

**Hoval calorifier**  
**CombiVal ER (200-500)**

- Calorifier made of steel enamelled inside
- Plain-tube coil enamelled, permanently installed
- Magnesium protection anode built in
- Flange for electric heating element
- Thermal insulation made of polyurethane hard foam foamed on the calorifier
- Dismountable foil casing, red coloured, ERW (200) white coloured
- Including thermometer
- Sensor channel

*On request*

- Flange-mounted electric heating element

*Delivery*

- Calorifier with foil casing installed

**Hoval calorifier**  
**CombiVal ER (800,1000)**

- Calorifier made of steel, enamelled inside
- Plain-tube coil enamelled, permanently installed
- 2 magnesium protection anodes built in
- Flange below as cleaning flange or for the installation as flange-mounted electric heating element or blank flange with immersion sleeve
- Flange above as additional cleaning flange
- Flange for electric heating element or immersion sleeve
- Thermal insulation made of polyester fleece with foil jacket, red coloured
- With thermometer
- Two terminal bars for contact sensor

*On request*

- Flange-mounted electric heating element
- Flange including immersion sleeve

*Delivery*

- Calorifier and thermal insulation completely installed (can be removed for installation)



**Range**

CombiVal  
type

ER	(200)	<b>B</b>
ERW	(200)	<b>B</b>
ER	(300)	<b>B</b>
ER	(400)	<b>B</b>
ER	(500)	<b>B</b>
ER	(800)	
ER	(1000)	

Calorifier



**CombiVal ER (200-1000)**

Calorifier made of steel enamelled inside.  
With built-in, enamelled plain-tube coil.

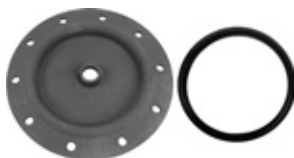
CombiVal ER type		Volume dm <sup>3</sup>	Heating surface m <sup>2</sup>
(200)		196	0.95
(200) ERW (white)		196	0.95
(300)		302	1.45
(400)		382	1.80
(500)		473	1.90
(800)		735	3.70
(1000)		968	4.50

**Electric heating elements**  
see chapter "Electric heating elements"

Part No.

7015 960  
7015 961  
7015 962  
7015 963  
7015 964  
7014 422  
7014 423

Accessories



**Flange cover 180 - 3/4"**  
for the installation of the Correx<sup>®</sup> impressed current anode in flange Ø 180/110 mm, enamelled on the inside with Rp 3/4" sleeve  
Seal included

2077 035



**Flange with immersion sleeve**  
for temperature sensor made of steel.  
On domestic water side, enamelled inside.  
Flange dimensions:  
- Outer Ø 180 mm,  
- Pitch circle Ø 150 mm, 8 x M10  
Immersion sleeve dimensions:  
- Installation length = 120 mm,  
- Outer Ø: 24 mm, inner Ø: 20 mm

6028 468



**Kit Correx<sup>®</sup> impressed current anode UP2.3-919-L395/1**  
for long-term corrosion protection for installation in the enamelled calorifier with reduction R 1 1/4" (ET) – Rp 1" (IT) and R 1" (ET) – Rp 3/4" (IT)  
Installation length: 395 mm  
Connection cable length: 1 x 2000 mm  
1 Correx<sup>®</sup> impressed current anode

684 760

In every case, **either** a Correx<sup>®</sup> impressed current anode **or** one/two magnesium anodes are allowed to be used.

Part No.



**Immersion sensor TF/2P/5/6T, L = 5.0 m with plug**  
 for TopTronic® E controller modules/  
 module expansions with exception of  
 basic module district heating/fresh  
 water or basic module district heating com,  
 cable length: 5 m with plug  
 sensor sleeve diameter: 6 x 50 mm,  
 dewpoint-proof,  
 operating temperature: -20...105 °C,  
 protection class: IP67

2056 788



**Immersion sensor TF/2P/5/6T, L = 5.0 m**  
 for TopTronic® E controller modules/  
 module expansions with exception of  
 basic module district heating/fresh  
 water or basic module district  
 heating com,  
 cable length: 5 m without plug  
 sensor sleeve diameter: 6 x 50 mm,  
 dewpoint-proof,  
 operating temperature: -20...105 °C,  
 protection class: IP67

2055 888



**Immersion sensor TF/12N/2.5/6T, L = 2.5 m**  
 for gas boiler with RS-OT  
 Cable length: 2.5 m  
 Sensor sleeve diameter: 6 x 50 mm,  
 dewpoint-proof,  
 operating temperature: -20...105 °C,  
 protection class: IP67

2056 791

**At TopTronic® E, immersion sensor is included in the boiler controller or in the heating controller set.**



**Calorifier thermostat control TW 12**  
 Universal thermostat controller  
 for thermostatic pump charge  
 demand, setting in  
 casing, visible from outside.  
 15-95 °C, switching difference 6 K,  
 capillar length 700 mm  
 incl. fastening material for  
 Hoval calorifier, can be used with  
 integrated immersion sleeve

6010 080

**Thermal water mixer**  
 see "Various system components"

Services



**Commissioning**  
 Commissioning by works service or Hoval  
 trained authorised serviceman/company is  
 condition for warranty.

For commissioning and other services  
 please contact your Hoval sales office.

**CombiVal ER (200-500)**

Type		(200)	(300)	(400)	(500)
• Volume	l	196	302	382	473
• Max. operating/test pressure SVGW	bar	6/12	6/12	6/12	6/12
• Max. operating/test pressure DVGW	bar	10/13	10/13	10/13	10/13
• Max. operating temperature	°C	95	95	95	95
• Thermal insulation PU-foam foamed onto calorifier	mm	75	50	75	75
• Thermal insulation λ	W/mK	0.027	0.027	0.027	0.027
• Fire protection class		B2	B2	B2	B2
• Heat loss at 65 °C	W	49	67	65	76
• Transport weight	kg	77	104	134	146
• U value	W/m <sup>2</sup> K	0.328	0.404	0.307	0.308
<b>Heating battery (built in)</b>					
• Heating surface	m <sup>2</sup>	0.95	1.45	1.80	1.90
• Heating water	l	6.4	9.9	12.2	12.8
• Flow resistance <sup>1)</sup>	z value	7	10	12	13
• Max. operating/test pressure SVGW	bar	8/13	8/13	8/13	8/13
• Max. operating/test pressure DVGW	bar	10/13	10/13	10/13	10/13
• Max. operating temperature	°C	110	110	110	110
• Dimensions		see table of dimensions			

<sup>1)</sup> Flow resistance heating battery in mbar = flow rate (m<sup>3</sup>/h)<sup>2</sup> x z (1 mbar = 0.1 kPa)

