

TA 50 programme-controlled blowdown system with PRS 50 cycling timer for installation in a control cabinet

Programme-controlled blowdown system TA 50

System description

The TA 50 electronic programme-controlled blowdown system triggers periodic blowdowns for the MPA ... intermittent blowdown valve.

The TA 50 programme-controlled blowdown system is suitable for GESTRA MPA ... intermittent blowdown valves.

It is used in steam boiler plants for keeping the boiler water in good condition, particularly during operation when supervision is limited or not constant.

The TA 50 programme-controlled blowdown system consists of a PRS 50 electronic cycling timer and an assembly comprising a connector, strainer, reducer and 3/2-way solenoid valve.

Medium

- Solenoid valve control medium: compressed air or pressurised water, 4 – 8 bar depending on the rapid-action blowdown valve and the boiler pressure (see MPA...)

Potentially explosive atmospheres

The TA 50 equipment is not suitable for use in potentially explosive atmospheres.

Function

The PRS 50 cycling timer generates a control pulse that operates the solenoid valve. The solenoid valve allows in compressed air or pressurised water, so that the intermittent blowdown valve opens quickly and closes again after the pulse time.

The pulse times and intervals can be adjusted on the PRS 50.

The three-way solenoid valve can also be operated manually for checking purposes or in the event of power failure. You can test the blowdown system at any time using the button on the solenoid valve.

Technical data

PRS 50 cycling timer

Indicators and controls

- 1 x green 4-digit, 7-segment display for showing status information
- 3 x LEDs (2 x yellow, 1 x red)
- 1 x 4-pole code switch for configuration (standby/burner function)
- 1 x rotary knob with integrated push-button for setting parameters and executing the test function

Supply voltage

24 V DC +/-20 % (external fuse M 0.5 A)

Protection class

II double insulated

Admissible ambient temperature

0 °C to 55 °C

Weight

Approx. 0.2 kg

Technical data – continued –

2/3-way solenoid valve 6430 C

Mechanical connection

G ¼, EN ISO 228-1

Service pressure

16 bar

Differential pressure for opening and closing

At least 0.5 bar

Duty cycle

100 % ED

Installation position

Any

Connection symbols

P = pressure connection

A = valve outlet

R = exhaust or drain outlet

Supply voltage (+/-10 %)

