# **Cervomatic EDP.2**

# Type series booklet





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Type series booklet Cervomatic EDP.2

KSB Aktiengesellschaft Pegnitz

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# General Description

- Control and monitoring unit for small pump sets.
- Suitable for handling clean to turbid water not containing aggressive, abrasive or solid substances

#### Cervomatic can be used with:

Type series	Multi Eco	Ixo	S 100 D UPA 100 C UPA 150 C 1/7, 1/9, 1/12, 1/14, 1/16, 2/7, 2/11, 2/15, 2/18, 4/4, 4/6, 4/9, 4/12, 7/5, 7/7, 7/9	
Туре	33 E/D, 34 E/D, 35 E/D, 36 E/D, 65 E/D	45 E/D, 55 E/D, 65 E/D, 48 E/D, 58 E/D		
	Rp 1	G 1 <sup>1</sup> / <sub>4</sub>	G 1 <sup>1</sup> / <sub>4</sub>	

#### **Operating data**

#### Operating properties

Characteristic		Value	
Flow rate	Q	Up to 15 m <sup>3</sup> /h (4.17 l/s)	
Operating pressure	р	10 bar	
Operating temperature	t	0 to 40°C	

#### Designation

#### Example: Cervomatic ED P .2

#### Key to the designation

Code	Description
Cervomatic	Type series
E	Single-phase
D	Three-phase
Р	Electrical protection
2	Product version

#### Materials

The following components are used:

- Housing: polyamide
- Membrane: stainless steel
- Built-in components: EPDM, natural rubber, Noryl, ceramic

#### Functions

Ensures gentle system operation by:

- Pressure-dependent pump start
- Pressure-dependent or flow-dependent stop of the pump
- Integrated dry-running protection
- Integrated overload protection

#### Operating modes

Main applications

Water supply

The unit offers two different operating modes which can be selected during parameterisation:

#### On/off mode:

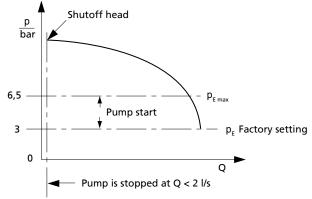
- The pump is started when the pressure in the pipe drops
- The pump is stopped when the flow is interrupted

#### Pressure-dependent mode:

- The pump is started when the pressure in the pipe drops
- The pump is stopped when the set pressure in the pipe is exceeded

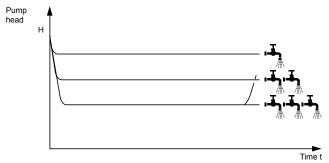
#### **Pressure distribution**

The start pressure is set to 3 bar at the factory and can be decreased to 1 bar or increased to 6.5 bar if necessary. For further information, refer to operating instructions.



Start-up range





System pressure in relation to withdrawn fluid quantities

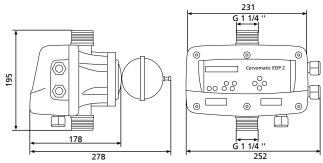


# **Technical Specifications**

#### Technical data

Description	Value
Range of start pressure (on/off mode)	1 to 5 bar
Minimum flow (on/off mode) <sup>1)</sup>	2 l/min
Maximum start pressure (pressure-dependent mode)	6.5 bar
Maximum stop pressure (pressure-dependent mode)	7 bar
Maximum operating pressure	10 bar
Rupture pressure <sup>2)</sup>	40 bar
Flow rate	15 m³/h
	4.17 l/h
Enclosure	IP 54
Maximum ambient temperature	0 to 50°C
Maximum water temperature	0 to 40°C
Mains voltage	1 ~ 230 V, 50/60 Hz
	3 ~ 230 V, 50/60 Hz
	3 ~ 400 V, 50/60 Hz
Maximum pump current	10A (16)A
Protection against lack of water	Available
Restart after detected lack of water	ART system (Automatic Reset Test)
	One restart attempt after 5.5 minutes
	<ul> <li>In the case of persisting lack of water: restart attempt repeated every 30 minutes for a period of 24 hours</li> </ul>
	<ul> <li>In the case of permanent lack of water: pump is permanently stopped until the defect is remedied</li> </ul>
Inlet tank monitoring	Optional
Weight	3.3 kg
Ident. No.	01 185 581

# Dimensions and weight Dimensions



Dimensions

#### Weight

Cervomatic EDP.2 has a weight of approx. 3.3 kg.

<sup>&</sup>lt;sup>1)</sup> The pump is stopped when the actual flow is lower than the minimum flow.

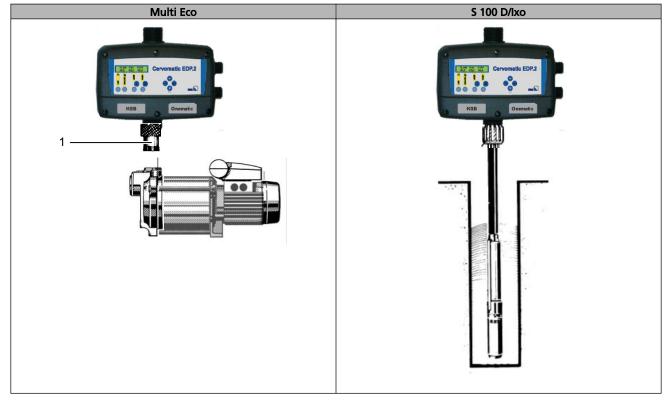
<sup>&</sup>lt;sup>2)</sup> The control unit must be protected at all times against excess pressure (incl. system-induced surge pressures) exceeding the permissible maximum rupture pressure of pB = 40 bar. If in doubt about the maximum suction side pressure, either add a safety margin of 5 bar to the nominal pressure, or install a pressure reducer between the pump and the unit or on the pump's suction side. In addition, a non-return valve must be installed on the pump's suction side.



## **Combinations and Accessories**

### For pumps and required accessories

#### Accessories required



No.	Accessories	Ident. No.	Application
1	2 x screwed connection G1"a to G11/4" i (union nut)	00 136 434	For connection to Multi Eco
	Pipe adapter set for installing the unit in horizontal pipes	01 198 308	
	Check valve, for using Cervomatic EDP.2 in combination with pumps without integrated swing check valve		



KSB Aktiengesellschaft 67225 Frankenthal • Johann-Klein-Str. 9 • 67227 Frankenthal (Germany) Tel. +49 6233 86-0 • Fax +49 6233 86-3401 www.ksb.com