**CombiVal ER (800,1000)**

Type		(800)	(1000)
• Volume	l	735	968
• Max. operating/test pressure SVGW	bar	6/12	6/12
• Max. operating/test pressure DVGW	bar	10/13	10/13
• Max. operating temperature	°C	95	95
• Thermal insulation made of polyester fleece	mm	100	100
• Thermal insulation λ	W/mK	0.040	0.040
• Fire protection class		B2	B2
• Heat loss at 65 °C	W	127	142
• Transport weight	kg	251	324
• U value	W/m <sup>2</sup> K	0.376	0.370
<b>Heating battery (built in)</b>			
• Heating surface	m <sup>2</sup>	3.70	4.50
• Heating water	l	34.2	40.6
• Flow resistance <sup>1)</sup>	z value	6	8
• Max. operating/test pressure SVGW	bar	8/13	8/13
• Max. operating/test pressure DVGW	bar	10/13	10/13
• Max. operating temperature	°C	110	110
• Dimensions		see table of dimensions	

<sup>1)</sup> Flow resistance heating battery in mbar = flow rate (m<sup>3</sup>/h)<sup>2</sup> x z (1 mbar = 0.1 kPa)

**Performance figure**

Selection of the calorifier type  
at a hot water temperature of 45 °C

**Reading example**  
see engineering

T >	Comfort <sup>1)</sup>			Standard <sup>2)</sup>		
	60 °C	70 °C	80 °C	60 °C	70 °C	80 °C
NL v						
1	200			200		
2	300	200		300	200	
3			200			200
4	400			400		
5	500	300		500	300	
6			300			300
7						
8						
9	800	400				
10	1000	500		800	400	
11			400	1000	500	
12			500			
13						400
14						500
15						
16						
17						
18						
19						
20						
21						
22		800				
23						
24						
25						
26		1000				
27						
28				800		
29						
30			800			
31						
32						
33				1000		
34						
35			1000			
36						
37						
38						800
39						
40						
41						
42						
43						
44						
45						1000
46						
47						
48						
49						
50						

T >	Comfort <sup>1)</sup>			Standard <sup>2)</sup>		
	60 °C	70 °C	80 °C	60 °C	70 °C	80 °C
NL v						
51						
52						
53						
54						
55						
56						
57						
58						
59						
60						
61						
62						
63						
64						
65						
66						
67						
68						
69						
70						
71						
72						
73						
74						
75						
76						
77						
78						
79						
80						
81						
82						
83						
84						
85						
86						
87						
88						
89						
90						
91						
92						
93						
94						
95						
96						
97						
98						
99						
100						

T = Heating flow

NL = Performance figure

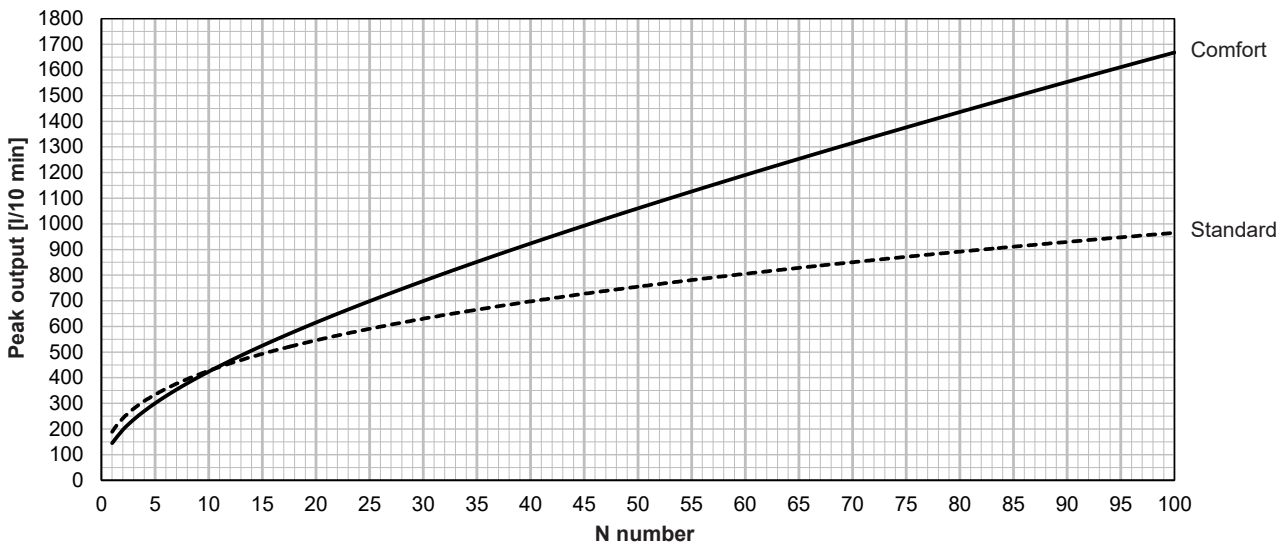
Performance figure NL acc. to DIN 4708 = number of flats which can be supplied with domestic hot water when the calorifier is heated and permanently reheated with the heat generator (standard flat: 1 bathroom - 4 rooms - 3.5 persons)

<sup>1)</sup> Calculation with simultaneity factor according to DIN 4708 (preferred for Switzerland)

<sup>2)</sup> Calculation with simultaneity factor according to Dresden Technical University

10 min peak output/N number with domestic hot water 45 °C  
according to DIN 4708 (Comfort) and Dresden Technical University (Standard)

