LIFTINSTITUUT

TYPE EXAMINATION CERTIFICATE

FOR LIFTCOMPONENTS

Issued by Liftinstituut B.V.

Certificate no.	: NL13-400-1002-184-01	Revision no.: 3
Description of the product	: Brake monitoring as part of the protection against unintended car movement and/or ascending car overspeed means	
Trademark, type	: Yaskawa, CIMR-LCxAxxxxxxx – 910x and CIMR-LCxFxxxxxxx – 91xx	
Name and address of the Manufacturer	: Yaskawa Electric UK LTD 1 Hunt Hill Orchardton Woods Cumbernauld G68 9LF United Kingdom	Yaskawa Electric Corporation 2-13-1-Nishimiyaichi Yukuhashi-City Fukuoka 824-8511 Japan
Name and address of the certificate holder	: Yaskawa Europe GmbH Hauptstr. 185 D-65760 Eschborn Germany	
Certificate issued on the following requirements	: Lifts Directive 2014/33/EU	
Certificate based on the following standard	: EN 81-20:2014 clause 5.6.6.2 and 5.6.7.3	
Test laboratory	: None	
Date and number of the laboratory report	: None	
Date of type examination	: June 13, 2017	
Additional document with this certificate	: Report belonging to the type examination certificate no.: NL13-400-1002-184-01 rev.3	
Additional remarks	: None	
Conclusion	: The lift component meets the requirements referred to in this certificate taking into account any additional remarks mentioned above.	

Amsterdam

Date : 27-06-2017
Valid until : 30-03-2020

ing. J.L. van Vliet
Managing Director

Certification decision by

CERTOSP

Report type-examination

Report belonging to type-examination certificate no.	:	NL13-400-1002-184-01
Date of issue of original certificate	:	June 25, 2012
Concerns	:	Lift component
No. and date of revision	:	3; June 27, 2017
Requirements	:	Lifts Directive 2014/33/EU Standard: EN 81-20:2014 clause 5.6.6.2 and 5.6.7.3
Project no.	:	P170177

1. General specifications

Name and address manufacturer	:	Yaskawa Electric UK LTD 1 Hunt Hill Orchardton Woods Cumbernauld G68 9LF United Kingdom and Yaskawa Electric Corporation 2-13-1-Nishimiyaichi Yukuhashi-City Fukuoka 824-8511 Japan
Description of lift component	:	Brake monitoring as part of the protection against unintended car movement and/or ascending car overspeed means
Type	:	Yaskawa, CIMR-LCxAxxxxxxx – 910x and CIMR-LCxFxxxxxxx – 91xx
Laboratory	:	-
Address of examined lift component	:	-
Data of examination	:	June 2013, June 2017
Examination performed by	:	A. v/d Burg, P.J. Schaareman

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2. Description lift component

The brake monitoring described in this report shall be used in combination with a suitable detection system and a suitable brake to build an unintended car movement protection and/or ascending car overspeed means for lifts.
The monitoring function that is integrated in the frequency inverter becomes effective after parameter S6-17 is set to 1.
Two inputs can be programmed to monitor the correct opening and closing of brakes, it can be done with both normally closed or both normally open contacts.
The activated system will stop the lift when at least one programmed brake monitoring inputs detects one of the following situations:

- When the brake monitoring signal changes status for a time period longer than set with parameter "S6-06" during a trip (Default 500 ms, range 0-60 sec.) (This function is optional).
- When the brake monitoring signal does not change status within a time period set with parameter "S6-05" after the brake is ordered to open during a trip (Default 500 ms, range 0-10 sec.).
- When the brake monitoring signal does not change status within a time period set with parameter "S6-05" after the brake is ordered to close after a trip (Default 500 ms, range 0-10 sec.).

After detection of brake malfunction, the lift remains out of service, also after switching off- and on the supply power or using the "reset" button.
Resetting of the system is only possible by setting the parameter "S6-18 = 1".

Technical data of the inputs:

Voltage	: +24 VDC
Switching level low/high	: typ. 11,85 VDC
Input current at 24 V	: typ. 12,6 mA

3. Examinations and tests

The examination covered a check whether compliance with the Lift Directive 2014/33/EU is met, based on the harmonized product standard EN 81-20:2014. Issues not covered by or not complying these Standards are directly related to the above mentioned essential requirements based on the risk assessment, where applicable with the aid of harmonized A-and B-standards.

The examination included:

- Examination of the technical file (See annex 2):
- Examination of the representative model in order to establish conformity with the technical file.

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4. Results

After the final examination the product and the technical file were found in accordance with the requirements.

5. Conditions

On the type-examination certificate the following conditions apply:

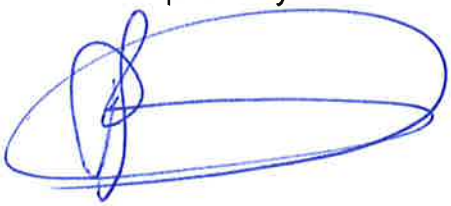
- Before taking the lift into service and after each change in the software of the Yaskawa, CIMR-LCxAxxxxxxx – 910x or CIMR-LCxFxxxxxxx – 91xx the proper functioning of the brake monitoring must be checked. The checking shall be done by disconnecting and short circuiting the brake monitoring switches one by one. Each time after a command is given, the manipulation shall be detected by the system and a reset shall be necessary to bring the lift back into operation.

6. Conclusions

Based upon the results of the type-examination Liftinstituut B.V. issues a type-examination certificate.

