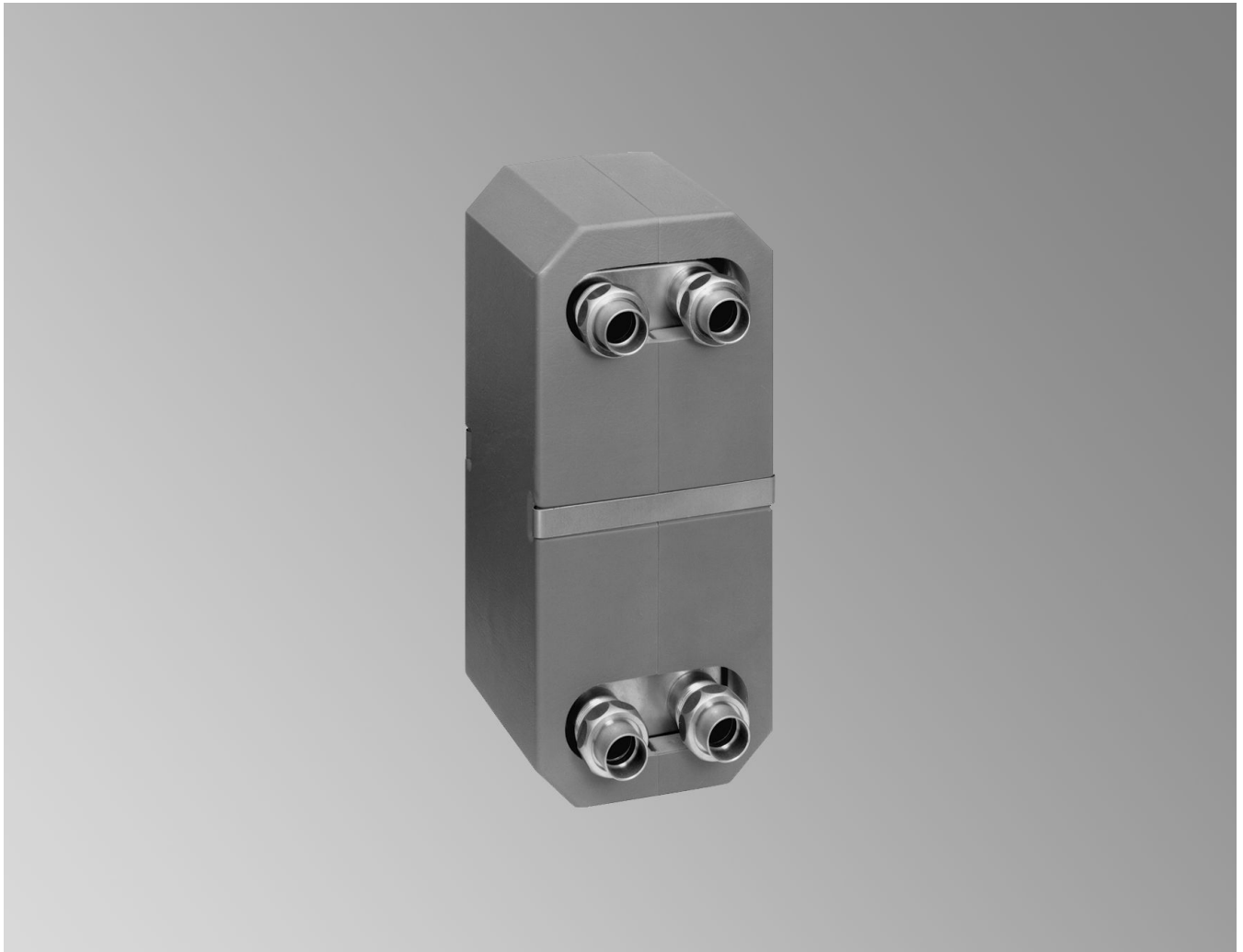


Datasheet

Part numbers and prices: see pricelist



VITOTRANS 100 Type PWT

For transfer stations from heat supply networks, for system separation in heating systems with underfloor heating, for DHW heating and for solar thermal systems

