APPLICATION FOR EXTENSION OF ESCC QUALIFICATION APPROVAL

Page 1

Component Title: CONNECTORS, RF, COAXIAL, SOLDER AND CRIMP CONTACTS, MALE, FEMALE ADAPTORS AND CONNECTING PIECES, BASED ON TYPE SMA

Appl. No. 68R

Executive Member: CNES Date: 27/06/2022

1

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

ESCC COMPONENT NO.	VARIANTS	RANGE OF COMPONENTS	BASED ON	TEST VEHICLE / S	COMPONENT SIMILAR
3402/001	01 to 35 and 37 to 47	Frequency Range 0-18 GHz	SMA	340200101B101 340200102B101	
3402/002	01 to 24, 27 to 58, 66 to 82, 85 to 89	Crimp or solder-type contact for flexible and semi-rigid cables, contacts for micro strip		340200288B301	
3402/003	01 to 6 and 8 to 14	Shell material and finish: Berylium copper gold plated, copper or nickel underplate; stainless steel,		340200305B401 340200313B101 340200307B101 see box 12	
		Hermetic variants are not included (see NCCS 2CRAD07) in this revision			

2 Component Manufacturer

Radiall

3 Location of Manufacturing Plant(s)

RADIALL (Centr'alp), 641 Rue Emile Romanet, 38340 Voreppe (France)

4

Date of original qualification approval:
Date: 01/02/1981

Certificate Ref No. 68

5

ESCC Specifications used for Maintenance of qualification testing:

Generic: 3402 Issue 5:

Detail(s): 3402/001 Issue 3 :

3402/002 Issue 8
3402/003 Issue 4

6

Deviations to LVT testing and Detail Specification used:

No ☐ Yes ☒ (supply details in Box 15)

Deviation from current Specifications:

No ☐ Yes ☒ (Supply details)

7

Qualification Extension Report reference and date:

TEST REPORT n° 2022.17.6101 Rev1, 17/06/2022
TEST REPORT n° 2022.18.6109 Rev1 13/05/2022
TEST REPORT n°CHR_C2021.25.0102 rev.2, 24/05/2022

8

Summary of procurement or equivalent test results during current validity period in support of this application (those to ESCC listed first)

Project Name	Testing Level	LAT	Date code	Quantity Delivered
See PID annex 4				

9

PID changes since start of qualification

None ☐
Minor* ☐
Major* ☒ *Provide details in box: see box 14

10

Current **PID** Verified by: G. Quadri,CNES
Name of Excutive Representative Agency

Ref No: PAQP-VOR 0064 (F)
Issue: 01, rev.A Date: 06/06/2022
Rev Date: 27/06/2022

11

Current Manufacturing facilities surveyed by: CNES/ESA on 12/04/2022
(Name of Executive Representative Agency) (Date)

Satisfactory: Yes ☒ No ☐ Explain

Report Reference: DTN/QE/CQ-2022.0005817

12

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

Ref. No's and purposes: 2CRAD207: Delay of manufacturing of hermetical connector ESCC 340200307B101 OPEN
2CRAD205-deviations about ESCC qualification (see box 14) CLOSED

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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 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: 27/06/2022

(Signature of the Executive Coordinator)

Continuation of Boxes above:

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Appendix 1 includes the application for the Maintenance of Qualification testing performed in the manufacturing plant in Isle d'Abeau before to move to the new manufacturing place in Centr'Alp.

Box 1: variants 86, 87, 88, 89 for the ESCC 3402/002 have been added with respects to the former certificate 68Q

Box 9:

PID refers to the generic specification ESCC 3402 issue 4 (no screening applied on test vehicles) except for qualification chart which deals with chart F4 of the issue 5. Test vehicles were manufactured in compliance with ESCC3402 issue 4. Test vehicles were manufactured in compliance with ESCC3402 issue 4 to allow a comparison with the qualification extension performed at IDA (n.283G)

Box 11

This revised application refers to the new manufacturing site of Centralp that takes the place of IDA, waiting for a final revision including as well hermetic variants

Box 12

NCCS 2CRAD207: A further revision n.2 will be necessary to include hermetic variants once the data available

NCSS 2CRAD205:several deviations are listed hereafter:

1/The screening of final production tests was carried out in accordance with chart II of the specification ESCC3402 Issue 4 to allow a comparison with the qualification extension performed on Isle d'Abeau

2/ The detail specifications applied for the qualification are the draft versions associated with the update of the ESCC 3402 issue 5

3/ For the qualification of connectors to be wired, A RFD S21023 REV A has been applied

