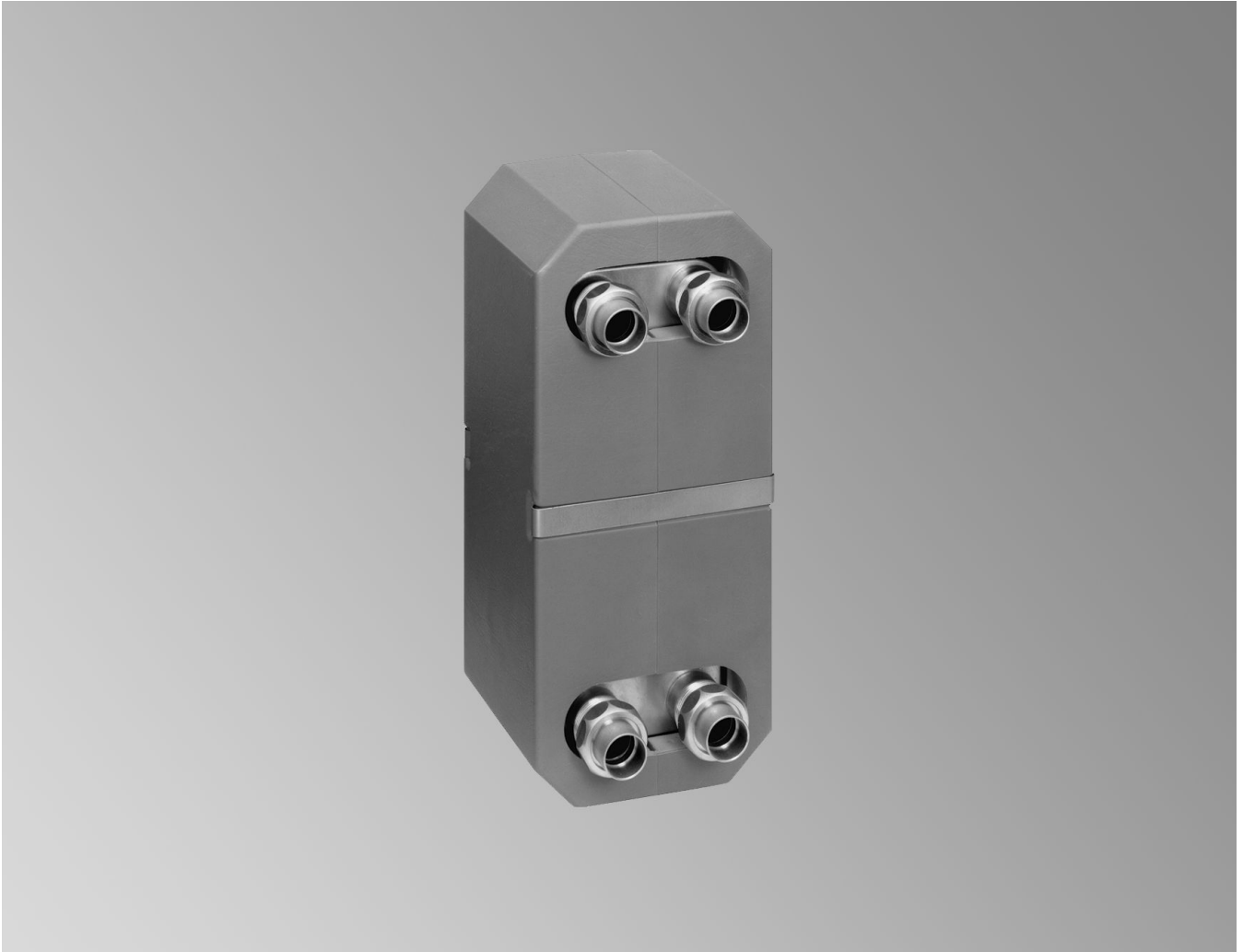


Datasheet

Part no. and prices: See pricelist



VITOTRANS 100 Type PWT

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

Up to 130 °C or 200 °C on the heating side

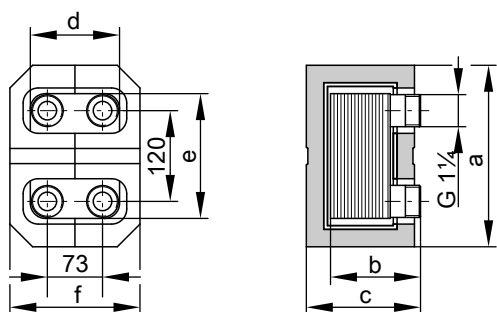
Heat exchanger plates and connections made of **stainless steel (1.4401)**

