

# TYPE APPROVAL CERTIFICATE

DNV·GL

This is to certify that the undernoted product(s) has/have been tested in accordance with the relevant requirements of the DNV GL Type Approval System.

Certificate No. **75 861 - 09 HH**

Company **DEIF A/S**  
**Frisenborgvej 33**  
**7800 Skive, DENMARK**

Product Description **Power Management and Generator Protection Unit**

Type **PPM-3 Power Management System**  
**Multi-line 2**

Environmental Category **C, H, EMC-2**

Technical Data /  
Range of Application **Measuring voltage: 100-690V AC +/-20%; power consumption: Max.**  
**0.25VA/phase**

**Measuring current: 1 or 5A AC; power consumption: Max. 0.3VA/phase**  
**Current overload withstand capability : 4 x In continuously**  
**20 x In, 10 sec. (max. 75A)**  
**80 x In, 1 sec. (max. 300A)**

**Measuring frequency: 30...70Hz**

**Overvoltage category III**  
**Pollution degree 2 (Anti-condensation heating required)**

**Degree of protection: Base unit IP20;**  
**Display IP52 (IP54 with gasket:Option L)**

**\*H: tested temperature -25°C up to +70°**

Test Standard **GL Guidelines for the Performance of Type Approvals, Chapter 2 - Test**  
**Requirements for Electrical / Electronic Equipment and Systems (VI-7-2),**  
**Edition 2012**

Documents **Test plan summary sheet IPA 0272-1; Test summary sheet EPC0300**

Remarks **Separate short circuit protection required. This certificate is issued on the basis**  
**of GL Guidelines for the Performance of Type Approvals, Chapter 1 - Procedure**  
**(VI-7-1), Edition 2007.**

Valid until **2020-04-26**

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File No. **I.L.01**

**Hamburg, 2015-04-27**

Type Approval Symbol



**DNV GL**

  
Marco Rinkel

  
Thomas Hartmann

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## Power Management

- Load-dependent start/stop
- Heavy consumer control
- Blackout start sequence
- Trip of non-essential load groups
- Synchronizing (PPM-3) according to application note "Separate synchronization relay, 4189340622A"

## Protection

- Overload
- Reverse power
- Overcurrent
- Over/undervoltage
- Over/underfrequency

## M-logic (Micro PLC)

- Selectable input/output events

## Engine control

- Run and stop coil
- GOV and AVR control
- alarm inputs with wire break supervision

Aux. supply: Terminals 1/ 2 and 98/99: 24V DC (8...36V continuously, 6V 1 sec.)  
Max. 11W consumption/ Max. 5W consumption  
24DC supply by a stabilized power source

Binary inputs: Optocoupler, bi-directional  
Analogue inputs: 0(4)...20mA;  
Analogue outputs: 0(4)...20mA and +/-25mA  
Relay outputs: 250V AC/30V DC, 5A (DC, 2A resistive load)

- Synchronizing (PPM-3) according to application note "Separate synchronization relay, 4189340622A"

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