

		APPLICATION FOR ESCC QUALIFICATION APPROVAL			Page 1	
Component Title: Relays, non-latching, Type GP5		Executive Member: CNES			Date: 22/04/2025	
Appl. No.		002P			1	
Components (including series and families) submitted for Qualification Approval						
ESCC COMPONENT. NO.	VARIANTS	RANGE OF COMPONENTS	BASED ON	TEST VEHICLE / S	COMPONENT SIMILAR	
3601/003	01 / 02 / 04 / 05 / 06 / 09	Coil voltage : 12V, 26.5V	Type GP5	3601 003 04 26V 1 3601 003 01 26V 1 GP5-037A00-06V-961(See Box 20) 3601 003 01 12V 1 3601 003 04 12V 1 3601 003 01 26V 2 3601 003 03 26V 1	01 / 02 / 04 / 05 / 06 / 09	
Component Manufacturer		Location of Manufacturing Plant		ESCC Specification used for Qualification		
LEACH International Europe		2 rue Goethe 57430 Sarralbe		Generic: 3601 Issue 4 Detail/s: 3601/003 Issue 8		
Qualification Report Reference and date: RT 1396217 Iss.1 – Date: 12/06/2023 RT 1360039 Iss.0 – Date: 07/02/2025 RT 1288356 Iss.0 – Date: 14/06/2021 RQ 1332599 Iss.1 – Date: 31/08/2022 RT_1442055 Iss.0 – Date: 11/07/2024 RT_1466166 (draft) Iss.0 Date: 21/02/2024			PID used for manufacturing Qualification Lot		Ref No: DR 1161302 Issue: 4 Date: 06/09/2022	
PID changes since start of qualification None ☐ Minor* ☒ Major* ☐ (* Details not published, provided in confidential annex 2.)			Current PID Verified by CNES Name of Executive Representative Ref No: DR 1161302 Issue 5 Date 07/02/2025		Evaluation testing performed Yes ☒ No ☐ Report Ref. No.: RT 1325241 Iss.1 Date: 16/06/2022 Equivalent Data: Certification:	
Current Manufacturing facilities surveyed by: CNES (Name of Executive Responsible) 2024.0005301 ESCC Audit Report LEACH 2024			19/03/2024 (Date)		Report Reference Satisfactory: Yes ☒ No ☐ Explain	
Quality and Reliability Data			Failure analysis, DPA, NCCS available (supply data) Ref Nos. and purpose: DPA : LEA20-003 / ESCC 20533600 & ESCC 2043600		Evaluation testing performed Yes ☒ No ☐ Report Ref. No.: RT 1325241 Iss.1 Date: 16/06/2022 Equivalent Data: Certification:	

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Executive Member: CNES	Date: 22/04/2025		002P
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 13; that the reports and data are available at the ESCC Executive and therefore applies for ESCC qualification status to be given to the component(s) listed herein.			11
Date: 24/02/2025	Fontaine Lya L. FONTAINE (Signature of the Executive Coordinator)		Signature numérique de Fontaine Lya Date : 2025.04.22 10:33:15 +02'00'
Continuation of Boxes above: (Only non-confidential comments)			12

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	Component Title:	Relays, non-latching, Type GP5	Appl. No.
	Executive Member:	CNES	Date: 22/04/2025
Non compliance to ESCC requirements:			13
No.:	Specification	Paragraph	Non compliance
Additional tasks required to achieve full compliance for ESCC qualification or rationale for acceptability of noncompliance:			14
Executive Manager Disposition			15
Application Approval: Yes ☒ No ☐			
Action / Remarks:			
Date:	Ali Zadeh Digitally signed by Ali Zadeh Date: 2025.06.02 10:51:56 +02'00' A. Zadeh: head of the Avionics and EEE Division		

