Hoval

CATALOGUE

Hoval TransTherm® aqua

Calorifier charging system
TransTherm® aqua L
TransTherm® aqua L-FW

Table of contents

Calorifier charging system
Consisting of:
- calorifier charging module TransTherm® aqua L
  TransTherm® aqua L-FW (for indirect connection to the (district) heating network)
- hot water charging tank CombiVal E or CombiVal C (optional)

Calorifier charging module TransTherm® aqua L

- Fully assembled station with plate heat exchanger for the provision of domestic hot water using the tank storage principle
- Intended for wall installation
- The primary side (heating side) contains the three-way valve, high-efficiency pump, air-bleeding, contact sensor and the filling and drain valve, line balancing valve. These components ensure a constant flow temperature at the plate heat exchanger. Pipes made from steel
- The secondary side (DHW side) contains the safety valve (10 bar), non-return valve, filling/drain valve and balancing valve.
  A flow sensor ensures the correct charging temperature for the hot process water storage tank. Pipes made from stainless steel
- Stainless steel plate heat exchanger 1.4404, copper-soldered or copper-free
- EPP insulation, 30 mm, for the heat exchanger
- Switch-on and switch-off of the charging pump is regulated via two sensors (included in the scope of delivery) in the storage tank.
- Mount tank sensor on the tank on site and connect it to the controller
- T-piece with dummy plug for on-site connection of the circulation group. Connect the pump to the controller on site.
- TopTronic® E control with integrated thermal disinfection of the DHW storage tank (anti-legionella circuit)

Calorifier charging module TransTherm® aqua L-FW

- Fully assembled station with plate heat exchanger for the provision of domestic hot water using the tank storage principle
- Intended for wall installation
- The primary side (heating side) includes a flow rate controller with through valve and safety function, ventilation, sensor and fill/drain valve.
  These components ensure a constant flow temperature at the plate heat exchanger. Pipes made from steel
- The secondary side (DHW side) contains the safety valve (10 bar), non-return valve, filling/drain valve and balancing valve.
  A flow sensor ensures the correct charging temperature for the hot process water storage tank. Pipes made from stainless steel
- Stainless steel plate heat exchanger 1.4404, copper-soldered or copper-free
- EPP insulation, 30 mm, for the heat exchanger
- Switch-on and switch-off of the charging pump is regulated via two sensors (included in the scope of delivery) in the storage tank.
- Mount tank sensor on the tank on site and connect it to the controller

Range
Calorifier charging module

TransTherm® aqua L type	Output kW
(1-10)	50
(1-16)	90
(1-20)	115
(1-30)	175
(1-40)	230
(1-50)	275

Calorifier charging module

TransTherm® aqua L-FW type	Output kW
(2-10)	50
(2-16)	90
(2-20)	115
(2-30)	175
(2-40)	230
(2-50)	275

Range
Hot water charging tank

CombiVal E		Content l
(300)	B	301
(500)	B	475
(800)		747
(1000)		968
(1500)		1472
(2000)		2000

A⁺ → F

CombiVal C		Content l
(300)	B	289
(400)	B	411
(500)	B	490
(750)	B	756
(1000)	B	990
(1500)	B	1415
(2000)	B	1975
(2500)	B	2450

A⁺ → F

Delivery
- The storage tank required is not included in the scope of delivery

On site
- Installation of a circulation unit;
  the necessary connection is provided.
- Electrical connection of the controller

Heating network
- Nominal pressure: 16 bar
- Maximum pressure: 13 bar
- Min. differential pressure: 0.6 bar
- Max. differential pressure: 12 bar
- Operating temperature: 70 ... 110 °C
- Maximum temperature: 120 °C

Suitable hot water charging tanks
see next page

TopTronic® E controller

TopTronic® E basic module district heating/ fresh water
- Control unit for controlling district heating transfer stations in non-communicative networks and the corresponding consumers with integrated control functions for
  - primary valve control
  - cascade management
  - 1 heating/cooling circuit with mixer
  - 1 heating/cooling circuit without mixer
  - 1 hot water charging circuit
  - various additional functions
- Various functions for hot water:
  - selection of different basic programs (week programs, economy mode, holiday until, etc.)
  - various operating modes (e.g. accumulator priority or parallel mode)
  - buffer storage circuit on the primary or secondary side
  - adjustable loading criteria (e.g. adjustable loading times, undershooting the minimum nominal value, etc.)
  - adjustable switch-off criteria (e.g. achieving the setpoint valve, achieving the lower sensor setpoint value, etc.)

- adjustable loading block (if the loading flow temperature is too low, the setpoint temperature is not reached, differential temperature-dependent solar circuit control)
- definable switching times for recirculation pump control

- Outdoor sensor
- Immersion sensor (calorifier sensor)
- Contact sensor (flow temperature sensor)
- Complete plug set for DH module
- RPM-regulated pumps

No further module expansions or controller modules can be installed in the control panel!

Option

TopTronic® E control module
- Simple, intuitive operating concept
- Display of the most important operating states
- Configurable start screen
- Operating mode selection
- Configurable day and week programs
- Operation of all connected Hoval CAN bus modules
- Commissioning wizard
- Service and maintenance function
- Fault message management
- Analysis function
- Weather display (with HovalConnect option)
- Adaptation of the heating strategy based on the weather forecast (with HovalConnect option)

Notice
The TopTronic® E control module for operating the basic module district heating/fresh water must be ordered separately!

Further information about the TopTronic® E
see “Controls”

Delivery
- All armatures required for operation, such as flow balancing and shut-off valves, backflow preventer, air-bleeding and drain valve are fitted.

Caution
As a result of thermal disinfection of the domestic hot water for legionella protection, increased water temperatures (at least 65 ... 70 °C) occur. Depending on the water quality, this may result in increased calcification at the installed armatures and heat exchangers and also brings the risk of scalding at the tapping points. Corresponding protective measures must be implemented on site.

CombiVal E (300-2000)
- Charging tank made of steel, enamelled inside (without built-in heating coil) for combination with calorifier charging module TransTherm® aqua L
- (300-1000) with one flange
  (1500,2000) with two flanges
  in each case with installed dummy flange plate for maintenance or installation of a flange-mounted electric heating element
- (300-1000) one magnesium protection anode built in
  (1500,2000) two magnesium protection anodes built in
- Thermal insulation made of
  - (300,500) polyurethane rigid foam, directly foamed, with dismantable foil jacket, 1-part, colour red
  - (800-2000) polyester fleece with foil jacket, completely removable, colour red
    (800-1500) 2-part
    (2000) 3-part
- Including thermometer
- (300,500) sensor channel
  (800-2000) two terminal bars for contact sensor

Delivery
- (300,500) with foil jacket completely installed
- (800-2000) with thermal insulation completely installed (removable)

Design on request
- Flange-mounted electric heating element

On site
- Installation of the thermometer
- Attachment of the glue-on protection rosettes to the thermal insulation

Water quality
see end of this brochure

CombiVal C (300-2500)
- Charging tank made of stainless steel (1.4571/1.4404) (without built-in heating coil) for combination with calorifier charging module
  TransTherm® aqua L
- (300-1000) with one flange
  (1500-2000) with two flanges
  (2500) with one manhole
  in each case with installed dummy flange plate for maintenance or, for types (300-2000), installation of a flange-mounted electric heating element
- Thermal insulation: Neodul® insulation (EPS rigid foam outside and 20 mm polyester fibre fleece inside) with zip, outer jacket made of polypropylene, colour red
  (300-1000) 2-piece
  (1500) 3-piece
  (2000-2500) 4-piece
- Thermometer incl. immersion sleeve loose (packed with the product)
- Sensor terminal bar
- Observe limit values for chloride content in domestic water – see “Engineering”.

Delivery
- (300-1000) with thermal insulation completely installed (can be removed for bringing in)
- (1500-2500) thermal insulation separately packed

Design on request
- (300-2000) Flange-mounted electric heating element

On site
- Installation of immersion sleeve for thermometer
- (1500-2500) Installation of the thermal insulation and attaching the protection rosettes

Calorifier charging module

Authorisation number

TransTherm® aqua L
SVGW test number 2407-7331

TransTherm® aqua L

Fully assembled station with plate heat exchanger for the provision of domestic hot water using the storage tank charging principle and built-in Hoval TopTronic® E control
The required storage tank is not supplied.

TransTherm® aqua L	Output kW	Part No.
(1-10)	50	8005 864
(1-16)	90	8005 865
(1-20)	115	8005 866
(1-30)	175	8005 867
(1-40)	230	8005 868
(1-50)	275	8005 869

Version with copper-free heat exchanger

TransTherm® aqua L

with copper-free heat exchanger

TransTherm® aqua L	Output kW	Part No.
(1-10)	50	8006 491
(1-16)	90	8006 492
(1-20)	115	8006 493
(1-30)	175	8006 494
(1-40)	230	8006 495
(1-50)	275	8006 496

Calorifier charging module

Authorisation number

TransTherm® aqua L-FW
SVGW test number 2407-7331

TransTherm® aqua L-FW

Fully assembled station with plate heat exchanger for the provision of domestic hot water using the storage tank charging principle and built-in Hoval TopTronic® E control
The required storage tank is not supplied.

TransTherm® aqua L	Output kW	Part No.
(2-10)	50	8006 353
(2-16)	90	8006 354
(2-20)	115	8006 355
(2-30)	175	8006 356
(2-40)	230	8006 367
(2-50)	275	8006 368

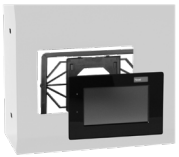
Version with copper-free heat exchanger

TransTherm® aqua L-FW

with copper-free heat exchanger

TransTherm® aqua L	Output kW	Part No.
(2-10)	50	8006 497
(2-16)	90	8006 498
(2-20)	115	8006 499
(2-30)	175	8006 500
(2-40)	230	8006 501
(2-50)	275	8006 502

Accessories



TopTronic® E control module black with 4.3″ colour touchscreen
For operation of all controller modules connected to the bus system (basic, solar, buffer modules etc.)
Connection to the Hoval bus system via RJ45 plug connection or via plug terminals (max. 0.75 mm²), flat design with flexible installation option
Installation:
- in control panel of the heat generator
- in the Hoval wall casing
- in the control panel front,

black high-gloss cover, customer-specific configurable start screen,
Display of current weather or weather forecast (only possible in combination with HovalConnect)

Consisting of:
- TopTronic® E control module black
- Clamping device set control module
- RJ45-RAST 5 CAN cable, L = 500

6043 844

Return changeover valve set
Consisting of:
- temperature sensor
- changeover valve
- drive (8 sec.) DN 20-40
- drive (30 sec.) DN 50-80
- seals
- screw connections

Nominal diameter	Output kW	k_{vs} m³/h	Part No.
DN 20	50-90	6.3	7010 832
DN 25	115-175	10	7010 836
DN 32	230-275	16	7011 009
DN 40	350	25	7011 025
DN 50	450	40	7016 331
DN 65	580	63	7016 332
DN 80	700	100	7016 333

Notice
When using a circulation set with integration at the heat exchanger (also on-site circulating pump), it is imperative to install a return switching valve set.

Notice
Only for TransTransTherm® aqua L

Circulation set
for TransTherm® aqua L, L-FW, F
Piping of parts in contact with domestic water in stainless steel and gunmetal
Consisting of:
- temperature sensor PT1000
- recirculation pump Wilo Yonos PARA
- recirculation pump Wilo Para MAXO
- regulating valve
- non-return valve

Connection	Flow rate m³/h	Recirculation pump	Part No.
DN 20 ¾″ Rp	1.9	Z15/7.0 RKC	8005 279
DN 25 1″ Rp	3.4	Z25/180/08/F02	8005 280
DN 32 1¼″ Rp	5.8	Z25/180/08/F02	8005 281

Test valve DN 8 G ¼"
for TransTherm® aqua L, L-FW, F, FS
Test valve suitable for flame treatment
for hygienic-microbiologic
tests.

Part No. 2049 861

Sludge separator DM with magnet
made of technopolymer (PO) or
brass with insulation (MS)

Type	Connection inches	Flow rate at 1.2 m/s flow speed m³/h	k_v value m³/h	Part No.
DM PO	Rp 1"	1.3	10.5	2054 376
DM PO	Rp 1¼"	2.1	10.5	2085 523
DM MS	Rp 1½"	5.4	63.2	2085 527
DM MS	Rp 2"	8.2	70.0	2085 528

Additional sludge separators
see "Various system components"

Insulation for sludge separator
DM PO 1"
10 mm insulating caps made of PE-X foam
Thermal conductivity 0.035 W/mK
Fire resistance (DIN 4102): class B2

Part No. 2085 524

Insulation for sludge separator
DM PO 1¼"
10 mm insulating caps made of PE-X foam
Thermal conductivity 0.035 W/mK
Fire resistance (DIN 4102): class B2

Part No. 2086 031

Ball valve
Shut-off valve between heating network
and TransTherm aqua L-FW
Material: steel
Weld end/external thread

Size	Max. operating pressure bar	Max. operating temperature °C	External thread	Part No.
DN 25	25	150	G 1"	2085 081
DN 32	25	150	G 1¼"	2085 082

		Part No.
	**Temperature monitor 0 ... 120 °C** for TransTherm® aqua L, L-FW, F, FS	2048 299
	**Safety temperature monitor 70 ... 130 °C** for TransTherm® aqua L, L-FW, F, FS	2048 300
	**Safety temperature limiter 70 ... 130 °C** for TransTherm® aqua L, L-FW, F, FS	2049 619
	**Immersion sleeve G ½″ stainless steel for thermostat** for TransTherm® aqua L, L-FW, F, FS Installation length = 100 mm Outer Ø: 8 mm, inner Ø: 6.5 mm	2048 285
	**Immersion sleeve G ½″ stainless steel for 2 thermostats** for TransTherm® aqua L, L-FW, F, FS Installation length = 100 mm Outer Ø: 15 mm, inner Ø: 13.5 mm	2048 288

Hot water charging tank

CombiVal E

Enamelled charging tank
(without heating coil)

CombiVal E (300-1000) with one flange
CombiVal E (1500,2000) with two flanges
- (300,500) thermal insulation mounted with foil jacket
- (800-2000) Thermal insulation completely installed (removable)

CombiVal type	Content l	Part No.
E (300)	301	6044 187
E (500)	475	6044 188
E (800)	747	6044 189
E (1000)	968	6044 190
E (1500)	1472	6044 191
E (2000)	2000	6044 192

CombiVal C

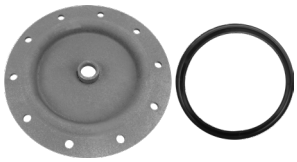
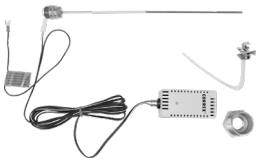
Stainless steel charging tank
(without heating coil)

CombiVal C (300-1000) with one flange
CombiVal C (1500-2000) with two flanges
CombiVal C (2500) with one manhole thermal insulation
- (300-1000) completely installed (removable)
- (1500-2000) separately packed

CombiVal type	Content l	Part No.
C (300)	289	6065 396
C (400)	411	6065 397
C (500)	490	6065 398
C (750)	756	6065 399
C (1000)	990	6065 400
C (1500)	1415	6065 401
C (2000)	1975	6065 402
C (2500)	2450	6065 543

Energy efficiency class
see “Description”

Electric heating elements
see chapter “Electric heating elements”

	Part No.
For CombiVal E (300-2000)	
 **Flange cover 180** – ¾″ for the installation of the Correx® impressed current anode in flange Ø 180/110 mm, enamelled on the inside with Rp ¾″ sleeve Seal included	2077 035
 **UP 2.3-919** **Kit Correx® impressed current anode UP2.3-919-L395/1** for long-term corrosion protection for installation in the enamelled calorifier with reduction R 1¼″ (ET) - Rp 1″ (IT) and R 1″ (ET) - Rp ¾″ (IT) Installation length: 395 mm Connection cable length: 1 x 2000 mm 1 Correx® impressed current anode	684 760
Either a Correx® impressed current anode or one/two magnesium protection anodes may be used.	
For CombiVal C (300-2500)	
 **Flange cover 180** – 1½″ for the installation of the Correx® impressed current anode in flange Ø 180/110 mm, stainless steel with Rp 1½″ sleeve Seal and screws included	2077 911
 **UP 1.9-924** **Kit Correx® impressed current anode UP1.9-924-L395/1** for long-term corrosion protection for installation in the stainless steel calorifier with reduction R 1½″ - Rp ¾″ and R 1¼″ - Rp ¾″ Installation length: 395 mm Connection cable length: 1 x 3500 mm 1 Correx® impressed current anode (up to 800 l)	6031 813
The flange cover 180 – 1½″ must also be ordered for installation of the impressed current anode set.	
Services	
Services and associated scope of services see separate catalogue “Hoval Services”	
Commissioning by Hoval customer service is a prerequisite for warranty/guarantee activation.	

