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Stannah

TB-MP018

TECHNICAL BULLETIN

INFORMATION ONLY

For the Attention of : Graham Mears, Larry Power, Peter Amura, Contract Managers, Service Branch Managers, Testers, Margaret Pitman

From: Pete Canning – Product Support Manager (Passenger Lifts)

Date : 9 May 2016

Product : MP

Subject : **Inverter Issues - Version 3**

Pages :

Background

Following the previous two Technical Bulletin's concerning this topic, this version 3 is aimed at sharing with you MPs background to this topic as outlined in their Technical Bulletin attached to this v3.

Summary

Of the 298 MP lifts currently on site and handed over we have replaced a total of 33 MP inverters, 38 if you include 5 for the second time. A list of these replacement projects is available on request.

SLL issue monthly Position Statements on this topic so we maintain control of the data and keep looking for trends.

	Column Labels		
	Yes		Total No.
Row Labels	**No.**	**%**	
Blank - no category given	1	5%	21
Transguard problems 6% failure rate	4	3%	118
Units 100% OK	4	19%	21
Units 98% OK (Improved transformer)	24	29%	84
Units with big probability of failure		0%	16
#N/A		0%	38
Grand Total	**33**	**11%**	**298**

MP set out the historic headlines as follows:

- Inverters supplied between Dec 2013 up to February 2015 a 6% chance of failure due to voltage spikes (anything above 435 volts) due to faulty transguards.

- Inverters supplied in February 2015 eliminated the transguard issues, however, this introduced a secondary failure with the transformers.
- Inverters supplied between March 2015 and December 2016 had the improved transformer and transguard and failure possibility of 2%, again subject to input voltage.
- Inverters supplied from January 2016 are trafo Grey, the brand is Crosiva and with 2 extractor fans (instead of a single fan) should be 100% OK.

In summary, it is all about the input voltage variable in the UK making some of the components overheat as they are designed for European voltages, where we have been advised it is more stable.

Actions:

1. All – please continue to make claims in the normal way where you believe you have a faulty inverter,

2. Testers – please continue to record site voltages on Page 3 of the test sheet.

3. Remember MP now provide Stannah with a 5 year guarantee for Inverters (the standard guarantee was 2 years).

If you are unsure and or have any questions concerning this topic then please do not hesitate to contact me.

I hope you find this Bulletin to be of help and should you have any questions about this topic or would like to know a little more then please contact me on **Ext 8646 or DDI 01264 34 36 46**

Technical Bulletin MP DSP

24-03-2016

EDICIÓN 1

V°.B°.

Subject: 3VFMACDSP Power supply issues

This document is intended to provide a summary of events in relation to failures with 3VFMACDSP (aka Drive units and / or Inverters), and provide a plan for dealing with any future risks of product failure and customer dissatisfaction.

The origin of the problem started when the historic supplier become insolvent at the end of 2013, ceasing the production of transformers that had been successful for many years.

The second (or new) transformer (assembled between end of 2013 and Feb-2015) introduced the **first failure**, that of the transguards. The transguard is a piece of equipment designed to guard the transformer.

The failure occurs due to high internal component temperature, temperature depends on the power input: rated voltage and voltage oscillations from the rated level.

Then in February 2015, MP changed the transformer (in that moment we started to assemble the blue one) and also include a specific protection for the transguards. With these actions, we reached to finish the transguards problems (up to today, no one more problem), however, we introduced the **secondary failure**. This new failure was in the transformers themselves. This problem is not so critical as the first failure.

This failure, like the transguard failure, occurs due to high temperature, temperature depends on the power input: rated voltage and voltage oscillations from the rated level.

CC.

HSJ,
RFM
JMUG,
PJCE,
HSC

At ***Appendix A*** this shows the number of lifts assembled for Stannah (SLL) between the end of 2013 and the end of February 2016, and the number of these jobs which have received replacement Drives.

During 2015 we introduced successive improvements in the blue transformer, reducing progressively the number of failures., and during March 2015, after the identification of the transformer problem the lifetime test has been improved and intensified.

Finally, in January 2016 we started to supply a completely new transformer (Crosiva) that we hope will finish completely theses problems. Up to today, no incidences concerning inverters produced from 1 January 2016.

EDICIÓN

1

V°.B°.

