

# DHW PRODUCTION TANKS

ELECTRIC - U-TUBE HEATER

ENERGY RECOVERY FROM HEAT PUMP - DUAL VERSION

"PREFERENCE" RANGE - FROM 300 TO 6 000L



CE compliance  
• 2014/68/UE  
• 2014/35/UE



U-tube heaters



Immersion heaters or electric cartridges



"RC" internal coating (WRAS approved material)

## DESCRIPTION

### Description

#### Common features for all versions:

- Vertical carbon steel tank with 3 feet.
- Capacity from 300 to 6 000L.
- Maximum working pressure = 7 bar - Test pressure = 10 bar.
- Tappings (in accordance with the following diagram).
- Ø 400 mm inspection manhole up to 4 000L<sup>(1)</sup>, Ø 500 mm for 5 000 et 6 000L (Ø 250 mm handhole for 300 litres).
- External anti-rust paint.
- "RC851" internal coating (WRAS, maximum temp = 85°C).
- Magnesium protection anode(s) with wear indicator.
- Removable thermal insulation (including the inspection manhole and the bottom of the tank):
  - Fire proof rating : M1 (Euroclass B): 60 mm mineral wool ( $\lambda = 0,032 \text{ W/m/K} - 32 \text{ kg/m}^3$ ) + flexible PVC jacket.
  - Fire proof rating : M0 (Euroclass A2): 50 mm rockwool ( $\lambda = 0,034 \text{ W/m/K} - 40 \text{ kg/m}^3$ ) + Isoxal metal sheet jacket.

<sup>(1)</sup>Note : Compliant with the recommendations of the French General Directorate for Health.

#### Electric or dual version only :

- Reinforced 825 incoloy resistor(s).
- Power :
  - 3 to 12 kW : 230/400 V three-phase;
  - > 12 kW : 400/700 V three-phase.
- Attachment : 3 to 12 kW : DN40 / > 12 kW : M77.
- Immersion heater fixing on the manhole.
- Temperature control :
  - Electrical power ≤ 20 kW : Three-phase control/safety box 30 A,

400 V, fitted to the top of the immersion heater (double safety thermostat + connected switch).  
- Electrical power > 20 kW : Double unipolar safety thermostat.

#### Electric cartridge(s) version :

- Removable, supplied in a stainless steel sleeve.
- Low head loss (6 W/cm<sup>2</sup>).
- M77 connection.
- Double unipolar safety thermostat.
- Cylinder lock on the manhole or/and on the tank.

#### U-tube heater ou dual version only :

- Removable U-tube heater with bundle made of 316 L stainless steel, fixed onto the Ø 400 mm inspection manhole.
- Input/output DN32F or DN50F + DN8F purge.
- Primary system = 90/70°C - Secondary system = 10/60°C.
- $\Delta p \leq 0,25 \text{ m CE}$ .
- Class B heater, compliant with article 16.9 of the French General Directorate for Health.

#### Options

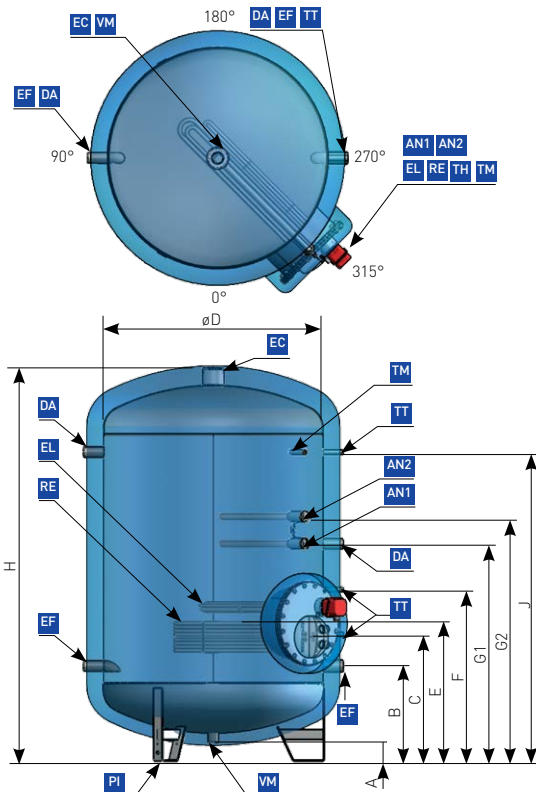
- Accessories kit (thermometer, DN25 safety valve, DN50 drainage valve, air vent valve).
- "RC951" finish (T-max = 95°C peak).
- Upon request : non-standard capacity, dimensions, working pressure and tappings implantation.

