ESCC

APPLICATION FOR ESCC QUALIFICATION APPROVAL

Component Title:

AXOMACH AND SPACEFIBRE CONNECTORS AND ACCESSORIES

Page 1 Appl. No.

		E	cecutive	Memb	er:		CNE	S				Da	ate:	18/01/2	2024		386	
Components (including	ng series and families	s) sub	omitted f	or Qua	alification	on App	orova	I										1
ESCC COMPONENT. NO.	VARIANTS	VARIANTS RANGE OF CO			OF CO	OMPONENTS			E	BASED ON		TEST VEHICLE / S		T	COMPONENT SIMILAR		NT	
3401089	01, 02, 03, 06		N.A.						AxoMa	ach		See a	nnex 1		V	ariants	05, 07	
3401089	04, 08		N.A.						Space	Fibre		See a	nnex 1		N	lone		
3401090	03, 05	İ	N.A.						AxoMa	ach		See a	nnex 1		v	ariants	01, 02,	04, 06
3401090	07	ĺ	N.A.						Space	Fibre		See a	nnex 1		N	one		
Component Ma Axon' Cable	anufacturer	2		Location de Chá					nt France	3	Gener Issue Detail/ Issues	ic:	3401 5			Qualifica	tion	4
Qualification Report R	Reference and date:						5	PID	used for i	manu		AND TEMPORE		Lot				6
17035-QTR-0001-AX		2-AX	ON, 170	035-Q1	TR-000)3-AX(ON,		202	200								
Date: 22/09/20								Ref		G. 1	Quadri, (CNES-P	PID-20					
								Date			02/2020							
PID changes since sta	art of qualification				7	Cun	rent F	PID V	erified by	_ 0	NES							8
None												of Exec		Represe	entative			
Minor* ⊠	(* Details not publish	ed r	rovided	in		Ref						-PID-20)					
	confidential annex 2.		noviaca			Issu	е				2							
						Date	9				22/07/	2022						
Current Manufacturing	g facilities surveyed b	oy:																9
	VEPLANE (CNES), [rançois NOUALS (C					12/0	06/20	19										
(Name of Executive R	and the second s	.,				(Da	te)					-						
AXON-AUD-2019																		
Report Re	ference																	
Satisfactory:	Yes ⊠		No		Ex	plain	,	Some	actions w	ere n	eeded or	Axon's	s side,	all actio	ns are	now clo	sed	
Quality and Reliability	Data																	10
Evaluation testing per	formed Yes		1	No					ailure an available	alysis	, DPA, N	ICCS		Yes	⊠	No		
is H	7072-TR-MDSA HDF sue D; 07072-TR-MI IDR02A-Axon' ED.1,	DSA		Date:	18/12	2/2012	2	(supply da	ta)								
Equivalent Data:																		
Certification:																		
								F	Ref Nos. a	and pu	urpose: 2	-C-AXC	0-2-01					
									Shielding nodify the						98, 159	99 and 1	600 iss	ued to



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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.

Date:

15/11/2023

Gianandrea Quadri G. QUADRI, CNES

(Signature of the Executive Coordinator)

Continuation of Boxes above: (Only non-confidential comments)

Box 1: in conjunction with application C218 dealing with AXOMACH AND SPACEFIBRE CABLE ASSEMBLIES

Executive Member:

Box 4: refer to appendix A for applied agreed deviations referring to ESCC 3401/089 issue 4 and for ESCC 3401/089 issue 4

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	Executive Men	ber: CNES	Date:	18/01/2024	386
Non compliance to ESCC requiremen	ts:				13
No.: Specification	on	Paragraph		Non compliance	
Additional tasks required to achieve ful noncompliance:	I compliance for ESC	C qualification or rationale for acceptability	of		14
Executive Manager Disposition					15
Application Approval: Yes Action / Remarks:	No 🗆				
Date:			3.	Def	•
			B. Schade: He	ad of the Product A Safety Departmen	Assurance nt

