



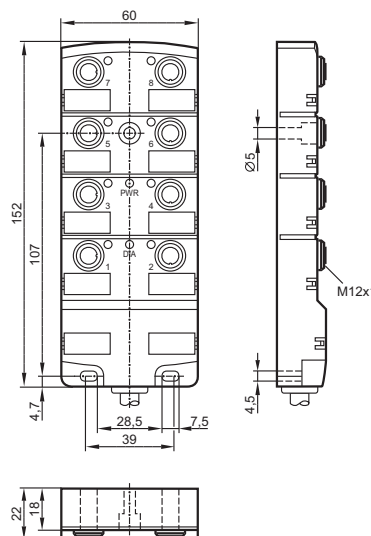
CR2011

CompactModule

Ausgangsmodul
digital und analog
für System R 360

CANopen
Schnittstelle

Betriebsspannung
10...32 V DC



Ausführung

Betriebsspannung	[V]
Stromaufnahme	[mA]
Ausgänge digital	
Ausgänge PWM	
Schaltstrom	[A]
Summenstrom	[A]
Gleichzeitigkeitsfaktor	
Anzeige Betriebszustände	
Stop	
Run	
Ausgang aktiv	
Kommunikationsfehler	
Schnittstelle	
Baudrate	
Kommunikationsprofil	
Geräteklasse	
CAN	
Node-ID (Default)	
Diagnose	
Betriebs- / Lagertemperatur	[°C]
Schutzart / Schutzklasse	
Gehäusematerial	
Gehäuseabmessung (L x B x H)	[mm]
Anschluss	

**8 digitale / PWM-Ausgänge
mit integrierter Strommessung**

10...32 DC (SELV)
≤ 100 (ohne externe Last)
8; plus-schaltend (High Side) 8; PWM-Frequenz 20...150 Hz
4 (ohne Stromüberwachung) max. 2 (mit Stromüberwachung)
16
1 (Summenstrom beachten)
LED grün leuchtet LED grün blinkt LED gelb leuchtet LED rot leuchtet
CAN Interface (ISO 11898 Ver. 2.0)
10 kBit/s...1 MBit/s (Defaulteinstellung 125 kBit/s)
CANopen
I/O-Modul entsprechend CiA DS401, CiA DS301 V3.0
Full-CAN
hex 20 (= 32)
CAN und E/A-Status; Diagnoseinformation wird an SPS übertragen
-25...85 / -40...90
IP 67 III
Polyamid (PA)
152 x 60 x 22
PUR/PVC-Kabel 2 m; 2 x 1,5 mm ² (Betriebsspannung) / 3 x 0,5 mm ² (CAN-Bus)



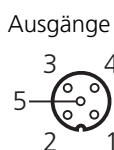
Buchsenbelegung

Buchse	Funktion
1	Ausgang digital / PWM, 4 A
2	Ausgang digital / PWM, 4 A
3	Ausgang digital / PWM, 4 A
4	Ausgang digital / PWM, 4 A
5	Ausgang digital / PWM, 4 A
6	Ausgang digital / PWM, 4 A
7	Ausgang digital / PWM, 4 A
8	Ausgang digital / PWM, 4 A

Anschlußbelegung

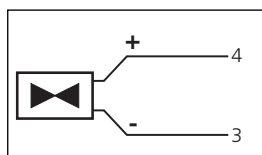
Bezeichnung	Adernfarbe	Potential
Betriebs- spannung	rot	10...32 V DC
	schwarz	GND
CAN- Interface	weiß	CAN_H
	blau	CAN_L
	grün	CAN_GND

**Ausgänge
ohne Stromüberwachung**

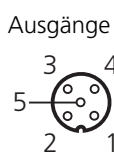


2-Leiter Magnetventil

M12- Buchse	Pin
Schaltausgang +	4
externe Spannung -	3
n. c.	5

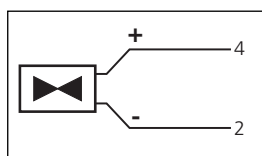


**Ausgänge
mit Stromüberwachung**



2-Leiter Magnetventil

M12- Buchse	Pin
Schaltausgang +	4
externe Spannung -	2
n. c.	5



Prüfnormen und Bestimmungen

Prüfungen für Bahnanwendungen

EN 50155 Pkt 12.2	mechanisch-klimatische Prüfungen
EN 50121-3-2	EMV-Störaussendung und Störfestigkeit
	ergänzende Informationen auf Anfrage