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ANNEX 1: LIST OF TESTS DONE TO SUPPORT QUALIFICATION												
Tests conducted in compliance with: - ESCC 3601 generic specification; Chart F4 (for ESCC/QPL parts); - Or PID-TFD (for ESCC/QML parts)												
Tests vehicle identification/description:												
<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%;">3601 003 03 26V 1 (ref: GP5-900BHA-26V-962 / DC: 24-26A)</td> <td style="width: 50%;"></td> </tr> <tr> <td>3601 003 04 26V 1 (ref: GP5-900AHA-26V-964 / DC: 24-51A)</td> <td>3601 003 01 26V 1 (ref: GP5-900A00-26V-964 / DC: 23-16A)</td> </tr> <tr> <td>ref: GP5-037A00-06V-961 / DC: 21-10A (see Box 20)</td> <td>3601 003 01 12V 1 (ref: GP5-190A00-12V-860 / DC : 19-47A)</td> </tr> <tr> <td>3601 003 04 12V 1 (ref: GP5-190AHA-12V-860 / DC: 19-47A)</td> <td>3601 003 01 26V 2 (ref: GP5-700A00-26V-860 / DC: 19-47A)</td> </tr> <tr> <td>3601 003 01 26V 1 (ref: GP5-900A00-26V-860 / DC: 19-46A)</td> <td>3601 003 04 26V 1 (ref: GP5-900AHA-26V-964 / DC: 24-51A)</td> </tr> </table>			3601 003 03 26V 1 (ref: GP5-900BHA-26V-962 / DC: 24-26A)		3601 003 04 26V 1 (ref: GP5-900AHA-26V-964 / DC: 24-51A)	3601 003 01 26V 1 (ref: GP5-900A00-26V-964 / DC: 23-16A)	ref: GP5-037A00-06V-961 / DC: 21-10A (see Box 20)	3601 003 01 12V 1 (ref: GP5-190A00-12V-860 / DC : 19-47A)	3601 003 04 12V 1 (ref: GP5-190AHA-12V-860 / DC: 19-47A)	3601 003 01 26V 2 (ref: GP5-700A00-26V-860 / DC: 19-47A)	3601 003 01 26V 1 (ref: GP5-900A00-26V-860 / DC: 19-46A)	3601 003 04 26V 1 (ref: GP5-900AHA-26V-964 / DC: 24-51A)
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Detail Specification reference: 3601/003												

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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	☒	MIL-STD-202, Test Method 107	24-51A / 23-16A / 21-10A / 19-47A / 19-46A / 24-51A	6 6 6 6+4+6 6	0	
	Low Level Sine Vibration	☒	MIL-STD-202, Test Method 204	24-51A / 23-16A / 21-10A / 19-47A / 19-46A / 24-51A	6 6 6 6+4+6 6	0	DC 23-16 : specification update for low level sine vibration, see box 20
	Random Vibration	☒	MIL-STD-202, Test Method 214	24-51A / 23-16A / 21-10A / 19-47A / 19-46A / 24-51A	6 6 6 6+4+6 6	0	
	Low Level Mechanical Shock	☒	MIL-STD-202, Test Method 213	24-51A / 23-16A / 21-10A / 19-47A / 19-46A / 24-51A	6 6 6 6+4+6 6	0	
	Resistance to Soldering Heat	☒	MIL-STD-202, Test Method 210	24-51A / 23-16A / 21-10A / 19-47A / 19-46A / 24-51A	6 6 6 6+4+6 6	0	
	Seal (Fine and Gross Leak)	☒	MIL-STD-202, Test Method 112	24-51A / 23-16A / 21-10A / 19-47A / 19-46A / 24-51A	6 6 6 6+4+6 6	0	
	External Visual Inspection	☒	ESCC Basic Specification No. 20500	24-51A / 23-16A / 21-10A / 19-47A / 19-46A / 24-51A	6 6 6 6+4+6 6	0	
Environmental	High Level Sine Vibration	☒	MIL-STD-202, Test Method 204	24-51A / 23-16A /	6 6	0	

