

		APPLICATION FOR EXTENSION OF ESCC QUALIFICATION APPROVAL			Page 1
		Component Title: Relays, electromagnetic, latching, type M402			Appl. No.
		Executive Member: CNES			Date: 06/10/2023
					317E
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	Rated coil Voltage	M402 relays	3602 004 16 28V x2	All variants
Component Manufacturer Leach International Europe		Location of Manufacturing Plant(s) 2 rue Goethe 57430 Sarralbe		Date of original qualification approval: Date: 01/02/2012 Certificate Ref No. 317	
ESCC Specifications used for Maintenance of qualification testing: Generic: 3602 Issue: 5 Detail(s): 3602/004 Issue: 6		Deviations to LVT testing and Detail Specification used: No <input type="checkbox"/> Yes <input checked="" type="checkbox"/> (supply details in Box 15) Deviation from current Specifications: No <input checked="" type="checkbox"/> Yes <input type="checkbox"/> (Supply details)		Qualification Extension Report reference and date: ESCC MOQ M402 RT_1320284 09/2022	
					8
Summary of procurement or equivalent test results during current validity period in support of this application (those to ESCC listed first)					
Project Name	Testing Level	LAT	Date code	Quantity Delivered	
PID changes since start of qualification None <input type="checkbox"/> Minor* <input checked="" type="checkbox"/> Major* <input type="checkbox"/> *Provide details in box:		Current PID Verified by: L. Baczowski, CNES Name of Executive Representative Ref No: DR_1156610 Issue: 2 Rev Date: 22/09/2020			
19		Date: 15/05/2018			
Current Manufacturing facilities surveyed by:					11
I. Fontaine, CNES on 18/10/2022 (Name of Executive Representative) (Date)					
Satisfactory: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Explain					
Report Reference: 2022.0014775-CR-Fontaine- Qualifications -LEACH- Septembre-2022					





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Non compliance to ESCC requirements:

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No.:	Specification	Paragraph	Non compliance
	ESCC 3602	8.11.2	The Number of Cycles of Operation shall be: 10000 minimum instead of 20000, as agreed in appendix A of ESCC 3602/004.

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

see NCCS 2CLEA302 and DCR1554

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Executive Manager Disposition

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Application Approval: Yes ☒ No ☐

Action / Remarks:

Date:

B. Schade: Head of the Product Assurance and Safety Department



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ANNEX 1: LIST OF TESTS DONE TO SUPPORT EXTENSION OF QUALIFICATION

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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:

36020041628V (M402-D2A-H-860) DC 2020

36020041628V (M402-D2A-H-860) DC 2126

Detail Specification reference: 3602/004

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	2126	6	0	
	Low Level Sine Vibration	<input checked="" type="checkbox"/>	MIL-STD-202, Test Method 204	2126	6	0	
	Random Vibration	<input type="checkbox"/>	MIL-STD-202, Test Method 214				Only applicable to relays with Rated Resistive Load Contact Current less than 5A
	Low Level Mechanical Shock	<input checked="" type="checkbox"/>	MIL-STD-202, Test Method 213	2126	6	0	
	Resistance to Soldering Heat	<input checked="" type="checkbox"/>	MIL-STD-202, Test Method 210	2126	6	0	
	Seal (Fine and Gross Leak)	<input checked="" type="checkbox"/>	MIL-STD-202, Test Method 112	2126	6	0	
	External Visual Inspection	<input checked="" type="checkbox"/>	ESCC Basic Specification No. 20500	2126	6	0	
Environmental / Mechanical Subgroup (Column 2)	High Level Sine Vibration	<input checked="" type="checkbox"/>	MIL-STD-202, Test Method 204	2126	6	0	
	High Level Mechanical Shock	<input checked="" type="checkbox"/>	MIL-STD-202, Test Method 213	2126	6	0	
	Seal (Fine and Gross Leak)	<input checked="" type="checkbox"/>	MIL-STD-202, Test Method 112	2126	6	0	
	External Visual Inspection	<input checked="" type="checkbox"/>	ESCC Basic Specification No. 20500	2126	6	0	
Endurance Subgroup 1 (Column 1)	Low Level Life	<input type="checkbox"/>	ESCC 3602 Para. 8.11.1				Only applicable to relays with Rated Resistive Load Contact Current less than 5A
	Inductive Life	<input checked="" type="checkbox"/>	ESCC 3602 Para. 8.11.2	2126	3	0	The Number of Cycles of Operation shall be: 10000 minimum as per 3602/004 agreed deviation
	Seal (Fine and Gross Leak)	<input checked="" type="checkbox"/>	MIL-STD-202, Test Method 112	2126	3	0	
	External Visual Inspection	<input checked="" type="checkbox"/>	ESCC Basic Specification No. 20500	2126	3	0	



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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				Not required for periodic testing except in the case of significant change of the design
	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	2126	3	0	
	Mechanical Life	<input checked="" type="checkbox"/>	ESCC 3602 Para. 8.14	2126	3	0	
	Seal (Fine and Gross Leak)	<input checked="" type="checkbox"/>	MIL-STD-202, Test Method 112	2126	3	0	
	External Visual Inspection	<input checked="" type="checkbox"/>	ESCC Basic Specification No. 20500	2126	3	0	
Endurance Subgroup 2	Resistive Life	<input checked="" type="checkbox"/>	ESCC 3602 Para. 8.11.3	2020 2126	6 6	0	
	Seal (Fine and Gross Leak)	<input checked="" type="checkbox"/>	MIL-STD-202, Test Method 112	2020 2126	6 6	0	
	External Visual Inspection	<input checked="" type="checkbox"/>	ESCC Basic Specification No. 20500	2020 2126	6 6	0	
Assembly Capability Subgroup	Solderability	<input checked="" type="checkbox"/>	MIL-STD-202, Test Method 208	2020 2126	3 3	0	
	Overload	<input checked="" type="checkbox"/>	ESCC 3602 Para. 8.16	2020 2126	3 3	0	
	Permanence of Marking	<input type="checkbox"/>	ESCC Basic Specification No. 24800				Not applicable for laser marking
	Terminal Strength	<input checked="" type="checkbox"/>	MIL-STD-202, Test Method 211	2020 2126	3 3	0	
	Seal (Fine and Gross Leak)	<input checked="" type="checkbox"/>	MIL-STD-202, Test Method 112	2020 2126	3 3	0	
Additional Tests		<input type="checkbox"/>					
		<input type="checkbox"/>					
		<input type="checkbox"/>					

