## Operation and test (ETR - mode)

Turning the key to run position starts the automatic self test which is indicated by all LED´s blinking 3 times. The green “READY“-LED keeps blinking for another 12 seconds. During this time the solenoid output is active, the engine can be started. If the engine does not start within the first 12 seconds the shutdown solenoid will be deactivated in order to save electrical energy. This optimises the start capability even at a low battery condition. The green LED lits steady now and all active inputs (normally closed switches) are indicated. Of course you can start the engine immediately without turning back the key to the OFF position previously. As soon as you start the engine, the solenoid output becomes active again.

## Operation and test (ETS - mode)

Turning the key to run position starts the automatic self test which is indicated by all LED´s blinking 3 times. After the self test the green “READY“-LED lits steady and all active inputs (normally closed switches) are indicated.
If a failure occurs, the solenoid output is active for a period of 20 seconds. This time is long enough to shut down all kind of engines.
To stop the running engine while normal operation just turn the key to the OFF position. The shutdown solenoid will be activated immediately. After 20 seconds the whole system will be deactivated automatically (no current consumption). This feature eleminates the need for an additional stop button.

## Hourmeter (MC 704 – H only)

The MC 704-H is equipped with an hourmeter. It counts the operating hours as soon as the engine turns. It can be resetted by the manufacturer only.

ehb electronics gmbh • Dreihornstr. 18 • D-30659 Hannover
**(** : +49-511-123207-0 **3**: +49-511-640332

## Motorcheck MC 704 – LC, MC 704 - H


The **MC 704** has been designed for industrial use on mobile and stationary equipment. It installs easily and quickly into 66x66 mm panel openings and requires minimal wiring. Some of the features include the following: oil pressure, temperature, battery charging, auxiliary. All inputs are controlled via ground. It is absolutely necessary to use the kind of switches as described in the wiring diagram. If you wish to use different kind of switches, please ask for a customer specific software version.
Activating the system is accomplished by turning the key to the start position. After 7seconds from initial start the MC 704 will begin to monitor the inputs. This shutdown delay eliminates the need for pushing an override button commonly required on old fashioned units during start-up.
During normal operation the green “READY“-LED will lit, indicating that everything is in good work order. Once a failure occured it will be memorized and indicated by the corresponding LED. After 3 seconds the controller shuts down the engine and activates the signal output which allows the user to install an audible alarm or flasher light for extra failure indication. Failures < 3 seconds will be added and memorised. If the sum of the failures is higher than 3s the engine will be stopped too. If no failure occurred for a period of 10s the memory will be cleared again.
Because the other inputs are latched at the same time the failure occured, you can allways find out which failure caused the engine shutdown even if the input reaches its normal condition in the meantime.
After an engine shutdown the external stop button can be pushed once to turn off audible alarm output. Pushing it again resets the whole system. It starts again with the automatic self test. During normal operation the external stop button can be pushed once at any time to shutdown the engine.

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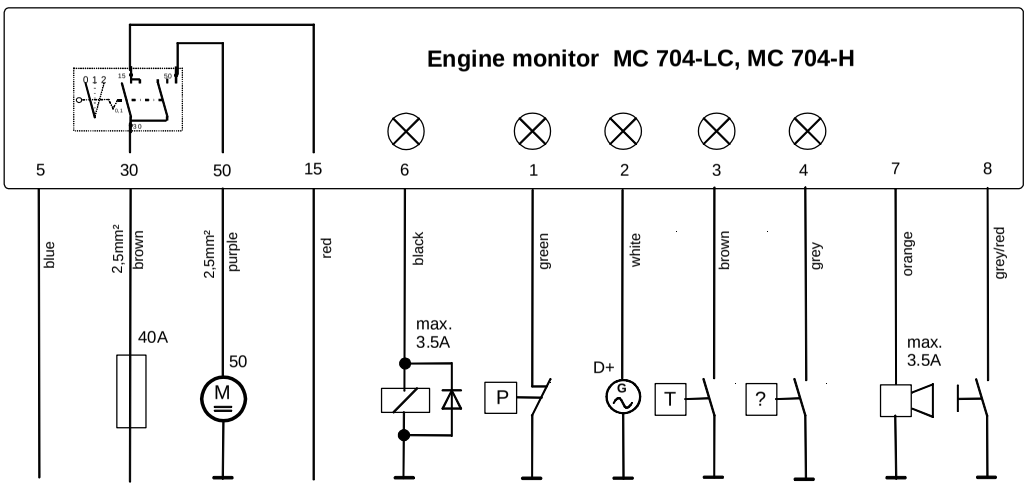
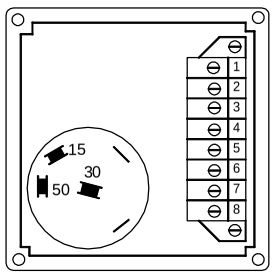



**View of the rear side**




Attention !
All magnetic coils must be equipped with a diode (f.e. 1N4007) as shown.

The coulor coding of the wires refers to ehb standard wiring harness only.