

# DHW STORAGE HEATER OPERATING MANUAL and WARRANTY TERMS & CONDITIONS



**REGISTER THIS PRODUCT  
ONLINE WITHIN 28 DAYS OF  
COMMISSIONING**

POLAND



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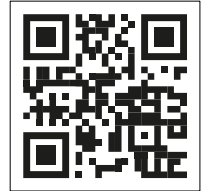
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# Safety

Before installing and commissioning the JOULE DHW (domestic hot water) tank, read the following Installation and Operating Instructions and the Warranty Terms & Conditions (T&C), which are also available on our website at <https://joule.pl/>

The DHW tank must be installed and commissioned by authorized professionals and in compliance with this Manual and the Warranty T&C.



## Operating safety requirements

- Read and understand the Operating Manual and the Warranty T&C.
- The DHW tank should be installed in an indoor location protected from freezing (temperatures below 0°C) and not exposed to high humidity or risk of flooding.
- The installation surface for the DHW tank must be properly designed and built to be sound, firm, levelled, of sufficient load capacity, and damp-proof.
- Install the DHW tank in a location with enough clearance for easy servicing and unobstructed access to the electric heater.
- The DHW tank is a pressurized equipment unit and must be provided with a pressure relief valve on the cold water supply and a suitably sized membrane expansion vessel.
- The DHW features a pressure/temperature (P/T) valve for protection against overheating and overpressure. The P/T valve discharge must open to a sewer/drain.

# Warranty Certificate

Register your product online

## PRODUCT INSTALLATION ADDRESS

Product name

Product serial number

Date of purchase

Date installed

Installer's details

Installer's contact information

Invoice number

Place of purchase/reseller

## PRODUCT OWNER'S DETAILS

First name

Last name

Phone

E-mail

## PRODUCT INFORMATION

Product name

Product serial number

Date of purchase

Date installed

## First-year inspection

Date of inspection

Inspected items

Authorized service  
stamp and signature

Inspector's details

## Joule DHW Tank Post-Installation Checklist

Pressure relief valve installed on the cold water supply\*

 Y  N

**Reducer valve** installed on the cold water supply\*

 Y  N

**Check valve** installed on the cold water supply\*

 Y  N

Suitable **membrane expansion vessel** installed on the cold water supply\*

 Y  N

Hot water end P/T valve **discharge** test performed\*

 Y  N

**Couplings** properly installed on the DHW tank stub ends\*

 Y  N

### ! WARNING!

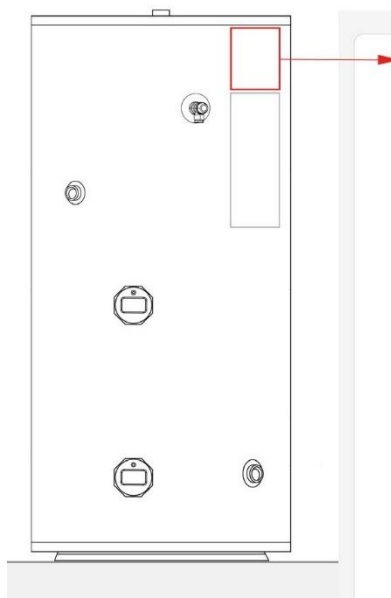
**Failure to comply with the Checklist requirements may result in rejection of all warranty claims.**

\*Check the correct box: **Y** - Yes; **N** - No.

# Nameplate (contents and location)

Where to find the serial number and other unit data of the DHW tank

Nameplate:



<b>joule</b> Manufacturing Excellence	
MODEL	CYCLONE CY200L CYCLONE TWIN SOLAR
TYP	80,200,TW,70B
KOD PRODUKTU	TCPMVS-0200LFB
POJEMNOŚĆ	200L
MAKSYMALNE CIŚNIENIE PRACY WĘŻOWNIC	1000 kPa (10 bar)
MAKSYMALNE CIŚNIENIE PRACY ZBIORNIKA	600 kPa (6 bar)
CIŚN-TEMP. ZAWÓR BEZPIECZENSTWA USTAWIONY NA	7 bar / 90°C
GRZALKA	3kW / 240V, 1 3/4", 14" LONG
IP RATING	IPX1
STRATY CIEPŁA	1,392 kWh/24h
WAGA (PUSTY / PEŁNY)	44kg / 244 kg
ROK PRODUKCJI	2020
NUMER SERYJNY	200TW70B 201000110

Joule Polska Sp. z o.o.  
Strzegomska 55D,  
53-611 Wrocław  
Tel: +48 721 009 202

# Connection to the DHW system

## Connecting the DHW tank:

### ! CAUTION!

**The DHW coil should be installed and commissioned by qualified professionals. The installer should demonstrate the product's features and operation and provide the necessary guidance on operating safety.**

Fill the DHW tank with water before starting the electric heater.

## Filling and venting the DHW tank:

- Open the cold water supply stop valve (at the mains water supply) and one of the hot water taps in the system.
- This unit can only be operated for heating potable water. Any other use is not intended, while Joule Poland shall not be liable for any damage or loss caused by non-intended use. Continue filling the DHH tank until hot water starts flowing from the open tap.
- Fill the coil with boiler water and vent thoroughly in the process.
- Make sure that none of the connections is leaking.

With the DHW tank and its coil filled and vented, the unit is ready for use.

### ! CAUTION!

**Before the first DHW production (heating) cycle and after each prolonged standstill, open the hot water taps in the system to verify the DHW tank is full of water and the cold water supply stop valve is open.**

Connect the Joule DHW tank to a cold water system with a supply pressure between **1 bar minimum** and **6 bar maximum** and a space heating system with a maximum supply pressure of **6 bar**. **Each DHW tank must be provided with a pressure reducing valve.** Each time the DHW tank produces DHW, its internal pressure grows; each DHW coil must be connected to the cold water supply via a pressure relief valve rated to open at 6 bar for protection against overpressure. When DHW is produced in the DHW tank, a small and temporary discharge from the pressure relief valve is normal; it is a sign that the internal pressure is above the valve rating and the valve is operational. Do not obstruct the pressure relief valve operation, otherwise the DHW tank may fail. The discharge from the pressure relief valve should open to a floor drain or a sewer pipe. The discharge line from the pressure relief valve needs to be installed in an area protected against freezing and its outlet end must be left open (not hermetically plumbed to any receiver).

**Joule shall not be responsible for flooding of the room as a result of the pressure relief valve operation.**

A 7 bar/90°C temperature/pressure (P/T) valve has been factory installed at the top of the DHW tank. **This is an additional protection for the DHW tank** against water overtemperature and overpressure. The discharge from the P/T valve must follow a copper pipe and open to the drain. **This valve is not a pressure relief valve for the cold water supply. It is critical to install a separately purchased pressure relief valve set to open at 6 bar** on the cold water supply connection to the DHW tank as explained above. When filling and commissioning, make sure that all plumbing connections are perfectly sealed against leaking. Do not connect the hot water pressure relief valve stub to any other system than specified.

## ! CAUTION!

- When DHW is produced in the DHW tank, a small and temporary discharge from the pressure relief valve is possible.
- Do not obstruct the pressure relief valve operation, otherwise the DHW tank may fail.
- Do not operate the DHW tank if the pressure safety valve is stuck closed or obstructed.
- The cold water supply line must be connected to the unit via a pressure relief valve with a maximum rated opening pressure of 6bar.
- All connections to the stubs on the unit must be made with brass, bronze, plastic or stainless fittings; do not use any galvanized steel fittings.
- Do not install any galvanized steel pressure booster units upstream of the cold water supply inlet of the DHW tank.
- Do not connect the plumbing via any reduction pieces attached directly to the DHW tank stubs; reduction pieces must be installed remotely per good practice.
- **For DHW tanks other than the DIRECT model, the heater is only a backup operated when the primary heat source has failed. If the heater is to be powered by a PV array, consult Joule before purchasing the DHW tank.**

## ! CAUTION!

**Note! Every DHW tank and every system MUST be electrically earthed to avoid galvanic corrosion!**

## Heating elements

The heaters are provided with a 1¾" threaded end, have a power rating of 3 kW at 240 V and feature a low-noise Incoloy 800 alloy design. The heaters have a thermostat with a default cut-off temperature set to 52°C. Order all replacement parts from Joule. Installation of non-approved heaters may lead to failure of the DHW tank.

When installing the heater, make sure the connection end gasket is properly seated on the heater head. The power cable must have 2.5 mm<sup>2</sup> cores and be a heat-resistant, insulated flexible cable complying with the applicable Polish standard (PN). Do not operate the heater until the DHW tank is full of water.



# Heater installation

- Make sure that the mains supply matches the voltage rating on the nameplate.
- Install the heater oriented horizontally and secured using its .13/4" threaded end.
- Install the heater in the DHW tank with the gasket included.
- Do not overtighten the heater.

## ! CAUTION!

INSTALL THE HEATER ONLY IN THE DHW TANKS WHERE IT WILL BE FULLY SUMBERGED IN WATER. BEFORE POWERING ON THE HEATER FOR THE FIRST TIME, MAKE SURE THE DHW TANK IS FULL OF WATER.

This unit must not be operated by children, individuals with impaired physical, sensory or mental capabilities, or individuals lacking the required knowledge or experience, unless supervised or instructed to properly operate the unit by an individual liable for their safety. Keep the unit out of the reach of children.

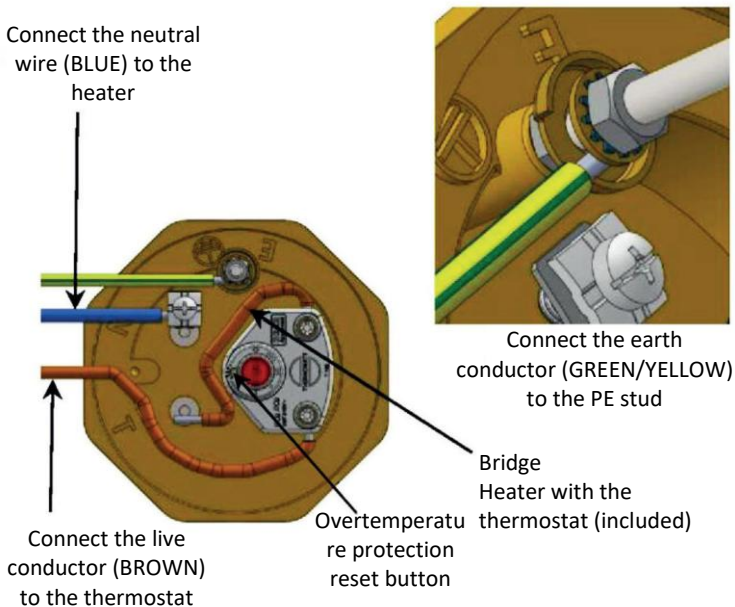
## Thermostat overview

The heater is provided with an RTS/RTS PLUS thermostat with a factory cut-off temperature setting of 52°C which is adjustable.

Due to safety concerns, always replace with the same thermostat model or the model recommended by the heater's manufacturer. The thermostat in this unit can disconnect both power supply cores (live and neutral) in a single tripping action. The unit features integrated overtemperature protection. If the temperature sensor fails, the overtemperature protection will prevent overheating of water.

Resetting the thermostat after an overtemperature protection trip:

- Isolate the heater from electrical power.
- Wait for the water to cool down in the DHW tank.
- Remove the thermostat cover and press the top reset button on the thermostat. (See the figure below).



## ! WARNING!

If the thermostat trips to cut power too often, consult a qualified electrician to troubleshoot. It may help to reduce the cut-off temperature value to prevent too many power cycles of the heater.

## Electrical connection

- This unit must be wired by a properly qualified electrician who holds a professional license required by law in the country of installation.
- Make sure that the power supply is turned off upstream before wiring the unit. Fill the coil with boiler water and vent thoroughly in the process. Fill the DHW tank with potable water, ref. "Connecting the DHW tank".
- Wire the heater to mains power via a double-insulated all-pole circuit breaker with a minimum open contact separation of 3 mm on both poles.
- Wire the heater to mains power using a heat-resistant, flexible cable with T-80 minimum and a minimum core size of 2.5 mm<sup>2</sup>.
- Do not overtighten the screw terminals or the connection may break and separate.

## ! WARNING!

Wire the unit to protective earth! Heavy water scaling of the heater will void its warranty!

### Wiring:

- Securely connect the PE wire (green/yellow) to the PE stud.
- Connect the live wire (brown) of the power cable to the respective thermostat terminal labelled "L".
- Connect the neutral wire (brown) of the power cable to the respective thermostat terminal labelled "N".

### Thermostat setting:

The single dot means the minimum cut-off temperature limit. The double dot means the maximum cut-off temperature limit.

Operate the red knob to set the temperature.

52°C – one dot.

60°C – two dots.

The thermostat safety trip is set to 75°C.

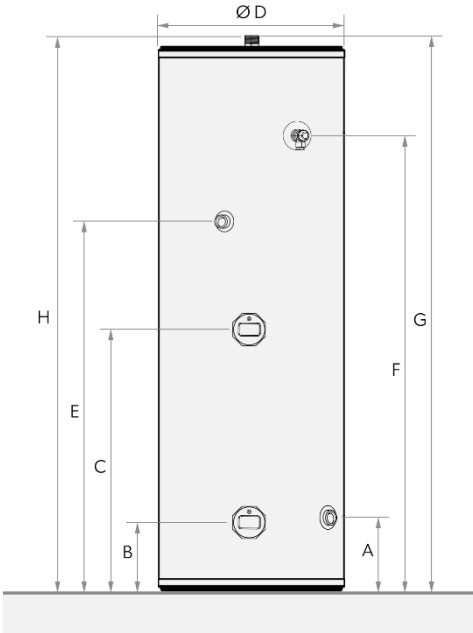
### The DHW membrane expansion vessel capacity plus the capacity required by Joule.