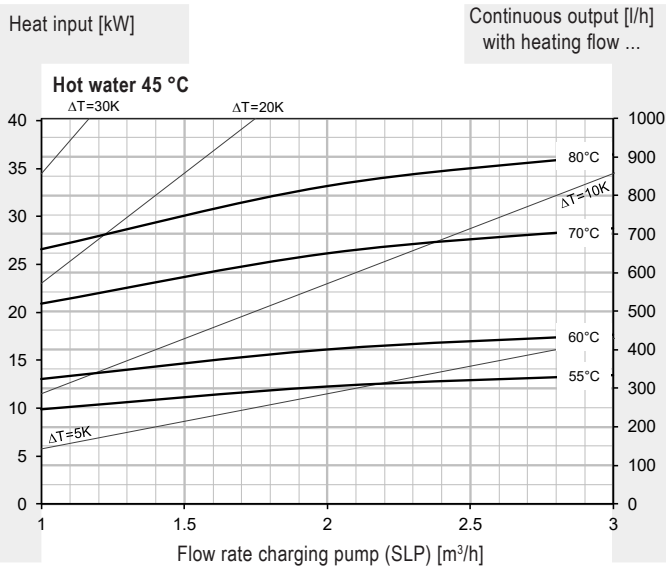
Reading example  
see Engineering



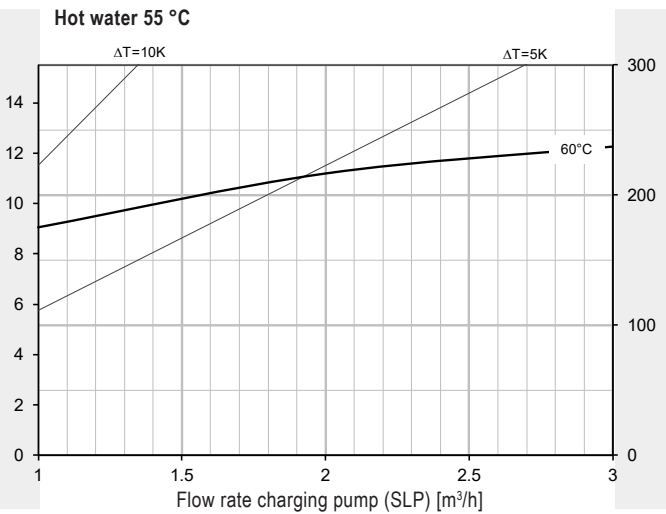
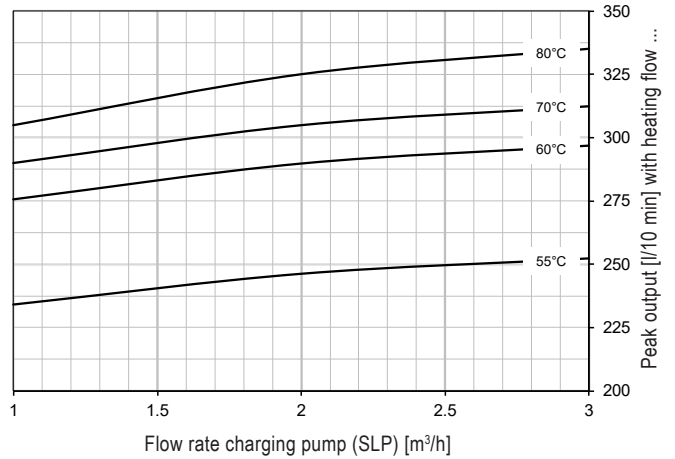
CombiVal ER (200)

Hot water output  
Continuous output

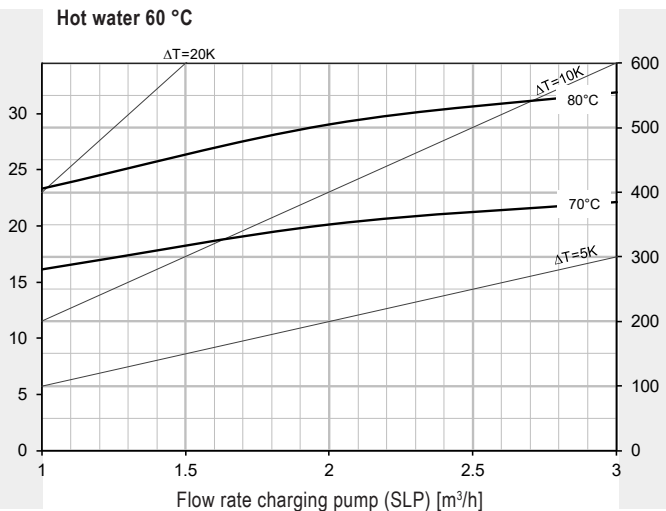
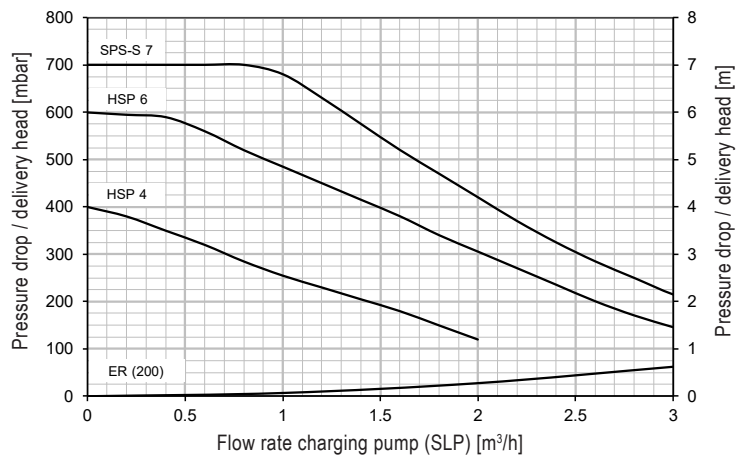
Reading example  
see engineering



