

Colomo, 21.11.2016

**Subject: New Standards EN81-20/50, circular letter nr. 007/2016**

**Dear Customer,**

**We are pleased to share with you the Wittur products compliance to the new EN81-20 Wittur / 50 Standards, which will come into force since 31.08.2017, replacing the European standards EN 81-1 / 2.**

**Some of the main changes on the elevator doors are related to a higher mechanical resistance, which introduces concepts of improvement, in particular:**

- *Improved safety for users and maintenance personnel*
- *Improved travel comfort for passengers*

**We kindly inform you that Wittur has tested its complete doors and cabins range. All the tests have confirmed that the so far applied construction requisite perfectly meets the resistance requirements of the new 81-20 / 50 Standards. It follows that most part of the executions do not need any additional reinforcement.**

**To your kind additional information, the label applied to the landing door mechanism reports the number of the new certificate, that can be downloaded from our website [www.wittur.com](http://www.wittur.com).**



**Enclosed please kindly receive:**

- **A short summary of the most important points required by the new standards with the relating solutions adopted by Wittur,**
- **The interface instructions to the control panels; we kindly recommend you to send them to your control panel operators,**
- **The instructions how to unlock from the pit the landing door at the ground floor.**

**In the end, we are proud to inform you that at our plant in Colomo – Parma, we have installed a new facility for mechanical tests on our doors; measurements of doors deformations are carried out, with a relating results filing and report issue.**

**This is a technologically advanced solution, automatic and able to offer high reliability and tests reproducibility.**

**The whole procedure is approved by the certifying Notified Body TÜV.**



**The above is the confirmation that one of our main objectives is to continuously upgrade our products quality and their effectiveness, including our service aimed at always improving our response to the customer.**

**Should you need any additional information, do not hesitate to contact our Wittur Sales team!**

**Best regards**

**Gianluca Ferrari**

**Sales Director  
Corporate Director Business Development**

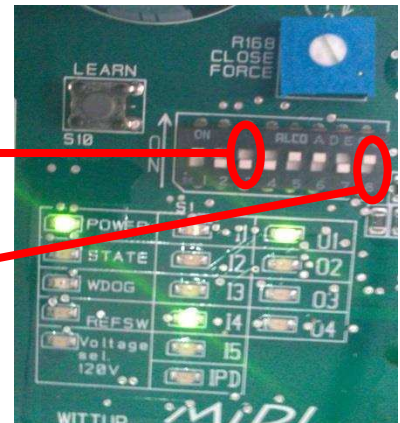


Paragraph EN81-20/50	EN 81-20/50 Requirements	Wittur solutions EN81-20/50	Always included	Always included but de- selectionable by the customer	Available options under customer request
5.3.5.3	1. Doors must have a stronger mechanical resistance to external forces	<ul style="list-style-type: none"> <li>In terms of construction, the 90% of the Wittur products range has been tested</li> <li>To finalize: Hydra 3000, Luna, Piuma, Hydra car door operator ty 33.35.63</li> </ul>	X		
5.3.6.2.2.1	2. Extracorsa/Labyrinth dimension, not larger than 25 mm.	<ul style="list-style-type: none"> <li>Wittur products range tested</li> <li>To finalize: Taurus UK Fire rated/BS476</li> </ul>	X		
5.3.6.2.2.1	3. A protection device must automatically re-open the door when a person crosses the entrance during the door closing.	<ul style="list-style-type: none"> <li>Light curtain pre-arrangement (lowered panel or Fico kit)</li> <li>Light curtain pre-arrangement + WSE Evo light curtain</li> </ul>		X	X
5.3.6.2.2.1	4. Glass doors must reduce kids fingers trapping. (This confirms the previous Standard) The only one difference is that it does no longer allow any reduction of the sliding friction coefficient	<ul style="list-style-type: none"> <li>Anti trapping device</li> <li>Protection profile</li> <li>Darken glass up to 1100 mm from sill edge</li> </ul>		X	X
5.3.9.3.2	5. The emergency key length must be at least 2 of LH - 2 meters	<ul style="list-style-type: none"> <li>Key length - update</li> </ul>	X		
5.3.9.3.2	6. The emergency key can not be positioned on the upper frame if LH>2700 -	<ul style="list-style-type: none"> <li>Emergency on panels or on the side frame</li> </ul>	X		
5.12.1.5.2.2	7. After the procedure in the pit, the lift can work properly again if: <ul style="list-style-type: none"> <li>- Landing doors are closed -</li> <li>- All locking devices in the pit are deactivated</li> <li>- The reset device is re-activated</li> </ul>	<ul style="list-style-type: none"> <li>Bistable contact with manual reset on landing doors</li> </ul>			X
5.3.9.3.5	8. An unlocking device from the pit must be installed on the lower landing door if: <ul style="list-style-type: none"> <li>- the lock is not reachable at 1,80 m height and at 0,80 m of horizontal distance from the pit ladder.</li> <li>- no access to the pit is possible except from the landing door.</li> </ul>	<ul style="list-style-type: none"> <li>Unlocking device from the pit on landing door (one only) (see instructions enclosed)</li> </ul>		X	
5.12.1.8	9. During maintenance an additional signal is needed to monitor the car door closing	<ul style="list-style-type: none"> <li>Our door drive is already compliant, thanks to a closing signal (input from door travel end)</li> <li>Real additional contact on the car door operator (input from contact switch)</li> </ul>	X		X
5.3.15.1	10. Car door opening must be allowed when the door is placed within the unlocking zone only	<ul style="list-style-type: none"> <li>Car door locking device for the whole range</li> </ul>	X		
5.3.15.1	11. Car door locking device actionable with or without power	<ul style="list-style-type: none"> <li>Drive with switch 3 and switch 8 OFF.</li> <li>The control panel must keep the door closed signal during the cabin running (see instructions enclosed)</li> </ul>	X		