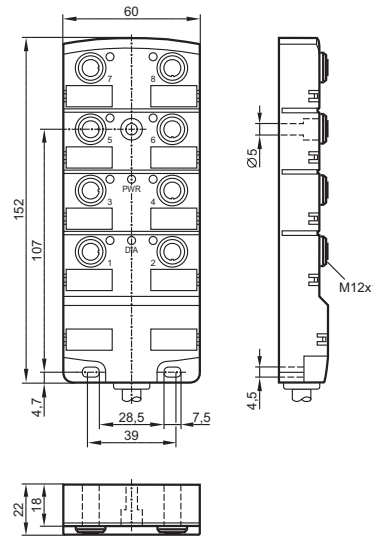
CR2011

CompactModule

Output module
digital and analog
for R 360 systems

CANopen
interface

Operating voltage
10...32 V DC



Version

Operating voltage	[V]
Current consumption	[mA]
Outputs digital	
Outputs PWM	
Switching current	[A]
Total current	[A]
Simultaneity factor	
Display operating status	
Stop	
Run	
Output active	
Communication error	
Interface	
Baud rate	
Communication	
Device class	
CAN	
Node ID (default)	
Diagnostic function	
Operating / storage temperature	[°C]
Protection	
Housing material	
Housing dimensions (L x W x H)	[mm]
Connection	

**8 digital outputs / PWM outputs
with integrated current measuring**

Operating voltage	10...32 DC (SELV)
Current consumption	≤ 100 (without external load)
Outputs digital	8; positive switching (High Side)
Outputs PWM	8; PWM frequency 20...150 Hz
Switching current	4 (without current monitoring) max. 2 (with current monitoring)
Total current	16
Simultaneity factor	1 (total current to be considered)
Display operating status	
Stop	LED green is lit
Run	LED green is flashing
Output active	LED yellow is lit
Communication error	LED red is lit
Interface	CAN interface (ISO 1 1898 version 2.0)
Baud rate	10 kbits/s ... 1 Mbits/s (default setting 125 kbits/s)
Communication	CANopen
Device class	I/O module to CiA DS401, CiA DS301 V3.0
CAN	Full-CAN
Node ID (default)	hex 20 (= 32)
Diagnostic function	CAN and I/O status; diagnostic information is transferred to the plc
Operating / storage temperature	-25...85 / -40...90
Protection	IP 67 III
Housing material	polyamide (PA)
Housing dimensions (L x W x H)	152 x 60 x 25
Connection	PUR/PVC cable 2 m; 2 x 1.5 mm ² (operating voltage) / 3 x 0.5 mm ² (CAN-Bus)



Sockets

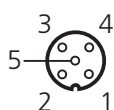
Socket	Function
1	output digital / PWM, 4 A
2	output digital / PWM, 4 A
3	output digital / PWM, 4 A
4	output digital / PWM, 4 A
5	output digital / PWM, 4 A
6	output digital / PWM, 4 A
7	output digital / PWM, 4 A
8	output digital / PWM, 4 A

Wiring

Designation	Core colour	Potential
operating voltage	red	10...32 V DC
	black	GND
CAN-Interface	white	CAN_H
	blue	CAN_L
	green	CAN_GND

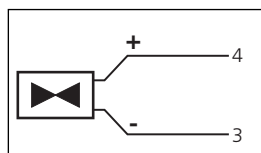
Outputs without current monitoring

outputs



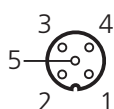
2-wire solenoid valve

M12 socket	Pin
output +	4
external voltage -	3
n. c.	5



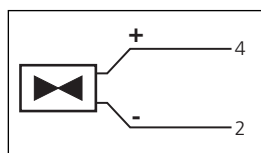
Outputs with current monitoring

outputs



2-wire solenoid valve

M12 socket	Pin
output +	4
external voltage -	2
n. c.	5



Test standards and regulations

Tests for railway applications

EN 50155 clause 12.2 mechanical/climatic tests

EN 50121-3-2

EMC noise emission and noise immunity

additional information on request