Performance data

TransTherm® aqua L (1-10 to 1-50) / TransTherm® aqua L-FW (2-10 to 2-50)

			Flow temperature heating water											
			55 °C (1-...)						60 °C (1-...)					
Domestic water secondary	**TransTherm® aqua L TransTherm® aqua L-FW**		(10)	(16)	(20)	(30)	(40)	(50)	(10)	(16)	(20)	(30)	(40)	(50)
60/5 °C	T return primary	°C	-	-	-	-	-	-	-	-	-	-	-	-
	V̇ primary	**m³/h**	-	-	-	-	-	-	-	-	-	-	-	-
	Q max.	kW	-	-	-	-	-	-	-	-	-	-	-	-
	V̇ secondary	**m³/h**	-	-	-	-	-	-	-	-	-	-	-	-
60/10 °C	T return primary	°C	-	-	-	-	-	-	-	-	-	-	-	-
	V̇ primary	**m³/h**	-	-	-	-	-	-	-	-	-	-	-	-
	Q max.	kW	-	-	-	-	-	-	-	-	-	-	-	-
	V̇ secondary	**m³/h**	-	-	-	-	-	-	-	-	-	-	-	-
60/15 °C	T return primary	°C	-	-	-	-	-	-	-	-	-	-	-	-
	V̇ primary	**m³/h**	-	-	-	-	-	-	-	-	-	-	-	-
	Q max.	kW	-	-	-	-	-	-	-	-	-	-	-	-
	V̇ secondary	**m³/h**	-	-	-	-	-	-	-	-	-	-	-	-
60/20 °C	T return primary	°C	-	-	-	-	-	-	-	-	-	-	-	-
	V̇ primary	**m³/h**	-	-	-	-	-	-	-	-	-	-	-	-
	Q max.	kW	-	-	-	-	-	-	-	-	-	-	-	-
	V̇ secondary	**m³/h**	-	-	-	-	-	-	-	-	-	-	-	-
55/5 °C	T return primary	°C	-	-	-	-	-	-	30	30	30	30	30	30
	V̇ primary	**m³/h**	-	-	-	-	-	-	**1.25**	**2.04**	**2.51**	**3.71**	**4.76**	**5.66**
	Q max.	kW	-	-	-	-	-	-	43	70	86	127	163	194
	V̇ secondary	**m³/h**	-	-	-	-	-	-	**0.74**	**1.2**	**1.48**	**2.18**	**2.8**	**3.33**
55/10 °C	T return primary	°C	-	-	-	-	-	-	30	30	30	30	30	30
	V̇ primary	**m³/h**	-	-	-	-	-	-	**1.11**	**2.04**	**2.51**	**3.71**	**4.76**	**5.63**
	Q max.	kW	-	-	-	-	-	-	38	70	86	127	163	193
	V̇ secondary	**m³/h**	-	-	-	-	-	-	**0.73**	**1.34**	**1.64**	**2.43**	**3.12**	**3.69**
55/15 °C	T return primary	°C	-	-	-	-	-	-	30	30	30	30	30	30
	V̇ primary	**m³/h**	-	-	-	-	-	-	**0.76**	**1.46**	**1.95**	**3.06**	**4.23**	**5.4**
	Q max.	kW	-	-	-	-	-	-	26	50	67	105	145	185
	V̇ secondary	**m³/h**	-	-	-	-	-	-	**0.56**	**1.08**	**1.44**	**2.26**	**3.12**	**3.98**
55/20 °C	T return primary	°C	-	-	-	-	-	-	30	30	30	30	30	30
	V̇ primary	**m³/h**	-	-	-	-	-	-	**0.47**	**0.9**	**1.17**	**1.9**	**2.63**	**3.36**
	Q max.	kW	-	-	-	-	-	-	16	31	40	65	90	115
	V̇ secondary	**m³/h**	-	-	-	-	-	-	**0.39**	**0.76**	**0.99**	**1.6**	**2.22**	**2.83**
50/5 °C	T return primary	°C	30	30	30	30	30	30	30	30	30	30	30	30
	V̇ primary	**m³/h**	**1.29**	**2.03**	**2.51**	**3.67**	**4.72**	**5.66**	**1.28**	**2.04**	**2.51**	**3.71**	**4.76**	**5.63**
	Q max.	kW	37	58	72	105	135	162	44	70	86	127	163	193
	V̇ secondary	**m³/h**	**0.71**	**1.11**	**1.37**	**2**	**2.58**	**3.09**	**0.84**	**1.34**	**1.64**	**2.43**	**3.12**	**3.69**
50/10 °C	T return primary	°C	30	30	30	30	30	30	30	30	30	30	30	30
	V̇ primary	**m³/h**	**1.29**	**2.03**	**2.51**	**3.67**	**4.72**	**5.66**	**1.28**	**2.04**	**2.51**	**3.73**	**4.81**	**5.69**
	Q max.	kW	38	58	72	105	135	162	44	70	86	128	165	195
	V̇ secondary	**m³/h**	**0.82**	**1.25**	**1.77**	**2.26**	**2.9**	**3.48**	**0.95**	**1.51**	**1.85**	**2.75**	**3.55**	**4.19**
50/15 °C	T return primary	°C	30	30	30	30	30	30	30	30	30	30	30	30
	V̇ primary	**m³/h**	**1.29**	**2.03**	**2.51**	**3.67**	**4.72**	**5.66**	**1.11**	**1.95**	**2.48**	**3.76**	**4.76**	**5.69**
	Q max.	kW	37	58	72	105	135	162	38	67	85	129	163	195
	V̇ secondary	**m³/h**	**0.91**	**1.43**	**1.77**	**2.58**	**3.32**	**3.99**	**0.94**	**1.65**	**2.09**	**3.18**	**4.01**	**4.8**
50/20 °C	T return primary	°C	30	30	30	30	30	30	30	30	30	30	30	30
	V̇ primary	**m³/h**	**1.15**	**2.03**	**2.55**	**3.7**	**4.75**	**5.69**	**0.96**	**1.69**	**2.13**	**3.24**	**3.63**	**5.16**
	Q max.	kW	33	58	73	106	136	163	33	58	73	111	145	177
	V̇ secondary	**m³/h**	**0.95**	**1.67**	**2.1**	**3.05**	**3.91**	**4.69**	**0.95**	**1.67**	**2.1**	**3.19**	**4.17**	**5.09**

T return primary	°C	Return temperature primary
V̇ primary	**m³/h**	Flow rate primary
Q max.	kW	Output
V̇ secondary	**m³/h**	Flow rate secondary

The specified technical data relate to the full load of the module in each case.

Performance data

TransTherm® aqua L (1-10 to 1-50) / TransTherm® aqua L-FW (2-10 to 2-50)

			Flow temperature heating water											
			65 °C (1-...)						70 °C (1-...)					
Domestic water secondary	**TransTherm® aqua L TransTherm® aqua L-FW**		(10)	(16)	(20)	(30)	(40)	(50)	(10)	(16)	(20)	(30)	(40)	(50)
60/5 °C	T return primary	°C	30	30	30	30	30	30	30	30	30	30	30	30
	V̇ primary	**m³/h**	**1.08**	**1.88**	**2.5**	**3.73**	**4.84**	**5.77**	**1.32**	**2.09**	**2.59**	**3.76**	**4.82**	**5.72**
	Q max.	kW	43	75	100	149	193	230	60	95	118	171	219	260
	V̇ secondary	**m³/h**	**0.67**	**1.17**	**1.55**	**2.33**	**3.01**	**3.59**	**0.94**	**1.48**	**1.84**	**2.67**	**3.42**	**4.06**
60/10 °C	T return primary	°C	30	30	30	30	30	30	30	30	30	30	30	30
	V̇ primary	**m³/h**	**0.8**	**1.5**	**2.01**	**3.16**	**4.34**	**5.39**	**1.08**	**1.94**	**2.48**	**3.77**	**4.95**	**5.92**
	Q max.	kW	32	60	80	126	173	215	50	90	115	175	230	275
	V̇ secondary	**m³/h**	**0.55**	**1.03**	**1.38**	**2.17**	**2.98**	**3.7**	**0.86**	**1.54**	**1.98**	**3.01**	**3.95**	**4.73**
60/15 °C	T return primary	°C	30	30	30	30	30	30	30	30	30	30	30	30
	V̇ primary	**m³/h**	**0.55**	**1.05**	**1.38**	**2.13**	**3.08**	**3.96**	**0.97**	**1.8**	**2.37**	**3.73**	**4.84**	**5.72**
	Q max.	kW	22	42	55	85	123	158	44	82	108	170	220	260
	V̇ secondary	**m³/h**	**0.42**	**0.8**	**1.05**	**1.63**	**2.35**	**3.02**	**0.84**	**1.57**	**2.08**	**3.24**	**4.21**	**4.98**
60/20 °C	T return primary	°C	30	30	30	30	30	30	30	30	30	30	30	30
	V̇ primary	**m³/h**	**0.3**	**0.6**	**0.8**	**1.28**	**1.75**	**2.33**	**0.62**	**1.14**	**2.05**	**2.4**	**3.43**	**4.22**
	Q max.	kW	12	24	32	51	70	93	28	52	68	109	156	192
	V̇ secondary	**m³/h**	**0.26**	**0.52**	**0.69**	**1.1**	**1.51**	**2**	**0.6**	**1.12**	**1.47**	**2.36**	**3.36**	**4.14**
55/5 °C	T return primary	°C	30	30	30	30	30	30	30	30	30	30	30	30
	V̇ primary	**m³/h**	**0.8**	**1.5**	**2.01**	**3.16**	**4.34**	**5.39**	**1.08**	**2.09**	**2.53**	**3.74**	**4.84**	**5.76**
	Q max.	kW	32	60	80	126	173	215	50	95	115	170	220	262
	V̇ secondary	**m³/h**	**0.55**	**1.03**	**1.38**	**2.17**	**2.98**	**3.7**	**0.86**	**1.63**	**1.97**	**2.92**	**3.78**	**4.5**
55/10 °C	T return primary	°C	30	30	30	30	30	30	30	30	30	30	30	30
	V̇ primary	**m³/h**	**1.3**	**2.06**	**2.53**	**3.71**	**4.81**	**5.64**	**1.08**	**1.87**	**2.42**	**3.74**	**4.84**	**5.72**
	Q max.	kW	52	82	101	148	192	225	49	85	110	170	220	260
	V̇ secondary	**m³/h**	**0.99**	**1.57**	**1.93**	**2.83**	**3.67**	**4.3**	**0.94**	**1.62**	**2.1**	**3.24**	**4.21**	**4.98**
55/15 °C	T return primary	°C	30	30	30	30	30	30	30	30	30	30	30	30
	V̇ primary	**m³/h**	**0.97**	**1.65**	**2.11**	**3.71**	**4.81**	**5.64**	**1.1**	**1.88**	**2.41**	**3.74**	**4.22**	**5.1**
	Q max.	kW	44	75	96	148	192	225	44	75	96	148	192	232
	V̇ secondary	**m³/h**	**0.95**	**1.61**	**2.07**	**3.19**	**4.13**	**4.84**	**0.94**	**1.62**	**2.1**	**3.19**	**4.21**	**5**
55/20 °C	T return primary	°C	30	30	30	30	30	30	30	30	30	30	30	30
	V̇ primary	**m³/h**	**0.95**	**1.68**	**2.13**	**3.23**	**4.24**	**5.14**	**0.84**	**1.47**	**1.87**	**2.84**	**3.72**	**4.51**
	Q max.	kW	38	67	85	129	169	205	38	67	85	129	169	205
	V̇ secondary	**m³/h**	**0.94**	**1.65**	**2.09**	**3.18**	**4.16**	**5.05**	**0.94**	**1.65**	**2.09**	**3.18**	**4.16**	**5.05**
50/5 °C	T return primary	°C	30	30	30	30	30	30	30	30	30	30	30	30
	V̇ primary	**m³/h**	**1.25**	**2.06**	**2.53**	**3.71**	**4.81**	**5.64**	**1.08**	**1.87**	**2.42**	**3.56**	**4.84**	**5.72**
	Q max.	kW	50	82	101	148	192	225	49	85	110	162	220	260
	V̇ secondary	**m³/h**	**0.95**	**1.57**	**1.93**	**2.83**	**3.67**	**4.3**	**0.94**	**1.62**	**2.1**	**3.09**	**4.21**	**4.98**
50/10 °C	T return primary	°C	30	30	30	30	30	30	30	30	30	30	30	30
	V̇ primary	**m³/h**	**1.1**	**1.88**	**2.41**	**3.71**	**4.81**	**5.64**	**0.97**	**1.65**	**2.11**	**3.25**	**4.22**	**5.1**
	Q max.	kW	44	75	96	148	192	225	44	75	96	148	192	232
	V̇ secondary	**m³/h**	**0.95**	**1.61**	**2.07**	**3.19**	**4.13**	**4.84**	**0.95**	**1.61**	**2.07**	**3.19**	**4.13**	**5**
50/15 °C	T return primary	°C	30	30	30	30	30	30	30	30	30	30	30	30
	V̇ primary	**m³/h**	**0.95**	**1.68**	**2.13**	**3.23**	**4.24**	**5.14**	**0.84**	**1.47**	**1.87**	**2.84**	**3.72**	**4.51**
	Q max.	kW	38	67	85	129	169	205	38	67	85	129	169	205
	V̇ secondary	**m³/h**	**0.94**	**1.65**	**2.09**	**3.18**	**4.16**	**5.05**	**0.94**	**1.65**	**2.09**	**3.18**	**4.16**	**5.05**
50/20 °C	T return primary	°C	30	30	30	30	30	30	30	30	30	30	30	30
	V̇ primary	**m³/h**	**0.83**	**1.45**	**1.81**	**2.44**	**3.63**	**4.44**	**0.73**	**1.28**	**1.61**	**2.44**	**3.19**	**3.89**
	Q max.	kW	33	58	73	111	145	177	33	58	73	111	145	177
	V̇ secondary	**m³/h**	**0.95**	**1.67**	**2.1**	**3.19**	**4.17**	**5.09**	**0.95**	**1.67**	**2.1**	**3.19**	**4.17**	**5.09**

T return primary	°C	Return temperature primary
V̇ primary	**m³/h**	Flow rate primary
Q max.	kW	Output
V̇ secondary	**m³/h**	Flow rate secondary

The specified technical data relate to the full load of the module in each case.