- 24 V DC, 8 W

or optionally

- 230 V, 50 Hz, 15 VA, after pick-up 30 VA

Protection class

IP 65

Admissible ambient temperature

Max. 55 °C

Weight

Approx. 0.9 kg

Strainer

Connection

G ½, EN ISO 228-1

Material

Housing MS 58

Filter cartridge 1.4571

Mesh width

0.5 mm

Weight

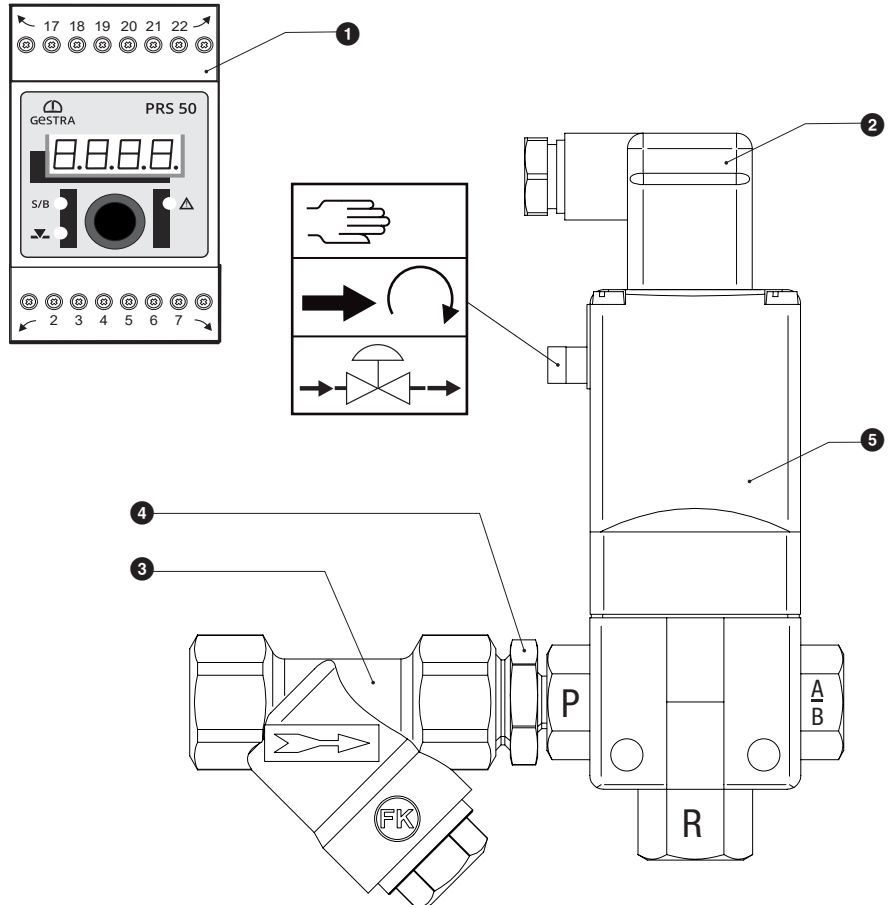
Approx. 0.3 kg

Programme-controlled blowdown system

TA 50

No.	Designation
1	PRS 50 cycling timer
2	Connector
3	Strainer
4	Reducer
5	3/2-way solenoid valve

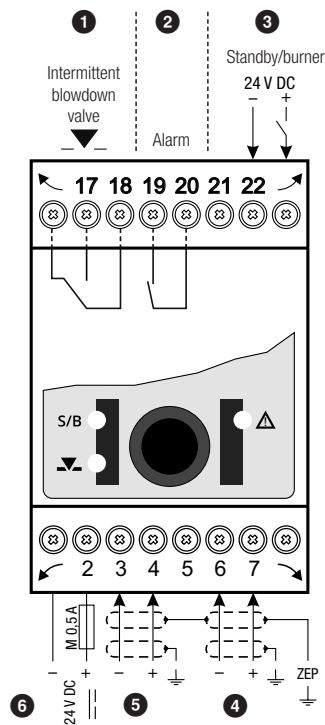
Dimensions



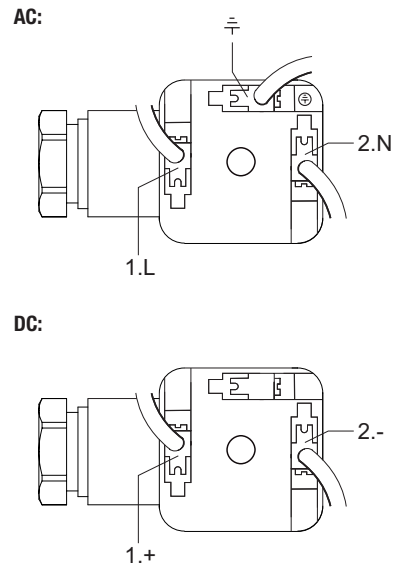
Wiring diagram

No.	Designation
1	Intermittent blowdown valve relay output
2	Alarm relay output
3	Standby/burner input (24 V DC) for an external command: intermittent blowdown OFF/burner active
4	Limit switch
5	Button (N/O contact) for manual intermittent blowdown
6	24 V DC supply voltage (M 0.5A)

