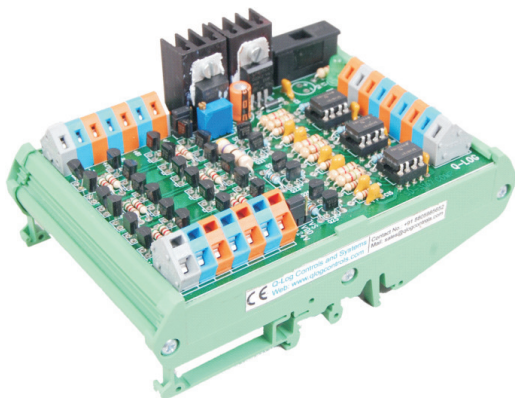


# Encoder Splitter 1000KHz Technical Information

Function of Encoder Splitter: Encoder splitter receives six signals from incremental encoder or simulated encoder output from servo drive and converts these signals into two sets of encoder signals. The output signals are optically isolated from the input signals. Features

- Input signals 3-10 or 10-30VDC
- Sink / Source/ Push pull / Open collector (Transistor) outputs.
- Supply voltage 24-30 VDC@1Amp
- Output pulse voltage 5/10/24 VDC as per customer's requirement.
- Each output can drive 150mA load.
- Din rail mountable

## Product Picture



## DIN rail mounting

## Order Code:

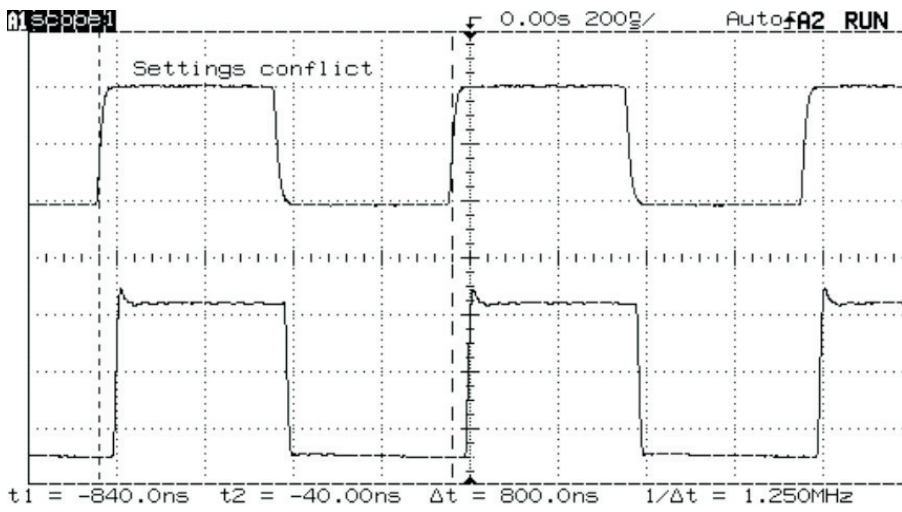
Encoder Specifications	Order Code
I/P:4-10Vpp,DIN rail mounted,	QLOG-HFESPL-5-DIN
I/P:4-10Vpp,BOX mounted,	QLOG-HFESPL-5-BOX
I/P:10-24Vpp,DIN rail mounted,	QLOG-HFESPL-24-DIN
I/P:10-24Vpp,BOX mounted,	QLOG-HFESPL-24-BOX

## Typical Switching Characteristic of optoisolator Circuit

SWITCHING CHARACTERISTICS						
PARAMETER	TEST CONDITION	SYMBOL	MIN.	TYP.	MAX.	UNIT
Propagation delay time to logic low output level	without peaking capacitor	$t_{PHL}$		120		ns
	with peaking capacitor	$t_{PHL}$		115	300	ns
	without peaking capacitor	$t_{PLH}$		125		ns
	with peaking capacitor	$t_{PLH}$		90	300	ns
Output rise time	10 % to 90 %	$t_r$		40		ns
Output fall time	90 % to 10 %	$t_f$		10		ns

## Encoder PPR and pulse frequency calculations:

Sr No	Encoder PPR	Encoder Shaft RPM	Pulse Freq	Suitable Splitter
1	10000	2000	333.34 KHz	1000 KHz
2	5000	5000	416.66 KHz	1000 KHz
3	10000	5000	833.33 KHz	1000 KHz
4	10000	6000	1000.00 KHz	1000 KHz



High frequency response (1250 KHz)of Encoder splitter 1000KHz  
 Input:1250 KHz square wave 5V      Output: Encoder o/p B

**Technical specifications:**

**Input signal voltage:3 VDC-30VDC, available is 2 variants 3-10VDC/10-30VDC**

**Max. input current:5 mA**

**Min. input current:1.6 mA**

**Max. output voltage:30 VDC**

**Min.output voltage:5.0 VDC**

**Max. load per output point:150 mA**

**Continuous power dissipation at (or below) 25°C free-air temperature: 200mW**

**Input to output electrical isolation: 3.55 KV**

**Max. Voltage drop in output voltage: 0.7 V @ 150 mA load**

**Resistance, input to output: 100 G?**

**Applications:**

- a) Connecting one encoder to two independent control systems.
- b) As a encoder signal booster and reducing high frequency noise.
- c) To connect incremental encoder with Incompatible signal level to control system.
- d) For connecting one signal level (5-30 VDC)to another signal level (5-15 VDC)with isolation.

