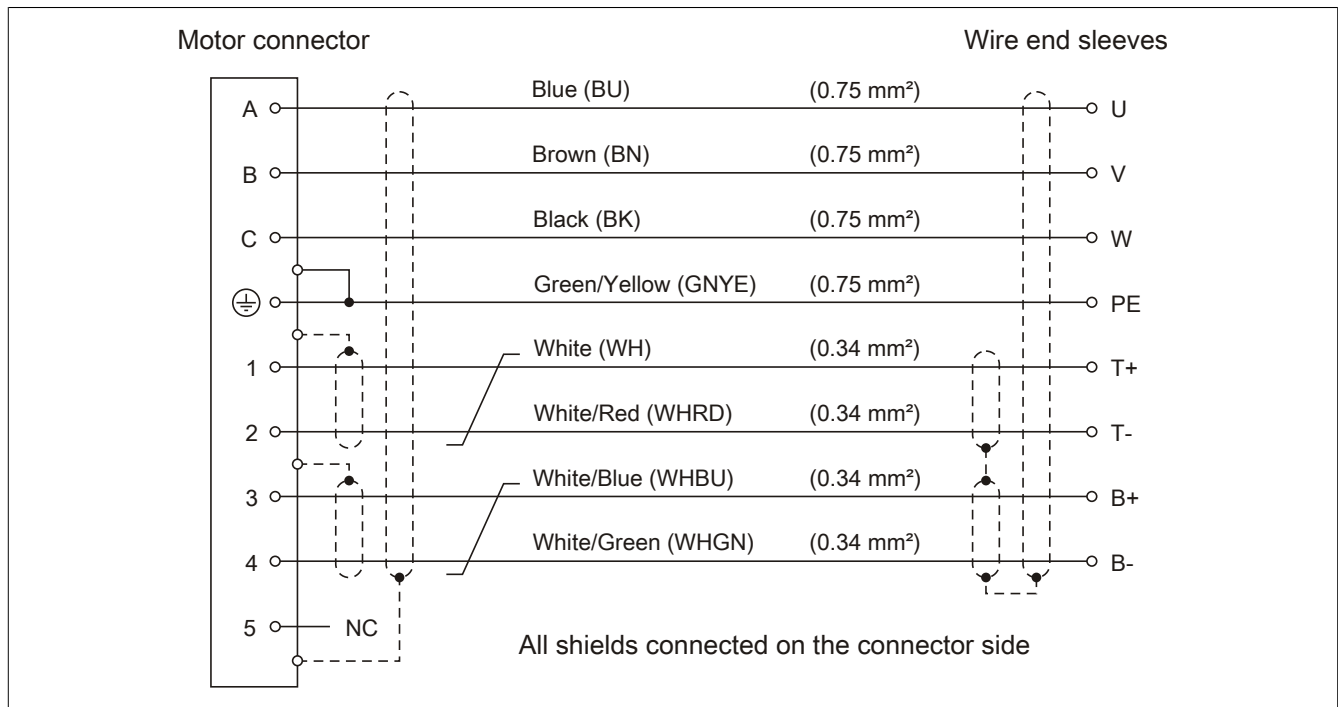


Figure 1: 0.75 mm² motor cables - Cable diagram