

# Remote Maintenance Box, RMB

## DATA SHEET



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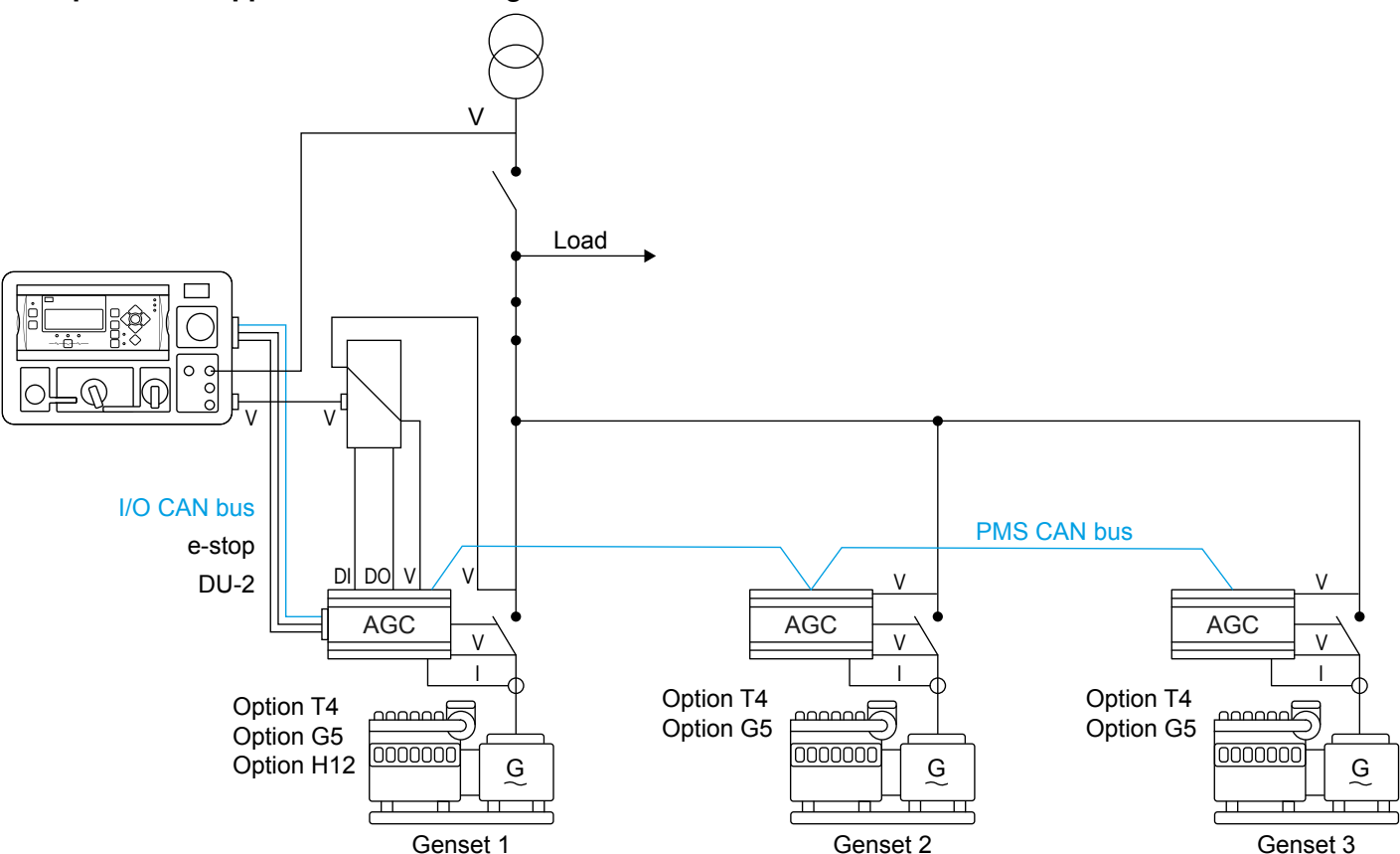
## 1. About the Remote Maintenance Box

## 1.1 Application

The Remote Maintenance Box (RMB) is a remote control box used to safely transfer the load to temporary genset(s). A transformer substation or other electrical installation can then be taken out of service for maintenance without interrupting the power to the load. When the maintenance is completed, the RMB enables resynchronisation and reconnection. The RMB is designed for operation where the operator interface must be close to the mains connection points.

