AGS1137K – Resolver to Digital Interface

Technical Specifications

Function
This instrument provides an excitation waveform to be fed to a resolver; using the return waveforms the angular position of the resolver is translated into parallel data.

Excitation
2.3Vpk-pk Sine Wave @ 6 KHz

Relay Output
Output is four sets of single pole changeover contacts, rated at 250VAC, 2A, 100VA (resistive)
LED indication of Relay status: Green = Energised
Red = De-Energised
Trip 1 = Low trip of window 1 Trip 3 = Low trip of window 2
Trip 2 = High trip of window 1 Trip 4 = High trip of window 2

Parallel Data Output
12 Bit parallel data output
Logic levels: Low = 0Vdc, High = 24Vdc
Each Bit can drive up to 5mA

Alternative configurations may be available on request

Display
4 Digit display to display bit count
Accuracy: +/- 2 LSB

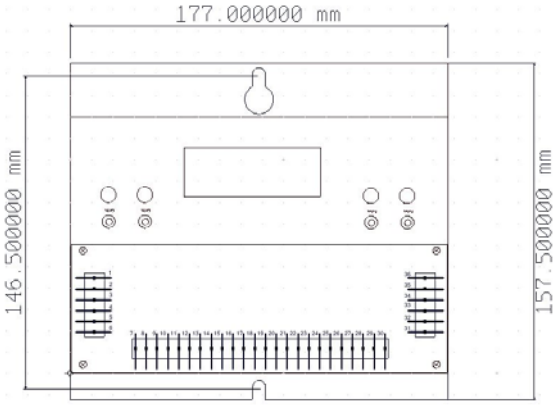
Performance
Trip settability: ± 1 LSB
Trip repeatability: ± 2 LSB
Response time: <400mS
Trip Hysteresis: 12 LSB ± 2 LSB
Relay: De-energise on Trip & fail safe on loss of power as std

Protection
Isolation 500Vdc: (Input+ Exc+ Output)/Relays/Supply/Earth
Internal Fuse.
RF Immunity: 20MHz-3GHz/5.25GHz 10V/m,
80MHz-1GHz/5.6GHz 30V/m
(889MHz-1.75GHz 40V/m)

Environmental Conditions
Storage Temperature: -40 to 70°C
Operating Ambient: -15 to 55°C
Relative Humidity: 5 – 95% RH

Supply
Voltage: 24Vdc +/- 10%
Max power consumption: 4 Watts

Mounting/Dimensions
Width (177mm) x Height (157.5mm) x Depth (100mm)



Customer Termination
Fixed screw terminals as standard
(Plug-in terminals optional)

TB	Function		TB	Function	
1	N/C	Trip 1	18	Ref(0V)	Output bits
2	W		19	1 (LSB)	
3	N/O		20	2	
4	N/C	Trip 2	21	3	
5	W		22	4	
6	N/O		23	5	
7	S2(COS)	Resolver Waveforms	24	6	
8	S4 (~COS)		25	7	
9	S3 (~SIN)		26	8	
10	S1 (SIN)		27	9	
11	R2 (~EXC)		28	10	
12	R1 (EXC)		29	11	
13	Screen		30	12 (MSB)	
14	Earth		31	N/C	Trip 3
15	+Ve Supply		32	W	
16	-Ve Supply		33	N/O	
17	Screen		34	N/C	Trip 4
			35	W	
			36	N/O	

N/C = Normally closed
N/O = Normally Open
W = Wiper

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Issue 1:2017