



MCflex

The HMCflex unit offers a multitude of functions for the control and monitoring of conventional but also electronically-controlled diesel engines. You can individually configure the settings for very diverse applications and different engine variants.

APPLICATIONS

Diesel engines in applications for industry

Communal vehicles

Agricultural machines

Construction machinery

Special-purpose vehicles and machines

Transflective, backlit B/W display with automatic contrast adjustment
MCflex ensures perfect legibility even under poor lighting conditions.

UV-resistant, rugged PA6 housing. Secure installation with retainer or screw-fastening, 3 x M6
Fast installation and retrofit. Dependable functioning even in harsh environments.

Communication via CAN bus with the network
Integration of conventional engines in existing CAN bus networks and applications.

Pin assignments of the outputs are freely parametrisable.
Up to 5 high-current outputs.
Flexible utilisation of the MCflex functionalities, tailored to the customer application. Output parametrisation with the display menu or the convenient ehbTools software. No programming required.

Pre-heat, by-glow and after-glow function, time- or temperature-controlled
Reliable starting process, even at very low temperatures. Less environmental impact and smoke generation.

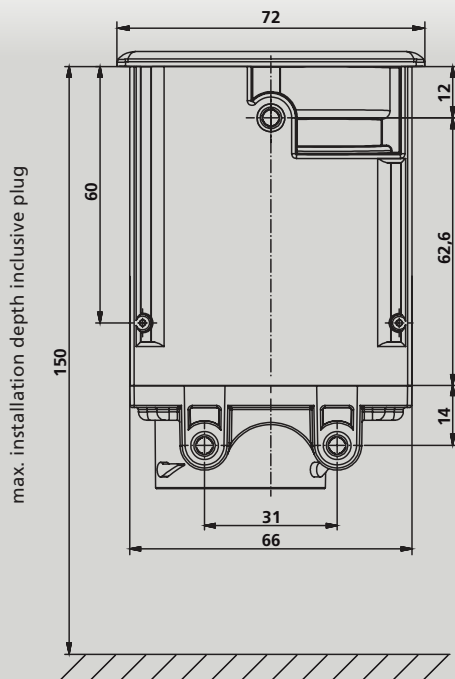
Total operating hours counter and resettable daily operating hours counter
Reliable information about engine running times and required servicing. Transparent summary of operating times.

Password-protected menu settings and automatic logging of the last 20 faults
Access to relevant functions restricted to authorised personnel. Reliable reproduction of faults occurred.

With or without ignition starter switch
An ignition starter switch starts the engine either per key or electronically, that is key-less. For the key-less version, entering a release code via a start button initiates the start.

MCflex TECHNICAL DATA

ehb5200 (standard version)
ehb5175 (keyless)



Electrical data

Voltage range	6 – 32V (typ. 12 – 24V)
Interference	14 – 28V (6Vss, 50Hz on UB)
Voltage peaks	200V (2ms on UB)
Power consumption	50mA typical (in UB 8 – 24V)
Operating temperature	-20°C to +70°C
Storage temperature	-30°C to +80°C
Inputs	PIN 01: Oil pressure as NO/NC, programmable, switching or analogue sensor PIN 02: Generator monitoring, terminal D+ PIN 03: Temperature as NO/NC, programmable, switching or analogue sensor PIN 04: Various, NO/NC PIN 07: Auto start, NO/NC PIN 09: External stop, NO/NC PIN 13: Speed monitoring, terminal W, Sensor or magnetic pick-up Pin 17/19: CAN bus interface (auto start, speed adjustment, optionally adaptable)
Outputs	All outputs are short circuit-proof PIN 02: Generator excitation, terminal D+, 0.5A PIN 06: Freely parametrisable, 7.5A (max. 1s) / 6.0A PIN 08: Freely parametrisable, 40A (max. 1s) / 20A PIN 10: Freely parametrisable, 70A (max. 1s) / 35A PIN 11: Freely parametrisable, 40A (max. 1s) / 20A PIN 12: Freely parametrisable, 70A (max. 1s) / 35A PIN 15: Freely parametrisable, 3.5A (max. 1s) / 3.0A PIN 18: Freely parametrisable, 40A (max. 1s) / 20A PIN 17/19: CAN bus interface (EEC1, ET1, EFL/P1, VEP1, AMB, DM1, fault messages)
CAN bus interface	CAN2.0B, 250kBit, SAE J1939
Operating hours counter	Integrated
Daily operating hours counter	Integrated

Visualisation

Display type	Dot-matrix LCD display, transfective Dark-blue representation on grey background
Resolution	16 x 2 characters, 5 x 8 dots per character
Brightness	>30 cd/m ²
Contrast ratio (CR)	8.24
Background lighting	LED, white

Mechanical data

Housing dimensions (L x W)	72 x 72 mm
Installation dimensions (W x H x D)	66 x 66 x 130 mm
Installation cut-out (W x H)	66 x 66 mm
Housing material	PA 6 30 GB, black, UV-stabilised
Weight	340g
Installation	Retainer or screw-fastening, 3 x M6
Degree of protection:	IP67
Connection	Deutsch plug type HDP24-24-19PE

Test standard

Humidity	DIN EN 60068-2-3
Vibration	DIN EN 60068-2-6
Impact	DIN EN 60068-2-27
CE marking	according to Directive 2014/30/EU

Accessories

Connection cable, 19-pole, 3m	EHB2268
Deutsch plug set	EHB1469
CAN dongle with ehbTools PC software	EHB5365
MCflex starter kit CAN dongle, ehbTools, connecting cable, power supply unit	EHB5378

