

eControl-IO

CAN module with numerous expansion options



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The key to lean fieldbus networks and efficient process automation is flexibility. The user must be able to cope with rapidly changing process requirements with existing resources. The eControl IO-module was developed specifically for the use in machine networks and with its numerous expansion modules it provides many applications in industrial environments and is the ideal supplement for all PLCs of the eControl family.

Key Features



CANopen acc. to CiA Draft Standard DS 301 and 401



Fast in- and outputs, short signal delay



CAN baud rate up to 1 Mbit/s



Numerous expansion options (up to 6 expansion modules)



Compact aluminium housing with IP20 and integrated top hat rail mounting

Master module and CAN interface

The master module is the basis of the eControl IO module and is required in each constellation. The entire IO system is controlled by an integrated microcontroller, while already 16 digital outputs, 16 digital inputs, two analog outputs and two analog inputs are integrated. The module has an LED status indicator to show the status of the module and the switching states of the digital IOs. As an interfaces for data exchange, it has two RJ45 ports for the CAN bus which allows an easy and fast connection. Via DIP switch the module ID and baud rate of the CAN bus can be set conveniently.

High flexibility through individual expansion options

An expansion interface enables the connection of up to six IO modules. The modules and the order can be freely selected. The addressing of the expansion modules is performed automatically and the master module detects the plugged in module and the addressing. As extension options we provide currently a motor module, analog module, digital module or temperature module.

Rugged interfaces

The Phoenix clamps ensure a simple and extremely robust connection that makes the module in combination with the robust aluminium housing very durable and reliable.

Technical Data

Master module	
CAN	2× CAN acc. to ISO 11898 via RJ45 (2× socket)
Internal bus	Serial interface
Clamping technology	Pluggable phoenix clamp RM 3.5
Digital inputs	16× DI, typically 0–24 V, max. 28.8 V; input current at rated voltage < 1–5 mA
Digital outputs	16× DO, typically 0–24 V, max. 28.8 V; 0.5 A maximum power per output; Protection against thermal overload
Analog inputs	2 contacts as reference-GND; 2 contacts for the analog inputs; Input voltage range: 0 V up to +10 V; Input current at +10 V: < 1 mA; Resolution: 10 bit
Analog outputs	2 contacts as reference-GND; 2 contacts for the analog outputs; Output voltage range: 0 V up to +10 V; Maximum output current 10 mA; Resolution: 10 bit
Dimensions (l×h)	180 mm × 120 mm
Temperature sensor	integrated
Storage temperature	–20 °C up to +70 °C
Operating temperature	0 °C up to +60 °C (extended temperature range is optionally available)
Supply	24 V ±10 % – via 3-pole phoenix clamp
Supply IO	24 V ±10 % – via 3-pole phoenix clamp

Expansion modules	8DI/8DO	2H-bridge	PT100/PT1000	2AI/2AO	Relay module
DI 24 V	8	–	–	–	–
DO 24 V	8	–	–	–	–
AI 0–10 V	–	–	–	2	–
AO 0–10 V	–	–	–	2	–
PT 100/1000	–	–	2	–	–
Engine bridge 10 A	–	2	–	–	–
Potential-free contacts 6 A	–	–	–	–	4
CAN – adress settings	automatically				
CAN baud rate	over master module				
Power supply	24 V				

Pin assignment



CAN RJ 45

2	CAN low
3	CAN high
4	CAN GND
7	CAN GND



DIP switch baud rate

0	50
1	125
3	250
4	500
5	1000



DIP switch module address

Minimum 01 HEX	1
Maximum 7F HEX	127

eControl PLC as a master with CODESYS V3

The PLCs of the eControl family are equipped with numerous communication interfaces, such as CAN, Ethernet, USB and serial interfaces. The PLCs have powerful CPUs which are optimized for the CODESYS target and web visualization. The robust and compact design in combination with CODESYS V3 as a development environment open up a variety of applications in industrial environments.

Order information

V965201110	Master module 16 DI/16 DO / 2 AI/2 AO 10 bit
V965201210	Module 2. 8 DI/8 DO
V965201310	Module 3. 2H bridge 10A
V965201410	Module 4.1. 2 PT 100/1000
V965201420	Module 4.2. 4 PT 100/1000
V965201510	Module 5. 2 AI/2 AO 10 bit
V965201610	Module 6. Relay module



Mobile Automation



Industrial Automation



Diagnostics



Connectivity

We are looking forward to your enquiry!

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