Incl. thermal insulation

Specification, part no. 3003485 to 3003487

Specification

Vitotrans 100	Part no.	3003485	3003486	3003487
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 incl. thermal insulation				
Capacity	l	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				



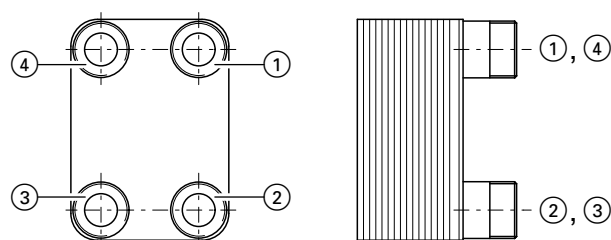
Heating output at different primary and secondary side temperature spreads

Vitotrans 100	Part no.	3003485	3003486	3003487
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 side 200 mbar
secondary side 200 mbar

Connection options



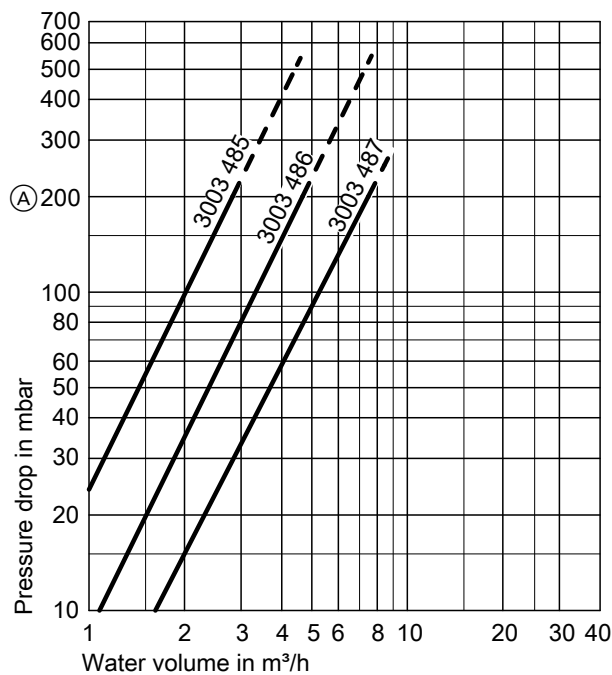
	Inlet	Outlet
primary	1	2
secondary	3	4
primary	2	1
secondary	4	3
primary	3	4
secondary	1	2
primary	4	3
secondary	2	1

*1 The output is limited by the pressure drop.

Specification, part no. 3003485 to 3003487 (cont.)

Pressure drop

Primary and secondary



(A) Recommended maximum pressure drop

Specification, part no. 3003488 to 3003495

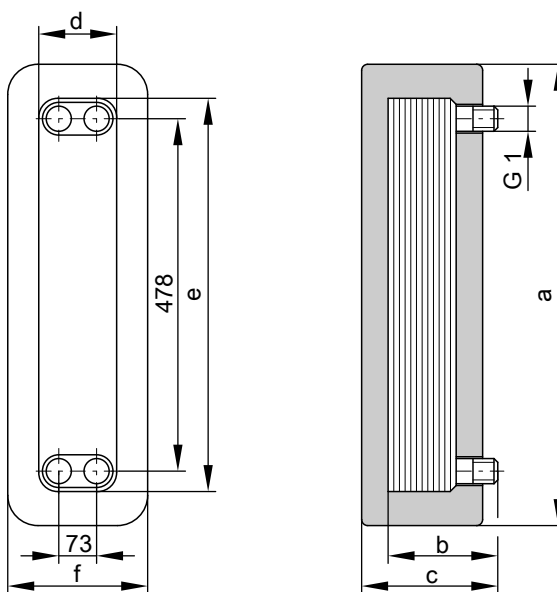
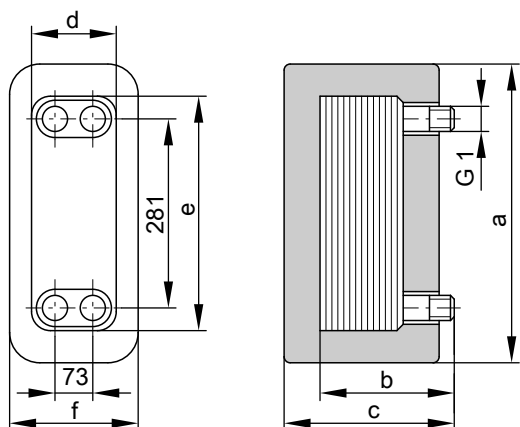
Specification

Vitotrans 100	Part no.	3003488	3003489	3003490	3003491	3003492	3003493	3003494	3003495
Dimensions excluding thermal insulation and fittings									
Length b	mm	80	128	176	224	76	108	145	191
Width d	mm	124	124	124	124	124	124	124	124
Height e	mm	335	335	335	335	532	532	532	532
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 a	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 incl. thermal insulation									
Capacity	l	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. 3003488 to 3003495 (cont.)

