

Ingenieur-Büro Kirchen

Kippesweg 4, D-97657 Langenleiten
Tel.: +49 (0)9701 90716-0
Internet: www.ibkirchen.de
eMail: contact@ibkirchen.de



SSI/TTL Encoder Simulator (Combi-Device)

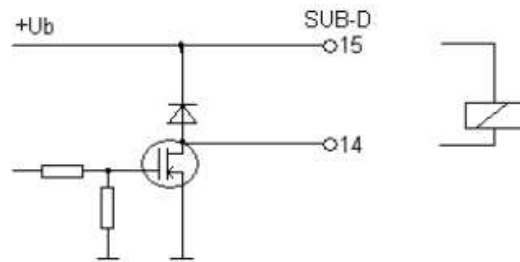


Infonummer: 01027-71

Header – Pin function

Pin Nr.	Description
1	GND
2	RS422 OUT Dat + / A +
3	RS422 IN Clk +
4	RS422 OUT Z -
5	RS422 OUT Z +
6	RS422 OUT B -
7	RS422 OUT B +
8	+U _B (12VDC to 30VDC)
9	res.
10	RS422 OUT Dat - / A -
11	RS422 IN Clk -
12	res.
13	res.
14	Digital Output o.D. driver
15	Digital Output o.D. power

Digital Output



A,B,Z signals are used in TTL-mode
 Dat,Clk signals are used in SSI-mode

Electrical characteristics

Parameter	Mode	Symbol	Min	Typ	Max	Unit
DC Supply Voltage		U _B	12	24	30	[V]
DC Supply Current (Standby)		I _B		15		[mA]
Number of databits	SSI	N	8		24	
External Clock Frequency	SSI	f _{CLK}	40		500	[kHz]
CLK to DAT out (after CLK L→H trigger)	SSI	t _{ed}	900		1100	[ns]
CLK – H-time	SSI	t _H	1000		12500	[ns]
CLK – L-time	SSI	t _L	1000		12500	[ns]
CLK Termination (CLK+ to CLK-)	SSI	R _{CLK}		200		[Ω]
DAT Hold Time (at end of transmission)	SSI	t _m		10		[μs]
CLK Idle Time	SSI	t _I	25			[μs]
Counts per revolution	TTL	N	0		4095	
Speed (revolution per second)	TTL	f _{AB}	0		2047	[1/s]
Impulse Rate (N x f _{AB}) for A,B Tracks	TTL	f _{IMP}			150000	[Hz]
Differential output voltage per track (Termination R _L =100Ω)	TTL	V _{OD}	2	3,1	5	[V]
Operating Temperature		T _A	0		50	[°C]
IP		IP	00		20	

SSI transfer function

