

# 8BCM0020.3011A-0

## 1 General information

- Extremely flexible
- Assembled specifically for use with ACOPOSmulti drive systems and B&R servo motors with motor connector size 1
- speedtec - Innovative connector system for secure connections
- Integrated shield plate

### Information:

A shield plate is attached to ACOPOSmulti 8BCM motor cables. If this shield plate is correctly installed on the respective ACOPOSmulti 8BVI inverter module, no additional shielding measures are necessary.

## 2 Order data


Model number	Short description	Figure
	<b>0.75 mm<sup>2</sup> motor cables</b>	
8BCM0020.3011A-0	ACOPOSmulti motor cable, length 20 m, 4x 0.75 mm <sup>2</sup> + 2x 2x 0.34 mm <sup>2</sup> , 8-pin female speedtec motor connector size 1, integrated shield plate	

Table 1: 8BCM0020.3011A-0 - Order data

## 3 Technical data

Model number	8BCM0020.3011A-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 TM5 per VDE 0281 Part 1 / HD21.1 Flame resistance per IEC 60332-1-2 / UL 2556 (VW-1) / CSA C22.2 No. 210.2 (FT-1) <sup>1)</sup>
Certification	UL Style 2570 80°C 1000 V VW-1 E130266 and cUL AWM I/II A/B 80°C 1000 V FT-1 <sup>1)</sup>
<b>Certifications</b>	
CE	Yes
UL	cULus E225616 Power conversion equipment
EAC	Yes
<b>Cable construction</b>	
<b>Power lines</b>	
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
<b>Signal line</b>	
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	Separate shielding for 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
<b>Outer jacket</b>	
Material	PVC
Color	Orange, similar to RAL 2003 flat
Labeling	B&R 4x0,75+2x2x0,34 XX/YYYY E130266 cURus AWM STYLE 2570 I/II A/B 80°C 1000 V FT-1 <sup>1)2)</sup>
<b>Connector</b>	
Type	8-pin female speedtec motor connector, size 1

Table 2: 8BCM0020.3011A-0 - Technical data

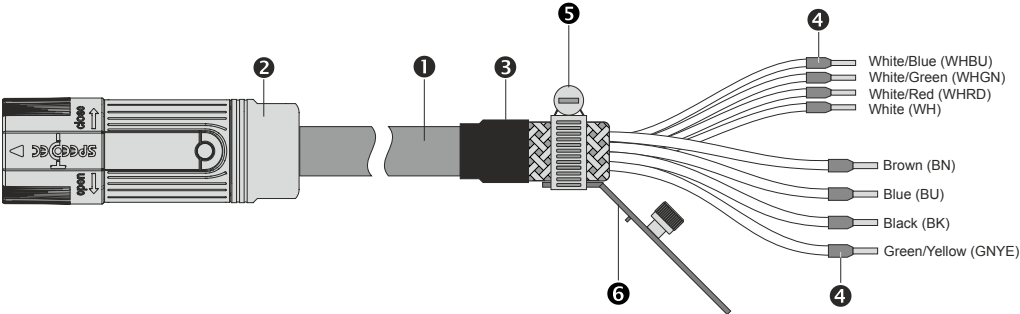
Model number	8BCM0020.3011A-0
Mating cycles	<500
Contacts	8 (4 power and 4 signal contacts)
Degree of protection per EN 60529	IP66/67 when connected
Electrical properties <sup>1)</sup>	
Test voltage	
Wire - Wire	4 kV
Wire - Shield	3 kV
Conductor resistance	
Power lines	≤58.3 Ω/km
Signal line	≤26.7 Ω/km
Insulation resistance	≥100 MΩ*km
Current-carrying capacity per DIN VDE 0298 part 4, table 11	
Wall mounting	9.8 A
Installed in conduit or cable duct	8.5 A
Installed in cable tray	10.4 A
Ambient conditions <sup>1)</sup>	
Temperature	
Moving	-20°C to +80°C
Static	-20°C to +90°C
Mechanical properties <sup>1)</sup>	
Dimensions	
Length	20 m
Diameter	10.6 mm ± 0.4 mm
Bend radius	
Single bend	>55 mm
Moving	≥165 mm
Weight	1.8 kg

Table 2: 8BCM0020.3011A-0 - Technical data

- 1) Values refer to the raw cable being used.  
2) XX ... Week of manufacture, YYYY ... Year of manufacture

