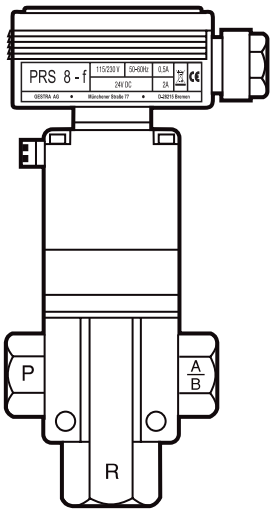


Programme-Controlled Blowdown System
TA 7

Description

Electronic unit for the generation of periodic pulses to initiate a blowdown cycle via the GESTRA rapid-action intermittent blowdown valve type MPA 46 or 47, i.e. automation of intermittent boiler blowdown. Equipment for steam boilers to TRD 401, section 6.4.

The programme-controlled blowdown system consists of an electronic cycling timer, a three-way solenoid valve and a strainer.

The equipment meets the German regulations for use in steam-boiler plants operating without constant supervision or with limited supervision (TRD 602 and TRD 604, sheet 1).

Function

The cycling timer type PRS 8 generates a control pulse which, after the preset blowdown interval, operates the three-way solenoid valve. This in turn actuates the rapid-action blowdown valve by means of compressed air or pressurized water and closes it again at the end of the pulse (blowdown) duration.

The blowdown interval and the pulse duration can be coarsely preset with a code switch. Final adjustment is carried out with the aid of two potentiometers.

For test purposes and in the event of power failure the three-way solenoid valve can be operated by hand. A push-button manual override is provided on the solenoid valve which allows a test of the blowdown valve as required by certain regulations in force.

Design

The cycling timer PRS 8 is mounted in an appliance plug socket fitted on the three-way solenoid valve.

Technical Data

Cycling Timer PRS 8

Interval time t_{off} (blowdown interval)
Adjustable within a range of 0.5 h to 10 h

Pulse duration t_{on} (blowdown duration)
Adjustable within a range of 0.5 s to 10 s

Indicators
One LED mains supply
One LED pulse duration

Supply voltage
115 V – 230 V, 50 – 60 Hz
or 24 V DC

Protection
IP 65

Permissible ambient temperature
0 °C to 60 °C

Cable entry
PG cable gland for 0.6 to 7 mm cable

Approx. weight
60 g

Technical Data – continued –

Three-Way Solenoid Valve 340 C

Connection
¼", EN ISO 228-1

Max. service pressure
16 barg (230 psig)

Min. differential pressure required for opening and closing
0.5 bar (7.2 psi)

Duty cycle
100 %

Position of installation
as required

Code letters for connections
P = Pressure connection
A = Valve outlet
R = Exhaust or drain outlet

Supply voltage
115 V, 50 Hz, 15 VA, in rush 30 VA
or
230 V, 50 Hz, 15 VA, in rush 30 VA
or optional
24 V DC 8 W

Protection
IP 65

Maximum permissible ambient temperature
55 °C

Approx. weight
0.9 kg

Strainer

Connection
½", EN ISO 228-1

Material
Body: gun metal RG 5
Filter cartridge: austenitic stainless steel 1.4571

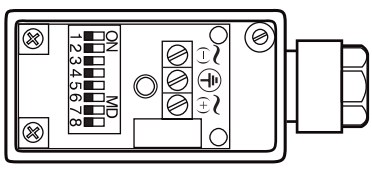
Mesh size
0.5 mm

Approx. weight
0.3 kg

Control Fluid

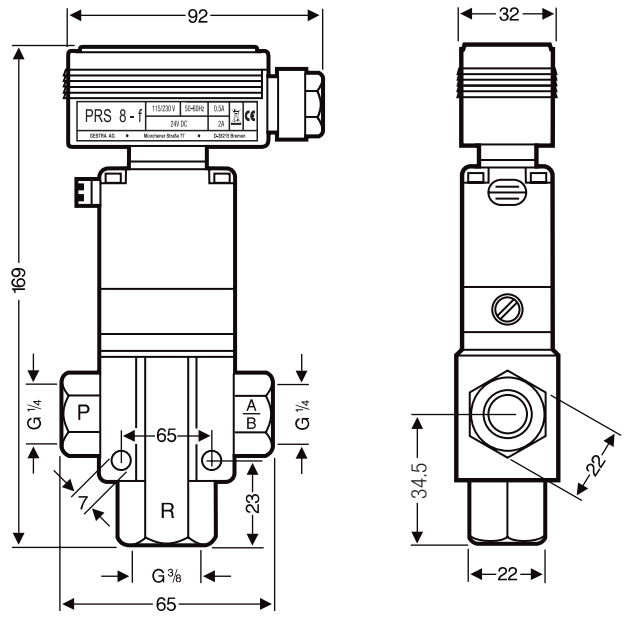
Compressed air or pressurized water, 4 to 8 barg (58 to 116 psig) depending on the blowdown valve used and the boiler pressure (see chart in data sheet MPA 46, MPA 47).

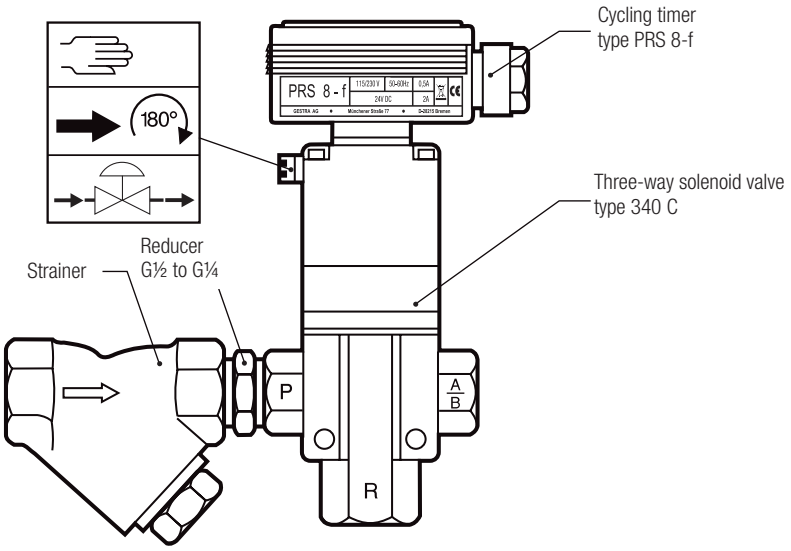
Wiring Diagram



Programme-Controlled
Blowdown System
TA 7

Dimensions





Important Notes

For wiring to the cycling timer three-core cable, conductor size 1.5 mm², is required.

Order and Enquiry Specifications

GESTRA programme-controlled blowdown system type TA 7 with cycling timer type PRS 8, three-way solenoid valve type 340 C and strainer. Mains supply 230 V, 50 Hz.

Supply in accordance with our general terms of business.

GESTRA AG
Münchener Straße 77, 28215 Bremen, Germany
Telefon +49 421 3503-0, Telefax +49 421 3503-393
E-mail info@de.gestra.com, Web www.gestra.de

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