

# SC2AqB - Analog to incremental AqB interpolator for Electric Encoder™



The Analog to AqB interpolator (SC2AqB) provides incremental AqB output + single index to the Electric Encoder™ native analog signals.

The SC2AqB provides:

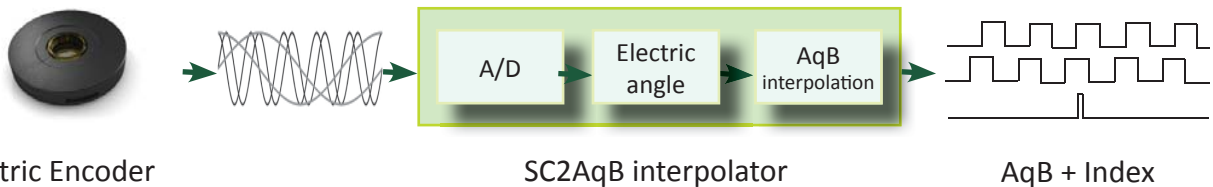
- Real time servo feedback
- Available with predefined resolution

Electrical	
Supply voltage	5V ± 5%
Interconnection	250 mm Teflon - insulated, loose AWG-32 wires
Current consumption	~ 180 mA
Environment - common to all types	
Operating temperature range	-20°C to +80°C
Relative humidity	<98 % - non condensing
Shock endurance	IEC 60068-2-27 ; 100 g for 11 ms
Vibration endurance	IEC 60068-2-6 ;20 g 10 – 2000 Hz

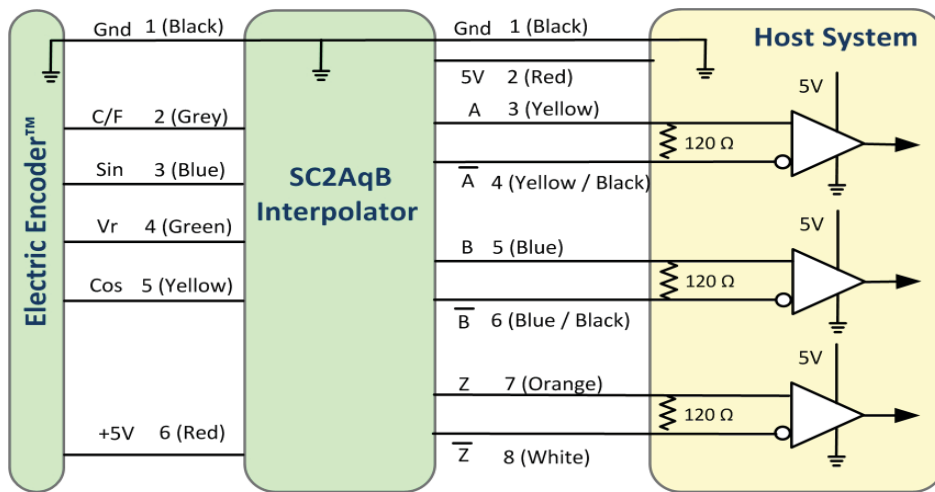
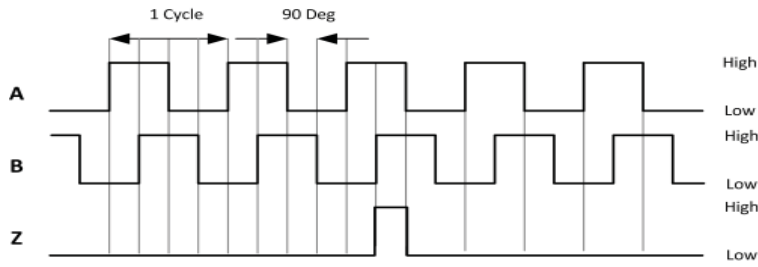
The interpolator act as intelligent converter of the analog Electric Encoder™ signals to Digital incremental AqB + index , the converter performs the post processing algorithms and translates the electrical angle to mechanical counts + single index.

The final performance in terms of accuracy and resolution are according to the original characteristic of the encoder and the converter setup based on interpolation with 12 bit A/D.

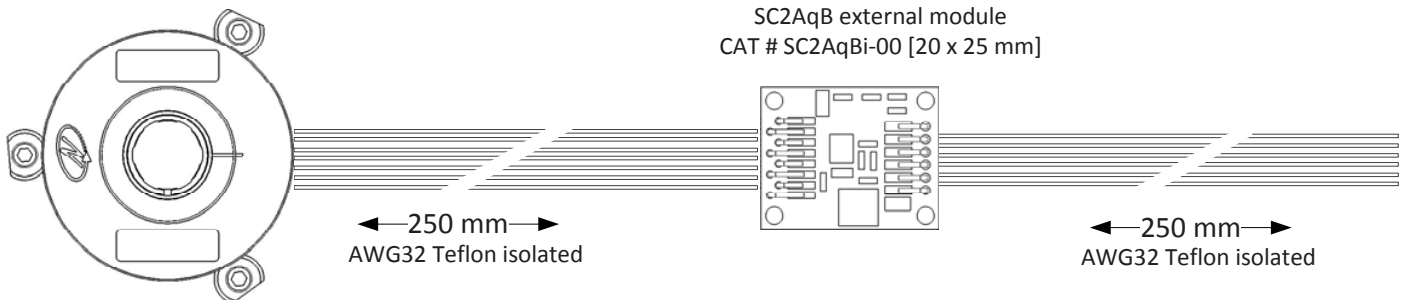
Output signal parameters	
Angular max. resolution	By Encoder
Accuracy	By Encoder
Maximum operational speed	By Encoder
Output signal latency	250 µSec
Phase shift A to B	90°
Incremental output – Differential	RS-422
Index pulse width (Adjustable)	½ A
A B signal phase relation (on CW rotation seen from the top)	A leads B



