

INTEC GmbH

Product Catalogue



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elevator and industrial engineering



Lift Controller – Model MLC 8000

1- General Features

- Up to 64 floors
- Group control with up to 8 lifts
- No additional group controller necessary (only CAN bus connection)
- Safety circuit for advanced door open / re-levelling already include in standard delivery
- Very simple wiring
- Only one traveling cable necessary (independent of number of floors)
- Easy shaft wiring by CAN bus connection
- Fast and simple set-up procedures
- Very well suitable for modernization
- Certified according to EN81-A3
- Certified according to EN81-20/50

2- Call Processing

- Either 1 push or 2 pushes collective control ; up or down collecting ;even several combination within a lift possible
- Flexible assignment of the car and landing calls to certain door or lifts in a group
- Group call processing optimized for minimum waiting time
- No calls lost in case of shutting down a lift in a group
- Dynamic group management (always recalculated)
- Many special setting for call processing like penthouse control, visitor control

3- Open Lift Controller

- No additional tools is required for maintenance and set-up of lift controller
- All documents are free available at INTEC home page
- No dependence from special parts or manufactures
- Spare parts available at fair prices

4- CAN Open Interface According To DSP-417

- Connection between different components via CAN open lift
- Plug-and-play between lift controller and components from other manufacturing (drive controller, door controller, positioning load weighting devices, LCD...)
- Keypad unit of peripheral components may be displayed and directly from the lift controller (“ virtual terminal “)



possible

encoder,

handled



5- Door Control

- Different types of doors can be connected to lift controller
- Frequency controlled doors (e.g. RCF-1, flash, Fermator, sematic, Siemens...)
- AC doors
- Up to 3 car doors possible (even from different types)
- Fixable assignment for door open / door close push to the doors
- Adjustable door open stay time separately for each door and for car calls/ landing calls control of electrically operated landing doors possible (connected Via CAN bus; minimum wiring)

6- Drive

- For hydraulic and rope lifts
- Different drive controllers possible (VVVF , voltage controlled) very flexible interface
- Multispeed AC motors
- Different hydraulic units (2 ,3 or 4 valves additional re-levelling valves)
- Electronic controlled valve (e.g. Bucher, Giehl)

7- Positioning

- Digital Via incremental or absolute encoder as far as conventional switch positioning
- Possible mechanical attachment of encoder to the car , machine room or pit
- Use of motor encoder for positioning possible
- Maximum travel height up to 500 meter
- Maximum lift speed up to 16 m/s
- Fully automatic adjustment of the parking distances
- Easy flush adjustment using diagnostic tool inside the cabin or with the COP pushes
- Short floors down to 10 mm without any additional hardware possible
- Safety circuited for advanced door opening or re-levelling without any shaft switch possible (just an absolute encoder)

8- Battery Supply In Case Of Power Failure

- Battery charging and battery supervision included in lift controller
- Battery supply for emergency light , alarm bell and intercom system
- Evacuation trip by battery supply (to next floor or to main floor) possible

9- Car Position Display

- Different level indicators with CAN-bus connection available (LCD, DOT matrix)
- Use of third party indicators with CAN bus adapter board (binary, Gary code, 7 segment display...)
- Simple setting of displayed level name by parameter



10- General Control Functions

- All controller inputs and outputs (also on the landings)are freely configurable and can therefore adapted to each desired control function
- Key switches, indicators etc. can thus be directly connected to the required location (e.g. directly to landing electronics)and then transmitted via CAN bus to the control box (no additional wiring)
- Polarity for each input and output (N.C / N.O) can be set separately by parameter
- evacuation trip with automatic time delay or evacuation chain
- fire control according to EN-81 and many local requirements
- special service with 3 different priorities
- preferred landing call (e.g. for emergency control in hospital)
- centralized fault indication ; additional faults outputs for different fault states
- arrival arrows / moving arrows
- arrival Gong in car or in landings
- dynamic parking levels
- Software – coupling of different inputs with different outputs. this can subsequently be implemented without wiring switch function (e.g. switching shaft light from any floor or top of the car)
- Automatic test trips by chance while the lift may normally be used
- Door lock by software
- Many other special functions included in standard lift controller software , all selectable by parameters
- Easy adaptable to special customer requirements

UMLBAU VON AUFZUGSTEUERUNGEN

11- Diagnostic /Service

- LCD and keypad unit fixed on top of main board for diagnosis / setup
- Additional mobile handheld terminal may be connected in machine room or inside / on top of car as well as in landings
- Multilingual capability of the handheld terminal (currently English , German , Dutch ,Turkish ,French , Russian), selectable by the user
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- Error history of the last 100 errors with time stamp and many details for each error (actual position , state of in- and outputs , state of safety circuit ,door state,...)
- Error counter
- Password protection possible
- Setting of car and landing calls with handled terminals



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- Travel and door movements with handheld terminal (for test purposes)
- Easy hardware test of each input / output possible
- Power full automatic test functions for technical check (e.g. final limit switch test, over speed test, break test, uncontrolled movement...)
- Remote control via telephone line and Inter Net possible
- PC based monitoring system available
- Lift controller may send any SMS or telefax in case of failure