Part no. 3003488 to 3003491

Part no. 3003492 to 3003495



Heating output at different primary and secondary side temperature spreads

Vitotrans 100	Part no.	3003488	3003489	3003490	3003491	3003492	3003493	3003494	3003495
prim. 130/ 75 °C sec. 70/ 90 °C	kW	46 ^{*2}	93 ^{*2}	140 ^{*2}	162 ^{*2}	—	—	—	—
prim. 130/ 70 °C sec. 68/ 88 °C	kW	46 ^{*2}	93 ^{*2}	140 ^{*2}	162 ^{*2}	—	—	—	—
prim. 130/ 70 °C sec. 65/ 95 °C	kW	67	135	200	240	—	—	—	—
prim. 130/ 65 °C sec. 60/ 90 °C	kW	69	140	210	240	—	—	—	—
prim. 130/ 63 °C sec. 60/ 90 °C	kW	45	85	135	175	63 ^{*2}	105 ^{*2}	162 ^{*2}	225 ^{*2}
prim. 130/ 50 °C sec. 45/ 85 °C	kW	50	100	150	200	83 ^{*2}	140 ^{*2}	216 ^{*2}	300 ^{*2}
prim. 130/ 50 °C sec. 45/ 90 °C	kW	—	—	—	—	94 ^{*2}	157 ^{*2}	243 ^{*2}	340 ^{*2}
prim. 130/ 50 °C sec. 45/ 95 °C	kW	—	—	—	—	105	175	270	370
prim. 130/ 50 °C sec. 45/100 °C	kW	—	—	—	—	70	120	180	250
prim. 130/ 50 °C sec. 45/110 °C	kW	—	—	—	—	26	45	67	93
prim. 130/ 50 °C sec. 47/ 90 °C	kW	—	—	—	—	90	150	230	325
prim. 130/ 50 °C sec. 47/100 °C	kW	—	—	—	—	40	72	105	145
prim. 120/ 63 °C sec. 60/ 90 °C	kW	—	—	—	—	63 ^{*2}	105 ^{*2}	162 ^{*2}	225 ^{*2}
prim. 120/ 60 °C sec. 55/ 85 °C	kW	58	115	175	230	—	—	—	—
prim. 120/ 60 °C sec. 55/ 90 °C	kW	—	—	—	—	73 ^{*2}	122 ^{*2}	190 ^{*2}	264 ^{*2}
prim. 120/ 55 °C sec. 50/ 90 °C	kW	—	—	—	—	83 ^{*2}	140 ^{*2}	216 ^{*2}	300 ^{*2}
prim. 120/ 50 °C sec. 45/ 75 °C	kW	70	140	210	244 ^{*2}	—	—	—	—
prim. 120/ 50 °C sec. 45/ 90 °C	kW	—	—	—	—	94	157	240	340

^{*2} The output is limited by the pressure drop.

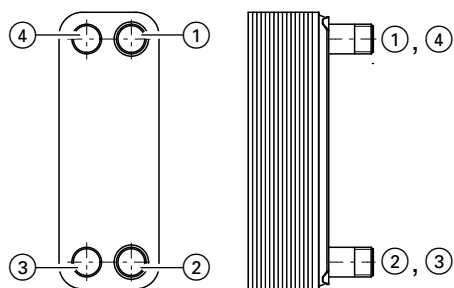
Specification, part no. 3003488 to 3003495 (cont.)