On the heating side **up to 130 °C or 200 °C**

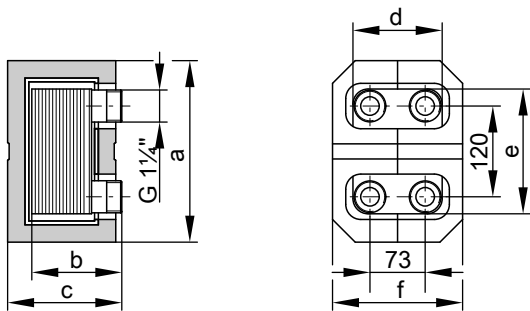
Heat exchanger plates and connections made of **stainless steel (1.4401)**

With thermal insulation

Specification part no. 3003 485 to 3003 487

Specification

Vitotrans 100	Part no.	3003 485	3003 486	3003 487
Dimensions excluding thermal insulation and fittings				
Length b	mm	80	104	152
Width d	mm	123	123	123
Height e	mm	172	172	172
Dimensions incl. thermal insulation				
Total length c	mm	145	145	210
Total width f	mm	178	178	178
Total height a	mm	240	240	240
Weight	kg	2.4	3.0	4.2
Heat exchanger with thermal insulation				
Capacity	litres	0.27/0.30	0.42/0.45	0.72/0.75
Primary side/secondary side				
Permiss. operating pressure	bar	30	30	30
Primary side/secondary side				
Permiss. operating temperature	°C	130	130	130
Primary side/secondary side				
Connections	G	1¼	1¼	1¼
Primary side/secondary side				



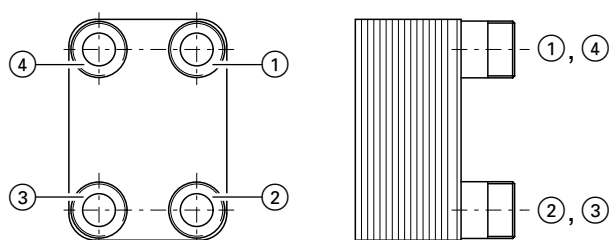
Output at different temperature spreads between the primary and secondary side

Vitotrans 100	Part no.	3003 485	3003 486	3003 487
Prim. 70/50 °C Sec. 40/50 °C	kW	11	16	36
Prim. 70/50 °C Sec. 40/45 °C	kW	19 ^{*1}	25 ^{*1}	34 ^{*1}
Prim. 65/45 °C Sec. 35/45 °C	kW	9	14	31
Prim. 60/45 °C Sec. 35/45 °C	kW	7	11	26

Recommended maximum pressure drop

Primary 200 mbar
Secondary 200 mbar

Optional connections



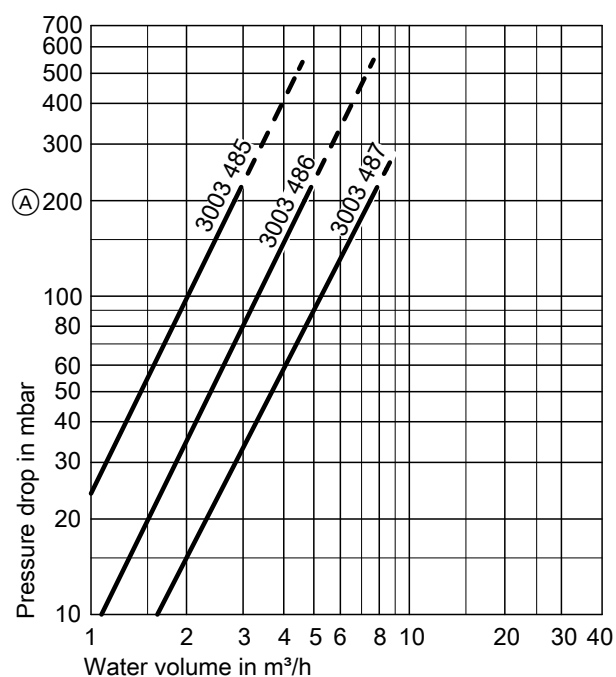
	Inlet	Outlet
Primary	1	2
Secondary	3	4
Primary	2	1
Secondary	4	3
Primary	3	4
Secondary	1	2
Primary	4	3
Secondary	2	1

