

## HSG FLAG 250 SRS REC W/ COVER

### 1. INTRODUCTION

#### 1.1 Purpose

Testing was performed on Hsg Flag 250 SRS Rec w/cover to determine their conformance to the requirements of Product Specification 108-37101, Revision B.

#### 1.2 Scope

This report covers the electrical, mechanical, and environmental performance of Hsg Flag 250 SRS Rec w/cover connectors. Testing was performed at the Braganca-Paulista Electrical Components Test Laboratory. The test file numbers for this testing are RL140263, RL140793 and RL 160540. This documentation is on file and available at the Braganca-Paulista Electrical Components Test Laboratory.

#### 1.3 Conclusion

The Flag connectors listed in paragraph 1.4, conformed to all the electrical, mechanical, and environmental performance requirements of Product Specification 108-37101. Revision B

#### 1.4 Test Specimens

Test specimens were produced, inspected, and accepted as conforming product drawing requirement. Specimens identified with the following part numbers were used for test:

Group	Part Number	Rev.	Date Code	Sample Description	Quantity Tested
1	2133857-1	2	N/A	HGS FLAG 250 SRS TEC W/ COVER	80
1	2133857-3	A	N/A	HGS FLAG 250 SRS TEC W/ COVER	80
1	2133857-4	D	N/A	HGS FLAG 250 SRS TEC W/ COVER	20

Remark: PN 2133857-2 was not tested, but it can be considered as present in this report because the difference in regarding to 2133857-1 is only its color.

#### 1.5- Environmental Conditions

Temperature: 25°C

Moisture: 41 %

### 2. TEST SEQUENCE

The following test sequence was defined with the objective of assuring the functionality of the product during its use in real operational conditions.

All tests were done without a defined sequence. Just after accelerated ageing was done again the Housing Opening Resistance Test.

### 3. SUMMARY OF TESTS

#### 3.1- Initial Examination of Product

Specimens were visually examined and no evidence of physical damage detrimental to product performance was observed.

### 3.2- Insulation Resistance

All insulation resistance measurements were greater than 10 MΩ.

### 3.3- Dielectric Withstanding Voltage

No dielectric breakdown or flashover occurred.

### 3.4- Housing Opening Resistance

Cover resisted the effort made to open it.

### 3.5- Accelerated Ageing

No deformation or cracks found. Mechanical performance according to Housing Opening Resistance Test.

### 3.6- Final Examination of Product

Specimens were visually examined and no evidence of physical damage detrimental to product performance was observed.

## 4. TEST METHODS

### 4.1- Initial Examination of Product

Specimens were visually examined and no evidence of physical damage detrimental to product performance was observed.

### 4.2- Insulation Resistance.

Insulation resistance was measured between adjacent contacts. A test voltage of 500 volts DC was applied 1 minute before the resistance was measured.

### 4.3- Dielectric Withstanding Voltage

A test potential of 1500 volts AC was applied between adjacent contacts. This potential was applied for 1 minute and then returned to zero.

### 4.4- Housing Opening Resistance

An axial force was performed in the direction in favor of withdrawal of the terminal and cover resisted 10 N minimum.

### 4.5- Accelerated ageing

Mated specimens were exposed to a temperature of 90°C +/- 2°C for 200 hours.

### 4.6- Final Examination of Product

Specimens were visually examined for evidence of physical damage detrimental to product performance.

Revision Record					
Rev.	Date	Description	Edited	Checked	Approved
A	27-Nov-2014	Released	R. Gomes	H. Canteri	W. Stefani
B	06-Feb-2017	Added same corrections and dash 4.	A. Pereira	H. Canteri	W. Stefani