DHW tank capacity, L	Membrane expansion vessel capacity, L
90	12
100	12
125	12
150	12
200	19
250	19
300	24
400	35
500	35
200+90	19 + per the project
250+90	19 + per the project
300+90	24 + per the project

# Dimensions and specifications

## DIRECT

Coilless electric DHW tank



### SPECIFICATION

- A** Cold water supply, 1" F thread
- B** Heating element socket, 1 3/4" F thread
- C** Heating element socket, 1 3/4" F thread
- E** Recirculation / return, 3/4" F thread
- F** P/T valve, 1/2" F thread
- G** Hot water supply, 1" F thread

TYPE	100L	125L	150L	200L	250L	300L	400L	500L
Product code	TCPMVD-0100LFC	TCPMVD-0125LFC	TCPMVD-0150LFC	TCPMVD-0200NFD	TCPMVD-0250NFD	TCPMVD-0300NFD	TCPMVD-0400LFD	TCPMVD-0500LFD
DIMENSIONS*								
H – Overall height (mm)	950	990	1150	1150	1400	1600	1540	1900
D – Diameter w/insulation (mm)	500	530	530	600	600	600	710	710
A (mm)	190	200	205	220	220	225	230	230
B (mm)	210	220	220	240	240	235	245	245
C (mm)	470	520	570	560	660	735	745	845
E (mm)	630	660	795	770	975	1155	1200	1445
F (mm)	740	760	920	890	1140	1335	1290	1645
G (mm)	950	990	1150	1150	1400	1600	1540	1900
Weight (kg)	26	30	40	40	49	56	62	85

\* Height from the ground +/- 10mm

DHW TANK SPECIFICATION	100L	125L	150L	200L	250L	300L	400L	500L
Insulation (mm)	50	40	40	40	40	40	50	50
Max. internal pressure (bar)	6	6	6	6	6	6	6	6
Max. operating temperature (°C)	90	90	90	90	90	90	90	90
Load profile	L	L	L	L	L	XL	XXL	XXL
Energy efficiency (%)	37	37	37	36	35	37	37	36
Annual electricity consumption (kWh)	2740	2773	2785	2875	2908	4565	5806	5999
Noise level (dB)	16	16	16	16	16	16	16	16
Thermostat cut-off temperature setting (°C)	60	60	60	60	60	60	60	60
Energy rating	C	C	C	D	C	D	D	D
Standstill loss (W)	44	50	55	77	82	92	102	115
DHW tank shell	DUPLEX STAINLESS STEEL							
External casing	POWDER-COATED SHEET STEEL							

HEATER	100L	125L	150L	200L	250L	300L	400L	500L
Immersion heaters	2x3kW	2x3kW	2x3kW	2x3kW	2x3kW	2x3kW	2x3kW	2x3kW
Warm-up time to 40°C (min) **	32	42	51	67	84	98	133	168
Warm-up time to 60°C (min) **	54	71	85	112	140	164	221	281

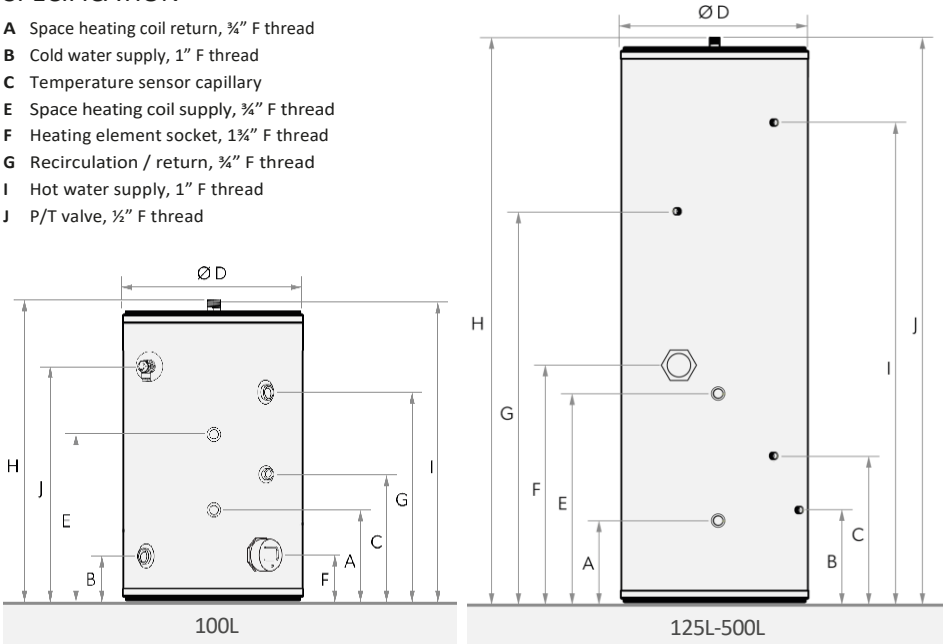
\*\* At an initial water temperature of 10°C

# INDIRECT

## Single-coil tanks

### SPECIFICATION

- A Space heating coil return, 3/4" F thread
- B Cold water supply, 1" F thread
- C Temperature sensor capillary
- E Space heating coil supply, 3/4" F thread
- F Heating element socket, 1 1/2" F thread
- G Recirculation / return, 3/4" F thread
- I Hot water supply, 1" F thread
- J P/T valve, 1/2" F thread



TYPE	100L	125L	150L	200L	250L	300L	300L (SLIM)	400L	500L
Product code	TCPMVI-0100LFB	TCPMVI-0125LFB	TCPMVI-0150LFB	TCPMVI-0200NFC	TCPMVI-0250NFC	TCPMVI-0300NFC	TCPMVI-0300LFD	TCPMVI-0400LFC	TCPMVI-0500LFC

#### DIMENSIONS\*

H – Overall height (mm)	950	990	1150	1150	1400	1600	2050	1540	1900
D – Diameter w/insulation (mm)	500	530	530	600	600	600	530	710	710
A (mm)	195	200	200	220	220	220	200	235	230
B (mm)	205	200	200	220	220	220	200	235	230
C (mm)	260	350	345	365	425	385	410	410	460
E (mm)	380	490	490	535	610	610	715	680	750
F (mm)	545	560	560	600	675	675	780	745	815
G (mm)	635	650	790	770	1020	1155	1555	1185	1445
I (mm)	755	755	915	885	1130	1335	1815	1285	1645
J (mm)	950	990	1150	1150	1400	1600	2050	1540	1900
Weight (kg)	34	35	39	46	58	64	65	71	89

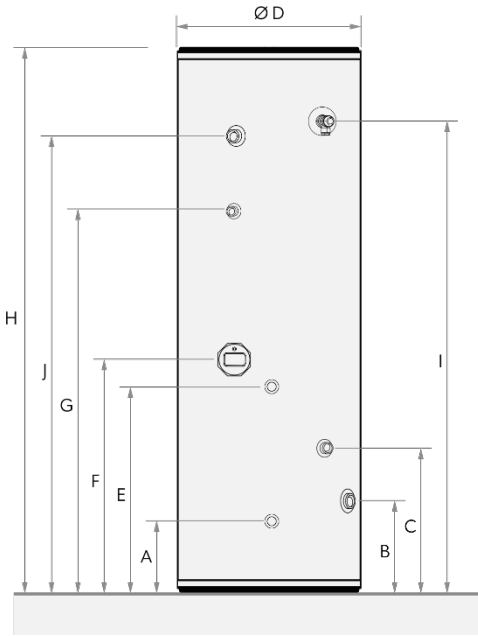
\* Height from the ground +/- 10mm

DHW TANK SPECIFICATION	100L	125L	150L	200L	250L	300L	300L (SLIM)	400L	500L
Insulation (mm)	50	40	40	40	40	40	40	50	50
Max. internal pressure (bar)	6	6	6	6	6	6	6	6	6
Max. operating temperature (°C)	90	90	90	90	90	90	90	90	90
Heater	3 kW 240 V								
Energy rating	B	B	B	C	C	C	C	C	C
Standstill loss (W)	44	52	55	78	87	92	103	102	115
Coil material	AISI 316L STAINLESS STEEL								
DHW tank shell	DUPLIX STAINLESS STEEL								
External casing	POWDER-COATED SHEET STEEL								

COIL PARAMETERS		100L	125L	150L	200L	250L	300L	300L (SLIM)	400L	500L
Coil surface area (m <sup>2</sup> )		0.6	0.6	0.6	0.8	0.8	1.2	1.2	1.3	1.4
Coil capacity (L)		2.8	2.8	2.8	3.8	3.8	5.7	5.7	6.2	6.6
Max. coil operating press. (bar)		6	6	6	6	6	6	6	6	6
Max. coil operating temp. (°C)		90	90	90	90	90	90	90	90	90
DHW PRODUCTION CAPACITY	80/10/45°C (L/H)	678	712	742	988	1054	1451	1451	1694	1900
	70/10/45°C (L/H)	538	572	602	825	891	1218	1218	1414	1620
	60/10/45°C (L/H)	421	455	485	638	704	961	961	1134	1340
HEATING CAPACITY	80/10/45°C (KW)	24	24	24	32	32	47	47	52	55
	70/10/45°C (KW)	18	18	18	25	25	37	37	40	43
	60/10/45°C (KW)	13	13	13	17	17	26	26	28	31
DHW PRODUCT ION CAPACITY	80/10/60°C (L/H)	392	417	437	578	624	853	853	990	1150
	70/10/60°C (L/H)	294	319	339	447	493	673	673	794	921
HEATING CAPACITY	80/10/60°C (KW)	19	19	19	25	25	37	37	40	44
	70/10/60°C (KW)	13	13	13	17	17	26	26	28	30

# INDIRECT

Single coil tanks (extra heavy insulation with a higher energy rating)



## SPECIFICATION

- A Space heating coil return, 3/4" F thread
- B Cold water supply, 1" F thread
- C Temperature sensor capillary
- E Space heating coil supply, 3/4" F thread
- F Heating element socket, 1 3/4" F thread
- G Recirculation / return, 3/4" F thread
- I Hot water supply, 1" F thread
- J P/T valve, 1/2" F thread

TYPE	125L	150L	200L	250L
Product code	TCPMVI-0125LFA	TCPMVI-0150LFA	TCPMVI-0200LFB	TCPMVI-0250LFB
DIMENSIONS*				
H – Overall height (mm)	1030	1190	1490	1800
D – Diameter w/insulation (mm)	580	580	580	580
A (mm)	200	200	200	200
B (mm)	200	200	200	200
C (mm)	310	340	340	420
E (mm)	450	485	520	590
F (mm)	500	550	580	655
G (mm)	650	785	990	1305
I (mm)	750	905	1210	1530
J (mm)	755	910	1210	1535
Weight (kg)	35	39	46	58

\* Height from the ground +/- 10mm

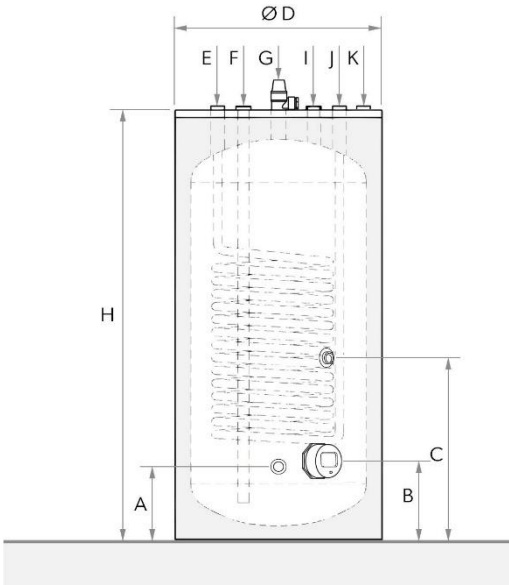


DHW TANK SPECIFICATION	125L	150L	200L	250L
Insulation (mm)	60	60	65	65
Max. internal pressure (bar)	6	6	6	6
Max. operating temperature (°C)	90	90	90	90
Heater	3 kW 240 V	3 kW 240 V	3 kW 240 V	3 kW 240 V
Energy rating	A	A	B	B
Standstill loss (W)	35	39	58	64
Coil material	AISI 316L STAINLESS STEEL			
DHW tank shell	DUPLEX STAINLESS STEEL			
External casing	POWDER-COATED SHEET STEEL			

COIL PARAMETERS		125L	150L	200L	250L
Coil surface area (m <sup>2</sup> )		0.6	0.6	0.8	0.8
Coil capacity (L)		2.8	2.8	3.8	3.8
Max. coil operating press. (bar)		6	6	6	6
Max. coil operating temp. (°C)		90	90	90	90
DHW PRODUCTION CAPACITY	80/10/45°C (L/H)	712	742	988	1054
	70/10/45°C (L/H)	572	602	825	891
	60/10/45°C (L/H)	455	485	638	704
HEATING CAPACITY	80/10/45°C (KW)	24	24	32	32
	70/10/45°C (KW)	18	18	25	25
	60/10/45°C (KW)	13	13	17	17
DHW PRODUCTION CAPACITY	80/10/60°C (L/H)	417	437	578	624
	70/10/60°C (L/H)	319	339	447	493
HEATING CAPACITY	80/10/60°C (KW)	19	19	25	25
	70/10/60°C (KW)	13	13	17	17

# INDIRECT TOP CONNECTION

## Top-connection single-coil tanks



### SPECIFICATION

- A Water drain, ½" F thread
- B Heating element socket, 1¼" F thread
- C Temperature sensor capillary
- E Space heating coil supply, ¾" F thread
- F Cold water supply, 1" F thread
- G P/T valve, ½" F thread
- I Hot water supply, 1" F thread
- J Space heating coil supply, ¾" F thread
- K Recirculation / return, ¾" F thread

TYPE	125L	150L
Product code	TCPMVI-0125TLC	TCPMVI-0150TLC
DIMENSIONS*		
H – Overall height (mm)	1000	1150
D – Diameter w/insulation (mm)	530	530
A (mm)	200	200
B (mm)	200	210
C (mm)	410	410
E, F, G, I, J, K (mm)	1000	1150
Weight (kg)	37	43

\* Height from the ground +/- 10mm

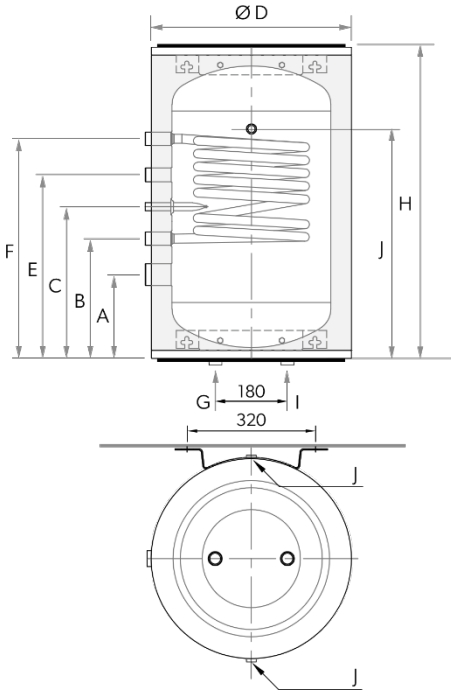
DHW TANK SPECIFICATION	125L	150L
Insulation (mm)	40	40
Max. internal pressure (bar)	6	6
Max. operating temperature (°C)	90	90
Heater	3 kW 240 V	3 kW 240 V
Energy rating	B	B
Standstill loss (W)	52	55
Coil material	AISI 316L STAINLESS STEEL	
DHW tank shell	DUPLEX STAINLESS STEEL	
External casing	POWDER-COATED SHEET STEEL	

COIL PARAMETERS	125L	150L	
Coil surface area (m <sup>2</sup> )	0.6	0.6	
Coil capacity (L)	2.8	2.8	
Max. coil operating press. (bar)	6	6	
Max. coil operating temp. (°C)	90	90	
DHW PRODUCTION CAPACITY	80/10/45°C (L/H)	712	742
	70/10/45°C (L/H)	572	602
	60/10/45°C (L/H)	455	485
HEATING CAPACITY	80/10/45°C (KW)	24	24
	70/10/45°C (KW)	18	18
	60/10/45°C (KW)	13	13
DHW PRODUCTION CAPACITY	80/10/60°C (L/H)	417	437
	70/10/60°C (L/H)	319	339
HEATING CAPACITY	80/10/60°C (KW)	19	19
	70/10/60°C (KW)	13	13

