		APPLICATION FOR EXTENSION OF ESCC QUALIFICATION APPROVAL						Page 1		
E	SCC	Component Title: Re	elays, electromag	netic, latching	, type M	402		Appl. No	D.	
100		Executive Member:	CNES		D	ate: 22/07/2020	317D			
Components (includi	ng series and families	s) submitted for Extension	of Qualification	Approval:					1	
ESCC COMPONENT NO	VARIANTS	VARIANTS RANGE OF COMPONENTS BASED ON					TEST VEHICLE / S			
3602 004	04,06,09, 14,16	Rated coil Voltage	Rated coil Voltage M402 relays			SCC 3602004 16 28V All variants				
	and 19									
Component M	anufacturer	2 Location of Ma	nufacturing Plant	(s) 3					4	
Leach International E	Europe	2 rue Goethe	nulacturing r lant	(3) 5	Date	of original qualification ap	oproval	:	4	
		57430 Sarralbe			Date	: 01/02/2012				
					Certi	ficate Ref No. 317				
		5	6						7	
ESCC Specifications Maintenance of quali	used for fication testing:	Deviations to LVT testing and Detail Specification used:				Qualification Extension Report reference and date:				
Generic: 3602	Issue: 4	No 🖂 Yes	No ⊠ Yes □ (supply details in Box				Report 1271341, 10/06/2020			
Detail(s): 3602/00	4 Issue: 3	Deviation from curre	Deviation from current Specifications:							
		No 🛛 Yes	No ⊠ Yes □ (Supply details)							
		I							8	
Summary of procure	ment or equivalent tes	st results during current va	alidity period in su	upport of this a	pplicatio	on (those to ESCC listed fi	irst) Delive	red		
RT_1271341, p. <b>129</b>						Quanty	Donve			
VOQ ESCC	M300-D2A-H-8	60 Chart F4 Endurand Assembly Capabili	ce & 18-22A ity			22				
VOQ ESCC	M402-D2A-H-8	60 Chart F4 Periodic	27							
		Tests								
	tort of qualification			(orified by:		P Morty CNES			10	
None 🛛		9		vermed by.	N	lame of Agency Represer	itative		10	
Minor*			Ref No: I	DR_1156610						
Major* □	*Provide details in bo	эх:	Issue:	1 18/04/2018		Date:		15/05/2018		
	1							11		
Current Manufacturin	ng facilities surveyed t	by: L. Baczkows	L. Baczkowski CNES & S. Hernandez ESA			n 23	/01/20 <sup>-</sup> (Date)	19		
Satisfactory:	(Ivanie or Agency Representative) (Date)									
Report Reference:	Report Reference:2019.0002067-CRR de visite fournisseur LEACH du 23.01.2019									

	APPLICATION FOR EXTENSION OF ESCC QUALIFICATION APPROVAL Page 2					
<b>ESCC</b>	Component title:	Relays, electromag	netic, latching, type M40	2	Appl. No.	
	Executive Member:	CNES	Dat	e: 22/07/2020	317D	
Failure Analysis, DPA, NCCS ava	ilable: Yes	□ No ⊠	(Supply data)		12	
Ref. No's and purposes:						
The undersigned hereby certifies on behalf that the appropriate documentation has bee (except as stated in box 15;) - that the repo CNES as the responsible Executive Memb	of the ESCC Executiv en evaluated; - that full rts and data are availa er for ESCC qualificati	e - that the above in compliance to all ES ble at the ESCC Exe on status to be exter	formation is correct; - SCC requirements is evic scutive and therefore app nded to the component(s	dence blies on behalf of b) listed herein.	13 Wrouc	
Date: 23/07/2020			-	JP. BUSSEN (Signature of the Executiv	IOT e Coordinator)	
Continuation of Boxes above:					14	

APPLICATION FOR EXTENSION OF ESCC QUALIFICATION APPROVAL Page 3								Page 3
al and	ESCC	Componen	t title: Re	elays, electromag	netic, latching, typ	e M402		Appl. No.
100		Executive N	Member:	CNES		Date:	22/07/2020	317D
Non com	nlianae to ESCC, requirementer	I						15
				Davaaraah			Nen compliance	
NO.:	Specification			Paragraph			Non compliance	e
Additiona noncomp	I tasks required to achieve full co liance:	mpliance for I	ESCC qualifi	ication or rational	e for acceptability	of		
								16
Executive	Manager Disposition							
Exoodiive								17
Application Action / R	on Approval: Yes 🗵 Remarks:	No 🗆						
,,								
								ly signed
						61	$4 \otimes 1$ by Brit	ta Schade
						»[	Date: 2	2020.08.28
Date:							11:24:2	16 +02'00'
						B. Sc	hade: Head of the Produc and Safety Departr	et Assurance ment