Summary:

1. Drives supplied in dec 2013 up to February 2015, grey transformer, chance to have breakdown due to transguard problem in all production of MP is now 6% (Change in case of a key account or critical locations!)
2. Drives supplies in February 2015, Grey transformer, breakdown rate 50% at lifetime test!, 1 month batch of drive we consider all has been replaced in the meantime. (You have seen an big increase of breakdowns in the period of May _ July when these drives have been put in service)
3. Drives supplied between March 2015 _ December 2016. Blue transformer, Transguard problems solved, transformer is of an improved model. We consider it is not necessary to change this model preventively as breakdown rate is less than 2% in lifetime test.
4. Drives supplied as per January 2016, trafo Grey, Brand Crosiva and with 2 ventilators are 100% OK.

Replacement drives supplied earlier:

- with blue transformers are OK.
- with grey transformers and 1 ventilator (Supplied, please return to MP for modification)

Action plan:

1. MP has agreed with Stannah to start a retrofit program for Stannah's "key" client Hills for their most critical lifts.

2. One of the other decision maker can be the net voltage stability & voltage level, if it is much higher than the average of 415 Volts (for now we say 435Volts) we should consider a change depending the situation of the lift (Hospital, eldery house….) and the type of client.

!!To get more accurate information it would be essential to record all the net voltages of supplied installations. This could be obtained during future maintenance visits and in case any unit fails before exchange. !!

How to proceed:

- For Hills account Stannah will provide MP a list with units we supplied from October 2013 till October 2015, which Stannah considers critical for Retrofit. We will split in batches of 10 units.

- Single units for units for Retrofit (Due to high net voltage) can be obtained by registration of a claim in B2B, mention the line voltage measured.

CC.

HSJ,
RFM
JMUG,
PJCE,
HSC

When the instructions to replace the drive are followed up precisely it will not be necessary to perform an AutoTuning, however when the procedure is done incorrect a loss of parameter value can occur and an AutoTune will be necessary. Instructions will be send.

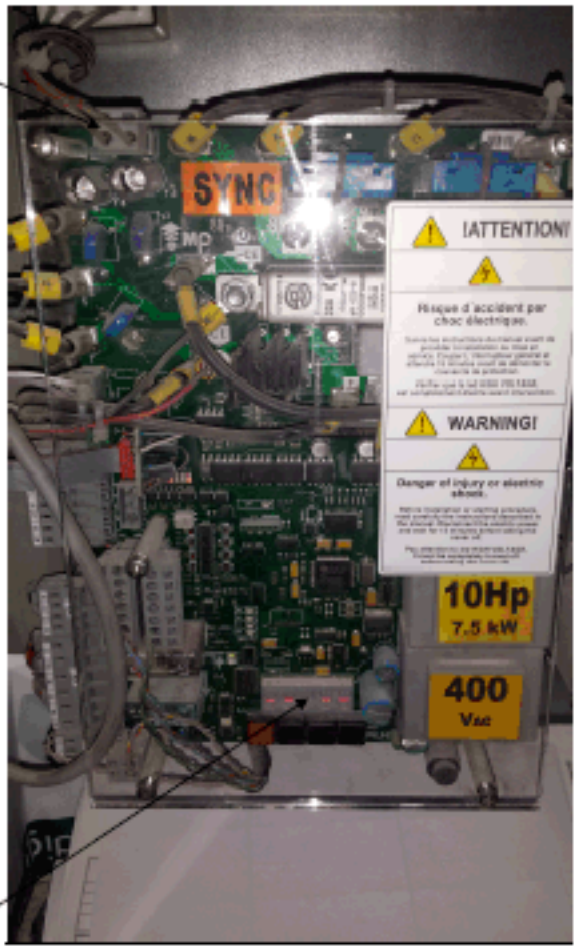
MP has offered to Stannah the assistance of Pedro Calvo or anyone else from MP aftersales team to give instructions during the replacement of the first batch for Hills account.

MP Will offer Stannah a warrantee of 5 years on all DSP inverters produced in and between 2013 – 2015 and will therefor issue free of charge a new or retrofitted unit for any units with power failure due to transformer or Transguard issue (Sympton ->no display)

How to identify a faulty drive (Caused by Transformer failure.)

XC12 Plug will have 415 volts on it but the display will be blank.

XC12 Plug



No Display shown here (The picture shows the normal display.)

EDICIÓN 1

V°.B°.

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