# **Olsbergs**

# MultiDrive 2 PB.F2 / RMS



Technical description

RMS Box Part no. 1304

STOP





#### **GENERAL DESCRIPTION PB.F2**

Olsbergs' new Power Box, PB.F2 is designed for systems which have no requirement for emergency stop integrated in the power supply. The PB.F2 is contained in a compact box where the emergency stop, some contacts, all the buttons etc. are removed compared to the previous version, PB.F. The electronics have the same high safety level as the other power supplies. Functionality, configurability of various functions and support for trouble shooting are enhanced.

The PB.F2 has three LEDs. They can shine steadily or blink, and thus give information about different modes of operation, status, error, etc. The LEDs and their various indications are described in detail in the facing page.

On the outside of PB.F2-cover there are connectivity for remote control (radio, control or levers) and outputs to the DA modules or relay box.

In the PB.F2 there is a feature that can be used to time stamp errors or other occurrences, measure the operating time on the system and thus be able to indicate when the maintenance is due, how long it was since the last service and so on.

On the inside of the cover are screw terminal connections for dump 1 and 2, and button and lamp for manual/remote control.

Wiring according to schematics on page 4-5.

#### **GENERAL DESCRIPTION RMS**

The machine builder or body builder are responsible for Emergency stop or Stop the engine function. Olsbergs Remote Manual Stop, RMS box, has these functions and in this brochure it is assumed that the RMS is used together with the PB.F2.

In the RMS box there is also a button which is used to choose whether the valve is controlled manually (Manual) or remotely (Remote).

#### **OPERATION MODES**

When the power to the PB.F2 is on, such as when the power outlet in the truck is on, the PB.F2 startsup in Standby mode and the system is ready for remote control.

At activation of the on/off button mounted in the crane cabin or the stop button on the controller, the PB.F2 and the system switch over to Crane mode provided the levers are in neutral position. In this mode the machine or the crane is operated from the controller or the levers in the crane cabin.

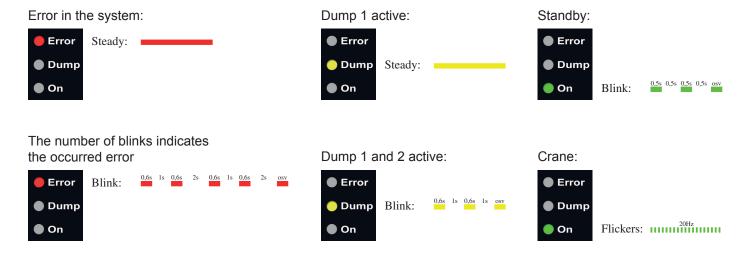
When the system is powered, the choice to run manually can be made directly on the RMS box by activating the push button. The LED in the button lights up, the dump valve is activated and the crane can be operated manually with levers on the valve. To return to Standby mode the button is pressed again and the LED in the button turns off.

#### **PLACING**

PB.F2 is placed in a protected area, such as the crane cabin. RMS is designed to be installed near the manual control position of the vehicle.

#### INDICATION

Blink mode for respective LED:



#### **CONFIGURATION**

Dump 1 has the following configuration options:

- Always activated at remote control (Crane).
- Automatic dumping at mode Crane and not activated levers. Time to dumping is adjustable.
- Activated in Manual mode.

Dump 2 has the following configuration options:

- Active in chosen menu.
- Activated in Manual mode.

Dump 2 follows the automatic dumping if dump 1 is configured to it.

#### INDICATION

The red LED, Error, can either shine steadily or blink. At steady shine, the error information is available at D3 display alternatively controller display. It provides various error blinks when communication to D3 display or control devices is interrupted.

When the PB.F2 indicates error an acknowledgment of the error must be made before the system can be in use again. This acknowledgment is done by pressing the yellow button on the RMS or any of the buttons connected in parallel with it, for 5 seconds.

If no error persists, the red LED turns off on the PB.F2 and everything works normally.

#### The Red LED,

shows occurred errors, a more comprehensive description of errors to be found in a separate troubleshooting guide.

- Steady shine at error in the system.
   Error code is displayed in the D3 display or controller display.
- 1 blink. Too high current measured at the input to the PB.F2.
- 2 blinks. Error in the CAN bus.
- 3 blinks. Main circuit broken.
- 4 blinks. Manual mode out of order.
- 5 blinks. Remote mode out of order.

