

SAFETY INFORMATION PCI 63000224

To STANNAH NEW LIFTS

Copy JM INSALACO – P. BOSSELUT – R. GRANDPIERRE – R. FROGER – D. MEUNIER – P. LAMY – Y. BOISRIVAUD – M. SUROT – A. MARTEL – A. FAYOL – S. PAVY – J. MORILLE – R. PERDRIEUX - Y. BOURCHIS – G. RICHARD – V. COUSIN – A. BOUDAILLIEZ

From JP FLOCH
Department TKEMF Quality Coordinator

Angers, the 7th of October 2014

Our/Ref. PCI 63000224 Revision 01

Subject: Instruction PCI N°63000224 sent by TKEMS

- SAFETY INSTRUCTIONS -

Following customer claims, please find below the PCI 63000224 revision 01 from TKEMS approved by AENOR (notified body of TKEMS).

This instruction explains the causes of the failure, describes how the electrical switch of the overspeed governor has to be checked and, in case of failure, how the electrical switch has to be readjusted.

! IMPORTANT NOTE ! : With this information, we inform you how to check the good operation of the overspeed governor according to the type of controller.

l) Controller CMC4

* Operation sheet with the PCI 63000224 revision 01

* No list of the affected lifts because TKEMF did not manage directly the orders. TKEMS sent you directly the PCI and the list of the affected lifts.

* Video of the implementation with duration of 9 minutes (only tests) for CMC4 controller

<https://shareit.thyssenkrupp-elevator-seame.com/data/public/7e7e96.php?lang.es>

* Video of the implementation with duration of 18 minutes (tests + repair) for CMC4 controller

<https://shareit.thyssenkrupp-elevator-seame.com/data/public/c232c2.php?lang.es>

* The traceability document to be filled in :

- with the overspeed governor serial number



- by marking the column Check List 1 if the overspeed governor is in conformity after the tests
- by marking the column Check List 2 if the overspeed governor has been repaired (and tested in conformity after the tests).

* Label 63000224.

II) Controller MC3 for Synergy NC91A

- * All the sections of the PCI 63000224 revision 01 have to be respected excluded the section 2.1 “Electrical switch checking”
- * To check the good operation of the electrical switch in upwards and downwards directions, please see the annex 4 “Check the good operation of the electrical switch of the overspeed governor SG200”. The tests have to be performed 3 times.
- * List of the affected lifts attached to this information
- * The traceability document to be filled in :
 - with the overspeed governor serial number



- by marking the column Check List 1 if the overspeed governor is in conformity after the tests
- by marking the column Check List 2 if the overspeed governor has been repaired (and tested in conformity after the tests).
- * Label 63000224.

III) Controller MHC / ECOR for Synergy NC91B

- * All the sections of the PCI 63000224 revision 01 have to be respected excluded the section 2.1 “Electrical switch checking”
- * To check the good operation of the electrical switch in upwards and downwards directions, please see the annex 4 “Check the good operation of the electrical switch of the overspeed governor SG200”. The tests have to be performed 3 times.
- * List of the affected lifts attached to this information
- * The traceability document to be filled in :
 - with the overspeed governor serial number



- by marking the column Check List 1 if the overspeed governor is in conformity after the tests
- by marking the column Check List 2 if the overspeed governor has been repaired (and tested in conformity after the tests).
- * Label 63000224.

IV) Controller MCI for Synergy residential

- * All the sections of the PCI 63000224 revision 01 have to be respected excluded the section 2.1 “Electrical switch checking”
- * To check the good operation of the electrical switch in upwards and downwards directions, please see the annex 4 “Check the good operation of the electrical switch of the overspeed governor SG200”. The tests have to be performed 3 times.
- * List of the affected lifts attached to this information

- * The traceability document to be filled in :
 - with the overspeed governor serial number



- by marking the column Check List 1 if the overspeed governor is in conformity after the tests
 - by marking the column Check List 2 if the overspeed governor has been repaired (and tested in conformity after the tests).
- * Label 63000224.