Performance data

TransTherm® aqua L (1-10 to 1-50) / TransTherm® aqua L-FW (2-10 to 2-50)

Temperature primary 70 °C flow/30 °C return

Domestic water heating

		TransTherm® aqua L	Cold water 10 °C, domestic water 60 °C					
		TransTherm® aqua L-FW	(10)	(16)	(20)	(30)	(40)	(50)
		kW	50	90	115	175	230	275
		m³/h	0.86	1.54	1.97	3.00	3.94	4.71
		l/min	14.3	25.7	32.9	50.0	65.7	78.6
		l/s	0.2	0.4	0.5	0.8	1.1	1.3
Tank size l								
300	**V̇s**	**l/10 min**	443	557	629	800	-	-
	Hourly output	l/h at 60 °C	1157	1843	2271	3300	-	-
	NL index		16	30	39	60	-	-
400	**V̇s**	**l/10 min**	543	657	729	900	-	-
	Hourly output	l/h at 60 °C	1257	1943	2371	3400	-	-
	NL index		18	32	41	64	-	-
500	**V̇s**	**l/10 min**	643	757	829	1000	1157	-
	Hourly output	l/h at 60 °C	1357	2043	2471	3500	4443	-
	NL index		20	34	43	66	88	-
800	**V̇s**	**l/10 min**	943	1057	1129	1300	1457	-
	Hourly output	l/h at 60 °C	1657	2343	2771	3800	4743	-
	NL index		26	40	49	73	96	-
1000	**V̇s**	**l/10 min**	1143	1257	1329	1500	1657	1786
	Hourly output	l/h at 60 °C	1857	2543	2971	4000	4943	5714
	NL index		30	45	54	77	100	119
1500	**V̇s**	**l/10 min**	-	1757	1829	2000	2157	2286
	Hourly output	l/h at 60 °C	-	3043	3471	4500	5443	6214
	NL index		-	56	65	89	112	131
2000	**V̇s**	**l/10 min**	-	2257	2329	2500	2657	2786
	Hourly output	l/h at 60 °C	-	3543	3971	5000	5943	6714
	NL index		-	67	77	101	124	143
2500	**V̇s**	**l/10 min**	-	2757	2829	3000	3157	3286
	Hourly output	l/h at 60 °C	-	4043	4471	5500	6443	7214
	NL index		-	79	89	113	137	160

V̇s **l/10 min** 10 min peak output at 60 °C

NL index Performance figure in accordance with DIN 4708 = number of flats which can be supplied with domestic hot water when the calorifier is heated and permanently reheated with the heat generator (standard flat: 1 bath – 4 rooms – 3.5 persons)

Performance data

TransTherm® aqua L (1-10 to 1-50) / TransTherm® aqua L-FW (2-10 to 2-50)

Tapping point (mixing temperature)		TransTherm® aqua L	Cold water 10 °C, domestic water 45 °C					
		TransTherm® aqua L-FW	(10)	(16)	(20)	(30)	(40)	(50)
		kW	50	90	115	175	230	275
		m³/h	1.22	2.20	2.82	4.29	5.63	6.73
		l/min	20.4	36.7	46.9	71.4	93.9	112.2
		l/s	0.3	0.6	0.8	1.2	1.6	1.9
Tank size l								
300	**V̇s**	**l/10 min**	633	796	898	1143	-	-
	Hourly output	l/h at 45 °C	1653	2633	3245	4714	-	-
	NL index		16	30	39	60	-	-
400	**V̇s**	**l/10 min**	776	939	1041	1286	-	-
	Hourly output	l/h at 45 °C	1796	2776	3388	4857	-	-
	NL index		18	32	41	64	-	-
500	**V̇s**	**l/10 min**	918	1082	1184	1429	1653	-
	Hourly output	l/h at 45 °C	1939	2918	3531	5000	6347	-
	NL index		20	34	43	66	88	-
800	**V̇s**	**l/10 min**	1347	1510	1612	1857	2082	-
	Hourly output	l/h at 45 °C	2367	3347	3959	5429	6776	-
	NL index		26	40	49	73	96	-
1000	**V̇s**	**l/10 min**	1633	1796	1898	2143	2367	2551
	Hourly output	l/h at 45 °C	2653	3633	4245	5714	7061	8163
	NL index		30	45	54	77	100	119
1500	**V̇s**	**l/10 min**	-	2510	2612	2857	3082	3265
	Hourly output	l/h at 45 °C	-	4347	4959	6429	7776	8878
	NL index		-	56	65	89	112	131
2000	**V̇s**	**l/10 min**	-	3224	3327	3571	3796	3980
	Hourly output	l/h at 45 °C	-	5061	5673	7143	8490	9592
	NL index		-	67	77	101	124	143
2500	**V̇s**	**l/10 min**	-	3939	4041	4286	4510	4694
	Hourly output	l/h at 45 °C	-	5776	6388	7857	9204	10306
	NL index		-	79	89	113	137	160

V̇s **l/10 min** 10 min peak output at 45 °C

NL index Performance figure in accordance with DIN 4708 = number of flats which can be supplied with domestic hot water when the calorifier is heated and permanently reheated with the heat generator (standard flat: 1 bath – 4 rooms – 3.5 persons)

Performance data

TransTherm® aqua L (1-10 to 1-50) / TransTherm® aqua L-FW (2-10 to 2-50)

Temperature primary 65 °C flow/30 °C return

Domestic water heating

		TransTherm® aqua L	Cold water 10 °C, domestic water 60 °C					
		TransTherm® aqua L-FW	(10)	(16)	(20)	(30)	(40)	(50)
		kW	32	60	80	126	173	215
		m³/h	0.55	1.03	1.37	2.16	2.97	3.69
		l/min	9.1	17.1	22.9	36.0	49.4	61.4
		l/s	0.2	0.3	0.4	0.6	0.8	1.0
Tank size l								
300	**V̇s**	**l/10 min**	391	471	529	660	-	-
	Hourly output	l/h at 60 °C	849	1329	1671	2460	-	-
	NL index		10	19	26	43	-	-
400	**V̇s**	**l/10 min**	491	571	629	760	-	-
	Hourly output	l/h at 60 °C	949	1429	1771	2560	-	-
	NL index		12	21	28	45	-	-
500	**V̇s**	**l/10 min**	591	671	729	860	994	-
	Hourly output	l/h at 60 °C	1049	1529	1871	2660	3466	-
	NL index		14	23	30	47	65	-
800	**V̇s**	**l/10 min**	891	971	1029	1160	1294	-
	Hourly output	l/h at 60 °C	1349	1829	2171	2960	3766	-
	NL index		19	30	36	53	72	-
1000	**V̇s**	**l/10 min**	1091	1171	1229	1360	1494	1614
	Hourly output	l/h at 60 °C	1549	2029	2371	3160	3966	4686
	NL index		24	33	41	59	77	94
1500	**V̇s**	**l/10 min**	-	1671	1729	1860	1994	2114
	Hourly output	l/h at 60 °C	-	2529	2871	3660	4466	5186
	NL index		-	44	52	69	89	106
2000	**V̇s**	**l/10 min**	-	2171	2229	2360	2494	2614
	Hourly output	l/h at 60 °C	-	3029	3371	4160	4966	5686
	NL index		-	56	64	81	102	119
2500	**V̇s**	**l/10 min**	-	2671	2729	2860	2994	3114
	Hourly output	l/h at 60 °C	-	3529	3871	4660	5466	6186
	NL index		-	65	75	93	113	131

V̇s **l/10 min** 10 min peak output at 60 °C

NL index Performance figure in accordance with DIN 4708 = number of flats which can be supplied with domestic hot water when the calorifier is heated and permanently reheated with the heat generator (standard flat: 1 bath – 4 rooms – 3.5 persons)

Performance data

TransTherm® aqua L (1-10 to 1-50) / TransTherm® aqua L-FW (2-10 to 2-50)

Tapping point (mixing temperature)

		TransTherm® aqua L	**Cold water 10 °C, domestic water 45 °C**					
		TransTherm® aqua L-FW	(10)	(16)	(20)	(30)	(40)	(50)
		kW	32	60	80	126	173	215
		m³/h	0.78	1.47	1.96	3.09	4.24	5.27
		l/min	13.1	24.5	32.7	51.4	70.6	87.8
		l/s	0.2	0.4	0.5	0.9	1.2	1.5
Tank size l								
300	**V̇s**	**l/10 min**	559	673	755	943	-	-
	Hourly output	l/h at 45 °C	1212	1898	2388	3514	-	-
	NL index		10	19	26	43	-	-
400	**V̇s**	**l/10 min**	702	816	898	1086	-	-
	Hourly output	l/h at 45 °C	1355	2041	2531	3657	-	-
	NL index		12	21	28	45	-	-
500	**V̇s**	**l/10 min**	845	959	1041	1229	1420	-
	Hourly output	l/h at 45 °C	1498	2184	2673	3800	4951	-
	NL index		14	23	30	47	65	-
800	**V̇s**	**l/10 min**	1273	1388	1469	1657	1849	-
	Hourly output	l/h at 45 °C	1927	2612	3102	4229	5380	-
	NL index		19	30	36	53	72	-
1000	**V̇s**	**l/10 min**	1559	1673	1755	1943	2135	2306
	Hourly output	l/h at 45 °C	2212	2898	3388	4514	5665	6694
	NL index		24	33	41	59	77	94
1500	**V̇s**	**l/10 min**	-	2388	2469	2657	2849	3020
	Hourly output	l/h at 45 °C	-	3612	4102	5229	6380	7408
	NL index		-	44	52	69	89	106
2000	**V̇s**	**l/10 min**	-	3102	3184	3371	3563	3735
	Hourly output	l/h at 45 °C	-	4327	4816	5943	7094	8122
	NL index		-	56	64	81	102	119
2500	**V̇s**	**l/10 min**	-	3816	3898	4086	4278	4449
	Hourly output	l/h at 45 °C	-	5041	5531	6657	7808	8837
	NL index		-	65	75	93	113	131

V̇s **l/10 min** 10 min peak output at 45 °C

NL index Performance figure in accordance with DIN 4708 = number of flats which can be supplied with domestic hot water when the calorifier is heated and permanently reheated with the heat generator (standard flat: 1 bath – 4 rooms – 3.5 persons)

Hot water charging tank CombiVal E (300-2000)

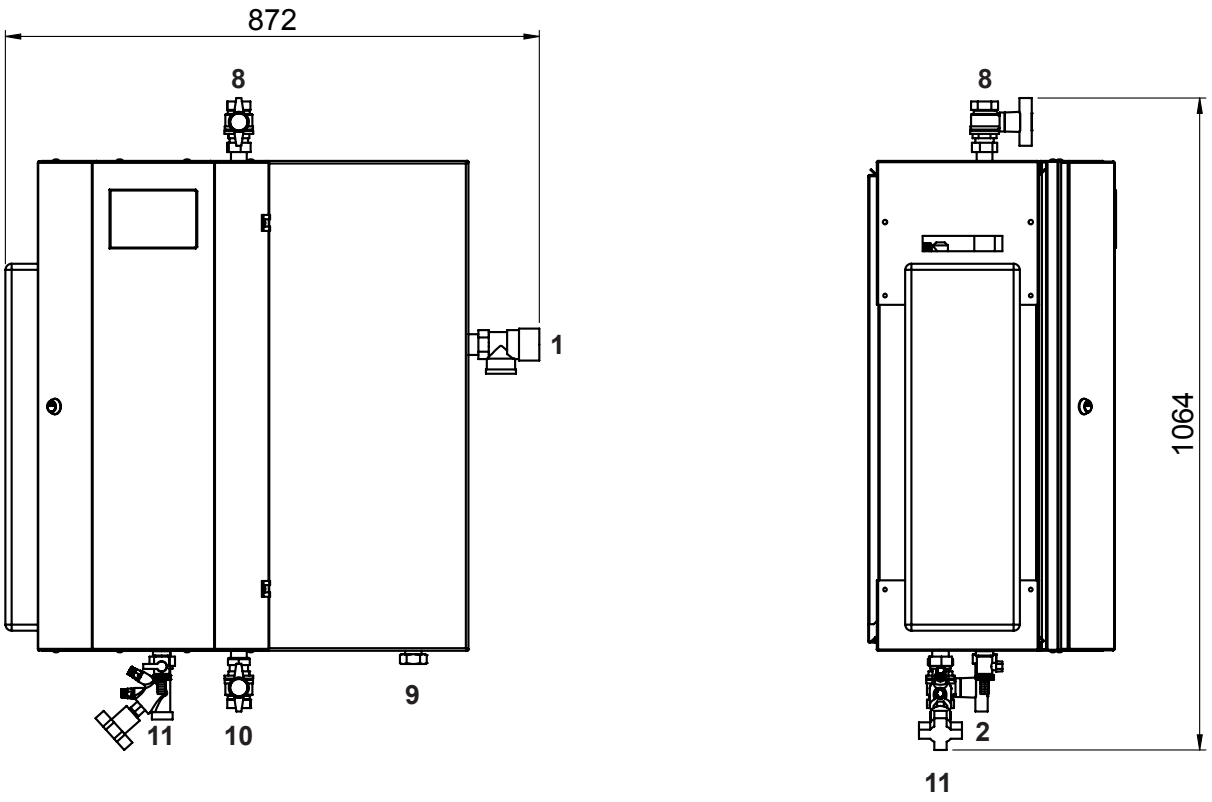
Type		(300)	(500)	(800)	(1000)	(1500)	(2000)
• Volume	l	301	475	747	968	1472	2000
• Max. operating/test pressure SVGW	bar	6/12	6/12	6/12	6/12	6/12	6/12
• Max. operating/test pressure DVGW	bar	10/13	10/13	10/13	10/13	10/13	10/13
• Max. operating temperature	°C	95	95	95	95	95	95
• Thermal insulation PU hard foam, foam-lined	mm	75	75	-	-	-	-
• Thermal insulation polyester fleece	mm	-	-	100	100	120	120
• Thermal insulation λ	W/mK	0.027	0.027	0.040	0.040	0.040	0.040
• Fire protection class		B2	B2	B2	B2	B2	B2
• Heat loss at 65 °C	W	58	75	128	139	170	190
• Transport weight	kg	97	126	205	264	400	600
• U value	W/m^2K	0.290	0.303	0.381	0.362	0.339	0.325

