

## RGMAT E W8 5/4 Pump Station

	Main Features	
	Description	<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>• Wilo PARA 25/8 SC Pump</li> <li>• TSV5B Load Valve with automatic bypass balancing</li> <li>• thermometer</li> <li>• insulation</li> </ul>
	Working fluid	water; water/glycol mixture (max. 1:1) or water-glycerine mixture (max. 2:1)
	Installation	on return piping, min. dist. of the pipe axis from a wall is 100 mm

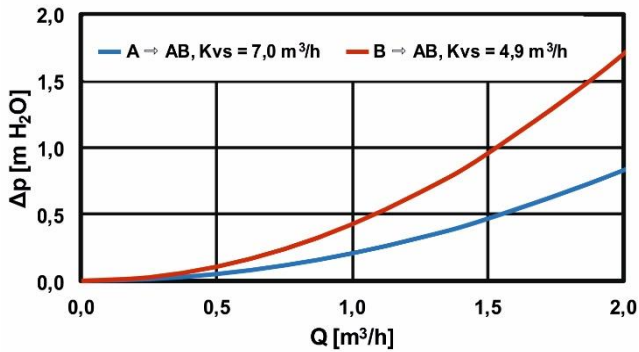
Codes	boiler output
18684 for valve opening temperature 55 °C	max. 55 kW
18663 for valve opening temperature 65 °C	max. 40 kW

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
Insulation material	EPP RG 60 g/l
Control Range of the Load Valve	opening temperature + 5 °C
Load Valve Kvs (direction A ►AB)	7,0 m³/h
Load Valve Kvs (direction B ►AB)	4,9 m³/h
Max. pump speed	4800 rpm
Pump speed control	frequency converter
Pump motor protection	integrated
Overall dimensions	325 x 140 x 220 mm
Total weight	3,27 kg
Connections	3 x G 5/4" F

Electric Data	
Power supply	230 V, 50 Hz
Power input (min./max.)	2/75 W
Current (min./max)	0,03/0,66 A
Energy Efficiency Index	≤ 0,21 by EN 16 297/3
IP rating	IPX4D

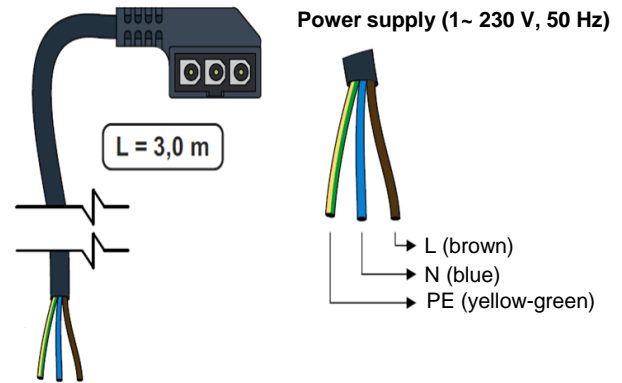
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### Valve pressure drop diagram



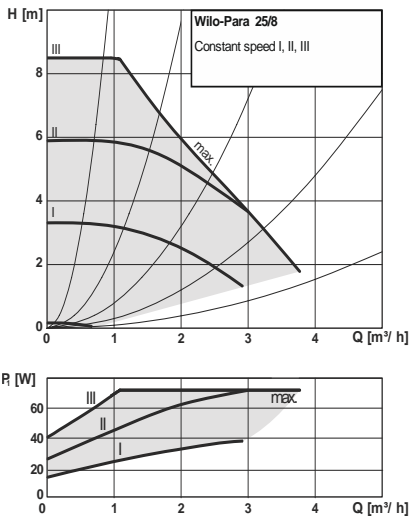
The pressure drop value of the valve moves between the two curves depending on the mixing ratio during mixing

