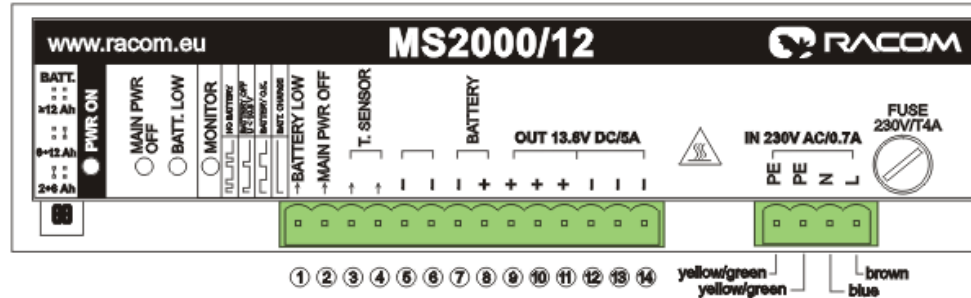


### 1. MS2000 connection to 230 V mains and linking with other devices

[Print version](#) [PDF](#)

There are removable screw connectors for connection to 230 V mains. Cable *NKR9* for *MR25* is used for linking between the radio modem and the MS2000 and connection with the battery is done with cable *NKR4* for *MS2000*. The cable is protected by a cable fuse F6.3A.

The wire connecting is apparent from the following diagram:



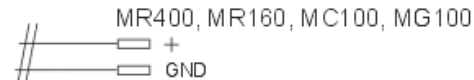
#### NKR9 for MR25

To be connected to:

- ⑨ or ⑩ or ⑪
- ⑫ or ⑬ or ⑭



#### Simple cable for MR400



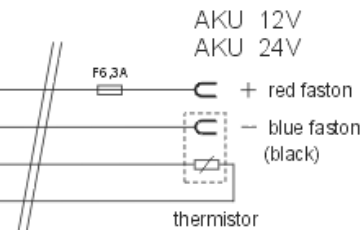
#### NKR4 for MS2000

To be connected to:

- ⑧
- ⑦
- ③ or ④
- ④ or ③

MS2000/12  
MS2000/24

- PKC106 yellow +
  - PKC106 yellow -
  - PKC0506
  - PKC0506
- the porality is not distinguished*



To be connected to:

- battery +
- battery -

① has to be connected to PI pin in the powering connector on the RM400 radio modem

