

function monitoring:

permanent test	test of the voltages, transducer- and controller- functions
self-test	- testing of the signal chain, duration of the self test: 1 - 2,5s - after power-on the ok-relay switches 1 time and the alarm-relay 2 times for checkup. During the automatic tests both relays will not switched If self-test or permanent function-test detects an error, the alarm-relay will drop down - the contacts opens and the analog output provides 22mA.
starting the self-test	- everytime after power-on, duration approx. 2,5s - automatic approx. every 24h, duration approx. 2s

Inside the unit the alarm-relay and the ok-relay are connected in series. In case of alarm, internal error and voltage drop both relays fall down in their normal position (not energized) – the switching contacts are deactivated.

To check the complete functions of the unit it is necessary to make the self-test in periodic intervals – including the switching-ability of the alarm-relay. The frequency of this verification is determined by the operator.

Attention: During the self-test function the analog output will not be observed. Therefore it's prohibited to use this output for security-related functions. This signal output only has briefing character.

The technical construction complies:

Performance-Level PL-c (in accordance to EN13849)

Categorie Cat.-2

Diagnostic-Coverage DC = low

$DC = \lambda_{DD} / \lambda_D = 90,88\%$

Mean time to failure MTTFd = high

$MTTF = 1 / \sum \lambda = 235,9$ years