
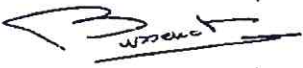

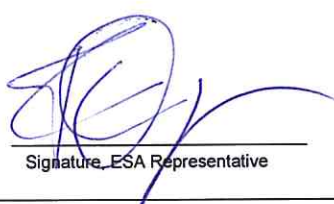

		<b>APPLICATION FOR EXTENSION OF ESCC QUALIFICATION APPROVAL</b>			Page 1 Appl. No. 317B rev1
Component Title: <b>Relays, latching, type M402</b>		Executive Member: <b>CNES</b>		Date: <b>17/05/2017</b>	
Components (including series and families) submitted for Extension of Qualification Approval:					1
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>		Location of Manufacturing Plant(s) <b>2 rue Goethe</b>  <b>57430 SARRALBE</b>		Date of original qualification approval: Date: <b>01/02/2012</b>  Certificate Ref No. <b>317</b>	
ESCC Specifications used for Maintenance of qualification testing: Generic: 3602 Issue: 03, 04 Detail(s): 3602 004 Issue: 03		Deviations to LVT testing and Detail Specification used: No <input checked="" 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)		Qualification Extension Report reference and date: RT-1168898, 17/03/2016  RT_1197514, 19/04/2017 RT_1212197, 19/04/2017	
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	
See Qual. Report, appendix 9					
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: <b>CNES</b> Name of Executive Representative Ref No: <b>DR-1156610</b> Issue: <b>0</b> Rev Date: <b>10/03/2016</b>		Date: <b>10/03/2016</b>	
Current Manufacturing facilities surveyed by: <b>ESA &amp; CNES</b> on <b>27/10/2014</b> (Name of Executive Representative)					11
Satisfactory: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Explain					<b>26-27/5/2010</b> (Date)
Report Reference: <b>TECQES-MIN2014-Leach01-</b> <b>QCS/LB/100201 + DCT/AQ/CQ-2010/8987</b>					

	<p align="center"><b>APPLICATION FOR EXTENSION OF ESCC QUALIFICATION APPROVAL</b></p> <p>Component title: Relays, latching, type M402</p> <p>Executive Member: CNES Date: 17/05/2017</p>	<p>Page 2</p> <p>Appl. No. 317B rev1</p>
<p>Failure Analysis, DPA, NCCS available:    Yes    <input type="checkbox"/>    No    <input checked="" type="checkbox"/>    (Supply data)</p> <p>Ref. No's and purposes:</p>		12
<p>The undersigned hereby certifies on behalf of the ESCC Executive - that the above information is correct; - that the appropriate documentation has been evaluated; - that full compliance to all ESCC requirements is evidence (except as stated in box 15;) - that the reports and data are available at the ESCC Executive and therefore applies on behalf of CNES as the responsible Executive Member for ESCC qualification status to be extended to the component(s) listed herein.</p> <p>Date: 18/05/2017</p> <p align="right">         JP. BUSSENOT        (Signature of the Executive Coordinator)     </p>		13
<p>Continuation of Boxes above:</p> <p>Box 9 : PID change</p> <p>Modification of format , no technical evolution</p> <p><i>CLARIFICATION ON REV 1 OF CENT. 317B :</i></p> <ul style="list-style-type: none"> <li>- THIS MOQ SUMMARY ACCOUNTS FOR SATISFACTORY TEST RESULTS ACHIEVED IN CONFORMANCE WITH ESCC 3602 REGARDING PERIODIC TESTING (12 months periodicity → 1637A)</li> <li>- THE REPORTS PROVIDED AS WELL ADDITIONAL VERIFICATION ON ROBUSTNESSES OF PRODUCT VS LOW LEVEL VIBRATION AND SHOCK (ACHIEVED SATISFACTORILY) AND HIGH LEVEL VIBRATION AND SHOCK (NOT SUCCESSFUL).</li> </ul>		14

 <b>ESCC</b>	<b>APPLICATION FOR EXTENSION OF ESCC QUALIFICATION APPROVAL</b> Component title: Relays, latching, type M402 Executive Member: CNES	Page 3 Appl. No. 317B rev1	
Date: 17/05/2017		15	
Non compliance to ESCC requirements:			
No.:	Specification	Paragraph	Non compliance
1	ESCC 3602	8.8.3	see test summary.
2	ESCC 3602	8.8.2	see test summary.
Additional tasks required to achieve full compliance for ESCC qualification or rationale for acceptability of noncompliance:			16
<p>The present product does not show The capability to survive High level sine Vibration and High level Shock as specified in ESCC 3602 iss 4. This has been agreed and a manufacturer-specific deviation is acknowledged in ESCC 3602/004 iss.4, App. A, in this respect.</p>			
Executive Manager Disposition			17
Application Approval: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>			
Action / Remarks:			
<p>Additional ESCC survey by CNES and ESA has been scheduled for w27.</p>			
Date:			 Signature, ESA Representative