# INDIRECT WALL HUNG



Wall-mounted single coil tanks with reversible RH/LH connections



## SPECIFICATION

- A** Heater connection end, 1 1/2" F thread
- B** Coil return socket, 3/4" F thread
- C** Temperature sensor capillary
- E** Recirculation socket, 3/4" F thread
- F** Coil supply socket, 3/4" F thread
- G** Hot water supply, 3/4" F thread
- I** Cold water supply, 3/4" F thread
- J** Thermometer stub, 1/2" F thread

TYPE	80L	100L	125L	150L
Product code	TCPMVI-0080WH	TCPMVI-0100WH	TCPMVI-0125WH	TCPMVI-0150WH
DIMENSIONS*				
H – Overall height (mm)	780	940	980	1100
D – Diameter w/insulation (mm)	500	500	530	530
A (mm)	210	210	210	210
B (mm)	300	300	300	300
C (mm)	380	380	390	390
E (mm)	460	460	470	470
F (mm)	550	630	660	660
G (mm)	0	0	0	0
I (mm)	0	0	0	0
J (mm)	560	710	710	870
Weight (kg)	27	31	35	39

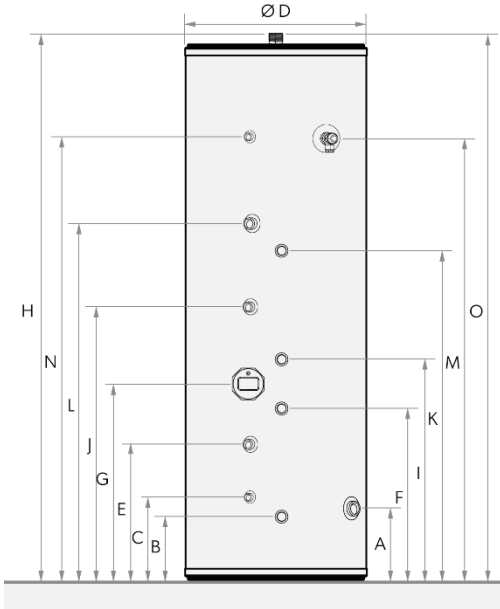
\* Height from the ground +/- 10mm

DHW TANK SPECIFICATION	80L	100L	125L	150L
Insulation (mm)	40		40	
Max. internal pressure (bar)	6		6	
Max. operating temperature (°C)	90		90	
Energy rating	B		B	
Standstill loss (W)	52		55	
Coil material	AISI 316L STAINLESS STEEL			
DHW tank shell	DUPLEX STAINLESS STEEL			
External casing	POWDER-COATED SHEET STEEL			

COIL PARAMETERS		80L	100L	125L	150L
Coil surface area (m <sup>2</sup> )		0.50	0.57	0.80	0.80
Coil capacity (L)		2.3	2.7	3.8	3.8
Max. coil operating press. (bar)		6	6	6	6
Max. coil operating temp. (°C)		90	90	90	90
DHW PRODUCTION CAPACITY	80/10/45°C (L/H)	559	630	897	927
	70/10/45°C (L/H)	442	536	734	764
	60/10/45°C (L/H)	349	396	547	577
HEATING CAPACITY	80/10/45°C (KW)	20	22	32	32
	70/10/45°C (KW)	15	18	25	25
	60/10/45°C (KW)	11	12	17	17
DHW PRODUCTION ON CAPACITY	80/10/60°C (L/H)	326	375	514	535
	70/10/60°C (L/H)	245	375	514	535
HEATING CAPACITY	80/10/60°C (KW)	16	18	25	25
	70/10/60°C (KW)	11	12	17	17

# TWIN SOLAR

## Twin-coil tanks



### SPECIFICATION

- A** Cold water supply, 1" F thread
- B** Solar coil return, 3/4" F thread
- C** Solar heat sensor capillary
- E** Temperature sensor capillary
- F** Solar coil supply, 3/4" F thread
- G** Heating element socket, 1 1/4" F thread
- I** Space heating coil return, 3/4" F thread
- J** Temperature sensor capillary
- K** Space heating coil supply, 3/4" F thread
- L** Recirculation / return, 3/4" F thread
- M** P/T valve, 1/2" F thread
- N** Temperature sensor capillary
- O** Hot water supply, 1" F thread

TYPE	200L	200L (SLIM)	250L	250L (SLIM)	300L	300L (SLIM)	400L	500L
Product code	TCPMVS-0200NFC	TCPMVS-0200LFD	TCPMVS-0250NFC	TCPMVS-0250LFD	TCPMVS-0300NFC	TCPMVS-0300LFD	TCPMVS-0400LFC	TCPMVS-0500LFC
<b>DIMENSIONS*</b>								
H – Overall height (mm)	1150	1450	1400	1780	1600	2050	1540	1900
D – Diameter w/insulation (mm)	600	530	600	530	600	530	710	710
A (mm)	220	200	220	200	225	210	230	230
B (mm)	220	200	220	200	225	210	230	230
C (mm)	270	250	270	250	275	250	280	300
E (mm)	375	410	440	500	445	545	435	450
F (mm)	475	560	540	715	545	720	620	635
G (mm)	535	625	600	775	605	800	690	700
I (mm)	605	690	675	845	675	880	750	765
J (mm)	695	830	800	1035	815	1045	890	905
K (mm)	775	980	970	1230	1060	1270	1135	1150
L (mm)	855	1055	1055	1300	1160	1560	1185	1460
M (mm)	890	1215	1135	1535	1340	1820	1285	1650
N (mm)	890	1215	1135	1535	1340	1820	1285	1660
O (mm)	1150	1450	1400	1780	1600	2050	1540	1900
Weight (kg)	50	50	62	62	67	67	74	87

\* Height from the ground +/- 10mm

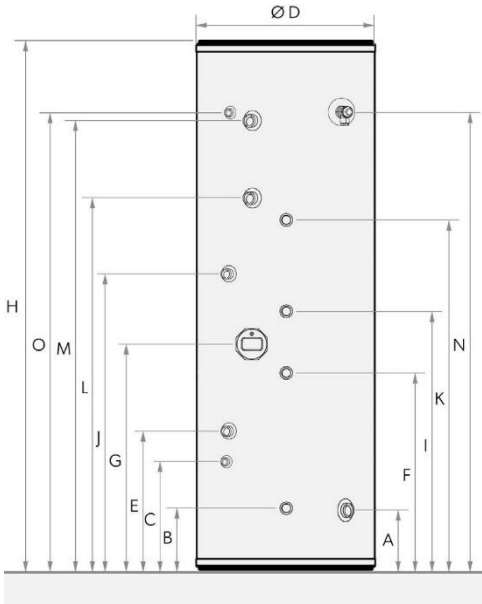
DHW TANK SPECIFICATION	200L	200L (SLIM)	250L	250L (SLIM)	300L	300L (SLIM)	400L	500L
Insulation (mm)	40	40	40	40	40	40	50	50
Max. internal pressure (bar)	6	6	6	6	6	6	6	6
Max. operating temperature (°C)	90	90	90	90	90	90	90	90
Heater	3 kW 240 V	3 kW 240 V	3 kW 240 V	3 kW 240 V	3 kW 240 V	3 kW 240 V	3 kW 240 V	3 kW 240 V
Energy rating	C	C	C	C	C	C	C	C
Standstill loss (W)	80	83	89	91	96	99	102	115
Coil material	AISI 316L STAINLESS STEEL							
DHW tank shell	DUPLEX STAINLESS STEEL							
External casing	POWDER-COATED SHEET STEEL							

SOLAR COIL PARAMETERS	200L	200L (SLIM)	250L	250L (SLIM)	300L	300L (SLIM)	400L	500L	
Coil surface area (m <sup>2</sup> )	0.7	0.7	0.7	0.7	1.2	1.2	1.2	1.2	
Coil capacity (L)	3.3	3.3	3.3	3.3	5.7	5.7	5.7	6.2	
Max. coil operating press. (bar)	6	6	6	6	6	6	6	6	
Max. coil operating temp. (°C)	90	90	90	90	90	90	90	90	
DHW PRODUCTION CAPACITY	80/10/45°C (L/H)	901	901	962	962	1451	1451	1547	1820
	70/10/45°C (L/H)	761	761	822	822	1218	1218	1342	1540
	60/10/45°C (L/H)	597	597	658	658	961	961	1085	1260
HEATING CAPACITY	80/10/45°C (KW)	28	28	28	28	47	47	47	52
	70/10/45°C (KW)	22	22	22	22	37	37	37	40
	60/10/45°C (KW)	15	15	15	15	26	26	26	28
DHW PRODUCT ION CAPACITY	80/10/60°C (L/H)	531	531	575	575	853	853	939	1078
	70/10/60°C (L/H)	417	417	461	461	673	673	759	782
HEATING CAPACITY	80/10/60°C (KW)	22	22	22	22	37	37	37	40
	70/10/60°C (KW)	15	15	15	15	26	26	26	28

SOLAR COIL PARAMETERS	200L	200L (SLIM)	250L	250L (SLIM)	300L	300L (SLIM)	400L	500L	
Coil surface area (m <sup>2</sup> )	0.58	0.58	0.7	0.7	0.8	0.8	0.7	0.8	
Coil capacity (L)	2.7	2.7	3.3	3.3	3.8	3.8	3.3	3.8	
Max. coil operating press. (bar)	6	6	6	6	6	6	6	6	
Max. coil operating temp. (°C)	90	90	90	90	90	90	90	90	
DHW PRODUCTION CAPACITY	80/10/45°C (L/H)	650	650	884	847	978	978	949	1158
	70/10/45°C (L/H)	556	556	724	707	815	815	809	995
	60/10/45°C (L/H)	416	416	560	543	628	628	645	808
HEATING CAPACITY	80/10/45°C (KW)	22	22	28	28	32	32	28	32
	70/10/45°C (KW)	18	18	22	22	25	25	22	25
	60/10/45°C (KW)	12	12	15	15	17	17	15	17
DHW PRODUCT ION CAPACITY	80/10/60°C (L/H)	389	389	506	494	571	571	566	697
	70/10/60°C (L/H)	291	291	392	380	440	440	452	566
HEATING CAPACITY	80/10/60°C (KW)	18	18	22	22	25	25	22	25
	70/10/60°C (KW)	12	12	15	15	17	17	15	17

# TWIN SOLAR

## Twin-coil tanks (extra heavy insulation models)



### SPECIFICATION

- A** Cold water supply, 1" F thread
- B** Solar coil return, 3/4" F thread
- C** Solar heat sensor capillary
- E** Temperature sensor capillary
- F** Solar coil supply, 3/4" F thread
- G** Heating element socket, 1 1/4" F thread
- I** Space heating coil return, 3/4" F thread
- J** Temperature sensor capillary
- K** Space heating coil supply, 3/4" F thread
- L** Recirculation / return, 3/4" F thread
- M** Hot water supply, 1" F thread
- N** P/T valve, 1/2" F thread
- O** Temperature sensor capillary

TYPE	200L	250L
Product code	TCPMVS-0200LFB	TCPMVS-0250LFB
<b>DIMENSIONS*</b>		
H – Overall height (mm)	1490	1800
D – Diameter w/insulation (mm)	580	580
A (mm)	200	200
B (mm)	200	200
C (mm)	245	250
E (mm)	400	420
F (mm)	500	520
G (mm)	565	585
I (mm)	635	650
J (mm)	770	790
K (mm)	920	1035
L (mm)	990	1275
M (mm)	1210	1525
N (mm)	1215	1535
O (mm)	1215	1535
Weight (kg)	50	62

\* Height from the ground +/- 10mm



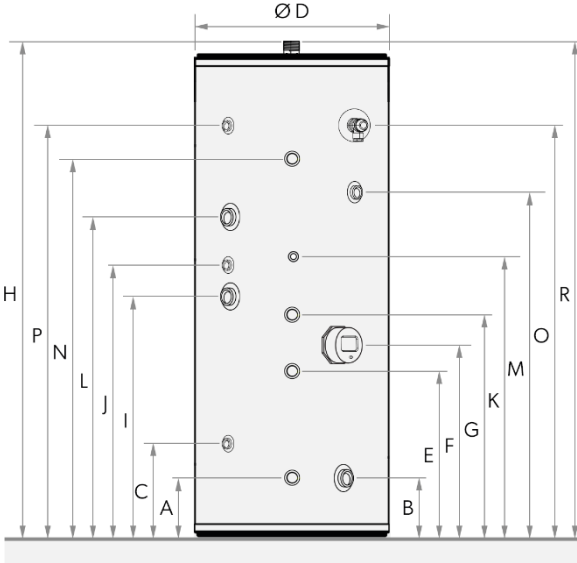
DHW TANK SPECIFICATION	200L	250L
Insulation (mm)	65	65
Max. internal pressure (bar)	6	6
Max. operating temperature (°C)	90	90
Heater	3 kW 240 V	3 kW 240 V
Energy rating	B	B
Standstill loss (W)	58	64
Coil material	AISI 316L STAINLESS STEEL	
DHW tank shell	DUPLIX STAINLESS STEEL	
External casing	POWDER-COATED SHEET STEEL	

SOLAR COIL PARAMETERS	200L	250L	
Coil surface area (m <sup>2</sup> )	0.7	0.7	
Coil capacity (L)	3.3	3.3	
Max. coil operating press. (bar)	6	6	
Max. coil operating temp. (°C)	90	90	
DHW PRODUCTION CAPACITY	80/10/45°C (L/H)	901	962
	70/10/45°C (L/H)	761	822
	60/10/45°C (L/H)	597	658
HEATING CAPACITY	80/10/45°C (KW)	28	28
	70/10/45°C (KW)	22	22
	60/10/45°C (KW)	15	15
DHW PRODUCT ION CAPACITY	80/10/60°C (L/H)	531	575
	70/10/60°C (L/H)	417	461
HEATING CAPACITY	80/10/60°C (KW)	22	22
	70/10/60°C (KW)	15	15

SOLAR COIL PARAMETERS	200L	250L	
Coil surface area (m <sup>2</sup> )	0.58	0.7	
Coil capacity (L)	2.7	3.3	
Max. coil operating press. (bar)	6	6	
Max. coil operating temp. (°C)	90	90	
DHW PRODUCTION CAPACITY	80/10/45°C (L/H)	650	847
	70/10/45°C (L/H)	556	707
	60/10/45°C (L/H)	416	543
HEATING CAPACITY	80/10/45°C (KW)	22	28
	70/10/45°C (KW)	18	22
	60/10/45°C (KW)	12	15
DHW PRODUCT ION CAPACITY	80/10/60°C (L/H)	389	494
	70/10/60°C (L/H)	291	380
HEATING CAPACITY	80/10/60°C (KW)	18	22
	70/10/60°C (KW)	22	15

# TRIPLE

## Three-coil tanks



### SPECIFICATION

- A Solar coil return, 3/4" F thread
- B Cold water supply, 1" F thread
- C Temperature sensor capillary
- E Solar coil supply, 3/4" F thread
- F Heating element socket, 1 1/4" F thread
- G Space heating coil return, 3/4" F thread
- I Aux coil return, 1" F thread
- J Temperature sensor capillary
- K Temperature sensor capillary
- L Aux coil supply, 1" F thread
- M Recirculation / return, 3/4" F thread
- N Space heating coil supply, 3/4" F thread
- O P/T valve, 1/2" F thread
- P Temperature sensor capillary
- R Hot water supply, 1" F thread