The RMB is used with genset(s) controlled by AGC-4 Mk II or AGC-4. The first genset controller must have the option J8 sockets installed and option H12. Option T4 allows the controller(s) to use the functions in AGC-4 Mk II software version 6.00 or AGC-4 software version 4.80. If more than one genset is required, each genset controller must have option T4 and option G5. There can be up to 32 gensets.

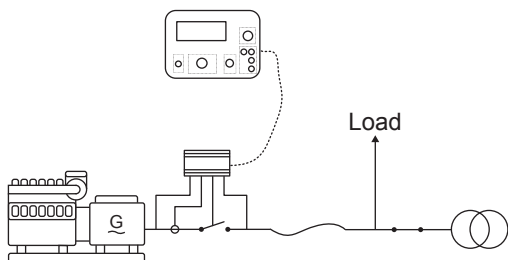
### Example of RMB application with three gensets



## 1.2 Functions

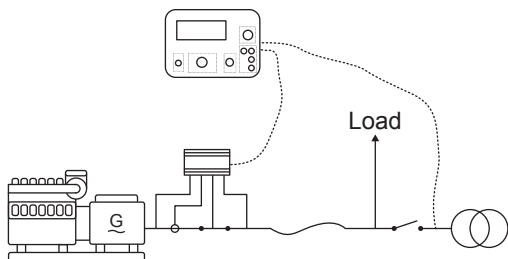
## Generator synchronising

The operator connects the RMB. By turning the *Function select* switch, the genset(s) start up. When the genset(s) are synchronised, the operator can turn the switch for the generator breaker(s) close. The operator uses the RMB to control the genset(s) to deload the mains. When the mains power is zero, the mains breaker can be opened or the fuses can be removed.



### Sync to mains

When the maintenance or repair is complete, the operator turns the *Function select* switch to synchronise to mains. When the static sync is OK, the mains breaker can be closed or the fuses can be connected. The operator turns the switch so that the generator(s) start to deload. When the generator(s) are deloaded, the operator can turn the switch so that the generator breaker(s) are opened and the generator(s) can be stopped.



## 1.3 User interfaces

The remote maintenance box includes a function selector, a power controller switch, visual and audio indication of mains synchronisation, an emergency stop, and a display unit.

### Display unit

The RMB display unit is the same as the display unit for the first genset. It shows the operating information for the first genset. You can use the menu structure in the display (password protected) for setup.

### Utility software

You can also use the AGC USB PC connection and the Windows® based PC utility software (USW) for setup and monitoring operation. The USW allows parameter, input/output and logic configuration, monitoring during commissioning and operation, saving and downloading settings, and downloading software updates. The USW can be downloaded free of charge from [www.deif.com](http://www.deif.com).

## 1.4 Software versions

The remote maintenance box does not have software.

This data sheet applies to AGC-4 Mk II, software version 6.00.0 onwards, and AGC-4, software version 4.80.0 onwards.