15

Non compliance to ESCC requirements:

No.:	Specification	Paragraph	Non compliance
1	ESCC 3402 issue 5	12.4	Deviation from Chart F4 Sequence

16

Additional tasks required to achieve full compliance for ESCC qualification or rationale for acceptability of non-compliance

The justification for the deviation is described hereafter:

For the following categories which refer to connector to be cabled or crimped:
ESCC3402/001 Variants from 01 to 04-09-10, 36 to 43
ESCC3402/002 Variants from 01 to 04-09-10-53-66 to 69
ESCC3402/001 Variants 05 to 08-12 to 15-26-44-47 plus variants 01 to 04-09-10, 36 to 43
ESCC3402/002 Variants 05 to 08-11 to 14-70 plus variants 01 to 04-09-10-53-66 to 69

A RFD S2103 rev. A has been applied and consists in the following steps:
In Lot Validation testing Flow Chart (F4) of ESCC3402 issue 5, Random vibration and Electrical measurement are required: cable assembly is needed to electrically characterize the connectors.

Being not sustainable the random vibration level (50 grms) demanded by the ESCC3402 issue 5 for the concerned cable assemblies, additional pigtails have been dedicated to this purpose. In parallel taking advantage of a renewal of a capability approval under CNES control for cable assemblies, ESCC3408 chart F4B has been deployed only for connectors in these specific configurations (i.e. the ones to be crimped and brazed for cables).

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Executive Manager Disposition

Application Approval: Yes ☒ No ☐

Action / Remarks:

Date:

B. Schade: Head of the Product Assurance and Safety Department

ANNEX 1: LIST OF TESTS DONE TO SUPPORT EXTENSION OF QUALIFICATION 18

Tests conducted in compliance with:

- ESCC 3402 generic specification; Chart V (for ESCC/QPL parts);
- Or PID-TFD PAQP-A 0014 (F) issue 11 (for ESCC/QML parts)

Tests vehicle identification/description:

ESCC 340200102B101 (DC2210A) ESCC 340200101B101 (2210A)	
ESCC340200288B301 (DC 2211A) ESCC340200313B101 (DC2210A) ESCC340200305B401 (DC2210A)	ESCC 340200101B101(DC2044) ESCC340200102B101(DC1751)

Detail Specification reference: ESCC3402/001 issue 3, ESCC34002/002 issue 8, ESCC3402/003 issue 4

Chart	Test	Tick when done	Conditions	Date Code	Tested Qty	No. of Rejects	Comments if not performed. Comments on Rejection
ESCC 3402 issue 5 chart F4	Mating and unmating Force	☒	ESCC 3402, Para. 8.11	2211A 2210A 2210A	2,2,1	0	
	Random Vibration	☒	ESCC 3402, Para. 8.15	2211A 2210A 2210A	2,2,1	0	
	Mechanical shock	☒	ESCC 3402, Para. 8.16	2211A 2210A 2210A	2,2,1	0	
	Temperature cycling	☒	ESCC 3402, Para. 8.8	2211A 2210A 2210A	2,2,1	0	
	Thermal Stability of insertion loss	☒	ESCC 3402, Para. 8.17	2210A 2210A	2,1	0	Only applicable to connector transition, adaptor and connecting piece components
	Shielding effectiveness	☒	ESCC 3402, Para. 8.18	2210A 2210A	2,1	0	Only applicable to connector transition, adaptor and connecting piece components
	Electrical measurements at room temperature	☒	ESCC 3402, Para. 8.9.9	2211A 2210A 2210A	2,2,1	0	
	Endurance	☒	ESCC 3402, Para. 8.19	2211A 2210A 2210A	2,2,1	0	
	Seal	☐	ESCC 3402, Para. 8.13	Click here to enter text.	0	0	Only applicable to hermetically sealed, barrier-sealed or panel-sealed components
	Coupling Proof Torque	☒	ESCC 3402, Para. 8.10	2211A 2210A 2210A	2,2,1	0	
	External Visual Inspection	☒	ESCC 3402, Para. 8.14	2211A 2210A 2210A	2,2,1	0	
	Destructive Physical Analysis	☒	ESCC 3402, Para. 8.17	2211A	1	0	