10 min peak output - hot water 45 °C \*



Pressure drop heating coil - delivery head charging pump

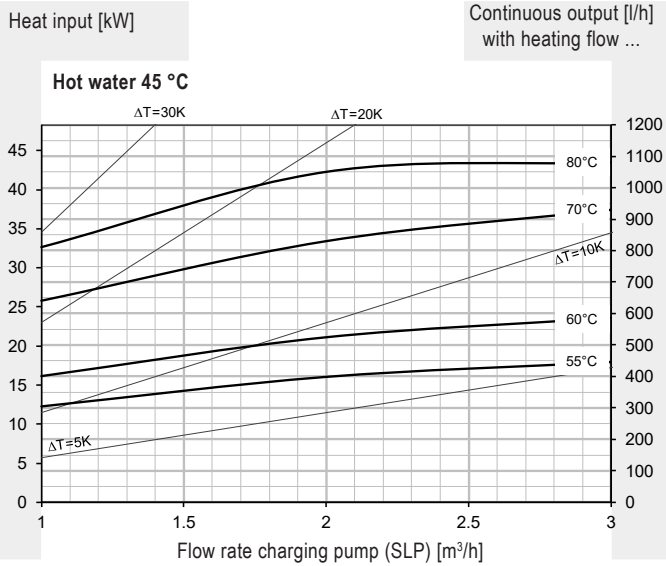


\* Calorifier heated to 60 °C

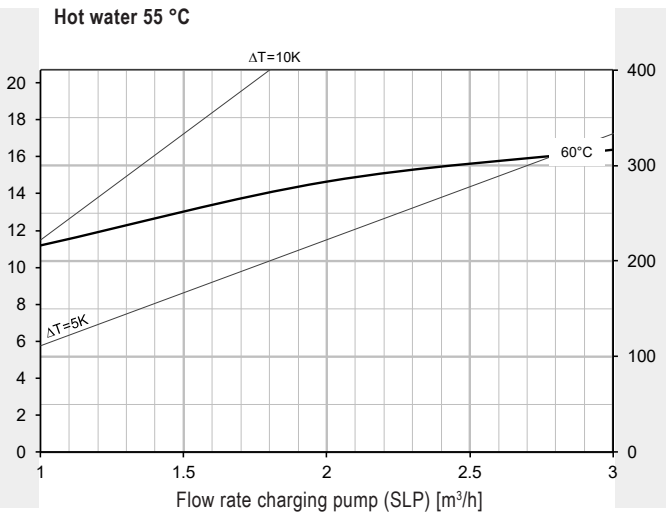
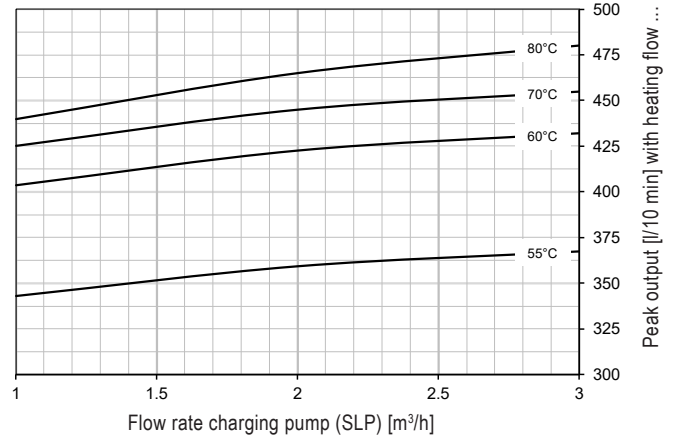
CombiVal ER (300)

Hot water output  
Continuous output

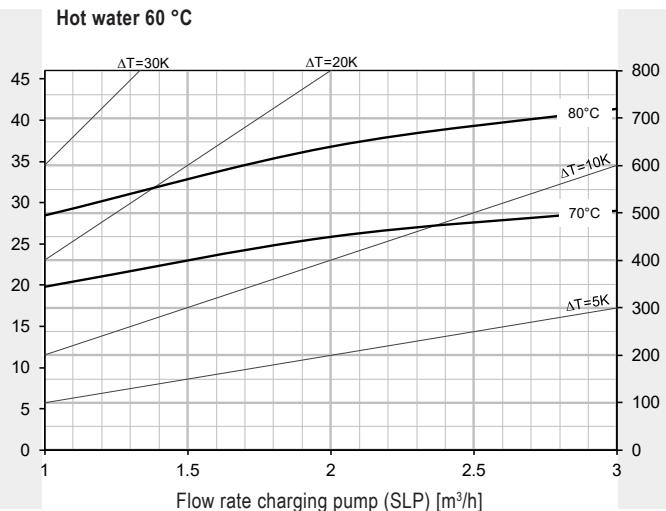
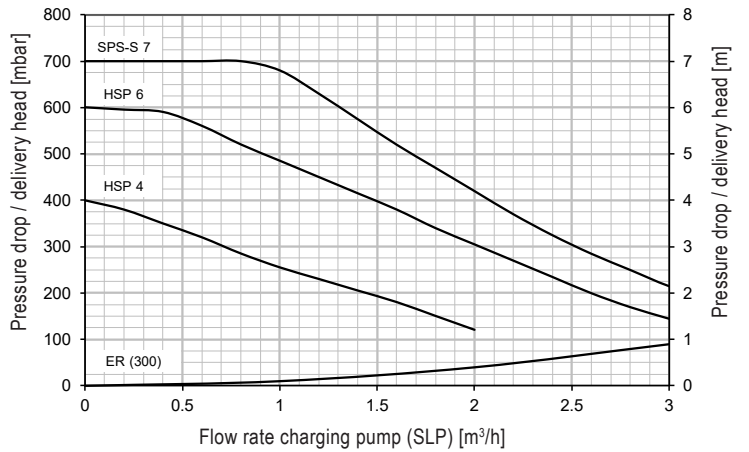
Reading example  
see engineering



10 min peak output - hot water 45 °C \*



Pressure drop heating coil - delivery head charging pump



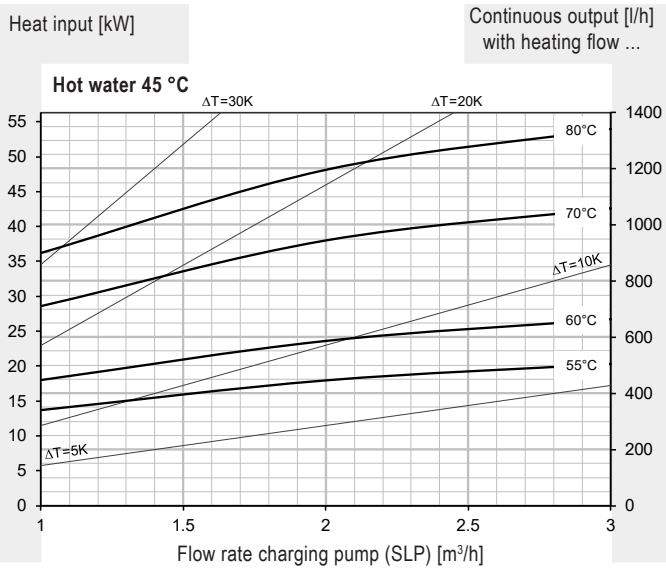
\* Calorifier heated to 60 °C



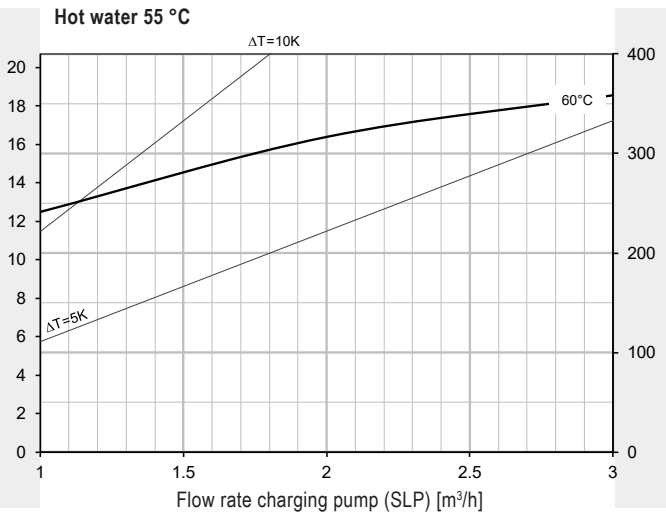
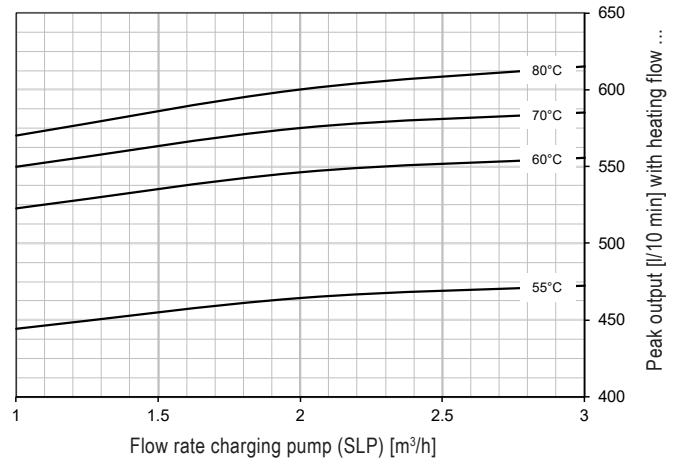
CombiVal ER (400)