TYPE	200L	250L	300L	400L	500L
Product code	TCPMV3-0200NFC	TCPMV3-0250NFC	TCPMV3-0300NFC	TCPMV3-0400LFC	TCPMV3-0500LFC
<b>DIMENSIONS*</b>					
H – Overall height (mm)	1150	1400	1600	1540	1900
D – Diameter w/insulation (mm)	600	600	600	710	710
A (mm)	215	215	220	230	230
B (mm)	215	215	220	230	230
C (mm)	275	265	270	295	290
E (mm)	465	535	735	635	595
F (mm)	515	615	785	715	715
G (mm)	555	680	835	830	830
I (mm)	595	705	885	870	870
J (mm)	695	805	985	970	970
K (mm)	695	815	985	970	970
L (mm)	755	935	1115	1135	1100
M (mm)	815	970	1160	1190	1215
N (mm)	835	1060	1225	1215	1445
O (mm)	885	1135	1335	1285	1640
P (mm)	890	1135	1340	1300	1660
R (mm)	1150	1400	1600	1540	1900
Weight (kg)	50	62	67	74	87

\* Height from the ground +/- 10mm

DHW TANK SPECIFICATION	200L	250L	300L	400L	500L
Insulation (mm)	40	40	40	50	50
Max. internal pressure (bar)	6	6	6	6	6
Max. operating temperature (°C)	90	90	90	90	90
Heater	3 kW 240 V	3 kW 240 V	3 kW 240 V	3 kW 240 V	3 kW 240 V
Energy rating	C	C	C	C	C
Standstill loss (W)	80	89	96	102	115
Coil material	AISI 316L STAINLESS STEEL				
DHW tank shell	DUPLEX STAINLESS STEEL				
External casing	POWDER-COATED SHEET STEEL				

SOLAR PARAMETERS	200L	250L	300L	400L	500L	
Coil surface area (m <sup>2</sup> )	0.7	0.7	1.2	1.2	1.3	
Coil capacity (L)	3.3	3.3	5.7	5.7	6.2	
Max. coil operating press. (bar)	6	6	6	6	6	
Max. coil operating temp. (°C)	90	90	90	90	90	
DHW PRODUCTI ON CAPACITY	80/10/45°C (L/H)	901	962	1448	1570	1814
	70/10/45°C (L/H)	761	822	1215	1337	1534
	60/10/45°C (L/H)	597	658	958	1080	1254
HEATING CAPACITY	80/10/45°C (KW)	28	28	47	47	52
	70/10/45°C (KW)	22	22	37	37	40
	60/10/45°C (KW)	15	15	26	26	28
DHW HEATING PRODUCTI ON CAPACITY	80/10/60°C (L/H)	531	575	851	936	1074
	70/10/60°C (L/H)	417	461	671	756	878
	80/10/60°C (KW)	22	22	37	37	40
70/10/60°C (KW)	15	15	26	26	28	

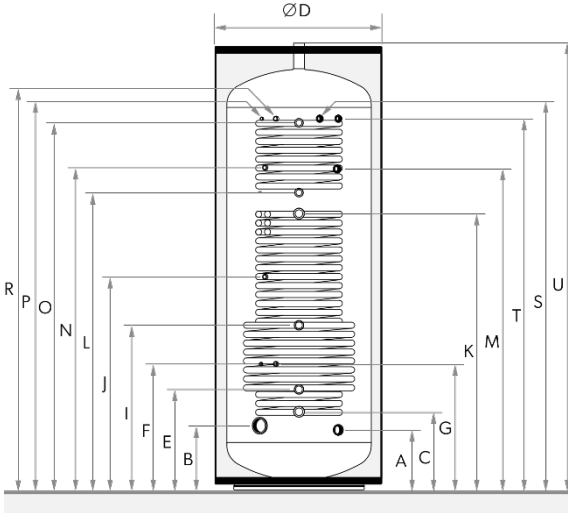
SOLAR COIL PARAMETERS	200L	250L	300L	400L	500L	
Coil surface area (m <sup>2</sup> )	0.58	0.7	0.8	0.7	0.8	
Coil capacity (L)	2.7	3.3	3.8	3.3	3.8	
Max. coil operating press. (bar)	6	6	6	6	6	
Max. coil operating temp. (°C)	90	90	90	90	90	
DHW PRODUCTI ON CAPACITY	80/10/45°C (L/H)	650	851	933	952	1171
	70/10/45°C (L/H)	556	711	770	812	1008
	60/10/45°C (L/H)	416	547	583	648	821
HEATING CAPACITY	80/10/45°C (KW)	22	28	32	28	32
	70/10/45°C (KW)	18	22	25	22	25
	60/10/45°C (KW)	12	15	17	15	17
DHW HEATING PRODUCTI ON CAPACITY	80/10/60°C (L/H)	389	481	539	552	706
	70/10/60°C (L/H)	291	383	408	454	575
	80/10/60°C (KW)	18	21	25	21	25
70/10/60°C (KW)	12	15	17	15	17	

SOLAR PARAMETERS	200L	250L	300L	400L	500L	
Coil surface area (m <sup>2</sup> )	0.58	0.58	0.58	0.58	0.58	
Coil capacity (L)	2.7	2.7	2.7	2.7	2.7	
Max. coil operating press. (bar)	6	6	6	6	6	
Max. coil operating temp. (°C)	90	90	90	90	90	
DHW PRODUCTI ON CAPACITY	80/10/45°C (L/H)	671	704	688	797	923
	70/10/45°C (L/H)	577	610	564	703	829
	60/10/45°C (L/H)	437	470	454	563	689
HEATING CAPACITY	80/10/45°C (KW)	22	22	22	22	22
	70/10/45°C (KW)	18	18	18	18	18
	60/10/45°C (KW)	12	12	12	12	12
DHW HEATING PRODUCTI ON CAPACITY	80/10/60°C (L/H)	404	427	416	492	580
	70/10/60°C (L/H)	306	329	318	394	482
	80/10/60°C (KW)	15	18	18	18	18
70/10/60°C (KW)	12	12	12	12	12	

# TRIPLE HEAT PUMP

Three-coil DHW tanks for heat pumps

NEW



## SPECIFICATION

- A Cold water supply, 1" F thread
- B Heating element socket, 1 1/4" F thread
- C Heat pump coil return, 1" F thread
- E Solar coil return, 3/4" F thread
- F Solar heat sensor capillary
- G Temperature sensor capillary
- I Solar coil supply, 3/4" F thread
- J Temperature sensor capillary
- K Heat pump coil supply, 1" F thread
- L Aux coil return, 3/4" F thread
- M Recirculation socket, 3/4" F thread
- N Temperature sensor capillary
- O Aux coil supply, 3/4" F thread
- P Solar heat sensor capillary
- R Temperature sensor capillary
- S Thermometer stub, 1/2" F thread
- Y P/T valve, 1/2" thread
- U Hot water supply, 1" F thread

TYPE	250L	300L	400L	500L
Product code	TCPMV3-0250HGC	TCPMV3-0300HGC	TCPMV3-0400HGC	TCPMV3-0500HGC
DIMENSIONS*				
H – Overall height (mm)	1400	1600	1560	1900
D – Diameter w/insulation (mm)	600	660	710	710
A (mm)	215	215	225	225
B (mm)	230	230	240	240
C (mm)	280	280	290	290
E (mm)	360	360	370	370
F (mm)	450	450	440	450
G (mm)	450	450	440	450
I (mm)	590	250	620	620
J (mm)	650	750	-	-
K (mm)	820	990	930	1000
L (mm)	895	1065	1010	1100
M (mm)	950	1150	1080	1450
N (mm)	950	1150	1150	1250
O (mm)	1115	1315	1250	1390
P (mm)	1130	1330	1280	1640
R (mm)	1130	1330	1280	1640
S (mm)	1130	1330	1280	1640
T (mm)	1130	1330	1280	1640
U (mm)	1400	1600	1560	1900
Weight (kg)	71	78	97	111

\* Height from the ground +/- 10mm

DHW TANK SPECIFICATION	250L	300L	400L	500L
Insulation (mm)	40	40	50	50
Max. internal pressure (bar)	6	6	6	6
Max. operating temperature (°C)	90	90	90	90
Heater	3 kW 240 V	3 kW 240 V	3 kW 240 V	3 kW 240 V
Energy rating	C	C	C	C
Standstill loss (W)	89	96	102	115
Coil material				
DHW tank shell				
External casing				

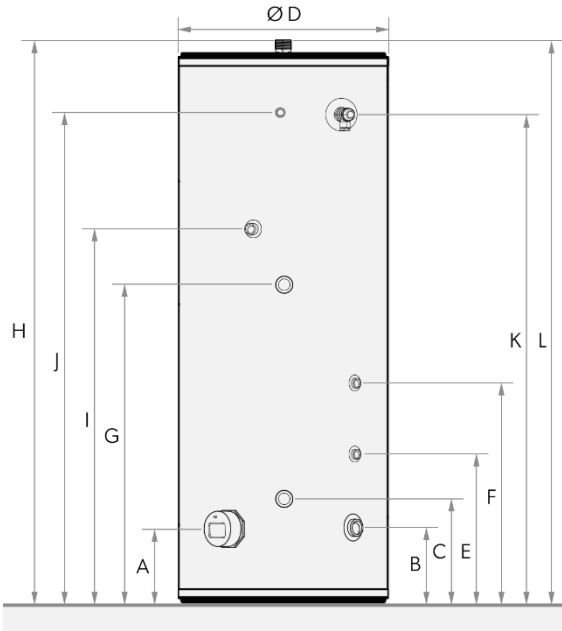
SOLAR PARAMETERS	250L	300L	400L	500L	
Coil surface area (m <sup>2</sup> )	2.3	2.5	3	3.2	
Coil capacity (L)	10.9	11.8	14.2	15.1	
Max. coil operating press. (bar)	6	6	6	6	
Max. coil operating temp. (°C)	90	90	90	90	
DHW PRODUCTION CAPACITY	80/10/45°C (L/H)	866	965	1181	1380
	70/10/45°C (L/H)	726	825	1018	1194
	60/10/45°C (L/H)	586	661	831	1007
HEATING CAPACITY	80/10/45°C (KW)	26	28	33	36
	70/10/45°C (KW)	20	22	26	28
	60/10/45°C (KW)	14	15	18	20
DHW PRODUCTION CAPACITY	80/10/60°C (L/H)	508	577	713	836
	70/10/60°C (L/H)	410	463	582	705
	80/10/60°C (KW)	20	22	26	28
HEATING CAPACITY	70/10/60°C (KW)	14	15	18	20

SOLAR PARAMETERS	250L	300L	400L	500L	
Coil surface area (m <sup>2</sup> )	0.6	0.6	0.7	0.7	
Coil capacity (L)	2.8	2.8	3.3	3.3	
Max. coil operating press. (bar)	6	6	6	6	
Max. coil operating temp. (°C)	90	90	90	90	
DHW PRODUCTION CAPACITY	80/10/45°C (L/H)	796	848	1036	1165
	70/10/45°C (L/H)	680	732	896	1025
	60/10/45°C (L/H)	539	591	732	861
HEATING CAPACITY	80/10/45°C (KW)	24	24	28	28
	70/10/45°C (KW)	19	19	22	22
	60/10/45°C (KW)	13	13	15	15
DHW PRODUCTION CAPACITY	80/10/60°C (L/H)	476	512	627	717
	70/10/60°C (L/H)	362	398	513	603
	80/10/60°C (KW)	19	19	22	22
HEATING CAPACITY	70/10/60°C (KW)	12	12	15	15

SOLAR PARAMETERS	250L	300L	400L	500L	
Coil surface area (m <sup>2</sup> )	0.5	0.5	0.5	0.5	
Coil capacity (L)	2.4	2.4	2.4	2.4	
Max. coil operating press. (bar)	6	6	6	6	
Max. coil operating temp. (°C)	90	90	90	90	
DHW PRODUCTION CAPACITY	80/10/45°C (L/H)	565	565	618	719
	70/10/45°C (L/H)	448	448	501	599
	60/10/45°C (L/H)	355	355	408	506
HEATING CAPACITY	80/10/45°C (KW)	20	20	20	20
	70/10/45°C (KW)	15	15	15	15
	60/10/45°C (KW)	11	11	11	11
DHW PRODUCTION CAPACITY	80/10/60°C (L/H)	314	314	351	419
	70/10/60°C (L/H)	249	249	286	354
	80/10/60°C (KW)	15	15	15	15
HEATING CAPACITY	70/10/60°C (KW)	11	11	11	11

# HEAT PUMP

## Single-coil DHW tanks for heat pumps



### SPECIFICATION

- A Heating element socket, 1 3/4" F thread
- B Cold water supply, 1" F thread
- C Heat pump coil return, 1" F thread
- E Temperature sensor capillary
- F Temperature sensor capillary
- G Heat pump coil supply, 1" F thread
- I Recirculation / return, 3/4" F thread
- J Temperature sensor capillary
- K P/T valve, 1/2" F thread
- L Hot water supply, 1" F thread

TYPE	200L	250L	300L	300L	400L	500L
Product code	TCPMVH-0200LFC	TCPMVH-0250LFC	TCPMVH-0300NFC	TCPMVH-0300LFD	TCPMVH-0400LFC	TCPMVH-0500LFC
<b>DIMENSIONS*</b>						
H – Overall height (mm)	1460	1780	1600	2050	1540	1900
D – Diameter w/insulation (mm)	530	530	600	530	710	710
A (mm)	220	220	240	230	265	240
B (mm)	200	205	225	200	230	245
C (mm)	265	265	290	275	295	290
E (mm)	455	570	495	505	465	585
F (mm)	755	870	780	920	820	935
G (mm)	985	1015	1000	1140	1005	1195
I (mm)	1005	1275	1155	1555	1165	1445
J (mm)	1215	1540	1340	1815	1285	1645
K (mm)	1215	1540	1340	1815	1285	1645
L (mm)	1460	1780	1600	2050	1540	1900
Weight (kg)	58	67	74	75	81	107

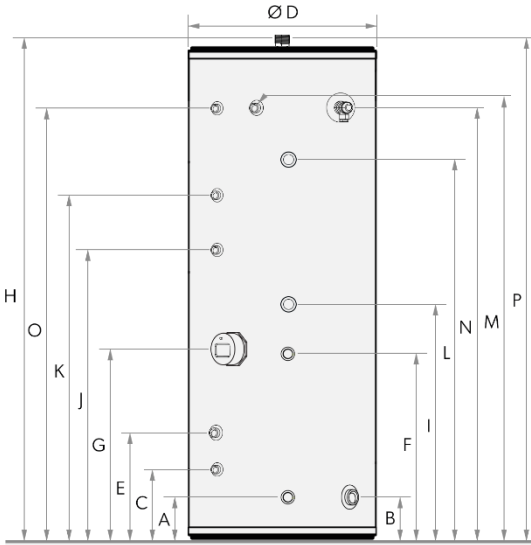
\* Height from the ground +/- 10mm

DHW TANK SPECIFICATION	200L	250L	300L	300L (SLIM)	400L	500L
Insulation (mm)	40	40	40	40	50	50
Max. internal pressure (bar)	6	6	6	6	6	6
Max. operating temperature (°C)	90	90	90	90	90	90
Heater	3 kW 240 V	3 kW 240 V	3 kW 240 V	3 kW 240 V	3 kW 240 V	3 kW 240 V
Energy rating	C	C	C	C	C	C
Standstill loss (W)	81	89	92	103	102	115
Coil material	AISI 316L STAINLESS STEEL					
DHW tank shell	DUPLIX STAINLESS STEEL					
External casing	POWDER-COATED SHEET STEEL					