ADDITIONAL TEST	External visual inspection initial	☒	ESCC 3402, Para. 8.14	2210A 2210A	3,3	0	No electrical test performed on pigtails only visual inspection before and after random vibration (see RFD S2103 rev. A)
	Random vibration	☒	ESCC 3402, Para. 8.15	2210A 2210A	3,3	0	No electrical test performed on pigtails only visual inspection before and after random vibration (see RFD S2103 rev. A)
	External visual inspection final	☒	ESCC 3402, Para. 8.14	2210A 2210A	3,3	0	No electrical test performed on pigtails only visual inspection before and after random vibration (see RFD S2103 rev. A)
ESCC 3408 issue chart F4B	VISUAL INSPECTION	☒	ESCC 3408, Para. 8.15	2044, 1751	10,10	0	
	RF MEASUREMENT (room temperature)	☒	ESCC 3408, Para. 8.14	2044, 1751	10,10	0	
	SHIELDING EFFECTIVENESS	☒	ESCC 3408, Para. 8.15	2044, 1751	10,10	0	
	RF MEASUREMENT (room temperature)	☒	ESCC 3408, Para. 8.14	2044, 1751	10,10	0	
	THERMAL STABILITY OF INSERTION LOSS	☒	ESCC 3408, Para. 8.15	2044, 1751	10,10	0	
	RF MEASUREMENT (room temperature)	☒	ESCC 3408, Para. 8.14	2044, 1751	10,10	0	
	THERMAL CYCLING	☒	ESCC 3408, Para. 8.15	2044, 1751	10,10	0	
	RF MEASUREMENT (room temperature)	☒	ESCC 3408, Para. 8.14	2044, 1751	10,10	0	
	THERMAL STABILITY OF INSERTION LOSS	☒	ESCC 3408, Para. 8.15	2044, 1751	10,10	0	
	RF MEASUREMENT (room temperature)	☒	ESCC 3408, Para. 8.14	2044, 1751	10,10	0	
	SHIELDING EFFECTIVENESS	☒	ESCC 3408, Para. 8.15	2044, 1751	10,10	0	
	VISUAL INSPECTION	☒	ESCC 3408, Para. 8.14	2044, 1751	10,10	0	
	RF MEASUREMENT AT HIGH AND LOW TEMPERATURE	☒	ESCC 3408, Para. 8.14	2044, 1751	10,10	0	
	RF MEASUREMENT (room temperature)	☒	ESCC 3408, Para. 8.15	2044, 1751	10,10	0	
	COUPLING PROOF TORQUE	☒	ESCC 3408, Para. 8.14	2044, 1751	10,10	0	
	VISUAL INSPECTION	☒	ESCC 3408, Para. 8.15	2044, 1751	10,10	0	
	X-RAY	☒	ESCC 3408, Para. 8.14	2044, 1751	10,10	0	
	MICROSECTIONING	☒	ESCC 3402, Para. 8.15	2044, 1751	10,10	0	

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.

Appendix 1 **includes the application for the Maintenance of Qualification testing performed in the manufacturing plant in Isle d'Abeau before to move to the new manufacturing place in Centr'Alp.**

ESCC	APPLICATION FOR EXTENSION OF ESCC QUALIFICATION APPROVAL	Page 1
	Component Title: CONNECTORS, RF, COAXIAL, SOLDER AND CRIMP CONTACTS, MALE, FEMALE ADAPTORS AND CONNECTING PIECES, BASED ON TYPE SMA	Appl. No.
	Executive Member: CNES Date: 27/06/2022	68R

1

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

ESCC COMPONENT NO.	VARIANTS	RANGE OF COMPONENTS	BASED ON	TEST VEHICLE / S	COMPONENT SIMILAR
3402/001	01 to 47	Frequency Range 0-18 GHz	SMA	340200101B101 340200102B101	
3402/002	01 to 89	Crimp or solder-type contact for flexible and semi-rigid cables, contacts for micro strip		340200288B301	
3402/003	01 to 14	Shell material and finish: Berylium copper gold plated, copper or nickel underplate; stainless steel,		340200305B401 340200313B101 340200307B101 see box 12	

2 Component Manufacturer

Radiall

3 Location of Manufacturing Plant(s)

RADIALL (Usine de L'Isle d'Abeau) Z.I. Chesnes Tharabie- BP 709 38295 Saint Quentin Fallavier (France)

4

Date of original qualification approval:

Date: 01/02/1981

Certificate Ref No. 68

5

ESCC Specifications used for Maintenance of qualification testing:

Generic: 3402 Issue 4:

Detail(s): 3402/001 Issue 3 :

3402/002 Issue 8

3402/003 Issue 4

6

Deviations to LVT testing and Detail Specification used:

No ☐ Yes ☒ (supply details in Box 15)

Deviation from current Specifications:

No ☐ Yes ☒ (Supply details)

7

Qualification Extension Report reference and date:

TEST REPORT n° 2021.40.5989 Rev1, 03/12/2021
TEST REPORT n°2022.02.6053 Rev1, 24/01/2022
TEST REPORT n°2022.15.6091 Rev2, 20/06/2022
TEST REPORT n°CHR_C2021.25.0102 rev.2, 24/05/2022

8

Summary of procurement or equivalent test results during current validity period in support of this application (those to ESCC listed first)

Project Name	Testing Level	LAT	Date code	Quantity Delivered
See PID annex 4				

9

PID changes since start of qualification

None ☐

Minor* ☐

Major* ☒ *Provide details in box: see box 14

10

Current **PID** Verified by: CNES

Name of Excutive Representative

Ref No: PAQP- 0014(F)

Issue: 11, rev.A Date: 20/05/2022

Rev Date: 27/06/2022

11

Current Manufacturing facilities surveyed by: CNES on 16/01/2020

(Name of Executive Representative) (Date)

Satisfactory: Yes ☒ No ☐ Explain

Report Reference: CRIM_CNES_16_01_2020

Component title: CONNECTORS, RF, COAXIAL, SOLDER AND CRIMP CONTACTS, MALE, FEMALE ADAPTORS AND CONNECTING PIECES, BASED ON TYPE SMA

Appl. No. 68R

Executive Member: CNES Date: 27/06/2022

12

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

Ref. No's and purposes: 2CRAD201: Delay of manufacturing of hermetical connector ESCC 340200307B101 CLOSED

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: 27/06/2022

(Signature of the Executive Coordinator)

Continuation of Boxes above:

14

Box 1: variants 86, 87, 88, 89 for the ESCC 3402/002 have been added with respects to the former certificate 68Q

Box 9:

PID refers to the generic specification ESCC 3402 issue 4 (no screening applied on test vehicles) except for qualification chart which deals with chart F4 of the issue 5. Test vehicles were manufactured in compliance with ESCC3402 issue 4

15

Non compliance to ESCC requirements:

No.:	Specification	Paragraph	Non compliance
1	ESCC 3402 issue 5	12.4	Deviation from Chart F4 Sequence

16

Additional tasks required to achieve full compliance for ESCC qualification or rationale for acceptability of non-compliance

The justification for the deviation is described hereafter:

For the following categories which refer to connector to be cabled or crimped:
ESCC3402/001 Variants from 01 to 04-09-10, 36 to 43
ESCC3402/002 Variants from 01 to 04-09-10-53-66 to 69
ESCC3402/001 Variants 05 to 08-12 to 15-26-44-47 plus variants 01 to 04-09-10, 36 to 43
ESCC3402/002 Variants 05 to 08-11 to 14-70 plus variants 01 to 04-09-10-53-66 to 69

A RFD S2103 rev. A has been applied and consists in the following steps:
In Lot Validation testing Flow Chart (F4) of ESCC3402 issue 5, Random vibration and Electrical measurement are required: cable assembly is needed to electrically characterize the connectors.

Being not sustainable the random vibration level (50 grms) demanded by the ESCC3402 issue 5 for the concerned cable assemblies, additional pigtails have been dedicated to this purpose. In parallel taking advantage of a renewal of a capability approval under CNES control for cable assemblies, ESCC3408 chart F4B has been deployed only for connectors in these specific configurations (i.e. the ones to be crimped and brazed for cables).

ANNEX 1: LIST OF TESTS DONE TO SUPPORT EXTENSION OF QUALIFICATION 18

Tests conducted in compliance with:

- ESCC 3402 generic specification; Chart V (for ESCC/QPL parts);
- Or PID-TFD PAQP-A 0014 (F) issue 11 (for ESCC/QML parts)

Tests vehicle identification/description:

ESCC 340200102B101 (DC2147A) ESCC 340200101B101 (2142A)	
ESCC340200288B301 (DC 2126 A) ESCC340200313B101 (DC2109A) ESCC340200305B401 (DC2109A)	ESCC 340200101B101(DC2044) ESCC340200102B101(DC1751) ESCC340200307B101 (DC2203A)

Detail Specification reference: ESCC3402/001 issue 3, ESCC34002/002 issue 8, ESCC3402/003 issue 4