### 2.3. Signalizing of States

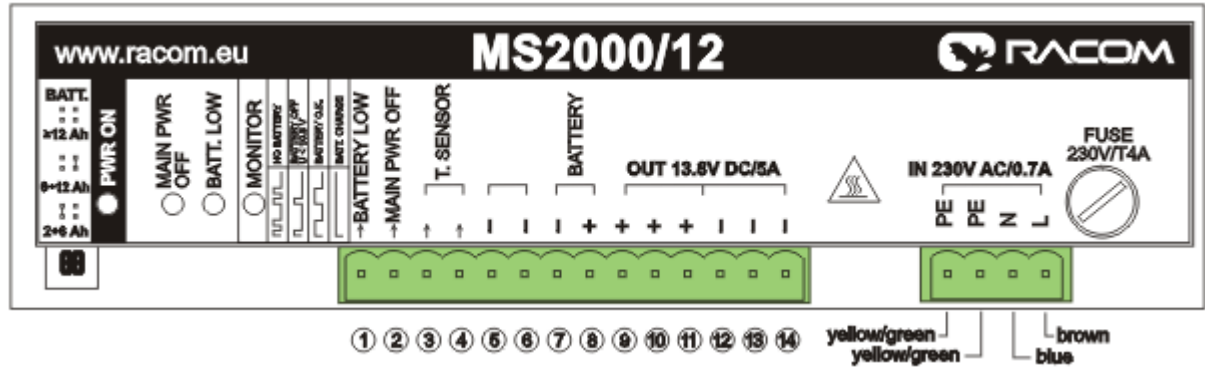
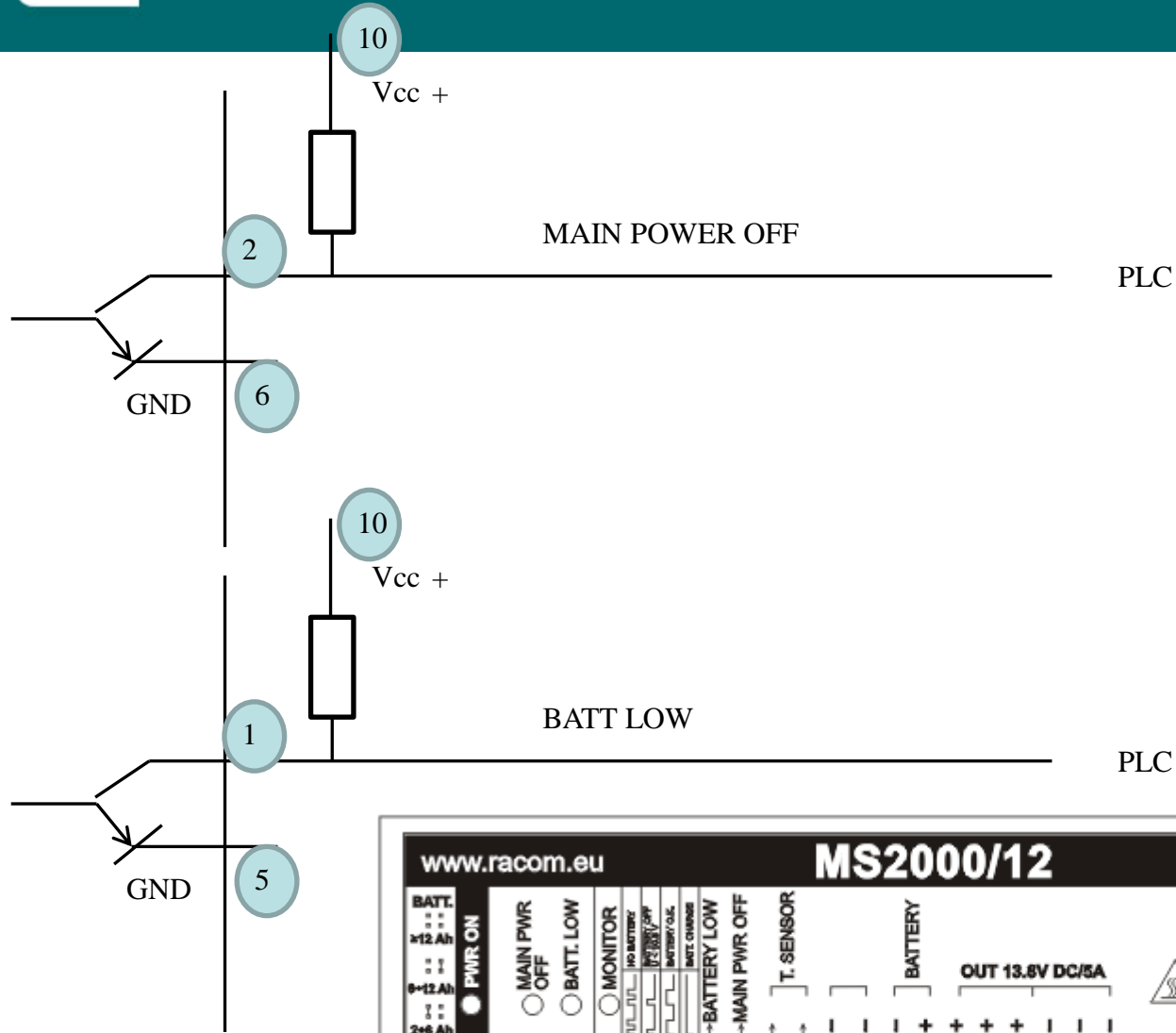
Information about mains failure **MAIN PWR OFF** and information about low battery voltage **BATTERY LOW**, (e.g. there will be a total voltage failure for a connected device) is linked to the output terminal – open collector. The current through the output transistors is not limited in any way and therefore it is important to connect an external resistor in series with the transistor to limit the current to an acceptable level (the maximum current value is 0.5 A). The following table contains the value of current through the transistor,  $I_D$ , the output voltage when the transistor is switched on,  $U_{DS}$ , and the value of the external series resistors,  $R_s$ , for a 13.8 V and 24 V power supply.

$I_D$ [mA]	$U_{DS}$ [mV]	$R_s$ [ $\Omega$ ]	
		$U_{\text{voltage}}$ 13.8 V	$U_{\text{voltage}}$ 24 V
20.8	5.5	680	1200
89.1	24.5	150	270
471	137.5	27	56

