

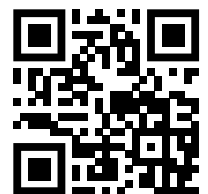


**HeatBloC®**  
Heating technology



## Product range HeatBloC® standard

Technical data and product information





The **PAW HeatBloC®s** are premounted groups of fittings for heating circuits in the nominal diameters DN 20 to DN 50. PAW offers a broad range of heating circuits - from direct HeatBloC®s to mixed HeatBloC®s with 3- or 4-way mixing valve or thermal control valve to mixing valves with bypass or 3-temperature mixing valves. Modular distribution manifolds and special purpose solutions as boiler connections and return flow temperature maintenance complete our range of products.

All **HeatBloC®s** are designed such that they can be directly mounted onto a distribution manifold or a mounting plate with thread connections.

With transition connections, the HeatBloC®s can also be mounted on PAW modular distribution manifolds of other dimensions.

The single modules can thus be combined without any problems and can be arranged in numerous ways. This extraordinary flexibility is achieved by the modular structure of the entire system. It allows you to plan, install and extend distribution manifolds rapidly and professionally.

HeatBloC® is a registered trademark in Germany.



Insulation of the valves and fittings with sealing lips



**All HeatBloC®s offer the following advantages:**

- **Ball valve with full port, gaskets of the spindle can be replaced during operation**
- **Flat-sealing connections DN 20 to DN 32** with union nut for the assembly on a PAW distribution manifold
- **Flange connections DN 40/50** with gaskets and screws
- **An individual assembly with a wall bracket or mounting bracket is possible.**
- **Large ball valve handles**, easy handling, visible closing position
- **EnEV-compliant functional insulation**, made of permanently elastic EPP, complete insulation of the valves and fittings with sealing lips, ventilation opening to cool the pump and cable channel for a comfortable laying of the cables
- **Check valve in the return pipe**, can be opened, 200 mm wc, spring-loaded, thus also suited for horizontal and overhead installation
- **PAW mixing valve with suitable actuator**  
Easy assembly and disassembly thanks to the smart PAW snap-in mechanism
- **Flow on the right = standard**  
The HeatBloC®s can be delivered with flow on the left against additional charge.
- **The flow and return line can be easily changed on site**, also for heating circuits with mixing valve
- **All water-carrying parts are made of brass**
- **All-metal thermometers**, can be pulled off, with immersion sleeve integrated in the ball valve
- **Heating circulation pumps with high-efficiency technology**, fitted with 2 m cable, completely premounted, integrated in the insulation, pressure tested, with serial number, perfectly aligned system, dimensioning diagram, EuP/ErP READY
- **Free access to the pump head, the pump can be entirely isolated**, no draining necessary during servicing



