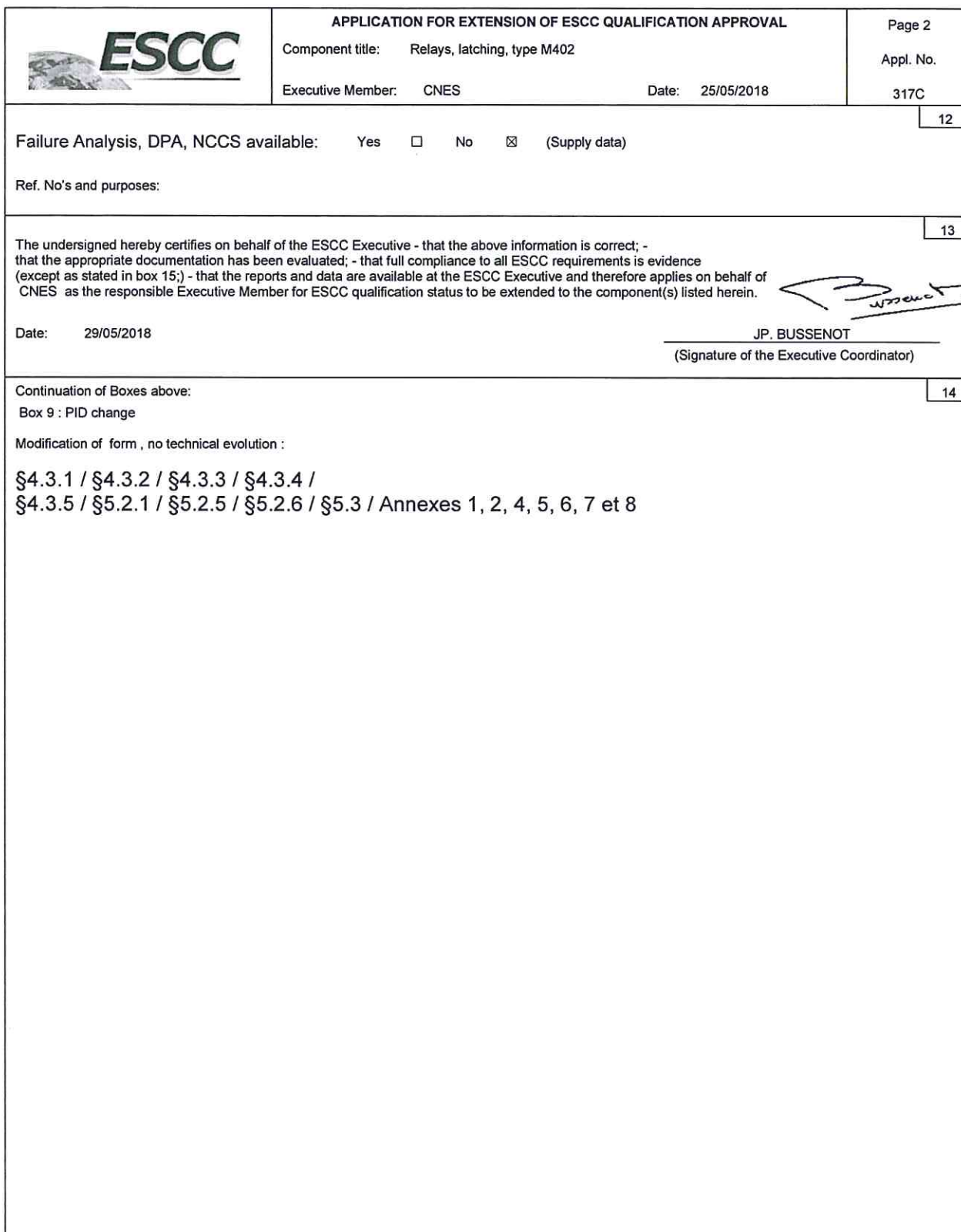

		<b>APPLICATION FOR EXTENSION OF ESCC QUALIFICATION APPROVAL</b>			Page 1 Appl. No. 317C
Component Title: <b>Relays, latching, type M402</b>		Executive Member: CNES			Date: 25/05/2018
Components (including series and families) submitted for Extension of Qualification Approval:					1
ESCC COMPONENT NO.	VARIANTS	RANGE OF COMPONENTS	BASED ON	TEST VEHICLE / S	COMPONENT SIMILAR
3602 004	04,06,09, 14,16 and 19	Coil voltage : 28 and 12 VDC	Type M 402	3602 004 16B 28V	All other variants in ESCC 3602 004
Component Manufacturer <b>Leach International Europe</b>		2	Location of Manufacturing Plant(s) <b>2 rue Goethe</b> <b>57430 SARRALBE</b>		3
			Date of original qualification approval: Date: 01/02/2012		4
			Certificate Ref No. 317		
ESCC Specifications used for Maintenance of qualification testing: Generic: 3602 Issue: 04 Detail(s): 3602 004 Issue: 03		5	Deviations to LVT testing and Detail Specification used: No <input type="checkbox"/> Yes <input type="checkbox"/> (supply details in Box 15) Deviation from current Specifications: No <input checked="" type="checkbox"/> Yes <input type="checkbox"/> (Supply details)		6
			Qualification Extension Report reference and date: RT-119714 EC , 19/04/2017 RT-1219614 EC , 26/04/2018		7
Summary of procurement or equivalent test results during current validity period in support of this application (those to ESCC listed first)					8
Project Name	Testing Level	LAT	Date code	Quantity Delivered	
Cf RT-1219614 p 115 (9.summary of manufactured batches)					
PID changes since start of qualification None <input type="checkbox"/> Minor* <input checked="" type="checkbox"/> Major* <input type="checkbox"/> *Provide details in box:		9	Current PID Verified by: CNES Name of Executive Representative Ref No: M402-XXXX-860 (DR-1156610) Issue: 1 Date: 18/04/2018 Rev Date: 18/04/2018		10
