

SCC-200 Converter Datasheet

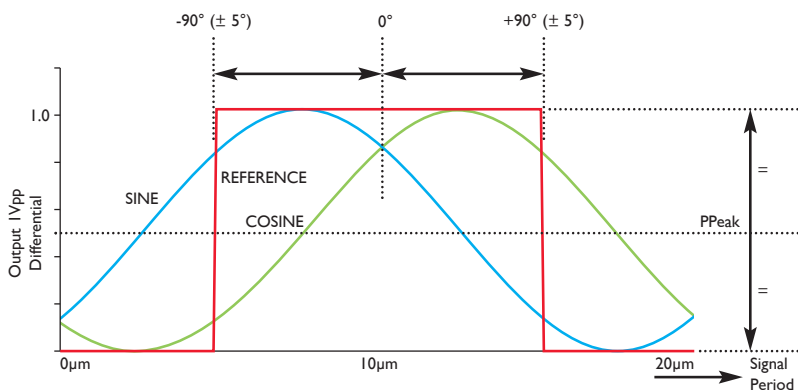
NEWALL

Incremental Sinusoidal Signals $\sim 1V_{pp}$

The SCC-200 signal converter is for use with Newall MHG-VP, SHG-VP, SHG-VS and SHG-AV series incremental linear encoders.

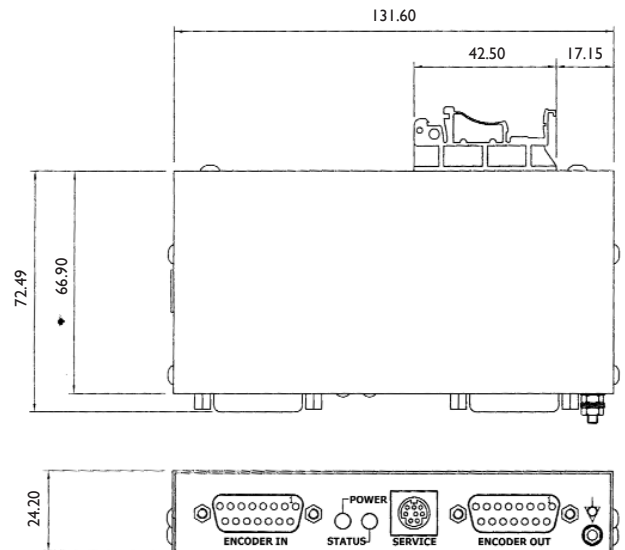
The sinusoidal incremental signals are digitally derived but due to advanced processing a near pure sinusoid is produced for both the A and B signal channels. These channels are phase shifted by 90° and have a signal level of $1V_{pp}$ differential when terminated using the recommended circuitry with a common mode voltage of 2.5V. The signal levels are maintained at all speed levels providing no loss of signal integrity with increasing scanning frequency.

Note: The SCC-200 can be DIN rail mounted.
(European DIN rail standards: EN50022 & EN50035)



Part Numbers:

- 600-82870 = Use with MHG-VP series encoders
- 600-82875 = Use with SHG-VP, SHG-VS and SHG-AV series encoders

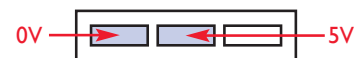


Power Supply (system)	5VDC +/-5% <300mA
Operating Temperature	0 to 55°C
Storage Temperature	-20 to 70°C
Ingress Protection Level	IP54
EMC Compliance	BS EN 50081-2 BS EN 50082-2
Drawing Number	316-81750
Sinusoidal Voltage Output Signal	$\sim 1V_{pp}$ differential
Sinusoidal Signals A & B* Signal Levels	0.8 to 1.2Vpp Typically $1V_{pp}$
Amplitude Ratio (A to B)	0.95 to 1.05
Phase Angle	$90^\circ \pm 5^\circ$ elec
Ref. Mark Zero Crossover Point	$\pm 90^\circ \pm 5^\circ$ elec
Dimensions (SCC200 only)	131mm x 67mm x 24mm
Weight (SCC200 only)	0.5lbs (0.23kg)

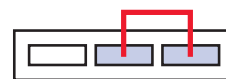
*With recommended input circuitry at terminating electronics.

Input Power Connection

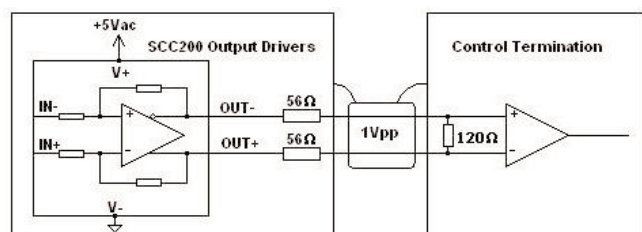
If the control **can not** provide the required power, an external supply can be connected.



If the control **can** supply the required power, insert the link provided as shown below.



Recommended Input Circuitry at Terminating Electronics



SCC200 Connections

Encoder Output Connector

15 pin male D-type

Pin Number	VS,VP Function	AV Function
1	Reserved	SSI CLK+
2	Reserved	Reserved
3	Reserved	Reserved
4	RM-	Reserved
5	B-	B-
6	A-	A-
7	Reserved	Reserved
8	5V	5V
9	Reserved	SSI CLK-
10	Reserved	SSI DATA+
11	Reserved	SSI DATA-
12	RM	Reserved
13	B+	B+
14	A+	A+
15	0V	0V
Shell	Ground	Ground

Connections marked as reserved should be left unconnected or damage may result

SCC200 LED Conditions

The SCC200 has two LED's to aid setup and diagnostics.

Power	
LED	Power Status
Off	No Power
Orange	Low 5V to encoder
Green	Operational

Power				
LED	MHG-TT	SHG-TT	SHG-TS	SHG-AV
Off	Normal	N/A	Normal	N/A
Orange	N/A	Normal	Insert	Normal
Green	REF	REF	REF	N/A