ECKELMANN

ANALOG INPUT MODULE – AIM04


Features

▸ Analog input module for 4 single ended signals 2- or 3-wire connections
▸ Electrical isolation between the inputs and the system bus
▸ Signal preprocessing possible – e.g. parametrisable averaging
▸ Selectable 0 .. 10 V or 0 .. 20 mA inputs; signal can by selected by jumper for each input
▸ 10 bit resolution / multiplex mode
▸ Range 0 .. 20mA, 4 .. 20mA parametrisable by software
▸ Cross-communication to other modules
▸ Communication by CANopen DS-401, autobaud-recognition
▸ Anti-aliasing-filter integrated
▸ Module address type-specifically adressable by a front-switch
▸ LED for life check
▸ Ultra compact design

Connection diagram and terminal assignment AIM04
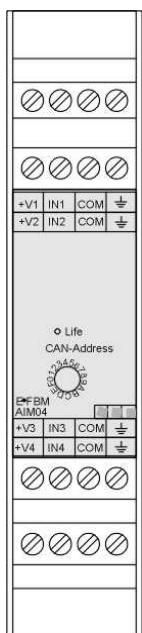
V1, V2	Sensor supply 10 VDC
V3, V4	Sensor supply 24 VDC
COM	Signal ground
IN1 .. 4	Input 1 .. 4
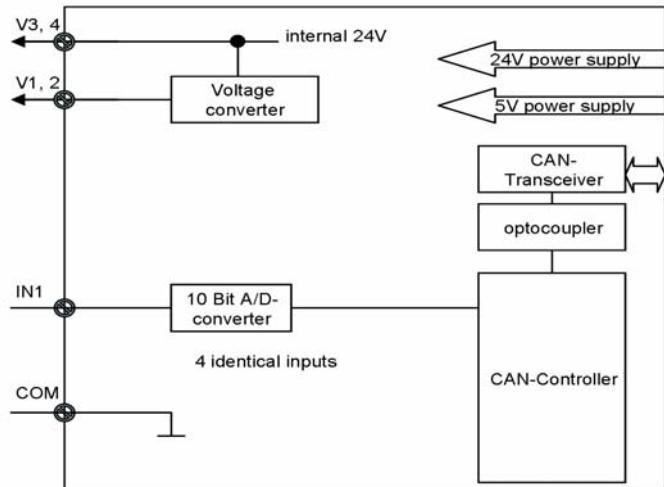
Technical specifications

Electrical connection

▸	Supply voltage:	5 VDC and 24 VDC by internal ME-bus
▸	Supply:	
	- Control voltage for sensor supply	typ. 24 VDC (18 .. 32 VDC) via ME bus
	- Logic voltage	typ. 5.0 VDC (4.75 .. 5.25 VDC) via ME bus
▸	Supply current:	max. 50 mA via 24 V system bus, max. 220 mA via 5 V system bus

Interfaces

▸	Number of inputs:	4 channels
▸	Input voltage range:	0 .. 10 V; max. 15 V; resolution 10 bit, 1 Ohm
▸	Input current range:	0 .. 20mA, resolution 10 Bit, shunt maximum 499 Ohm
▸	Max. signal frequency:	1000 Hz
▸	Parameterisable filter:	Parametrisable digital filter for averaging
▸	Isolation voltage:	500 V
▸	Monitoring functions:	Watchdog; thermical and short-circuit protection

Housing

▸	Module width:	22,5 mm
▸	Address range:	By switch in the range of 60 .. 6F hex
▸	Temperature range:	-20°C bis +70°C; transport and storage
		+0°C bis +50°C; operation
▸	Relative humidity:	8 – 80 %, non-condensing
▸	Protection:	IP20
▸	Standards:	EC conformation declaration according
	▸ 89/336/EWG (EMC-standards)	
	▸ 73/23/EWG (low voltage standard)	