



TNT 35

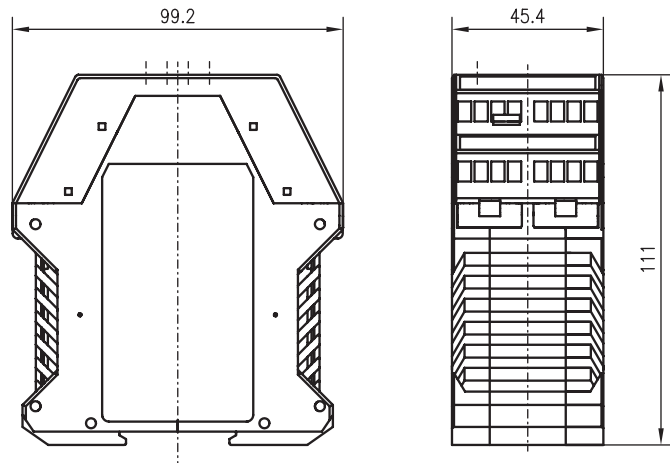
Test monitoring unit



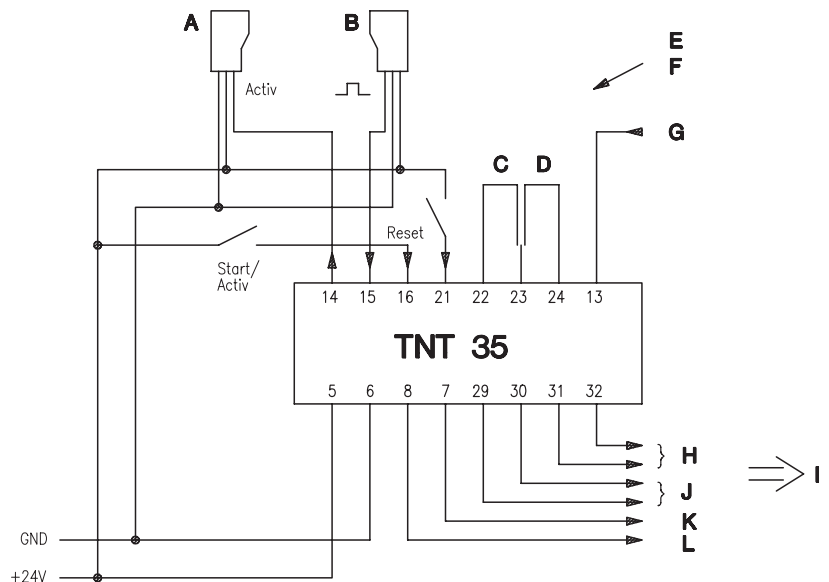
- High security through permanent cyclic test in time intervals of 2 sec.
- Highest operating safety through microcontroller technique
- Security relay output with fault protected monitoring
- No interruption of operation during test procedure
- Connection possibility for all current testable protective photoelectric sensors
- Optical coupler inputs for high interference protection
- Separate signalling outputs as PNP transistor outputs
- Selectable start and restart-disable



Dimensioned drawing



Electrical connection



- A** Transmitter
- B** Receiver
- C** Operation with start/restart-disable
- D** Operation without start-/restart-disable
- E** Selection of the operating mode by bridging:
terminal 22 and 23 (with start/restart-disable)
or
terminal 23 and 24 (without start/restart-disable)
- F** Factory setting for the bridge is between terminals 22 and 23 (with start/restart-disable function)
- G** EDM (contactor monitoring, feedback control loop)
- H** Safety relay output 2
- I** EMERGENCY SHUTDOWN
- J** Safety relay output 1
- K** Signal output "Safety on"
- L** Signal output "Error"

Accessories:

We reserve the right to make changes • SLS_s07e.fm



Specifications

Electrical data

Operating voltage U_B	24VDC $\pm 15\%$
Residual ripple	$\leq 15\%$
Current consumption	approx. 200mA
Response time	$\leq 20\text{ms}$
Delay before start-up	approx. 2s

Sensors

Transmitter activation	PNP (HIGH active)
Receiver input	optical coupler input
	Input current approx. 10mA

Inputs/outputs

Start input "START"	optical coupler input (HIGH active)	Input current approx. 10mA
Reset input	optical coupler input (HIGH active)	Input current approx. 10mA
Relay monitoring (EDM)	optical coupler input (HIGH active)	Input current approx. 10mA
Signal output "Safety on"	PNP transistor output, 100mA	short-circuit and polarity reversal protection
Signal output "Error"	PNP transistor output, 100mA	short-circuit and polarity reversal protection
Safety output	voltage free N.O. contacts	max. current load 4A
Fuse	external with max. 4AMT	2 for rating voltage 300VAC
Overtoltage category	acc. to VDE 0110 part 1	

Mechanical data

Housing	polyamide PA6.6/grey
Connection	screw terminals
	connection cross section 0.2 ... 2.5mm
Mounting type	snap-on mounting on top hat rail acc. to EN 50022
Weight	approx. 200g
Dimensions (WxHxD)	45mm x 100mm x 115mm

Environmental data

Ambient temp. (operation/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	Part No.
TNT 35	500 33058

Tables

Protective photoelectric sensor AOPD type 2 (extract)

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

Diagrams

Remarks

- The test monitoring unit TNT 35 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.