HEAT PUMP COIL PARAMETERS		200L	250L	300L	300L (SLIM)	400L	500L
Coil surface area (m <sup>2</sup> )		2.5	2.8	3.2	3	3.2	4
Coil capacity (L)		11.8	13.2	15.1	14.2	15.1	18.9
Max. coil operating press. (bar)		6	6	6	6	6	6
Max. coil operating temp. (°C)		90	90	90	90	90	90
DHW PRODUCTION CAPACITY	60/10/45°C (L/H)	1514	1691	1973	1860	2098	2641
HEATING CAPACITY	60/10/45°C (KW)	55	60	70	65	70	88

# HEAT PUMP + SOLAR

## Twin-coil DHW tanks for heat pumps



### SPECIFICATION

- A Solar coil return, 3/4" F thread
- B Cold water supply, 1" F thread
- C Solar heat sensor capillary
- E Temperature sensor capillary
- F Solar coil supply, 3/4" F thread
- G Heating element socket, 1 3/4" F thread
- I Heat pump coil return, 1" F thread
- J Temperature sensor capillary
- K Recirculation / return, 3/4" F thread
- L Heat pump coil supply, 1" F thread
- M Temperature sensor capillary
- N P/T valve, 1/2" F thread
- O Solar heat sensor capillary
- P Hot water supply, 1" F thread

TYPE	200L	250L	300L	400L	500L
Product code	TCPMVG-0200LFC	TCPMVG-0250LFC	TCPMVG-0300NFC	TCPMVG-0400LFC	TCPMVG-0500LFC
<b>DIMENSIONS*</b>					
H – Overall height (mm)	1450	1780	1600	1540	1900
D – Diameter w/insulation (mm)	530	530	600	710	710
A (mm)	200	200	220	230	230
B (mm)	200	200	220	230	230
C (mm)	255	250	270	295	300
E (mm)	390	410	440	475	455
F (mm)	535	520	580	615	620
G (mm)	585	615	635	675	685
I (mm)	635	685	680	715	740
J (mm)	840	880	920	960	975
K (mm)	1010	1275	1155	1150	1645
L (mm)	1185	1230	1315	1265	1645
M (mm)	1220	1535	1355	1305	1660
N (mm)	1220	1540	1355	1285	1650
O (mm)	1220	1535	1355	1305	1660
P (mm)	1460	1780	1600	1540	1900
Weight (kg)	61	70	77	84	107

\* Height from the ground +/- 10mm



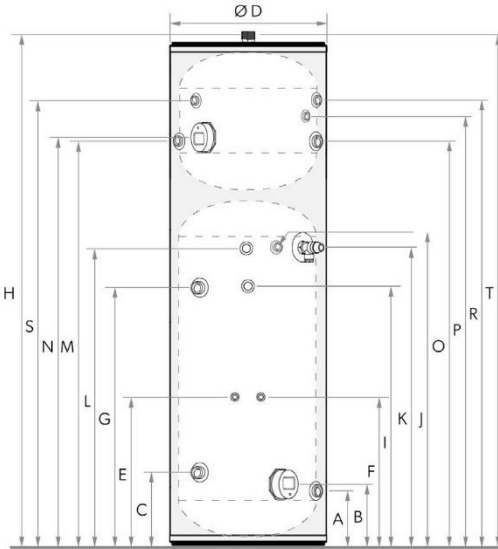
DHW TANK SPECIFICATION	200L	250L	300L	400L	500L
Insulation (mm)	40	40	40	50	50
Max. internal pressure (bar)	6	6	6	6	6
Max. operating temperature (°C)	90	90	90	90	90
Heater	3 kW 240 V	3 kW 240 V	3 kW 240 V	3 kW 240 V	3 kW 240 V
Energy rating	C	C	C	C	C
Standstill loss (W)	83	91	98	102	115
Coil material	AISI 316L STAINLESS STEEL				
DHW tank shell	DUPLEX STAINLESS STEEL				
External casing	POWDER-COATED SHEET STEEL				

HEAT PUMP COIL PARAMETERS		200L	250L	300L	400L	500L
Coil surface area (m <sup>2</sup> )		2.5	2.8	3.2	3.2	4
Coil capacity (L)		11.8	13.2	15.1	15.1	18.9
Max. coil operating press. (bar)		6	6	6	6	6
Max. coil operating temp. (°C)		90	90	90	90	90
DHW PRODUCTION CAPACITY	60/10/45°C (L/H)	1439	1632	1885	1964	2512
HEATING CAPACITY	60/10/45°C (KW)	55	60	70	70	25

SOLAR PARAMETERS		200L	250L	300L	400L	500L
Coil surface area (m <sup>2</sup> )		0.7	0.7	1.1	1.1	1.2
Coil capacity (L)		3.3	3.3	5.2	5.2	5.7
Max. coil operating press. (bar)		6	6	6	6	6
Max. coil operating temp. (°C)		90	90	90	90	90
DHW PRODUCTION CAPACITY	80/10/45°C (L/H)	901	962	1305	1470	1688
	70/10/45°C (L/H)	761	822	1135	1260	1455
	60/10/45°C (L/H)	597	658	901	1026	1198
HEATING CAPACITY	80/10/45°C (KW)	28	28	43	43	47
	70/10/45°C (KW)	22	22	34	34	37
	60/10/45°C (KW)	15	15	24	24	26
DHW PRODUCTION CAPACITY	80/10/60°C (L/H)	531	575	795	882	1019
	70/10/60°C (L/H)	417	461	615	702	839
HEATING CAPACITY	80/10/60°C (KW)	22	22	34	34	37
	70/10/60°C (KW)	15	15	23	23	26

# TANK ON TANK

## Combination DHW heater and buffer tanks



### SPECIFICATION

- A** Cold water supply, 1" F thread
- B** Heating element socket, 1¼" F thread
- C** Heat pump coil return, 1" F thread
- E** Temperature sensor capillary
- F** Temperature sensor capillary
- G** Heat pump coil supply, 1" F thread
- I** Recirculation / return, ¾" F thread
- J** Temperature sensor capillary
- K** P/T valve, ½" F thread
- L** Hot water supply, 1" F thread
- M** Connection stub, 1" F thread
- N** Heating element socket, 1¼" F thread
- O** Connection stub, 1" F thread
- P** Temperature sensor capillary
- R** Connection stub, 1" F thread
- S** Connection stub, 1" F thread
- Y** Vent stub, ½" F thread

TYPE	200L+90L	250L+90L	300L+90L
Product code	TCLMVJ-20090FC	TCLMVJ-25090FC	TCLMVJ-30090FC
<b>DIMENSIONS*</b>			
H – Overall height (mm)	1670	1930	2150
D – Diameter w/insulation (mm)	600	600	600
A (mm)	220	220	220
B (mm)	225	235	235
C (mm)	285	275	285
E (mm)	485	560	565
F (mm)	485	560	565
G (mm)	865	935	990
I (mm)	730	965	1180
J (mm)	885	1135	1340
K (mm)	885	1135	1340
L (mm)	870	1130	1330
M (mm)	1290	1535	1745
N (mm)	1305	1555	1755
O (mm)	1290	1535	1740
P (mm)	1365	1610	1815
R (mm)	1450	1700	1900
S (mm)	1450	1695	1900
T (mm)	1670	1930	2150
Weight (kg)	85	92	102

\* Height from the ground +/- 10mm

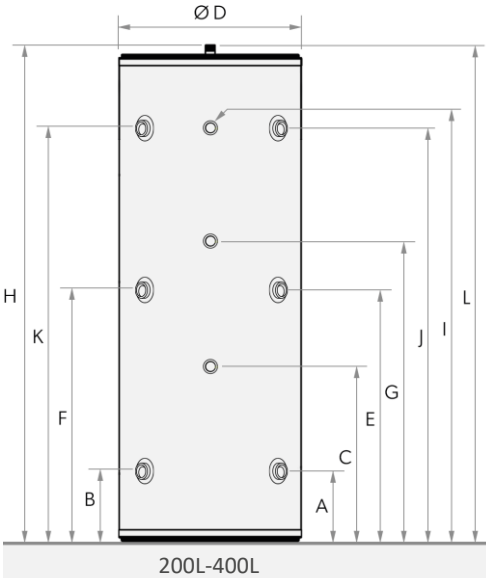
DHW TANK SPECIFICATION	200L+90	250L+90	300L+90
Insulation (mm)	40	40	40
Max. internal pressure (bar)	6	6	6
Max. operating temperature (°C)	90	90	90
Heater	3 kW 240 V	3 kW 240 V	3 kW 240 V
Energy rating	C	C	C
Standstill loss (W)	77	91	98
Coil material	AISI 316L STAINLESS STEEL		
DHW tank shell	DUPLEX STAINLESS STEEL		
External casing	POWDER-COATED SHEET STEEL		

HEAT PUMP COIL PARAMETERS		200L+90	250L+90	300L+90
Coil surface area (m <sup>2</sup> )		2.5	2.8	3
Coil capacity (L)		11.8	13.2	14.2
Max. coil operating press. (bar)		6	6	6
Max. coil operating temp. (°C)		90	90	90
DHW PRODUCTION CAPACITY	60/10/45°C (L/H)	1514	1691	1860
HEATING CAPACITY	60/10/45°C (KW)	55	60	65

90L DHW BUFFER TANK SPECIFICATIONS		200L+90	250L+90	300L+90
Nominal capacity (L)		90	90	90
Max. internal pressure (bar)		6	6	6
Max. operating temperature (°C)		90	90	90
Heater		3 kW 240 V	3 kW 240 V	3 kW 240 V
Energy rating		B	B	B
Standstill loss (W)		40	40	40
DHW tank shell		DUPLEX STAINLESS STEEL		
External casing		POWDER-COATED SHEET STEEL		

# BUFFER

## Stainless steel buffer tanks



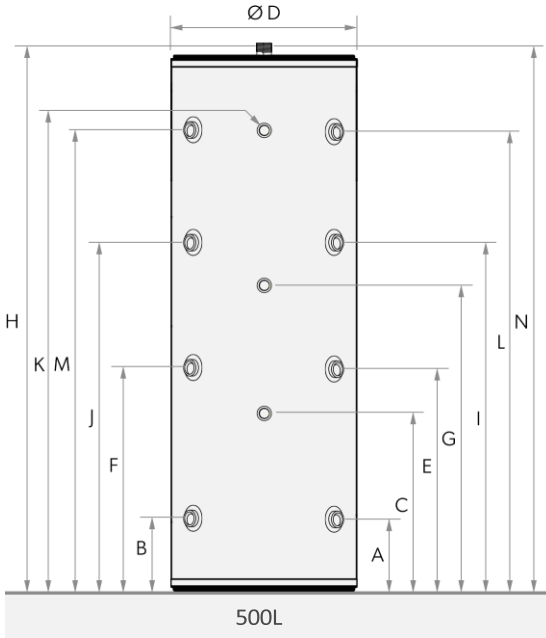
### SPECIFICATION

- A Connection stub, 1¼" F thread\*
- B Connection stub, 1¼" F thread\*
- C Temperature sensor capillary
- E Connection stub, 1¼" F thread\*
- F Connection stub, 1¼" F thread\*
- G Temperature sensor capillary
- I Temperature sensor capillary
- J Connection stub, 1¼" F thread\*
- K Connection stub, 1¼" F thread\*
- L Vent stub, ½" F thread

TYPE	90L	200L	300L	400L	500L
Product code	BBSSD-00090NFC	BBSSD-00200NFC	BBSSD-00300NFC	BBSSD-00400NFC	BBSSD-00500NFC
<b>DIMENSIONS*</b>					
H – Overall height (mm)	750	1460	1600	1540	1900
D – Diameter w/insulation (mm)	530	530	600	710	710
A (mm)	205	210	230	235	245
B (mm)	205	210	230	235	245
C (mm)	355	310	575	230	605
E (mm)	505	705	780	755	695
F (mm)	505	705	780	755	695
G (mm)	750	-	975	755	1075
I (mm)	-	1205	1325	1275	1165
J (mm)	-	1205	1325	1275	1165
K (mm)	-	1205	1325	1280	1645
L (mm)	-	1460	1600	1540	1625
M (mm)	-	-	-	-	1625
N (mm)	-	-	-	-	1900
Weight (kg)	26	40	55	62	77

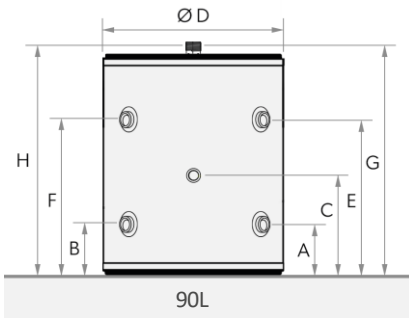
\* Height from the ground +/- 10mm

\*\* 1 1/2" F thread for 400L capacity



## SPECIFICATION

- A** Connection stub, 1½" F thread
- B** Connection stub, 1½" F thread
- C** Temperature sensor capillary
- E** Connection stub, 1½" F thread
- F** Connection stub, 1½" F thread
- G** Temperature sensor capillary, ½" F thread
- I** Connection stub, 1½" F thread
- J** Connection stub, 1½" F thread
- K** Temperature sensor capillary, ½" F thread
- L** Connection stub, 1½" F thread
- M** Connection stub, 1½" F thread
- N** Vent stub, ½" F thread



## SPECIFICATION

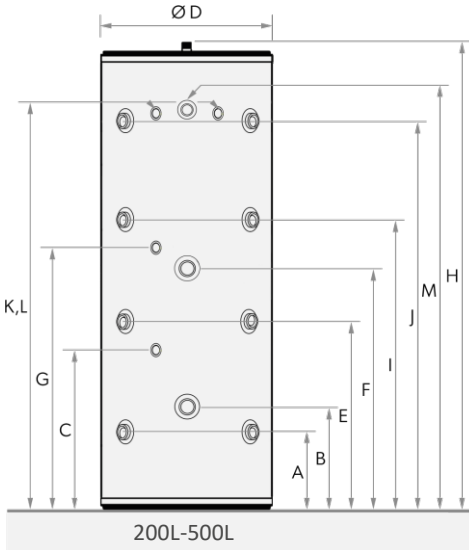
- A** Connection stub, 1" F thread
- B** Connection stub, 1" F thread
- C** Temperature sensor capillary
- E** Connection stub, 1" F thread
- F** Connection stub, 1" F thread
- G** Vent stub, ½" F thread

DHW TANK SPECIFICATION	90L	200L	300L	400L	500L
Insulation (mm)	40	40	40	50	50
Max. internal pressure (bar)	6	6	6	6	6
Max. operating temperature (°C)	90	90	90	90	90
Energy rating	B	C	C	C	C
Standstill loss (W)	40	81	92	102	115
DHW tank shell	DUPLEX STAINLESS STEEL				
External casing	POWDER-COATED SHEET STEEL				