### Pump wiring

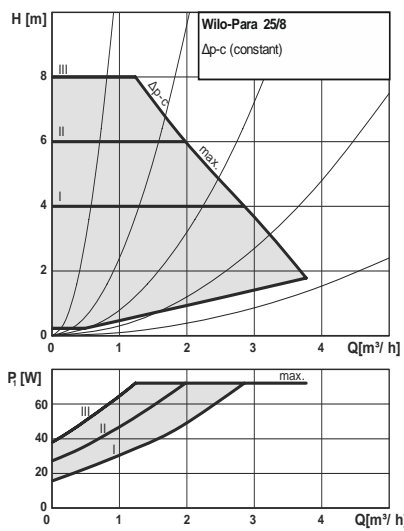


### Pump performance curves

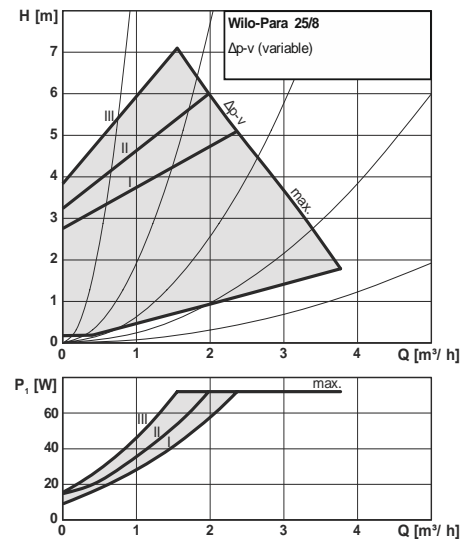
#### Characteristics of n=const.



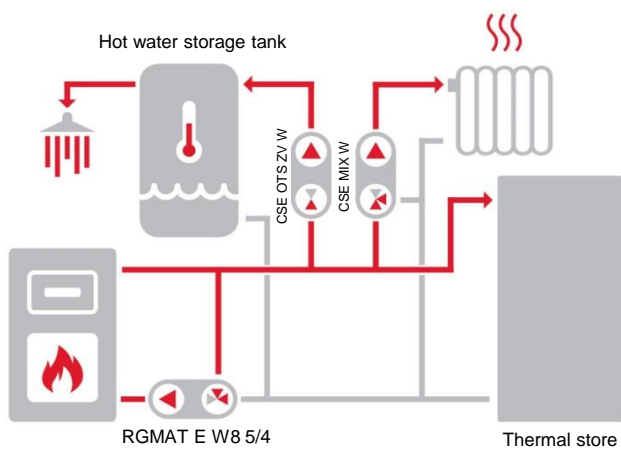
#### Characteristics of Δp-c (constant)



#### Characteristics of Δp-v (variable)

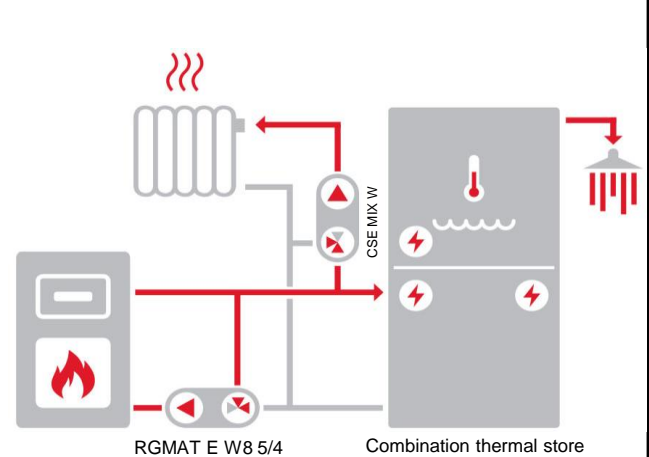


### Example of possible connection I



The diagram shows a typical connection of a solid fuel boiler, thermal store and heating circuit (with the recommended CSE MIX W pump station – not included in supply). If the boiler is used also for hot water heating, it is recommended to install a CSE OTS ZV W pump station (not included in supply).

### Example of possible connection II



The diagram shows a typical connection of a solid fuel boiler, combination thermal store and heating circuit (with the recommended CSE MIX W pump station – not included in supply).