## 4 Wiring

### Construction



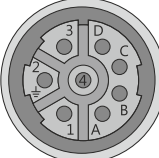
The diagram illustrates the construction of the motor cable. It shows a cross-section of the cable with various components labeled 1 through 6. Component 1 is the motor line, 2 is the 8-pin female circular connector, 3 is heat shrink tubing, 4 is wire end sleeves, 5 is a cable clamp, and 6 is shield mounting. The wire color coding is as follows:

- White/Blue (WHBU)
- White/Green (WHGN)
- White/Red (WHRD)
- White (WH)
- Brown (BN)
- Blue (BU)
- Black (BK)
- Green/Yellow (GNYE)

Pos.	Description	Note
1	Motor line	4x 0.75 mm <sup>2</sup> + 2x 2x 0.34 mm <sup>2</sup> (8BCMxxxx.x011A-0)
2	8-pin female circular connector	Dimensions: ø 28 x 78 mm
3	Heat shrink tubing	
4	Wire end sleeves	
5	Cable clamp	
6	Shield mounting	

Table 3: 8BCMxxx.x011A-0 motor cables - Construction

### Pinout



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

Table 4: 8BCMxxx.x011A-0 motor cables - Pinout

## Cable diagram

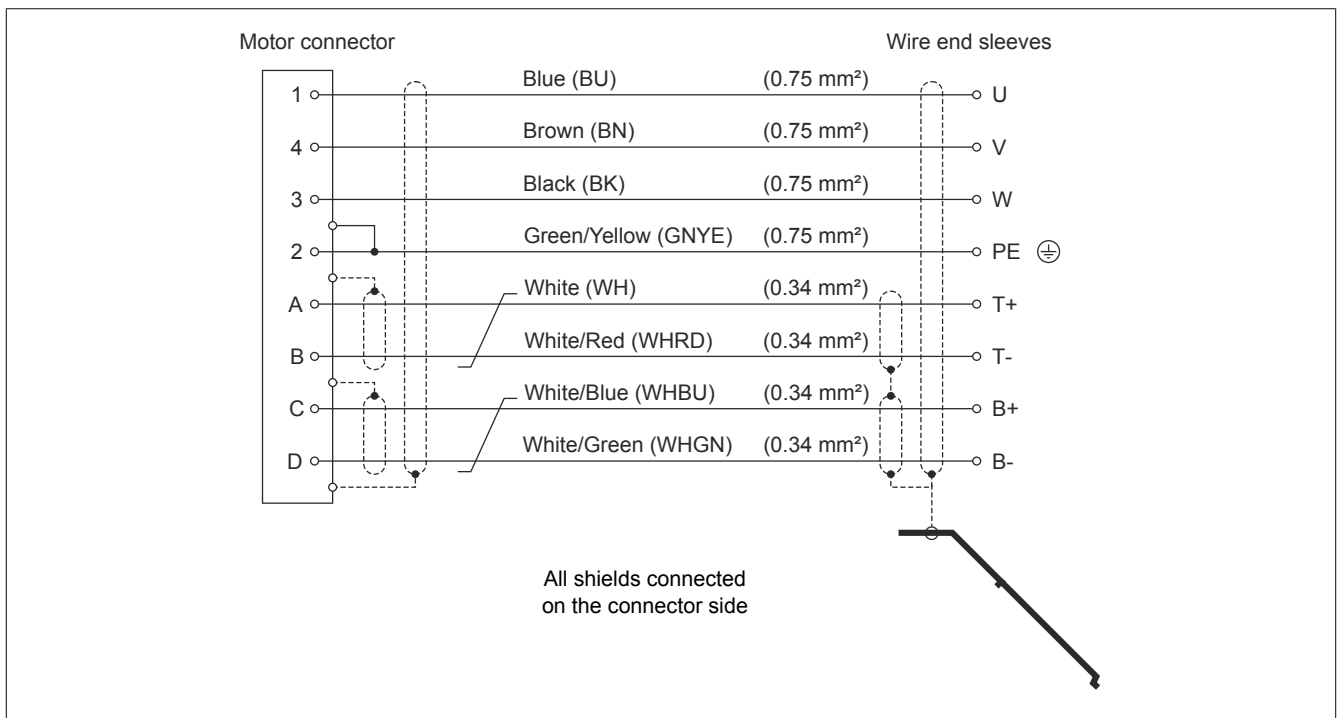


Figure 1: 8BCMxxxx.x011A-0 motor cables - Cable diagram