# BUFFER HP



Stainless steel buffer tanks with a heat pump coil – BBSSH (100L wall-hung model, 200L-500L floor-standing models)

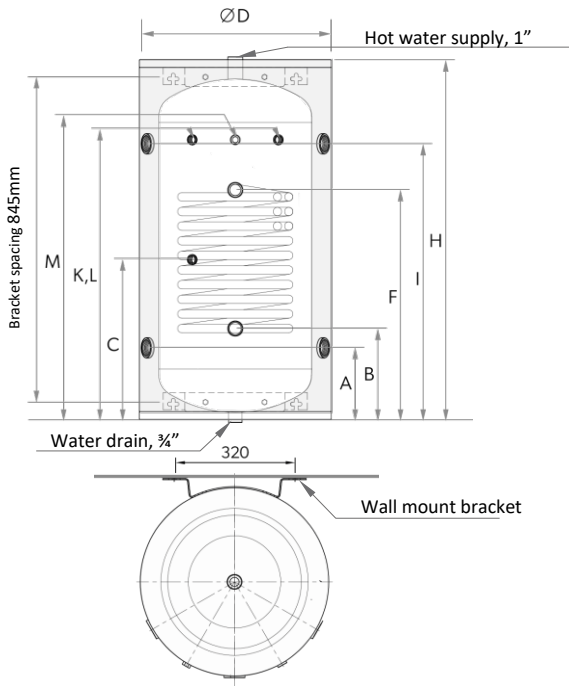


## SPECIFICATION

- A Connection stub, 1½" F thread
- B Heat pump coil return, 1" F thread
- C Temperature sensor capillary, ½"
- E Connection stub, 1½" F thread
- F Heat pump coil supply, 1" F thread
- G Temperature sensor capillary, ½"
- I Connection stub, 1½" F thread
- J Connection stub, 1½" F thread
- K Temperature sensor capillary, ½"
- L P/T valve, ½" F thread
- M Thermometer stub, 1/2" F thread
- H Vent stub, ½" F thread

TYPE	100L	200L	300L	400L	500L
Product code	BBSSH-00100NFC	BBSSH-00200NFC	BBSSH-00300NFC	BBSSH-00400NFC	BBSSH-00500NFC
<b>DIMENSIONS*</b>					
H – Overall height (mm)	950	1460	1600	1570	1900
D – Diameter w/insulation (mm)	500	530	600	710	710
A (mm)	200	205	225	235	235
B (mm)	250	225	275	285	285
C (mm)	429	470	520	470	510
E (mm)	-	700	765	578	698
F (mm)	610	805	825	735	835
G (mm)	-	-	1070	880	1050
I (mm)	730	1195	1310	920	1160
J (mm)	-	-	-	1265	1625
K (mm)	740	1205	1325	1275	1635
L (mm)	740	1205	1325	1275	1635
M (mm)	740	1205	1325	1275	1635
H (mm)	740	1205	1325	1275	1635
Weight (kg)	32	46	68	74	90

\* Height from the ground +/- 10mm

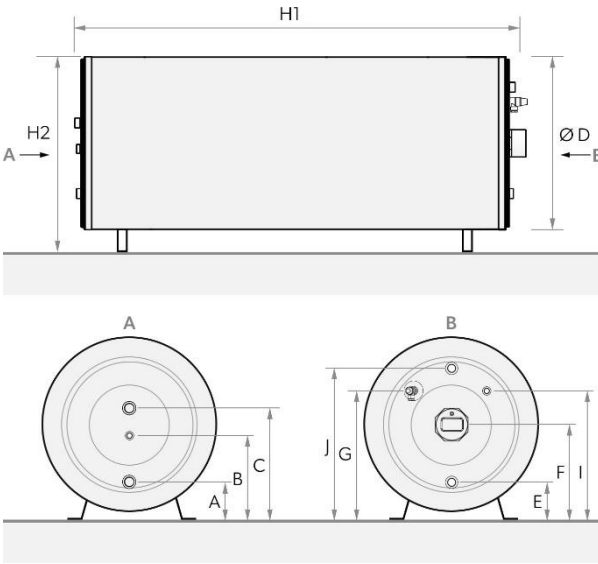


DHW TANK SPECIFICATION	100L	200L	300L	400L	500L
Insulation (mm)	40	40	40	50	50
Max. internal pressure (bar)	6	6	6	6	6
Max. operating temperature (°C)	90	90	90	90	90
Energy rating	B	C	C	C	C
Standstill loss (W)	44	83	92	102	115
Coil material	AISI 316L STAINLESS STEEL				
DHW tank shell	DUPLEX STAINLESS STEEL				
External casing	POWDER-COATED SHEET STEEL				

HEAT PUMP COIL PARAMETERS	100L	200L	300L	400L	500L	
Coil surface area (m <sup>2</sup> )	1	2	2	2	2.5	
Coil capacity (L)	4.7	9.4	9.4	9.4	11.8	
Max. coil operating press. (bar)	6	6	6	6	6	
Max. coil operating temp. (°C)	90	90	90	90	90	
DHW PRODUCTION CAPACITY	80/10/45°C (L/H)	394	759	874	998	1267
HEATING CAPACITY	80/10/45°C (KW)	12	22	22	22	28
DHW PRODUCTION CAPACITY	70/10/45°C (L/H)	324	665	780	904	1127
HEATING CAPACITY	70/10/45°C (KW)	9	18	18	18	22
DHW PRODUCTION CAPACITY	60/10/45°C (L/H)	254	525	640	764	963
HEATING CAPACITY	60/10/45°C (KW)	6	12	12	12	15
DHW PRODUCTION CAPACITY	80/10/60°C (L/H)	226	465	546	633	788
HEATING CAPACITY	80/10/60°C (KW)	9	18	18	18	22
DHW PRODUCTION CAPACITY	70/10/60°C (L/H)	177	367	448	535	674
HEATING CAPACITY	70/10/60°C (KW)	6	12	12	12	15

# HORIZONTAL INDIRECT

## Horizontal single-coil tanks



### SPECIFICATION

- A** Space heating coil return, ¼" F thread
- B** Temperature sensor capillary
- C** Space heating coil supply, ¼" F thread
- E** Cold water supply, 1" F thread
- F** Heating element socket, 1¾" F thread
- G** P/T valve, ½" F thread
- I** Recirculation / return, ¼" F thread
- J** Hot water supply, 1" F thread

TYPE	150L	200L	250L	300L	400L	500L
Product code	TCPMHI-0150LFC	TCPMHI-0200NFC	TCPMHI-0250NFC	TCPMHI-0300NFC	TCPMHI-0400LFC	TCPMHI-0500LFC
DIMENSIONS*						
H1 – Overall height (mm)	1100	1100	1340	1540	1540	1900
H2 – Height from the ground (mm)	555	625	625	625	725	735
D – Diameter w/insulation (mm)	530	600	600	710	710	710
A (mm)	150	150	150	170	170	160
B (mm)	270	300	300	350	350	350
C (mm)	400	400	400	510	510	510
E (mm)	150	150	150	165	165	170
F (mm)	300	330	330	385	385	390
G (mm)	400	470	440	515	515	530
I (mm)	400	470	440	515	515	530
J (mm)	450	510	510	600	600	600
Weight (kg)	47	59	71	115	115	137

\* Height from the ground +/- 10mm

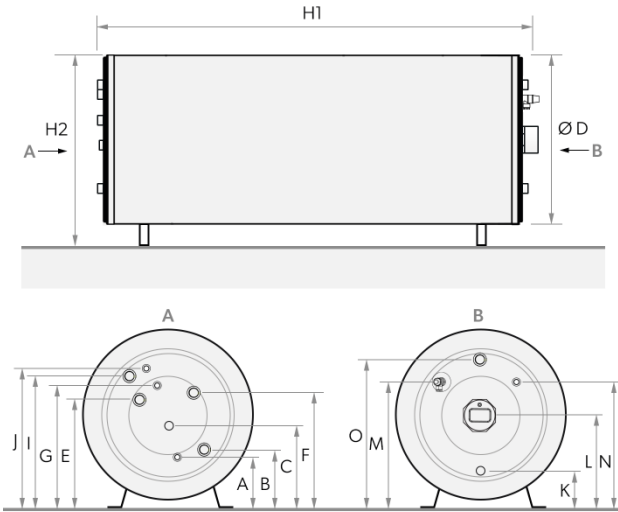


DHW TANK SPECIFICATION	150L	200L	250L	300L	400L	500L
Insulation (mm)	40	40	40	40	50	50
Max. internal pressure (bar)	6	6	6	6	6	6
Max. operating temperature (°C)	90	90	90	90	90	90
Heater	3 kW 240 V	3 kW 240 V	3 kW 240 V	3 kW 240 V	3 kW 240 V	3 kW 240 V
Energy rating	C	C	C	C	C	C
Standstill loss (W)	63	81	89	94	104	115
Coil material	AISI 316L STAINLESS STEEL					
DHW tank shell	DUPLEX STAINLESS STEEL					
External casing	POWDER-COATED SHEET STEEL					

SOLAR PARAMETERS		150L	200L	250L	300L	400L	500L
Coil surface area (m <sup>2</sup> )		0.6	0.67	0.8	0.8	1.1	1.2
Coil capacity (L)		2.8	3.2	3.8	3.8	5.2	5.7
Max. coil operating press. (bar)		6	6	6	6	6	6
Max. coil operating temp. (°C)		90	90	90	90	90	90
DHW PRODUCTION CAPACITY	80/10/45°C (L/H)	742	847	1054	1104	1484	1706
	70/10/45°C (L/H)	602	707	891	941	1274	1473
	60/10/45°C (L/H)	485	567	704	754	1040	1216
HEATING CAPACITY	80/10/45°C (KW)	24	26	32	32	43	47
	70/10/45°C (KW)	18	20	25	25	34	37
	60/10/45°C (KW)	13	14	17	17	24	26
DHW PRODUCTION CAPACITY	80/10/60°C (L/H)	437	495	624	659	892	1031
	70/10/60°C (L/H)	339	397	493	528	712	851
HEATING CAPACITY	80/10/60°C (KW)	19	20	25	25	34	37
	70/10/60°C (KW)	13	14	17	17	23	26

# HORIZONTAL TWIN SOLAR

## Horizontal twin-coil tanks



### SPECIFICATION

- A** Temperature sensor capillary
- B** Solar coil return, 3/4" F thread
- C** Temperature sensor capillary
- E** Space heating coil return, 3/4" F thread
- F** Solar coil supply, 3/4" F thread
- G** Temperature sensor capillary
- I** Space heating coil supply, 3/4" F thread
- J** Temperature sensor capillary
- K** Cold water supply, 1" F thread
- L** Heating element socket, 1 1/4" F thread
- M** P/T valve, 1/2" F thread
- N** Recirculation / return, 3/4" F thread
- O** Hot water supply, 1" F thread

TYPE	150L	200L	250L	300L	400L	500L
Product code	TCPMHS-0150LFC	TCPMHS-0200NFC	TCPMHS-0250NFC	TCPMHS-0300NFC	TCPMHS-0400LFC	TCPMHS-0500LFC
DIMENSIONS*						
H1 – Overall height (mm)	1100	1100	1340	1540	1540	1900
H2 – Height from the ground (mm)	555	625	625	735	735	735
D – Diameter w/insulation (mm)	530	600	600	600	710	710
A (mm)	120	200	180	180	190	180
B (mm)	150	200	200	190	200	200
C (mm)	230	300	280	280	340	340
E (mm)	300	380	370	360	440	450
F (mm)	260	380	380	380	480	450
G (mm)	350	430	430	430	490	490
I (mm)	400	490	480	480	560	570
J (mm)	430	500	500	490	590	600
K (mm)	150	150	150	150	170	170
L (mm)	310	330	330	330	390	390
M (mm)	410	450	450	470	540	540
N (mm)	410	450	450	470	540	540
O (mm)	450	520	520	520	600	600
Weight (kg)	49	63	74	83	123	147

\* Height from the ground +/- 10mm

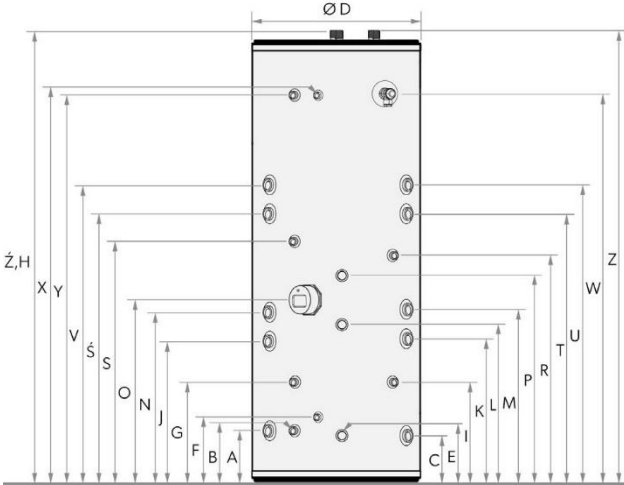
DHW TANK SPECIFICATION	150L	200L	250L	300L	400L	500L
Insulation (mm)	40	40	40	40	50	50
Max. internal pressure (bar)	6	6	6	6	6	6
Max. operating temperature (°C)	90	90	90	90	90	90
Heater	3 kW 240 V	3 kW 240 V	3 kW 240 V	3 kW 240 V	3 kW 240 V	3 kW 240 V
Energy rating	C	C	C	C	C	C
Standstill loss (W)	63	80	89	92	102	115
Coil material	AISI 316L STAINLESS STEEL					
DHW tank shell	DUPLEX STAINLESS STEEL					
External casing	POWDER-COATED SHEET STEEL					

SOLAR COIL PARAMETERS	150L	200L	250L	300L	400L	500L	
Coil surface area (m <sup>2</sup> )	0.58	0.6	0.67	0.8	1	1.2	
Coil capacity (L)	2.7	2.8	3.2	3.8	4.7	5.7	
Max. coil operating press. (bar)	6	6	6	6	6	6	
Max. coil operating temp. (°C)	90	90	90	90	90	90	
DHW PRODUCT ION CAPACITY	80/10/45°C (L/H)	692	798	915	1101	1427	1702
	70/10/45°C (L/H)	598	658	775	938	1193	1469
	60/10/45°C (L/H)	458	541	635	759	1007	1212
HEATING CAPACITY	80/10/45°C (KW)	22	24	26	32	40	47
	70/10/45°C (KW)	18	18	20	25	30	37
	60/10/45°C (KW)	12	13	14	17	22	26
DHW PRODUCT ION CAPACITY	80/10/60°C (L/H)	418	477	543	657	868	1028
	70/10/60°C (L/H)	320	379	445	526	704	848
HEATING CAPACITY	80/10/60°C (KW)	18	19	20	25	32	37
	70/10/60°C (KW)	12	13	14	17	22	26