*1 The output is limited by the pressure drop.

Specification part no. 3003 485 to 3003 487 (cont.)

Pressure drop

Primary and secondary



(A) Recommended maximum pressure drop

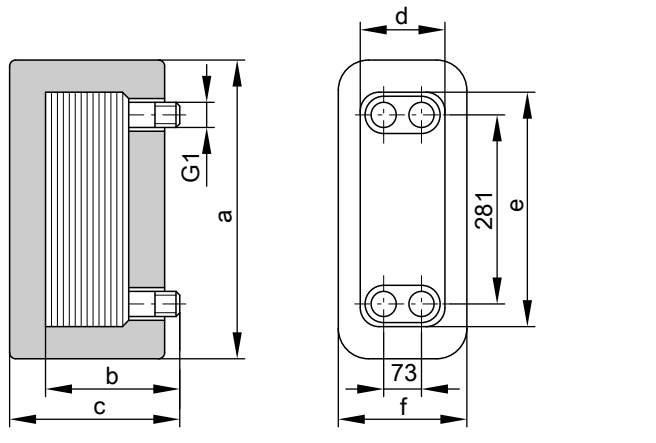
Specification part no. 3003 488 to 3003 495

Specification

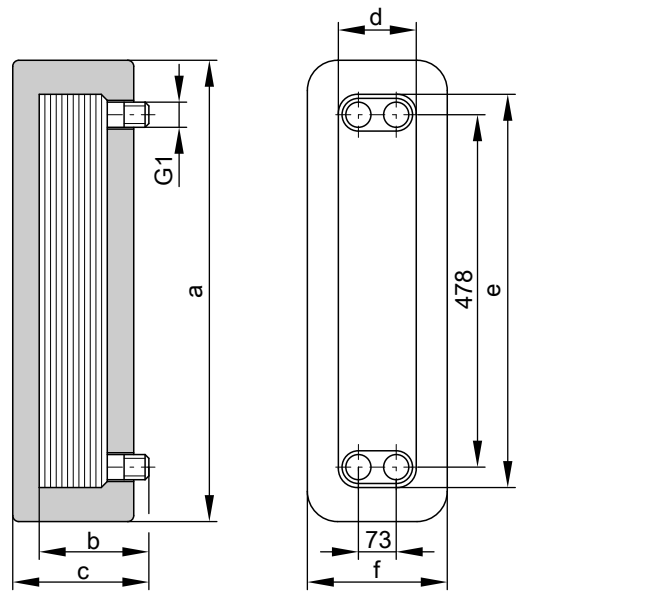
Vitotrans 100	Part no.	3003 488	3003 489	3003 490	3003 491	3003 492	3003 493	3003 494	3003 495
Dimensions excluding thermal insulation and fittings									
Length b	mm	80	128	176	224	76	108	145	191
Width d	mm	123	123	123	123	118	118	118	118
Height e	mm	332	332	332	332	523	523	523	523
Dimensions incl. thermal insulation									
Total length c	mm	128	174	218	270	148	182	230	325
Total width f	mm	172	172	172	172	178	178	178	178
Total height	mm	400	400	400	400	600	600	600	600
Weight	kg	4.0	6.4	8.8	11.2	6.8	10.1	14.0	18.8
Heat exchanger with thermal insulation									
Capacity	litres	0.54/0.60	1.14/1.20	1.74/1.80	2.34/2.40	0.85/0.95	1.52/1.62	2.28/2.37	3.22/3.32
Primary side/secondary side									
Permiss. operating pressure	bar	30	30	30	30	30	30	30	30
Primary side/secondary side									
Permiss. operating temperature	°C	200	200	200	200	200	200	200	200
Primary side/secondary side									
Connections	G	1	1	1	1	1	1	1	1
Primary side/secondary side									

Specification part no. 3003 488 to 3003 495 (cont.)

