



FÉDÉRATION AÉRONAUTIQUE INTERNATIONALE

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FAI AEROMODELLING COMMISSION (CIAM) ELECTRONIC DEVICES IN COMPETITIONS WORKING GROUP (EDIC-WG)

References:

FAI web site: www.fai.org
CIAM website: www.fai.org/aeromodelling

To: CIAM web site under F3EEL Approvals
CIAM Technical Secretary
F3E Sub Committee

Copy: Manufacturer Concerned

Date: March 20th, 2023

CIAM APPROVAL FOR F3E Electronic Limiter (F3EEL)

Approval Reference: F3EEL002
Manufacturer: Fiori Metaal BV
Manufacturer Contact: Rob Metkemeijer (fiorimet@xs4all.nl), Peet Doddema
Device Name/s: PD Limiter

- (i) This document gives formal approval from the above date for the F3EEL equipment described below to be used for competitions under the Sporting Code Section 4:Aeromodelling – Class F3E – RC Electric Pylon Racing Aeroplanes.
- (ii) This document is the initial approval for this type of F3EEL and only applies to the functions relevant to the F3E competition class rules.
- (iii) Tests undertaken by EDIC-WG (or such representative as it may appoint), are specifically concerned with the functions relevant to the F3E competition class rules. Other functions of the equipment are not part of this approval and the relevance of this document does not extend beyond the specific validation and certification purposes mentioned above.
- (iv) This document does not constitute a guarantee of compatibility of the device listed above with any associated devices with which it may be interconnected.
- (v) This document does not constitute any guarantee and/or statement by EDIC-WG, CIAM and/or FAI as to the reliability of the device listed above.
- (vi) This approval is not concerned with National and other regulations relating to electronic equipment and compliance with such regulations is not the responsibility of the FAI.
- (vii) This approval is not concerned with, and the FAI has no responsibility for, matters related to: (a) intellectual property and intellectual property rights and/or, (b) relations of the manufacturer listed above with any other entities except with FAI and its agents or as they affect the FAI, its agents and this approval.

EQUIPMENT

1 HARDWARE

1.1 Equipment Name

PD Limiter

1.2 Hardware Version

V2.03



- 1.3 Specifications beyond requirements
- Voltage range motor battery: 3S – 6S lipo
 - Current range: 0 – 160A
 - Voltage range Rx battery: 4.5 – 10V
 - Weight: 12 grams including connectors
 - Dimensions: 42mm length x 23mm width x 9mm height, including bullet connectors, excluding Rx and ESC wiring
 - Length of Rx/ESC wiring: 80 – 100 mm
 - Will also detect any energy consumption after energy limit is reached and motor cutoff signal is given by the device
 - Will detect if (brief) current overload situation occurred.
 - Provides energy status info via LED signaling
 - Signals previous flight energy status at device boot via LED
 - ESC motor “beeps” below 9.5A will not be measured by the device

1.4 Production Status

The device is in series production status.

2 FIRMWARE

2.1 Firmware Version

2.03

3 CONDITIONS OF APPROVAL

3.1 This Approval:

- Is only applicable to devices of the type described and manufactured to the same production standards as the example evaluated.
- is not applicable to any device, which has been subject to repair or modification by person(s) other than the original manufacturer or his authorized agent.
- Is based on compliance matrix
“F3EEL_Compliance_Matrix_Fiori-F3E_limiter_18_march_2023.xlsx”

3.2 Accompanying documents

F3E limiter manual HW rev 2.0.pdf

Fiori F3E limiter qualification document_EDIC_revision SW_v2_03_march2023.docx

4 Withdrawal of Approval

If after this Approval has been issued, inconsistencies of performance are found in further examples of the device(s), Approval may be withdrawn upon notice to the manufacturer.

4.1 Changes to F3E Class Rules

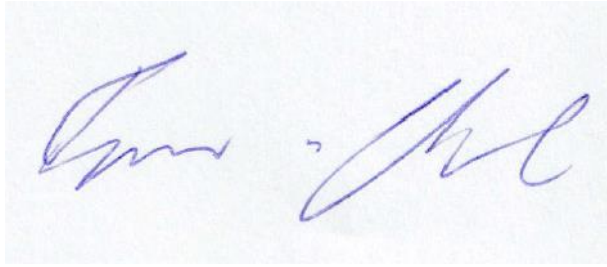
If the F3E class rules are amended in any manner that affects the technical specification of the F3EEL, the validity of this Approval will be subject to review.

4.2 Expiry of Approval

This Approval remains active until it is either superseded or withdrawn. A list of all currently active Approvals can be obtained from the FAI CIAM website.

5 MANUFACTURER’S CHANGES

Notification of any changes to hardware and/or firmware must be made by the manufacturer to the Chairman of EDIC-WG so that a decision can be made on any further testing that might be required to maintain CIAM Approval of the F3EEL. This includes changes that are applicable to any additional functions of the device(s) that do not necessarily form part of the F3E requirements.



(original signed)

<p>Tjarko van Empel Member FAI-CIAM F3E EDIC Working Group</p> <p>email: t.empel@upcmail.nl</p>	<p>Ing Manfred Lex Chairman FAI-CIAM EDIC Working Group</p> <p>Address any queries to: Chairman, FAI-CIAM EDIC Working Group email: ciam-edic@fai.org</p>
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