

Main characteristics

- Modbus/TCP slave- Modbus RTU Master
- Network address from rotary switches
- Baud rate 10/100Mbit/s settable via Dip-switch
- Internal installation

PROFILE

The GFX4-ETH module can be installed inside GFX4/GFXTERMO4 products and expands communication by means of the Modbus/TCP protocol.

The module has two communication channels:

- the first channel is a serial port with Modbus RTU protocol, and connects a maximum of four GFX4/GFXTERMO4 devices including the product on which the module is installed, for total of 16 controlled zones (4x4);

- the second channel is a ethernet port with Modbus/TCP slave protocol, and lets you connect to a Master Modbus/TCP.

The node address is assigned by means of the two rotary switches (1...99) on the product that houses the module or by means of a software message.

The network Master (typically a PLC) recognizes the slave node by means of this address.

The slave node recognized by the Master consists of the GFX4/GFXTERMO4 that houses the module plus the GFX4/GFXTERMO4 products connected to the Modbus serial port.

The expansion can be installed when the above-mentioned products are ordered or at a later date.

You can run the following procedures via the Dip-switches:

- Dip-switch 1

ON = reset communication parameters of GFX-ETH board

- Dip-switch 2

Select baud rate

OFF = 100Mbit/s (default)

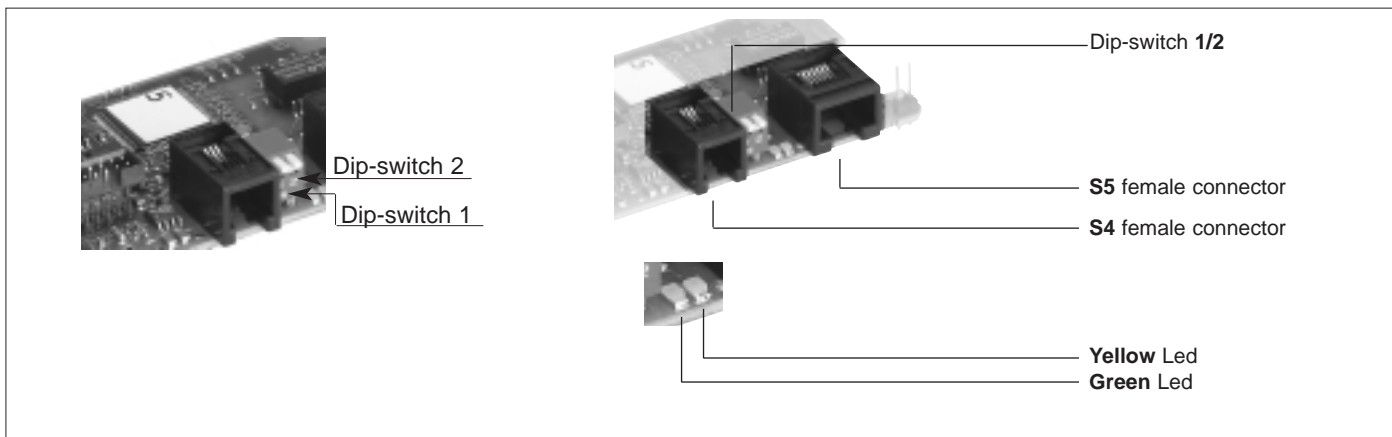
ON = 10Mbit/s

TECHNICAL DATA

ETHERNET port	
Protocol	Modbus/TCP (slave)
Function	Connects GFX4/GFXTERMO4 to a Modbus/TCP Master device
Baud rate	10/100 Mbit/s settable via dip-switch
Connector	RJ45 CAT5 10/100 BaseT conforming
Address	HW: ID Modbus SW: MAC Address, IP Address
I/O dimensions	5 words for zone
Msg. supported	01, 02, 03, 04, 05, 06, 0f, 10
Diagnosics	Error counter to serial link
GREEN led	
ON	Packet activity
YELLOW led	
ON	Link integrity
Modbus port	
Protocol	ModBus RTU (master) RS485 serial
Function	Connects GFX4/GFXTERMO4 to ModBus RTU network
Baud rate	19200
Connector	RJ10 4-4
General characteristics	
Dimensions	106x56x17mm (H x L x D)
Installation	Inside module
Weight	35g
Power supply	+24V, 3VA max. taken directly from GFX4/GFXTERMO4 module
Working/storage temperature	0...40°C/-20...70°C
Relative humidity	20...85% RH non-condensing
Ambient conditions of use	Internal use, altitude up to 2000m
Installation	Inside module (see "INSTRUCTION AND WARNING" manual)
Approvals and certifications	See GFX4/GFXTERMO4 modules

ELECTRICAL CONNECTIONS

Connectors / LEDs



Connector S4 RJ10 4-4 pin	Nr. Pin	Name	Description	Note
	1	GND1 (**)	-	(**) Connect the GND signal among Modbus devices with a line distance > 100 m.
	2	Rx/Tx+	Data reception/transmission (A)	
	3	Rx/Tx-	Data reception/transmission (B)	
	4	+V (reserved)	-	

Cable type: flat telephone cable for fin 4-4 conductor 28AWG

Connector S5 RJ45	Nr. Pin	Name	Description	Note
	1	TX+	Data transmission +	
	2	TX-	Data transmission -	
	3	RX+	Data reception +	
	4	n.c.		
	5	n.c.		
	6	RX-	Data reception -	
	7	n.c.		
	8	n.c.		

Cable type: Use standard category 5 cable according to TIA/EIA-568B

ORDER CODE

GFX4

ETH

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