

Type Approval Certificate



[Generator Control & Protection Units]

Initial Approval 25 June 2002

Manufacturer DEIF A/S

Frisenborgvej 33, DK-7800 Skive, Denmark

Product Description Type : Uni-Line

" See Appendix 1 "

Approval Condition " See Appendix 1 "

THIS IS TO CERTIFY that the above-mentioned product has been approved in accordance with the relevant requirement of this Society's Rules and / or of the recognized standards as follows.

Pt. 6, Ch. 1, Art. 109 of the Rules for Classification, Steel Ships.

This Certificate is valid until 24 June 2027

Issued at Busan, Korea on 7 February 2023



This certificate is signed electronically in accordance with IMO FAL.5/Circ.39/Rev.2. Validation and authentication of the certificate can be confirmed from "<http://e-cert.krs.co.kr>" by using the tracking No(ME23004880712) and certificate No.(CPH06107-AC007).



KOREAN REGISTER

*General Manager of
Marine & Ocean Equipment Team*

Note : 1. This certificate will be valid subject to complying with the approval conditions described on the certificate and/or on the Rules of this Society.
2. This certificate will be invalid from the expiry date aforementioned unless the extension or renewal has been granted to the applicant or the manufacturer.
3. Any significant modifications or changes in design or construction to the above product without approval from this Society will render this certificate invalid.
4. Should the specified rules, regulations or standards be amended during the validity of this certificate, the product is to be re-approved by this Society in accordance with the requirements as amended.

Product Description and/or Approval Condition

Date of Issue : 7 February 2023

A. Product Description

1. Product Specification

Type	Name	data sheet Ref.
- Voltage relays		
RMV-112D	Under/over voltage protection	4921240096D
RMV-122D	Over voltage protection(2 levels)	4921240096D
RMV-132D	Under voltage protection(2 levels)	4921240096D
RMV-142D	Under/over voltage protection(single phase)	4921240128D
- Overcurrent and short circuit relays		
RMC-111D	Short circuit relay	4921240102D
RMC-121D	Short circuit current relay	4921240260A
RMC-122D	Overcurrent and short circuit relay	4921240102D
RMC-132D	Dual overcurrent relay	4921240102D
- Overload/reverse power relays		
RMP-111D	Over load relay	4921240108D
RMP-112D	Overload/reverse power relay	4921240110D
RMP-121D	Reverse power relay	4921240106E
- Excitation relays		
RMQ-111D	Loss of excitation relay	4921240112D
RMQ-121D	Over excitation relay	4921240112D
- Synchronisers		
FAS-113DG	Synchroniser without voltage matching	4921240114D
FAS-115DG	Synchroniser with voltage matching	4921240116D
FAS-125DG	Synchroniser with static synchronisation	4921240141D
- Load sharing units		
LSU-112DG	Load sharing unit	4921240118D
LSU-113DG	Load sharing unit with reverse power protection	4921240120F
LSU-114DG	Load sharing unit with auto. start/stop signals	4921240122D
LSU-122DG	VAR load sharing unit	4921240124D
RMC-131D	Differential current relay	4921240104F
RMF-112D	Over/under frequency relay	4921240223A
HAS-111DG	Paralleling relay	4921240144D
EPN-110DN	Electronic potentiometer	4921240126E
RMT-111Q96	Phase sequence relay	4921240131E
- Approved drawings :		
4157200266E, 4157200270I, 4157200279D, 4157200273I, 4157200278H, 4157200277F, 4157200280D, 4157200280F, 4157200282C, 4157200281D, 4157200264H, 4910216501M, 4910217502N		

2. Approved Drawings and Documents

" See Appendix 1. A. 1 "

3. Test Reports, etc.

" See Appendix 1. A. 1 "

B. Approval Condition

1. Application & Limitation

- 1) This approval is granted on the basis of the approved drawings, data sheets, environmental test reports of Deif A/S (IACS UR E10 Rev.8).

2. Individual Product Cert. and Drawing Approval Requirement

- 1) Individual Product Certification is not required.

Product Description and/or Approval Condition

Date of Issue : 7 February 2023

3. Marking

- 1) The product or packing is to be marked with the manufacturer's name and type designation on a suitable position.

4. Others

—