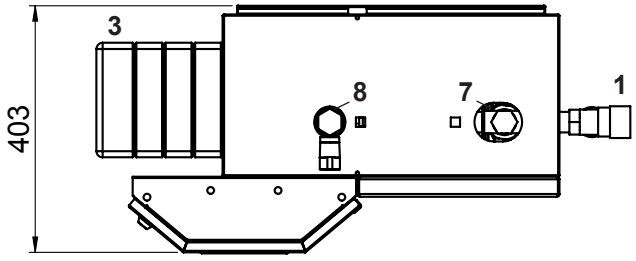
Hot water charging tank CombiVal C (300-2500)

Type		(300)	(400)	(500)	(750)	(1000)	(1500)	(2000)	(2500)
• Volume	l	289	411	490	756	990	1415	1975	2450
• Max. operating/test pressure SVGW	bar	6/12	6/12	6/12	6/12	6/12	6/12	6/12	6/12
• Max. operating temperature	°C	95	95	95	95	95	95	95	95
• Thermal insulation		Neodul® insulation (EPS rigid foam outside and polyester fibre fleece inside)							
	mm	100	100	100	130	130	150	150	150
• Thermal insulation λ (EPS)	W/mK	0.0316	0.0316	0.0316	0.0316	0.0316	0.0316	0.0316	0.0316
• Fire protection class		B2	B2	B2	B2	B2	B2	B2	B2
• Heat loss at 65 °C	W	59	68	73	84	99	114	135	169
• Weight (only container)	kg	55	65	70	118	155	200	250	430
• Transport weight (incl. thermal insulation and packaging/pallet)	kg	75	90	100	165	210	260	325	510
• U value	W/m^2K	0.327	0.327	0.327	0.249	0.249	0.216	0.216	0.216

Charging module TransTherm® aqua L (1-10)

(Dimensions in mm)





1 Safety valve
Hot water 10 bar
2 Filling/drain valve
3 Heat exchanger

		(1-10)
7	Circulation [1]	DN 25, Rp 1″ (20, Rp ¾″) (IT)
8	Hot water	DN 25, Rp 1″ (IT)
9	Cold water	DN 20, Gp 1″ (IT)
10	Flow heating water	DN 25, Rp 1″ (IT)
11	Return heating water	DN 25, Gp 1″ (IT)

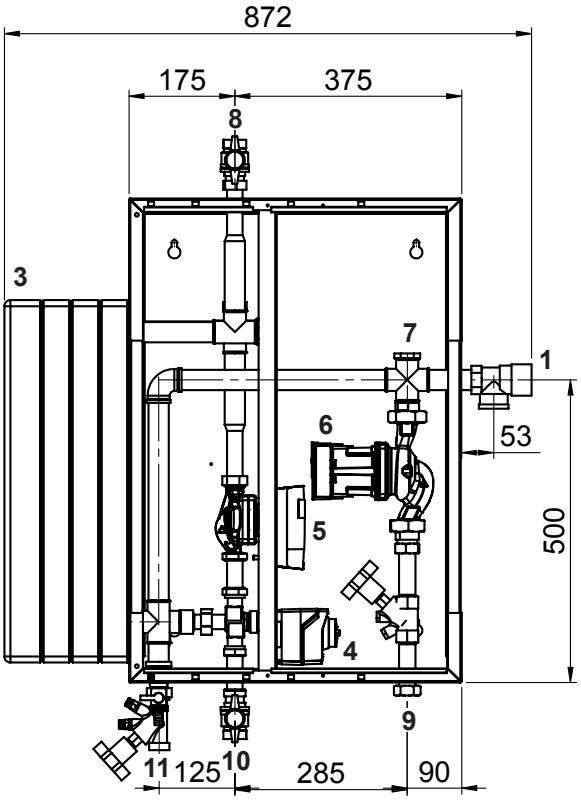
TransTherm® aqua L	Weight in kg
(1-10)	56

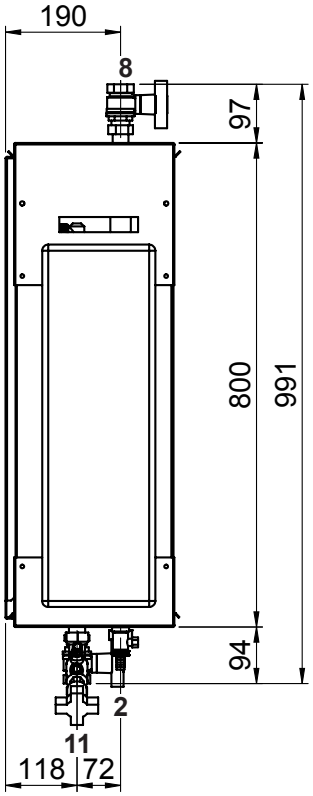
[1] Optional, connection and installation on site

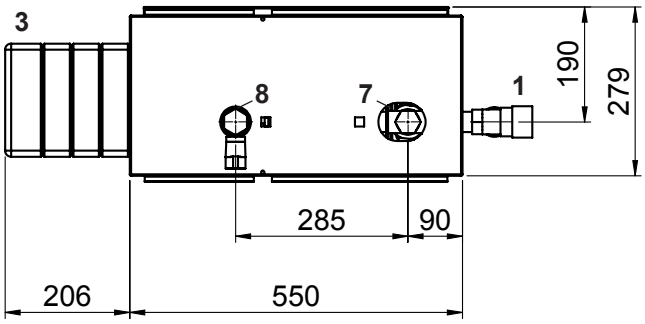
Gp = straight internal thread

Charging module TransTherm® aqua L (1-10)

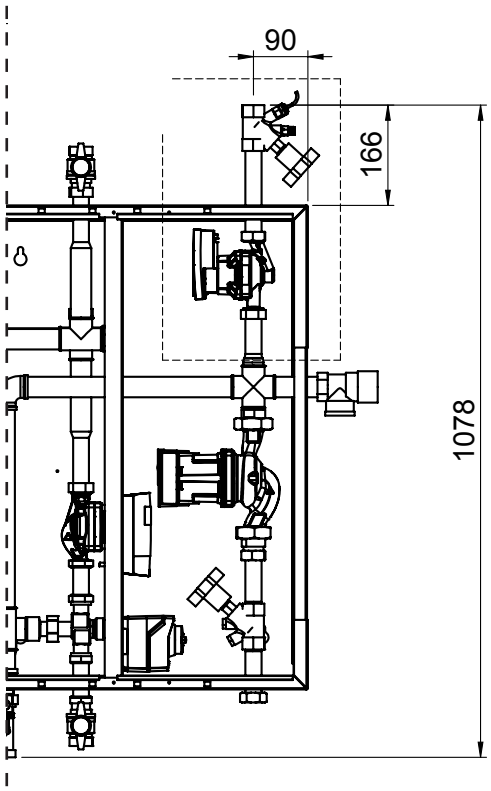
(Dimensions in mm)







Version incl. circulation set



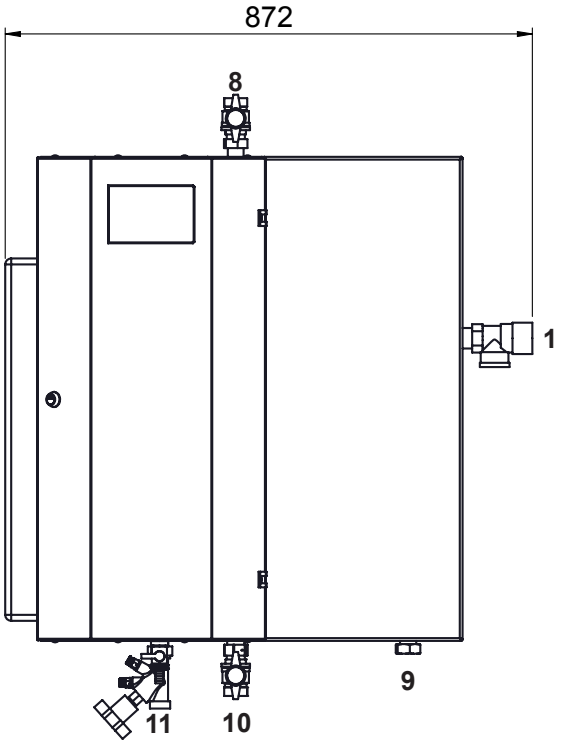
		(1-10)
1	Safety valve Hot water 10 bar	
2	Filling/drain valve	
3	Heat exchanger	
4	Primary three-way valve	
5	Primary circulating pump	
6	Secondary circulating pump	
7	Circulation [1]	DN 25, Rp 1″ (20, Rp ¾″) (IT)
8	Hot water	DN 25, Rp 1″ (IT)
9	Cold water	DN 20, Gp 1″ (IT)
10	Flow heating water	DN 25, Rp 1″ (IT)
11	Return heating water	DN 25, Gp 1″ (IT)

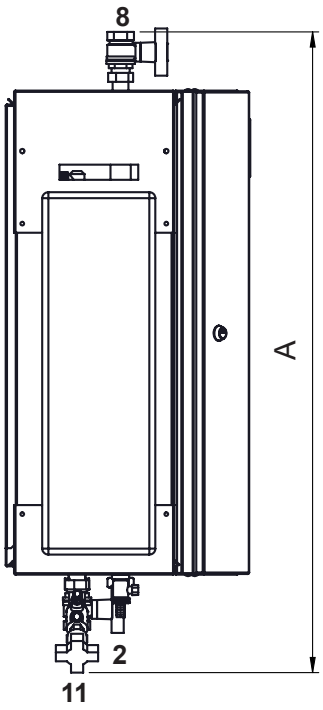
[1] Optional, connection and installation on site

Gp = straight internal thread

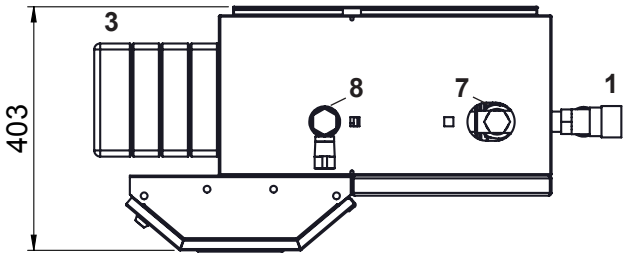
Charging module TransTherm® aqua L (1-16, 1-20)

(Dimensions in mm)





	A
(1-16)	1059
(1-20)	1073



1 Safety valve
Hot water 10 bar
2 Filling/drain valve
3 Heat exchanger

		(1-16) (1-20)
7	Circulation [1]	DN 25, Rp 1″ (20, Rp ¾″) (IT)
8	Hot water	DN 25, Rp 1″ (IT)
9	Cold water	DN 20, Gp 1″ (IT)
10	Flow heating water	DN 25, Rp 1″ (IT)
11	Return heating water	DN 25, Gp 1″ (IT)

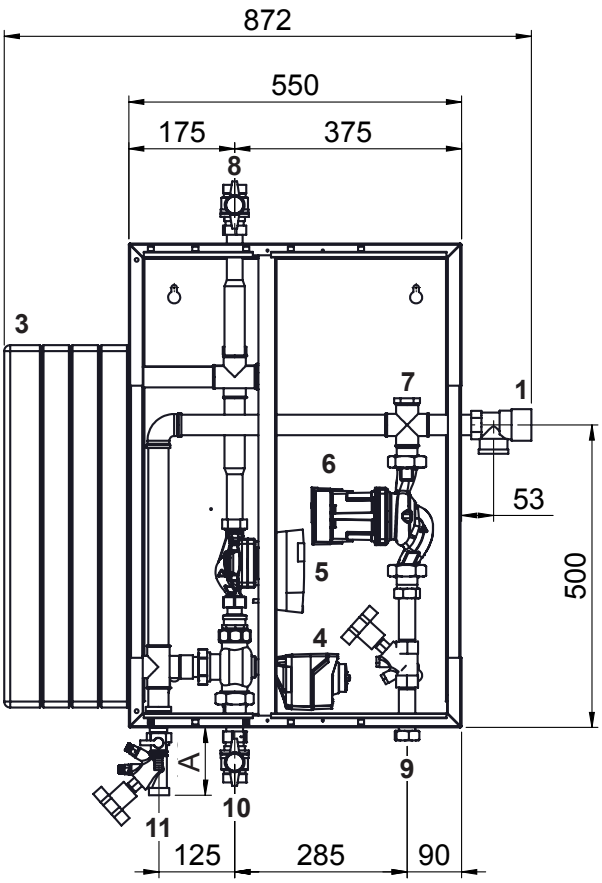
[1] Optional, connection and installation on site

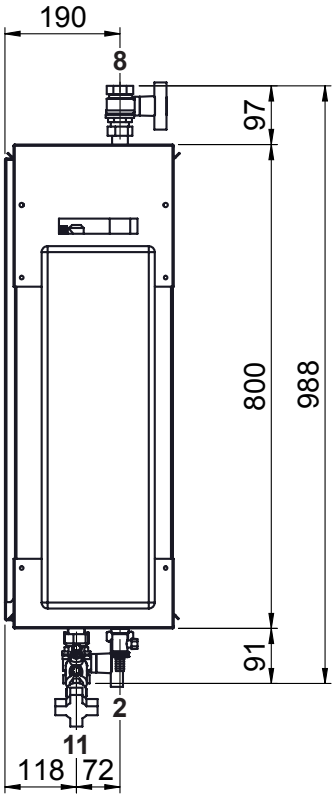
Gp = straight internal thread

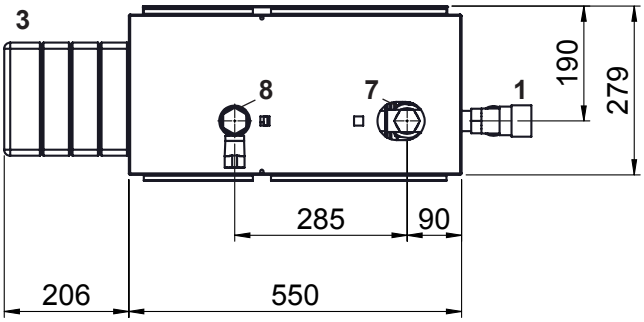
TransTherm® aqua L	Weight in kg
(1-16)	58
(1-20)	60

Charging module TransTherm® aqua L (1-16, 1-20)

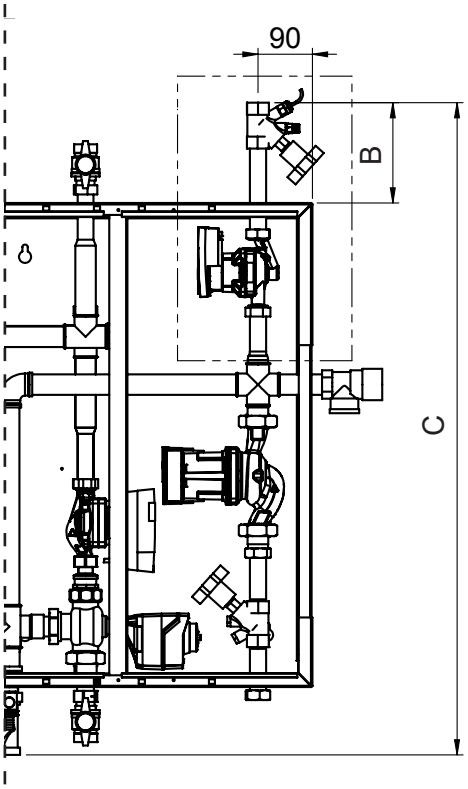
(Dimensions in mm)







