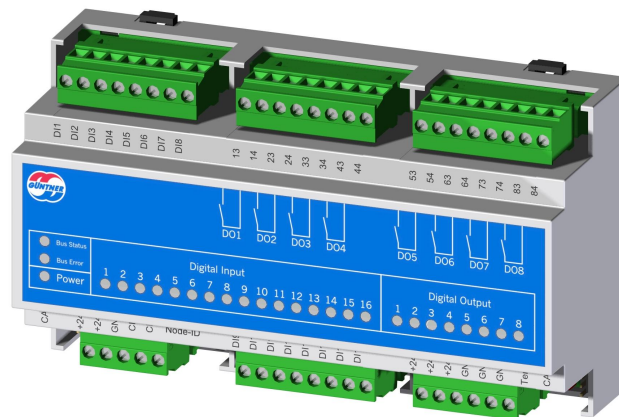


Datasheet GIOD.1

In-Output Module with CAN-Bus



BAAN Nr.: 5204183

www.guentner.de

Contents

1	GIOD.1.....	3
1.1	Functional Description.....	3
1.2	Connections.....	5
1.3	Electrical Characteristics.....	7
1.4	Mounting / Operating conditions.....	7
1.5	Dimensions / Weight.....	8

1 GIOD.1

1.1 Functional Description

The GIOD.1 is controlled by a Güntner Controller via CAN. The GIOD.1 has 16 digital inputs working at a nominal Voltage of 24V DC and 8 relay outputs. A maximum of 15 GIOD.1 can be connected to one controller. The node ID of the GIOD.1 is set via a rotary switch. Address 0xF may not be used for operation.

The CAN Bus connection between the Controller and one or several GIOD.1 needs to be terminated on both ends. The DIP switch on the first device and the last device on the bus needs to be switched to the "ON" position to activate the termination. The DIP switch is labeled "Term" on the housing. Devices that pass on the CAN signal must have the termination switched off.

The status of the inputs and outputs is visualized on the front of the device via LEDs. A lighted LED means that the respective input has a "high" level or that the output of a respective relay contact is closed. The relay contacts are designed as normally open contacts.

A Power LED shows if Voltage is supplied to the GIOD.1

Additionally the Bus status is visualized via two LEDs according to the following table:

Bus Status LED	Description
On	The GIOD.1 is in the operating state
Flashing with proportion 50:50	The GIOD.1 is ready to start operation
Single flash	The GIOD.1 is stopped
Triple flash with the Error LED	The software caused a stack overflow on the GIOD.1
Alternate flashing with the Error LED	An Layer Setting Service is executed on the GIOD.1
Synchronous fast flashing together with the Error LED	A reset to default was started on the rotary switch (position "F")

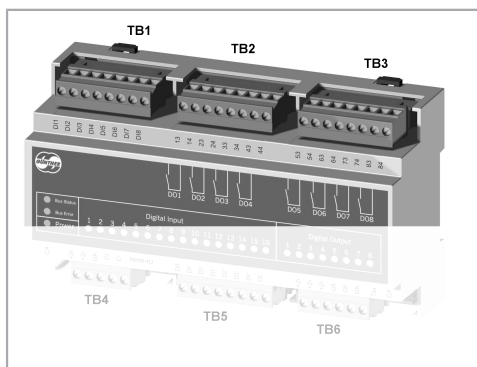
Bus Error LED	Description
Off	The device is working properly
On	The GIOD.1 has a static bus error
single flash	The warning limit in the CAN controller was reached
double flash	An error during Lifeguard, Node guard or Heartbeat was detected
Triple flash with the Bus Status LED	The software caused a stack overflow on the GIOD.1
Alternate flashing with the Bus status LED	The Layer Setting Service is executed on the GIOD.1
Synchronous fast flashing together with the Error LED	A reset to default was started on the rotary switch (position "F")

Power LED	Description
On	Voltage is supplied to the GIOD.1
Off	No Voltage or reverse Voltage supplied

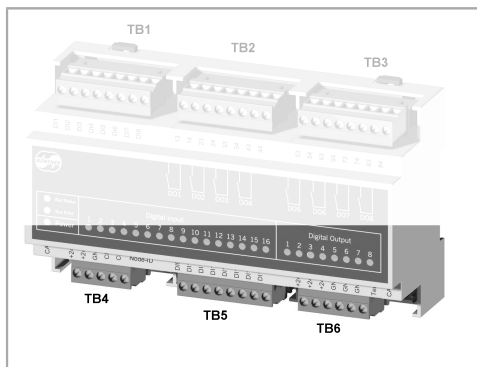
Digital Input LED	Description
On	A "high" input is detected
Off	A "low" input is detected