For the MC3, MHC/ECOR and MCI controllers, should you have any questions or suggestions, please do not hesitate to contact the TKEMF Technical Assistance Department (+33 2 41 33 32 10).

We thank you in advance to contact the owners for all the lifts which are under the responsibility of competitors in order to organize the checking of these lifts with the companies which are in charge to do the maintenance.

We apologize for any inconvenience caused.

Best regards
Jean-Philippe FLOCH

SAFETY INSTRUCTIONS



ThyssenKrupp Elevator Manufacturing Spain



ThyssenKrupp

PRODUCT CORRECTION INSTRUCTION
OVERSPEED GOVERNOR SG-200 & SG-300 ELECTRIC CONTROL FAULTY

No.: PCI 63000224 Rev. 01
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1. FAULT

1.1. Description

During the mandatory commissioning test prescribed EN-81-1, Annex D, section D.2, paragraph i in one elevator it has been detected that the electrical switch of the Overspeed Governor SG-200 is not actuated when the elevator is moving in upwards direction at tripping speed, so that the safety line is not open and therefore the machine brake do not stop the car, as is defined in the EN-81-1-1 part 9.9.11.1.

1.2. Reason

Due to this customer complaint the failure was analyzed with the conclusion that some version of the Overspeed Governor SG-200 and SG-300, that includes the electrical switch XCM 2110S38 and XCM2910 S38; under two joint circumstances the electrical switch could fail.

These two circumstances are:

- Misalignment between the central plane of the electrical switch and the central line of the cam actuator.
- The distance between the actuator of the electrical switch and the cam actuator exceeds 2.5 mm

The switch cannot work properly and however be accepted by line production controls after the last modification on it on December 15, 2011

2. CORRECTIVE ACTION

In spite of the expected units affected by this failure are low, the problem has to be considered as safety relevant, due to affect to a safety function of the elevator, so it is **MANDATORY** to apply this Corrective Action to all units listed in the file AFFECTED ORDERS attached to this document.

This document defines how to test the electrical switch of the SG in the elevator and in case of malfunction it is described the procedure to readjust the electrical switch.


In Annex 3 there is a letter from the Notify Body AENOR, which certifies the TKEMS Quality Management System, approving this PCI.

IMPORTANT NOTE: It is mandatory to follow the instructions and procedures outlined in the guide "10 Safety Rules" of TKE to execute the tasks defined in this document.

2.1. ELECTRICAL SWITCH CHECKING

2.1.1. TEST IN UPWARDS DIRECTION

Run the elevator with the car empty in upwards direction in inspection speed (tests cannot be done from the car roof) and engage the overspeed governor, by means of the remote control included in the control cabinet in case of machine room less elevators, and manually in case of machine room elevators. In this condition the car must stop due to the actuation of the machine brake.

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Repeat the test 3 times.

2.1.2. TEST IN DOWNWARDS DIRECTION.

Use two certified jumpers to bypass, in the control cabinet, the safety contacts related with the safety gears and tension pulley.

Run the elevator in downwards direction in inspection speed (tests cannot be done from the car roof) and engage the overspeed governor, by means of the remote control included in the control cabinet in case of machine room less elevator, and manually in case of machine room elevator. In this condition the car will stop electrically due to the activation of the machine brake. It is not expected the full activation of the safety gear.

Repeat the test 3 times.

IMPORTANT NOTE: REMOVE THE JUMPERS FROM THE CONTROL CABINET.

If in all test the electrical switch is activated the elevator can run normally and please, send the document CHECKLIST 1 fulfilled to the e-mail below:



gestion-calidad.tkems@thyssenkrupp.com

In case of failure of the electrical switch in one test follow with point 2.2.