Version incl. circulation set



	A	B	C
(1-16)	112	166	1078
(1-20)	128	193	1121

1 Safety valve
Hot water 10 bar
2 Filling/drain valve
3 Heat exchanger
4 Three-way valve primary
5 Primary circulating pump
6 Secondary circulating pump

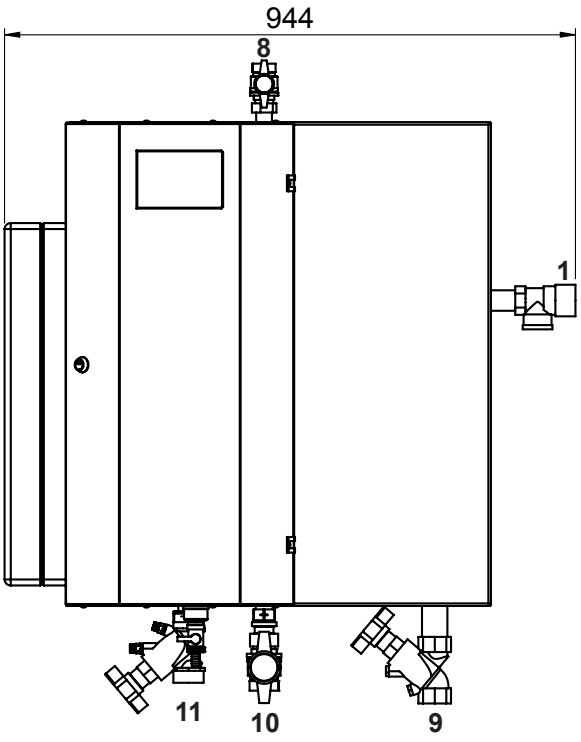
		(1-16) (1-20)
7	Circulation [1]	DN 25, Rp 1″ (20, Rp ¾″) (IT)
8	Hot water	DN 25, Rp 1″ (IT)
9	Cold water	DN 20, Gp 1″ (IT)
10	Flow heating water	DN 25, Rp 1″ (IT)
11	Return heating water	DN 25, Gp 1″ (IT)

[1] Optional, connection and installation on site

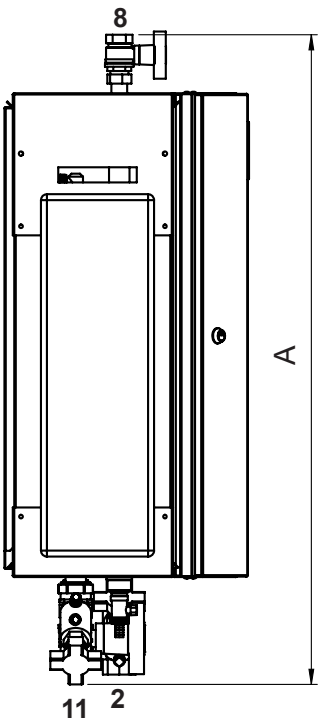
Gp = straight internal thread

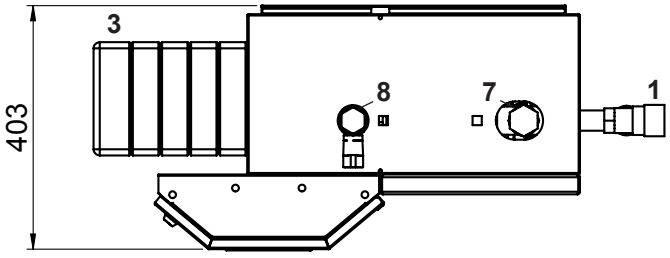
Charging module TransTherm® aqua L (1-30 to 1-50)

(Dimensions in mm)



	A
(1-30)	1074
(1-40)	1058
(1-50)	1079





1 Safety valve
Hot water 10 bar
2 Filling/drain valve
3 Heat exchanger

		(1-30) (1-40) (1-50)
7	Circulation [1]	DN 32, Rp 1¼″ (25, Rp 1″) (20, Rp ¾″) (IT)
8	Hot water	DN 32, Rp 1¼″ (IT)
9	Cold water	DN 32, Rp 1¼″ (IT)
10	Flow heating water	DN 32, Rp 1¼″ (IT)
11	Return heating water	DN 32, Gp 1½″ (IT)

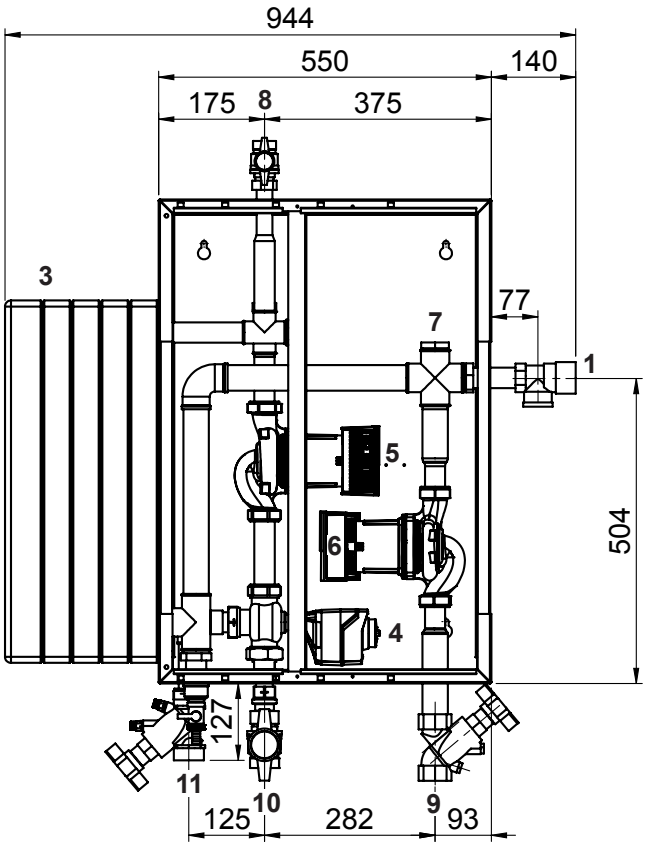
TransTherm® aqua L	Weight in kg
(1-30)	66
(1-40)	68
(1-50)	70

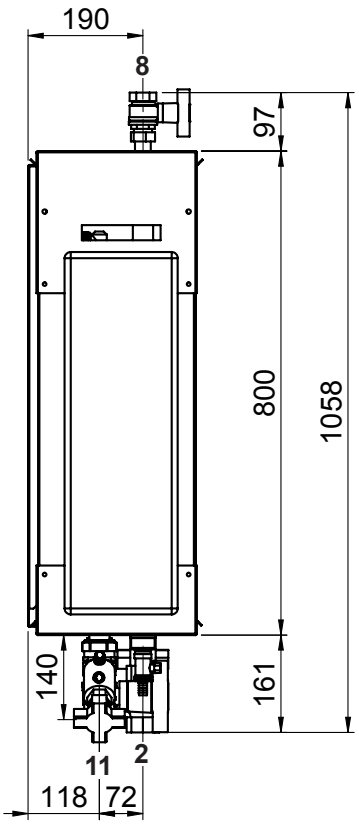
[1] Optional, connection and installation on site

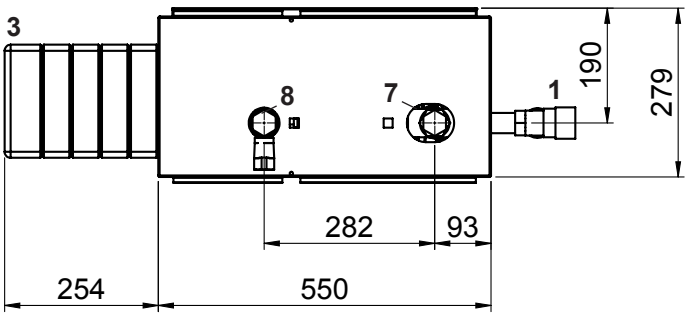
Gp = straight internal thread

Charging module TransTherm® aqua L (1-30 to 1-50)

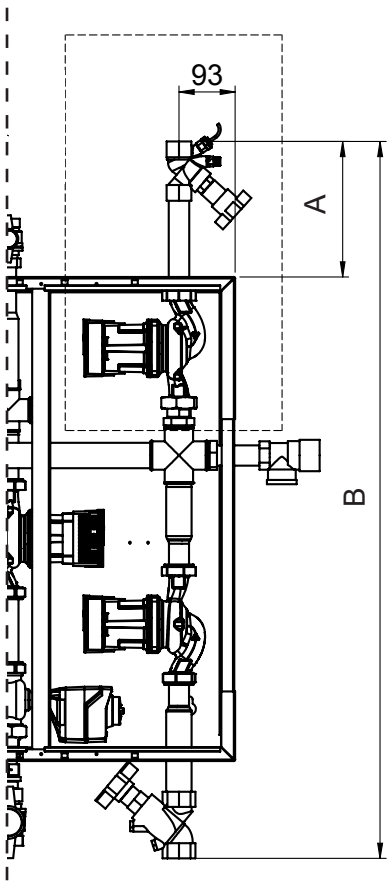
(Dimensions in mm)







Version incl. circulation set



	A	B
(1-30)	224	1185
(1-40)	221	1182
(1-50)	219	1180

1 Safety valve Hot water 10 bar
2 Filling/drain valve
3 Heat exchanger
4 Primary three-way valve
5 Primary circulating pump
6 Secondary circulating pump

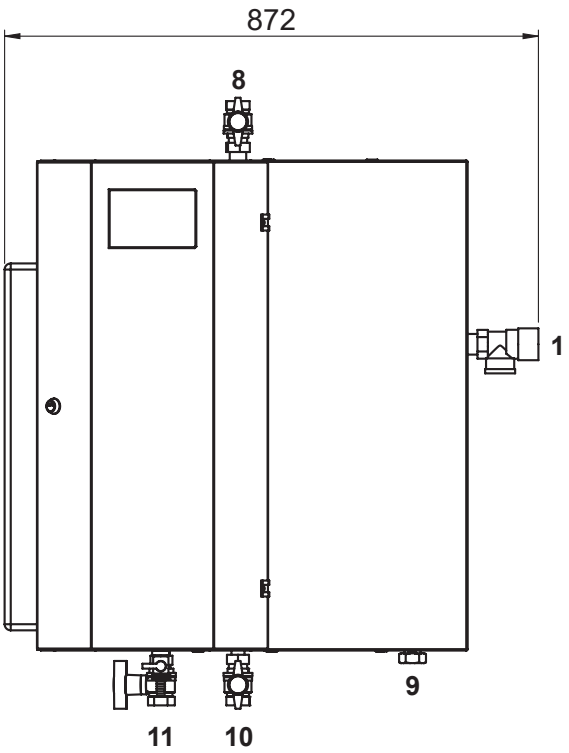
		(1-30) (1-40) (1-50)
7	Circulation [1]	DN 32, Rp 1¼″ (25, Rp 1″) (20, Rp ¾″) (IT)
8	Hot water	DN 32, Rp 1¼″ (IT)
9	Cold water	DN 32, Rp 1¼″ (IT)
10	Flow heating water	DN 32, Rp 1¼″ (IT)
11	Return heating water	DN 32, Gp 1½″ (IT)

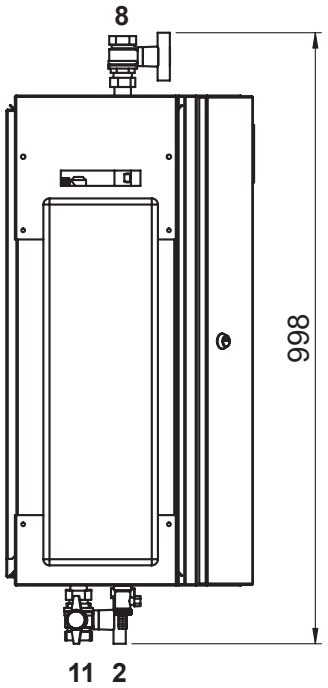
[1] Optional, connection and installation on site

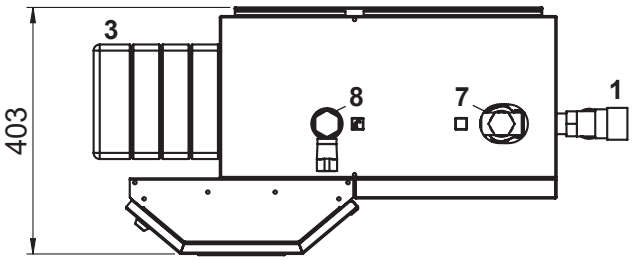
Gp = straight internal thread

Charging module TransTherm® aqua L-FW (2-10)

(Dimensions in mm)







1 Safety valve
Hot water 10 bar
2 Filling/drain valve
3 Heat exchanger

		(2-10)
7	Circulation [1]	DN 25, Rp 1″ (20, Rp ¾″) (IT)
8	Hot water	DN 25, Rp 1″ (IT)
9	Cold water	DN 20, Gp 1″ (IT)
10	Flow heating water	DN 25, Rp 1″ (IT)
11	Return heating water	DN 25, Gp 1″ (IT)

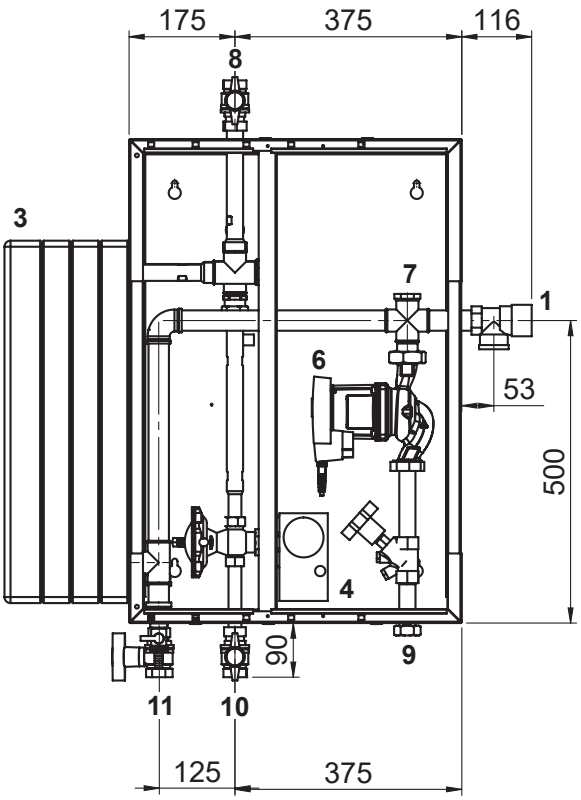
[1] Optional, connection and installation on site