Part no. 3003 488 to 3003 491



Part no. 3003 492 to 3003 495



Output at different temperature spreads between the primary and secondary side

Vitotrans 100	Part no.	3003 488	3003 489	3003 490	3003 491	3003 492	3003 493	3003 494	3003 495
Prim. 130/ 75 °C	kW	46 ^{*2}	93 ^{*2}	140 ^{*2}	162 ^{*2}	—	—	—	—
Sec. 70/ 90 °C									
Prim. 130/ 70 °C	kW	46 ^{*2}	93 ^{*2}	140 ^{*2}	162 ^{*2}	—	—	—	—
Sec. 68/ 88 °C									
Prim. 130/ 70 °C	kW	67	135	200	240	—	—	—	—
Sec. 65/ 95 °C									
Prim. 130/ 65 °C	kW	69	140	210	240	—	—	—	—
Sec. 60/ 90 °C									
Prim. 130/ 63 °C	kW	45	85	135	175	63 ^{*2}	105 ^{*2}	162 ^{*2}	225 ^{*2}
Sec. 60/ 90 °C									
Prim. 130/ 50 °C	kW	50	100	150	200	83 ^{*2}	140 ^{*2}	216 ^{*2}	300 ^{*2}
Sec. 45/ 85 °C									
Prim. 130/ 50 °C	kW	—	—	—	—	94 ^{*2}	157 ^{*2}	243 ^{*2}	340 ^{*2}
Sec. 45/ 90 °C									
Prim. 130/ 50 °C	kW	—	—	—	—	105	175	270	370
Sec. 45/ 95 °C									
Prim. 130/ 50 °C	kW	—	—	—	—	70	120	180	250
Sec. 45/100 °C									
Prim. 130/ 50 °C	kW	—	—	—	—	26	45	67	93
Sec. 45/110 °C									
Prim. 130/ 50 °C	kW	—	—	—	—	90	150	230	325
Sec. 47/ 90 °C									
Prim. 130/ 50 °C	kW	—	—	—	—	40	72	105	145
Sec. 47/100 °C									
Prim. 120/ 63 °C	kW	—	—	—	—	63 ^{*2}	105 ^{*2}	162 ^{*2}	225 ^{*2}
Sec. 60/ 90 °C									
Prim. 120/ 60 °C	kW	58	115	175	230	—	—	—	—
Sec. 55/ 85 °C									
Prim. 120/ 60 °C	kW	—	—	—	—	73 ^{*2}	122 ^{*2}	190 ^{*2}	264 ^{*2}
Sec. 55/ 90 °C									
Prim. 120/ 55 °C	kW	—	—	—	—	83 ^{*2}	140 ^{*2}	216 ^{*2}	300 ^{*2}
Sec. 50/ 90 °C									
Prim. 120/ 50 °C	kW	70	140	210	244 ^{*2}	—	—	—	—
Sec. 45/ 75 °C									
Prim. 120/ 50 °C	kW	—	—	—	—	94	157	240	340
Sec. 45/ 90 °C									

*2 The output is limited by the pressure drop.

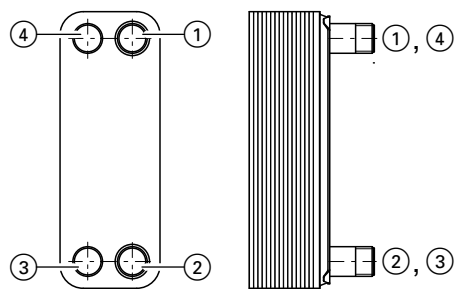
Specification part no. 3003 488 to 3003 495 (cont.)