SOLAR PARAMETERS	150L	200L	250L	300L	400L	500L	
Coil surface area (m <sup>2</sup> )	0.6	0.67	0.8	0.8	1.1	1.2	
Coil capacity (L)	2.8	3.2	3.8	3.8	5.2	5.7	
Max. coil operating press. (bar)	6	6	6	6	6	6	
Max. coil operating temp. (°C)	90	90	90	90	90	90	
DHW PRODUCT ION CAPACITY	80/10/45°C (L/H)	594	647	671	743	779	957
	70/10/45°C (L/H)	500	507	531	603	639	794
	60/10/45°C (L/H)	360	390	414	463	499	607
HEATING CAPACITY	80/10/45°C (KW)	22	24	24	26	26	32
	70/10/45°C (KW)	18	18	18	20	20	25
	60/10/45°C (KW)	12	13	13	14	14	17
DHW PRODUCT ION CAPACITY	80/10/60°C (L/H)	350	371	387	422	448	556
	70/10/60°C (L/H)	252	273	289	324	350	425
HEATING CAPACITY	80/10/60°C (KW)	18	19	19	20	20	25
	70/10/60°C (KW)	12	13	13	14	14	17

# THERMALSTORE 2.0

## Stainless steel buffer tanks with hygienic demand coil



### SPECIFICATION

- A Connection stub, 1" F thread
- B Drain stub, ½" F thread
- C Connection stub, 1" F thread
- E Solar coil return, ¾" F thread
- F Solar heat sensor capillary
- G Temperature sensor capillary
- I Temperature sensor capillary
- J Connection stub, 1" F thread
- K Connection stub, 1" F thread
- L Solar coil supply, ¾" F thread
- M Connection stub, 1" F thread
- N Connection stub, 1" F thread
- O Heating element socket, 1¾" F thread
- P Hygienic coil supply, 1" F thread
- R Temperature sensor capillary
- S Temperature sensor capillary
- Š Connection stub, 1" F thread
- Y Connection stub, 1" F thread
- U Connection stub, 1" F thread
- V Connection stub, 1" F thread
- W P/T valve, ½" F thread
- X Solar heat sensor capillary
- Y Temperature sensor capillary
- Z Hygienic coil outlet, 1" F thread
- Ž Vent stub, 1" F thread

TYPE	200L	250L	300L	400L	500L
Product code	TCSMVS-00200FC	TCSMVS-00250FC	TCSMVS-00300FC	TCSMVS-00400FC	TCSMVS-00500FC
<b>DIMENSIONS*</b>					
H – Overall height (mm)	1450	1400	1600	1570	1900
D – Diameter w/insulation (mm)	530	600	600	710	710
A (mm)	200	215	215	225	225
B (mm)	200	215	215	225	225
C (mm)	200	220	215	225	230
E (mm)	200	220	215	225	230
F (mm)	250	270	365	230	275
G (mm)	350	365	365	305	375
I (mm)	490	365	-	305	-
J (mm)	490	465	520	530	630
K (mm)	530	470	520	530	635
L (mm)	580	555	565	575	680
M (mm)	590	565	620	630	730
N (mm)	590	570	620	630	735
O (mm)	640	585	645	655	765
P (mm)	705	635	705	725	815
R (mm)	710	685	760	800	930
S (mm)	825	690	765	800	930
Š (mm)	825	790	910	920	1155
T (mm)	925	790	910	920	1155
U (mm)	925	890	1010	1020	1255
V (mm)	1210	890	1010	1020	1255
W (mm)	1210	1130	1325	1285	1640
X (mm)	1210	1130	1325	1285	1640
Y (mm)	1210	1130	1325	1285	1640
Z (mm)	1450	1400	1600	1570	1900
Ž (mm)	1450	1400	1600	1570	1900
Weight (kg)	43	55	64	71	87

\* Height from the ground +/- 10mm

DHW TANK SPECIFICATION	200L	250L	300L	400L	500L
Insulation (mm)	40	40	40	50	50
Max. internal pressure (bar)	6	6	6	6	6
Max. operating temperature (°C)	90	90	90	90	90
Heater	3 kW 240 V	3 kW 240 V	3 kW 240 V	3 kW 240 V	3 kW 240 V
Energy rating	C	C	C	C	C
Standstill loss (W)	83	91	96	102	115
Coil material	AISI 316L STAINLESS STEEL				
DHW tank shell	DUPLEX STAINLESS STEEL				
External casing	POWDER-COATED SHEET STEEL				

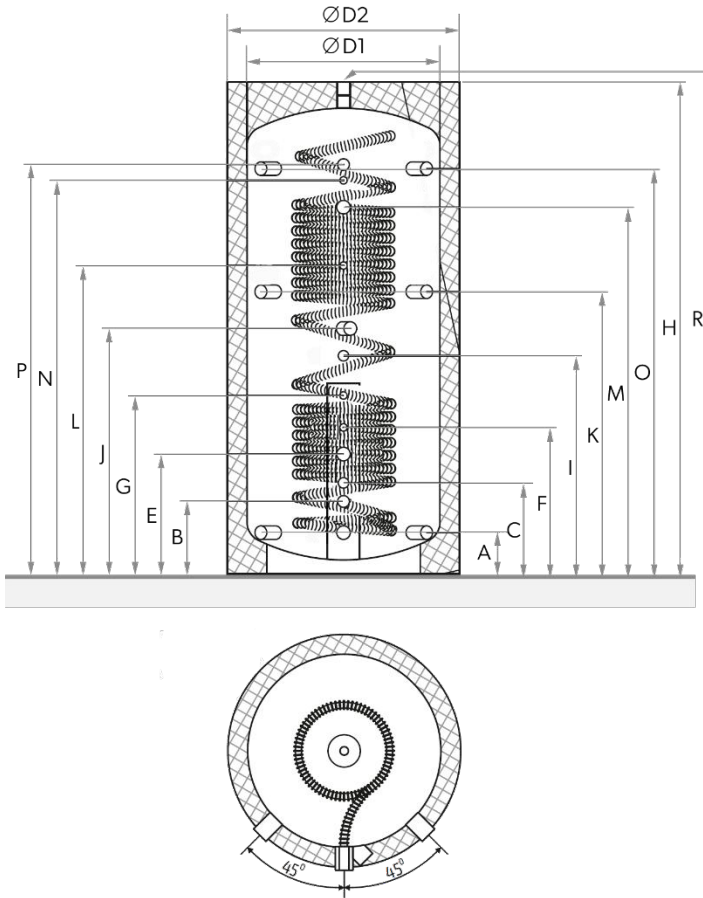
SOLAR COIL PARAMETERS	200L	250L	300L	400L	500L
Coil surface area (m <sup>2</sup> )	2.3	2.3	2.3	2.3	3.45
Coil capacity (L)	10.5	10.5	10.5	10.5	15.7
Max. coil operating press. (bar)	6	6	6	6	6
Max. coil operating temp. (°C)	90	90	90	90	90

SOLAR PARAMETERS	200L	250L	300L	400L	500L
Coil surface area (m <sup>2</sup> )	1	1	1	1	1.15
Coil capacity (L)	4.7	4.7	4.7	4.7	5.3
Max. coil operating press. (bar)	6	6	6	6	6
Max. coil operating temp. (°C)	90	90	90	90	90

DHW PRODUCTION CAPACITY	80/10/45°C (L/H)	1168	1236	1288	1411	1680
	70/10/45°C (L/H)	934	1002	1054	1177	1446
	60/10/45°C (L/H)	748	816	868	991	1190
HEATING CAPACITY	80/10/45°C (KW)	40	40	40	40	46
	70/10/45°C (KW)	30	30	30	30	36
	60/10/45°C (KW)	22	22	22	22	25
DHW PRODUCT ION CAPACITY	80/10/60°C (L/H)	987	735	771	857	1012
	70/10/60°C (L/H)	523	571	607	693	833
HEATING CAPACITY	80/10/60°C (KW)	32	32	32	32	36
	70/10/60°C (KW)	22	22	22	22	25

# THERMALSTORE BLACK

Black buffer tanks with stainless steel demand coil



## SPECIFICATION

- |   |   |
|---|---|
| <b>A</b> Connection stub, 6/4" F thread       | <b>K</b> Connection stub, 6/4" thread         |
| <b>B</b> Cold water supply, 1" thread         | <b>L</b> Thermometer/sensor stub, 1/2" thread |
| <b>C</b> Heating medium return, 1" thread     | <b>M</b> Connection stub, 6/4" thread         |
| <b>E</b> Connection stub, 6/4" F thread       | <b>N</b> Thermometer/sensor stub, 1/2" thread |
| <b>F</b> Thermometer/sensor stub, 1/2" thread | <b>O</b> Connection stub, 6/4" thread         |
| <b>G</b> Thermometer/sensor stub, 1/2" thread | <b>P</b> Hot water supply, 1" thread          |
| <b>I</b> Heating medium supply, 1" thread     | <b>R</b> Tank vent, 6/4" thread               |
| <b>J</b> Electric heater port, 6/4" thread    |   |

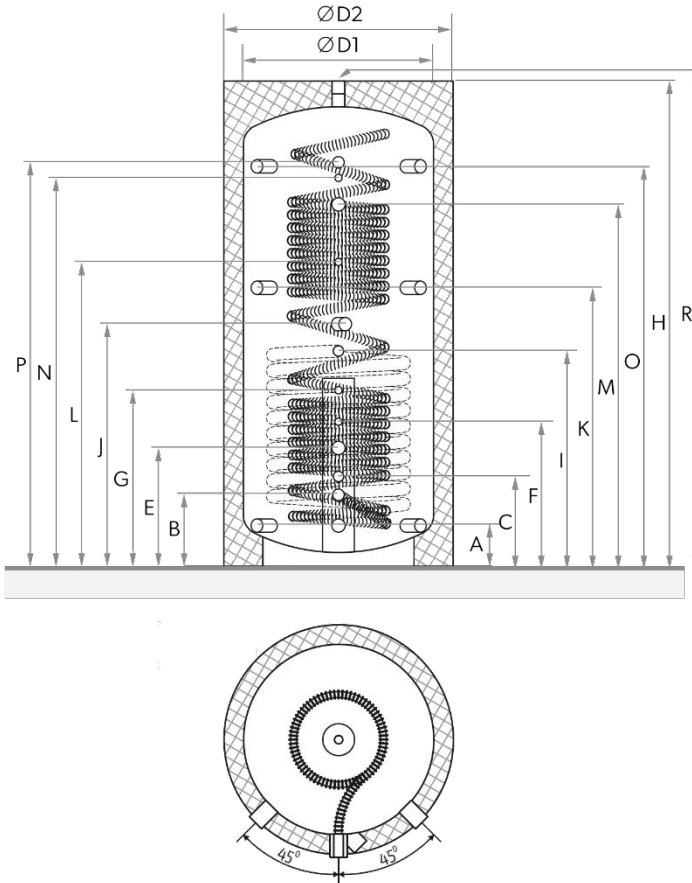
TYPE	500L	800L	1000L	1500L
Product code	TCSMVD-0500F	TCSMVD-0800F	TCSMVD-1000F	TCSMVD-1500F
<b>DIMENSIONS*</b>				
H – Overall height (mm)	1750	1890	2090	2220
ØD1 – Diameter w/o insulation (mm)	650	790	790	1000
ØD2 - Diameter w/insulation	850	990	990	1200
A (mm)	150	170	170	235
B (mm)	250	270	310	345
C (mm)	325	350	390	445
E (mm)	430	470	500	690
F (mm)	540	590	620	800
G (mm)	650	710	770	920
I (mm)	775	845	930	1045
J (mm)	900	930	1050	1280
K (mm)	1030	1050	1210	1450
L (mm)	1140	1160	1320	1520
M (mm)	1360	1410	1510	1720
N (mm)	1420	1520	1700	1790
O (mm)	1450	1550	1740	1820
P (mm)	1480	1580	1760	1850
R (mm)	1750	1890	2090	2220
Weight (kg)	131	171	182	289

\* Height from the ground +/- 20mm

TANK SPECIFICATION	500L	800L	1000L	1500L
Actual capacity (l)	478	780	880	
DHW coil surface area (m <sup>2</sup> )	5.5	6.11	6.1125	9.9
DHW coil capacity (L)	22	25	25	40
Max. tank internal pressure & temperature (°C /bar)	95/3	95/3	95/3	95/3
Max. DHW coil internal pressure & temperature (°C /bar)	95/6	95/6	95/6	95/6
Continuous DHW production capacity 10/45°C\buffer tank primed to DHW 65°C	1080/44	1840/75	1840/75	2800/114
Continuous DHW production capacity 10/38°C, buffer tank primed to DHW 65°C (l/h) (kW)	1350/44	2300/75	2300/75	3500/114
DHW discharge capacity 10/38°C, buffer tank heated to 65°C (L)	375	580	790	1150
ΔT – temperature difference between the buffer tank and DHW at 30/40/50 l/min	6/8/12	3.5/5/8	3.5/5/8	2/3/5
Insulation type/material	REMOVABLE/FIBRE			
Energy rating	C	C	C	C

# THERMALSTORE BLACK 1

Black buffer tanks with stainless steel demand coil + single black coil



## SPECIFICATION

- |   |   |
|---|---|
| <b>A</b> Connection stub, 6/4" F thread       | <b>K</b> Connection stub, 6/4" thread         |
| <b>B</b> Cold water supply, 1" thread         | <b>L</b> Thermometer/sensor stub, 1/2" thread |
| <b>C</b> Lower coil return, 1" thread         | <b>M</b> Connection stub, 6/4" thread         |
| <b>E</b> Connection stub, 6/4" F thread       | <b>N</b> Thermometer/sensor stub, 1/2" thread |
| <b>F</b> Thermometer/sensor stub, 1/2" thread | <b>O</b> Connection stub, 6/4" thread         |
| <b>G</b> Thermometer/sensor stub, 1/2" thread | <b>P</b> Hot water supply, 1" thread          |
| <b>I</b> Lower coil supply, 1" thread         | <b>R</b> Tank vent, 6/4" thread               |
| <b>J</b> Electric heater port, 6/4" thread    |   |



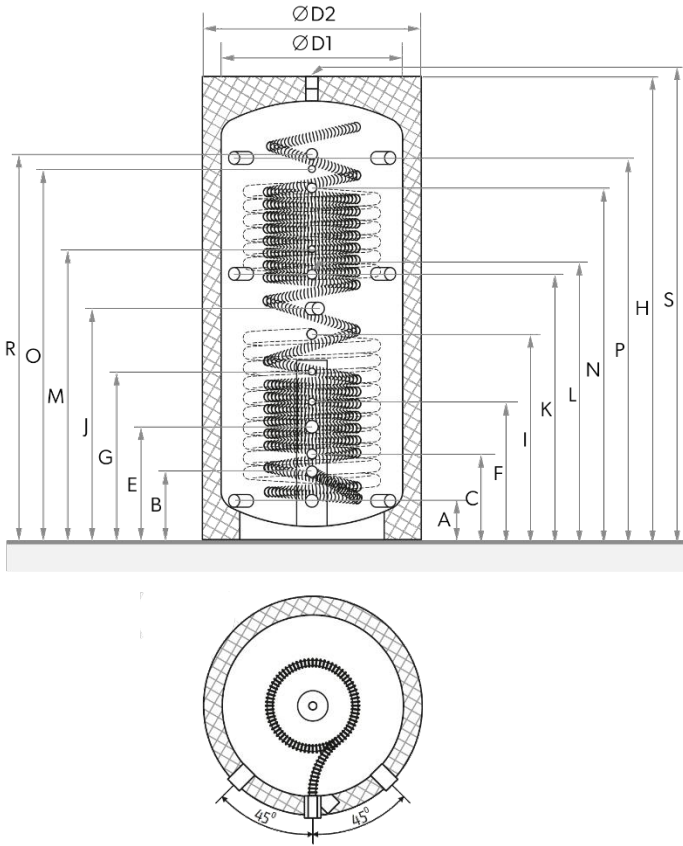
TYPE	500L	800L	1000L	1500L
Product code	TCSMVI-0500F	TCSMVI-0800F	TCSMVI-1000F	TCSMVI-1500F
<b>DIMENSIONS*</b>				
H – Overall height (mm)	1750	1890	2090	2220
ØD1 – Diameter w/o insulation (mm)	650	790	790	1000
ØD2 - Diameter w/insulation	850	990	990	1200
A (mm)	150	170	170	235
B (mm)	250	270	310	345
C (mm)	325	350	390	445
E (mm)	430	470	500	690
F (mm)	540	590	620	800
G (mm)	650	710	770	920
I (mm)	775	845	930	1045
J (mm)	900	930	1050	1280
K (mm)	1030	1050	1210	1450
L (mm)	1140	1160	1320	1520
M (mm)	1360	1410	1510	1720
N (mm)	1420	1520	1700	1790
O (mm)	1450	1550	1740	1820
P (mm)	1480	1580	1760	1850
R (mm)	1750	1890	2090	2220
Weight (kg)	131	171	182	289