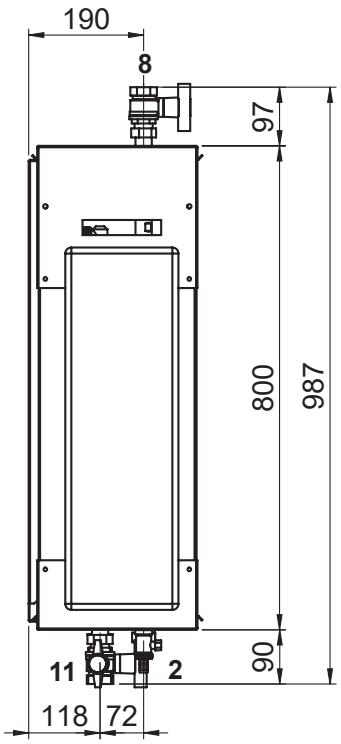
Gp = straight internal thread

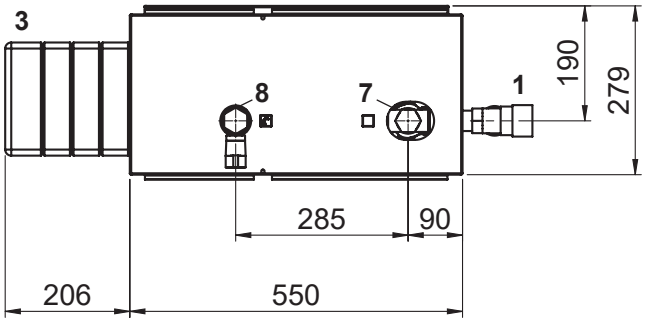
TransTherm® aqua L-FW	Weight in kg
(2-10)	56

Charging module TransTherm® aqua L-FW (2-10)

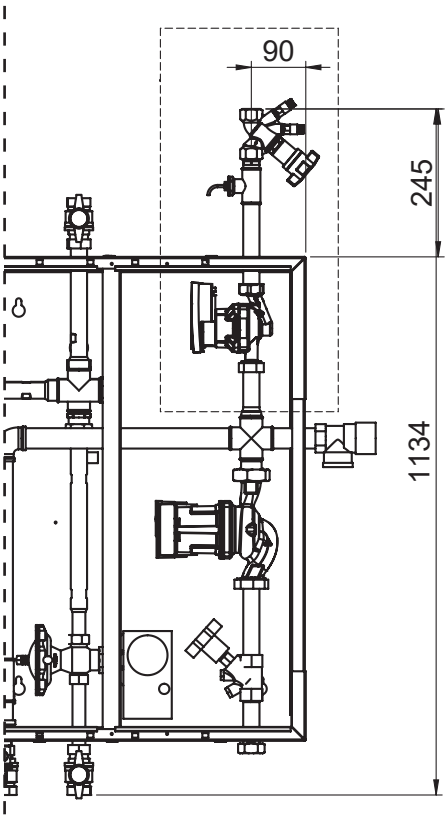
(Dimensions in mm)







Version incl. circulation set



1 Safety valve
Hot water 10 bar
2 Filling/drain valve
3 Heat exchanger
4 Primary three-way valve
5 Primary circulating pump
6 Secondary circulating pump

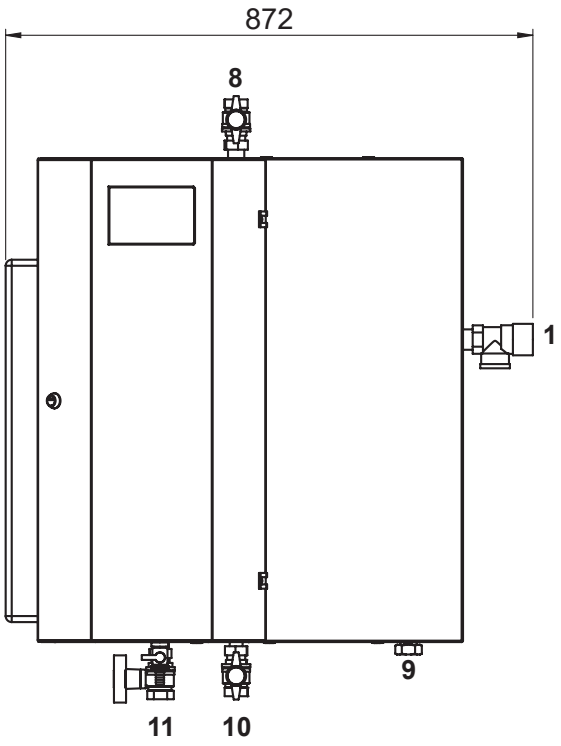
		(2-10)
7	Circulation [1]	DN 25, Rp 1″ (20, Rp ¾″) (IT)
8	Hot water	DN 25, Rp 1″ (IT)
9	Cold water	DN 20, Gp 1″ (IT)
10	Flow heating water	DN 25, Rp 1″ (IT)
11	Return heating water	DN 25, Gp 1″ (IT)

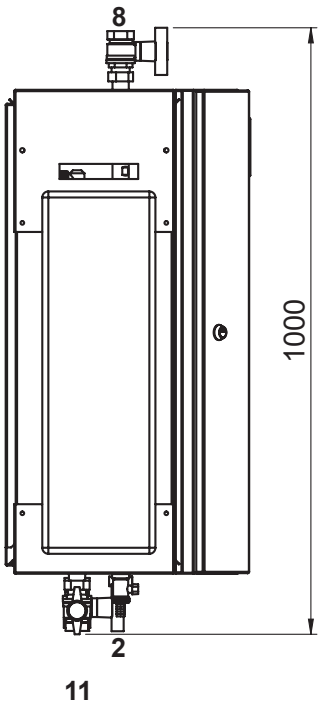
[1] Optional, connection and installation on site

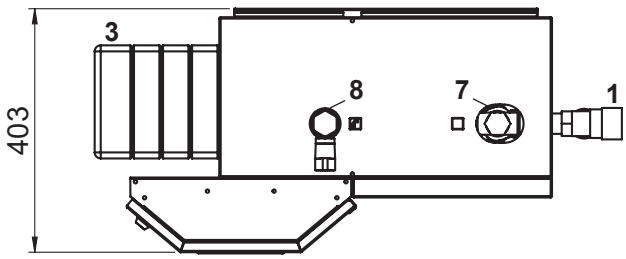
Gp = straight internal thread

Charging module TransTherm® aqua L-FW (2-16, 2-20)

(Dimensions in mm)







1 Safety valve
Hot water 10 bar
2 Filling/drain valve
3 Heat exchanger

		(2-16) (2-20)
7	Circulation [1]	DN 25, Rp 1″ (20, Rp ¾″) (IT)
8	Hot water	DN 25, Rp 1″ (IT)
9	Cold water	DN 20, Gp 1″ (IT)
10	Flow heating water	DN 25, Rp 1″ (IT)
11	Return heating water	DN 25, Gp 1″ (IT)

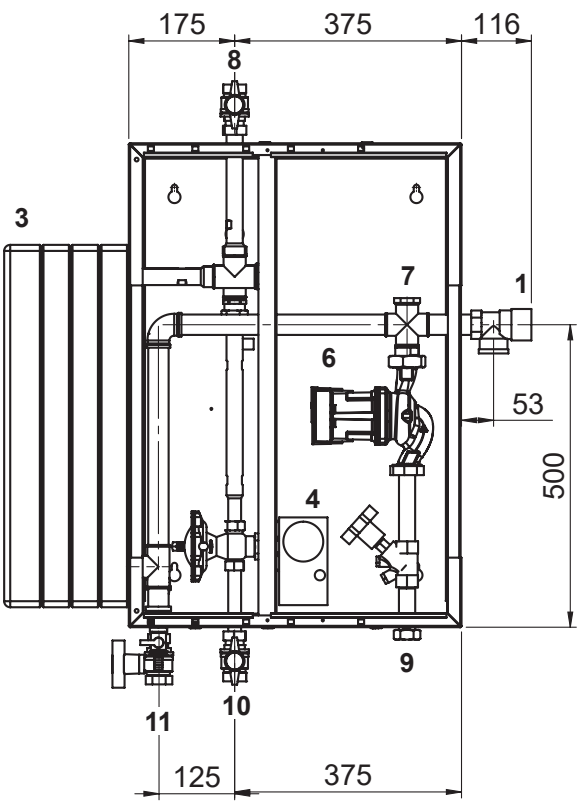
TransTherm® aqua L-FW	Weight in kg
(2-16)	58
(2-20)	60

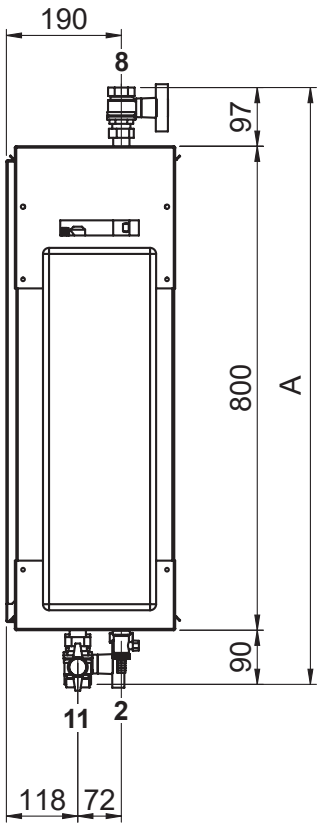
[1] Optional, connection and installation on site

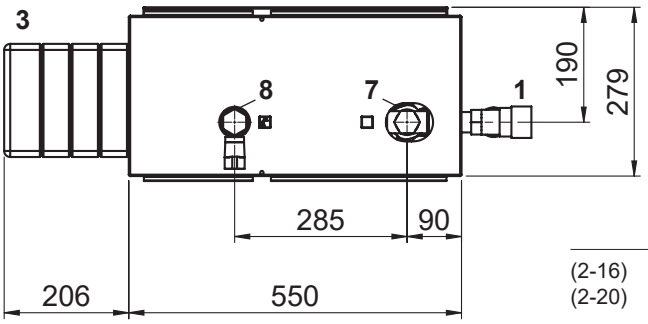
Gp = straight internal thread

Charging module TransTherm® aqua L-FW (2-16, 2-20)

(Dimensions in mm)

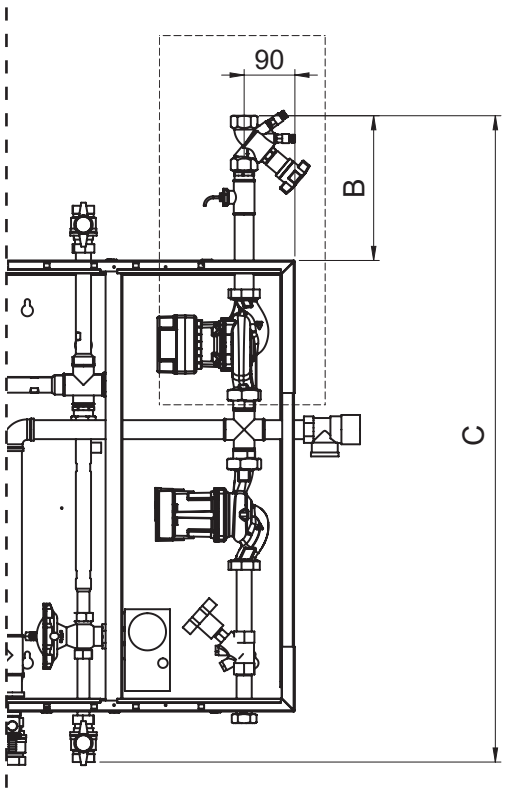






	A	B	C
(2-16)	1000	245	1134
(2-20)	987	257	1146

Version incl. circulation set



1 Safety valve
Hot water 10 bar
2 Filling/drain valve
3 Heat exchanger
4 Three-way valve primary
5 Primary circulating pump
6 Secondary circulating pump

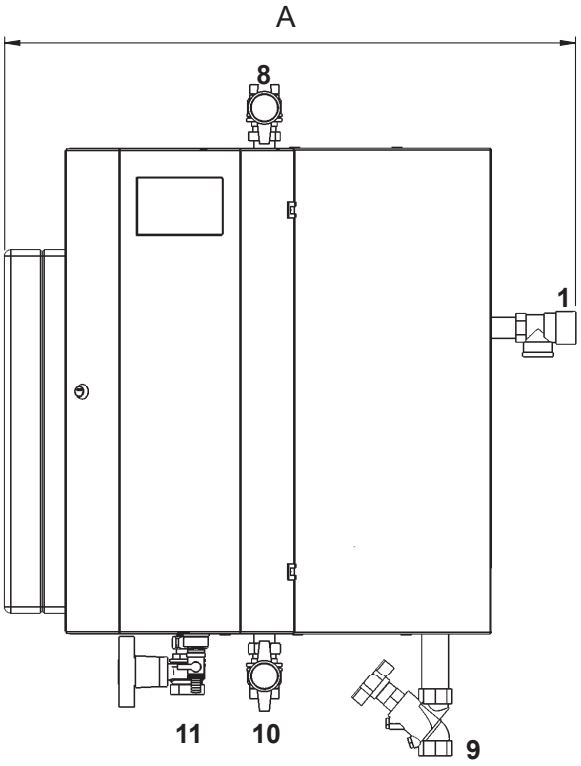
		(2-16) (2-20)
7	Circulation [1]	DN 25, Rp 1″ (20, Rp ¾″) (IT)
8	Hot water	DN 25, Rp 1″ (IT)
9	Cold water	DN 20, Gp 1″ (IT)
10	Flow heating water	DN 25, Rp 1″ (IT)
11	Return heating water	DN 25, Gp 1″ (IT)

[1] Optional, connection and installation on site

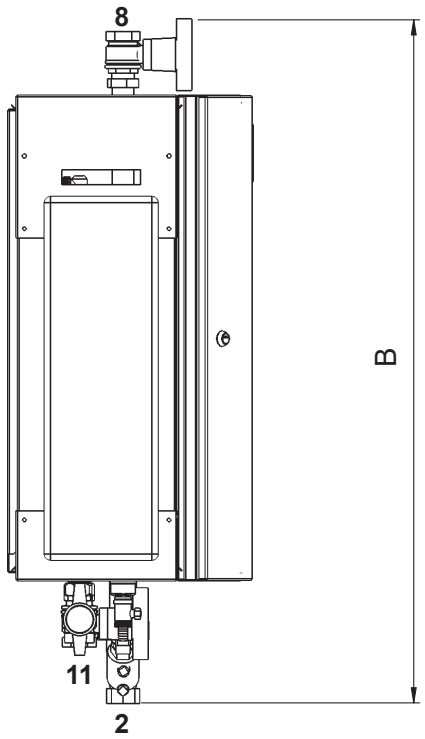
Gp = straight internal thread

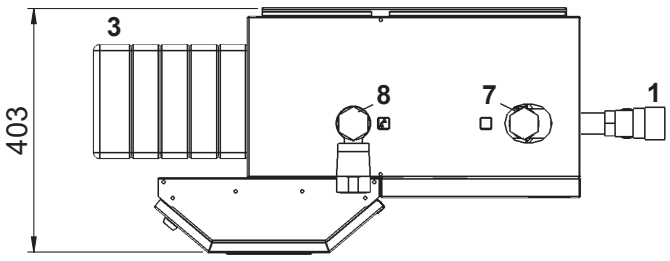
Charging module TransTherm® aqua L-FW (2-30 to 2-50)

(Dimensions in mm)



	A	B
(2-30)	943	1129
(2-40)	943	1129
(2-50)	992	1146





1 Safety valve
Hot water 10 bar
2 Filling/drain valve
3 Heat exchanger

		(2-30) (2-40) (2-50)
7	Circulation [1]	DN 32, Rp 1¼″ (25, Rp 1″) (20, Rp ¾″) (IT)
8	Hot water	DN 32, Rp 1¼″ (IT)
9	Cold water	DN 32, Rp 1¼″ (IT)
10	Flow heating water	DN 32, Rp 1¼″ (IT)
11	Return heating water	DN 32, Gp 1½″ (IT)