Hot water output  
Continuous output

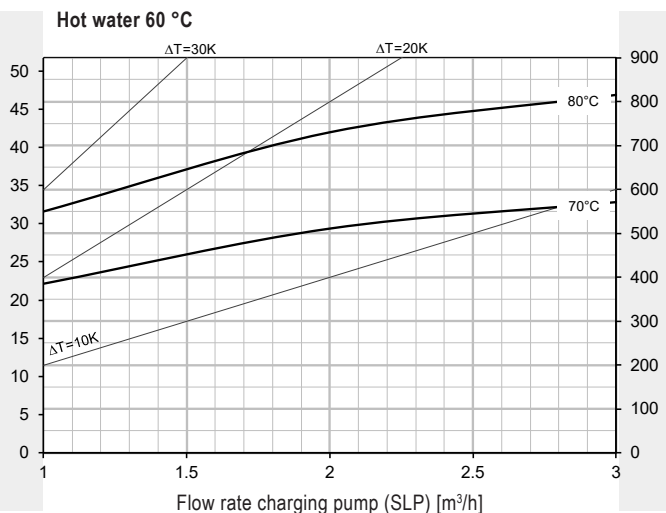
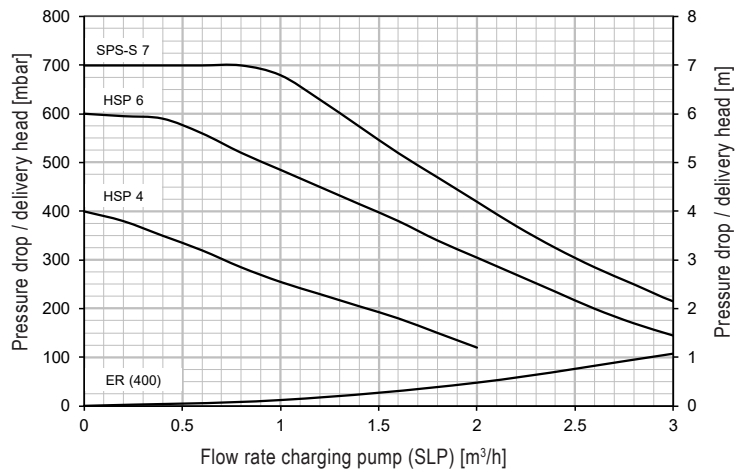
Reading example  
see engineering



10 min peak output - hot water 45 °C \*



Pressure drop heating coil - delivery head charging pump

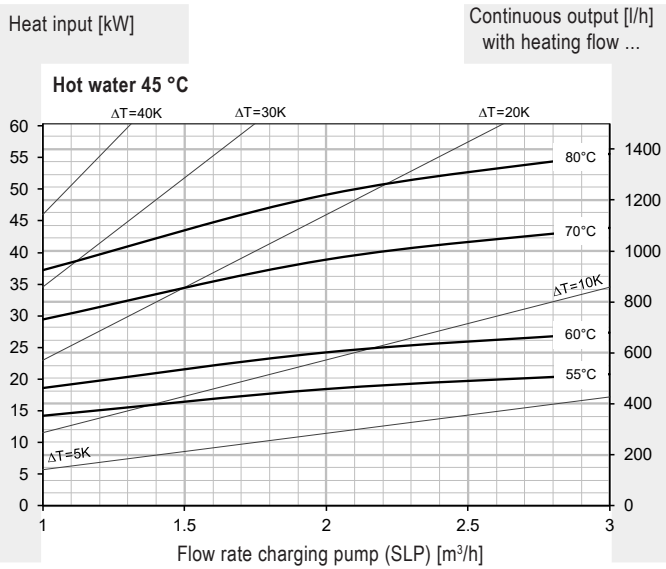


\* Calorifier heated to 60 °C

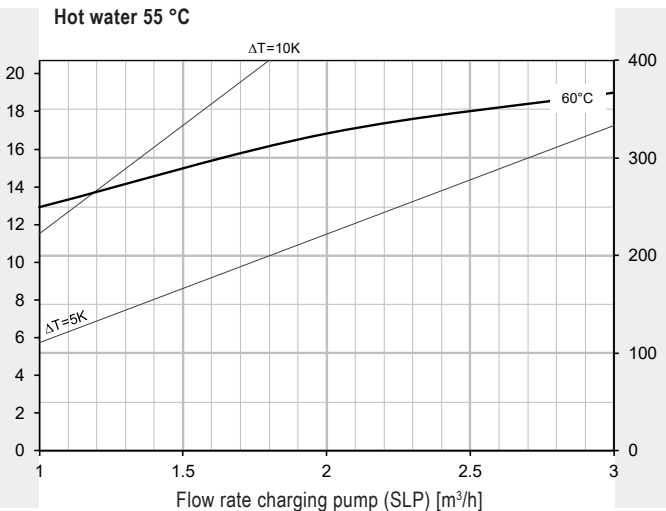
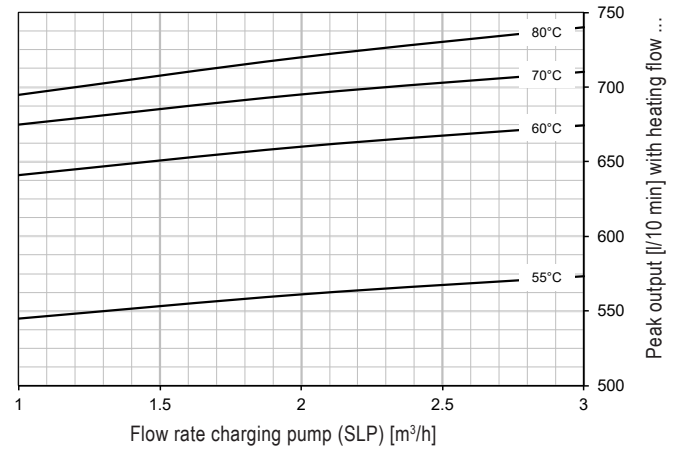
CombiVal ER (500)