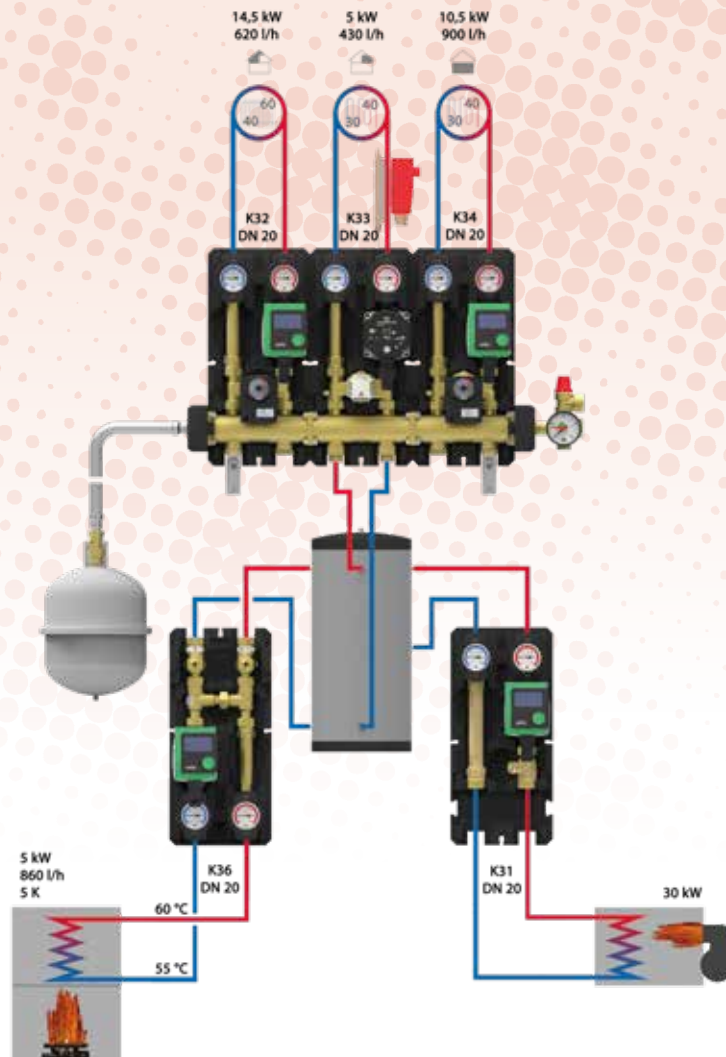
Replaceable spindle





K31: direct	K32: 3-way mixing valve	K33: Controlled circuit with constant value	K34: 3-way mixing valve with bypass	K36: Boiler charging set
up to 30 kW*	up to 21 kW*	up to 5 kW*	up to 21 kW*	up to 10 kW*
Item no.: 32013xx	32053(M)xx	32073xx	32063(M)xx	320353xx / 320373xx

\*at  $\Delta t = 20\text{ K}$ , xx = pump version, (M) = version with actuator



**DN 25**



<b>K31: direct</b>	<b>K32: 3-way mixing valve</b>	<b>K33: Constant value control circuit</b>	<b>K33R: Constant value control circuit, electronic</b>
up to 50 kW*	up to 40 kW*	up to 10 kW*	up to 16 kW*
Item no.: 36013xx	36053(M)xx	36073xx	360453xx



<b>K34: 3-way mixing valve</b>	<b>K35: 3-temperature mixing valve</b>	<b>K36E: Boiler charging set</b>	<b>K38: 4-way mixing valve</b>
up to 45.5 kW*	up to 32.5 kW*	up to 40 kW*	up to 33 kW*
Item no.: 36063(M)xx	36093(M)xx	360343xx / 360373xx	36083(M)xx