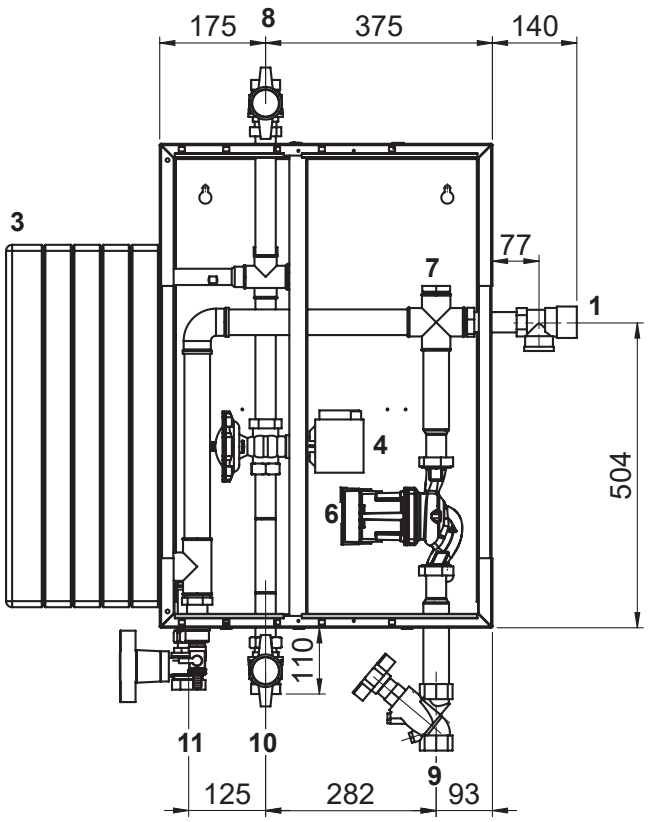
TransTherm® aqua L-FW	Weight in kg
(2-30)	66
(2-40)	68
(2-50)	70

[1] Optional, connection and installation on site

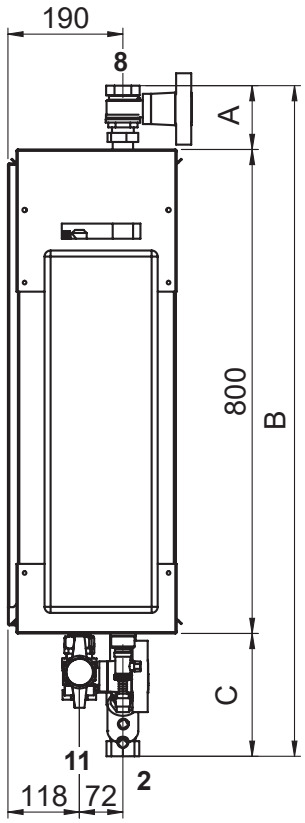
Gp = straight internal thread

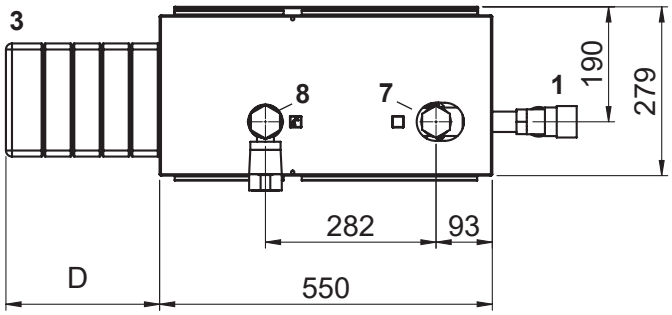
Charging module TransTherm® aqua L-FW (2-30 to 2-50)

(Dimensions in mm)

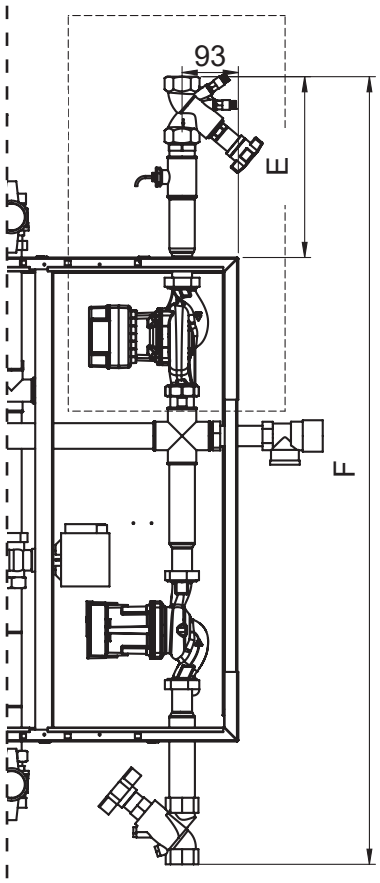


	A	B	C
(2-30)	106	1109	203
(2-40)	106	1109	203
(2-50)	97	1146	249





Version incl. circulation set



	D	E	F
(2-30)	254	287	1290
(2-40)	254	299	1302
(2-50)	302	299	1348

1 Safety valve
Hot water 10 bar
2 Filling/drain valve
3 Heat exchanger
4 Primary three-way valve
5 Primary circulating pump
6 Secondary circulating pump

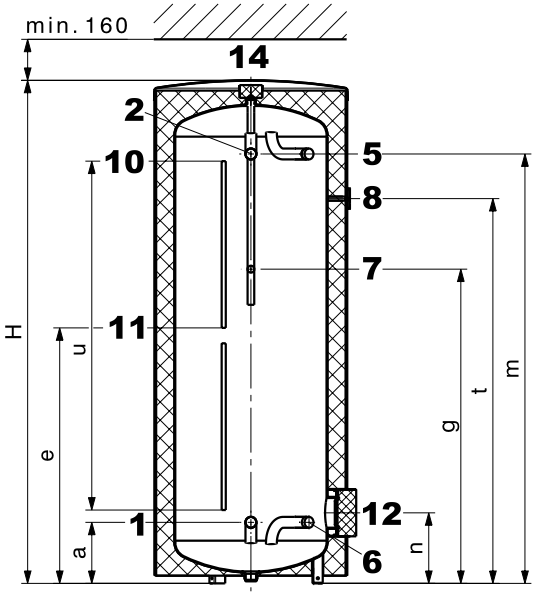
		(2-30) (2-40) (2-50)
7	Circulation [1]	DN 32, Rp 1¼″ (25, Rp 1″) (20, Rp ¾″) (IT)
8	Hot water	DN 32, Rp 1¼″ (IT)
9	Cold water	DN 32, Rp 1¼″ (IT)
10	Flow heating water	DN 32, Rp 1¼″ (IT)
11	Return heating water	DN 32, Gp 1½″ (IT)

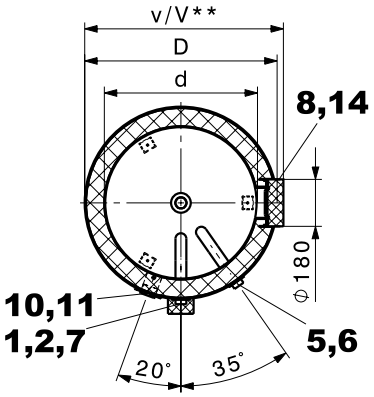
[1] Optional, connection and installation on site

Gp = straight internal thread

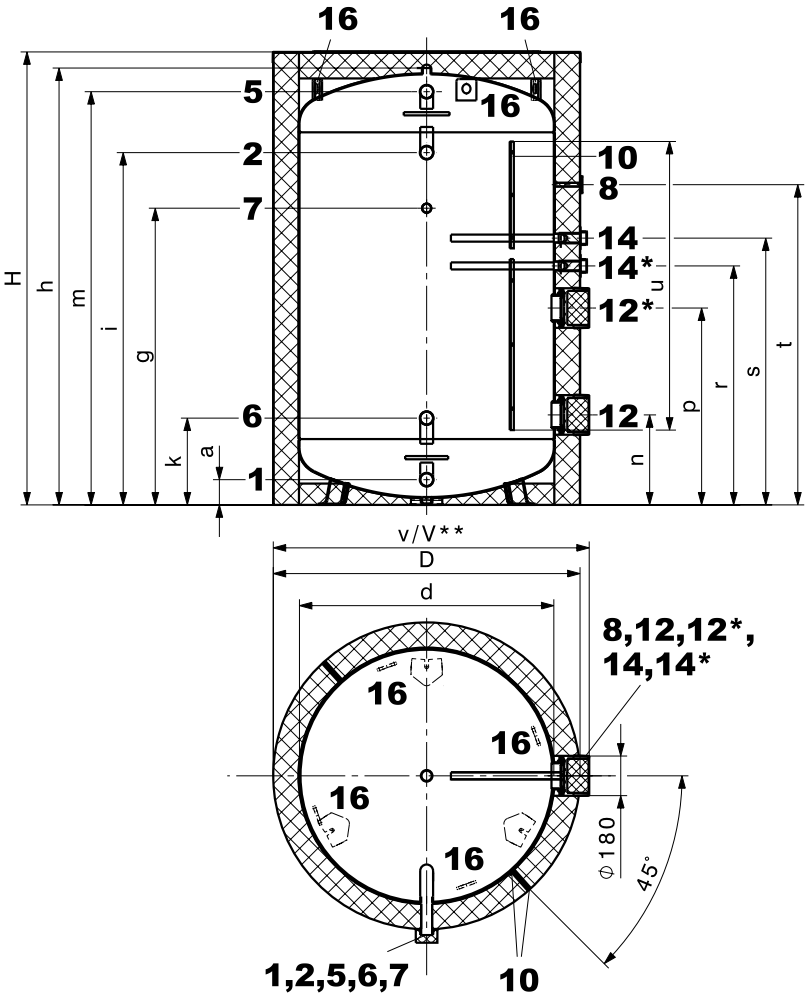
CombiVal E (300,500)

(Dimensions in mm)





CombiVal E (800-2000)



1	Cold water	type (300,500)	G 1¼″	(ET)
		type (800-2000)	G 2″	(ET)
2	Domestic hot water	type (300,500)	G 1¼″	(ET)
		type (800-2000)	G 2″	(ET)
5	Charging flow – hot	type (300,500)	G 1¼″	(ET)
		type (800-2000)	G 2″	(ET)
6	Charging return – cold	type (300,500)	G 1¼″	(ET)
		type (800-2000)	G 2″	(ET)
7	Circulation (removable insulated cap Ø 100 mm)	type (300,500)	G ¾″	(ET)
		type (800-2000)	G 1¼″	(ET)

8	Thermometer			
10	Sensor channel, inner Ø 11 mm	type (300,500)		
	Sensor terminal strip (zip fastener)	type (800-2000)		
11	Removable cap (Ø 60 mm) for positioning the sensor in the sensor channel	type (300,500)		
12	Hand-hole flange (flange-mounted electric heating element) Ø 180/120 mm, pitch circle 150 mm, 8 x M10			
12*	**Attention:** type (800,1000) does not have a second flange			
14	Anode sleeve	type (300,500)	G 1″	(IT)
		type (800-2000)	G 1¼″	(IT)
14*	Anode sleeve	type (1500,2000)	G 1¼″	(IT)
16	Transport strap	type (800-2000)		

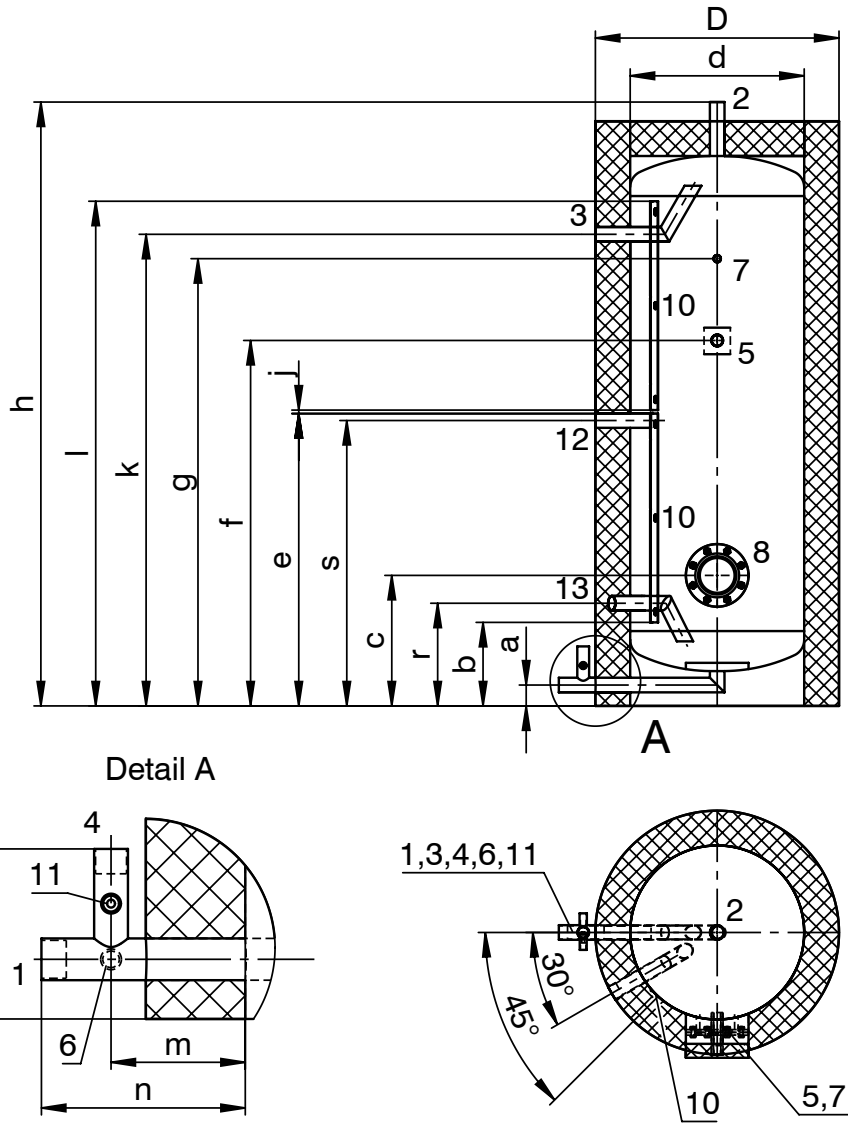
Deviations possible as a result of manufacturing tolerances.
Dimensions ± 10 mm

CombiVal E type	D	d	H	h	a	k	e	g	m	n	p	r	s	t	u	v	V**	Tilting dimension
(300)	650	500	1850	-	235	-	945	1160	1584	325	-	-	-	1505	1360	745	785	1961
(500)	750	597	1960	-	238	-	996	1225	1674	275	-	-	-	1500	1360	745	785	2082
(800)	950	750	2030	1938	101	347	-	1150	1893	352	-	-	1336	1505	1400	975	1020	1960
(1000)	1050	850	2060	1968	100	355	-	1158	1910	360	-	-	1331	1500	1400	1075	1120	2000
(1500)	1240	1000	2240	2133	105	375	-	1357	2049	390	890	1167	1521	1657	1450	1265	1310	2370
(2000)	1440	1200	2150	2044	118	406	-	1388	1933	421	921	1118	1248	1498	1350	1465	1510	2350

