

# TYPE EXAMINATION CERTIFICATE FOR LIFTCOMPONENTS

Issued by Liftinstituut B.V.

Certificate no.	: NL14-400-1002-110-08	Revision no.: 2
Description of the product	: Safety contact for door locking device	
Trademark	: Prolift	
Type no.	: PRL-BMP-013	
Name and address of the manufacturer	: Prolift Asansör San.ve Tic. Aş Büyükbalikli Mah. Büyükbalikli Cad. No:157/A-157/B Nilüfer / Bursa / Turkey	
Name and address of the certificate holder	: Prolift Asansör San.ve Tic. Aş Büyükbalikli Mah. Büyükbalikli Cad. No:157/A-157/B Nilüfer / Bursa / Turkey	
Certificate issued on the following requirements	: Lifts Directive 2014/33/EU	
Certificate based on the following standard	: Parts of : EN 81-20/50:2014, EN 81-1/2:1998+A3:2009 IEC 60947-1:2004 and IEC 60947-5-1:2004+A1:2009	
Test laboratory	: None	
Date of type examination	: November 2013 – February 2014 Rev.1; September 15, 2017 Rev.2; March - May 2020	
Additional document with this certificate	: Report belonging to the type examination certificate no.: NL14-400-1002-110-08 rev.2	
Additional remarks	: $U_e$ : 230 VAC $I_e$ : 2.0 A Utilization Category: AC-15 $U_i$ : 500 V $U_{imp}$ : 4 kV $I_{th}$ : 10.0 A Furthermore see chapter 5 of the report belonging to this type examination certificate.	
Conclusion	: The lift component meets the requirements referred to in this certificate taking into account any additional remarks mentioned above.	

Amsterdam

Date : 07-05-2020  
Valid until : 15-09-2022

ing. P.J. Peeters  
Manager Certification

Certification decision by

## Report type-examination

Report belonging to type-examination : NL14-400-1002-110-08  
certificate number

Date of issue of original certificate : February 19, 2014

Certificate applies to : Component

Revision number / date : 2; May 7, 2020

Requirements : Lifts Directive 2014/33/EU  
Standards: EN 81-20/50:2014, EN 81-1/2:  
1998+A3:2009, IEC 60947-1:2004 and  
IEC 60947-5-1:2004+A1:2009

Project number : P200057

### 1. General specifications

Description of the product : Safety contact for Prolift door locking device

Trademark : Prolift

Type no. : PRL-BMP-014

Name and address of the manufacturer : Prolift Asansör San.ve Tic. Aş  
Büyükbalikli Mah Büyükbalikli Cad.  
No:157/A-157/B  
Nilüfer / Bursa / Turkey

Address of examined component : Liftinstituut BV  
Buikslotermeerplein 381  
1025 XE Amsterdam, The Netherlands

Data of examination : November 2013 – February 2014  
Rev.1; September 15, 2017  
Rev.2; March - May 2020

Examination performed by : W. Visser / P.J. Schaareman / H.D. Kramer

## 2. Description component

### GENERAL DATA

Type	Safety switch with forced actuation
Sort, Form	Double gap contact element with two terminals , Y
Rated operational voltage	$U_e$ 230 VAC
Rated operational current	$I_e$ 2,0 A
Rated insulation voltage	$U_i$ 500 V
Rated impulse withstanding voltage	$U_{imp}$ 4 kV
Conventional free air current	$I_{th}$ 10 A
Bridge piece diameter	2,5 mm
Utilization Category	AC-15
Weight receiving door switch	18 g
Weight contact bridge piece	6 g
Stroke of contacts in receiving door switch	4 mm

The PRL-BMP-013 landing door locking contact consists of two parts, the contact bridge and the receiving door switch. The contact is used for supervising the closed and locked position of automatic lift landing doors. The contact is meant to be incorporated in the Prolift locking device, type PRL-BMP-014. The contact can be used up to 230 VAC and 2,0 A.

## 3. Examinations and tests

The tests which are performed are as stated in annex F1 of the EN 81-1/2 resp. clause 5.2 of EN 81-50 and clause 8, annex C and annex K of the IEC 60947-5-1.

### 3.1 Mechanical tests

#### Endurance test

According to clause 7.7.5 plus annex F.1.2.2.1.1 of EN 81-1/2 resp. clause 5.3.10 of EN 81-20, clause 5.2.2.2.2 of EN 81-50 and annex C of IEC 60947-5-1 an endurance test must be made. For this test a special testing apparatus was designed. An actuator for the lever was driven at 60 rpm. A mechanical counter was installed to keep track of the number of complete cycles.

