

Customer information regarding order, electrical charging, storage and handling of battery backup trays as spare parts for pitch control systems

Dear Sir/Madam,

On the basis of our long-standing experience in the field and as part of ongoing efforts to improve our products and services, we wish to inform you about a change to future spare part deliveries of battery trays. We are continually working to develop and upgrade our products, enhance their performance and extend their service life. The following measure is intended to reduce the risk of battery trays at different states of charge and age from being operated inside a battery box or cabinet. Combining the operation of different battery trays can influence the ageing of the individual batteries. In exceptional cases, it may even affect the electrochemical processes within the battery.

Description of change:

With immediate effect, Moog is consolidating all battery trays intended for spare parts deliveries into a set that corresponds to the number of trays in a battery box or cabinet. The battery trays in a particular set will be produced, charged and delivered together. Every battery tray in a set will be marked with a yellow label featuring the same number. This is a biunique number that is assigned only once.



Figure 1: Top view battery tray

A set may consist of the following number of trays depending on its intended usage (i.e. the pitch system in which it is to be implemented):

- 3 battery trays (216V battery box voltage),
- 4 battery trays (288V battery box voltage), or
- 5 or 10 battery trays (360V battery box voltage).

We ask for your understanding that Moog will only deliver battery trays in whole multiples of the relevant set size. With this in mind, we would appreciate it if you would inform us which battery tray sets you require for future spare part orders. Please state this expressly on your order. Further information about set size options can be found under Table 1: Relevant item numbers.

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Amtsgericht: Hamm HRB 3653 Geschäftsführer: Harald Seiffer, Dr. Uwe Klossowski USt.-IdNr.: DE 811 334772 HSBC Trinkaus & Burkhardt AG (BLZ 300 308 80) Kto. 30 0577 008 IBAN DE77 3003 0880 0300 5770 08 - SWIFT TUBDDEDD



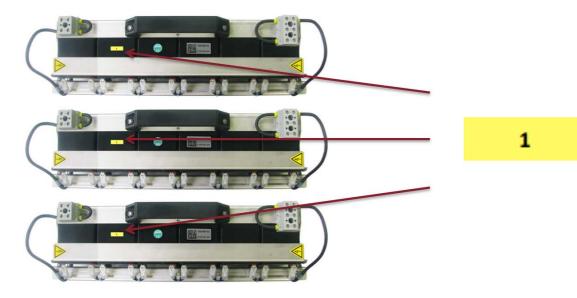


Figure 2: 216V battery box voltage (example)

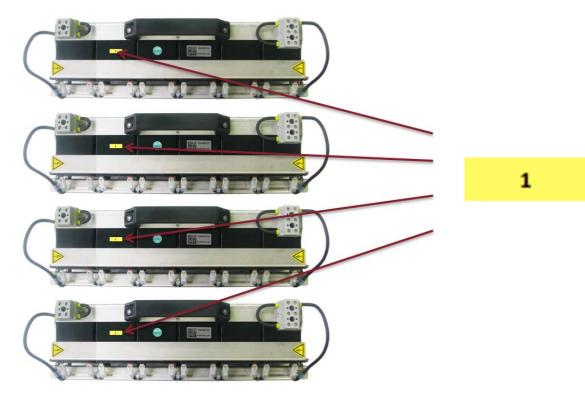


Figure 3: 288V battery box voltage (example)

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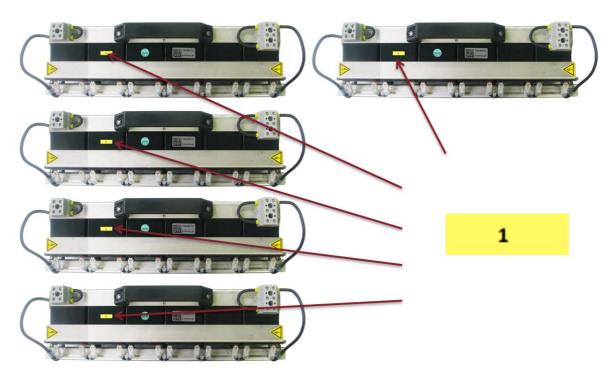


Figure 4: 360V battery box voltage (example)

Important information

Please note that battery trays **from a single set only** should be used in each battery box or cabinet when replacing the battery trays. **Always** exchange **all** battery trays in a battery box or cabinet.

Please also note that batteries should always be recharged after **3 months** in storage at the latest. Further information can be found in our operating manuals in the sections titled 'Storage Instructions' or 'Storage' (content may vary depending on the delivery period).

Any warranty claims may be denied if the customer disregards the information in our operating manual (instructions) when using the battery trays. In particular, this includes use of original Moog spare parts, making regular visual inspections of the battery trays, ensuring the proper installation of the battery trays, ensuring proper storage before and after installation, and promptly notifying Moog in the event of any faults or defects.

Improper, wanton or malicious acts that result in damage to the battery trays will render the warranty null and void.

Moreover, the warranty shall be considered null and void if the customer is unable to prove that the damage would have occurred even after observing the operating manual, carrying out regular visual inspections, installing the battery tray correctly and storing the battery tray correctly.

Our General Terms and Conditions of Sale and Delivery (dated October 2010) also apply. They are available at: http://www.moog.de/literature/ICD/FB_V-0002-027_Allgemeine_Verkaufs-_und_Lieferbedingungen_der_Moog_Unna_GmbH.pdf

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The following items are affected by the change:

Item number	Description	Possible bundle size	
700-50102	Battery tray 72 V; 7,2 Ah; 3 pole terminal	3 or 4 trays	
700-50103	Battery tray 72 V; 7,2 Ah; 2 pole terminal	3 or 4 trays	
700-50106	Battery tray 72 V; 12 Ah; WTV; 3 pole terminal	5 trays	
700-50112	Battery tray 72 V; 7,2 Ah	3 or 4 trays	
700-50113	Battery tray 72 V; 7,2 Ah	3 or 4 trays	
700-50116	Battery tray 72 V; 12 Ah; WTP; 2 pole terminal	5 trays	
700-50117	Battery tray 72 V; 12 Ah; WTP; 3 pole terminal	5 trays	
700-50124	Battery tray 72 V; 12 Ah; WTV; 2 pole terminal	5 trays	
CB81727-001	Battery tray 36 V; 12 Ah; WTP	10 trays	

Table 1: Relevant item numbers

For technical queries, please contact Sustaining Engineering at sustaining-wind@moog.com.

If you have any other questions, please contact our Industrial Services Team at service.unna@moog.com.

Yours faithfully,

Lars Kauke

Systems Development Manager

1. Unto

Wind Pitch Control Systems - CPR

Kai Griesenbrock

Head of Quality Management and Process

c.A. V. Cll

Development

Revision	Date	Changes
Α	17.09.2015	Initial release
В	29.01.2016	- translated headline added + reference to battery trays used in pitch control systems - under "important information" clarification that with battery trays original Moog spare parts are referred to - change of contact person for other questions from CSC to Industrial Services - document number added to header

Note: A corresponding German version of this document exists in parallel.

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