Vitotrans 100	Part no.	3003488	3003489	3003490	3003491	3003492	3003493	3003494	3003495
prim. 110/ 65 °C	kW	46* ²	93* ²	140* ²	162* ²	—	—	—	—
sec. 60/ 80 °C									
prim. 110/ 60 °C	kW	—	—	—	—	73	122	190	264
sec. 55/ 90 °C									
prim. 110/ 60 °C	kW	—	—	—	—	42	75	110	150
sec. 55/ 95 °C									
prim. 110/ 50 °C	kW	—	—	—	—	48	80	120	170
sec. 45/ 90 °C									
prim. 100/ 65 °C	kW	46	93	140	162	—	—	—	—
sec. 60/ 80 °C									
prim. 100/ 55 °C	kW	—	—	—	—	20	34	50	70
sec. 50/ 90 °C									
prim. 90/ 70 °C	kW	—	—	—	—	35	60	90	125
sec. 65/ 85 °C									
prim. 90/ 70 °C	kW	46* ²	93* ²	140* ²	162* ²	—	—	—	—
sec. 60/ 80 °C									
prim. 70/ 50 °C	kW	—	—	—	—	25	42	65	90
sec. 45/ 65 °C									
prim. 70/ 50 °C	kW	23* ²	46* ²	70* ²	81* ²	—	—	—	—
sec. 40/ 50 °C									
prim. 60/ 45 °C	kW	23* ²	46* ²	70* ²	81* ²	—	—	—	—
sec. 40/ 50 °C									
prim. 50/ 40 °C	kW	18	37	55	75	—	—	—	—
sec. 35/ 45 °C									
prim. 70/ 40 °C	kW	50	100	150	200	—	—	—	—
sec. 10/ 60 °C									
prim. 70/ 30 °C	kW	—	—	—	—	75	135	200	275
sec. 10/ 60 °C									
prim. 65/ 35 °C	kW	—	—	—	—	63	105	162	225
sec. 10/ 60 °C									

Recommended maximum pressure drop

primary side 200 mbar
secondary side 200 mbar

Connection options



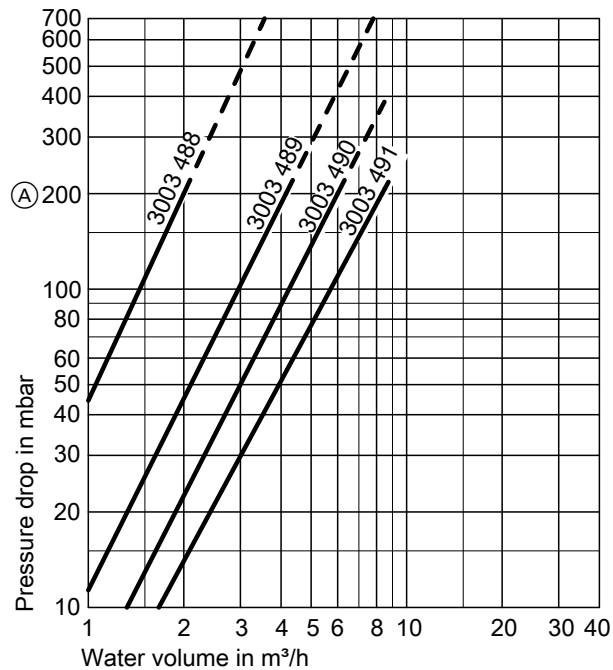
	Inlet	Outlet
primary	1	2
secondary	3	4
primary	2	1
secondary	4	3
primary	3	4
secondary	1	2
primary	4	3
secondary	2	1

Pressure drop

Primary and secondary

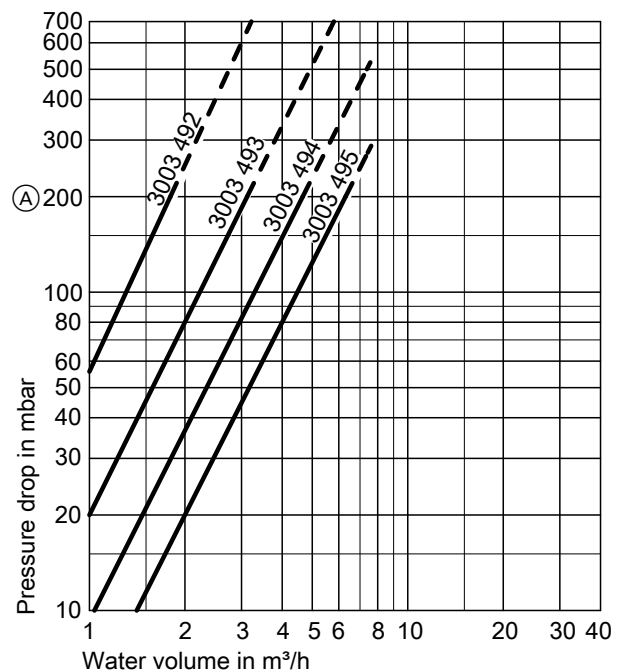
Specification, part no. 3003488 to 3003495 (cont.)

Part no. 3003488 to 3003491



(A) Recommended maximum pressure drop

Part no. 3003492 to 3003495



(A) Recommended maximum pressure drop

Delivered condition

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

Note

Whether the Vitotrans 100 must be tested is subject to the stipulations of the Pressure Equipment Directive 97/23/EC.

