

Component Title: Relays, non-latching, type M 302

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The same of		E	xecutive M	Memb	oer:	CNES	6			D	Pate: 09/07/2019		310D	
Components (includ	ing series and famil	ies) s	ubmitted f	or Ex	ktension	of Qu	ualification	Approval:						1
ESCC COMPONENT NO.	VARIANTS	VARIANTS		RANGE OF COMPONENTS			В	BASED ON		TEST VEHICLE / S		COMPONEN SIMILAR	Т	
3602 009	3602 009 03, 04, 06, 13, 14 and 16		Coil volt	ages	12V ar	nd 28\	/	Type N	Type M302		36020091428V		riants	
											36020091328V	i		
											36020090428V			
	<u> </u>													
Component M Leach internatio		2				ınufac	turing Pla	nt(s)	3	Date	of original qualification o	pproval:		4
Leach internatio	nai Lurope 3.A.		2 Rue							Date	of original qualification a : 01/04/2011	pprovai.		
			57430	Sai	rralbe									
										Certi	ficate Ref No. 310			
		5							6					7
ESCC Specifications Maintenance of qual			Deviation used:	ons to	LVT te	sting	and Detail	Specificati	ion		ification Extension Repor ence and date:	t		
Generic: 3602	Issue: 4		200	\boxtimes	Yes			details in E	Вох	Rapp	ort_MOQ_M302_RT_12		14/03/2019	
Detail(s): 3602 009 Issue: 5			15)					and I	RT_1219615, 27/03/2018	3				
Detail(s): 3602 009 Issue: 5			Deviation from current Specifications: No ⊠ Yes □ (Supply details)											
			1											
			4 6 6											8
Project Name	ment or equivalent		esults duri		urrent va AT	alidity	period in :	Support of t Date code		plication	on (those to ESCC listed to	7.703 07.45	- 4	
See document MOC M302_2019 append to MoQ report		VCI			AI			Date Cour			Quantity	y Delivere	ed	
										5				
PID changes since s	tart of qualification				9	Cur	rent PID	Verified by	<i>/</i> :	-	CNES		_	10
None						L.,		DD 4450		N	ame of Excutive Represe	entative		
Minor* ⊠ Major* □ *Provide details in box:							No:	DR_1156	611		D-1		0.107.100.10	
iviajoi 🗆	*Provide details in	DOX:				Issu	Date:	17/04/201	8		Date:	: 0	9/07/2019	
											0		af a	11
Current Manufacturing facilities surveyed by:			CNES (Name of Executive Representative)					tive)	on 23/01/2)		
Satisfactory:	Yes ⊠		No			plain		.oprosonia	•0)			(Date)		
Report Reference:	2019.000206 fournisseur Ll 23.01.2019			9										

	APPLICAT	Page 2					
ESCC	Component title:	Relays, non-late	hing, type M 302			Appl. N	Vo.
	Executive Member:	CNES		Date:	09/07/2019	3100)
Failure Analysis, DPA, NCCS ava	ailable: Yes	□ No	⊠ (Supply data)				12
Ref. No's and purposes:							
The undersigned hereby certifies on behal that the appropriate documentation has be (except as stated in box 15;) - that the repc CNES as the responsible Executive Memb	en evaluated; - that fu orts and data are avail	II compliance to all able at the ESCC I	ESCC requirements i Executive and therefor	s evidend e applies	on behalf of	mene	13
Date: 10/07/2019				(Si	JP BUSSENOT		_
Continuation of Boxes above:							14
Minor Change in PID :							
 Update of document template Update of documentation and 	equipment procedure						

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Cont.	ED	
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	34, 27	Executive I	Date: 09/07/2019	310D	
Non comp	pliance to ESCC requirements:		15		
No.:	Specification		Paragraph	Non complianc	e
Additional	I tacks required to achieve full as	malianas for	ESCC qualification or rationale for acceptability		
noncompl	liance:	inpliance for	ESCC qualification or rationale for acceptability	OI	16
Executive	Manager Disposition				17
Applicatio	n Approval: Yes 🗹	No 🗆			
Action / R					
				2411	
Date:				Den	
				B. Schade, Head of ESA Produ	uct Assurance



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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:

36020090428V (Ref:M302-D2AA-H-967-30 / DC:1842A)	36020091428V (Ref:M302-D2A-H-860 / DC:1829A)
36020091328V (Ref:M302-D3A-H-860 / DC:1808A)	36020091428V (Ref:M302-D2A-H-860 / DC:1712A)

Executive Member:

