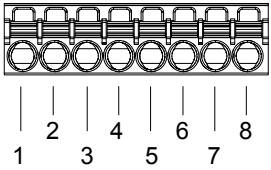

Maximum Encoder Cable Length				
Encoder Supply	Minimum Cable Cross Section	Total Encoder Consumption		
		100 mA	175 mA	200 mA
12 Vdc	0.2 mm² (AWG 24)	100 m	50 m	50 m
	0.5 mm² (AWG 20)	250 m	150 m	100 m
	0.75 mm² (AWG 18)	400 m	250 m	200 m
	1 mm² (AWG17)	500 m	300 m	250 m
	1.5 mm² (AWG15)	500 m	500 m	400 m
15 Vdc	0.2 mm² (AWG 24)	250 m	150 m	-
	0.5 mm² (AWG 20)	500 m	400 m	-
	0.75 mm² (AWG 18)	500 m	500 m	-
24 Vdc	0.2 mm² (AWG 24)	500 m	-	-

PIN	SIGNAL	FUNCTION	ELECTRICAL CHARACTERISTICS
1	A+	Channel A	Incremental Signal: +12Vdc or +15Vdc or +24Vdc Input Impedance: 2kΩ Max Frequency: 300kHz Low level: ≤2Vdc High level: ≥9Vdc
2	A-	Channel /A	
3	B+	Channel B	
4	B-	Channel /B	
5	V+	Software configurable encoder supply voltage	+12Vdc / 200mA or +15Vdc / 175mA or +24Vdc / 100mA
6	V+		
7	0V	Reference potential for encoder supply	-
8	0V		
SHIELD		Overall cable shielding for signal lines	The shield has to be connected to the drive cabling plate

Encoder can be configured in [Complete settings] ➡ [Encoder configuration].
For more information, refer to the ATV900 Programming Manual (NHA80757).

		PUSH PULL			OPEN COLLECTOR					
PIN	TWISTED WIRE PAIR	A/AB/B DIFFERENTIAL	AB SINGLE ENDED	A SINGLE ENDED	A/AB/B DIFFERENTIAL	AB PNP	AB NPN	A PNP	A NPN	I/O
1	1	R	R	R	R	R	R**	R	R**	I
2		R	R*	R*	R	R*	R	R*	R	I
3	2	R	R	-	R	R	R**	-	-	I
4		R	R*	-	R	R*	R	-	-	I
5	3	R	R	R	R	R	R	R	R	O
6	Opt.	-	-	-	-	-	R**	-	R**	O
7	3	R	R	R	R	R	R	R	R	O
8	Opt.	-	R*	R*	-	R*	-	R*	-	O
SHIELD		R	R	R	R	R	R	R	R	-

R: Required
- : Not required
Opt. : Optional

*: The inputs have to be wired to the 0V pins
**: The inputs have to be wired to the V+ pins