

JXM-IO-E30

Expansion module for mobile machinery

Short description

The expansion module JXM-IO-E30 is the universal remote building block for mobile machinery. Thanks to its well-adjusted I/O configuration, it can take on almost any remote task and this way significantly reduce wiring expenses. The reference output lets you use standard sensors and carry out pre-processing applications.

Communication with the JXM-IO-E30 takes place via CANopen®. This allows for integration into conventional CAN networks used in mobile machinery.

The potted - and thus rugged - enclosure is applicable in any situation even under harsh environmental conditions.



Features

- 12 inputs and 14 diagnostics-capable outputs - including high current paths and PWM with current control
- High switching capacity thanks to parallel use of outputs and high continuous total current
- CAN ID addressing via tri-state inputs allows up to nine nodes in one network without software configuration, and thus supports the common part strategy
- Three short-circuit-proof sensor supplies allow „mission critical“ sensor networks
- Rugged potted housing

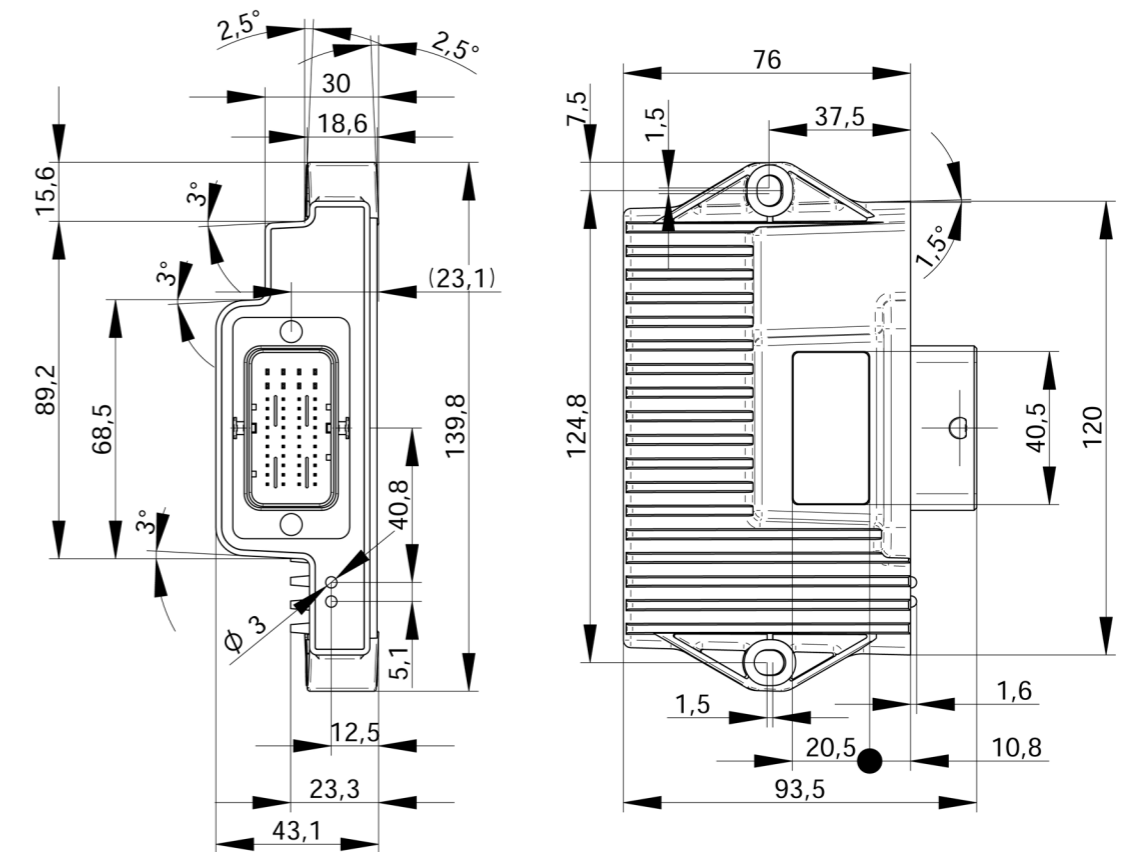
JXM-IO-E30

Technical Data

JXM-IO-E30	
Operating voltage	DC 8 ... 32 V, with separate ECU power supply
Operating/storage temperature	-40 ... +85 °C
CAN ports	1 CANopen®
Max. number of inputs/outputs	26
Inputs	
▪ Analog	8 <ul style="list-style-type: none"> 0 ... 5 V/0 ... 20 mA, can be configured individually; Resolution: 12 bits, input impedance: 35 kΩ, load resistor: 120 Ω
▪ Digital / frequency	4 <ul style="list-style-type: none"> Active-high; input impedance 5.6 kΩ 0.1 Hz ... 10 kHz
▪ Digital / CAN-coding	2 Coding of the CAN ID, tristate
Outputs with diagnostics capability (short-circuit, no-load)	
▪ PWM, precision current measuring	4 <ul style="list-style-type: none"> 3 A, 1.5 kHz max., dithering, current-controlled, diagnostics capability, short-circuit proof; Alternative usage: <ul style="list-style-type: none"> Digital input active-low, input impedance 10 kΩ Digital output 3 A PNP input