Detail Specification reference:

3602 009

Chart F4	Test	Tick when done	Conditions	Date Code	Tested Qty	No. of Rejects	Comments if not performed. Comments on Rejection
group	Thermal Shock		MIL-STD-202, Test Method 107	1829A	6	0	
	Low Level Sine Vibration	×	MIL-STD-202, Test Method 204	1829A	6	0	
iical Su)	Random Vibration		MIL-STD-202, Test Method 214				
il / Mechani (Column 1)	Low Level Mechanical Shock	×	MIL-STD-202, Test Method 213	1829A	6	0	
ental / I	Resistance to Soldering Heat	×	MIL-STD-202, Test Method 210	1829A	6	0	
Environmental / Mechanical Subgroup (Column 1)	Seal (Fine and Gross Leak)	×	MIL-STD-202, Test Method 112	1829A	6	0	
	External Visual Inspection		ESCC Basic Specification No. 20500	1829A	6	0	
dno	High Level Sine Vibration	×	MIL-STD-202, Test Method 204	1829A, 1808A	1+ 5	0	
Subgroun 2)	High Level Mechanical Shock	×	MIL-STD-202, Test Method 213	1829A, 1808A	1+ 5	0	
Environmental / Mechanical Subgroup (Column 2)	Seal (Fine and Gross Leak)	\boxtimes	MIL-STD-202, Test Method 112	1829A, 1808A	1+ 5	0	
Mech	External Visual Inspection	⊠	ESCC Basic Specification No. 20500	1829A, 1808A	1+ 5	0	
Endurance Subgroup 1 (Column 1)	Low Level Life						
	Inductive Life	⊠	ESCC 3602 Para. 8.11.2	1842A	3	0	
	Seal (Fine and Gross Leak)	\boxtimes	MIL-STD-202, Test Method 112	1842A	3	0	
	External Visual Inspection	×	ESCC Basic Specification No. 20500	1842A	3	0	



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Additional Tests Relays, non-latching, type M 302

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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
0.7.0	Coil Life		ESCC 3602 Para. 8.12				
Endurance Subgroup 1 (Column 2)	Seal (Fine and Gross Leak)		MIL-STD-202, Test Method 112				
Sub (Co	External Visual Inspection		ESCC Basic Specification No. 20500				
Endurance Subgroup 1 (Column 3)	Intermediate Current	⊠	ESCC 3602 Para. 8.13	1829A	3	0	
	Mechanical Life	\boxtimes	ESCC 3602 Para. 8.14	1829A	3	0	
	Seal (Fine and Gross Leak)	×	MIL-STD-202, Test Method 112	1829A	3	0	
	External Visual Inspection	×	ESCC Basic Specification No. 20500	1829A	3	0	
20	Resistive Life	⊠	ESCC 3602 Para. 8.11.3	1829A, 1712A	6+6	0	
Endurance Subgroup 2	Seal (Fine and Gross Leak)	×	MIL-STD-202, Test Method 112	1829A, 1712A	6+6	0	
Sub	External Visual Inspection	⊠	ESCC Basic Specification No. 20500	1829A, 1712A	6+6	0	
	Solderability	⊠	MIL-STD-202, Test Method 208	1829A, 1712A	3 + 3	0	
ability	Overload	×	ESCC 3602 Para. 8.16	1829A, 1712A	3 +3	0	
Assembly Capability Subgroup	Permanence of Marking		ESCC Basic Specification No. 24800				Not Applicable for laser marking
	Terminal Strength	⊠	MIL-STD-202, Test Method 211	1829A, 1712A	3 + 3	0	
	Seal (Fine and Gross Leak)	⋈	MIL-STD-202, Test Method 112	1829A, 1712A	3 + 3	0	
SAFEKEL INCOMESSAGE AND INCOMES	CONTRACTOR OF THE PROPERTY OF	1					



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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 Member; - 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 explanation of the changes must 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 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.
Box 7	Must reference the report(s) supplied in support of the application.
Box 8	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.
Box 9	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.
Box 10	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.
Box 11	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.
Box 12	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.
Box 13	Enter only the name of the Executive Member (i.e., CNES, DLR, ESTEC, etc.) and the signature of the responsible Executive Coordinator.
Box 14	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.
Box 15	Fill in Table as requested.
Box 16	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.
Box 17	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.
Box 18	Fill in Table as requested.
Box 19	Confidential Details of PID changes including those of a confidential nature, shall be provided.
Box 20	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'.
Box 21	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.
Box 22	Additional Comments.