

# **Multifunction Card**

EBM-107100



- 6 prop. power outputs with current measurement
- 4 On/Off outputs without current measurement
- 4 analogue inputs
- 5 digital inputs
- · Connectivity via CAN bus
- Supply voltage range from 12 V to 32 V DC
- Integrated reference-voltage source for direct supply of setpoint transmitters
- Implementation of a tip over protection control circuit possible (in accordance with DIN EN 474-1)

## 1 Description

#### 1.1 General

The EBM-107100 plug-in card is a digital multifunction electronic unit. With its various inputs and outputs, it is particularly suitable for controlling proportional directional control valves and On/Off valves (e.g. seat valves) in the control valve blocks of self-propelled machines. With the configurable analog inputs, it can be flexibly set up to suit a large number of setpoint transmitters. These can be parametrized for voltage or current measurement. The outputs are driven by semiconductor output stages and enabled via relay contacts. The card itself is controlled by an analogue joystick with one or two axes, or by potentiometers. In addition, it is possible to receive the signals from a load-torque sensor and, as appropriate, interrupt the control of the hydraulic valves either completely or just in one half of their function.

#### 1.2 Application example

- Processing signals from joysticks for controlling proportional and On/Off directional valves in mobile hydraulic system, taking into account the signals from a load-display system.
- · Agricultural machinery
- Municipal equipment technology
- Forestry machines
- Construction equipment

### 2 Technical data

General Characteristics	Unit	Description, value
Supply voltage	V DC	12 / 24 V nominal voltage ± 15%, ripple < 10%
Current consumption of the electronics (without solenoid) and CAN-bus	mA	ca. 20
Reference voltage	V DC	8 V (provided on the card), max. load 50 mA
Inputs		4x analogue 5x digital (2 for enable inputs)
Input impedance	kΩ	voltage inputs approx. 76 k $\Omega$ current inputs approx. 200 $\Omega$
Outputs		6x proportional with current measurement, each max. 3 A 4x On/Off outputs
Diagnostics		3 LEDs
Communication		CAN-Bus
PWM frequency	Hz	100

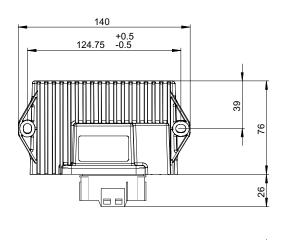
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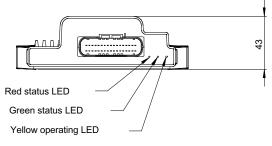
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General Characteristics	Unit	Description, value
Protection class		IP 67
Operating temperature	° C	-40 +85
Dimensions	mm	140 x 102 x 43
Weight	g	ca. 200
Connection	MX23A34NF1, 34-pin	

## 3 Dimensions





### info.kl@bucherhydraulics.com

www.bucherhydraulics.com

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Classification: 450710