

RF COAXIAL CONNECTORS, TNC, VERY HIGH POWER, 50 OHMS BASED ON TYPE TNC-VHP  $\,$ Component Title:

Executive Member: CNES Date: 07/01/2021

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350A

Components (includi	ng series and famili	ies) s	ubmitted for Extension	of Qu	alification A	Approval:					_ 1
ESCC COMPONENT NO.	VARIANTS		RANGE OF COMPONENTS		ENTS	BASED ON			TEST VEHICLE / S	COMPONEN SIMILAR	ΙΤ
3402/027	01 & 02		Frequency Range 0- designed for RF Pov			TNC type			34020701B – 1939B samples 1 to 4- 1939A-samples 5 to 14		
3402/028 01 to 06			Straight and right angle adaptors,very high Power 50 Ohms			TNC type			R340202803B- R14370464 samples 1 to 5 and 5 bis R4020804B- R143771604 samples n°6 to 9 and 9 bis		
0			1 6 6				_				<del></del>
Component M RADIALL	anuiacturer	2	Location of Ma RADIALL (Usine de L'Isle d'At Z.I. Chesnes Tharat 38295 Saint Quentir	oeau) oie- BP	709	_	3	Date	of original qualification ap : 09/01/2018 ficate Ref No. 350	pproval:	4
		5					6				7
Maintenance of qualification testing:  Generic: 3402   Issue 4   :  Detail(s): 3402/027   Issue 2   3402/028   :			used:  No ⊠ Yes ☐ (supply details in Box 15)  Deviation from current Specifications:  No ⊠ Yes ☐ (Supply details)			x	reference and date: Test report n° 2019.44.5588 Rev-,18/12/2019 Test Report n°2020.39.5760 Rev-, 9/12/2020 VOQ information CNES ESCC3402-027 et 028_10.12.2020_V3, 10/12/2020				
Summary of procure	ment or equivalent	test r	esults during current v	alidity	period in su	pport of this	s ap	plicatio	on (those to ESCC listed fi	rst)	8
Project Name	Testing Le		LAT			Date code				Delivered	
See PID appendix 4											
PID changes since start of qualification  None □  Minor* ⊠				9 Current PID Verified by: Quadri Gianandrea, CNES  Name of Excutive Representative  Ref No: PAQP IDA 0024 (F)						10	
Major* □	*Provide details in	box:		Issu Rev		A 14/12/2020		. ,	Date:	12/12/2020	
Current Manufacturi	ag facilities surveys	d by	0.0	ONE	C ID C		ONIE	-0 0"	47/04/2020		11
Current Manufacturing	ng racilities surveye	a by:			S and JB Sa xecutive Re	•		<u>-</u> 5 or		(Date)	
Satisfactory:	Yes ⊠		,	plain			-,			(=)	
Report Reference:	CRvisite_radi	iall_1	7_01_2020.pdf								

# APPLICATION FOR EXTENSION OF ESCC QUALIFICATION APPROVAL Page 2 RF COAXIAL CONNECTORS, TNC, VERY HIGH POWER, 50 OHMS BASED ON TYPE TNC-VHP $\,$ Component title: Appl. No. Date: 07/01/2021 Executive Member: **CNES** 350A 12 Failure Analysis, DPA, NCCS available: Yes No $\boxtimes$ (Supply data) Ref. No's and purposes: 13 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. Date: 13/01/2021 JP. BUSSENOT, CNES (Signature of the Executive Coordinator) 14 Continuation of Boxes above:

Component title:

CNES

Executive Member:

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Non comp	pliance to ESCC requirements:		l	15
No.:	Specification	Paragraph	Non compliance	
Additiona	tasks required to achieve full compliance for	LESCC qualification or rationale for acceptability of	of	
noncomp	iance:			16
Executive	Manager Disposition			17
Application	n Approval: Yes 🗵 No 🗆			
Action / R				
			0.50.00.00	
			Digitally signed by Britta Schade	
			Date: 2021.02.03	
Date:			10:34:09 +01'00'  B. Schade: Head of the Product Assurance	
			and Safety Department	



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ANNEX 1: LIST OF TESTS DONE TO SUPPORT EXTENSION OF QUALIFICATION

Tests conducted in compliance with:

ESCC 3402 generic specification; Chart V (for ESCC/QPL parts); Or PID-TFD (for ESCC/QML parts)

Tests vehicle identification/description:

34020701B (DC1939A) 34020701B (DC1939B)	
340202803B (DC2026A), 340202804B (DC 2026A)	

ESCC 3402/027 issue 2; ESCC 3402/028 issue 2 Detail Specification reference:

Chart V	Test	Tick when done	Conditions	Date Code	Tested Qty	No. of Rejects	Comments if not performed Comments on Rejection
d.	Contact Resistance	$\boxtimes$	ESCC 3402, Para. 9.9	1939A & 1939B	8	0	
ıbgro	Corrosion		IEC 68-2-11	1939B	4	0	
al Su	Vibration		IEC 68-2-6	1939A	4	0	
chanic	Rapid Change of Temperature		IEC 68-2-14	1939A	4	0	
Environmental / Mechanical Subgroup	Permanence of Marking		ESCC 24800				N.A.
imenta	Cable Retention Force		ESCC 3402, Para. 9.14				N.A.
inviron	Endurance		ESCC 3402, Para. 9.18	1939A & 1939B	8	0	
Ш	Seal Test		ESCC 3402, Para. 9.7				N.A.
Electrical and Endurance Subgroup	Cabling and Crimping Capability		ESCC 3402, Para. 9.15				N.A.
	VSWR		ESCC 3402, Para. 9.16	1939A	6	0	
	RF Insertion Loss		ESCC 3402, Para. 9.19	1939A	6	0	
	Coupling Proof Torque		IEC 410	1939A	6	0	
	Contact Resistance		ESCC 3402, Para. 9.9	1939A	6	0	
	Seal Test		ESCC 3402, Para. 9.7				N.A.
	Plating Thickness (Hermetic)		ESCC 3402, Para. 9.29				N.A.
Additional Tests Deviation from Lot acceptance test (chart V):	Endurance: 50 mating/unmating cycles		See appendix A in ESCC3402/028 issue 2	2026A	4*	0	
	Vibration: sine and random	$\boxtimes$	See appendix A in ESCC3402/028 issue 2	2026A	4*	0	
	Mechanical Shock	$\boxtimes$	See appendix A in ESCC3402/028 issue 2	2026A	4*	0	
	Rapid change of temperature	$\boxtimes$	See appendix A in ESCC3402/028 issue 2	2026A	4*	0	
	Endurance: 450 mating/unmating cycles	$\boxtimes$	See appendix A in ESCC3402/028 issue 2	2026A	4*	0	

	Permanence of marking	×	See appendix A in ESCC3402/028 issue 2	2026A	4*	0	Not applicable on engraved parts
	External visual inspection		See appendix A in ESCC3402/028 issue 2	2026A	4*	0	
	DPA		See appendix A in ESCC3402/028 issue 2	2026A	2*	0	
	RF insertion Loss	$\boxtimes$	See appendix A in ESCC3402/028 issue 2	2026A	3*	0	
	VSWR	$\boxtimes$	See appendix A in ESCC3402/028 issue 2	2026A	3*	0	
	Coupling proof torque	$\boxtimes$	See appendix A in ESCC3402/028 issue 2	2026A	3*	0	
	Mating/unmating forces	$\boxtimes$	See appendix A in ESCC3402/028 issue 2	2026A	3*	0	
	Contact resistance		See appendix A in ESCC3402/028 issue 2	2026A	3*	0	
	External visual inspection		See appendix A in ESCC3402/028 issue 2	2026A	3*	0	
	Residual Magnetism		See appendix A in ESCC3402/028 issue 2	2026A	2*	0	
	Soldering proof		See appendix A in ESCC3402/028 issue 2	2026A	2*	0	
	RF Leakage		See appendix A in ESCC3402/028 issue 2	2026A	2*	0	
	High Temperature Storage		See appendix A in ESCC3402/028 issue 2	2026A	2*	0	
	External Visual Inspection	×	See appendix A in ESCC3402/028 issue 2	2026A	2*	0	
	Multipactor		See appendix A in ESCC3402/028 issue 2				Not applicable, no change of design
	Power Handling		See appendix A in ESCC3402/028 issue 2				Not applicable, no change of design
	Corona		See appendix A in ESCC3402/028 issue 2				Not applicable, no change of design
	External Visual Inspection		See appendix A in ESCC3402/028 issue 2				Not applicable, no change of design
Additional Tests	Power Handling	×	ESCC 3402/027 issue 2 Para 4.2.5 & 4.3.11	1939A	6	0	

Note: \*1 adaptor is equivalent to two connectors



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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.