



**estec**

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For the attention of Mr O. Masson

**Your ref.**            **140P**  
**Our ref.**            **TEC-QES/HHE/171119**

**Noordwijk, 24 November 2017**  
**Subject: ESCC Qualification Certificate for Connectors**

Dear Sir,

We are pleased to inform you that, based on a review of the Lot Acceptance Test Report by the ESCC Executive, your plant in Dole, France remains qualified for the supply of Connectors, Electrical, Rectangular, Microminiature, Crimp Contact, based on Type MDM.

Please note that, as specified in the relevant Certificate, the qualification status of the subject devices will be valid until September 2019.

If after this date, you wish to maintain the qualification status, you are required to notify your ESCC Executive Representative (ie. CNES, Toulouse) by letter, copying the ESCC Executive Secretariat (address above, Attention TEC-QES), 2 months before the actual expiry date. At the same time, you should then provide ESCC Executive Representative with the following documents:

- Certificate of Compliance.
- List of agreed changes – if any – in manufacturing processes and/or materials used.
- List of hi-rel components supplied by your above mentioned plant during the preceding period (including the identification of the procurement testing level).
- Test evidence.

Upon receipt of these items and after investigation into your customers' experience regarding delivery times and quality of components supplied for European space projects, your ESCC Executive Representative will forward to the ESCC Executive an application for extension of Qualification Approval.

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The ESCC Executive will:

- (a) if its findings are satisfactory immediately extend the qualification period by 2 years
- (b) if the situation is not satisfactory define the actions required to achieve a maintenance of qualification status.

Please be reminded that it is not permitted to mark components for space application with the ESA symbol after the qualification validity period has expired.

Yours faithfully,

A handwritten signature in blue ink, appearing to read 'B. Schade'.

B. Schade  
Head of the Product Assurance  
and Safety Department

Encl.

cc.  
J.P. Bussenot, CNES, Toulouse  
A. Pesce, ESA, TEC-QES

6.2.5 Microminiature, Crimp Contacts

CONNECTORS, ELECTRICAL, RECTANGULAR, MICROMINIATURE, CRIMP CONTACT, BASED ON TYPE MDM				140P
Procurement Specifications	Manufacturer	Nature of Approval	Supervising Authority	Initial Qualification Date
Generic ESCC 3401	C&K COMPONENTS Dole France	Qualification	CNES	Oct 1986
Detail ESCC		Remarks 3401/029 termination types GMR7580 and CMR7590 are NOT qualified		
3401/029, 3401/041, 3401/032, 3401/087				
<p>Qualified range:</p> <p>3401/029: 01 and 02            3401/041: 01 to 07            3401/032: 03, 04, 07 to 17            3401/087: 01 to 56</p> <p>Layout: 9 - 15 - 21- 25 - 31 - 37 - 51 Contacts, Non removable crimp contacts</p> <p>Termination types: AWG 25: Uninsulated rigid wire. Bent and straight PCB - Max rated: 2.5 A            AWG 26: ESCC 390101302, ESCC 390100256, ESCC 390101203            - Max rated: 2.5 A            AWG 28: ESCC 390101301, ESCC 390100261, ESCC 390101202            - Max rated: 1.5 A            Solder bucket – Max rated 2.5 A</p> <p>Nickel or Gold Plated Shells</p> <p>Operating Temperature Range (°C): -55 to +125</p>				



**european space agency**  
**agence spatiale européenne**

## **Certificate of Qualification No. 140P**

**This is to certify that C&K Components, Dole, France has been qualified by ESA for the supply of Connectors, Electrical, Rectangular, Microminiature, Crimp Contact, based on Type MDM for use in ESA space programmes, according to ESCC Generic Specification 3401 and associated Detail Specifications 3401/029, 3401/041 and 3401/032 as recommended by the Space Components Steering Board.**

**This certificate is valid until September 2019.**

**Head of the Product Assurance  
and Safety Department**

**Date**

**24 November 2017**