

EC Type-Examination Certificate



Reg.-No.: 01/208/5A/6024.00/16

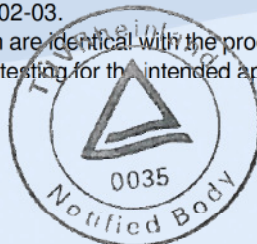
Product tested	Safety circuit, Monitoring circuits	Certificate holder	INTEC GmbH Ringstraße 3 04827 Gerichshain Germany
Type designation	HSE (marked subarea on the printed circuit board HSE)		
Codes and standards	Directive 95/16/EC EN 81-1:1998 + A3:2009	EN 81-2:1998 + A3:2009	
Intended application	Use in passenger and goods passenger lifts Safety circuit: - Bypass of the door and locking element switches during levelling and re-levelling with open doors acc. to EN 81-1/-2, clause 14.2.1.2 - Detection of unintended car movement with open doors acc. to EN 81-1/-2, clause 9.11.7 and 9.13.7 respectively Monitoring circuits: Retrieval or monitoring of switching states in the safety chain of a lift system for informational purposes acc. to EN 81-1/-2, clause 14.1.2.1.3 The safety circuit and the monitoring circuits fulfil the requirements of the EN 81-1/-2.		
Specific requirements	The instructions of the associated Installation and Operating Manual and the annex to this certificate shall be considered.		

It is confirmed, that the product under test complies with the requirements for lifts defined in the EC Directive 95/16/EC.

Valid until 2019-12-04

The issue of this certificate is based upon an examination, whose results are documented in Report No. 968/FSP 1245.00/16 dated 2016-02-03.

This certificate is valid only for products which are identical with the product tested. It becomes invalid at any change of the codes and standards forming the basis of testing for the intended application.



Köln, 2016-02-03

Notified Body for Lifts and their Safety Components, NB 0035

Dipl.-Ing. Volker Sepanski

Annex to the EC Type-Examination Certificate Reg.-No. 01/208/5A/6024.00/16 dated 2016-02-03

1. Component	- Safety circuit - Monitoring circuits
2. Manufacturer	Detlef Klinkhammer Steuerungen und Komponenten für Aufzüge GmbH Blatzheimerstraße 7-9 53909 Zülpich Germany
3. ID-No. on the component	01/208/5A/6024.00/16
4. Area of application	<u>Safety circuit:</u> - Levelling and re-levelling with open doors acc. to EN 81-1/-2, clause 14.2.1.2 - Detection of unintended car movement with open doors acc. to EN 81-1/-2, clause 9.11.7 and 9.13.7 respectively <u>Monitoring circuits:</u> - Retrieval / monitoring of switching states in the safety chain of lifts for informational purposes acc. to EN 81-1/-2, clause 14.1.2.1.3
5. Designation / Type	Subarea on the printed circuit board HSE V1.5
6. Intended use / Intended application	Use in passenger and goods passenger lifts: <u>Application of the safety circuit:</u> - Bypass of the door and locking element switches during levelling and re-levelling with open doors - Detection of an unintended movement of the car with open doors beyond the unlocking zone <u>Application of the monitoring circuits:</u> - Detection of signals in the safety chain of passenger and goods passenger lifts for the non-safety related utilisation by the single board controller HSE
7. Characteristics	<u>Monitoring circuits:</u> Input voltage range: max. 250 V AC Input current: max. ca. 8mA @ 250 V AC Input impedance: min. ca. 30 kOhm @ 250 V AC Terminals: 4 terminals for the safety chain (SK1 - SK4) 2 terminals for the neutral wire (N_SK, N) <u>Safety circuit:</u> Output voltage: max. 250 V AC (XH12/1(OT), XH12/5(LGS)) max. 8 A @ 250 V AC (XH12/1(OT), XH12/5(LGS)) Pollution degree: 3 Material group: III Protection degree: IP 00 Operating temperature: 0...+65°C
8. Maintenance	The correct installation has to be checked periodically.
9. Installation	- The instructions in the operating manual for the installation, commissioning as well as the operation of the safety circuit and the safety chain tapings have to be considered.

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9. Installation (cont'd)	<ul style="list-style-type: none"> - On the installation, the national regulations and the EN 81-1/-2 are to be considered. - The return conductor of the safety-relevant contactors is to be made acc. to the wiring diagram of the operating manual and must not have any further connection to the return conductors of the remaining control system. - On the installation an EMC-compatible wiring has to be considered.
10. Ancillary conditions	<ul style="list-style-type: none"> - The PCB has to be mounted in a housing or a cabinet of protection degree IP 5X or better in order to ensure that negative influences as a result of condensation, ingress of water or conductive dusts are prevented. - At the contacts of Rel1 and Rel2 only safety-low voltage (SELV/PELV) is permitted to be connected. - In line with the initial operation and the periodic checks of the lift the following checks have to be performed: <ul style="list-style-type: none"> - Check of the correct installation - Check of the hardware version - Check of the safety function <p><u>Ancillary conditions</u> for the safety function „Detection of unintended car movement with open doors“ acc. to EN 81-1/-2:1998+A3:2009, clause 9.11.7 and 9.13.7 respectively:</p> <ul style="list-style-type: none"> - The retention of the activated state of the protection means - as well beyond an interruption of the power supply system - must be performed by an appropriate additional measure outside of the safety circuit. - As reaction time for the safety circuit to detect an unintended movement 25 ms are to be considered for the signal „Zone innen“ (Terminal XH1/2 and XH1/5 respectively, „SM“) and 150 ms for the signal „Zone außen“ (Terminals XH1/1, „SO“ and XH1/3, „SU“). Reaction times of upstream connected sensors (e.g. zone switches) and downstream connected actors (e.g. tripping unit, operating equipment for braking and holding the car) are not included and have to be considered separately.