8CCE0006.11210-0

1 General information

- Can be used in cable drag chains
- Assembled specifically for use with ACOPOSremote / ACOPOSmulti65 8CVI inverter modules and B&R servo motors

2 Order data

Model number	Short description	Figure
	EnDat 2.1 cables	
8CCE0006.11210-0	ACOPOSremote EnDat 2.1 cable, length 6 m, 10x 0.14 mm² + 2x 0.5 mm², 17-pin female speedtec motor connector, 15-pin male series 615 signal connector, can be used in cable drag chains	

Table 1: 8CCE0006.11210-0 - Order data

3 Technical data

Model number	8CCE0006.11210-0
General information	
Cable cross section	5x 2x 0.14 mm² + 1x 2x 0.50 mm²
Durability	Oil resistance per VDE 0472 Part 803 as well as standard hydraulic oils [1)]
Certification	UL AWM Style 20963, 80°C, 30 V, E63216 and CSA AWM I/II A/B, 90°C, 30 V, FT1 LL46064 [1)]
Certifications	
CE	Yes
UL	cULus E225616 Power conversion equipment
Cable construction	
Supply lines	
Quantity	2
Wire insulation	Special thermoplastic material
Wire colors	White/Green, white/red
Variant	Tinned copper stranded wire
Cross section	0.5 mm²
Shield	No
Stranding	White/Red with white/green and filler elements
Signal line	
Quantity	10
Wire insulation	Special thermoplastic material
Wire colors	Blue, brown, yellow, gray, green, pink, red, black, violet, white
Variant	Tinned copper stranded wire
Cross section	0.14 mm²
Shield	No
Stranding	Green with brown, gray with yellow, white with violet, black with red, pink with blue
Cable stranding	With terminating foil shield
Cable shield	Copper braiding, optical coverage >85% and foil shield
Outer jacket	
Material	PUR
Color	Green, similar to RAL 6018 flat
Labeling	BERNECKER + RAINER 5x2x0,14+2x0,50 FLEX UL AWM STYLE 20963 80°C 30 V E63216 CSA AWM I/II A/B 90°C 30 V FT1 LL46064 [1)]
Connector	
Type	17-pin female speedtec motor connector
Mating cycles	<500
Contacts	17
Additional connectors	15-pin male series 615 signal connector Mating cycles: <500 Contacts: 15 Degree of protection per EN 60529: IP66/67 when connected
Degree of protection per EN 60529	IP66/67 when connected
Electrical properties [1)]	
Operating voltage	≤30 V_{eff}

Table 2: 8CCE0006.11210-0 - Technical data

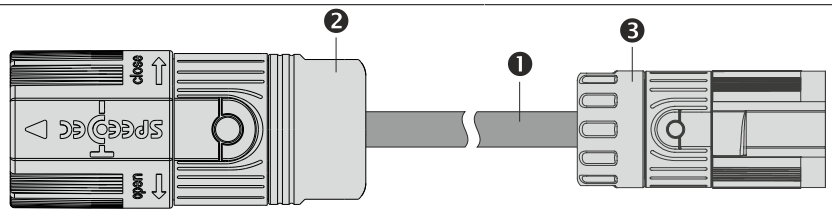
Model number	8CCE0006.11210-0
Test voltage	
Wire - Wire	1 kV
Wire - Shield	0.8 kV
Conductor resistance	
Supply lines	≤40 Ω/km
Signal line	≤140 Ω/km
Insulation resistance	>200 MΩ*km
Ambient conditions [1]	
Temperature	
Moving	-20°C to +80°C
Static	-20°C to +90°C
Mechanical properties [1]	
Dimensions	
Length	6 m
Diameter	7.85 mm ±0.2 mm
Bend radius	
Single bend	≥24 mm
Moving	≥60 mm
Drag chain data	
Acceleration	≤6 g
Flex cycles [2]	>3,000,000
Velocity	≤4 m/s
Weight	0.5 kg

Table 2: 8CCE0006.11210-0 - Technical data

1) Values refer to the raw cable being used.
2) At an ambient temperature of 20°C and bend radius of 65 mm.