	<p align="center"><b>APPLICATION FOR EXTENSION OF ESCC QUALIFICATION APPROVAL</b></p> <p>Component Title: Relays, latching, type M402</p> <p>Executive Member: CNES</p> <p>Date: 17/05/2017</p>		<p>Page 4</p> <p>Appl. No.</p> <p>317B rev1</p>				
<p>ANNEX 1: LIST OF TESTS DONE TO SUPPORT EXTENSION OF QUALIFICATION</p>							
<p>Tests conducted in compliance with:</p>							
<ul style="list-style-type: none"> <li>- ESCC 3602 generic specification; Chart F4 (for ESCC/QPL parts);</li> <li>- Or PID-TFD (for ESCC/QML parts)</li> </ul>							
<p>Tests vehicle identification/description:</p>							
<table border="1"> <tr> <td>3602 004 16B 28V DC 1521A</td> <td></td> </tr> <tr> <td>3602 004 16B 28V DC 1637A</td> <td></td> </tr> </table>				3602 004 16B 28V DC 1521A		3602 004 16B 28V DC 1637A	
3602 004 16B 28V DC 1521A							
3602 004 16B 28V DC 1637A							
<p>Detail Specification reference: 3602 004</p>							
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	15-21	6	0	
	Low Level Sine Vibration	<input checked="" type="checkbox"/>	MIL-STD-202, Test Method 204	15-21	6	0	
	Random Vibration	<input type="checkbox"/>	MIL-STD-202, Test Method 214				N/A ( $I_{ca}(min) = 15A$ )
	Low Level Mechanical Shock	<input checked="" type="checkbox"/>	MIL-STD-202, Test Method 213	15-21	6	0	
	Resistance to Soldering Heat	<input checked="" type="checkbox"/>	MIL-STD-202, Test Method 210	15-21	6	0	
	Seal (Fine and Gross Leak)	<input checked="" type="checkbox"/>	MIL-STD-202, Test Method 112	15-21	6	0	
	External Visual Inspection	<input checked="" type="checkbox"/>	ESCC Basic Specification No. 20500	15-21	6	0	
Environmental / Mechanical Subgroup (Column 2)	High Level Sine Vibration	<input checked="" type="checkbox"/>	MIL-STD-202, Test Method 204	15-21	6	5	Test performed to remove deviation in ESCC 3602/004 appendix unsatisfactory
	High Level Mechanical Shock	<input checked="" type="checkbox"/>	MIL-STD-202, Test Method 213	15-21	6	1	Test performed to remove deviation in ESCC 3602/004 appendix unsatisfactory
	Seal (Fine and Gross Leak)	<input checked="" type="checkbox"/>	MIL-STD-202, Test Method 112	15-21	6	0	
	External Visual Inspection	<input checked="" type="checkbox"/>	ESCC Basic Specification No. 20500	15-21	6	0	
Endurance Subgroup 1 (Column 1)	Low Level Life	<input checked="" type="checkbox"/>	ESCC 3602 Para. 8.11.1	15-21	3	0	
	Inductive Life	<input checked="" type="checkbox"/>	ESCC 3602 Para. 8.11.2	15-21	3	0	
	Seal (Fine and Gross Leak)	<input checked="" type="checkbox"/>	MIL-STD-202, Test Method 112	15-21	3	0	
	External Visual Inspection	<input checked="" type="checkbox"/>	ESCC Basic Specification No. 20500	15-21	3	0	





# APPLICATION FOR EXTENSION OF ESCC QUALIFICATION APPROVAL

Component title: Relays, latching, type M402

Executive Member: CNES


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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				
	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	15-21	3	0	
	Mechanical Life	<input checked="" type="checkbox"/>	ESCC 3602 Para. 8.14	15-21	3	0	
	Seal (Fine and Gross Leak)	<input checked="" type="checkbox"/>	MIL-STD-202, Test Method 112	15-21	3	0	
	External Visual Inspection	<input checked="" type="checkbox"/>	ESCC Basic Specification No. 20500	15-21	3	0	
Endurance Subgroup 2	Resistive Life	<input checked="" type="checkbox"/>	ESCC 3602 Para. 8.11.3	15-21 16-37	6 6	0 0	cf. Annex 3 of NT 1168898
	Seal (Fine and Gross Leak)	<input checked="" type="checkbox"/>	MIL-STD-202, Test Method 112	15-21 16-37	6 6	0 0	
	External Visual Inspection	<input checked="" type="checkbox"/>	ESCC Basic Specification No. 20500	15-21 16-37	6 6	0 0	
Assembly Capability Subgroup	Solderability	<input checked="" type="checkbox"/>	MIL-STD-202, Test Method 208	15-21 16-37	2 3	0 0	
	Overload	<input checked="" type="checkbox"/>	ESCC 3602 Para. 8.16	15-21 16-37	2 3	0 0	
	Permanence of Marking	<input type="checkbox"/>	ESCC Basic Specification No. 24800	15-21 16-37			N/A
	Terminal Strength	<input checked="" type="checkbox"/>	MIL-STD-202, Test Method 211	15-21 16-37	2 3	0 0	
	Seal (Fine and Gross Leak)	<input checked="" type="checkbox"/>	MIL-STD-202, Test Method 112	15-21 16-37	2 3	0 0	
Additional Tests	Electrical Measurements	<input checked="" type="checkbox"/>	ESCC 3602 para 9.3	15-21	4	0	
	Seal (Fine and gross leak)	<input checked="" type="checkbox"/>	MIL-STD-202 Method 112	15-21	4	0	
	External Visual inspection	<input checked="" type="checkbox"/>	ESCC Basic specification No.20500	15-21	4	0	

