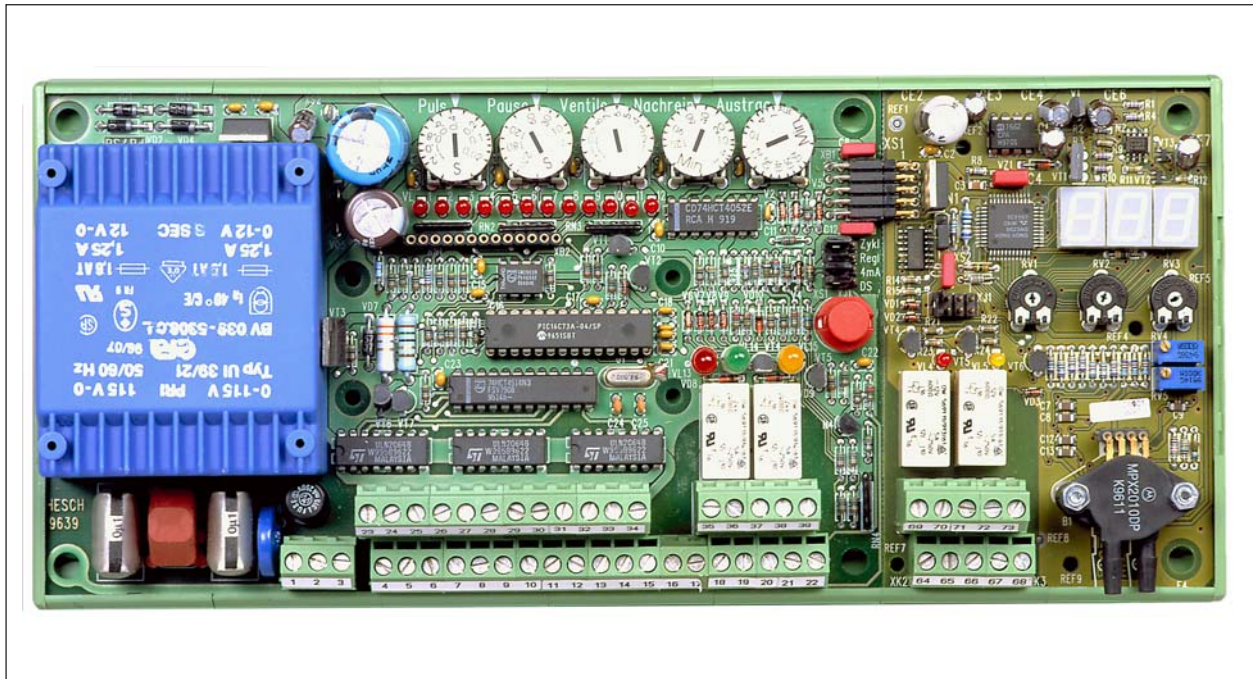


## µP-Valve Control Unit HE 5720

with  $\Delta P$ -Controller



### Features

- Activation of 12 (24) solenoid valves
- Valve voltage 24 V DC (1 A)
- Time- or  $\Delta P$ -dependent controller mode
- Integrated  $\Delta P$ -control function
- Function- and malfunction indication of every individual valve
- Valve monitoring functions (option)
- Power supply 230 V AC, 30 VA (option: 115 V AC or 24 V DC)
- 4 relay outputs 250 V AC, 5 A (malfunction, follow-up signal,  $\Delta P$ -alarm, ...)

### Short Description

The HE 5720 valve control system is used for pulse activation of solenoid valves in air pollution control systems.

Basically the device has 12 outputs to activate 12 valves with 24 V DC. With an extension board the HE 5720 controls 24 valves.

These functions are available: Timer mode,  $\Delta P$ -dependent cleaning (part- / full cycle), forced cleaning, post cleaning, lag-time control for discharge organs, etc.

The operator can select the timer mode with variable pause time or the  $\Delta P$ -dependent mode based on the built-in  $\Delta P$ -controller.