\* Height from the ground +/- 20mm

TANK SPECIFICATION	500L	800L	1000L	1500L
Actual capacity (l)	471	762	859	1427
DHW coil surface area (m <sup>2</sup> )	5.5	6.11	6.1125	9.9
DHW coil capacity (L)	22	25	25	40
Lower coil surface area (m <sup>2</sup> )	1.7	2.9	3.0	3.4
Lower coil capacity (L)	10.5	17.9	18.5	21
Max. tank internal pressure & temperature (°C /bar)	95/3	95/3	95/3	95/3
Max. DHW coil internal pressure & temperature (°C /bar)	95/6	95/6	95/6	95/6
Max. lower coil internal pressure & temperature (°C /bar)	110/16	110/16	110/16	110/16
Continuous DHW production capacity 10/45°C\buffer tank primed to DHW 65°C	1080/44	1840/75	1840/75	2800/114
Continuous DHW production capacity 10/38°C, buffer tank primed to DHW 65°C (l/h) (kW)	1350/44	2300/75	2300/75	3500/114
DHW discharge capacity 10/38°C, buffer tank heated to 65°C (L)	375	580	790	1150
ΔT – temperature difference between the buffer tank and DHW at 30/40/50 l/min	6/8/12	3.5/5/8	3.5/5/8	2/3/5
Insulation type/material	REMOVABLE/FIBRE			
Energy rating	C	C	C	C

# THERMALSTORE BLACK 2

Black buffer tanks with stainless steel demand coil + two black coils



## SPECIFICATION

- |   |   |
|---|---|
| <b>A</b> Connection stub, 6/4" F thread       | <b>K</b> Connection stub, 6/4" thread         |
| <b>B</b> Cold water supply, 1" thread         | <b>L</b> Upper coil return, 1" thread         |
| <b>C</b> Lower coil return, 1" thread         | <b>M</b> Thermometer/sensor stub, 1/2" thread |
| <b>E</b> Connection stub, 6/4" F thread       | <b>N</b> Upper coil supply, 1" thread         |
| <b>F</b> Thermometer/sensor stub, 1/2" thread | <b>O</b> Thermometer/sensor stub, 1/2" thread |
| <b>G</b> Thermometer/sensor stub, 1/2" thread | <b>P</b> Connection stub, 6/4" thread         |
| <b>I</b> Lower coil supply, 1" thread         | <b>R</b> Hot water supply, 1" thread          |
| <b>J</b> Electric heater port, 6/4" thread    | <b>S</b> Tank vent, 6/4" thread               |

TYPE	500L	800L	1000L	1500L
Product code	TCSMVS-0500F	TCSMVS-0800F	TCSMVS-1000F	TCSMVS-1500F
<b>DIMENSIONS*</b>				
H – Overall height (mm)	1750	1890	2090	2220
ØD1 – Diameter w/o insulation (mm)	650	790	790	1000
ØD2 - Diameter w/insulation	850	990	990	1200
A (mm)	150	170	170	235
B (mm)	250	270	310	345
C (mm)	325	350	390	445
E (mm)	430	470	500	690
F (mm)	540	590	620	800
G (mm)	650	710	770	920
I (mm)	775	845	930	1045
J (mm)	900	930	1050	1280
K (mm)	1030	1050	1210	1450
L (mm)	1030	1050	1210	1450
M (mm)	1140	1160	1320	1520
N (mm)	1360	1410	1510	1720
O (mm)	1420	1520	1700	1790
P (mm)	1450	1550	1740	1820
R (mm)	1480	1580	1760	1850
S (mm)	1750	1890	2090	2220
Weight (kg)	176	229	248	375

\* Height from the ground +/- 20mm

TANK SPECIFICATION	500L	800L	1000L	1500L
Actual capacity (l)	465	748	847	1402
DHW coil surface area (m <sup>2</sup> )	5.5	6.11	6.1125	9.9
DHW coil capacity (L)	22	25	25	40
Lower coil surface area (m <sup>2</sup> )	1.7	2.9	3.0	3.4
Lower coil capacity (L)	10.5	17.9	18.5	21
Upper coil surface area (m <sup>2</sup> )	1.0	1.8	2.0	2.4
Upper coil capacity (L)	6.5	11.1	12.3	14.8
Max. tank internal pressure & temperature (°C /bar)	95/3	95/3	95/3	95/3
Max. DHW coil internal pressure & temperature (°C /bar)	95/6	95/6	95/6	95/6
Max. upper/lower coil internal pressure & temperature (°C /bar)	110/16	110/16	110/16	110/16
Continuous DHW production capacity 10/45°C\buffer tank primed to DHW 65°C	1080/44	1840/75	1840/75	2800/114
Continuous DHW production capacity 10/38°C, buffer tank primed to DHW 65°C (l/h) (kW)	1350/44	2300/75	2300/75	3500/114
DHW discharge capacity 10/38°C, buffer tank heated to 65°C (L)	375	580	790	1150
ΔT – temperature difference between the buffer tank and DHW at 30/40/50 l/min	6/8/12	3.5/5/8	3.5/5/8	2/3/5
Insulation type/material	REMOVABLE/FIBRE			
Energy rating	C	C	C	C

## The Warranty applies to the following models:

DIRECT

INDIRECT

INDIRECT (extra heavy insulation with a higher energy rating)

INDIRECT TOP CONNECTION

INDIRECT WALL HUNG

TWIN SOLAR

TWIN SOLAR (extra heavy insulation with a higher energy rating)

TRIPLE

TRIPLE HEAT PUMP

HEAT PUMP

HEAT PUMP + SOLAR

TANK ON TANK

BUFFER

BUFER HP

HORIZONTAL INDIRECT

HORIZONTAL TWIN SOLAR

THERMALSTORE 2.0

THERMALSTORE BLACK

THERMALSTORE BLACK 1

THERMALSTORE BLACK 2

**! CAUTION!**

**Always make sure to keep the proof of product purchase.**

Joule Polska Sp. z o.o., with its registered office in Wrocław 53-611, street address ul. Strzegomska 55D, incorporated in the Register of Entrepreneurs of the National Court Register (KRS) managed by the District Court for Wrocław Fabryczna in Wrocław, 6th Commercial Division of the National Court Register (KRS) under KRS 0000435783, NIP (tax ID) 7151934891, REGON (statistical business ID) 061469850, (hereinafter “Joule”) provides a commercial warranty the terms and conditions (“T&C”) follow (henceforth, “Warranty”).

1. Joule provides this Warranty of performance of the units sold with the Warranty period established below:
  - **12 years of warranty** on seal integrity of DHW tanks made of stainless steel and with a maximum capacity of 500L.
  - **5 years of warranty** on seal integrity of DHW tanks made of AISI 316L stainless steel and with a maximum capacity in excess of 500L.
  - **12 months of warranty** on the DHW tank trim, which is:
    - » Heating element: provided that the unit has only been operated for private home use (otherwise than commercial or industrial) in a DHW system.
    - » Factory-installed pressure/temperature safety valve.
  - **5 years of warranty** for the THERMAL STORE BLACK, THERMALSTORE BLACK or THERMALSTORE BLACK 2 DHW storage heaters.
  - **24 months of warranty** for the external casing of the tank.

## ! CAUTION!

Only the buyers who are natural persons are eligible for the heating element warranty.

2. During the Warranty period, the user has the right to claim free repairs for all defects attributable to the manufacturer of the unit.
3. This Warranty becomes effective only from the installation date which is within 6 months of the date of original purchase.
4. Joule shall not be liable for any warranty concerning defective performance of the unit which is attributable to any operation in violation of the Operating Manual or any unauthorized repairs or alterations, or any damage the cause of which is not attributable to the manufacturer. This Warranty does not cover any defects caused by external factors beyond any reasonable control of the manufacturer. Such factors may include the mineral load (hardness) of water and scale deposits which shall be routinely removed from the unit by its user.

Scale deposits inhibit the operating performance of the DHW tank and may result in the loss of its seal integrity. The maximum concentration of chemical/mineral compounds, expressed in mg/l of the water supply for the DHW tank that is permitted under this Warranty is:

- Total dissolved content **600 mg/l**.
- Chlorides **250 mg/l**.
- Magnesium **10 mg/l**.
- Water pH from **6.5 to 9.5**.
- Sodium **150 mg/l**.
- Total water hardness as CaCO<sub>3</sub>: **max. 250 mg/l**.
- Sulphates **200 mg/l**.
- Specific conductivity: **max. 400 µS/cm at 25°C**.

The buyer shall provide the latest valid water analysis results on request from Joule.

- The water analysis results must concern the water supply output by the DHW tank.

## **Warranty exclusions:**

- All secondary damage caused damage or failure of the DHW tank.
- Leaks through the sheet metal shell or welds caused by aggressive chemicals.
- Any consequences of scale deposits.
- Irreversible or reversible damage of the DHW tank caused by the water hardness and/or chemical content.
- Damage caused by non-intended use or any operation in violation of the prevailing good operating practice of this unit type.
- All damage attributable to the user.
- All products found to be altered, modified, repaired or redesigned without authorization.
- Damage attributable to electrical power outages.
- Damage caused by mains overvoltage/surge, lightning storms, flooding, fire and similar acts of force majeure.
- Damage attributable to poor installation/assembly of the unit.
- Consumables and all other components subject to natural wear and tear.
- Any additional equipment to be provided by the unit's installer required for proper installation of the DHW tank.
- Corrosion of the metallic shell of the DHW tank caused by flooding with water, condensation of indoor moisture, and/or damage during the installation, transport, handling or operation.

## **Further Warranty exclusions:**

- DHW tank leaks attributable to:
  - a. Poor installation.
    - » Installation of any additional equipment, like pumps or similar units, directly on the stubs of the DHW tank.
    - » Using galvanised fittings.
    - » Using too much sealant in the connections, e.g. tow.
    - » Tearing of connection stubs; all thread reduction pieces must be never be installed directly on the DHW tank stubs.

- b. Other.
  - » Selecting a membrane expansion vessel with an insufficient area for the system.
  - » Poorly prepared or non-level flooring under the DHW tank.
  - » Operation of the DHW tank connected to a galvanised pressure booster.
  - » Missing or poor PE connection of the DHW tank.
  - » Casing corrosion attributable to poor operation or storage.
  - » Any aggressive environment generated by a water softener unit. Notify your water softener unit supplier to specify the correct treated water parameters for your DHW tank.

## ! WARNING!

**A poor or missing PE of the DHW tank may result in galvanic corrosion, not unlike poor quality of the water supply.**

If the water quality parameters miss the standard values in Section 4 the DHW tank PE is poor or missing, the manufacturer may require adding a titanium sacrificial electrode at the expense of the user.

- Pressure relief valve leaks attributable to:
  - a. High pressure in the water mains (> 6 bar)
  - b. Installation of the DHW tank in a system without a membrane expansion vessel or with a poorly specified membrane expansion vessel.
  - c. Installation of a water pressure regulating valve without a membrane expansion vessel.
  - d. Operation of a membrane expansion vessel with the air cushion at a poor or atmospheric pressure.
  
- Damage attributable to poor handling (never handle or transport the DHW tanks laid flat) or storage.
- Damage from freezing.
- Damage caused by fortuitous events or force majeure.
- Failure of the heating element attributable to:
  - a. Chemical compounds in the water.
  - b. Stray electrical currents.
  - c. Poor water hardness.
  - d. Galvanic corrosion, resulting in breakdown of the element's tube.

5. All defects claimed will be rectified in 14 days from the date on which Joule Poland accepts the claim, provided that the claim processing can be protracted by random events beyond any reasonable control of Joule Poland.
6. Claim your Warranty rights to:
  - The reseller of your product.
  - Directly to the manufacturer on <https://joule.pl/serwis>
  - Directly to the manufacturer on by e-mail to [biuro@joule-pl.pl](mailto:biuro@joule-pl.pl)
7. The buyer has the right to claim replacement of the product for a new one or a credit equal to the price of original purchase if the factory defect found and claimed cannot be reasonably rectified.
8. You may claim your Warranty rights only by serving a valid Warranty Certificate. The installer records the installation date of the product in the Warranty Certificate. This Warranty period begins on the installation date of the product which is within 6 months of the date of original purchase. The Warranty Certificate shall be deemed invalid if not duly filled or showing any evidence of alteration.
9. The user will be charged with all costs arising from each service claim the user makes for a warranty repair which is found to be unreasonable.

## 10. Basic product maintenance includes:

- Keeping the exchanger clean.
- Functional testing of the pressure relief valve every month and according to the Manual.
- Verifying that air cushion pressure in the membrane expansion tank is as specified by the manufacturer.

## 11. The manufacturer will not accept any liability for:

- Injury or damage reasonably attributable to misuse or poor practice of operating the unit, its poor installation, or failure to comply with the manufacturer's Manual.
- Any costs resulting from poor service access of any components or parts.
- Damage caused by transport. Before accepting the product delivery from the forwarder, inspect the unit. If the delivery is questionable in any way, file a complaint with the forwarder, with a copy submitted to Joule Poland.
- Damage caused to the product which has remained out of service for more than 60 days without interruption.



## 12. The specific rights of the buyer and Joule are established in the Polish Civil Code.

- The material used in the production of DHW tanks by Joule, which is duplex stainless steel.
- The material used in the production of stubs and coils, which is AISI 316L stainless steel.
- Note that your Warranty rights will not be honoured if the first-year inspection of the DHW tank is not completed.
- The first-year inspection shall be completed in 15 days after the first year of operation.
- The first-year inspection is payable by the DHW tank owner.
- The first-year inspection must be ordered from the Joule Service.
- The first-year inspection must follow the Post-Installation Checklist specified in the Operating Manual.







#### **OFFICE**

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Submit your Warranty claims online using our website  
[joule.pl](http://joule.pl) > **Serwis tab**  
or directly by e-mail to [biuro@joule-pl.pl](mailto:biuro@joule-pl.pl).

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