

Which signals will be connected depends on encoder type

VW3 A3 409		Endat	SSI	Hiperface	SinCos	SinCos / Endat
○	0 (0V)	X	X	X	X	X
○	V+ (V+)	X	X	X	X	X
○	CL- (Clock -)	X	X			X
○	CL+ (Clock +)	X	X			X
○	D- (Data -)	X	X	X		X
○	D+ (Data +)	X	X	X		X
○	B- (Sin -)			X	X	X
○	B+ (Sin +)			X	X	X
○	A- (Cos -)			X	X	X
○	A+ (Cos +)			X	X	X

Signals description for VW3A3409 card

SinCos, SinCosHiperface, EnDat, SSI encoder interface cards (ATV ... 383)

Terminal	Function	Electrical characteristics		
		VW3 A3 409		
0V V+	Encoder power supply	5 V $\pm$ (max. 5.5 V) protected against short-circuits and overloads - Max. current 200 mA	8 V $\pm$ (max. 8.5 V) protected against short-circuits and overloads - Max. current 200 mA	12V $\pm$ (max. 12.5 V) protected against short-circuits and overloads - Max. current 200 mA
CL - CL +	Clock	- Fixed clock frequency: 500 kHz - Max. speed feedback resolution: 2¹³		
D - D +	Data			
S - S +	Sine signals			
C - C +	Cosine signals			

Example, list of signals on ERN487 encoder

Pin layout for ERN 487

Power supply						Incremental signals					
	U _p	Sensor U _p	0V	Sensor 0V	Inside shield	A+	A-	B+	B-	R+	R-
	Brown/ Green	Blue	White/ Green	White	/	Green/ Black	Yellow/ Black	Blue/ Black	Red/ Black	Red	Black

Other signals				
	C+	C-	D+	D-
	Gray	Pink	Yellow	Violet

Shield! on housing; U_p = power supply voltage
 C, D = commutation signals for sinusoidal commutation
 Sensor: The sensor line is connected internally with the corresponding power line.
 Vacant pins or wires must not be used!

Wiring between VW3A3409 and ERN487 encoder

