

## Rotor cleaning device EPRW

**GE1**

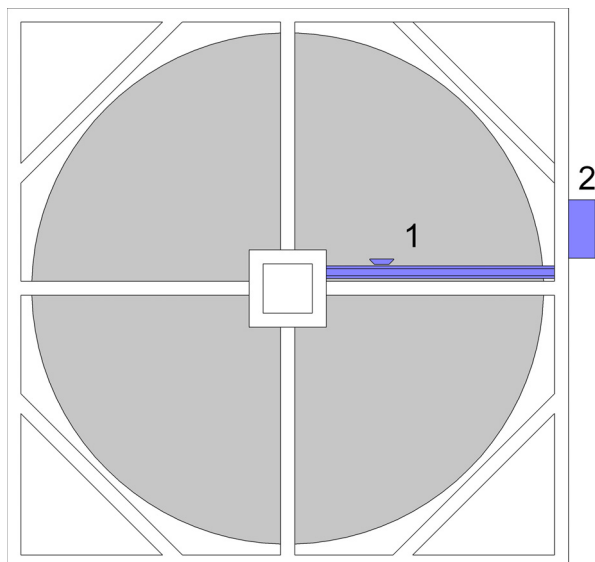


Figure 1

### Automatic rotor cleaning

In most applications the self-cleaning effect of the rotorsystem is sufficient to keep up an optimal operational condition.

For especially extreme conditions we have developed automatic operating rotor cleaning systems.

The rotor cleaning system EPRW is an electro-pneumatic-controlled rotor cleaning system that has been developed especially for rotorsystems that are employed in air conditioning plants where there is heavy soiling with dust and baking-on dirt. The rotor is cleaned by pressurised air.

Figure 1 shows an assembly example of the pneumatic way cylinder (1) on the middle spar of the support frame.

Mounting of the way cylinder with the nozzle carriage can be done either at the casing traverse or the casing middle support.

### Functional description

The control can be done by the central control system, a timer or by a manual switch depending on the application. The blower air for the rotor cleaning and the control air is activated by a separate filter regulator by the control of the solenoid of the EPRW.

The pressurised cleaning air for the cleaning and the nozzle advance is released by the solenoid in the controller.

During frost and/or the danger of ice build-up in the rotor, cleaning with water is forbidden.

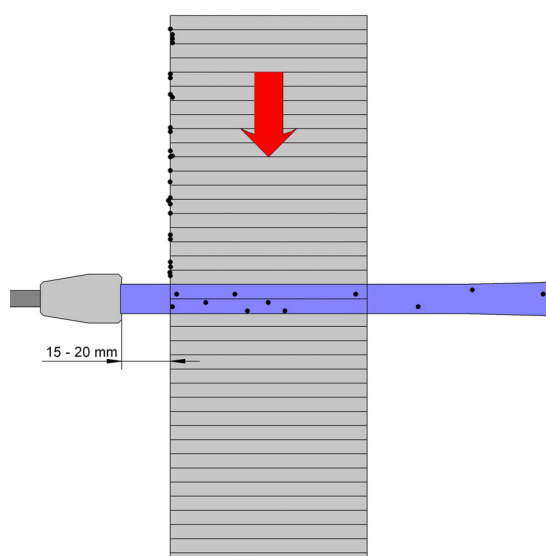


Figure 2

## Rotor cleaning device EPRW

GE2

Pneumatic cylinder (Figure 3) with nozzle carriage and the cleaning nozzles for compressed air.

- 1 Pneumatic - way cylinder
- 2 Nozzle carriage with nozzles
- 3 Control lines
- 4 Cleaning air lines
- 5 Mounting bracket

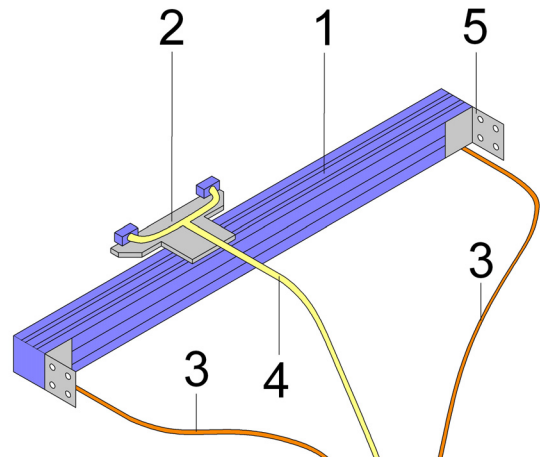


Figure 3

The controller (Figure 4) is installed in a switch box with externally attached filter regulator for operation with compressed air of 2 to 6 bar. The control is done with 230 Volts. Upon request the control can be supplied with 24 Volts.

- 6 Control cabinet for electro-pneumatic control
- 7 Control 220 Volts or 24 Volts
- 8 Connection for control lines
- 9 Connection cleaning air lines
- 10 Filter regulator

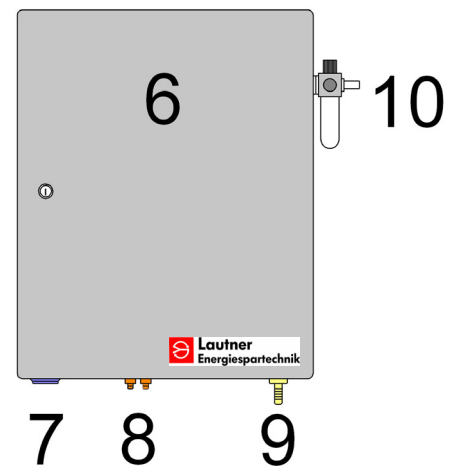


Figure 4

Dimensions of the switch box:

Height: 300 mm  
 Width: 200 mm  
 Depth: 155 mm

## Rotor cleaning device EPRW

GE3

Notes on assembly and installation of the cleaning system EPRW for cleaning the rotor systems with compressed air.

- The distance between rotor and cleaning nozzles is set to 15 - 20 mm.
- The connection between nozzle carriages and cleaning air connection has to be realized with flexible hoses.  
Please make sure that the nozzle carriage can be moved freely along the whole length of the stroke and that the hoses can not get caught between the rotor and the encasing.  
The control air line should be kept as short as possible and can be permanently attached.

■ **Media supply:**

Main supply line compressed air:	Pipe 10 mm, connected to "EPRW" controller with compressed-air hose with NW 7.2 coupling to EPRW plug nipple connection.
Cleaning air line connection:	Polyamide hose 8 x 6, screw plug Qss8,
Connection to the cleaning nozzles:	1/4" pipe thread.
Control lines between EPRW controller and cylinder:	2 connections polyamide hose 6 x 4 screw plug Qss6,
Operating data and media consumption:	
Air:	Operational pressure 2 - 6 bar (max. pressure: {8 bar)
Cleaning air flow rate:	155 ltr./min at 6 bar, (with one cleaning nozzle)
Control air flow rate:	2 ltr./min at 6 bar
Ambient temperature:	up to 80 °C

Technical specifications subject to change / Version 5.6