	APPLICAT	Page 4						
<b>ESCC</b>	Component Title:	Relays, electromagnetic, latching, type M402	2		Appl. No.			
	Executive Member:	CNES	Date:	22/07/2020	317D			
ANNEX 1: LIST OF TESTS DONE TO SUPPORT EXTENSION OF QUALIFICATION								
Tests conducted in compliance with:								
<ul> <li>ESCC 3602 generic specification; Chart F4 (for ESCC/QPL parts);</li> <li>Or PID-TFD (for ESCC/QML parts)</li> </ul>								
Tests vehicle identification/description:								
SCC 3602 004 16 28V, M402-D2A-H-86	0, DC 19-10A Mo	oQ (Period 2019-2020)						
SCC 3602 004 16 28V, M402-D2A-H-86	0, DC 18-23A Mo	DQ (Period 2018-2019)						
Detail Specification reference: 36	602/004							

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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
iical Subgroup )	Thermal Shock	$\boxtimes$	MIL-STD-202, Test Method 107	19-10A	6	0	
	Low Level Sine Vibration	$\boxtimes$	MIL-STD-202, Test Method 204	19-10A	6	0	
	Random Vibration		MIL-STD-202, Test Method 214				
Mechai olumn 1	Low Level Mechanical Shock	$\boxtimes$	MIL-STD-202, Test Method 213	19-10A	6	0	
nental / (Co	Resistance to Soldering Heat	$\boxtimes$	MIL-STD-202, Test Method 210	19-10A	6	0	
Environm	Seal (Fine and Gross Leak)	$\boxtimes$	MIL-STD-202, Test Method 112	19-10A	6	0	
	External Visual Inspection	$\boxtimes$	ESCC Basic Specification No. 20500	19-10A	6	0	
nvironmental / nanical Subgroup (Column 2)	High Level Sine Vibration	$\boxtimes$	MIL-STD-202, Test Method 204	19-10A	6	1	Not applicable as referred in 3602/004 Appendix A
	High Level Mechanical Shock	$\boxtimes$	MIL-STD-202, Test Method 213	19-10A	6	2	Not applicable as referred in 3602/004 Appendix A
	Seal (Fine and Gross Leak)	X	MIL-STD-202, Test Method 112	19-10A	6	0	
Mec	External Visual Inspection	$\boxtimes$	ESCC Basic Specification No. 20500	19-10A	6	0	
p 1	Low Level Life		ESCC 3602 Para. 8.11.1				
subgrou nn 1)	Inductive Life	$\boxtimes$	ESCC 3602 Para. 8.11.2	19-10A	3	0	
Irance S (Colun	Seal (Fine and Gross Leak)	$\boxtimes$	MIL-STD-202, Test Method 112	19-10A	3	0	
Endur	External Visual Inspection	$\boxtimes$	ESCC Basic Specification No. 20500	19-10A	3	0	

			APPLICATION FOR	N APPROVAL	Page 5			
ESCC			omponent title: Relays,	Appl. No.				
2 AL		E×	Executive Member: CNES Date: 22/07/2020					
		I		1			1	
Chart F4	Test	Tick when done	Conditions	Date Code	Tested Qty	No. of Rejects	Comments if no Comments on	t performed. Rejection
ırance roup 1 ımn 2)	Coil Life		ESCC 3602 Para. 8.12					
	Seal (Fine and Gross Leak)		MIL-STD-202, Test Method 112					
End Subç (Col	External Visual Inspection		ESCC Basic Specification No. 20500					
dna	Intermediate Current		ESCC 3602 Para. 8.13	19-10A	3	0		
Subgro nn 3)	Mechanical Life	$\boxtimes$	ESCC 3602 Para. 8.14	19-10A	3	0		
Endurance S 1 (Colun	Seal (Fine and Gross Leak)	$\boxtimes$	MIL-STD-202, Test Method 112	19-10A	3	0		
	External Visual Inspection	$\boxtimes$	ESCC Basic Specification No. 20500	19-10A	3	0		
a C	Resistive Life	$\boxtimes$	ESCC 3602 Para. 8.11.3	18-23A 19-10A	6 6	0		
lurance group	Seal (Fine and Gross Leak)	$\boxtimes$	MIL-STD-202, Test Method 112	18-23A 19-10A	6 6	0		
End Subç	External Visual Inspection		ESCC Basic Specification No. 20500	18-23A 19-10A	6 6	0		
	Solderability	$\boxtimes$	MIL-STD-202, Test Method 208	18-23A 19-10A	3 3	0		
ability	Overload	$\boxtimes$	ESCC 3602 Para. 8.16	18-23A 19-10A	3 3	0		
ibly Capa ubgroup	Permanence of Marking		ESCC Basic Specification No. 24800				Not applicable for la	ser marking
Assen	Terminal Strength	$\boxtimes$	MIL-STD-202, Test Method 211	18-23A 19-10A	3 3	0		
	Seal (Fine and Gross Leak)	$\boxtimes$	MIL-STD-202, Test Method 112	18-23A 19-10A	3 3	0		
Ja								
dition Tests								
- Ad								