#### Test details

Start date / time	March 27 <sup>th</sup> , 2020 / 11:00
End date / time	April 10 <sup>th</sup> , 2020 / 10:25
Number of cycles	1.000.000
Test voltage / current	$U_e = 230 \text{ VAC} / 2 \times I_e = 4,0 \text{ A}$

**Test result: OK**

### 3.2 Electrical tests

In accordance with IEC 60947-5-1 a circuit was made with a resistor and choke.

#### Endurance test

see 3.1 Mechanical tests

**Test result: OK**

#### Test for making and braking capacities under normal conditions

According to clause 8.3.3.5.2 of IEC 60947-5-1 several tests must be made.

##### **Test # 1 details**

Test date April 10<sup>th</sup>, 2020  
Test voltage / current 1,1 x  $U_e$  = 253 VAC /  $I_e$  = 2,0 A  
Cos  $\varphi$  0,3  
Number of cycles 50 at 6 rpm

**Test result: OK**

##### **Test # 2 details**

Test date April 10<sup>th</sup>, 2020  
Test voltage / current  $U_e$  = 230 VAC /  $I_e$  = 2,0 A  
Cos  $\varphi$  0,3  
Number of cycles 10 rapidly

**Test result: OK**

##### **Test # 3 details**

Test date April 14<sup>th</sup>, 2020  
Test voltage / current  $U_e$  = 230 VAC /  $I_e$  = 2,0 A  
Cos  $\varphi$  0,3  
Number of cycles 990 at 60 rpm

**Test result: OK**

##### **Test # 4 details**

Start date / time April 13<sup>th</sup>, 2020 / 17:00  
End date / time April 14<sup>th</sup>, 2020 / 08:00  
Test voltage / current  $U_e$  = 230 VAC /  $I_e$  = 2,0 A  
Cos  $\varphi$  0,3  
Number of cycles 5.000 at 6 rpm

**Test result: OK**

#### Test for making and braking capacities under abnormal conditions

According to clause 8.3.3.5.3 of IEC 60947-5-1 a test must be made.

##### **Test details**

Test date April 15<sup>th</sup>, 2020  
Test voltage / current 1,1 x  $U_e$  = 253 VAC / 10 x  $I_e$  = 20,0 A  
Cos  $\varphi$  0,3  
Number of cycles 10 at 6 rpm

**Test result: OK**

#### Test of ability to break circuit

According to annex F.1.2.4.2.1 of EN 81-1/2 resp. clause 5.2.4.2.2 of EN 81-50 a test must be made.

Test date April 15<sup>th</sup>, 2020  
Test voltage / current  $1,1 \times U_e = 253 \text{ VAC} / 11 \times I_e = 22,0 \text{ A}$   
Cos  $\varphi$   $0,7 = 45^\circ$   
Number of cycles 50 at 6-12 rpm

**Test result: OK**

#### Test for resistance of leakage currents

This test is not performed. The values are based on prior tests made by the manufacturers supplier, these values go beyond the requirements of the EN 81-1/2, EN 81-20/50 and IEC 60947-5-1. The CTI value for the material used, PA 6 (Polyamide 6 with no glass fibre) is  $> 600\text{V}$ . The minimum value required by the EN 81-1/2 resp. EN 81-20/50 is  $175 \text{ V}$ . Different literature confirm these values.

#### Test to determine degree of Protection

According to EN 81-1/2 resp. EN 81-20 the degree of protection must be at least IP 2X. As long as the contact bridge is powered the opening between conductors of the contact bridge and the housing of the door switch must be IP2X minimum. Also the opening between powered conductors of the door switch and the housing of the door switch must be IP 2X minimum at all times. This requirement is sufficiently fulfilled.

## 4. Results

After the final examination the product and the technical file were found in accordance with the requirements. The functional tests passed without remarks.

## 5. Conditions

On the type-examination certificate the following conditions apply:

- The door lock contact PRL-BMP-013 shall be used for the Prolift PRL-BMP-014 locking device, used on horizontal power operated sliding doors.
- Locking distance before making contact must be at least 7 mm.
- The maintenance and installation instructions shall be provided with the lift.
- The switch shall be applied within rated current and voltage of  $2,0 \text{ A} / 230 \text{ VAC}$ .



## 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:



H.D. Kramer  
Product specialist Certification  
Liftinstituut B.V.

Certification decision by:



## Annexes

Annex 1 : Door locking contact Prolift PRL-BMP-013



<b>Annex 2</b>	<b>Documents of the Technical File which were subject of the examination</b>
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Title	Document number	Date

<b>Annex 3</b>	<b>Reviewed deviations from the standards</b>
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EN xx-x par.	Requirement	Accepted design
x.x.x		

<b>Annex 4</b>	<b>Revision of the certificate and its report</b>
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Rev.:	Date	Summary of revision
-	19-02-2014	Original
1	15-09-2017	Update to new Lifts Directive 2014/33/EU and re-assessment for EN 81-20/50
2	07-05-2020	Tested for higher effective current of 2,0 A