


## DATA SHEET

### RGMAT E R8 1F Pump Station

Main Features	
	<p>This Load Unit is intended for systems with solid-fuel boilers and fireplaces. The Load Valve integrated in the Load Unit keeps the min. incoming temperature to a boiler (fireplace) above the flue gas condensation temperatures, which prevents low-temperature corrosion of the boiler combustion chamber. This way the Load Unit contributes to a significant reduction in tarring and boiler fouling, to an increase in the efficiency of fuel combustion and to extension of the boiler service life. The Load Unit consists of:</p> <ul style="list-style-type: none"> <li>• RPA 25-8 Pump,</li> <li>• ball valve with union nut,</li> <li>• TSV3B Load Valve w. outer threads and automatic bypass balancing,</li> <li>• thermometer,</li> <li>• insulation.</li> </ul>
	<p><b>Description</b></p>
	<p><b>Working fluid</b></p> <p>Water; water/glycol mixture (max. 1:1). pH range 6.5-8.5. We recommend placing a filter with a mesh size of max. 0.6 mm upstream of the pump – e.g. Magnetfilterball – see the Catalogue for codes.</p>
	<p><b>Installation</b></p> <p>On return piping, min. dist. of the pipe axis from a wall is 100 mm.</p>

Codes	boiler output
<b>21374</b> – for valve opening temperature 45 °C	max. 54 kW
<b>21115</b> – for valve opening temperature 55 °C	max. 42 kW
<b>21122</b> – for valve opening temperature 65 °C	max. 30 kW
<b>21375</b> – for valve opening temperature 70 °C	max. 26 kW

Technical Data	
Fluid working temperature	5–95 °C
Max. working pressure	6 bar
Min. working pressure	0.5 bar
Ambient working temperature	5–40 °C
Max. relative humidity	80% non condensing
Control Range of the Load Valve	opening temperature +5 °C
Load Valve Kvs (direction A ►AB)	6.2 m³/h
Load Valve Kvs (direction B ►AB)	4.4 m³/h
Pump motor protection	integrated
Overall dimensions	325 x 140 x 155 mm
Total weight	3.1 kg
Connections	3 x G 1" F

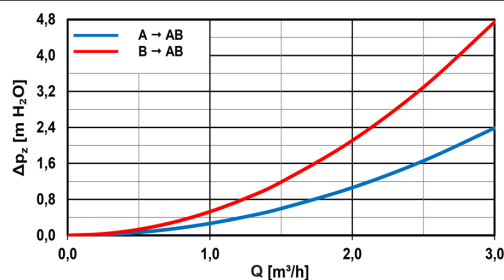
Electric Data	
Power supply	230 V, 50 Hz
Max. power input	65 W
Max. current	0.65 A
IP rating	IP44

Materials	
Insulation	EPP RG 60 g/l
Load Valve and fittings	brass
Thermostatic element and plug seal	EPDM
Load Valve cone seal	NBR

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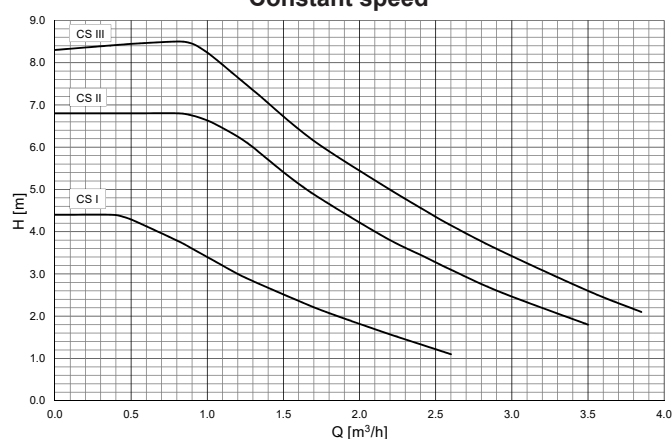
### Valve pressure drop diagram



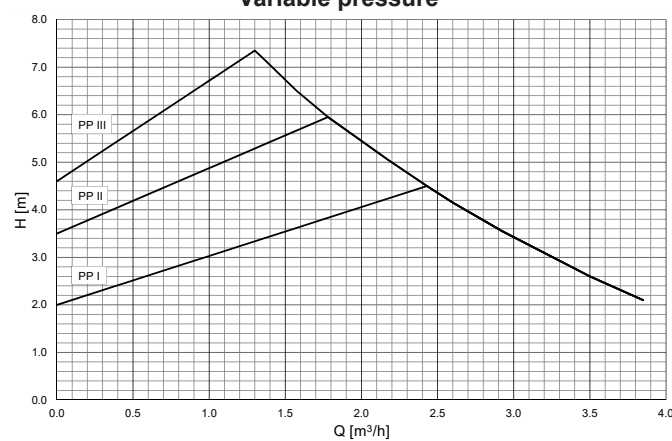
The pressure drop value of the valve moves between the two curves depending on the mixing ratio during mixing.

### Pump performance curves

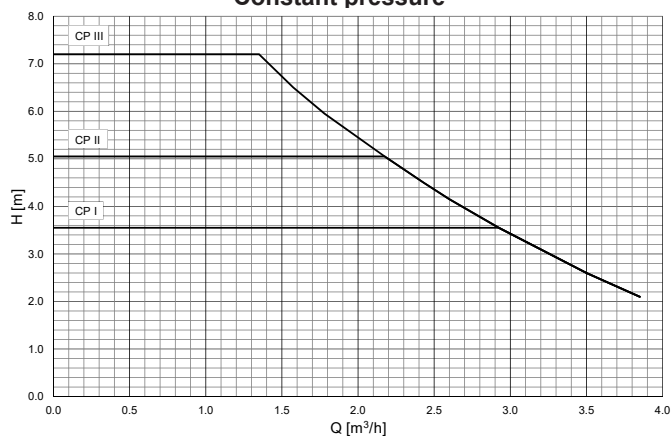
#### Constant speed



#### Variable pressure

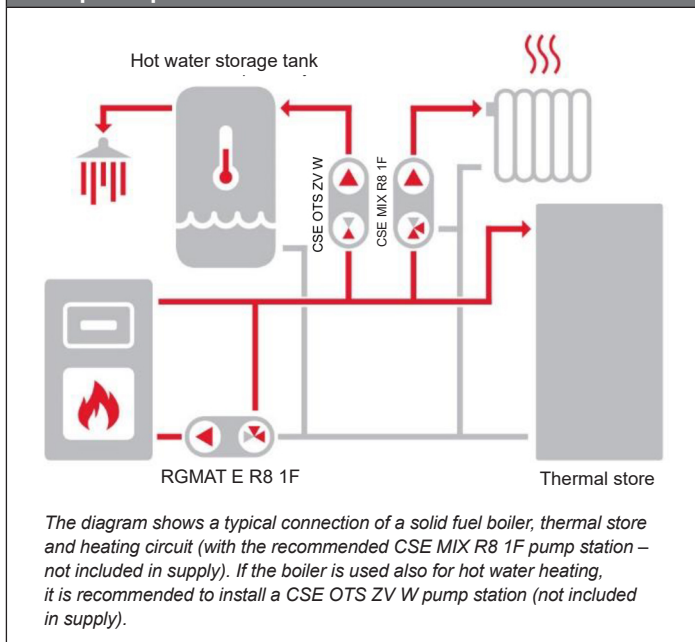


#### Constant pressure



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**Example of possible connection I**

**Example of possible connection II**