Hot water output  
Continuous output

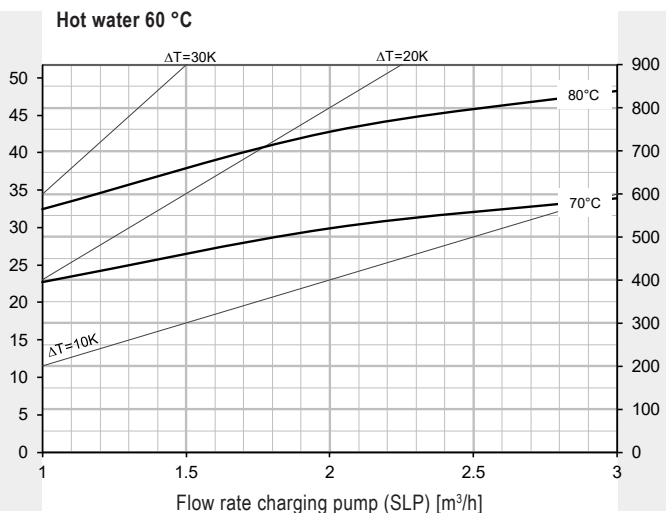
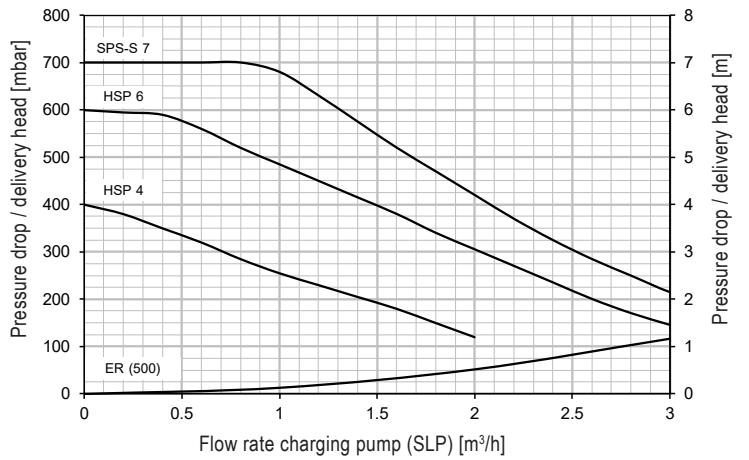
Reading example  
see engineering



10 min peak output - hot water 45 °C \*



Pressure drop heating coil - delivery head charging pump

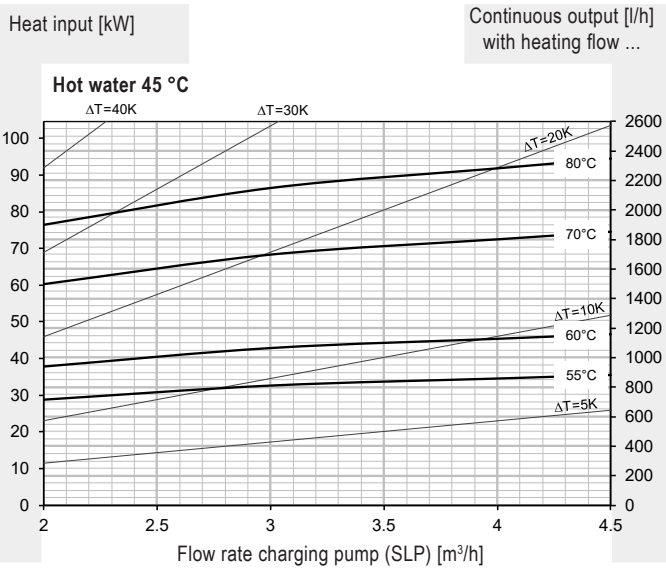


\* Calorifier heated to 60 °C

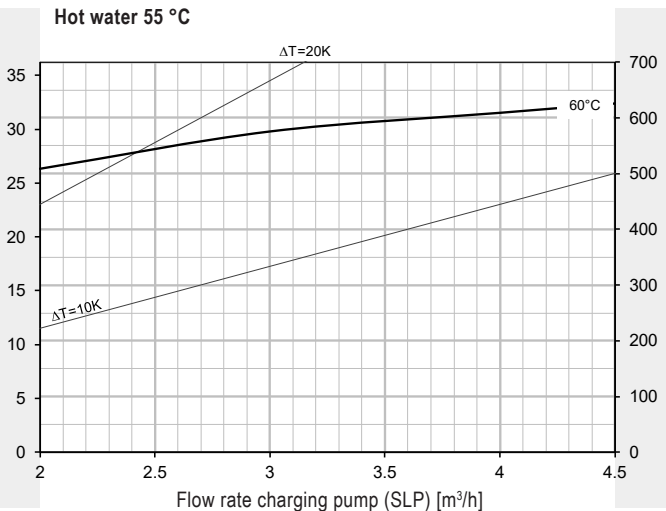
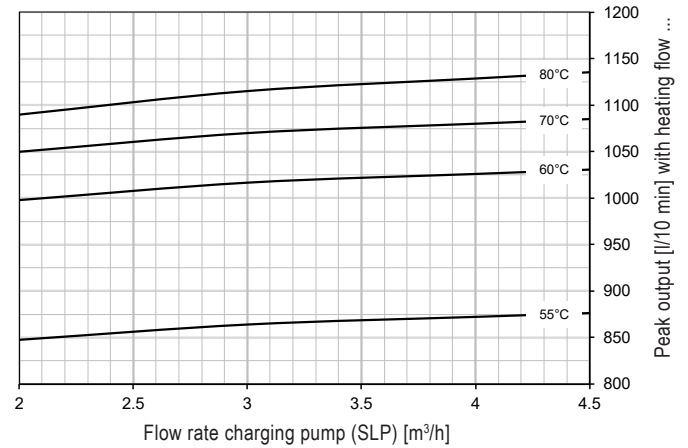
CombiVal ER (800)

Hot water output  
Continuous output

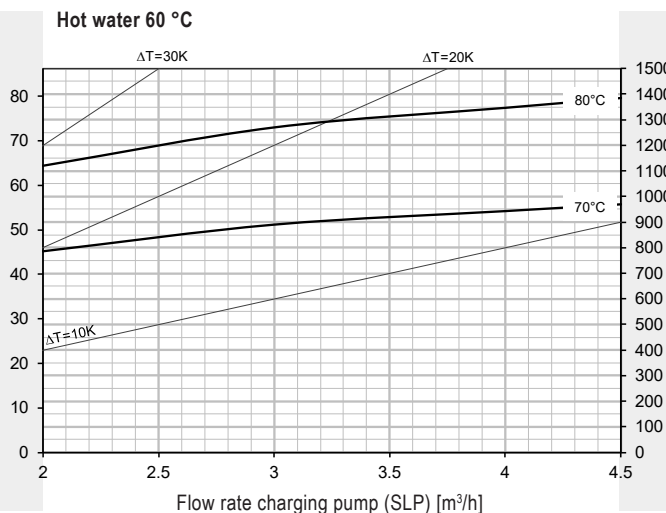
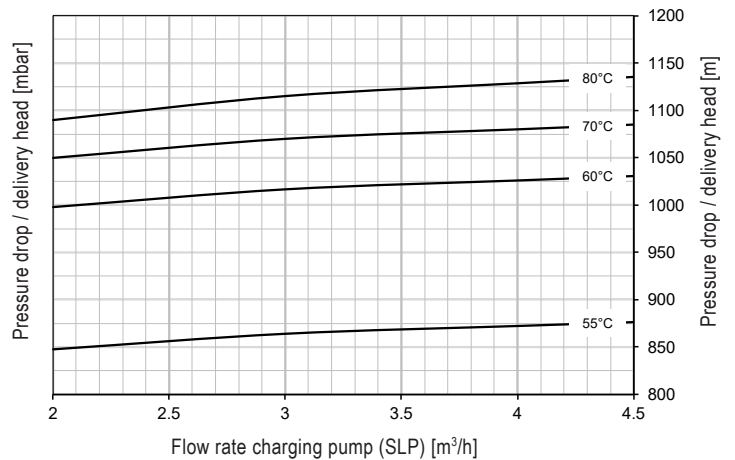
Reading example  
see engineering