Current Manufacturing facilities surveyed by: ESA & CNES on 27/10/2014 (Name of Executive Representative) (Date)					11
Satisfactory: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Explain					
Report Reference: <u>TECQES-MIN2014-Leach01 + ESA-TECQES-RP-006343 (JULY 2017)</u>					



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	Component title: Relays, latching, type M402	Appl. No.
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Non compliance to ESCC requirements: 15

No.:	Specification	Paragraph	Non compliance
1	ESCC 3602	8.8.3	THIS PRODUCT IS NOT CAPABLE OF PASSING HIGH LEVEL VIBRATION AND HIGH LEVEL SHOCK, AS REPORTED AS WELL AT THE ISSUE OF CERTIFICATE 317B NW.1.
2	ESCC 3602	8.9.2	

Additional tasks required to achieve full compliance for ESCC qualification or rationale for acceptability of noncompliance: 16

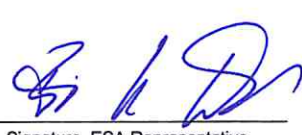
A MANUFACTURER-SPECIFIC DEVIATION IS INCLUDED IN ESCC 3602/004. THE IMPLEMENTATION OF DESIGN IMPROVEMENTS IS IN PROGRESS AND MAY RESULT IN A RUGGEDIZED VERSION OF THESE RELAYS, WITH THE CAPABILITY TO WITHSTAND SATISFACTORILY ALL ESCC 3602 QUALIFICATION TEST LEVELS.

Executive Manager Disposition 17


Application Approval: Yes ☒ No ☐

Action / Remarks:

THE COMPLETION OF TESTS ON THE RUGGEDIZED VERSION OF THESE RELAYS WILL BE FOLLOWED-UP BY THE ESCC EXECUTIVE IN 2018-19.

  
 Signature, ESA Representative

Date:

	<b>APPLICATION FOR EXTENSION OF ESCC QUALIFICATION APPROVAL</b>					Page 4	
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ANNEX 1: LIST OF TESTS DONE TO SUPPORT EXTENSION OF QUALIFICATION

Tests conducted in compliance with:

- ESCC 3602 generic specification; Chart F4 (for ESCC/QPL parts);
- Or PID-TFD (for ESCC/QML parts)

Tests vehicle identification/description:

3602 004 16B 28V, 16-37A	
3602 004 16B 28V, 17-12A and 17-14A	

Detail Specification reference: 3602 004 Issue **A 3**

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Chart F4	Test	Tick when done	Conditions	Date Code	Tested Qty	No. of Rejects	Comments if not performed. Comments on Rejection
Environmental / Mechanical Subgroup (Column 1)	Thermal Shock	<input checked="" type="checkbox"/>	MIL-STD-202, Test Method 107	17-12A	6	0	LAT 1 sequence refers
	Low Level Sine Vibration	<input checked="" type="checkbox"/>	MIL-STD-202, Test Method 204	17-12A	6	0	
	Random Vibration	<input type="checkbox"/>	MIL-STD-202, Test Method 214				N/A
	Low Level Mechanical Shock	<input checked="" type="checkbox"/>	MIL-STD-202, Test Method 213	17-12A	6	0	
	Resistance to Soldering Heat	<input checked="" type="checkbox"/>	MIL-STD-202, Test Method 210	17-12A	6	0	
	Seal (Fine and Gross Leak)	<input checked="" type="checkbox"/>	MIL-STD-202, Test Method 112	17-12A	6	0	
	External Visual Inspection	<input checked="" type="checkbox"/>	ESCC Basic Specification No. 20500	17-12A	6	0	
Environmental / Mechanical Subgroup (Column 2)	High Level Sine Vibration	<input type="checkbox"/>	MIL-STD-202, Test Method 204				Deviation new specification : test ready before next VOQ
	High Level Mechanical Shock	<input type="checkbox"/>	MIL-STD-202, Test Method 213				Deviation new specification : test ready before next VOQ
	Seal (Fine and Gross Leak)	<input type="checkbox"/>	MIL-STD-202, Test Method 112				Deviation new specification : test ready before next VOQ
	External Visual Inspection	<input type="checkbox"/>	ESCC Basic Specification No. 20500				Deviation new specification : test ready before next VOQ
Endurance Subgroup 1 (Column 1)	Low Level Life	<input checked="" type="checkbox"/>	ESCC 3602 Para. 8.11.1	17-12A	3	0	
	Inductive Life	<input checked="" type="checkbox"/>	ESCC 3602 Para. 8.11.2	17-12A	3	0	
	Seal (Fine and Gross Leak)	<input checked="" type="checkbox"/>	MIL-STD-202, Test Method 112	17-12A	3	0	
	External Visual Inspection	<input checked="" type="checkbox"/>	ESCC Basic Specification No. 20500	17-12A	3	0	

\* See This manufacturer's specific deviations as agreed in ESCC 3602/004 iss.3.





# APPLICATION FOR EXTENSION OF ESCC QUALIFICATION APPROVAL

Component title: Relays, latching, type M402

Executive Member: CNES

Date: 25/05/2018

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Chart F4	Test	Tick when done	Conditions	Date Code	Tested Qty	No. of Rejects	Comments if not performed. Comments on Rejection
Endurance Subgroup 1 (Column 2)	Coil Life	<input type="checkbox"/>	ESCC 3602 Para. 8.12				to not perform this test is an agreed deviation Esc3602/004
	Seal (Fine and Gross Leak)	<input type="checkbox"/>	MIL-STD-202, Test Method 112				
	External Visual Inspection	<input type="checkbox"/>	ESCC Basic Specification No. 20500				
Endurance Subgroup 1 (Column 3)	Intermediate Current	<input checked="" type="checkbox"/>	ESCC 3602 Para. 8.13	17-14A	3	0	
	Mechanical Life	<input checked="" type="checkbox"/>	ESCC 3602 Para. 8.14	17-14A	3	0	
	Seal (Fine and Gross Leak)	<input checked="" type="checkbox"/>	MIL-STD-202, Test Method 112	17-14A	3	0	
	External Visual Inspection	<input checked="" type="checkbox"/>	ESCC Basic Specification No. 20500	17-14A	3	0	
Endurance Subgroup 2	Resistive Life	<input checked="" type="checkbox"/>	ESCC 3602 Para. 8.11.3	16-37A, 17-14A	12	0	
	Seal (Fine and Gross Leak)	<input checked="" type="checkbox"/>	MIL-STD-202, Test Method 112	16-37A, 17-14A	12	0	
	External Visual Inspection	<input checked="" type="checkbox"/>	ESCC Basic Specification No. 20500	16-37A, 17-14A	12	0	
Assembly Capability Subgroup	Solderability	<input checked="" type="checkbox"/>	MIL-STD-202, Test Method 208	16-37A, 17-14A	6	0	
	Overload	<input checked="" type="checkbox"/>	ESCC 3602 Para. 8.16	16-37A, 17-14A	6	0	
	Permanence of Marking	<input type="checkbox"/>	ESCC Basic Specification No. 24800	16-37A, 17-14A			
	Terminal Strength	<input checked="" type="checkbox"/>	MIL-STD-202, Test Method 211	16-37A, 17-14A	6	0	
	Seal (Fine and Gross Leak)	<input checked="" type="checkbox"/>	MIL-STD-202, Test Method 112	16-37A, 17-14A	6	0	
Additional Tests	Electrical Measurements	<input checked="" type="checkbox"/>	ESCC 3602 para 9.3	16-37A, 17-14A	6	0	
	Seal (Fine and gross leak)	<input checked="" type="checkbox"/>	MIL-STD-202 Method 112	16-37A, 17-14A	6	0	
	External Visual inspection	<input checked="" type="checkbox"/>	ESCC Basic specification No.20500	16-37A, 17-14A	6	0	

Additional Comments.