2.2. READJUSTMENT OF THE OVERSPEED GOVERNOR SWITCH

2.2.1. Readjustment of the cam actuator

2.2.1.1. Loosen half turn the screw of the cam actuator indicated in the picture

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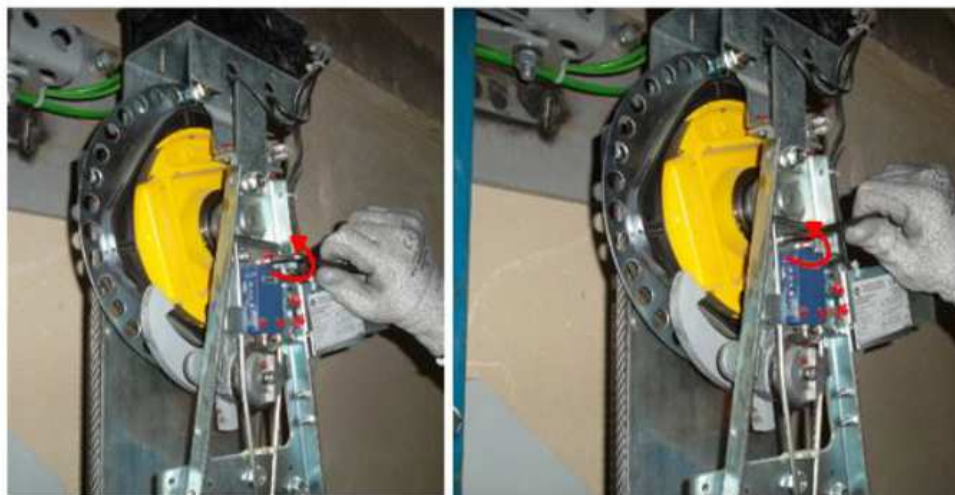
2.2.1.2. Push the cam actuator to its top position.



2.2.1.3. Tighten the screw of the cam actuator

2.2.2. Readjustment of the spring holder

2.2.2.1. Loosen two screws in the spring holder circled in the picture



**PRODUCT CORRECTION INSTRUCTION
OVERSPEED GOVERNOR SG-200 & SG-300 ELECTRIC CONTROL FAULTY**

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2.2.2.2. Push the spring holder to its lowest position



2.2.2.3. Visually align the switch in reference to the cam actuator

2.2.2.4. Tighten the two screws of the spring holder

2.2.3. Readjustment of the spring holder

2.2.3.1. Stick the label defined on section 4 and fulfill it accordingly



2.2.4. Electrical Switch rechecking

Repeat the testing procedure defined on section 2.1 of this document. In case of positive result, the elevator can run normally.

Please, send the document CHECKLIST 2 fulfilled to the e-mail below:

gestion-calidad.tkems@thyssenkrupp.com



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If you do not get positive results in one of tests, please, contact with our Technical Service:

Phone: +34 91 481 77 31

technicalservice.tkems@thyssenkrupp.com

2.3. AFFECTED UNITS

The units that could be affected by this issue are overspeed governor SG-200 y SG-300 with the switch shown in the picture.

Reference: Schneider Electric: XCMN2110S38 y XCMN2910S38



These units were produced from December 15, 2011 to July 3, 2014 according to the attached list.

2.4. FACTORY

All units of overspeed governor affected by this PCI supplied by TKEMS with production date equal to or later than 04th July 2014 have been properly controlled in the factory and this PCI do not apply them.

3. NEEDED TOOLS

- 3.1. Screwdriver electrically isolated to activate the overspeed governor trigger (in case of lift control CMC4)
- 3.2. Philips screw driver electrically isolated (in case of lift control CMC4)
- 3.3. Indelible marker
- 3.4. 2 certified jumper **according to the TKE and local regulations**
- 3.5. Allen wrench nº 5



