




AES 2135/36, AES 2335/36, AES 2535/36, AES 2365/66 and AES 2565/66

The LED indication of the safety-monitoring module shows the different switching conditions and faults.
The tables below explain the switching conditions.

LED lights up green	<ul style="list-style-type: none">Enabling paths closed
LED flashes green	<ul style="list-style-type: none">Enable delay time running, enabling paths open
LED flashes yellow (0,5 Hz)	<ul style="list-style-type: none">Enabling paths open
LED flashes yellow (2 Hz)	<ul style="list-style-type: none">Guard device closed but no authorised operation. Possible cause: Faulty operation (only one contact actuated when opening the guard) or voltage drop<ul style="list-style-type: none">Start-up test carried outFeedback circuit open








The safety-monitoring modules have 2 more LED indications. The LED flashes yellow in intervals.
The following tables explain the switching conditions.

Display (yellow)	Explanation of switching conditions
LED 1 pulse 	<ul style="list-style-type: none">Guard device 1 open
LED 2 pulses 	<ul style="list-style-type: none">Guard device 2 open
LED 3 pulses 	<ul style="list-style-type: none">Guard device 3 open

ISD - Integral System Diagnostics

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By fault messages, the LED lights up orange in intervals. During these intervals the LED flashes in short pulses from one to seven times.

Display (orange)	Fault	Cause
LED 1 pulse 	<ul style="list-style-type: none"> Inputs S1 	<ul style="list-style-type: none"> Incoming connection to switch defective Switch defective or fitted incorrectly Switch at least 5 s only partially actuated*
LED 2 pulses 	<ul style="list-style-type: none"> Inputs S2 	<ul style="list-style-type: none"> See fault inputs S1
LED 3 pulses 	<ul style="list-style-type: none"> Inputs S1 and S2 Inputs S3, only for AES 1185 	<ul style="list-style-type: none"> See fault inputs S1
LED 4 pulses 	<ul style="list-style-type: none"> Fault signals on the inputs, no secure evaluation, not for AES 1185 	<ul style="list-style-type: none"> Too high capacitive or inductive coupling on the switch leads or incoming power supply leads, not for AES 1185
LED 5 pulses 	<ul style="list-style-type: none"> One or both relays not pulled in within a monitored time 	<ul style="list-style-type: none"> Operating voltage U_e too low Defective relay
LED 6 pulses 	<ul style="list-style-type: none"> Relay not dropped out on actuation of switch 	<ul style="list-style-type: none"> Welded relay contact
LED 7 pulses 	<ul style="list-style-type: none"> Dynamic monitoring of both channels (Cross-Monitoring) not operating correctly Fault signals on the inputs, no secure evaluation, not for AES 1185 	<ul style="list-style-type: none"> Fault on one channel Error in internal data transmission Too high capacitive or inductive coupling on the switch leads or incoming power supply leads, only for AES 1185

* Partial actuation

Switch position in which only one contact has been actuated.

Deletion of fault indication

The fault indication is deleted when the error cause has been eliminated and the AES could check all the functions.

In case of a fault of switch 1 or switch 2, the appropriate switch must be actuated (open and re-close safety guard).

For all other faults, both switches must be actuated.