**Dimensions:**

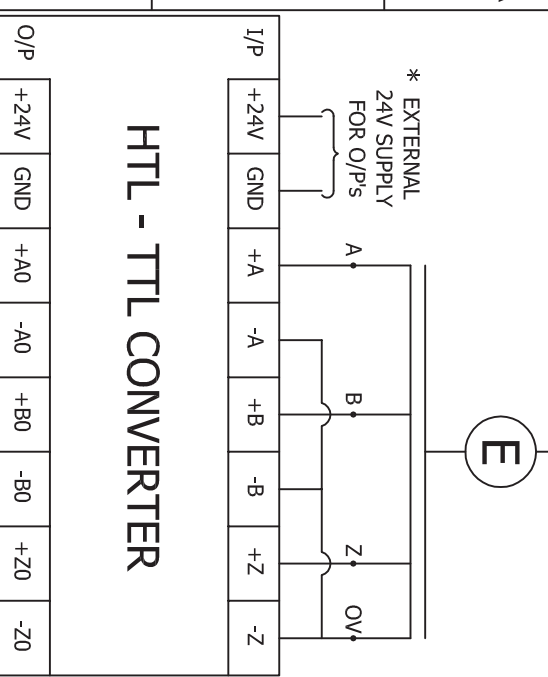
Sr.NO	Encoder splitter	Height mm	Width mm	Deapth mm
1	DIN rail 1000KHz	126	99	65
2	BOX 1000KHz	120	125	73

**Standards /Approvals**

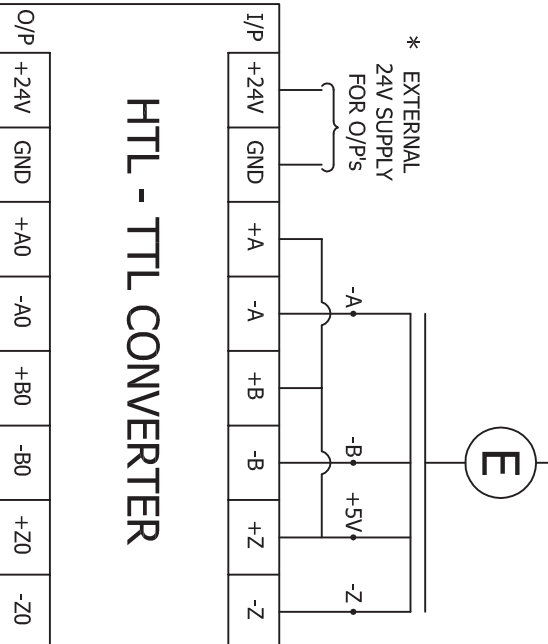
- CE certified
- PCB :IEC61373
- Terminals:UL/CE
- Optoisolator:UL
- Profile & end plates : CE

**NOTE:-Due to continuous product development the product supplied to you may look different than the product image in the pdf file.**

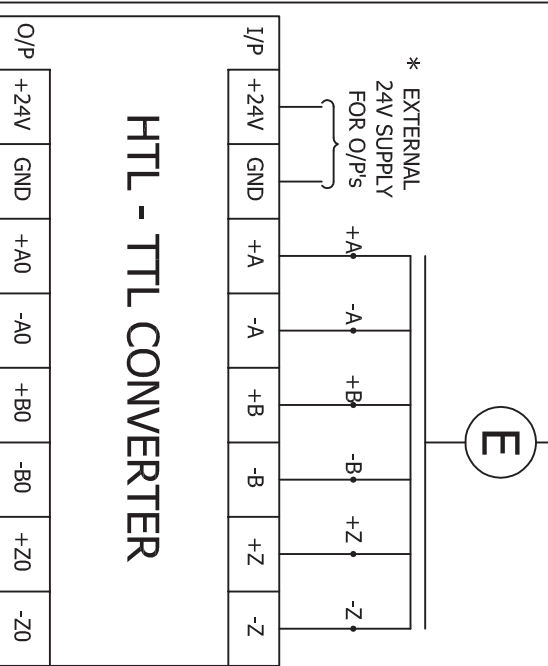
A) TO CONNECT 4 WIRE SOURCE TYPE ENCODER TO SOURCE TYPE LOAD



B) TO CONNECT 4 WIRE SINK TYPE ENCODER TO SINK TYPE LOAD



C) TO CONNECT 6 WIRE PUSH PULL TYPE ENCODER TO PUSH PULL LOAD



# HTL - TTL CONVERTER(HIGH FREQ.)/ ENCODER SPLITTER/ SPLITTER MASTER SLAVE

NOTES : 1) \* INCASE OF ENCODER SPLITTER/SPLITTER MASTER SLAVE.

S.P.D		S.C.M		S.P.D		DESCRIPTION:- HTL - TTL CONVERTER(HIGH FREQ.)/ ENCODER SPLITTER/SPLITTER MASTER SLAVE		PROJECT:-	
17.02.2017		17.02.2017		17.02.2017					
APRD. BY/DATE		DNRN. BY/DATE		CHKD. BY/DATE		DMG NO.:-5		CUSTOMER:-	
* IF IN DOUBT PLS. ASK		ALL RIGHTS OF REPRODUCTION & DISTRIBUTION ARE RESERVED							
SHEET NO: 6 OF 7									
REV NO	DESCRIPTION	APRD. BY	DATE						
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