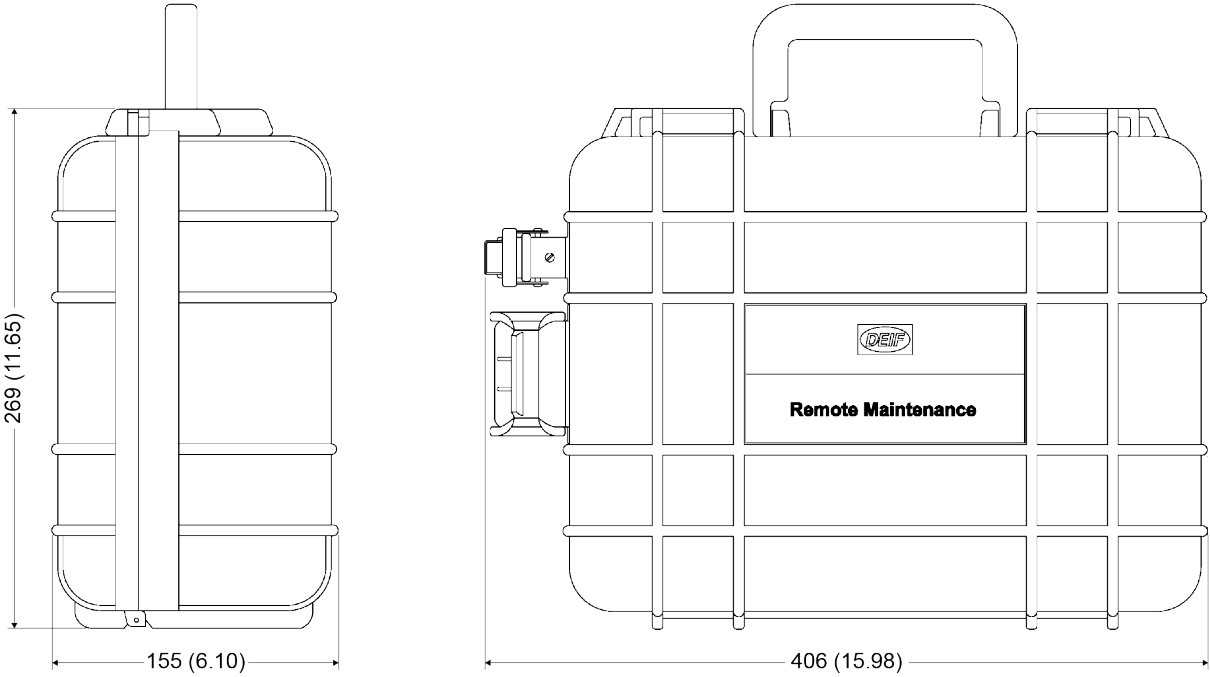
## 2. Specifications

### 2.1 Technical specifications

Operating temperature	-25 to 70 °C (-13 to 158 °F)
Storage temperature	-40 to 70 °C (-40 to 158 °F)
Climate	+55 °C, 97 % RH To IEC 60068-2-30 Db
Measuring voltage	100 to 400 V AC, ±20 %
Shock	50 g, 11 ms half sine To IEC 60068-2-27 Ea
Bump	40 g, 6 ms half sine 4000 bumps in each direction 2 directions 3 axes Total bumps: 24,000 To IEC 60068-2-27 Ea
Safety	To EN 61010-1, installation category (over-voltage category) III, 600 V, pollution degree 2
Material	All plastic materials are self-extinguishing according to UL94 (V1)
Plug connections	AC plug: OLFLEXR ROBUST 210 Communication plug: UNITRONICR BUS IBS Yv
Protection	RMB: IP20 open, IP67 closed Display: IP52 To IEC/EN 60529
Weights	RMB: 4.7 kg (10.4 lbs) Option J10 (5 m cable): 2.0 kg (4.4 lbs) Option J11 (25 m cable): 6.1 kg (13.5 lbs) Option J12 (50 m cable): 11.4 kg (25.1 lbs)

## 2.2 Dimensions

Dimensions in mm (inches)



## 3. Ordering and legal

### 3.1 Ordering

#### RMB options

Option	Description	Note
J10	2 × 5 m cable for Remote Maintenance Box	A data cable and a voltage cable*
J11	2 × 25 m cable for Remote Maintenance Box	A data cable and a voltage cable*
J12	2 × 50 m cable for Remote Maintenance Box	A data cable and a voltage cable*

\*Note: The mains voltage measurement cables (from the mains to the RMB) are not included.

#### AGC options

Option	Description	Note
G5	Power management	Required in each genset controller if there are multiple gensets.
H12	CAN bus external I/O	Required for the first genset controller.
J8	Kit for RMB cable connection sockets, to be installed at the first genset controller. Includes 2 × sockets for RMB cables, and a display CAN cable for DU-2 connection.	Required for the first genset controller.
T4	RMB with multiple gensets	Required for the functions in AGC-4 Mk II software version 6.00, or AGC-4 software version 4.80. Required in each genset controller if there are multiple gensets.

#### Order example: A remote maintenance box with 25 m cables

Type	Option	Option
RMB	J11	

#### Order example: RMB with 50 m cables, two genset controllers

Type	Option	Option
RMB	J12	
AGC-4 Mk II Genset controller	J8	G5, H12 and T4
AGC-4 Mk II Genset controller		G5 and T4

### 3.2 Disclaimer

DEIF A/S reserves the right to change any of the contents of this document without prior notice.

The English version of this document always contains the most recent and up-to-date information about the product. DEIF does not take responsibility for the accuracy of translations, and translations might not be updated at the same time as the English document. If there is a discrepancy, the English version prevails.

### 3.3 Copyright

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