



RESOLVER
G-REC

RESOLVER TO ENCODER CONVERTER

The LTN-REC is a position data converter.

The LTN-REC drives autonomously a resolver sensor and converts its output signals to encoder incremental (square wave) output signals (emulates encoder signals).



G-REC (Design example)

SPECIFICATIONS - ENCODER OUTPUT

Output Signals:	incremental A+, A-, B+, B-, Z+, Z-
Resolution:	12 bit / 1024 incremental steps per revolution
Output Voltage Level:	5 V (TTL), 14-36 V (HTL) limited by the supply voltage
Output Current:	100 mA limited, short circuit proof
Dynamic Peak Current:	1500 mA max.
Accuracy:	+/- 0.184° (+/- 11 arcmin)
Repeatability:	+/- 1/4 of incremental step
Angular speed:	up to 1000 s ⁻¹

RESOLVER OUTPUT / INPUT

Output Ref. Signal:	2.8 V _{rms} 100 mA max. 10 kHz
Input SIN / COS:	1.4 V _{rms} (diff.)
Transformation Ratio:	K = 0.5 +/- 10%

POWER SUPPLY

Supply Voltage (+V _S):	+8 to +15 V _{DC} or +14 to +36 V _{DC}
Power Consumption:	~1 W (e.g. 40 mA at 24V)
Operating Temperature:	0 to +85 °C

The supply voltage can be supplied via the power connector or optionally via the encoder connector (from the encoder decoding unit). The G-REC is protected against the wrong polarity and transient overvoltage of power supply and short circuit proof on output terminals.

Housing:	Phoenix Contact „ME 22,5“ for top hat rail mounting
Dimensions:	l=114.5 mm; h = 99 mm, w = 22.5 mm

CONNECTOR TERMINALS

Encoder Out: Sub-D, 9-pole male -> mating connector: female	
Pin 1	GND
Pin 2	Z-
Pin 3	Z+
Pin 4	A
Pin 5	A+
Pin 6	-
Pin 7	+V _s (Opt.)
Pin 8	B-
Pin 9	B+
Screen	PE

Resolver IN: Sub-D, 9-pole female -> mating connector: male	
Pin 1	Ref-
Pin 2	-
Pin 3	-
Pin 4	-
Pin 5	SIN+
Pin 6	SIN
Pin 7	Ref+
Pin 8	COS+
Pin 9	COS
Screen	PE

Power connector: 4-pole plug, screw wire connection, included	
Pin 1 (left)	+V _s
Pin 2	+V _s
Pin 3	GND
Pin 4	GND
Max. loopthroughed current:	
+V _s :	Pin 1 - Pin 2: 3A
GND:	Pin 3 - Pin 4: 3A

The PE connection (protective earth) is implemented over the mounting clamp to the top hat rail.

ORDERING INFORMATION

G-RECLDBI1024-5X1-15	Supply Voltage (+V _s): +8 to +15 V _{DC}	Output Voltage Level: 5V	3933542
G-RECLDBI1024-5X1-24	Supply Voltage (+V _s): +14 to +36 V _{DC}	Output Voltage Level: 5V	3931647
G-RECKIBI1024-5X1-24	Supply Voltage (+V _s): +14 to +36 V _{DC}	Output Voltage Level: V _s	3932553

Other configurations on request.