APPLICATION FOR EXTENSION OF ESCC QUALIFICATION APPROVAL									
ES	SCC	Component title:	Relays, electromagn	etic, latching, type M402		Appl. No.			
ALCON T		Executive Member:	CNES	Date:	22/07/2020	317D			
NOTES ON THE COMPLETION OF THE APPLICATION FORM FOR ESCC QUALIFICATION EXTENSION APPROVAL									
ENTRIES Form heading shall indicate: - the title of the component as given in its detail specification or the name of the series, family; - the Executive M - the entering date; - the certificate number and its sequential suffix.									
Box 1	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.								
Box 2; 3 and 4	As per QPL entry;	otherwise, an explana	ation of the changes m	ust be supplied.					
Box 5	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.								
Box 6	Will show the devi deviations this mu indicate also whet	iations from the Gener st be listed in Box 15. her the test data devia	ric and Detail Specific In case the referenced ates or not from such o	ations listed in Box 5, in p I specification in Box 5 hav surrent documents.	articular deviations from te ve currently a different issu	esting. In case of e and/or revision			
Box 7	Must reference the	e report(s) supplied in	support of the applica	tion.					
Box 8	Should provide the to the ESCC Exec	e details of procuremer cutive under the terms	nt to the full ESCC Sys of the relevant Generi	em, documentation of all o c Specification. An approp	of which should already hav riate table has been drawı	re been delivered n in this box.			
Box 9	If the PID evolved be provided togeth	after the Original Qua ner with the reasons fo	lification or after the la or the changes. Major	st Extension of Qualificati changes shall be clearly n	on, adequate details of suc narked.	ch evolution shall			
Box 10	Identify the currer arranged as close	nt PID issue status, d as possible to the req	ate and actual date of extensio	of verification. The date o n.	f verification of the curren	t PID should be			
Box 11	This box can be of practices, procedu out in accordance	completed only after a ires, material, etc. use with the requirements	a physical visit to the d in manufacturing the s of ESCC Basic Spec	plant to confirm that no u components are as descr fication No. 20200 and its	nexplained changes occur ibed in the PID. This surve findings shall be recorded	red and that the y shall be carried			
Box 12	Provide details of, or reference to, any Destructive Physical Analysis (DPA) and Failure Analysis reports as well as an Nonconformance(s) (NCCS) occurred during the qualification validity period, stating if established corrective action have produce satisfactory results.								
Box 13	Enter only the na Coordinator.	me of the Executive I	Member (i.e., CNES,	DLR, ESTEC, etc.) and t	he signature of the respo	nsible Executive			
Box 14	To be used when the relevant Box. I	there is a need to exp Box 14 can be broken	oand any of the boxes into 14a, 14b, etc. if s	from 1 through 12. Identif everal boxes have to be e	y box affected and referen xpanded.	ce the Box 14 in			
Box 15	Fill in Table as rec	quested.							
Box 16	Any additional act by the ESCC Exec	ion deemed necessar cutive should be listed	y by the Executive Me herein or the reason(	mber to bring the submitt s) to accept the noncompl	ed data to a standard likel iance.	y to be accepted			
Box 17	All Executive Man entry, letters to the	ager recommendations e manufacturer, etc. sł	s on the application its nall be entered clearly	elf, special conditions or re in Box 19, signed by the r	estrictions, modifications of epresentative for ESA, and	the QPL or QML d dated.			
Box 18	Fill in Table as rec	quested.							
Box 19	Confidential Detail	ls of PID changes inclu	uding those of a confid	lential nature, shall be pro	vided.				
Box 20	State noncomplia shall be sequentia	nce with reference to Ily numbered. If releva	specification(s) and p ant state 'None'.	aragraph(s). To simplify r	eference in Box 16 each	nonconformance			
Box 21	Any additional act by the ESCC Exec	ion deemed necessar	y by the Executive Me herein or the reason(	mber to bring the submitt s) to accept the noncompl	ed data to a standard likel ance.	y to be accepted			
Box 22	Additional Comme	ents.							