



APPLICATION FOR EXTENSION OF ESCC QUALIFICATION APPROVAL

Component Title: Capacitors, Ceramic, Type II, types CNC 31 to CNC 34

Executive Member: CNES

Date: 29/10/2015

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Components (including series and families) submitted for Extension of Qualification Approval: 1

ESCC COMPONENT NO.	VARIANTS	RANGE OF COMPONENTS	BASED ON	TEST VEHICLE / S	COMPONENT SIMILAR
3001/037	01 to 04	All values, 16 and 25V	CNC3xNE	CNC31NE 6.8µF 25V CNC34NE 33µF 25V	
	05 to 08	All values, 16 and 25V	CNC3xPE	CNC32PE 4.7µF 25V CNC34PE 47µF 16V CNC34PE 39µF 25V	
	09 to 12	All values, 16 and 25V	CNC3xPLE		X
	13 to 16	All values, 16 and 25V	CNC3xLE		X

Component Manufacturer EXXELIA Technologies (ex-EXXELIA EUROFARAD)	2	Location of Manufacturing Plant(s)	3	Date of original qualification approval: Date: 15/11/2011	4
		1, rue des Temps Modernes 77600 CHANTELOUP EN BRIE FRANCE	Certificate Ref No. 315		

ESCC Specifications used for Maintenance of qualification testing: Generic: 3001 Issue: 1 Detail(s): 3001/03 Issue: 1 7	5	Deviations to LVT testing and Detail Specification used: No <input checked="" type="checkbox"/> Yes <input type="checkbox"/> (supply details in Box 15) Deviation from current Specifications: No <input checked="" type="checkbox"/> Yes <input type="checkbox"/> (Supply details)	6	Qualification Extension Report reference and date: PV 13/1272 Dec. 2013 and PV 15/0657 Sept. 2015 PV 14/0383 Apr. 2014 and PV 15/0657 Sept. 2015 PV 14/0386 Apr. 2014 and PV 15/0658 Sept. 2015 PV 14/0066 Jan. 2014 and PV 15/0658 Sept. 2015	7
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Summary of procurement or equivalent test results during current validity period in support of this application (those to ESCC listed first) 8

Project Name	Testing Level	LAT	Date code	Quantity Delivered
(See box 22 in Annex 2)				
Click here to enter text.	Click here to enter text.	Click here to enter text.	Click here to enter text.	Click here to enter text.

PID changes since start of qualification None <input type="checkbox"/> Minor* <input type="checkbox"/> Major* <input checked="" type="checkbox"/> *Provide details in box: 19	9	Current PID Verified by: CNES Name of Executive Representative Ref No: 640.03.390 Issue: F Date: 18/06/2015 Rev Date: 17/06/2015	10
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Current Manufacturing facilities surveyed by: ESA and CNES on 02/03/2011 (Name of Executive Representative) (Date)	11
Satisfactory: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Explain	
Report Reference: QCS/LB/110203, 19/02/2011	



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Failure Analysis, DPA, NCCS available: Yes No (Supply data)

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Ref. No's and purposes:

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 20); - 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.

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Date: 29/10/2015

JP. BUSSENOT

(Signature of the Executive Coordinator)
chronologies report C

Continuation of Boxes above:

d in EXXELIA

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Box 1 - Test vehicles submitted to LAT as described below:

Stock CNC3X							Essais à effectuer
Désignation	Date Code	Lot	Quantité dispo	Niveau	PV	Spéc	
CNC32PE 4.7µF ±10% 25V	13.48	E13110057	14	C-	13/1272		LAT2 groupé avec 12 pièces de chaque
CNC31NE 6.8µF ±10% 25V	14.13	E14010225	12	C-	14/0383		
CNC34PE 47µF ±10% 16V	14.13	E14020145	4	C-	14/0386		Filière LAT1 sur gauche (1+1+1) et droite (4+2+2)
CNC34PE 39µF ±20% 25V	13.51	E13110186	4	B-	14/0066		
CNC34NE 33µF ±10% 25V	14.11	E14020072	5	EM	N/A		



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Non compliance to ESCC requirements:

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No.:	Specification	Paragraph	Non compliance

Additional tasks required to achieve full compliance for ESCC qualification or rationale for acceptability of noncompliance:

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Executive Manager Disposition

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Application Approval: Yes No

Action / Remarks:

Date:

Signature, ESA Representative



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

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Tests conducted in compliance with:

- ESCC 3001 generic specification; Chart F4 (for ESCC/QPL parts);
- PID- (for ESCC/QML parts)
- TFD (for ESCC/QML parts)

Tests vehicle identification/description:

300103706C – 475KA	CNC32PE 4.7µF ±10% 25V DC 1348
300103701C – 685KA	CNC31NE 6.8µF ±10% 25V DC 1413
300103708B – 396MA	CNC34PE 39µF ±20% 25V DC 1351
300103708C – 476KX	CNC34PE 47µF ±10% 16V DC 1413
CNC34NE – 336KA (Engineering Models)	CNC34NE 33µF ±10% 25V DC 1411

Detail Specification reference: 3001/037

Chart F4	Test	Tick when done	Conditions	Date Code	Tested Qty	N° of Rejects	Comments if not performed. Comments on Rejection	
Subgroup 1	Robustness of Terminations	<input checked="" type="checkbox"/>	IEC 60068-2-21	1413 1351 1411	1 1 1	0		
	Resistance to Soldering Heat	<input checked="" type="checkbox"/>	IEC 60068-2-20, test Tb	1413 1351 1411	1 1 1	0		
	External Visual Inspection	<input checked="" type="checkbox"/>	ESCC 20500	1413 1351 1411	1 1 1	0		
	Climatic test Sequence	<input checked="" type="checkbox"/>	ESCC 3001, Para 8.11	1413 1351 1411	1 1 1	0		
		<input type="checkbox"/>						
	Rapid Change Of Temperature	<input checked="" type="checkbox"/>	IEC 60068-2-14, test Na	1413 1351 1411	2 2 4	0		
	Vibration	<input checked="" type="checkbox"/>	IEC 60068-2-6, test Fc	1413 1351 1411	2 2 4	0		
	Shock	<input checked="" type="checkbox"/>	IEC 60068-2-27, test Ea	1413 1351 1411	2 2 4	0		
	External Visual Inspection	<input checked="" type="checkbox"/>	ESCC 20500	1413 1351 1411	2 2 4	0		
	Climatic test Sequence	<input checked="" type="checkbox"/>	ESCC 3001, Para 8.11	1413 1351 1411	2 2 4	0		
	Damp Heat Steady State	<input type="checkbox"/>	IEC 60068-2-78, test Cab					Not Applicable to Chart V
Subgroup 2	Operating Life	<input checked="" type="checkbox"/>	IEC 60384-1 clause 4.23	1348 1413	12 12	0		
		<input type="checkbox"/>						
		<input type="checkbox"/>						
		<input type="checkbox"/>						
Subgroup 3	Capacitance-Temperature Characteristic	<input type="checkbox"/>	ESCC 3001, Para 8.16				Not performed	
		<input type="checkbox"/>						
	Solderability	<input type="checkbox"/>	IEC 60068-2-20, test Ta				Not performed. Similarity with CNC5x	
Additional tests	Permanence of marking	<input type="checkbox"/>	ESCC 24800				Not performed. Similarity with CNC5x	
		<input type="checkbox"/>						

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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.