PRS 50

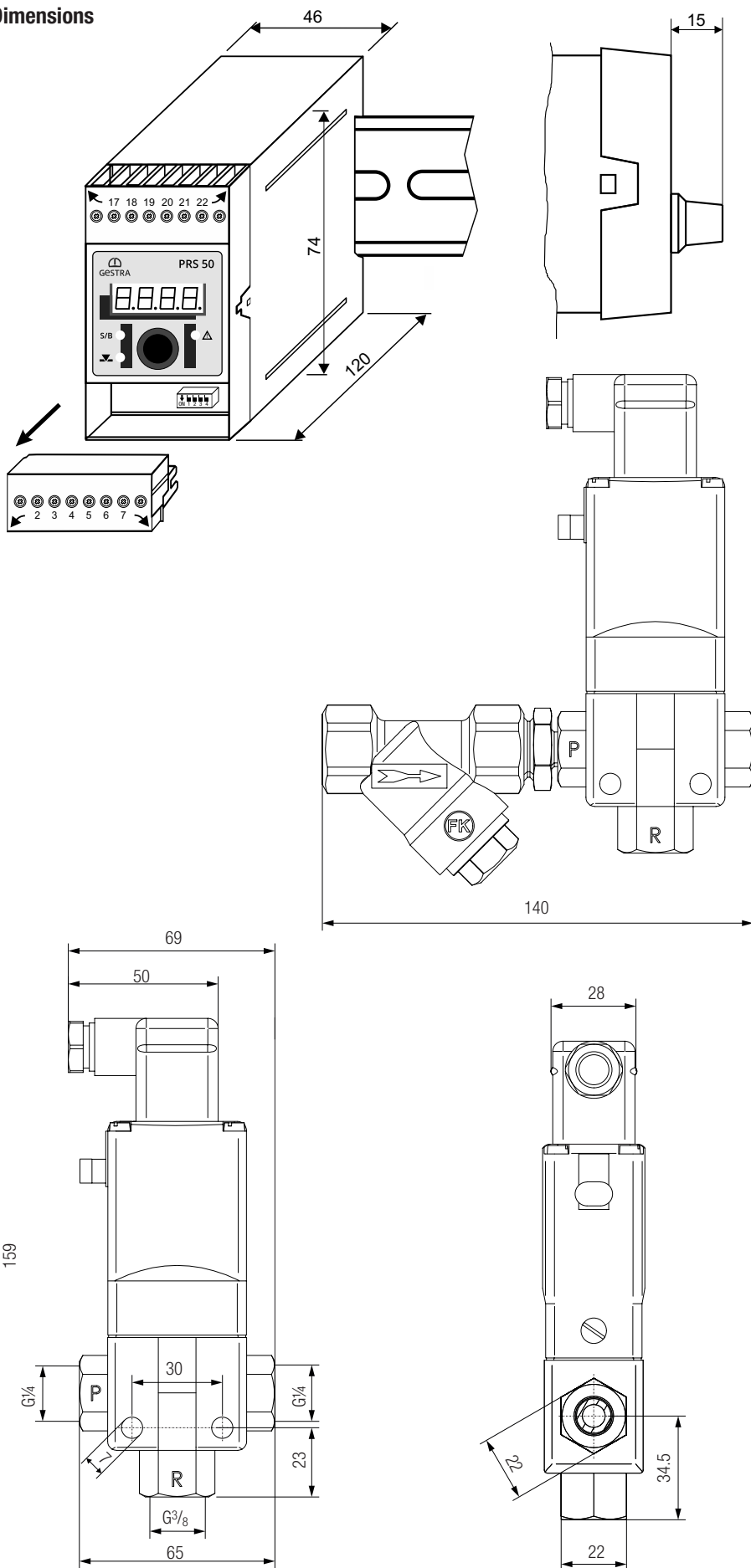


Connector



Programme-controlled blowdown system
TA 50

Dimensions



Important notes

Connecting the 24V DC power supply

The PRS 50 cycling timer is supplied with 24 V DC. A safety power supply unit that delivers a Safety Extra Low Voltage (SELV) must be used to supply the equipment with 24 V DC. Use an M 0.5A fuse as an external fuse.

Connecting the output contacts (intermittent blowdown valve/alarm)

■ Use a T 2.5A fuse to protect the switching contacts.

Connecting the standby/burner input (24 V DC)

■ 24 V DC input, for external command intermittent blowdown OFF/burner active (standby/burner configuration).
 ■ Maximum cable length = 30 m.

Connecting the inputs (manual intermittent blowdown/limit switch)

- Connect a button (N/O contact) here if you require this function.
- Connect the volt-free limit switch of the intermittent blowdown valve here.
- Use a shielded, multi-core control cable with a minimum conductor size of 0.5 mm², e.g. LIYCY 2 x 0.5 mm².
- Apply the shield at both ends.
- Maximum cable length = 100 m.

How to order and to specify

GESTRA TA 50 programme-controlled blowdown system with PRS 50 cycling timer, 6430 C 2/3-way solenoid valve and strainer.

Please note our general terms of business.

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