** When using a flange-mounted electric heating element

CombiVal C (300-1000)

(Dimensions in mm)



1	Cold water with baffle plate	type (300)	Rp 1¼″	(IT)
		type (400,500)	Rp 1½″	(IT)
		type (750,1000)	Rp 2″	(IT)
2	Hot water	type (300)	Rp 1¼″	(IT)
		type (400,500)	Rp 1½″	(IT)
		type (750,1000)	Rp 2″	(IT)
3	Charging flow – hot	type (300-500)	Rp 1″	(IT)
		type (750,1000)	Rp 1¼″	(IT)
4	Charging return – cold	type (300-500)	Rp 1″	(IT)
		type (750,1000)	Rp 1¼″	(IT)
5	Circulation with baffle plate	type (300-500)	Rp 1″	(IT)
		type (750,1000)	Rp 1¼″	(IT)
6	Drain	type (300-500)	Rp ½″	(IT)
		type (750,1000)	Rp ¾″	(IT)

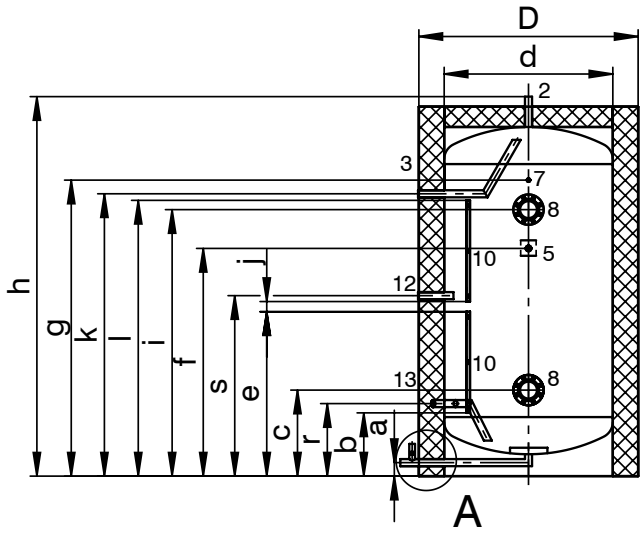
7	Sleeve (Rp ½″ (IT)) for mountable immersion sleeve and thermometer (L = 100 mm, inner Ø = 8 mm)			
8	Hand-hole flange Ø 180/120 mm, pitch circle 150 mm, 8 x M10 or optional: - flange-mounted electric heating element or - impressed current anode set with flange cover, 180 – 1½″ (IT)			
10	Sensor terminal bar 600 x 30 mm 2 x type (300-1000)			
11	Immersion sleeve M16 x 1.5 for sensor/thermostat			
12	Charging flow – MAGRO	type (300-500)	Rp 1″	(IT)
		type (750,1000)	Rp 1¼″	(IT)
13	Charging return – cold	type (300-500)	Rp 1″	(IT)
		type (750,1000)	Rp 1¼″	(IT)

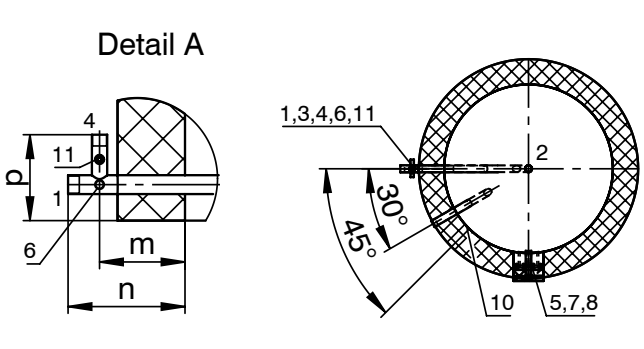
Deviations possible as a result of manufacturing tolerances.
Dimensions ± 10 mm

CombiVal C type	a	b	c	d	D	e	f	g	h	j	k	l	m	n	p	r	s	Tilting dimension
(300)	60	240	375	500	700	840	1050	1285	1680	10	1355	1450	135	205	174	295	820	1720
(400)	70	285	420	600	800	885	1095	1330	1745	10	1368	1495	135	205	187	340	850	1795
(500)	80	295	430	650	850	895	1105	1340	1765	10	1378	1505	130	190	197	350	860	1820
(750)	80	335	470	750	1010	935	1310	1590	2140	60	1674	1595	165	235	203	390	1030	2195
(1000)	80	365	500	900	1160	965	1215	1495	1945	10	1384	1575	165	235	203	420	930	2020

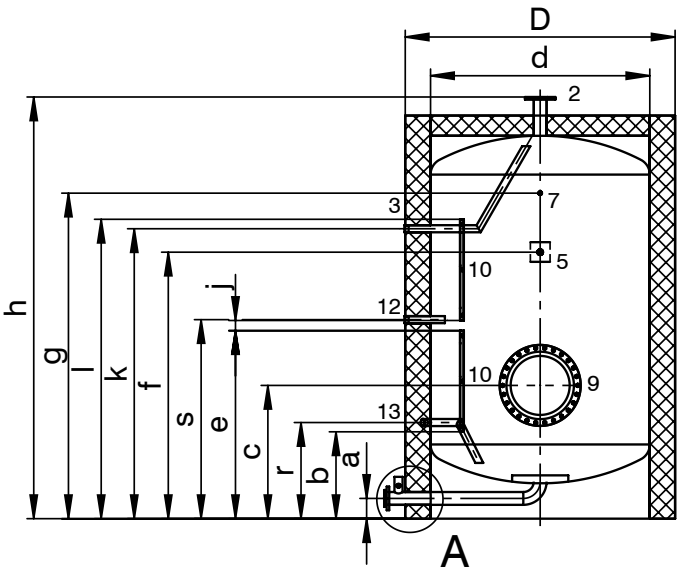
CombiVal C (1500,2000)

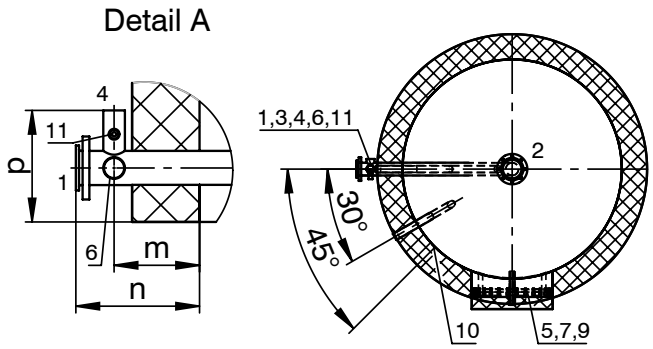
(Dimensions in mm)





CombiVal C (2500)





1 Cold water with baffle plate type (1500,2000) Rp 2″ (IT)
type (2500) DN 65/PN 10
2 Hot water type (1500,2000) Rp 2″ (IT)
type (2500) DN 65/PN 10
3 Charging flow – hot type (1500-2000) Rp 1½″ (IT)
4 Charging return – cold type (1500-2000) Rp 1½″ (IT)
5 Circulation with baffle plate type (1500-2000) Rp 1½″ (IT)
6 Drain type (1500-2000) Rp ¾″ (IT)
7 Sleeve (Rp ½″ (IT)) for mountable immersion sleeve and thermometer (L = 100 mm, inner Ø = 8 mm)
8 Hand-hole flange
Ø 180/120 mm, pitch circle 150 mm, 8 x M10 or optional:
- flange-mounted electric heating element or
- impressed current anode set with flange cover, 180 – 1½″ (IT)

9 Manhole flange
Ø 400/480 mm, pitch circle 445 mm, 26 x M14 or optional Flange adapter:
- for electric heating element or
- for impressed current anode set with flange cover, 180 – 1½″ (IT)

10 Sensor terminal bar 600 x 30 mm
2 x type (1500-2500)
11 Immersion sleeve M16 x 1.5 for sensor/thermostat
12 Charging flow – MAGRO type (1500-2000) Rp 1½″ (IT)
13 Charging return – cold type (1500-2000) Rp 1½″ (IT)

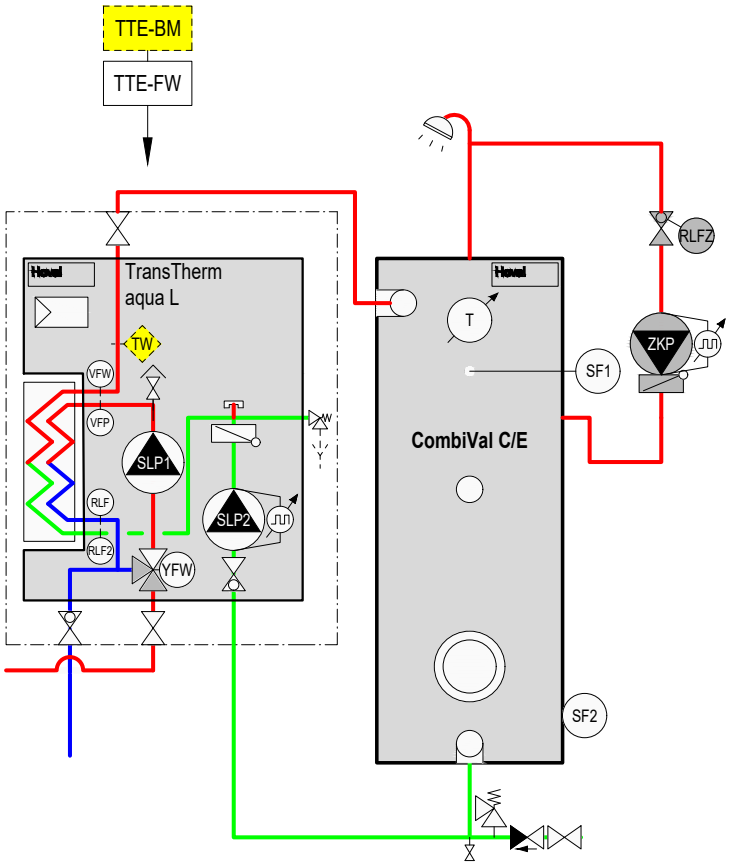
Deviations possible as a result of manufacturing tolerances.
Dimensions ± 10 mm

CombiVal C type	a	b	c	d	D	e	f	g	h	i	j	k	l	m	n	p	r	s	Tilting dimension
(1500)	80	375	510	1000	1300	975	1350	1755	2250	1580	60	1674	1635	165	260	203	430	1070	2330
(2000)	80	405	530	1100	1400	1005	1580	2035	2555	1860	165	1909	1770	165	260	191	460	1230	2635
(2500)	120	515	790	1300	1600	1115	1580	1930	2500	-	60	1719	1775	190	275	248	570	1180	2620

Water heating

TransTherm® aqua L

- Circulation via storage tank
- Storage tank charging system



TTE-FW	Basic module district heating/fresh water
TW	Flow temperature monitor (if required)
VFP	Primary flow sensor
VFW	Flow sensor domestic hot water
RLF	Primary return sensor
RLF2	Return sensor domestic cold water
SF1	Calorifier sensor 1
SF2	Calorifier sensor 2
RLFZ	Circulation sensor
SLP1	Calorifier charging pump primary
SLP2	Calorifier charging pump secondary
YFW	Flow rate sender with through valve and safety function
ZKP	Recirculation pump

Option

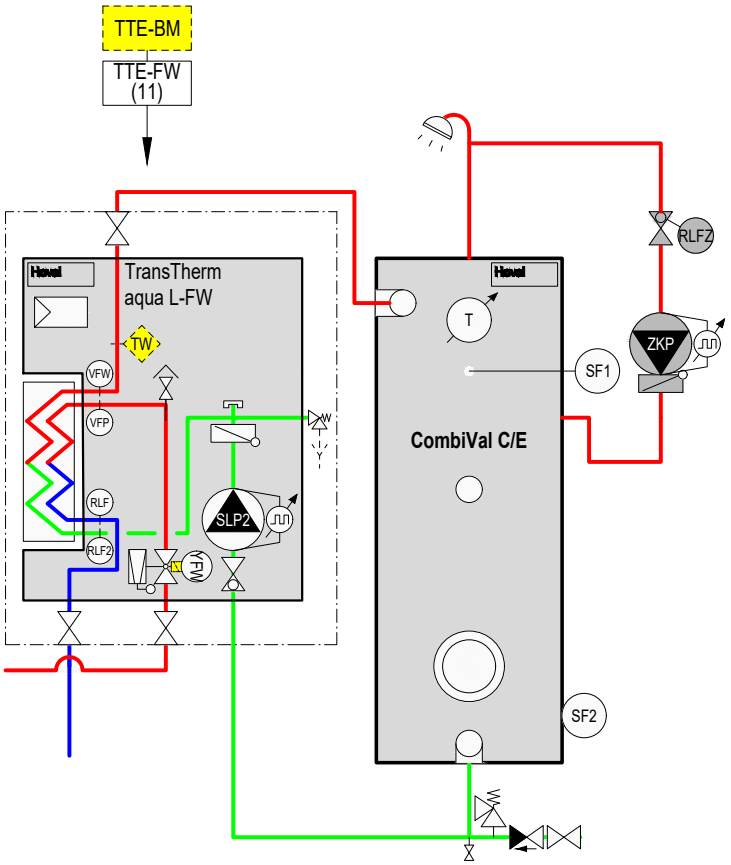
BM	TopTronic® E control module

Notice
A safety valve (6 bar) must be installed in the cold water line. The loading module is already protected with a safety valve (10 bar).

Water heating

TransTherm® aqua L-FW

- Circulation via storage tank
- Storage tank charging system



TTE-FW	Basic module district heating/fresh water
TW	Flow temperature monitor (if required)
VFP	Primary flow sensor
VFW	Flow sensor domestic hot water
RLF	Primary return sensor
RLF2	Return sensor domestic cold water
SF1	Calorifier sensor 1
SF2	Calorifier sensor 2
RLFZ	Circulation sensor
SLP1	Calorifier charging pump primary
SLP2	Calorifier charging pump secondary
YFW	Flow rate sender with through valve and safety function
ZKP	Recirculation pump
Option	
BM	TopTronic® E control module

Notice
A safety valve (6 bar) must be installed in the cold water line. The loading module is already protected with a safety valve (10 bar).

Hoval quality.
You can count on us.

Hoval

Hoval is one of the leading international companies for heating and indoor climate solutions. Drawing on more than 80 years of experience and benefiting from a close-knit team culture, the Hoval Group delivers exciting solutions and develops technically superior products. This leadership role requires a sense of responsibility for energy and the environment, which is expressed in an intelligent combination of different heating technologies and customised indoor climate solutions.

Hoval also provides personal consultations and comprehensive customer service. With around 2500 employees in 15 companies around the world, Hoval sees itself not as a conglomerate, but as a large family that thinks and acts globally.
Hoval heating and indoor climate solutions are currently exported to more than 50 countries.

Responsibility for energy and environment

Liechtenstein
Hoval Aktiengesellschaft
9490 Vaduz
+423 399 24 00
hoval.com

United Kingdom
Hoval Ltd.
Newark Notts. NG 24 1JN
+44 1636 672 711
hoval.co.uk

2026 - 04 | Subject to modifications

Your Hoval partner