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	Component title:    Relays, latching, type M402		Appl. No.
	Executive Member:    CNES	Date:    17/05/2017	317B rev1

**NOTES ON THE COMPLETION OF THE APPLICATION FORM FOR ESCC QUALIFICATION EXTENSION APPROVAL**

<b>ENTRIES</b> Form heading	shall indicate: - the title of the component as given in its detail specification or the name of the series, family; - the Executive Member; - the entering date; - the certificate number and its sequential suffix.
<b>Box 1</b>	shall provide details given in the table; in particular there shall be listed: - the variants or range of variants; - the range of components (the ESCC code is recommended to indicate the values or values range, the tolerance, the voltage, etc); the designation given in the detail specification as 'base on'; - under Test Vehicle enter either an ESCC code or the specific characteristic capable of identifying the component tested (e.g., voltage of coil for a relay); - under component similar enter a cross if relevant.
<b>Box 2; 3 and 4</b>	As per QPL entry; otherwise, an explanation of the changes must be supplied.
<b>Box 5</b>	Will show the ESCC Generic and Detail specifications, including issue number and revision letter, current at the time the tests reported were performed. If the specifications are different from those current on the date of the application, see Box 6.
<b>Box 6</b>	Will show the deviations from the Generic and Detail Specifications listed in Box 5, in particular deviations from testing. In case of deviations this must be listed in Box 15. In case the referenced specification in Box 5 have currently a different issue and/or revision indicate also whether the test data deviates or not from such current documents.
<b>Box 7</b>	Must reference the report(s) supplied in support of the application.
<b>Box 8</b>	Should provide the details of procurement to the full ESCC System, documentation of all of which should already have been delivered to the ESCC Executive under the terms of the relevant Generic Specification. An appropriate table has been drawn in this box.
<b>Box 9</b>	If the PID evolved after the Original Qualification or after the last Extension of Qualification, adequate details of such evolution shall be provided together with the reasons for the changes. Major changes shall be clearly marked.
<b>Box 10</b>	Identify the current PID issue status, date and actual date of verification. The date of verification of the current PID should be arranged as close as possible to the required date of extension.
<b>Box 11</b>	This box can be completed only after a physical visit to the plant to confirm that no unexplained changes occurred and that the practices, procedures, material, etc. used in manufacturing the components are as described in the PID. This survey shall be carried out in accordance with the requirements of ESCC Basic Specification No. 20200 and its findings shall be recorded.
<b>Box 12</b>	Provide details of, or reference to, any Destructive Physical Analysis (DPA) and Failure Analysis reports as well as any Nonconformance(s) (NCCS) occurred during the qualification validity period, stating if established corrective action have produced satisfactory results.
<b>Box 13</b>	Enter only the name of the Executive Member (i.e., CNES, DLR, ESTEC, etc.) and the signature of the responsible Executive Coordinator.
<b>Box 14</b>	To be used when there is a need to expand any of the boxes from 1 through 12. Identify box affected and reference the Box 14 in the relevant Box. Box 14 can be broken into 14a, 14b, etc. if several boxes have to be expanded.
<b>Box 15</b>	Fill in Table as requested.
<b>Box 16</b>	Any additional action deemed necessary by the Executive Member to bring the submitted data to a standard likely to be accepted by the ESCC Executive should be listed herein or the reason(s) to accept the noncompliance.
<b>Box 17</b>	All Executive Manager recommendations on the application itself, special conditions or restrictions, modifications of the QPL or QML entry, letters to the manufacturer, etc. shall be entered clearly in Box 19, signed by the representative for ESA, and dated.
<b>Box 18</b>	Fill in Table as requested.
<b>Box 19</b>	Confidential Details of PID changes including those of a confidential nature, shall be provided.
<b>Box 20</b>	State noncompliance with reference to specification(s) and paragraph(s). To simplify reference in Box 16 each nonconformance shall be sequentially numbered. If relevant state 'None'.
<b>Box 21</b>	Any additional action deemed necessary by the Executive Member to bring the submitted data to a standard likely to be accepted by the ESCC Executive should be listed herein or the reason(s) to accept the noncompliance.
<b>Box 22</b>	Additional Comments.