ESCC

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ANNEX 1: LIST OF TESTS DONE TO SUPPORT QUALIFICATION

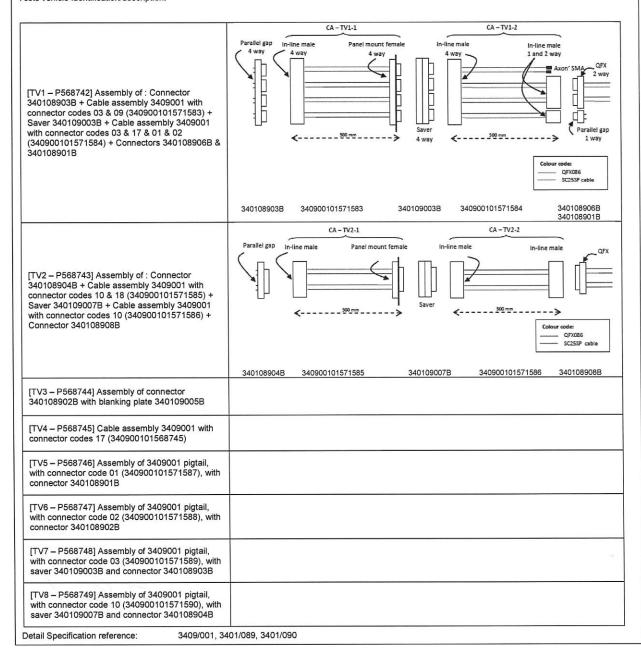
3

Tests conducted in compliance with:

ESCC 3409 generic specification; Chart F4 (for ESCC/QPL parts);
Or PID-TFD (for ESCC/QML parts)

Executive Member:

Tests vehicle identification/description:



IMPORTANT NOTE: Configuration of test vehicles was adapted depending on the test performed (use of complete TV or use of individual parts of TV (for instance, subharnesses of TV refered as TV1.1, TV1.2, TV2.1, TV2.2, savers and PCB connectors)). Thus date codes and tested quantity may vary depending on test configurations used for Chart F4 Column 2 and 4. Refer to complementary annex for detailed description of test configurations.

Chart F4	Test	Tick when done	Conditions	Date Code	Tested Qty	No. of Rejects	Comments if not performed. Comments on Rejection
S TVs	Shielding Effectiveness	⊠	IEC Publication No. 61726	19/38, 19/45, 20/02	6	0	
	Cable Retention Force	⊠	As specified in Detail Specification	19/38, 19/45, 20/02	6	0	
	Ageing	⊠	MIL-STD-202, Test Method 108	20/09	6	0	
	Mating Endurance	\boxtimes	ESCC Generic Specification No. 3401	20/09	3	0	
	Contact Retention (in Insert)	⊠	ESCC Generic Specification No. 3401	19/32, 19/38, 19/34, 19/23, 20/02	12	0	
	Bending	×	As specified in Detail Specification	19/38, 19/45, 20/02	6	0	
	Vibration (Random and Sine)	\boxtimes	MIL-STD-202 Test Method 214 & 204	20/09	6	0	
	Temperature Cycling (200 cycles)	\boxtimes	As specified in Detail Specification	20/09	3	0	
	Thermal Stability and Skew	\boxtimes	As specified in Detail Specification	20/09	3	0	
	Shielding Effectiveness	⊠	IEC Publication No. 61726	19/38, 19/45, 20/02	6	6	Refer to 2-CNES-AXO-2-01 and DCR 1598, 1599, 1600
	Electrical Measurements at Room, High and Low Temperatures	\boxtimes	As specified in Detail Specification	20/09	3	0	
	External Visual Inspection		ESCC Basic Specification No. 20500	20/09	3	0	
	Radiographic Inspection	\boxtimes	ESCC Basic Specification No. 20900	20/09	3	0	
	Destructive Physical Analysis		ESCC Basic Specification No. 21001				
Column 3 1 TV	Radiation	⊠	As specified in Detail Specification	19/48	4	0	



Component title:

AXOMACH AND SPACEFIBRE CABLE ASSEMBLY, AXOMACH AND SPACEFIBRE PCB CONNECTORS, AXOMACH AND SPACEFIBRE ACCESSORIES

Executive Member: CNES (FR)

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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
	Permanence of Marking	×	ESCC Basic Specification No. 24800	19/39, 19/23, 19/32, 20/02, 19/40	20	0	
Vs Vs	Mating and Unmating Forces	×	ESCC Generic Specification No. 3401	20/09	8	0	
Column 4 2 TVs	Insert Retention (in Shell)	×	ESCC Generic Specification No. 3401	19/39, 19/23, 19/32, 20/02, 19/40	20	0	
	Crimp Contact Tensile Strength		ESCC-Q-ST-70-26				Not applicable
le .			li di				7
Additional Tests							



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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