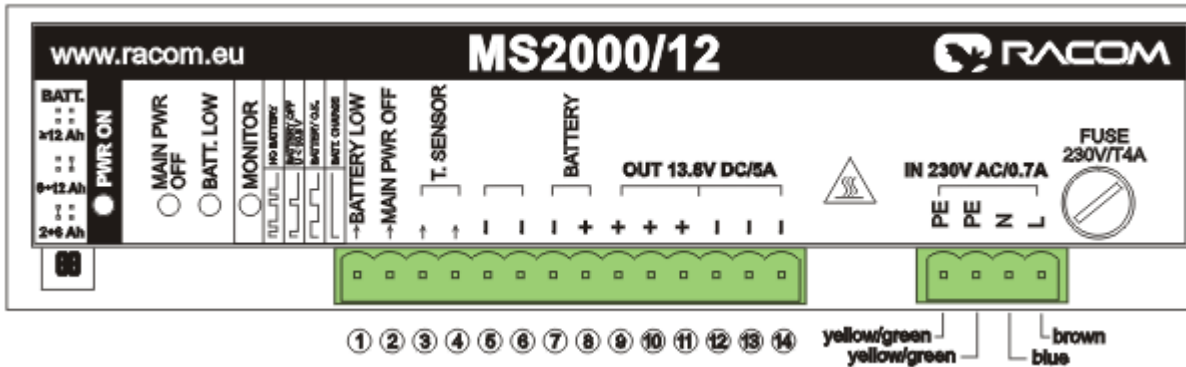
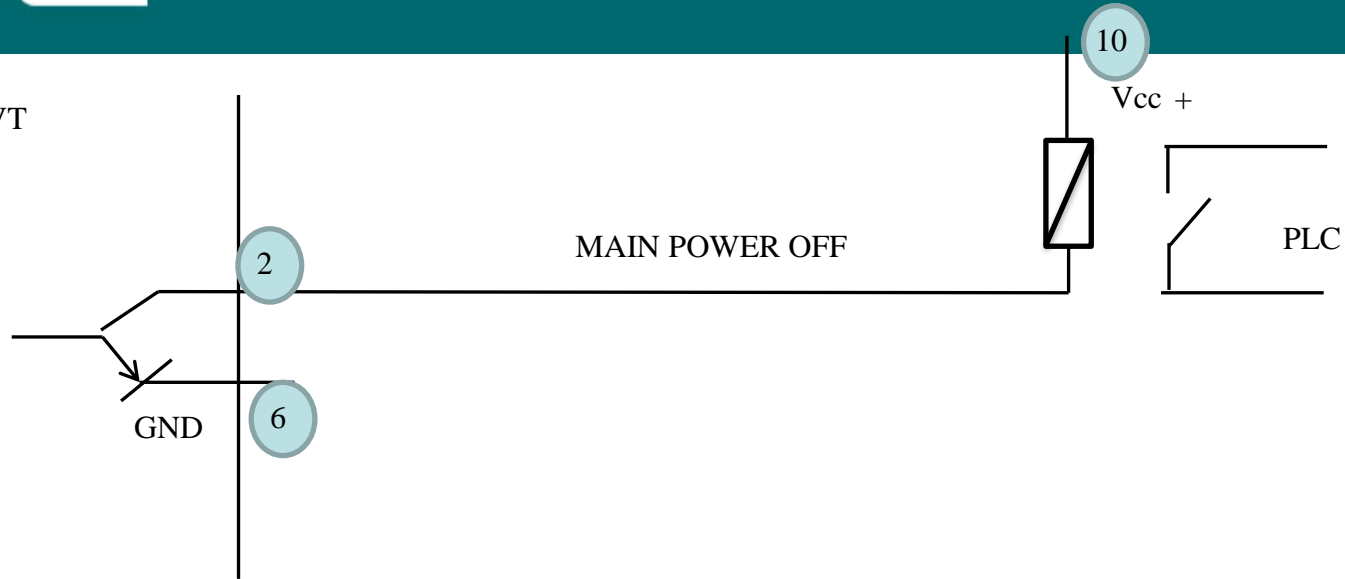
The wires having the low battery voltage information are connected between the screw connectors No.1 (**BATTERY LOW**) and 5 (**GND**), see the [diagram](#). The information MAIN POWER OFF is given by wires connected to clamps No. 2 (**MAIN PWR OFF**) and 6 (**GND**) and it is evaluated by function `(m)isc (b)att` using the `Setx` utility, see the manual [MORSE firmware documentation](#).

LEDs indicate the state of voltage on the power supply output (green LED **PWR ON**), mains failure (red LED **MAIN PWR OFF**), low battery voltage (orange LED **BATTERY LOW**). The last orange LED indicates the state of the battery charging cycle. The meaning of each state is shown on the front panel.

○ MONITOR	
	NO BATTERY
	BATTERY OFF $U_{\text{BATT}} < 10,8 \text{ V}$
	BATTERY O.K.
	BATTERY CHARGE



ALTERNATIVT



T SENSOR OG BATTERI



T SENSOR OG BATTERI



BATTERI

T SENSOR