Vitotrans 100	Part no.	3003 488	3003 489	3003 490	3003 491	3003 492	3003 493	3003 494	3003 495
Prim. 110/ 65 °C Sec. 60/ 80 °C	kW	46 ^{*2}	93 ^{*2}	140 ^{*2}	162 ^{*2}	—	—	—	—
Prim. 110/ 60 °C Sec. 55/ 90 °C	kW	—	—	—	—	73	122	190	264
Prim. 110/ 60 °C Sec. 55/ 95 °C	kW	—	—	—	—	42	75	110	150
Prim. 110/ 50 °C Sec. 45/ 90 °C	kW	—	—	—	—	48	80	120	170
Prim. 100/ 65 °C Sec. 60/ 80 °C	kW	46	93	140	162	—	—	—	—
Prim. 100/ 55 °C Sec. 50/ 90 °C	kW	—	—	—	—	20	34	50	70
Prim. 90/ 70 °C Sec. 65/ 85 °C	kW	—	—	—	—	35	60	90	125
Prim. 90/ 70 °C Sec. 60/ 80 °C	kW	46 ^{*2}	93 ^{*2}	140 ^{*2}	162 ^{*2}	—	—	—	—
Prim. 70/ 50 °C Sec. 45/ 65 °C	kW	—	—	—	—	25	42	65	90
Prim. 70/ 50 °C Sec. 40/ 50 °C	kW	23 ^{*2}	46 ^{*2}	70 ^{*2}	81 ^{*2}	—	—	—	—
Prim. 60/ 45 °C Sec. 40/ 50 °C	kW	23 ^{*2}	46 ^{*2}	70 ^{*2}	81 ^{*2}	—	—	—	—
Prim. 50/ 40 °C Sec. 35/ 45 °C	kW	18	37	55	75	—	—	—	—
Prim. 70/ 40 °C Sec. 10/ 60 °C	kW	50	100	150	200	—	—	—	—
Prim. 70/ 30 °C Sec. 10/ 60 °C	kW	—	—	—	—	75	135	200	275
Prim. 65/ 35 °C Sec. 10/ 60 °C	kW	—	—	—	—	63	105	162	225

Recommended maximum pressure drop

Primary 200 mbar
Secondary 200 mbar

Optional connections



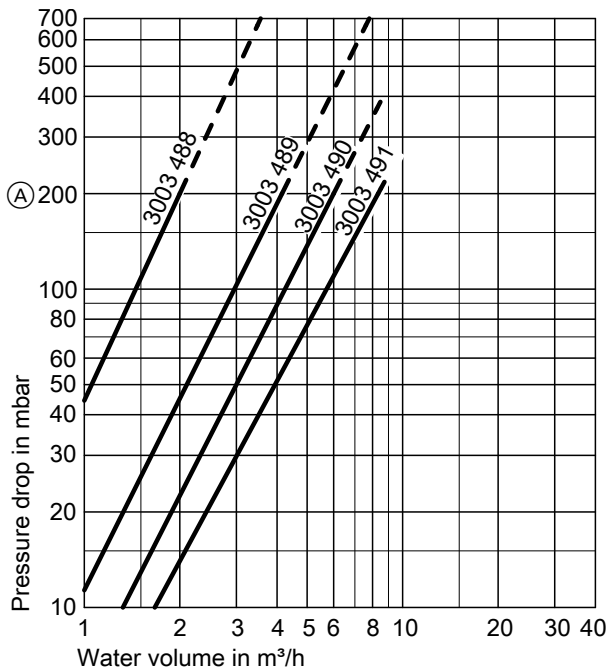
	Inlet	Outlet
Primary	1	2
Secondary	3	4
Primary	2	1
Secondary	4	3
Primary	3	4
Secondary	1	2
Primary	4	3
Secondary	2	1

