

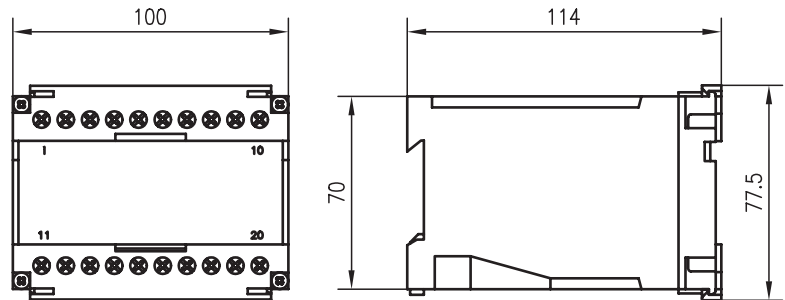


TMC 66

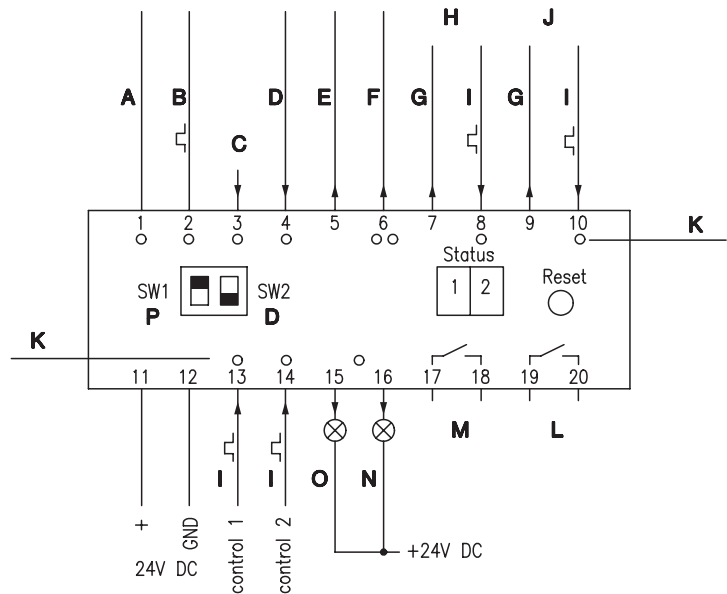
Test monitoring unit



Dimensioned drawing



Electrical connection



- A SLS transmitter active
- B SLS receiver
- C Start
- D Relay monitoring
- E Signal output "Error"
- F Signal output "Safety on"
- G Output Test
- H Start 1
- I Input
- J Start 2
- K Indicator diodes
- L Safety relay output 2
- M Safety relay output 1
- N Muting lamp 1
- O Muting lamp 2
- P start/restart-disable
- Status 1 Test monitoring unit - SLS
- Status 2 Muting controller

- High security through permanent cyclic test in time intervals of 2 sec.
- Security relay output with fault protected monitoring
- No interruption of operation during test procedure
- Connection possibility for all current testable protective photoelectric sensors
- Selectable start and restart-disable and contactor control
- Processing of PLC control signals as muting sender
- Integrated muting function
- Connection for two monitored muting warning lights (necessary acc. to EN 61496-1)
- Integrated self-containing mode (start with dimmed AOPD)
- Separate signalling outputs as PNP transistor outputs



Accessories:

(available separately)

- Testable muting sender - suitable:
 - PRK 96 K/P-1361-29 (Part No. 500 80476)
 - PRK 97/4.8 L (Part No. 500 80474)
 - IPRK 92/4.8 S (Part No. 500 14199)
 - PRK 46/4.8-S12 (Part No. 500 60920)
- all throughbeam photoelectric sensors with (.8) activation input

We reserve the right to make changes • SLS_s04e.fm

Specifications

Specifications

Operating voltage U_B	24VDC \pm 15% (incl. residual ripple)
Residual ripple	\leq 15% of U_B
Current consumption	approx. 200mA
Response time	\leq 20ms

Sensors

Transmitter activation	PNP (HIGH active)
Receiver input	optical coupler input ¹⁾
Activation muting sender	PNP (HIGH active)
Input muting sender	optical coupler input ¹⁾

Inputs/outputs

Start input	optical coupler input (HIGH active) ¹⁾
Signal output "Error"	PNP transistor output, 100mA ²⁾
Signal output "Safety on"	PNP transistor output, 100mA ²⁾
Muting preparation Control 1/Control 2	optical coupler inputs (HIGH active) ¹⁾
Muting light signal transmitter ³⁾	N.O. contacts, 24VDC, max. 2A integrated filament monitoring optical coupler input (HIGH active), ¹⁾ voltage free N.O. contacts, max. current load 4A internal with max. 4AMT for rating voltage 300VAC acc. to VDE 0110 part 1
Relay monitoring	
Safety output	
External fuse protection	
Overvoltage category 4	

Mechanical data

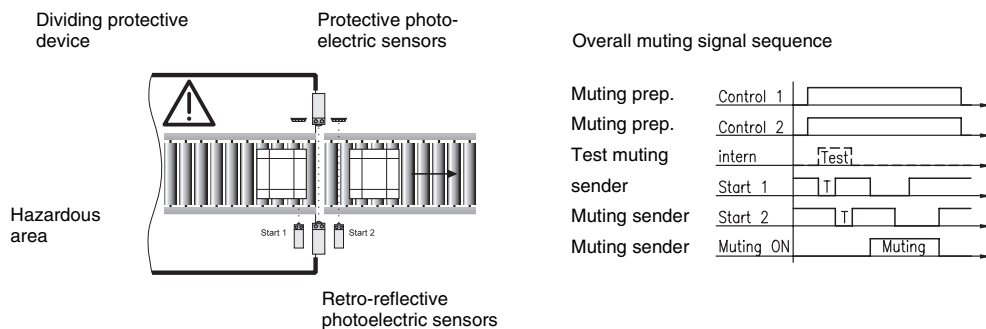
Housing	polycarbonate, cover ABS/v-o grey
Connection	screw terminals max. connection cross section 2x2.5mm ² acc. to DIN 46288
Mounting type	snap-on mounting on top hat rail
Weight	200g

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

- 1) Input current approx. 10mA
 2) short-circuit and polarity reversal protection
 3) Acc. to EN 61496-1 light density min. 200cd/m², light area min. 1cm²

Muting system structure



Muting procedure

Before inducing a muting function, a test of the connected muting signal senders, e.g. retro-reflective photoelectric sensor with activation input, via the muting preparatory signals Control 1 and Control 2 is performed.

With the TMC 66, a start of the unit can be performed even with dimmed protective photoelectric sensors. This "self-containing mode" can be induced with the start condition $U_{B ON}$, if using retro-reflective photoelectric sensors or security switches as muting sender.

The muting function starts with actuation of the first muting sensor "Start 1" and ends with the release of the second muting sensor "Start 2" and the switching off of the muting preparatory signals. A new muting process starts with the new activation of the muting preparatory signals.

Order guide

Designation	Part No.
TMC 66	500 82121

Tables

Diagrams

Remarks

- The TMC 66 test monitoring unit 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.
- Max. test response time for muting senders Start 1 and Start 2 is 240ms for each sender.