LIFTINSTITUUT

TYPE-EXAMINATION CERTIFICATE

Issued by Liftinstituut B.V.

Certificate no.	:	NL16-400-1002-236-01 Revision no.: -
Description of the product	:	Lift Control Unit for electric lifts with monitoring circuit for safety chain and door bridging circuit, also applied for monitoring, detection and activation of unintended car movement protection (UCMP)
Trademark, type	:	EMAK ASANSOR, E 380 INTEGRATED DRIVE Models 4B14A, 4B17A, 4B26A, 4C35A, 4C50A
Name and address of the certificate holder	:	EMAK ASANSOR / ILGENLER INS. MAK. SAN. TIC. LTD. STI. Mimarsinan Organize Sanayi Bolgesi 19. Cadde No:33 Melikgazi Kayseri Turkey
Certificate issued on the following requirements	:	Lifts Directive 2014/33/EU Part of EN 81-1:1998+A3:2009 Parts of EN 81-20:2014 and EN 81-50:2014
Name and address of the manufacturer	:	Arkel Elektrik Elektronik San. ve Tic. As. Serifali Mah. Turker Cad. No:51 34775 Umraniye, Istanbul, Turkey
Test laboratory	:	None
Date and number of the laboratory report	:	None
Date of type-examination	:	November 30, 2016
Additional document with this certificate	:	Annex belonging to the type-examination certificate no.: NL16-400-1002-236-01
Additional remarks	:	The printed circuit boards are not subjected to the laboratory tests according to annex F.6 of EN 81-1 resp. 5.6 of EN 81-50 Key parameters for detecting UCM Detection distance (variable) : ML magnets switching point Max. response time DBR board : 10 ms Speed and distance travelled : to be calculated
Conclusion	:	The printed circuit boards meet the requirements referred to in this certificate taking into account any additional remarks mentioned above.

Amsterdam
Date of issue : 30-11-2016
Valid until : 20-04-2021

ing. J.L. van Vliet
Managing Director

Certification decision by

Annex of type-examination certificate NL16-400-1002-236-01

Date of original certificate	:	30-11-2016
Date of revision	:	-
Requirements	:	EN 81-1:1998+A3:2009, article 9.11.3, 9.11.7, 9.11.9, 14.1.1, 14.1.2.1.3, Annex F.8 and H EN 81-20:2014 clause 5.6.7.3, 5.6.7.7, 5.6.7.9, 5.11.1.1 and 5.11.2.1.7 and EN 81-50:2014 clause 5.8 and 5.15
Project no.	:	P160387-01

1. Description

The E 380 INTEGRATED DRIVE is a complete lift control unit. The lift control unit is a so called integrated lift control board. The control unit comprises the CPU Board, Display Board, IO Board, Encoder Board, EMC Filter and Power Board (VVVF inverter). Additionally a door bridging functionality (DBR board) and UCM Solenoid control such as ApRe or ApRemini board can be added to the unit. As alternative for the ApRe(mini) board an output relay of E 380 INTEGRATED DRIVE can be programmed to (de-)activate directly the UCM solenoid, this option can be applied when the power to the control is provided with an UPS device.
To complete the electrical system of the lift there are interface boards for the controller (KBK-10 and KBK-11), a control board in the inspection box and not safety related boards for the car panel, landing door and signalization.

Regarding relevant safety requirements the boards used in the lift control system contain monitoring points for safety chain, a door bridging circuit and several detection/monitoring functions (UCM detection, contactors/brake monitoring, out of service control…) which were the subject for the examination and tests.

Depending the characteristics of the lift the E 380 INTEGRATED DRIVE can be programmed for the specific functions needed. When pre-opening and/or re-levelling is used E 380 INTEGRATED DRIVE can detect UCM, monitor the brake switches or other mechanisms and activate the brake or a safety solenoid on the overspeed governor.

In case pre-opening or re-levelling with open doors is not installed and certified brakes are used with gearless machines (or directly mounted on the (axis of) traction sheave in case of geared machines) are used with, E 380 INTEGRATED DRIVE can be used for monitoring the correct functioning of the brake. UCM test is in this case not required.

The E 380 INTEGRATED DRIVE is based on MOT control unit. EU type examination certificate is issued for MOT control unit and can be applied 100% to E 380 INTEGRATED DRIVE unit. Limits of use and safety components used can be found in the MOT EU type examination certificate and Annex NL16-400-1002-048-13.

2. Conditions

On this certificate the conditions of EU-type examination certificate MOT apply. See Annex NL16-400-1002-048-13 which is part of this certificate.