Digital Output LED	Description
On	The digital output is closed
Off	The digital output is open

1.2 Connections



Upper row			
	Name	Description	
TB1	DI1	Digital Input 1	
	DI2	Digital Input 2	
	DI3	Digital Input 3	
	DI4	Digital Input 4	
	DI5	Digital Input 5	
	DI6	Digital Input 6	
	DI7	Digital Input 7	
	DI8	Digital Input 8	
TB2	13		Normally Open Relay 1
	14		
	23		Normally Open Relay 2
	24		
	33		Normally Open Relay 3
	34		
	43		Normally Open Relay 4
	44		
TB3	53		Normally Open Relay 5
	54		
	63		Normally Open Relay 6
	64		
	73		Normally Open Relay 7
	74		
	83		Normally Open Relay 8
	84		



Lower row		
	Name	Description
	CAN	CAN connector including Voltage supply
TB4	+24V	External Voltage Supply +
	+24V	
	GND	External Voltage Supply -
	CH	CAN High Signal
	CL	CAN Low Signal
	Node ID	Rotary switch for Node ID
TB5	DI9	Digital Input 9
	DI10	Digital Input 10
	DI11	Digital Input 11
	DI12	Digital Input 12
	DI13	Digital Input 13
	DI14	Digital Input 14
	DI15	Digital Input 15
TB6	DI16	Digital Input 16
	+24V	+24V supply
	+24V	
	+24V	
	GND	Ground
	GND	
	GND	
	Term	DIP switch for CAN Bus termination (120Ohm)
	CAN	CAN connector including Voltage supply

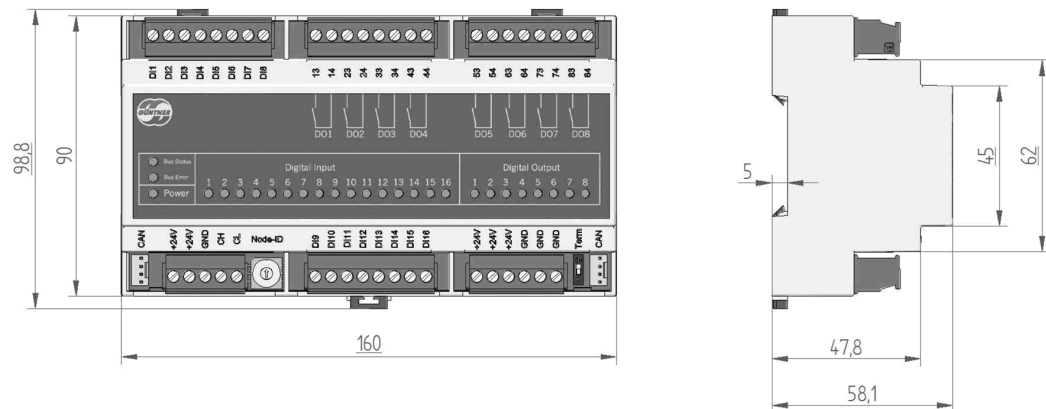
1.3 Electrical Characteristics

	Min	Type	Max	Unit
Input Voltage DC	21	24	30	V
Current consumption		100	250	mA
Digital Inputs				
High Level	15	24	30	V
Low Level	-3	0	5	V
RElay outputs				
Voltage DC		24	30	V
Voltage AC			250	V
Current resistive load 24V DC/250V AC			1	A
Current inductive load 24V DC/250V AC			1	A
Expected life mechanical	$1 \cdot 10^6$			cycle lifetime
Expected life electrical	$1 \cdot 10^5$			cycle lifetime
CAN Bus				
Absolute maximum rating	-24		24	V
Data rate		125		kbit/s

1.4 Mounting / Operating conditions

- The module is designed for rail mounting
- Bus cables other than the provided short ribbon cable need to be screened
- The shield of bus cables must be grounded on one side only
- Signal and control cables must be installed detachedly from mains cables or motor cables, e.g. in different cable ducts.
- Operating Temperature -20°C ~ +70°C
- Storage Temperature 0°C ~ 50°C dry
- Degree of protection by enclosure: IP20

1.5 Dimensions / Weight



All values in mm

Weight:

approx. 305g