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PRODUCT CORRECTION INSTRUCTION OVERSPEED GOVERNOR SG-200 & SG-300 ELECTRIC CONTROL FAULTY	No.: PCI 63000224 Rev. 01 Page: 6 DATE Rev. 00: 21/07/2014 DATE Rev. 01:17/09/2014	
<p>4. NEEDED COMPONENTS</p> <p><u>Label:</u> TKEMS will provide labels to be placed on the overspeed governor switch if it is necessary to operate on it, in the position shown in the picture of the section 2.2.1.8</p> <p>As well, the label can be printed locally. The label must be printed in sticker paper.</p> <p>COMMENT: Print size must be respected so that the label can be stuck in place.</p> <p>5. ESTIMATED TIME</p> <p>9 minutes per installation when IT IS NOT NECESSARY to execute section 2.2, once the technician is in front of the control cabinet</p> <p>18 min per installation when IT IS NECESSARY to execute section 2.2, once the technician is in front of the control cabinet</p> <p style="text-align: center;">Expiry date of this PCI is 15th October 2014</p> <p style="text-align: center;">MADE BY:</p> <p style="text-align: center;">Mercedes Blanco Muñoz Jefe de Gestión de Calidad y Medio Ambiente</p> <p style="text-align: center;">APROVED BY:</p> <p style="text-align: center;">Miguel Ángel Valverde Valverde Gerente</p>		



Annex 3 :

AENOR Asociación Española de
Normalización y Certificación

Génova, 6
28004 MADRID

Tel. directo 914 326 103
Centralita 914 326 000
Fax 913 101 356

certificacion@aenor.es
www.aenor.es

D^a. Mercedes BLANCO MUÑOZ

THYSSENKRUPP ELEVATOR MANUFACTURING SPAIN, S.L.
Parque Tecnológico de Móstoles
C/ Federico Cantero Villamil 4,
28935 Móstoles
(Madrid - España)

Su ref.
Nuestra ref. 2014005654/MBR-AAA
Asunto Approval of PCI for Speed Governors series SG 200 y SG 300
Fecha 2014-09-22

Dear Mrs. BLANCO,

Last September 4th, in the manufacturing premises of THYSSENKRUPP ELEVATOR MANUFACTURING SPAIN in Móstoles, we received explanations on the circumstances concerning the failure to detect the electrical switching when triggering speed is reached in speed governors series SG 200 and SG 300.

AENOR, as Notified Body for the Lifts Directive 95/16/CE approves the corrective action nr. PCI 63000224 rev. 01 related with the failure of the electrical switching according to clause 9.9.11.1 of the harmonized Standard EN 81-1:1998 + A3:2009, and considers it is proportional to the severity and efficient for resolution.

The certificate of conformity with the Annex IX (Module) nr. A11/99BN0034 maintains its validity.

We remain at your complete disposal for any other matter related.

With our kindest regards.

Yours faithfully,



Miguel BLANCO RODRÍGUEZ
Head of Mechanical Service



Antonio BALADO PACHÓN
Assistant Manager for Electro-mechanical Products
Certification Technical Division

Annex 4 :

Verification of the good operation of the over speed contact on governor SG200


On MC3 controller for the Synergy NC91A :

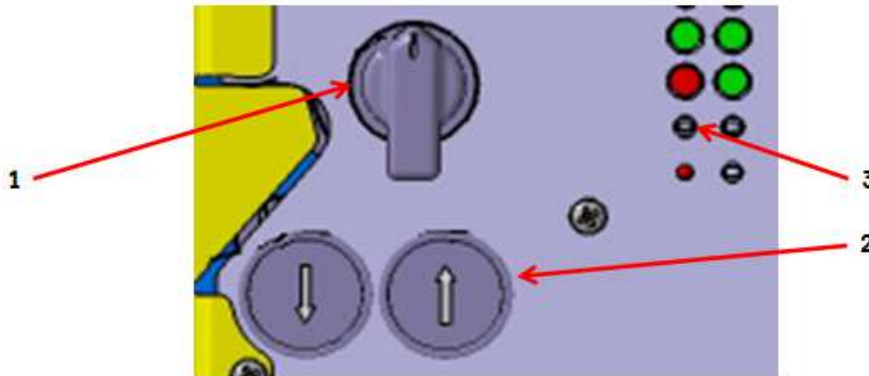
Make **the test in the upwards direction, 3 consecutive times** and according to the procedure described below.