10 min peak output - hot water 45 °C \*



Pressure drop heating coil - delivery head charging pump

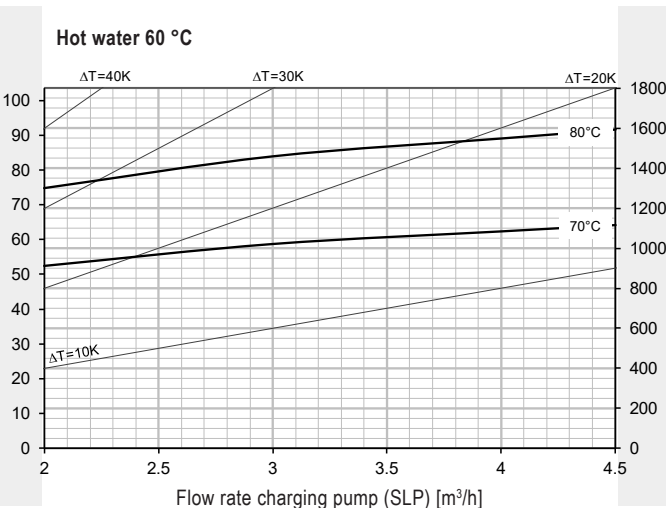
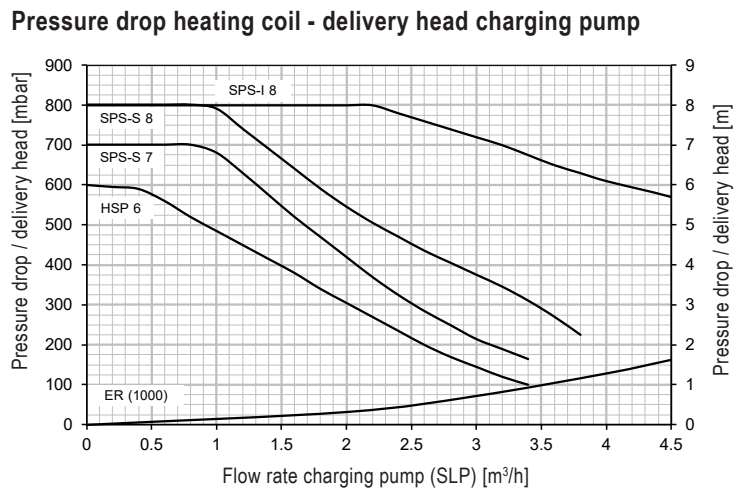
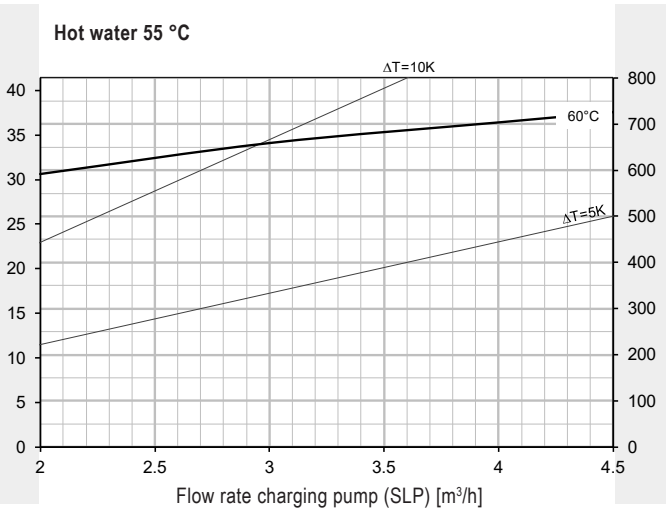
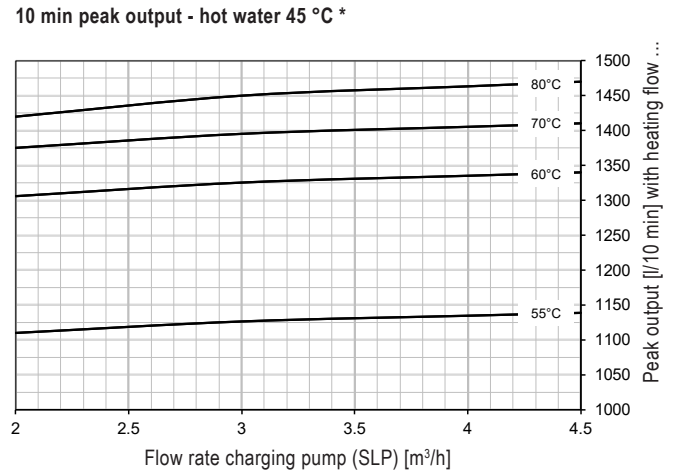
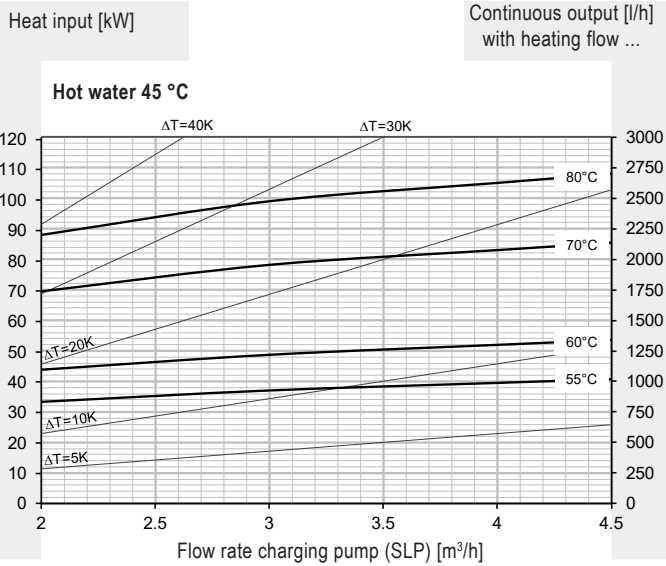