Pressure drop

Primary and secondary

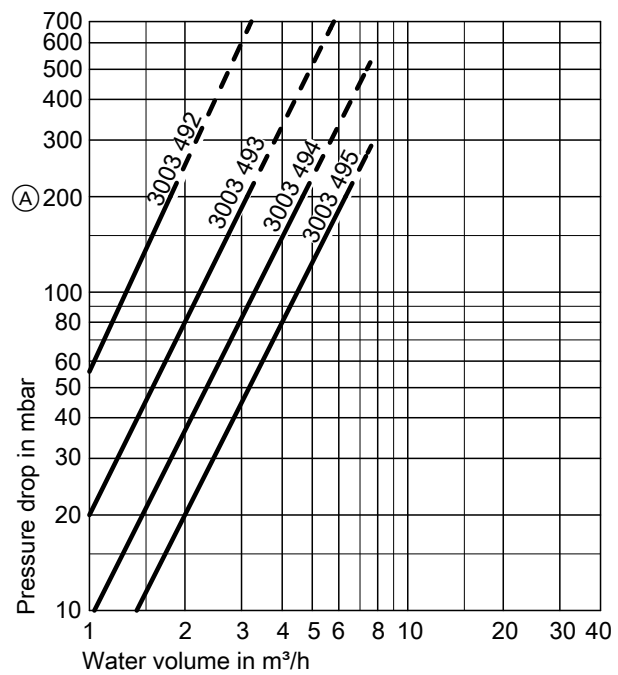
Specification part no. 3003 488 to 3003 495 (cont.)

Part no. 3003 488 to 3003 491



(A) Recommended maximum pressure drop

Part no. 3003 492 to 3003 495



(A) Recommended maximum pressure drop

Delivered condition

Vitotrans 100 with rigid PUR foam semi-shells as thermal insulation.

Note

Whether Vitotrans 100 needs to be inspected is subject to the Pressure Equipment Directive 97/23/EC.

Design information

Installation on the heating water side

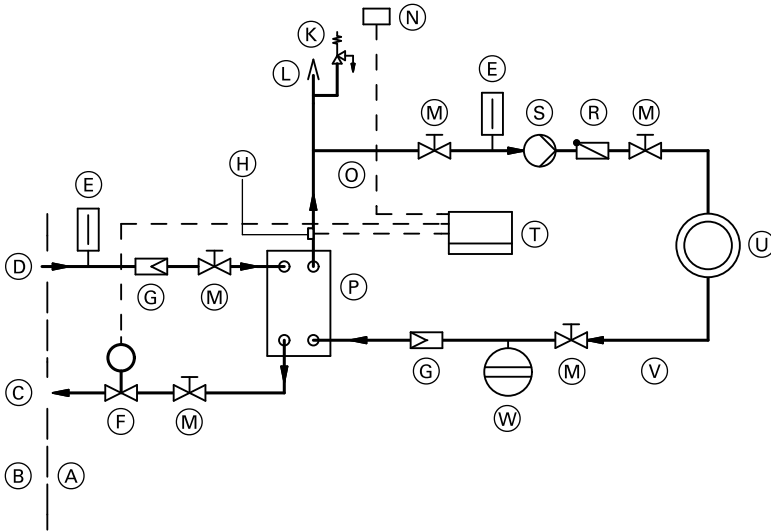
Vitotrans 100 must be connected in countercurrent. Select the installation position to ensure that the system can be fully vented and drained.

During installation, maintain a wall clearance to the side of at least 150 mm, as the thermal insulation is not fitted until the heat exchanger has been installed.

All connections are located on the same side.