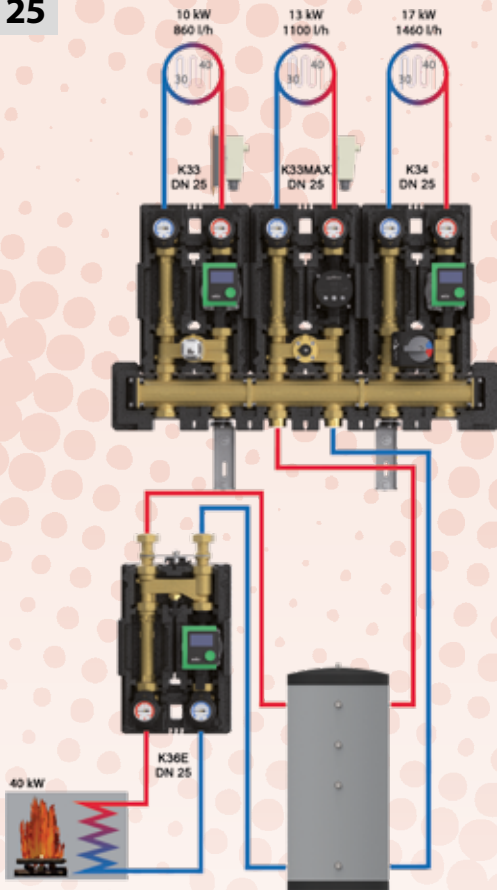
**DN 32**



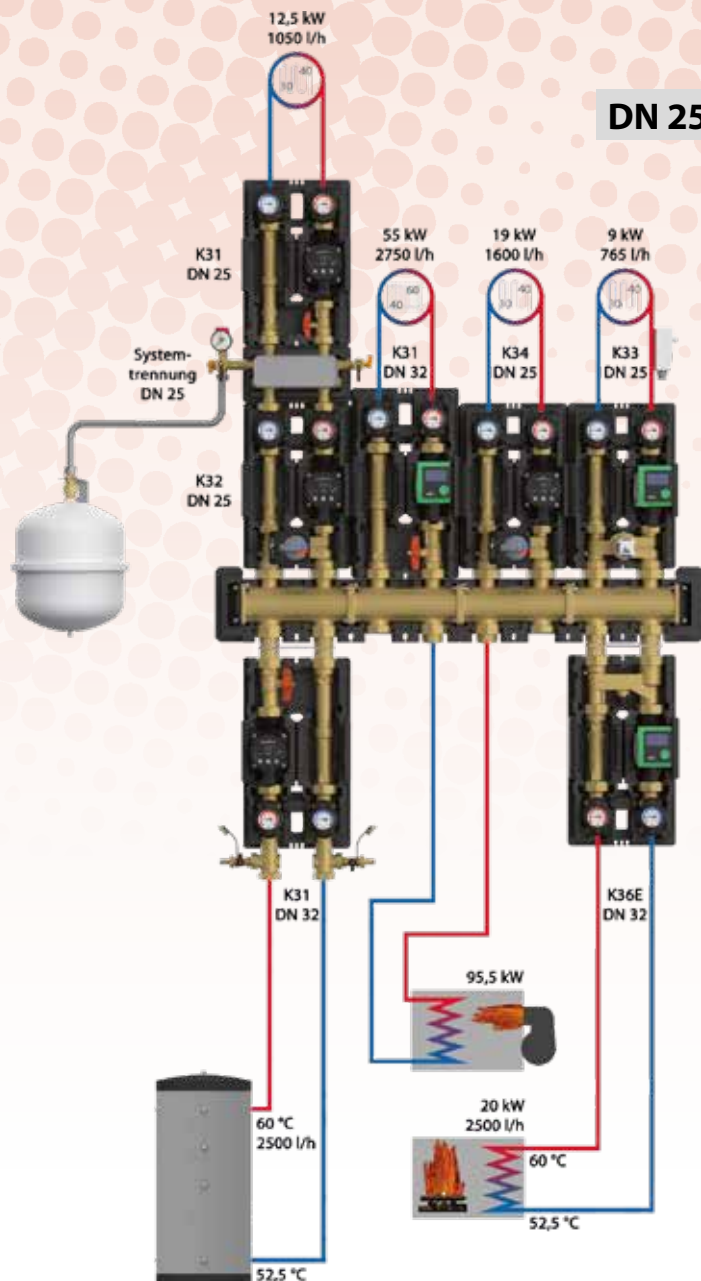
<b>K31: direct</b>	<b>K32: 3-way mixing valve</b>	<b>K34: 3-way mixing valve</b>	<b>K36E: Boiler charging set</b>	<b>K38: 4-way mixing valve</b>
up to 65 kW*	up to 51 kW*	up to 64 kW*	up to 60 kW*	up to 52 kW*
Item no.: 39013xx	39053(M)xx	39063(M)xx	390343xx / 390373xx	39083(M)xx