▪ PWM	6 <ul style="list-style-type: none"> 7 A, 1.5 kHz max., dithering, diagnostics capability, short-circuit proof; Alternative usage: <ul style="list-style-type: none"> Digital input active-low, input impedance 10 kΩ Digital output 7 A PNP input
▪ Digital (50 % ON period)	4 <ul style="list-style-type: none"> 3 A high-side, diagnostics capability, short-circuit proof, (with 50 % ON period); Alternative usage: <ul style="list-style-type: none"> Digital input active-low, input impedance 10 kΩ; PNP input
▪ Power supply - Sensors	3 Independent supply VBAT for sensors
▪ Max. permitted total current	25 A
▪ Degree of protection	IP65
Vibration	ISO 16750-3
Shock	ISO 16750-3
Protection against polarity reversal	Yes
Output diagnostics	Short circuit, no-load

Further details and order information are available on request. Specifications are subject to change without notice. Errors and omissions excepted.

Dimensional drawing



JXM-IO-E30

Connector pinout

JXM-IO-E30	
CAN High-Signal	A1
CAN Low-Signal	B1
PWMI_H3_4	C1
PWMI_H3_3	D1
PWMI_H3_2	E1
PWMI_H3_1	F1
DO_H3_4	G1
DO_H3_3	H1
DO_H3_2	J1
DO_H3_1	K1
VBAT PWR	L1
VBAT PWR	M1
CAN_TERM2	A2
CAN_TERM1	B2
DI_P_1	C2
DI_P_2	D2
DI_P_3	E2
DI_P_4	F2
GND_SEN	G2
VEXT_SEN_3	H2
VEXT_SEN_2	J2
VEXT_SEN_1	K2
VBAT PWR	L2
PWM_H7_1	M2

JXM-IO-E30	
n.c.	A3
AI_1	B3
AI_2	C3
AI_3	D3
AI_4	E3
AI_5	F3
AI_6	G3
AI_7	H3
AI_8	J3
VBAT ECU	K3
GND_PWR	L3
PWM_H7_2	M3
PWM_H7_5	A4
PWM_H7_5	B4
PWM_H7_6	C4
PWM_H7_6	D4
PWM_H7_4	E4
PWM_H7_4	F4
PWM_H7_3	G4
PWM_H7_3	H4
CFG1_IN	J4
CFG2_OUT	K4
GND_PWR	L4
GND_PWR	M4

Connector pinout JXM-IO-E30-G20-K00-001

JXM-IO-E30	
CAN High-Signal	A1
CAN Low-Signal	B1
PWMI_H3_4	C1
PWMI_H3_3	D1
PWMI_H3_2	E1
PWMI_H3_1	F1
DO_H3_4	G1
DO_H3_3	H1
DO_H3_2	J1
DO_H3_1	K1
VBAT PWR	L1
VBAT PWR	M1
CAN_H_OUT	A2
CAN_L_OUT	B2
DI_P_1	C2
DI_P_2	D2
DI_P_3	E2
DI_P_4	F2
GND_SEN	G2
VEXT_SEN_3	H2
VEXT_SEN_2	J2
VEXT_SEN_1	K2
VBAT PWR	L2
PWM_H7_1	M2

JXM-IO-E30	
n.c.	A3
AI_1	B3
AI_2	C3
AI_3	D3
AI_4	E3
AI_5	F3
AI_6	G3
AI_7	H3
AI_8	J3
VBAT ECU	K3
GND_PWR	L3
PWM_H7_2	M3
PWM_H7_5	A4
PWM_H7_5	B4
PWM_H7_6	C4
PWM_H7_6	D4
PWM_H7_4	E4
PWM_H7_4	F4
PWM_H7_3	G4
PWM_H7_3	H4
CFG1_IN	J4
CFG2_OUT	K4
GND_PWR	L4
GND_PWR	M4