LIFTINSTITUUT B.V. - SAFETY AND QUALITY MANAGEMENT
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3. Conclusions

The E 380 INTEGRATED DRIVE is applied as part of the UCMP safety component according the definition of the Lifts Directive. EMAK ASANSOR becomes the distributer of the E 380 INTEGRATED DRIVE and responsible for the proper selection and installation.
The EU type examination is executed for the MOT Control unit which is in complete conformity with the E 380 INTEGRATED DRIVE. The EU declaration of conformity will be issued by Arkel for the MOT Control unit which is also the manufacturer of the E 380 INTEGRATED DRIVE.

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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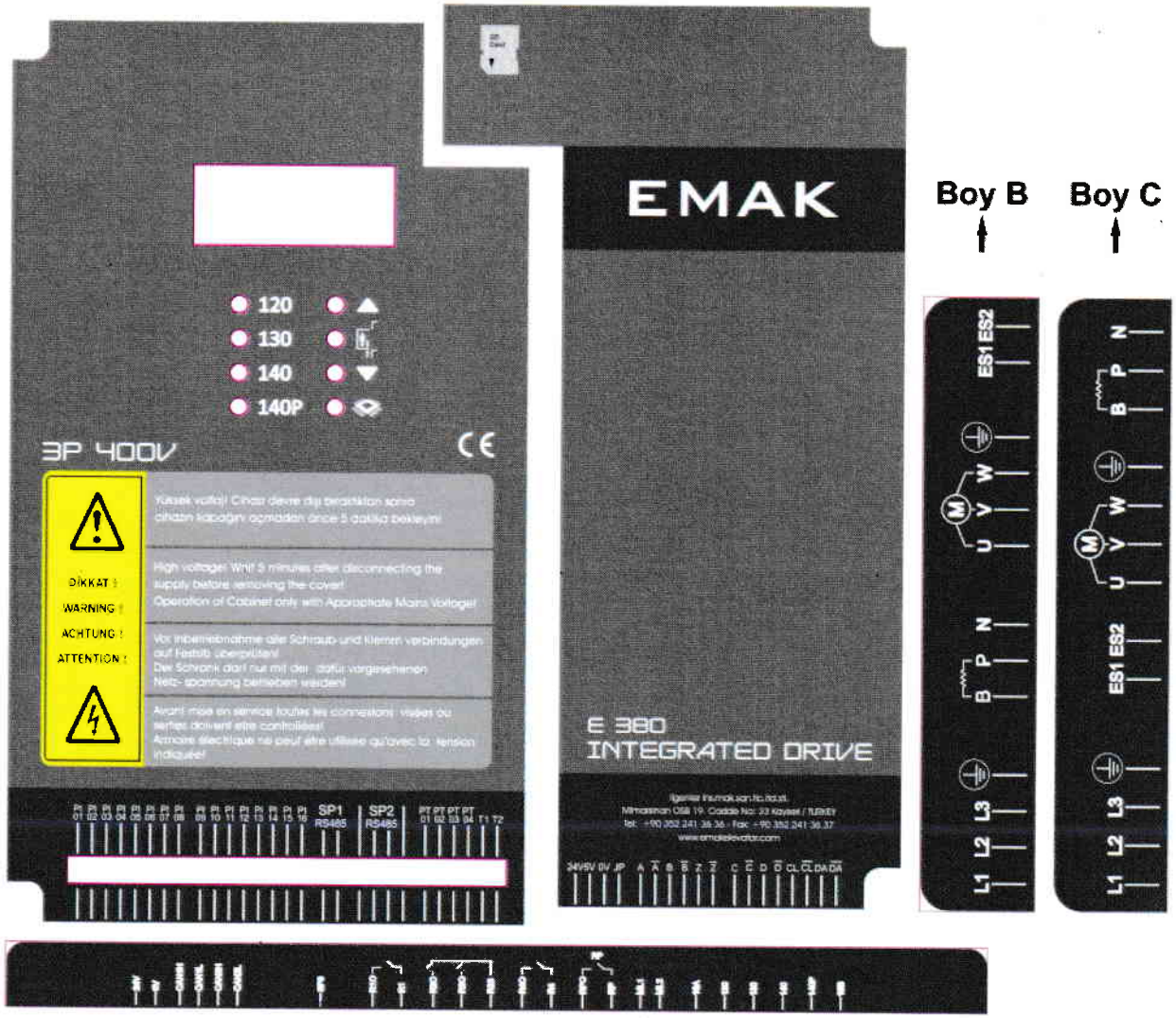
Annex 1. Basic lay-out of the component (E 380 INTEGRATED DRIVE)



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

Title	Document number	Date
EU-type examination certificate MOT Control	F23-02-16 EU-type examination certificate MOT Control NL16-400-1002-048-13	20-04-2016
Annex belonging to EU type examination certificate MOT Control	F 4-53 Annex EU type-examination MOT Control NL16-400-1002-048-13	20-04-2016
Test report MOT Control	F 4-66 Test report MOT Control NL16-400-1002-048-13	20-04-2016

Annex 3. Revision of the certificate and report

Rev.:	Date	Summary of revision
-	30-11-2016	Original

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