

# Speed switches

Programmable, digital speed switch

3 adjustable switching speeds

DS 93



DS 93

## Features

- Freely programmable on and off switching speed
- 3 adjustable switching speeds
- Actual speed indicator
- Switching points adjustable up to 20000 rpm
- Switching points can be adjusted individually for both rotating directions
- Suitable for rugged environment

## Optional

- Relay module DS 93 R with three relay outputs with isolated changeover contacts

## Technical data - electrical ratings

Voltage supply	15...26 VDC
Consumption w/o load	≤200 mA
Switching accuracy	±3 % (Digit)
Switching outputs	3 outputs, speed control
Output switching capacity	12 VDC; ≤40 mA ≤40 mA
Switching delay time	≤40 ms
Input signals	K1, K2 + inverted
Inputs	HTL TTL
Interference immunity	EN 61000-6-2
Emitted interference	EN 61000-6-3
Approval	CE

## Technical data - mechanical design

Dimensions W x H x L	122 x 122 x 80 mm
Protection DIN EN 60529	IP 65
Range of switching speed (ns)	Pulses = 512: ±120...20000 rpm Pulses = 1024: ±60...10000 rpm Pulses = 2048: ±30...5000 rpm Pulses = 2500: ±25...4096 rpm
Material	Housing: aluminium die-cast
Operating temperature	-20...+70 °C
Connection	Connecting terminal