From the landing service box:

- Put the switch « Normal/Recall » on to Recall (S01 on 1, see ref **1**),
- See the electrical wiring diagram of the lift file,
- Switch off the circuit breaker F02 (check absence of voltage between terminals X2.N and X1.115 with a Voltage Detector),
- Disconnect the 2 wires, of the over speed governor contact cable, from terminals X1.115 and X1.120 located at the bottom of the service box (reconnect the 2 wires on a connection terminal strip),
- Put the circuit breaker F02 back to normal,
- Put a continuity tester on the 2 above wires previously disconnected (use the connection terminal strip),

→ The tester should sound (contact to be closed).

- Make a call in the upwards direction (press the S01F button , see ref **2**),
- During the run, engage the safety gear (press the safety gear button S25, see ref **3**).



→ **The tester should not sound** (the contact should be open).



If the tester sounds, please refer to chapter 2.2 ADJUSTMENT OF THE OVER SPEED GOVERNOR CONTACT (see instruction PCI 63000224).
If the governor contact is located on wall side with no access for adjustment, please dismantle it according to the maintenance manual 3017422.

- The test has to be done front of a landing door (presence indicator at landing) so that we can eventually load the car to deactivate the brake safety gear.
- Deactivate the safety gear using the recall operation (make a run in the downwards direction).
- If necessary activate the governor contact using the remote control.
- Make **the test in the downwards direction, 3 consecutive times**, using the above described procedure, engaging the safety gear on recall downwards direction. Then move in recall upwards direction to deactivate the system.
- Take off all possible scratches on guides after any safety gear tests.
- After verification of the good operation of the over speed contact, switch off the circuit breaker F02 (check for no voltage between terminals X2.N and X1.115 with a Voltage Detector), reconnect the 2 wires, of the over speed governor contact cable, to the terminals X1.115 and X1.120.
- Put the circuit breaker F02 back to normal and put the lift back in service.

On MHC/ECOR controller for the Synergy NC91B :

Make **the test in the upwards direction, 3 consecutive times** and according to the procedure described below.

From the landing service box:

- Put the switch « Normal/Recall » on to Recall (S01 on 1, see ref **1**),
- See the electrical wiring diagram of the lift file,
- Switch off the circuit breaker F02 (check for no voltage between terminals X2.N and X1.115 with a Voltage Detector),
- Disconnect the 2 wires, of the over speed governor contact cable, from terminals X1.115 and X1.120 located at the bottom of the service box (reconnect the 2 wires on a connection terminal strip),
- Put the circuit breaker F02 back to normal,
- Put a continuity tester on the 2 above wires previously disconnected (use the connection terminal strip),

→ The tester should sound (contact to be closed).

- Make a call in the upwards direction (press the S01F button↑, see ref **2**),
- During the run, engage the safety gear (using the MHC screen, go to the menu « 4. Diagnosis », « 2.TUEV tests », « 13.safety gear test », Type of governor : governor 1 (car) or governor 2 (counterweight), Mode: select « Manually », press « OK » to engage the safety gear).



→ **The tester should not sound** (the contact should be open).




If the tester sounds, please refer to chapter 2.2 ADJUSTMENT OF THE OVER SPEED GOVERNOR CONTACT (see instruction PCI 63000224).
If the governor contact is located on wall side with no access for adjustment, please dismantle it according to the maintenance manual 3017422.