Endurance Subgroup 1 (Column 1)	High Level Mechanical Shock	☒	MIL-STD-202, Test Method 213	24-51A / 23-16A / 24-51A	6 6 6	0	
	Seal (Fine and Gross Leak)	☒	MIL-STD-202, Test Method 112	24-51A / 23-16A / 24-51A	6 6 6	0	
	External Visual Inspection	☒	ESCC Basic Specification No. 20500	24-51A / 23-16A / 24-51A	6 6 6		
	Low Level Life	☒	ESCC 3601 Para. 8.11.1	23-16A / 19-47A / 24-51A	3 3 3	0	
	Inductive Life	☐	ESCC 3601 Para. 8.11.2				Only applicable to relays with Rated Resistive Load Contact Current greater than or equal to 5A.
	Seal (Fine and Gross Leak)	☒	MIL-STD-202, Test Method 112	23-16A / 19-47A / 24-51A	3 3 3	0	
	External Visual Inspection	☒	ESCC Basic Specification No. 20500	23-16A / 19-47A / 24-51A	3 3 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	☒	ESCC 3601 Para. 8.12	23-16A	3	0	
	Seal (Fine and Gross Leak)	☒	MIL-STD-202, Test Method 112	23-16A	3	0	
	External Visual Inspection	☒	ESCC Basic Specification No. 20500	23-16A	3	0	
Endurance Subgroup 1 (Column 3)	Intermediate Current	☒	ESCC 3601 Para. 8.13	24-26A 23-16A / 19-47A / 24-51A	3 3 3	0	F4 deviation for 19-47 : low level and intermediate current are performed to the same SN. It is considered a worst case.
	Mechanical Life	☐	ESCC 3601 Para. 8.14				Only applicable to relays with Rated Resistive Load Contact Current greater than or equal to 5A.
	Seal (Fine and Gross Leak)	☒	MIL-STD-202, Test Method 112	24-26A 23-16A 24-51A	3 3 3	0	
	External Visual Inspection	☒	ESCC Basic Specification No. 20500	24-26A 23-16A 24-51A	3 3 3	0	
Endurance Subgroup 2	Resistive Life	☒	ESCC 3601 Para. 8.11.3	24-26A 23-16A 24-51A	6 6 6	0	
	Seal (Fine and Gross Leak)	☒	MIL-STD-202, Test Method 112	24-26A 23-16A 24-51A	6 6 6	0	
	External Visual Inspection	☒	ESCC Basic Specification No. 20500	24-26A 23-16A 24-51A	6 6 6	0	
Assembly Capability Subgroup	Solderability	☒	MIL-STD-202, Test Method 208	24-26A 23-16A 24-51A	3 3 3	0	
	Overload	☒	ESCC 3601 Para. 8.16	24-26A 23-16A 24-51A	3 3 3	0	
	Permanence of Marking	☒	ESCC Basic Specification No. 24800	21-10A	3	0	
	Terminal Strength	☒	MIL-STD-202, Test Method 211	24-26A 23-16A 24-51A	3 3 3	0	
	Seal (Fine and Gross Leak)	☒	MIL-STD-202, Test Method 112	24-26A 23-16A 24-51A	3 3 3	0	

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NOTES ON THE COMPLETION OF THE APPLICATION FORM FOR ESCC QUALIFICATION APPROVAL ENTRIES Form Heading shall indicate:— the title of the component as given in its detail specification or the name of the series or family; — the entering date; — the serial number and the suffix of the form. Box 1 shall provide details given in table; in particular there shall be listed - the variants or range of variants; the range of components by using the ESCC code for values tolerances, etc.; the designation given in detail specification as 'based on'; ---under Test Vehicle enter either a cross or the specific characteristic capable to identify the component tested; — under component similar enter a cross. Box 2 and 3 Manufacturer's name and location of plant where the components were manufactured and tested. Box 4 Generic and detail specifications used during qualification program. Box 5 Reference to test report(s) submitted in support of application. Box 6 Enter details to identify the PID that was applicable at the time the qualification lot was manufactured. Box 7 If the PID was evolved after qualification lot manufacture, adequate details of such evolution shall be provided together with reasons for changes. Major changes shall be clearly marked. Box 8 The box serves to identify the current PID and the Executive Representative that has verified it together with the date of this occurrence. Box 9 This box can be completed only after a physical visit to the plant to confirm that the practices, procedures, materials, 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. Box 10 Details entered shall be sufficient to evidence that an evaluation program according to ESCC Basic Specification No. 22600 has been performed and that the results thereof are summarized in the survey and test reports. If the evaluation program has not been carried out according to established ESCC documents, the applicant Executive Representative shall provide alternative data and declare its assessed degree of satisfactory compliance with the ESCC basic requirements. Reference shall be made to the reports on Destructive Physical Analysis (DPA), Failure Analysis and Non conformance (NCCS) issued during the Evaluation and/or Qualification Phase. Box 11 Enter the name of the Executive Coordinator and the signature. Box 12 To be used when there is a need to expand any of the boxes from 1 through 10. Identify box affected and reference the Box 12 in the relevant Box. Box 12 can be broken into 12a, 12b, etc. if several Boxes have to be expanded. Box 13 Fill table as requested. Box 14 Fill in any additional tasks required to achieve full compliance. Box 15 All Executive recommendations on the application itself, special conditions or restrictions, modifications of the QPL or ESCC QML entry, letters to the manufacturer, etc. shall be entered clearly in Box 15, signed by the ESA Representative. Box 16 Fill in Table as requested. Box 17 Confidential details of PID changes shall be provided. Box 18 State noncompliance with reference to specification(s) and paragraph(s). To simplify reference in Box 18 each nonconformance shall be sequentially numbered. If relevant state 'None' Box 19 Any additional action deemed necessary by the Executive Representative 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 nonconformance. Box 20 Additional Comments		