\*at  $\Delta t = 20 K$ , xx = pump version, (M) = version with actuator

## DN 25



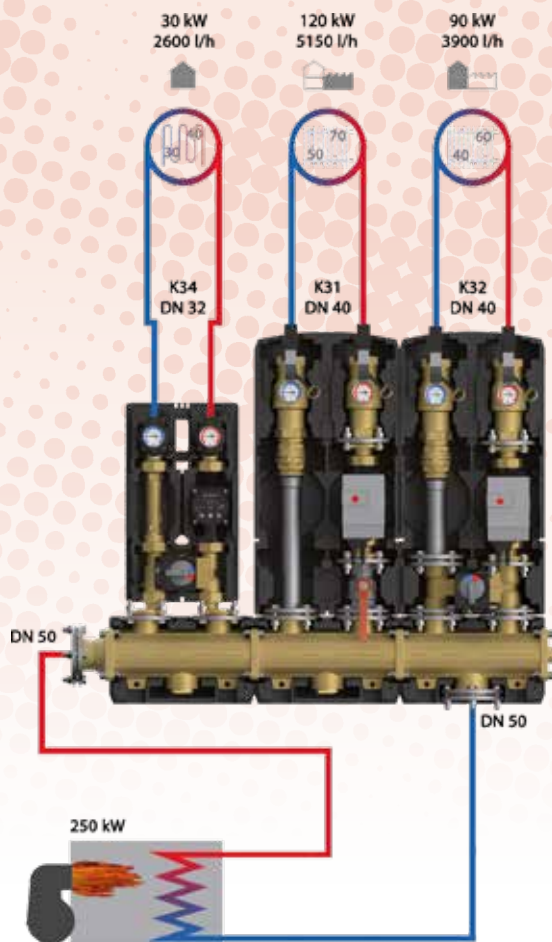
## DN 25 / 32

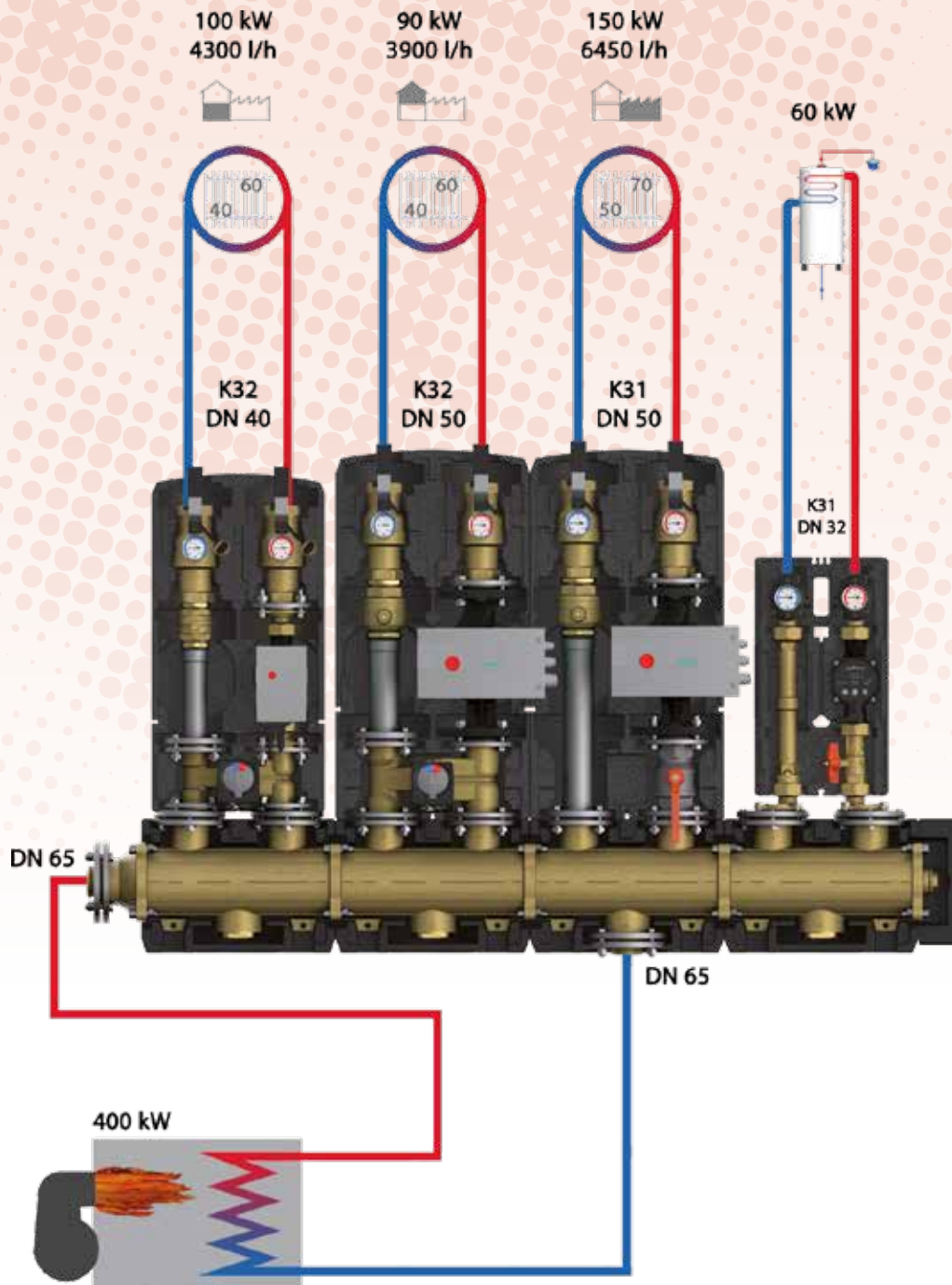


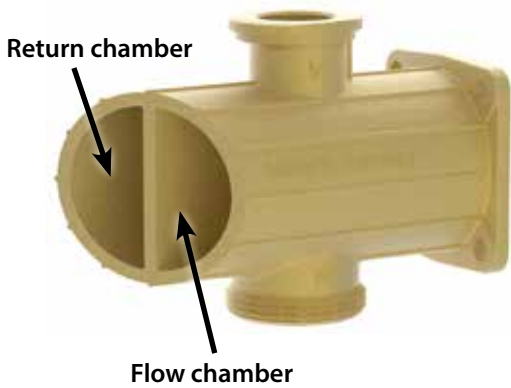


<b>K31 DN 40: direct</b>	<b>K32 DN 40: 3-way mixing valve</b>	<b>K31 DN 50: direct</b>	<b>K32 DN 50: 3-way mixing valve</b>
up to 150 kW*	up to 125 kW*	up to 250 kW*	up to 230 kW*
Item no.: 41211xx	41221(M)xx	51211xx	51221(M)xx

\*at  $\Delta t = 20\text{ K}$ , xx = pump version, (M) = version with actuator





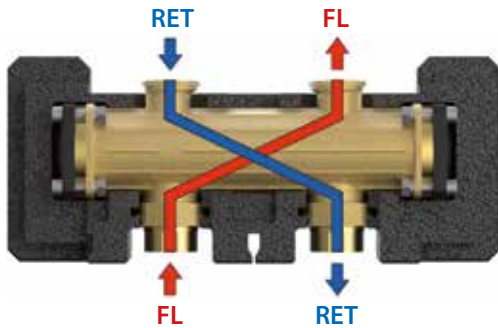


The **PAW modular distribution manifold** is a modular, completely insulated heating distribution manifold made of brass. Depending on the type, it consists of two to six premounted modules.

Depending on the number of the modules, two to eleven standard HeatBloC<sup>®</sup>s or maximum six HeatBloC<sup>®</sup>s MCom can be connected to the distribution manifold. The PAW HeatBloC<sup>®</sup>s can be mounted without further accessories on modular distribution manifolds of the same nominal diameter.

The modular distribution manifold is composed of two separated chambers inside (flow / return).

The flow (FL) and the return (RET) cross each other.