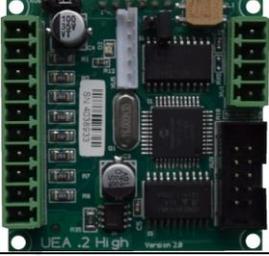
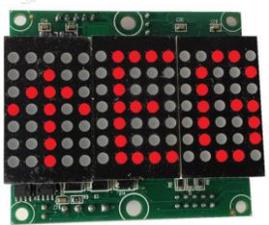
تليفون: ٢٤١٢٩٠٠١ فاكس ٢٤١٢٩٠٠٢

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Position Position	Bezeichnung Designation	Afbeelding Pictures
010	HSE Version 1.5 Main board	
020	FVE Version 2.1 Car top board	
030	UEA.1 Version 2.1, I/O extension board with 8 inputs/outputs, low side switching, opto-isolated	
040	UEA.2 Version 2.1, I/O extension board with 8 inputs/outputs, high side switching, opto-isolated	
050	PMA 2.1, Dot matrix display with 8 inputs/outputs	
060	LCD display LCD-047, 470*272 pixel, with 8 inputs/outputs and buzzer	
070	LCD display LCD-057, 640*480 pixel, with 8 inputs/outputs, buzzer, emergency light function, display for Intercom	



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Position Position	Bezeichnung Designation	Afbeelding Pictures
080	LCD display LCI16, with 8 inputs/outputs and buzzer	
090	CAN-Bus Koppler CBK	
100	Handheld terminal	

تليفون: ٢٤١٢٩٠٠١ فاكس ٢٤١٢٩٠٠٢

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EU Type-Examination Certificate



Product Safety
Functional
Safety

www.tuv.com
ID 0600000000

Reg.-No.: 01/208/4A/6121.00/17

Product tested	Safety circuit, Monitoring circuits	Certificate holder	INTEC GmbH Ringstraße 3 04827 Gerichshain Germany
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Type designation	HSE (marked subarea on the printed circuit board HSE)		
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Codes and standards	Directive 2014/33/EU EN 81-20:2014 EN 81-50:2014	EN 81-1:1998 + A3:2009 EN 81-2:1998 + A3:2009
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Intended application	Use in passenger and goods passenger lifts Safety circuit: - Detection of unintended car movement with open doors acc. to EN 81-20, 5.6.7.7 resp. EN 81-1/-2, 9.11.7/9.13.7 - Bypass of the door and locking element switches during levelling and re-levelling with open doors acc. to EN 81-20, 5.12.1.4 a) resp. EN 81-1/-2, 14.2.1.2 a) 2)		
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Monitoring circuits:
Retrieval or monitoring of switching states in the safety chain of a lift system for informational purposes acc. to EN 81-20, 5.11.2.1.2 resp. EN 81-1/-2, 14.1.2.1.3

The safety circuit and the monitoring circuits fulfil the requirements of the EN 81-20/-50 and EN 81-1/-2.

Specific requirements	The instructions of the associated Installation and Operating Manual and the annex to this certificate shall be considered.		
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It is confirmed, that the product tested complies with the requirements for lifts defined in the EU-Directive 2014/33/EU.

Valid until 2022-04-10

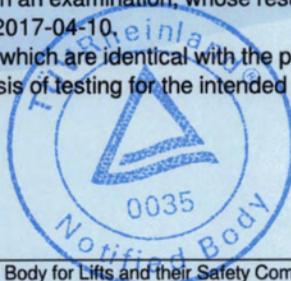
The issue of this certificate is based upon an examination, whose results are documented in Report No. 968/FSP 1245.01/17 dated 2017-04-10.

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, 2017-04-10

Notified Body for Lifts and their Safety Components, NB 0035

Dipl.-Ing. Volker Sepanski



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Annex to the EU Type-Examination Certificate Reg.-No. 01/208/4A/6121.00/17 dated 2017-04-10

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	01/208/4A/6121.00/17 (safety circuit and monitoring circuits are compatible with 01/208/5A/6024.00/16)
4. Area of application	<u>Safety circuit:</u> - Detection of unintended car movement with open doors acc. to EN 81-20, 5.6.7.7 resp. EN 81-1/-2, 9.11.7/9.13.7 - Levelling and re-levelling with open doors acc. to EN 81-20, 5.12.1.4 a) resp. EN 81-1/-2, 14.2.1.2 a) 2) <u>Monitoring circuits:</u> - Retrieval / monitoring of switching states in the safety chain of lifts for informational purposes acc. to EN 81-20, 5.11.2.1.2 resp. EN 81-1/-2, 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)) Output current: 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

Annex to the EU Type-Examination Certificate Reg.-No. 01/208/4A/6121.00/17 dated 2017-04-10

	the safety chain tapings have to be considered.
9. Installation (cont'd)	<ul style="list-style-type: none"> - On the installation, the national regulations and the EN 81-20 resp. EN 81-1/-2 are to be considered. - The wiring to the sensors (e.g. zone switches) as well as the output circuit / bypass path shall fulfil the requirements for short-circuit proof. - 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 54 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 of the safety circuit acc. the test instructions in the operating manual, - Check neutral conductor interruption at XH13.7 (N) of the monitoring circuits. <p><u>Ancillary conditions</u> for the safety function „Detection of unintended car movement with open doors“ acc. to EN 81-20, 5.6.7.7 resp. EN 81-1/-2, 9.11.7/9.13.7:</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“). <p>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.</p>