

		APPLICATION FOR ESCC QUALIFICATION APPROVAL				Page 1
		Component Title: RESISTORS, HEATERS, FLEXIBLE, SINGLE AND DOUBLE LAYER Executive Member: ESA Date: 06/01/2015				Appl. No. 330
Components (including series and families) submitted for Qualification Approval						1
ESCC COMPONENT NO.	VARIANTS	RANGE OF COMPONENTS	BASED ON	TEST VEHICLE / S	COMPONENT SIMILAR	
4009034XXRYYYY	01 thru 48	as per specification and PID, Ryyyy	-	Variants 01 and 34	All other variants	
Component Manufacturer IRCA, RICA Division		Location of Manufacturing Plant Via Podgora 26 31029 Vittorio Veneto (TV), Italy		ESCC Specification used for Qualification Generic: ESCC 4009 Issue: 5 Detail/s: ESCC 4009/004 Issue: 1		4
Qualification Report Reference and date: EFR.CMP.R.180/14 and 181.14 Date: 16/09/2014			PID used for manufacturing Qualification Lot Ref No: 5.34.16 Issue: 20 Date: 27/07/2011			6
PID changes since start of qualification None <input type="checkbox"/> Minor* <input type="checkbox"/> Major* <input checked="" type="checkbox"/> (* Details not published, provided in confidential annex 2.)			Current PID Verified by ESA Ref No: 5.34.16 Issue: 22 Date: 03/12/2014 Name of Executive Representative			8
Current Manufacturing facilities surveyed by: ESA 23/10/2013 (Name of Executive Responsible) (Date) RIC-AUD-2013						9
Report Reference Satisfactory: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Explain						
Quality and Reliability Data Evaluation testing performed Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Report Ref. No.: (Unreferenced) RICA MEMO Date: 01/01/2014 Equivalent Data: N/A Certification:				Failure analysis, DPA, NCCS available Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> (supply data) Ref Nos. and purpose:		10



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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: 26/01/2015


(Signature of the Executive Coordinator)

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

From box6: The PID of RICA has been approved since 1992 for 4009/002 product. The differences in product configuration and production controls between 4009/002 and 4009/004 product have been addressed and approved by ESA once the evaluation tests were completed and in parallel with the progress of the qualification activities. The final version of the PID, rev. 16, accounts for the specifics of both 4009/002 and 4009/004 product.

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Non compliance to ESCC requirements: 13

No.	Specification	Paragraph	Non compliance
1	4009/004		The specification was still in draft form when the qualification samples were manufactured and tested
2	20100	6.2	The manufacture and test of the qualification samples predated the actual final revision of the PID up to its valid rev. 22


Additional tasks required to achieve full compliance for ESCC qualification or rationale for acceptability of noncompliance: 14

No additional tasks required, the ESCC Detail specification and the PID rev 22 have been approved by ESA as ESCC Executive member and there are no discrepancies nor gaps between the final versions of both documents and the actual configuration and test sequence applied to the qualification samples, so there is only an anomaly in the mismatch between publication dates and manufacturing/test files.

Executive Manager Disposition 15

Application Approval: Yes ☐ No ☐

Action / Remarks:



Date:

Signature, ESA Representative

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ANNEX 1: LIST OF TESTS DONE TO SUPPORT QUALIFICATION

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Tests conducted in compliance with:

- ESCC 4009 generic specification; Chart F4 (for ESCC/QPL parts);
- Or PID-TFD (for ESCC/QML parts)

Tests vehicle identification/description:

400900434R2406, d.c. 1411A	
400900401R2407, d.c. 1411A	

Detail Specification reference: ESCC 4009/004

Chart F4	Test	Tick when done	Conditions	Date Code	Tested Qty	N° of Rejects	Comments if not performed, Comments on Rejection
Environmental/ Mechanical Subgroup	Robustness of Terminations	<input checked="" type="checkbox"/>	IEC 60066-2-21	1411A	7+7	0	
	Climatic Sequence	<input checked="" type="checkbox"/>	ESCC 4009, Para. 8.7	1411A	7+7	0	
	External Visual Inspection	<input checked="" type="checkbox"/>	ESCC 20500	1411A	7+7	0	
Endurance Subgroup	Operating Life	<input checked="" type="checkbox"/>	ESCC 4009, Para. 8.8	1411A	13+7	0	
	External Visual Inspection	<input checked="" type="checkbox"/>	ESCC 20500	1411A	13+7	0	
	Permanence of marking	<input checked="" type="checkbox"/>	ESCC 24800	1411A	13+7	0	
Additional tests	Additional Life	<input checked="" type="checkbox"/>	2000h, glued to Al plate	1411A	5	0	
	External Visual Inspection	<input checked="" type="checkbox"/>	ESCC 2054009	1411A	5	0	
	Electrical measurements at Room temperature	<input checked="" type="checkbox"/>	ESCC 4009	1411A	5	0	



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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