Modular distribution manifold	Max. power	Available as
DN 20	50 kW	2- to 6-fold
DN 25	80 kW	2- to 6-fold
DN 32	150 kW	2- to 6-fold
DN 40	250 kW	2- to 4-fold
DN 50	400 kW	2- to 4-fold

**DN 20**



**DN 25**



**DN 32**



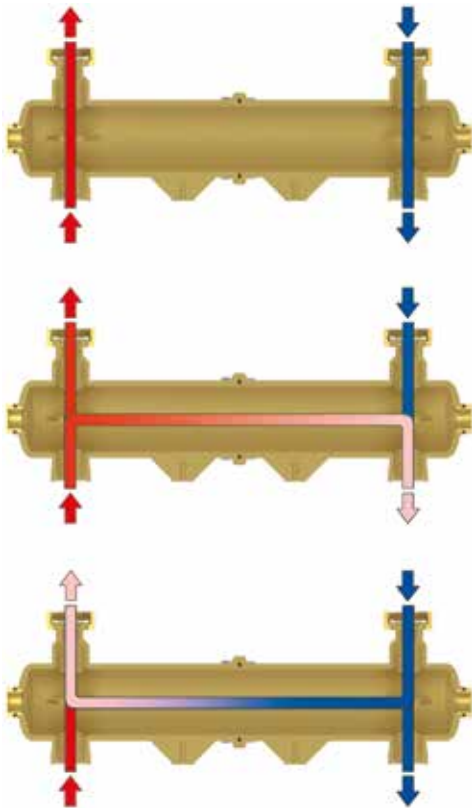
**DN 40**



**DN 50**





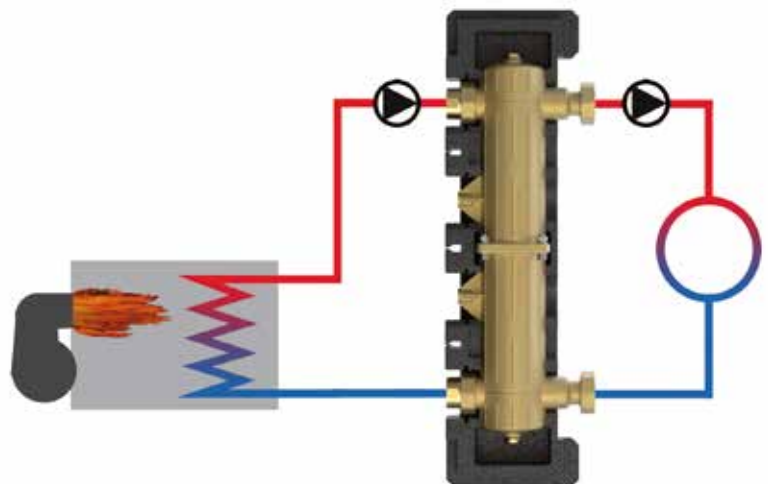
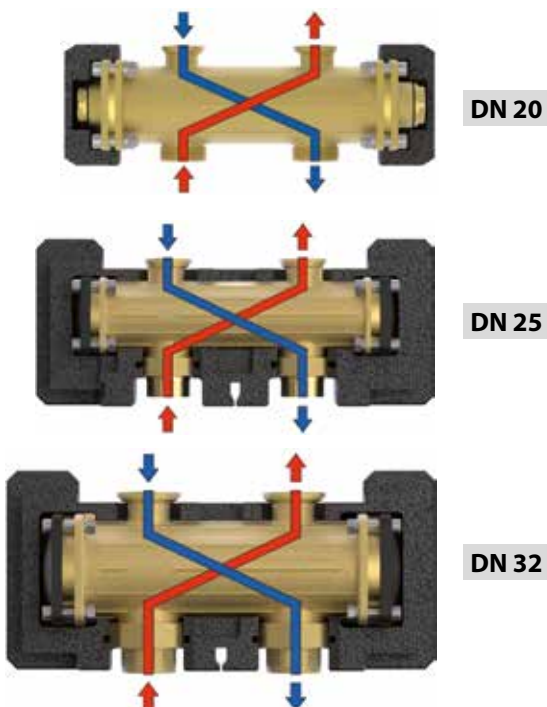


**Hydraulic separators** are used when there are simultaneously one or more heat generator circuits/primary circuits with an own pump and one or more consumer/secondary circuits with a distribution pump in an installation.