**EN81-20/50 (at point 5.3.15.1) requires that car door can be opened only in unlocking area, with and without electrical supply.**

Wittur can provide car door with Car Door Lock to allow door opening in unlocking zone only. In order to ensure door unlocking with and without electrical supply, it is needed to set Switch as follows:

- Switch S1/3 : OFF  
(engine closes if a specific input is received only)
- Switch S1/8 : OFF  
(engine does not maintain open / closed status by means of its torque)



### Controller logic modification

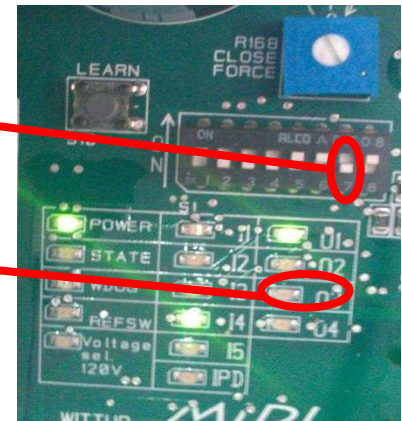
After having changed switch setting, it is needed to change controller's logic as follow:

1. Closure input must be kept during car movement.  
(Avoid car door coupling system opening because lack of torque – Switch S1/8 OFF)
2. Closure input must be removed whenever car stops, because desired floor was reached or because of failure.
3. Opening input must be kept when the door is open.  
(Avoid that panels weight close the door through inertia – Switch S1/8 OFF)
4. Controller cannot provide closing and opening input with the same conductor (Switch S1/3 OFF).

**EN81-20/50 (at point 5.3.6.2.2.1) requires that glass doors limit opening force to 150 N and stop in case of obstacle.**

In order to allow glass doors to have a limited opening force and stop in case of obstacle, it is needed to set:

- Switch S1/7 : ON  
(opening force is limited)
- Output O3 : ON  
(in motorization version EN81-20/50, Output O3 signals when door faces an obstacle)



**Controller logic modification**

Controller must manage obstacle-presence signal by stopping door closure or opening.

**EN81-20/50 (at point 5.12.1.5.2.2) requires to reactivate the elevator normal operation by manual contact.**

After pit maintenances, elevator normal operation reactivation must be done by means of a specific manual contact.

Requirement is needed to avoid accidental elevator reactivations with workers still in the pit.

Under request, it is possible to equip Wittur landing door with a manual contact, to make elevator reactivation easier.

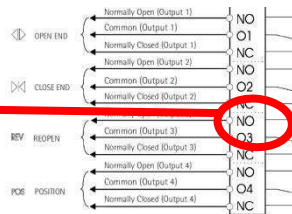
**Controller logic modification**

Controller must manage the input to reactivate the elevator normal operation.

**EN81-20/50 (at point 5.12.1.8) requires an additional input for closed car door.**

During maintenance, it must be possible to move the car bypassing current closed door signal. It must be provided an additional car door closed signal, by means of:

- Current car door contact (current contact can provide two signals)
- Output 04 : (in motorization version EN81-20/50, Output 04 signals when door is closed)
- Additional physical contact : Solution under development



**Controller logic modification**  
 The controller must manage the additional signal for car door closed, to move the car bypassing current signal

**EN81-20/50 motorization setting**

To assist its Customers, Wittur has defined a new setting for motorization specific for EN81-20/50. It is identified with the suffix "IE".

Motorization settled for EN81-20/50 are set to make the product compliant to EN81-20/50. In the details:

- Switch S1/3 : OFF
- Switch S1/7 : OFF (in case of glass door, the customer must set it ON).
- Switch S1/8 : OFF
- Output 04: signals when car door is closed
- Output 03 : signals door facing an obstruction in closing direction only. When Switch S1/7 is ON, it signals door facing obstruction in both closing and opening direction.