Chart	Test	Tick when done	Conditions	Date Code	Tested Qty	No. of Rejects	Comments if not performed. Comments on Rejection
ESCC 3402 issue 5 chart F4	Mating and unmating Force	☒	ESCC 3402, Para. 8.11	2126A 2109A 2109A 2203A	2,2,1,3	0	
	Random Vibration	☒	ESCC 3402, Para. 8.15	2126A 2109A 2109A 2203A	2,2,1,3	0	
	Mechanical shock	☒	ESCC 3402, Para. 8.16	2126A 2109A 2109A 2203A	2,2,1,3	0	
	Temperature cycling	☒	ESCC 3402, Para. 8.8	2126A 2109A 2109A 2203A	2,2,1,3	0	
	Thermal Stability of insertion loss	☒	ESCC 3402, Para. 8.17	2109A 2109A 2203A	2,1,3	0	Only applicable to connector transition, adaptor and connecting piece components
	Shielding effectiveness	☒	ESCC 3402, Para. 8.18	2109A 2109A 2203A	2,1,3	0	Only applicable to connector transition, adaptor and connecting piece components
	Electrical measurements at room temperature	☒	ESCC 3402, Para. 8.9.9	2126A 2109A 2109A 2203A	2,2,1,3	0	
	Endurance	☒	ESCC 3402, Para. 8.19	2126A 2109A 2109A	2,2,1,3	0	
	Seal	☒	ESCC 3402, Para. 8.13	2203A	3	0	Only applicable to hermetically sealed, barrier-sealed or panel-sealed components
	Coupling Proof Torque	☒	ESCC 3402, Para. 8.10	2126A 2109A 2109A 2203A	2,2,1,3	0	
	External Visual Inspection	☒	ESCC 3402, Para. 8.14	2126A 2109A 2109A 2203A	2,2,1,3	0	

	Destructive Physical Analysis	☐	ESCC 3402, Para. 8.17				Not applicable for qualification extension
ADDITIONAL TEST	External visual inspection initial	☒	ESCC 3402, Para. 8.14	2147A 2142A	3,3	0	No electrical test performed on pigtails only visual inspection before and after random vibration (see RFD S2103 rev. A)
	Random vibration	☒	ESCC 3402, Para. 8.15	2147A 2142A	3,3	0	No electrical test performed on pigtails only visual inspection before and after random vibration (see RFD S2103 rev. A)
	External visual inspection final	☒	ESCC 3402, Para. 8.14	2147A 2142A	3,3	0	No electrical test performed on pigtails only visual inspection before and after random vibration (see RFD S2103 rev. A)
ESCC 3408 issue chart F4B	VISUAL INSPECTION	☒	ESCC 3408, Para. 8.15	2044, 1751	10,10	0	
	RF MEASUREMENT (room temperature)	☒	ESCC 3408, Para. 8.14	2044, 1751	10,10	0	
	SHIELDING EFFECTIVENESS	☒	ESCC 3408, Para. 8.15	2044, 1751	10,10	0	
	RF MEASUREMENT (room temperature)	☒	ESCC 3408, Para. 8.14	2044, 1751	10,10	0	
	THERMAL STABILITY OF INSERTION LOSS	☒	ESCC 3408, Para. 8.15	2044, 1751	10,10	0	
	RF MEASUREMENT (room temperature)	☒	ESCC 3408, Para. 8.14	2044, 1751	10,10	0	
	THERMAL CYCLING	☒	ESCC 3408, Para. 8.15	2044, 1751	10,10	0	
	RF MEASUREMENT (room temperature)	☒	ESCC 3408, Para. 8.14	2044, 1751	10,10	0	
	THERMAL STABILITY OF INSERTION LOSS	☒	ESCC 3408, Para. 8.15	2044, 1751	10,10	0	
	RF MEASUREMENT (room temperature)	☒	ESCC 3408, Para. 8.14	2044, 1751	10,10	0	
	SHIELDING EFFECTIVENESS	☒	ESCC 3408, Para. 8.15	2044, 1751	10,10	0	
	VISUAL INSPECTION	☒	ESCC 3408, Para. 8.14	2044, 1751	10,10	0	
	RF MEASUREMENT AT HIGH AND LOW TEMPERATURE	☒	ESCC 3408, Para. 8.14	2044, 1751	10,10	0	
	RF MEASUREMENT (room temperature)	☒	ESCC 3408, Para. 8.15	2044, 1751	10,10	0	
	COUPLING PROOF TORQUE	☒	ESCC 3408, Para. 8.14	2044, 1751	10,10	0	
	VISUAL INSPECTION	☒	ESCC 3408, Para. 8.15	2044, 1751	10,10	0	
	X-RAY	☒	ESCC 3408, Para. 8.14	2044, 1751	10,10	0	
	MICROSECTIONING	☒	ESCC 3402, Para. 8.15	2044, 1751	10,10	0	

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.