\* Calorifier heated to 60 °C

CombiVal ER (1000)

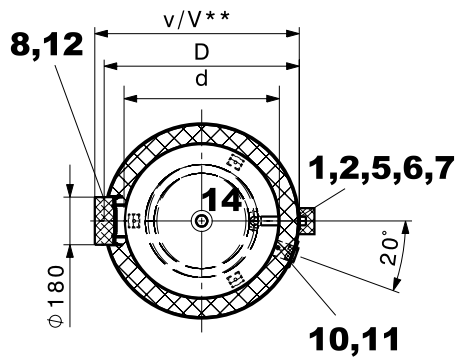
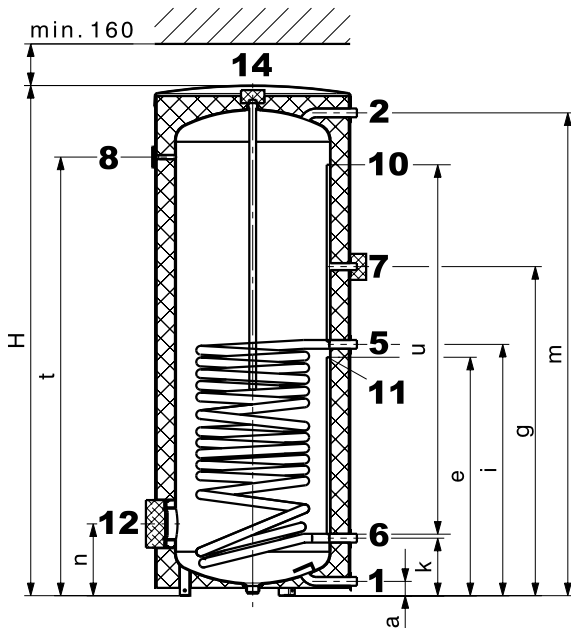
Hot water output  
Continuous output

Reading example  
see engineering

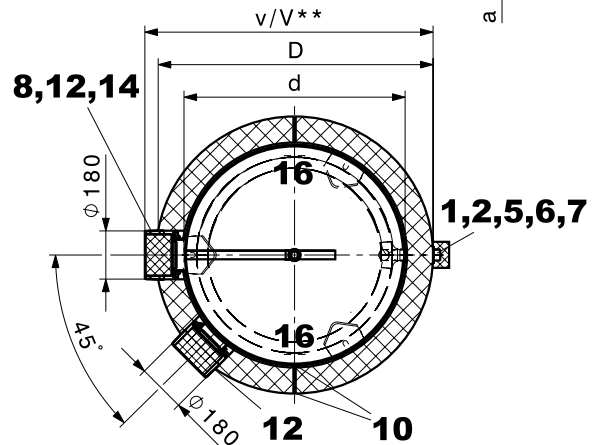
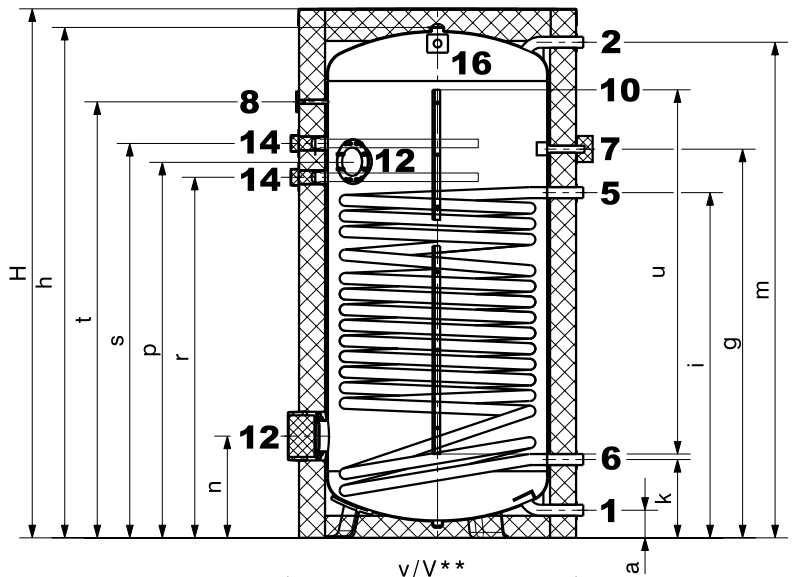


\* Calorifier heated to 60 °C

**CombiVal ER (200-500)**  
(Dimensions in mm)



**CombiVal ER (800,1000)**



- 1 Cold water  
type (200) G 3/4" (ET)  
type (300-500) G 1" (ET)  
type (800,1000) G 1 1/4" (ET)
- 2 Domestic hot water  
type (200) G 3/4" (ET)  
type (300-500) G 1" (ET)  
type (800,1000) G 1 1/4" (ET)
- 5 Heating flow  
type (200-500) G 1" (ET)  
type (800,1000) G 1 1/4" (ET)
- 6 Heating return  
type (200-500) G 1" (ET)  
type (800,1000) G 1 1/4" (ET)
- 7 Circulation  
(removable insulated cap Ø 100 mm)  
G 3/4" (ET)
- 8 Thermometer

- 10 Sensor channel, inner Ø 11 mm  
Sensor terminal strip (zip fastener) type (200-500)  
type (800,1000)
- 11 Removable cap (Ø 60 mm)  
for positioning the sensor in the sensor channel type (200-500)
- 12 Hand-hole flange (flange-mounted electric heating element) Ø 180/120 mm, hole circle 150 mm, 8 x M10  
(Mounting of a flange-mounted electric heating element:  
- bottom, possible.  
- top, not possible.)
- 14 Anode sleeve  
type (200-500) Rp 1" (IT)  
type (800,1000) Rp 1 1/4" (IT)  
Screw connection uninsulated
- 16 Transport strap  
type (800,1000)

Variation because of the production tolerance possible  
Dimension +/- 10 mm

CombiVal ER  
type

type	D	d	H	h	a	e	g	i	k	m	n	p	r	s	t	u	v	v**	Tilting dimension
(200)	600	450	1464	-	55	680	902	689	194	1373	249	-	-	-	1229	1060	635	650	1583
(300)	700	597	1326	-	55	609	921	721	221	1229	276	-	-	-	1069	860	795	810	1524
(400)	750	597	1623	-	55	747	1112	909	221	1526	276	-	-	-	1356	1060	795	810	1788
(500)	750	597	1953	-	55	917	1265	966	221	1856	276	-	-	-	1686	1360	795	810	2093
(800)	950	750	2040	1937	105	-	1422	1319	293	1891	383	1408	1348	1478	1648	1400	975	1020	1962
(1000)	1050	850	2063	1962	106	-	1494	1327	301	1905	391	1446	1386	1516	1676	1400	1075	1120	1991

\*\* when using a flange-mounted electric heating element