

PID Controller 3216



Product description

The GF 3216 PID controller is an economic and compact controller for industrial automation.

The type 3216 had been preconfigured for valve applications to guarantee a quick and straightforward configuration of the controller.

Only parameters which are most relevant for e.g. valve/flow control, tank filling applications or mixing processes appear in the setup wizard. No need to run through a long list of settings.

Measurement and control values are shown on a clear display. Important events are displayed as scrollable text messages to assure a good visibility to the operator.

Function

PID controllers offer a control feed mechanism.

For valve control the 3216 is connected to an electric actuator on a valve and a flow sensor. The operator defines a set-point for a required flow-rate in a system. The controller now permanently compares the actual flow reading and the set-point. As long as it identifies an “error”, it keeps on actuating the valve. As soon as the desired flow rate is reached the controller holds the valves position.

Features

- Quick-Setup
- Compact design
- Large display
- Comprehensive text screen
- One 4-20mA input
- External set point 4-20 mA input
- One 4-20 output
- Manual override per push button

Applications

- Flow/Valve Control
- Tank Filling/Emptying Control
- Mixing – Ratio Control

Technical Details

Specifications

General

Temperature limits:	Operation:	0...55°C
	Storage:	-10...70°C
Humidity limits:	Operation	5 to 90% RH non condensing
	Storage	5 to 90% RH non condensing
Panel sealing:	IP65	Nema12
Shock:	BD N61010	
Vibration:	Max. 2G	10 to 150Hz

EMC

Emission and immunity:	BS EN61326
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Operator Interface

Type:	LCD with backlight
	5 digits, green; text screen:9 characters, green

Power Supply

3216:	85-264V AC	48 to 62 Hz, 6W
	20-29V AC/DC	

Approvals

	CE, cUL listed (file E57766), Gost-R, EN14597 TR
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Current input

Input range:	3.36 mA to 20.96 mA, 48/62 Hz	
Sample rate	4 Hz	
Calibration accuracy:	<1% typical	
Resolution:	<2μA	

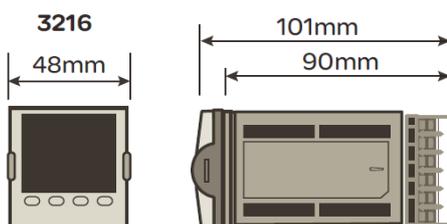
Current output

Output range:	0-20 mA	<500Ω
Accuracy:	± (<1% of Reading + <100μA)	
Resolution:	11.5 bits	

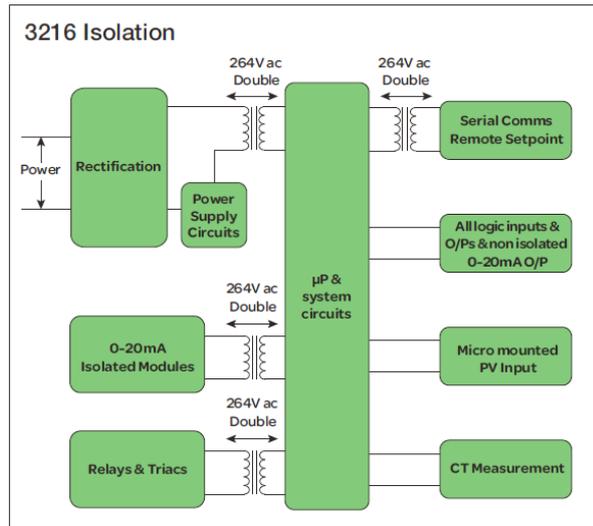
Relays output

Type:	Form A (normally open)
Rating:	Min. 100mA @ 12V DC, max. 2A @ 264V AC

Dimensions

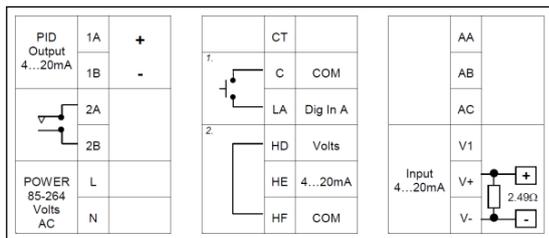


Electrical isolation



Rear Terminal Wiring

85-264 V AC



4-20mA loop e.g. to EAx or pneumatic positioner

1A: +

1B: -

Optional relay NO, 230V AC, 2A:

2A

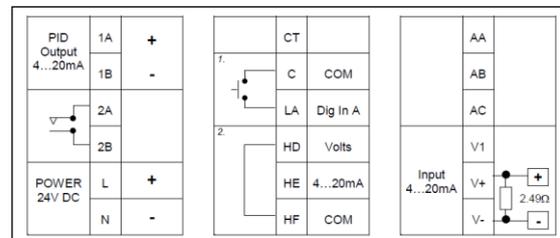
2B

Power supply:

L: L/+

N: N/-

24 V AC/DC



Manual override push button input:

C: COM

LA: Dig In A

External set point 4-20mA input:

HE: +

HF: - (if not in use, bridge to HD)

Flow sensor/9900 input 4-20mA*:

V+: +

V-: -

*Bridge V+ /V- with 2.49Ω!

Ordering information

Mfr. Part	No. Code	Description
3216-11	199192164	PID Controller 3216, 85-264V AC, single loop
3216-21	199192166	PID Controller 3216, 20-29V AC/DC, single loop

Rev A (02/16)

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