# SC2AqB



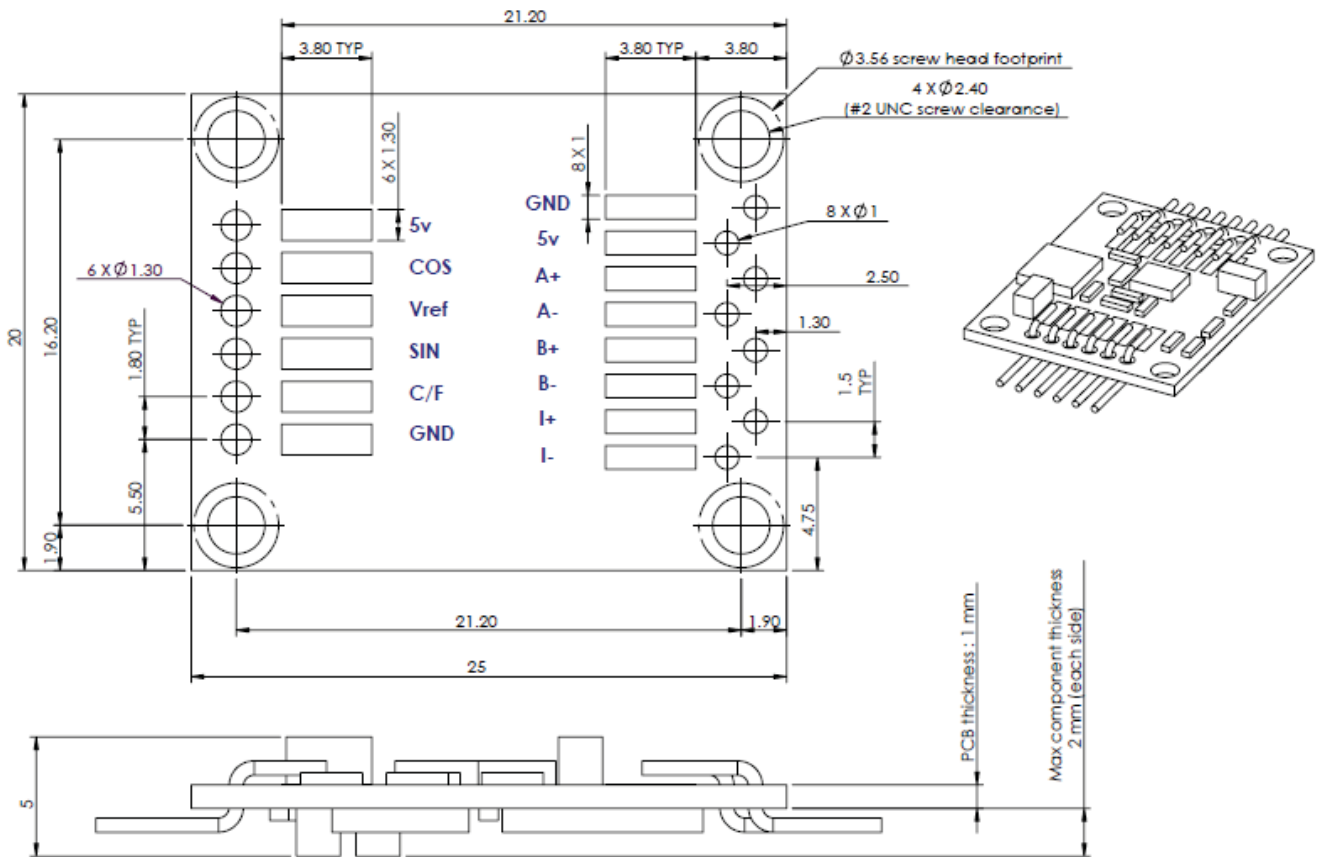
SC2AqB - Wires color code			
#	Name	Color	Function
1	GND	Black	Ground
2	+5V	Red	Supply voltage
3	A+	Yellow	Quadrature outputs
4	A-	Yellow/Black	
5	B+	Blue	
6	B-	Blue / Black	
7	Z+	Orange	Index
8	Z-	White	



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www.electromate.com  
sales@electromate.com

# SC2AqB (20 x 25mm)



CAT No.	Description	Size [mm]	Remarks
SC2AqB-00	Sin/Cos to AqB interpolator	20 x 25	For 0.5V amplitude encoder

Ordering should be placed with the associated Electric Encoder™, please refer to the Electric Encoder™ data sheet for information and ordering options.

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