IMAJ TEKNIK
ELEKTRİK ELEKTRONİK MALZEMELERİ SAN. VE TİC. LTD. ŞTİ.

LTN

RESOLVE R
G-RCC

RESOLVER TO C ANOPEN CONVE RTER / RESOLVER AS ENCODER IN C ANOPEN-PROFILE

The LTN G-RCC is a resolver to C ANopen converter to enable the integration of a resolver into a C ANopen network as single CANopen node. The G-RCC drives the resolver autonomous and delivers position and speed values as encoder in CANopen-profile. The LTN G-RCC uses a monolithic R DC-IC for resolver to digital conversion and a separate microcontroller for all other functions (control, communication, scaling, computation, etc.).

SPECIFICATIONS - C ONVERTER OUTPUT

Protocol:	CANopen Bus Protocol	Repeatability:	+/- 1 LSB (incremental step) of the set resolution, e.g. at 16 bits / 65536 incr: +/- 0,33 arcmin. for single speed and +/- 0,11 arcmin for triple speed version
Output signals:	position value (in incremental steps) current speed value, (in incremental steps per second)		
Resolution:	16 bits / 65536 incremental steps and 3 x 65536 at triple-speed resolver as sensor, between 2 and 65536 incremental steps per revolution, preset-function (software-zero) and change of the direction of rotation (CW - CCW) are also supported, free software-scaled	Speed:	18 s^{-1} (mech.) for single speed and 6 s^{-1} (mech.) for triple speed version (new setting necessary - on request)
		Baudrate settings:	0, 20, 50, 125, 250, 500, 800 or 1000 kB/s
		Node ID settings:	0 to 127 (dec), internal bus terminating resistor (120 Ohm / 1W or 15W) can be connected by wire-bridge (screw-terminals). Baudrate and node- ID can be set by hardware (coding microswitches) or by LSS.
Accuracy:	+/- 0,10° (+/- 6 arcmin) +/- 0,05° (+/- 3 arcmin) on request		

SPECIFICATIONS - R ESOLVER INPUT / OUTPUT

Output Ref. Signal:	8 V_{PP} / 100 m A max. / 5 kHz
Input SIN / C OS:	4 V_{PP} Resolver Transformation Ratio K = 0,5

POWER SUPPLY

Supply Voltage (+V_S):	+10 ... +36 V_{DC}
Power Consumption:	~2 W (e.g. 70 m A at 24 V)
Operating Temperature:	0 ... +85°C

The LTN-RCC is protected against the wrong polarity of power supply and overvoltage on all terminals.

Housing:	P hoenix Contact „M E 22,5" for top hat rail mounting
Dimensions:	l = 114,5 mm; h = 99 mm, w = 22,5 mm

CONNECTOR TERMINALS

Power: Sub-D, 9-pin male connector in the front panel / TBUS in the back (top hat rail) / screw terminal connector
CANopen: Sub-D, 9-pin male connector in the front panel / TBUS in the back (top hat rail)
Resolver: Sub-D, 9-pin female connector in the front panel

Power and CAN signals are passed (loopthroughed) from one terminal / connector to the other one.

CONNECTOR TERMINALS

Signals	CAN (front panel) Sub-D, 9 pin male	TBUS connector top hat rail	Screw terminal
CAN Gnd	3, 6	1 (TOP)	3, 4 (RIGHT)
CAN V_s	9	2	1, 2 (LEFT)
CAN Lo	2	3	
CAN Hi	7	4	
CAN Shield/PE	5, screen	5 (BOTTOM)	
NC	1, 4, 8		
Sub-D connector bolt thread: 4-40#			

Signals	Resolver (front panel) Sub-D, 9 pin female
Ref+ (R1)	7
Ref- (R2)	1
Sin+ (S2)	5
Sin- (S4)	6
Cos+ (S1)	8
Cos- (S3)	9
NC	2, 3, 4
Shield/PE	screen

Recommended additional components for using the TBUS system / Phoenix Contact part numbers:

Description	Type	Part No.	Requirement
TBUS plug component for top hat rail	ME 22,5 TBUS 1,5/5-ST-3,81 KMGY	2713722	necessary
axial plug, connector mating male side of TBUS	MC 1,5/5-ST-3,81 GY7035 AU	1719697	optional
axial plug, connector mating female side of TBUS	IMC 1,5/5-ST-3,81 GY7035 AU	1719707	optional
vertical plug, connector mating male side of TBUS	MC VR 1,5/5-ST-3,81 GY7035 AU	1719684	optional
end clamp, stable contruction for bus connector	E/ME TBUS NS35 GY	2713780	optional
terminal cover for male side of TBUS	ME B-K A KMGY	2706302	optional
terminal cover for female side of TBUS	ME B-SA /NS35 KMGY	2706700	optional

ORDERING INFORMATION

G-RCCLDSC65536-0XX-24 (other configurations on request)

AJA REGISTRARS
ISO 9001 - 2000 Reg. No 059-A
UKAS QUALITY MANAGEMENT