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#### Part number

DS 93

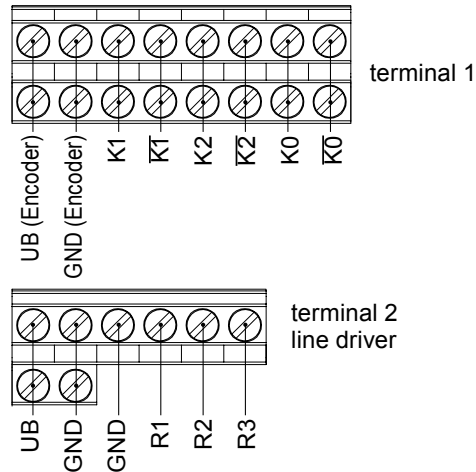
#### Accessories

##### Relay module

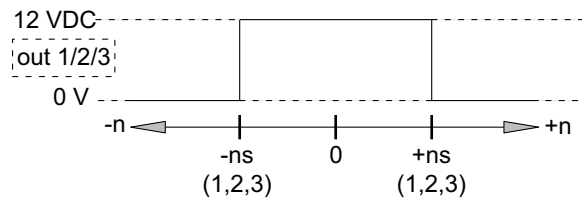
DS 93 R    Relay modul

#### Terminal assignment

Connecting terminal DS 93



Manner of output circuit



n    = speed  
 ns   = adjusted switching speed

# Speed switches

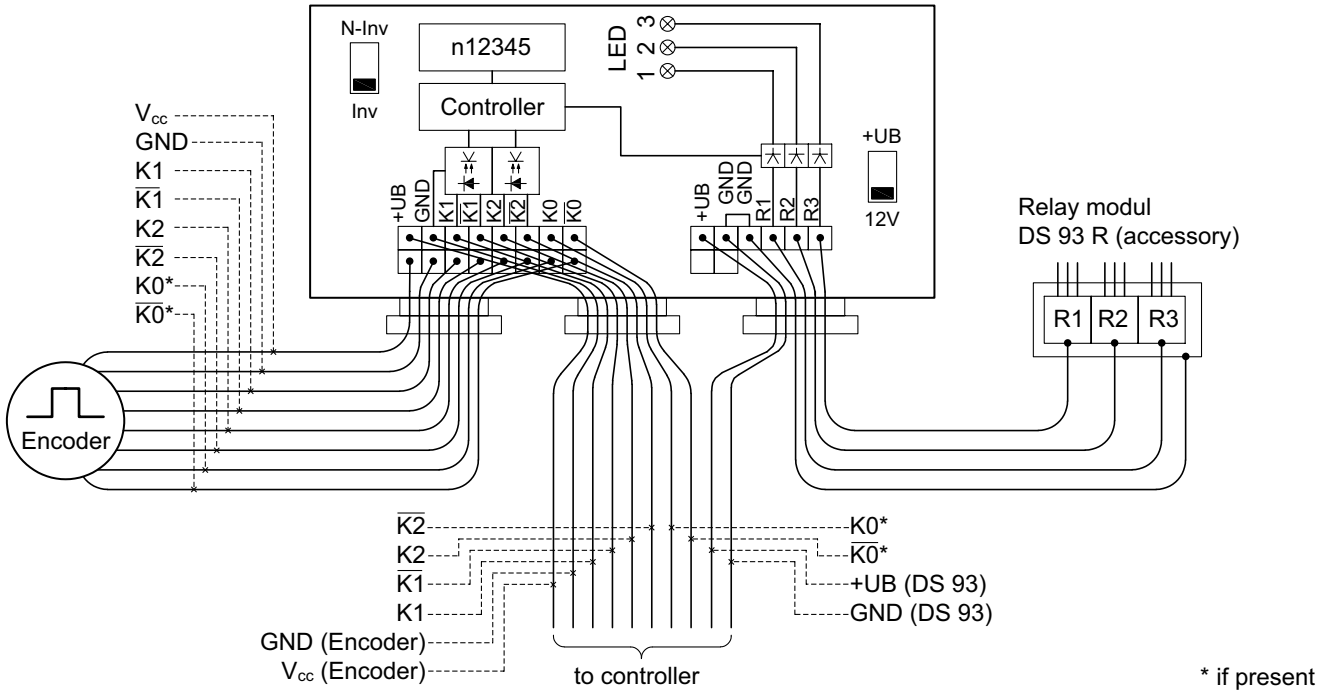
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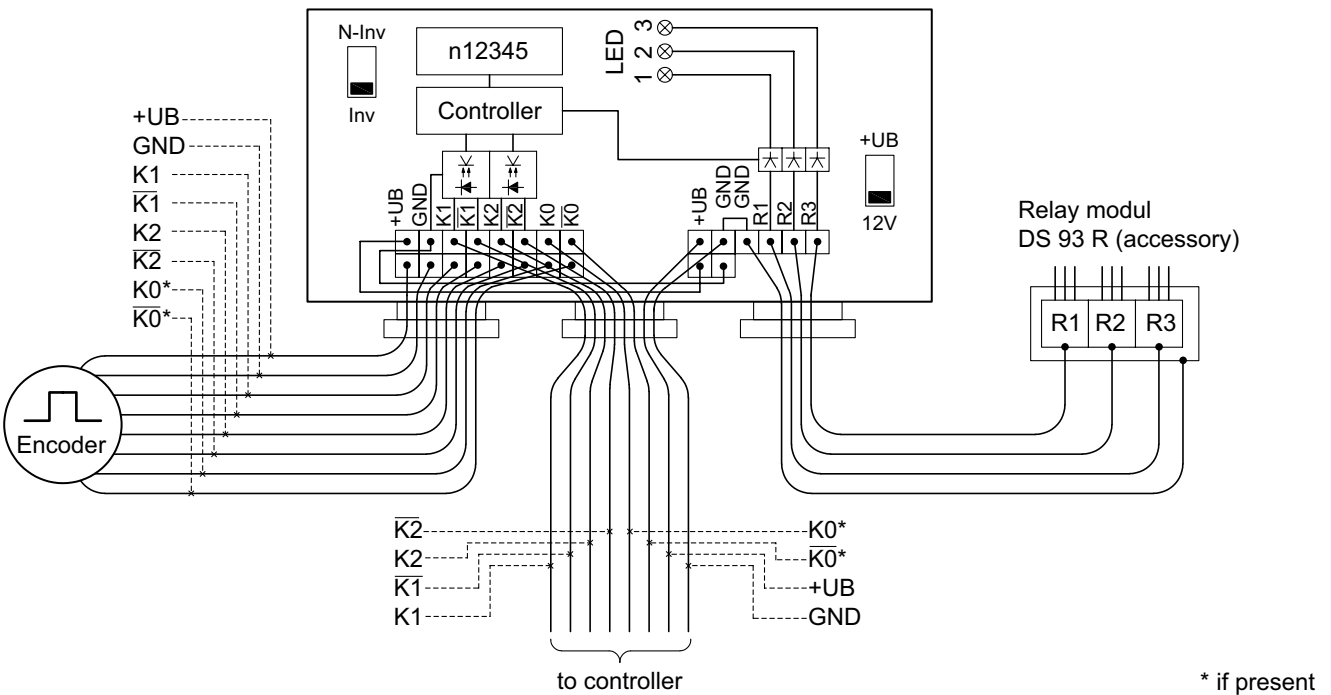
DS 93

## Block circuit diagram

Circuit design standard with inverted signals



Circuit design only one UB with inverted signals



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**DS 93**

**Dimensions**