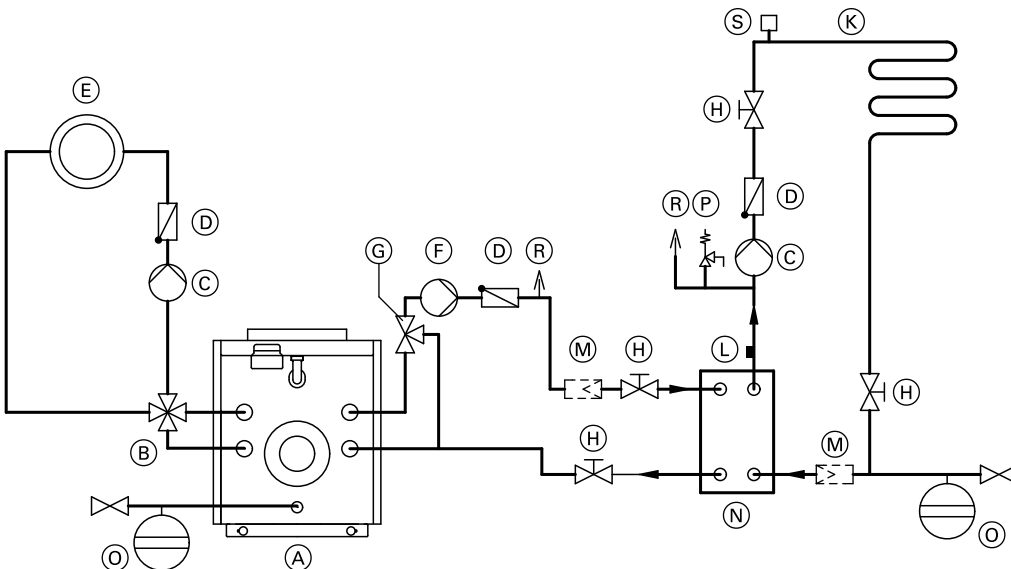
Application examples

Domestic district heating connection (indirect connection)



- | | |
|--|--------------------------------|
| (A) Domestic distribution centre | (M) Shut-off valve |
| (B) District heating network | (N) Outside temperature sensor |
| (C) District heating return | (O) Building heating flow |
| (D) District heating flow | (P) Vitotrans 100 |
| (E) Thermometer | (R) Spring-loaded check valve |
| (F) Temperature controller with servomotor | (S) Circulation pump |
| (G) Dirt filter | (T) Central control system |
| (H) Flow temperature sensor | (U) Building heating |
| (K) Safety valve | (V) Building heating return |
| (L) Air vent valve | (W) Expansion vessel |

Plate heat exchanger for system separation in a heating system with underfloor heating



- | | |
|---|---|
| (A) Boiler | (K) Underfloor heating circuit |
| (B) Mixer-4 with mixer motor | (L) Flow temperature sensor |
| (C) Heating circuit pump | (M) Dirt filter |
| (D) Spring-loaded check valve | (N) Vitotrans 100 |
| (E) Heating circuit 1 | (O) Expansion vessel |
| (F) Circulation pump for heat exchanger | (P) Safety valve |
| (G) Mixer-3 or mixer-4 with mixer motor | (R) Air vent valve |
| (H) Shut-off valve | (S) Temperature limiter (maximum limit) |

CE designation

The following equipment is identified with
CE-0090:

- Part no. 3003 490
- Part no. 3003 491
- Part no. 3003 493

- Part no. 3003 494
- Part no. 3003 495

All other equipment listed in this datasheet is **not** subject to compulsory CE designation (diagram 5, art. 3, sect. 3 of the Pressure Equipment Directive)



Subject to technical modifications.

Viessmann Werke GmbH&Co KG
D-35107 Allendorf
Telephone: +49 6452 70-0
Fax: +49 6452 70-2780
www.viessmann.com

Viessmann Limited
Hortonwood 30, Telford
Shropshire, TF1 7YP, GB
Telephone: +44 1952 675000
Fax: +44 1952 675040
E-mail: info-uk@viessmann.com

5414 656 GB