Due to the operating conditions in such a system, the pumps affect each other, leading to unwanted changes of the throughput capacity and of the head in the circuits. The hydraulic separator causes a hydraulic separation of the connected circuits. It is thus possible to make the connected primary and secondary circuits work independently regarding the hydraulics. The flow in one circuit does not cause a flow in the other circuit when the pressure drop in the hydraulic separator is insignificant.

When a hydraulic separator is used, the primary circuit and the secondary circuit must be equipped respectively with an own pump. Thus, a heat generation circuit/primary circuit can be provided with constant throughput and a consumer circuit/secondary circuit can be provided with variable flow. These are the typical functioning conditions for modern heating and air conditioning systems.

	Hydraulic separator: Max. output up to	
	Version: Horizontal Installation	Version: Vertical and horizontal installation
DN 20	950 l/h	2,200 l/h
DN 25	1,600 l/h	3,500 l/h
DN 32	2,600 l/h	4,800 l/h





<b>K31</b> direct	<b>DN 20 (¾")</b>	<b>DN 25 (1")</b>	<b>DN 32 (1¼")</b>	<b>DN 40 (1½")</b>	<b>DN 50 (2")</b>
	<b>Δ t = 20 K</b>				
	<b>30 kW</b>	<b>50 kW</b>	<b>65 kW</b>	<b>150 kW</b>	<b>250 kW</b>
	<b>Δ t = 10 K</b>				
	<b>15 kW</b>	<b>25 kW</b>	<b>32 kW</b>	<b>75 kW</b>	<b>125 kW</b>
	<b>Δ t = 7.5 K</b>				
	<b>11 kW</b>	<b>18.5 kW</b>	<b>24 kW</b>	<b>56 kW</b>	<b>93.5 kW</b>
<b>Δ t = 5 K</b>					
<b>7.5 kW</b>	<b>12.5 kW</b>	<b>16 kW</b>	<b>37.5 kW</b>	<b>62.5 kW</b>	

<b>K32</b> 3-way mixing valve	<b>DN 20 (¾")</b>	<b>DN 25 (1")</b>	<b>DN 32 (1¼")</b>	<b>DN 40 (1½")</b>	<b>DN 50 (2")</b>
	<b>Δ t = 20 K</b>				
	<b>21 kW</b>	<b>32.5 kW</b>	<b>51 kW</b>	<b>125 kW</b>	<b>230 kW</b>
	<b>Δ t = 10 K</b>				
	<b>10.5 kW</b>	<b>15.5 kW</b>	<b>25.5 kW</b>	<b>62.5 kW</b>	<b>115 kW</b>
	<b>Δ t = 7.5 K</b>				
	<b>7.5 kW</b>	<b>12 kW</b>	<b>19 kW</b>	<b>46.5 kW</b>	<b>86 kW</b>
<b>Δ t = 5 K</b>					
<b>5 kW</b>	<b>8 kW</b>	<b>12.5 kW</b>	<b>31 kW</b>	<b>57.5 kW</b>	

<b>K33</b> Controlled circuit with constant value	<b>DN 20 (¾")</b>	<b>DN 25 (1")</b>	<b>DN 32 (1¼")</b>	<b>DN 40 (1½")</b>	<b>DN 50 (2")</b>
	<b>Δ t = 20 K</b>				
	<b>10 kW</b>	<b>20 kW</b>			
	<b>Δ t = 10 K</b>				
	<b>5 kW</b>	<b>10 kW</b>			
	<b>Δ t = 7.5 K</b>				
	<b>3.5 kW</b>	<b>7.5 kW</b>			
<b>Δ t = 5 K</b>					
<b>2.5 kW</b>	<b>5 kW</b>				

<b>K33R</b> Controlled circuit with constant value	<b>DN 20 (¾")</b>	<b>DN 25 (1")</b>	<b>DN 32 (1¼")</b>	<b>DN 40 (1½")</b>	<b>DN 50 (2")</b>
	<b>Δ t = 20 K</b>				
		<b>32 kW</b>			
	<b>Δ t = 10 K</b>				
		<b>16 kW</b>			
	<b>Δ t = 7.5 K</b>				
		<b>12 kW</b>			
<b>Δ t = 5 K</b>					
		<b>8 kW</b>			