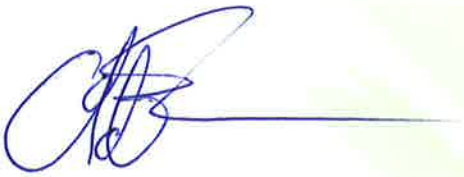
The type-examination certificate is only valid for products which are in conformity with the same specifications as the type certified product. The type-examination certificate is issued based on the requirements that are valid at the date of issue. In case of changes of the product specifications, changes in the requirements or changes in the state of the art the certificate holder shall request Liftinstituut B.V. to reconsider the validity of the type-examination certificate.

Prepared by:



P.J. Schaareman
Product Specialist Certification
Liftinstituut B.V.

Certification decision by:



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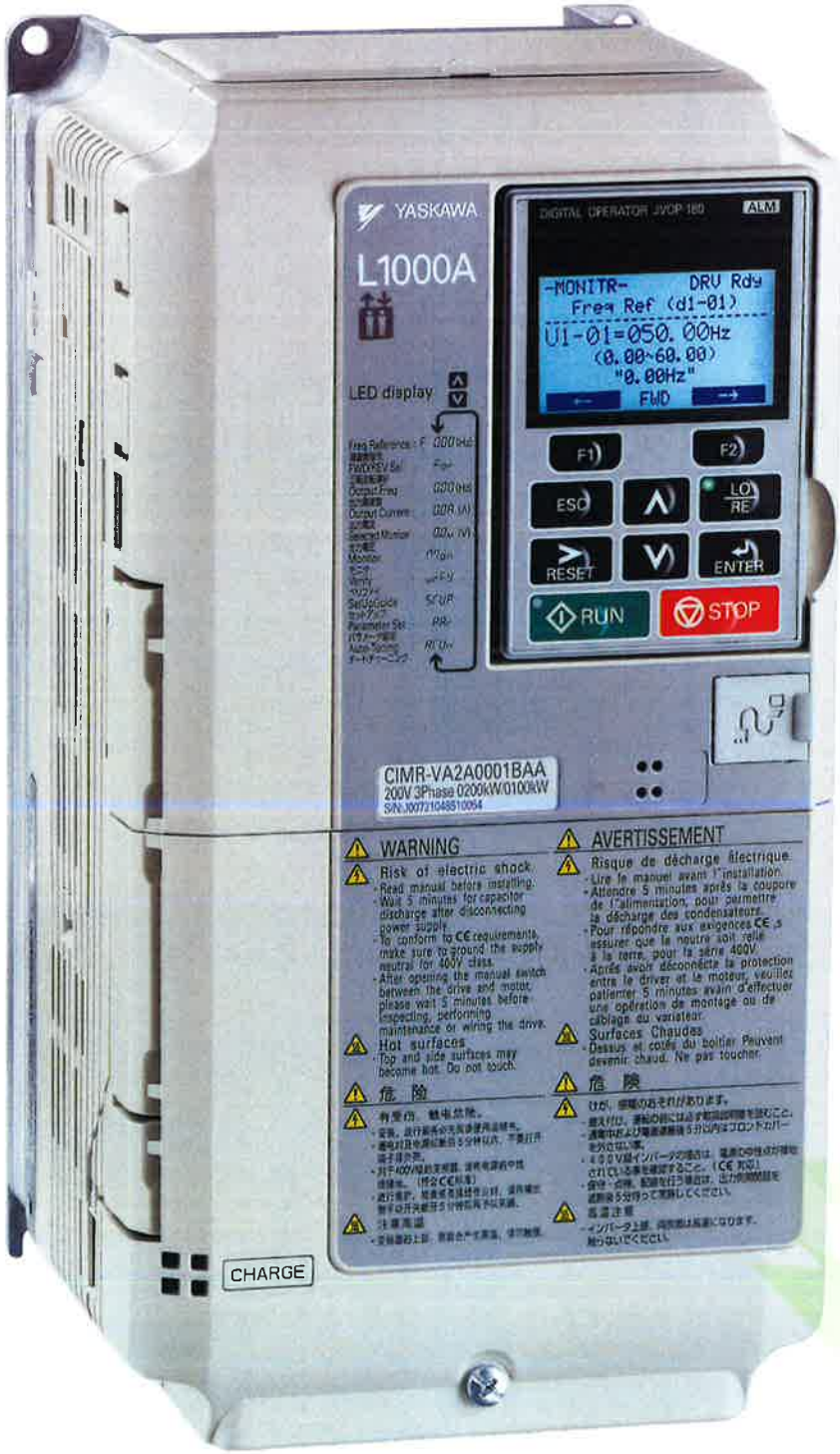
Annexes

Annex 1 : Impression Yaskawa frequency inverter



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Annex 2: Documents of the Technical File which were subject of the examination

Title	Date
Software Functional Specification.docx	13-03-2013
Software Functional Specification.docx rev.1	09-04-2013
Brake Status Monitor Operation Manual	13-06-2013

Annex 3: Reviewed deviations from the standards

EN xx-x par.	Requirement	Accepted design
x.x.x	-	-

Annex 4 Revision overview

Rev.:	Date	Summary of revision
-	25-06-2013	Original
1	10-09-2013	Product name changed
2	30-03-2015	Addition of CIMR-LCxFxxxxxxx – 91xx
3	27-06-2017	Addition of brake monitoring application for ascending car overspeed means and update to new Lifts Directive 2014/33/EU

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