Design information

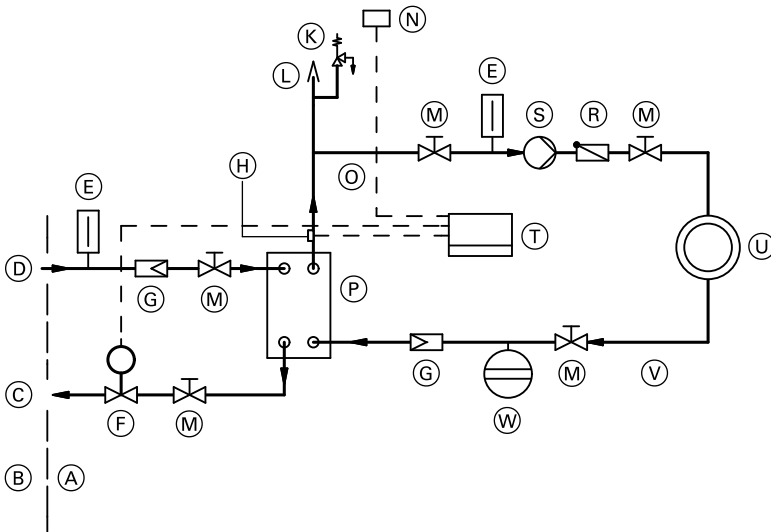
Installation on the heating water side

The Vitotrans 100 must be connected in countercurrent. The installation position should be selected to allow for unhindered ventilation and draining.

When installing, 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.

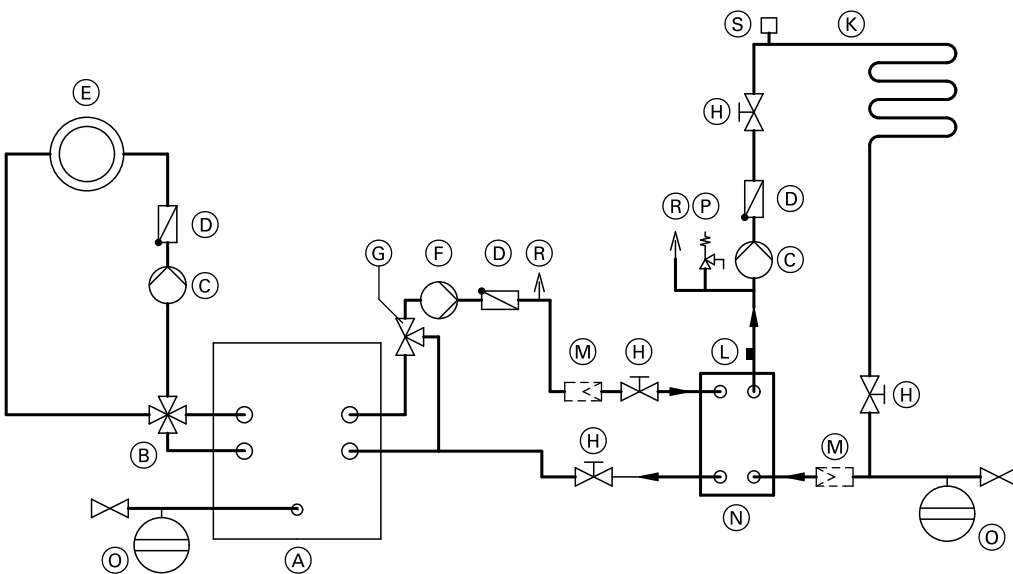
Application examples

Domestic district heating connection (indirect connection)



- | | |
|--|--------------------------------|
| (A) Domestic control 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 | (G) Mixer-3 or mixer-4 with mixer motor |
| (B) Mixer-4 with mixer motor | (H) Shut-off valve |
| (C) Heating circuit pump | (K) Underfloor heating circuit |
| (D) Spring-loaded check valve | (L) Flow temperature sensor |
| (E) Heating circuit 1 | (M) Dirt filter |
| (F) Circulation pump for heat exchanger | (N) Vitotrans 100 |

Application examples (cont.)

- Ⓞ Expansion vessel
- Ⓟ Safety valve

- Ⓡ Air vent valve
- Ⓢ Temperature limiter (maximum limit)

Tested quality

CE designation

The following equipment is identified with

CE-0090

:

- Part no. 3003490
- Part no. 3003491
- Part no. 3003493
- Part no. 3003494
- Part no. 3003495

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