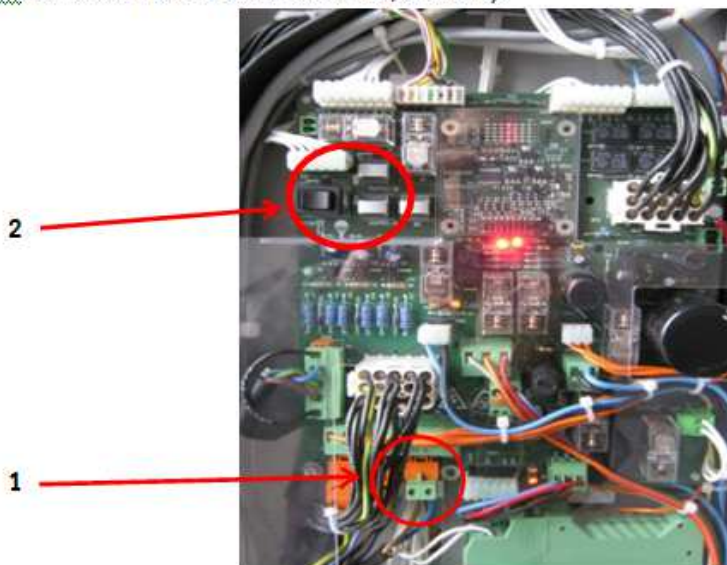
- The test has to be done front of a landing door (presence indicator at landing) so that we can eventually load the car to deactivate the brake safety gear.
- Deactivate the safety gear using the recall operation (make a run in the downwards direction).
- If necessary activate the governor contact using the remote control.
- Make **the test in the downwards direction, 3 consecutive times**, using the above described procedure, engaging the safety gear on recall downwards direction. Then move in recall upwards direction to deactivate the system.
- Take off all possible scratches on guides after any safety gear tests.
- After verification of the good operation of the over speed contact, switch off the circuit breaker F02 (check for no voltage between terminals X2.N and X1.115 with a Voltage Detector), reconnect the 2 wires, of the over speed governor contact cable, to the terminals X1.115 and X1.120.
- Put the circuit breaker F02 back to normal and put the lift back in service.]

On MCI controller for the Synergy Residential :

Make **the test in the upwards direction, 3 consecutive times** and according to the procedure described below.

From the landing service box:

- Put the switch « Normal/Recall » on to Recall,
- See the electrical wiring diagram of the lift file,
- Switch off the circuit breaker FT7 (check for no voltage between FT7.2 and FT7.4 with a Voltage Detector),
- Take off the XH21 connector (at the bottom of the connection board BI4, see ref **1**) of the over speed governor contact cable,
- Put the circuit breaker FT7 back to normal,
- Put a continuity tester on to XH21.1 and XH21.2 previously disconnected,
 - The tester should sound (contact to be closed).
- Make a call in the upwards direction (press the button  located underneath the connection board BI4 + the UP direction button on the same board, see ref **2**),
- During the run, engage the safety gear (press the safety gear button located at the left of the UP and Down buttons of the connection board BI4, see ref **2**).



→ **The tester should not sound** (the contact should be open).



If the tester sounds, please refer to chapter 2.2 ADJUSTMENT OF THE OVER SPEED GOVERNOR CONTACT (see instruction PCI 63000224).
If the governor contact is located on wall side with no access for adjustment, please dismantle it according to the maintenance manual 791834000.

- The test has to be done front of a landing door (presence indicator at landing) so that we can eventually load the car to deactivate the brake safety gear.
- Deactivate the safety gear using the recall operation (make a run in the downwards direction).
- If necessary activate the governor contact using the remote control.
- Make **the test in the downwards direction, 3 consecutive times**, using the above described procedure, engaging the safety gear on recall downwards direction. Then move in recall upwards direction to deactivate the system.
- Take off all possible scratches on guides after any safety gear tests.
- After verification of the good operation of the over speed contact, switch off the circuit breaker FT7 (check for no voltage between FT7.2 and FT7.4 with a Voltage Detector), reconnect the XH21 connector, of the over speed governor contact cable, to the connection board BI4.
- Put the circuit breaker FT7 back to normal and put the lift back in service.