The HE 5720 has a high-speed current check for all valves to detect open- or short-circuits. As options are available:

- mechanical valve function monitoring via pressure switch
- activation of discharge organs with adjustable lag-time
- flow-dependent  $\Delta P$ -control according to controller characteristics

## Technical Data HE 5720 with $\Delta$ P-Controller

|                                     |   |                    |                    |
|-------------------------------------|---|--------------------|--------------------|
| <b>Inputs:</b>                      | <ul style="list-style-type: none"> <li>• Start- or <math>\Delta</math>P-input 0(4)-20 mA</li> <li>• Release (contact closed) / Stop (contact open)</li> <li>• Post-cleaning (pulse signal)</li> <li>• Acknowledge malfunction (pulse signal)</li> <li>• Pressure switch for mechanically valve function monitoring</li> </ul>   |                    |                    |
| <b>Valve outputs:</b>               | 12, extendible to 24 (option)   |                    |                    |
| <b>Valve voltage:</b>               | 24 V DC $\pm$ 10 %  |                    |                    |
| <b>Valve current:</b>               | 1 A at a pulse time $\leq$ 1s and a pause time of $\geq$ the pulse time, otherwise 0.5 A  |                    |                    |
| <b>Relay outputs:</b>               | 250 V AC / 5 A,<br><ul style="list-style-type: none"> <li>• 1x SPDT for operating signal or malfunction signal (fail-safe)</li> <li>• 1x SPST for triggering of discharge organs or signal for cleaning</li> </ul> additional with $\Delta$ P-extension:<br><ul style="list-style-type: none"> <li>• 1x SPDT for cleaning</li> <li>• 1x SPDT for <math>\Delta</math>P-alarm</li> </ul>  |                    |                    |
| <b>Analog output:</b>               | 0(4)-20 mA  |                    |                    |
| <b><math>\Delta</math>P-Sensor:</b> | <ul style="list-style-type: none"> <li>• Meas. range: 0-25 / 30 / 40 / 50 / 60 / 70 / 80 / 90 / 100 mbar</li> <li>• Max. static pressure: 1 bar</li> <li>• Linearity: <math>\pm</math> 1%</li> <li>• Pressure hysteresis: <math>\pm</math> 0.1 %</li> <li>• Temperature hysteresis: <math>\pm</math> 0.5 %</li> <li>• Temperature drift / zero point: <math>\pm</math> 0.025 % / K</li> <li>• Temperature drift / maximum value: <math>\pm</math> 0.01 % / K</li> </ul>   |                    |                    |
| <b>Power supply:</b>                | 230 V AC, 50-60 Hz  | 115 V AC, 50-60 Hz | 24 V DC            |
| <b>Tolerance:</b>                   | $\pm$ 10 %  | $\pm$ 10 %         | $\pm$ 10 %         |
| <b>Main fuse:</b>                   | 0.315 A, slow reaction  | 0.63 A, slow reac. | 3.15 A, slow reac. |
| <b>Power consumption:</b>           | 30 VA   | 30 VA              | 42 W               |
| <b>Electrical connection:</b>       | screw-type terminal strips 2.5 mm <sup>2</sup>  |                    |                    |
| <b>Ambient temperature:</b>         | 0...50 °C   |                    |                    |
| <b>Humidity:</b>                    | $\leq$ 75% rel. humidity, no condensation   |                    |                    |
| <b>Housing:</b>                     | <ul style="list-style-type: none"> <li>• PCB with distance tubes for mounting<br/>with M4-screws: 178 x 107 x 46 mm (w x h x d),<br/>with <math>\Delta</math>P-extension: 248 x 107 x 46 mm (w x h x d)</li> <li>• DIN-rail-enclosure: 180 x 111 x 60 mm (w x h x d),<br/>with <math>\Delta</math>P-extension: 250 x 111 x 60 mm (w x h x d)</li> <li>• dust-tight macrolon housing (IP65) with PG flange,<br/>without PG screw-type joints (max. 12 x PG 13.5 possible),<br/>280 x 190 x 130 mm (w x h x d)</li> </ul> |                    |                    |

**Subject to technical alterations**