<b>K34</b> 3-way mixing valve with bypass	<b>DN 20 (¾")</b>	<b>DN 25 (1")</b>	<b>DN 32 (1¼")</b>	<b>DN 40 (1½")</b>	<b>DN 50 (2")</b>
	<b>Δ t = 20 K</b>				
	<b>21 kW</b>	<b>45.5 kW</b>	<b>64 kW</b>		
	<b>Δ t = 10 K</b>				
	<b>10.5 kW</b>	<b>22.5 kW</b>	<b>32 kW</b>		
	<b>Δ t = 7.5 K</b>				
	<b>7.5 kW</b>	<b>17 kW</b>	<b>24 kW</b>		
<b>Δ t = 5 K</b>					
<b>5 kW</b>	<b>11 kW</b>	<b>16 kW</b>			

<b>K35</b> 3-temperature mixing valve	<b>DN 20 (¾")</b>	<b>DN 25 (1")</b>	<b>DN 32 (1¼")</b>	<b>DN 40 (1½")</b>	<b>DN 50 (2")</b>
	<b>Δ t = 20 K</b>				
	<b>32.5 kW</b>				
	<b>Δ t = 10 K</b>				
	<b>16 kW</b>				
	<b>Δ t = 7.5 K</b>				
	<b>12 kW</b>				
	<b>Δ t = 5 K</b>				
<b>8 kW</b>					

<b>K36(E)</b> Boiler charging set	<b>DN 20 (¾")</b>	<b>DN 25 (1")</b>	<b>DN 32 (1¼")</b>	<b>DN 40 (1½")</b>	<b>DN 50 (2")</b>
	<b>Δ t = 20 K</b>				
	<b>20 kW</b>	<b>40 kW</b>	<b>60 kW</b>		
	<b>Δ t = 10 K</b>				
	<b>10 kW</b>	<b>20 kW</b>	<b>30 kW</b>		
	<b>Δ t = 7.5 K</b>				
	<b>7.5 kW</b>	<b>15 kW</b>	<b>22.5 kW</b>		
	<b>Δ t = 5 K</b>				
<b>5 kW</b>	<b>10 kW</b>	<b>15 kW</b>			

<b>K38</b> 4-way mixing valve	<b>DN 20 (¾")</b>	<b>DN 25 (1")</b>	<b>DN 32 (1¼")</b>	<b>DN 40 (1½")</b>	<b>DN 50 (2")</b>
	<b>Δ t = 20 K</b>				
	<b>33 kW</b>		<b>52 kW</b>		
	<b>Δ t = 10 K</b>				
	<b>16.5 kW</b>		<b>26 kW</b>		
	<b>Δ t = 7.5 K</b>				
	<b>12 kW</b>		<b>19.5 kW</b>		
	<b>Δ t = 5 K</b>				
<b>8 kW</b>		<b>13 kW</b>			

<b>MDM</b> Modular distribution manifold	<b>DN 20 (¾")</b>	<b>DN 25 (1")</b>	<b>DN 32 (1¼")</b>	<b>DN 40 (1½")</b>	<b>DN 50 (2")</b>
	<b>Δ t = 20 K</b>				
	<b>50 kW</b>	<b>80 kW</b>	<b>150 kW</b>	<b>250 kW</b>	<b>400 kW</b>
	<b>Δ t = 10 K</b>				
	<b>25 kW</b>	<b>40 kW</b>	<b>75 kW</b>	<b>125 kW</b>	<b>200 kW</b>
	<b>Δ t = 7.5 K</b>				
	<b>18.5 kW</b>	<b>30 kW</b>	<b>56 kW</b>	<b>94 kW</b>	<b>150 kW</b>
	<b>Δ t = 5 K</b>				
<b>12.5 kW</b>	<b>20 kW</b>	<b>37.5 kW</b>	<b>62.5 kW</b>	<b>100 kW</b>	



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