# **TNT 34**



## Test monitoring unit

#### Safety note:

- The test monitoring unit TNT 34 is a contactless active protective device according to EN 61496-1 only in connection with an EC certified protective photoelectric sensor category 2.
- Extensive description is part of every shipment.

### Accessories

(available separately)

- · Safety muting controller
  - SMC 33 (Part No. 500 28157)
  - SMC 34 (Part No. 500 82120)



- High security through permanent cyclic test in time intervals of 2 sec. •
- Highest operating safety through micro controller technique •
- Security relay output with fault protected monitoring
- No interruption of operating during test procedure ٠
  - Connection possibility for all current testable protective photoelectric sensors
- Integrated muting switching input •
- Optical coupler inputs for high interference protection • •
- Separate signaling outputs as PNP transistor outputs

#### **Dimensional Drawing**



# **Electrical Connection**



CE



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## **Technical Data**

Electrical data		
Operating voltage U <sub>R</sub>	24V DC (incl. residual ripple)	
Residual ripple	≤ 15% of U <sub>p</sub>	
Current consumption	approx. 200mA	
Response time	≤ 20ms	
Sensors		
Transmitter activation	terminal 1 PNP (HIGH active)	
	terminal 2 NPN (LOW active)	
	terminal 3 NPN (HIGH active)	
Receiver input	voltage free optical coupler input	
	input current approx. 5mA at 24VDC	
Muting		
Muting test	PNP (HIGH active)	
Muting input	voltage free optical coupler input	
	Input current approx. 5mA at 24VDC	
Inputs/outputs		
Start input "activ"	voltage free optical coupler input	
	input current approx. 5mA at 24VDC	
Delay before start-up at U <sub>B</sub> ON	approx. 2s	
Signaling outputs	PNP transistor output, 100mA	
	short-circuit and polarity reversal protection	
Safety relays "OFF"	safety output opened, output (HIGH active)	
Safety relays "ON"	safety output closed, output (HIGH active)	
Function characteristics (antivalent)	if incandescent lamps are connected, the cold resistance of the filament must be at least $240\Omega$	
Safety output	voltage free N.O. contact	
	max. current load 4A	
Fuse	external with max. 4AMT	
Overvoltage category	4 for rating voltage 300 VAC	
acc. to VDE 0110 part 1		
Mechanical data		
Housing	polycarbonate, cover ABS/v-o gray	
Connection	screw terminals max. connection cross section 2x2.5mm <sup>2</sup>	
	acc. to DIN 46288	
Mounting type	snap-on mounting on top hat rail	
Weight	200g	
Environmental data		
Ambient temp. (operating/storage)	-20°C +60°C/-30°C +70°C	
Protection class	IP 40 (only for application in electrical operating rooms/	
	switching cabinet with minimum protection class IP 54 is	
	suitable)	
Contact protection	acc. to VBG 4 and VDE 0106 part 100	

# Order guide

Designation TNT 34 Part No. 500 81023

#### Tables

Protective photoelectric sensor AOPD type 2 (extract)

Designation	Operating range
LS 763/4.8	6 m
SLSR 95/44.8 L	8 m
LS 92/4.8 L	12 m
LS 92/4.8 S	12 m
LS 92/4.8,6000	12 m
SLS 96M/PT2	50 m
SLSR 96K/PT2	30 m
SLS 85M/P-1750-T2-8	60 m
SLS 78M/P-1750-T2-8	120 m
SLS 46/44.8-S12	30 m
SRK 96	6 m