#### The Yellow LED.

shows the condition of the dump output:

- Steady shine when a dump output is active.
- Blinks when both dump outputs are active.

## The Green LED,

indicates the system mode.

- Standby. Blinks slowly. (on 0,5 s, off 0,5 s, on 0,5 s and so on.)
- Crane. LED flickers.
- Manual, LED off.

## **INSTALLATION PB.F2**

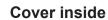
Controller Selection box

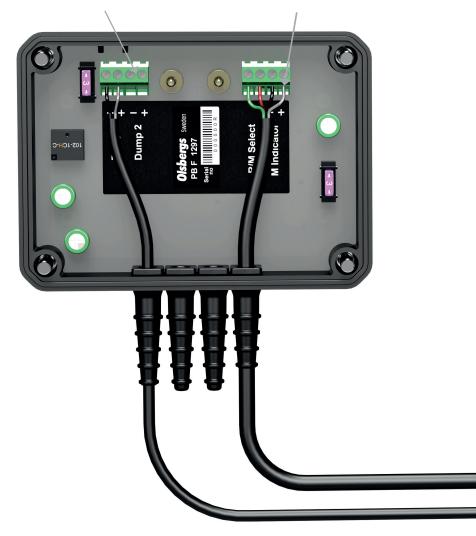


Cover Bottom inside



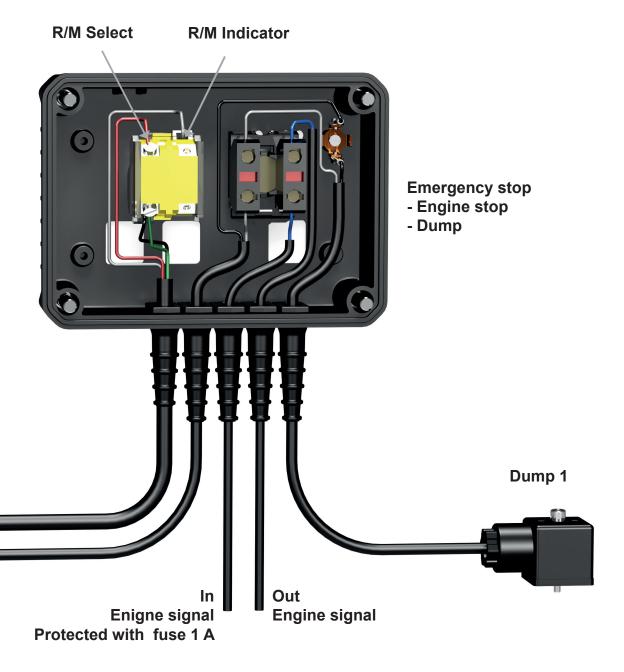
Dump 1 R/M Select R/M Indicator





## **INSTALLATION RMS**





# Power Box F2, PB.F2

Spare parts



Pos	Part N <sup>o</sup>	Description	Note
1	1297	Power Box F2	
2	E1539	Top PB.F2, complete	
3	E1541	Bottom PB.F2, complete	
4	S3152	Screw M6x40 MC6S	A4
5	S2556	O-ring Ø5,28x1,78	NBR 70
6	S3151	O-ring Ø150,0x2,0	70 Shore Gapi
7	S2539	Protective cap	•

## **RMS Box**

Spare parts



Pos	Part Nº	Description	Note
1	1304	RMS Box	
2	E1542 E1431	Top RMS Box, complete Bottom high	DxLxH, 35x150x110 mm
4 5 6	S3152 S2556 S3151	Screw M6x40 MC6S O-ring Ø5,28x1,78 O-ring Ø150,0x2,0	A4 NBR 70 70 Shore Gapi

Olsbergs Electronics AB Box 267 SE-186 24 VALLENTUNA, Sweden

Phone: +46 (0)8-511 858 50 E-mail: electronics@olsbergs.se

Olsbergs Hydraulics AB Box 17

SE-575 21 EKSJÖ, Sweden Phone: +46 (0)381-150 75 E-mail: hydraulics@olsbergs.se

www.olsbergs.com