4 Wiring

4.1 Cable construction



Pos.	Description	Note
1	Encoder line	5x 2x 0.14 mm² + 2x 0.50 mm²
2	17-pin motor connector, female	
3	15-pin servo connector, male	

Table 3: EnDat 2.1 cables - Cable construction

4.2 Pinout

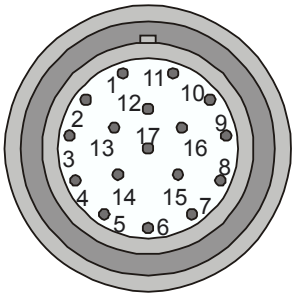
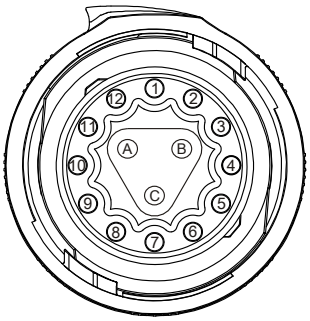
Connector	Pin	Description	Function	Pin	Connector
	1	Sense +5 V	Sense input +5 V	C	
	2	---	---	4	
	3	---	---	5	
	4	Sense COM	Sense input 0 V	6	
	5	---	---	12	
	6	---	---		
	7	+5 V Out	Encoder power supply +5 V	1	
	8	T	Clock output	A	
	9	T\	Clock output inverted	B	
	10	COM	Encoder power supply 0 V	7	
	11	---	---		
	12	B	Channel B	10	
	13	B\	Channel B inverted	11	
	14	D	Data input	2	
	15	A	Channel A	8	
	16	A\	Channel A inverted	9	
	17	D\	Data inverted	3	

Table 4: EnDat 2.1 cables - Pinout

4.3 Cable diagram

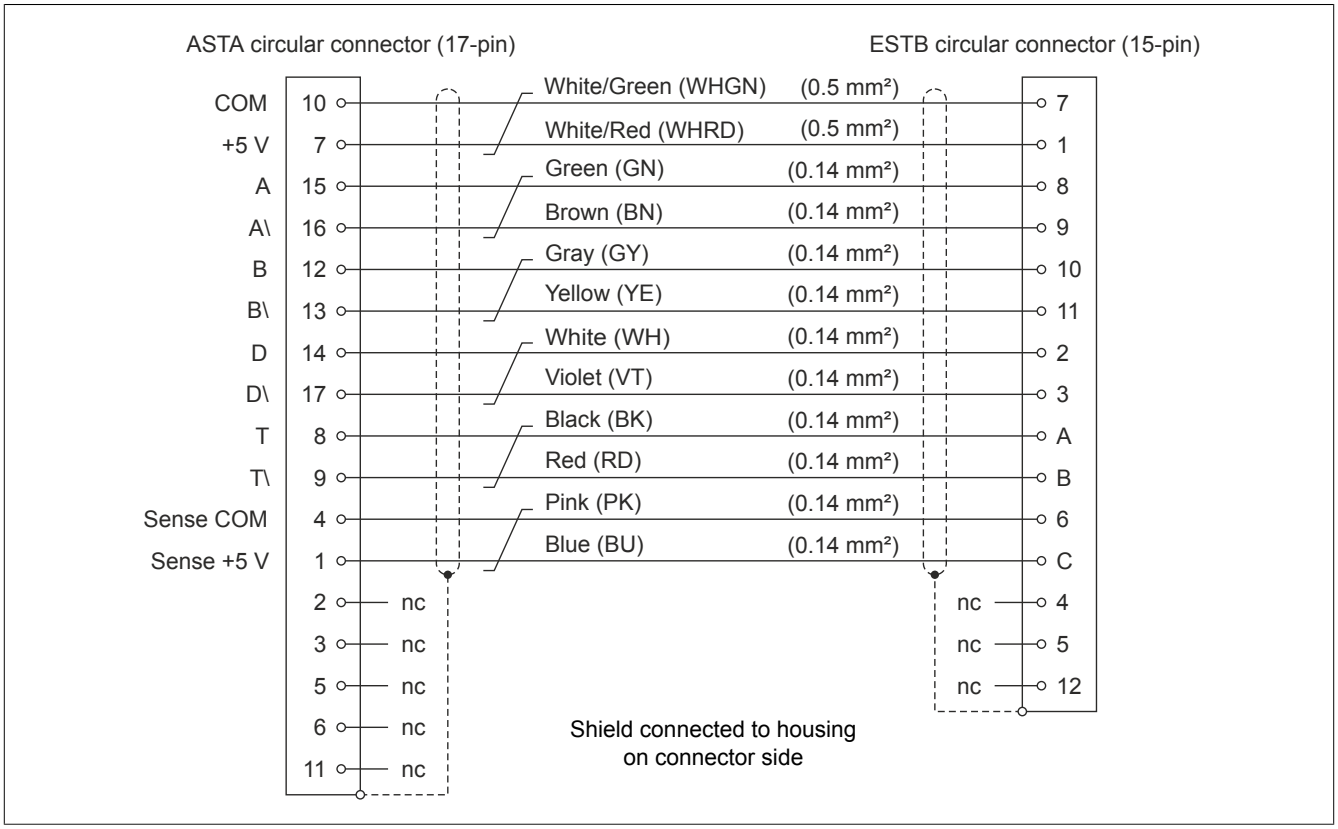


Figure 1: EnDat 2.1 cables - Cable diagram