#### Warranties (in accordance with our general conditions of sale)

- Tank and heater = 5 years.
- Other items = 1 year.

NEW  
Electric enamelled version  
also available ("Glass Lined" range)

## DIMENSIONS



- AN1** Threaded tapping 40/49 for anode
- AN2** Threaded tapping 40/49 for 2<sup>nd</sup> anode ( $V \geq 4 \text{ m}^3$ )
- DA** Outlet/loop return (DN50 G ext. thread)
- EC** Hot water outlet (DN50 threaded up to 4.000L / DN80 flat flange for 5 000 and 6 000L)
- EF** Cold water inlet (DN50 threaded G)
- EL** Electric heater
- PI** Support feet
- TH** Ø 400 mm manhole (Ø 250 mm handhole for 300 litres)
- TM** Tapping 15/21 for thermometer (DN15 G int. thread)
- TT** Threaded tappings 15/21 for thermostat (or PT100 probe) (DN15 G int. thread)
- RE** U-tube heater
- VM** Threaded drainage outlet (DN50 G ext. thread)

Cap. (litres)	A	B	C	ØD	E	F	G1	G2	H	J	Weight (kg)
300	90	395	545	550	565	685	850	-	1535	1155	95
500	90	410	560	650	660	860	1030	-	1820	1420	140
750	90	440	590	800	690	890	1060	-	1880	1450	175
1 000H <sup>(1)</sup>	90	440	590	800	690	890	1330	-	2430	2000	210
1 000B <sup>(1)</sup>	90	475	650	950	725	925	1100	-	1960	1485	235
1 500H <sup>(1)</sup>	90	475	650	950	725	925	1100	-	2510	2035	280
1 500B <sup>(1)</sup>	90	510	685	1100	760	960	1160	-	2020	1520	290
2 000H <sup>(1)</sup>	90	510	685	1100	760	960	1400	-	2570	2070	345
2 000B <sup>(1)</sup>	90	560	745	1300	810	1010	1220	-	2110	1570	400
2 500	90	560	745	1300	810	1010	1280	-	2350	1820	430
3 000	90	560	745	1300	810	1010	1450	-	2660	2120	470
4 000	110	630	855	1500	860	1060	1530	1780	2790	2185	680
5 000	110	630	855	1500	860	1060	1880	2130	3490	2805	790
6 000	110	630	855	1500	860	1060	2160	2410	3990	3305	890

AVAILABLE MODELS AND PRICES

Electric version (immersion heater(s)):

Cap. (litres)	Power (Nb x kW)	Reference with 60 mm-M1 jacket		Reference with 50 mm-M0 jacket	
		With manhole <sup>(2)</sup>	Without manhole	With manhole <sup>(2)</sup>	Without manhole
300	3 (1 x 3)	PRE030M1B	PRE030M1	PRE030MOB	PRE030M0
500	6 (1 x 6)	PRE050M1V	PRE050M1	PRE050MOV	PRE050M0
750	9 (1 x 9)	PRE075M1V	PRE075M1	PRE075MOV	PRE075M0
1000H <sup>(1)</sup>	12 (1 x 12)	PRE100M1HV	PRE100M1H	PRE100M0HV	PRE100M0H
1000B <sup>(1)</sup>	12 (1 x 12)	PRE100M1BV	PRE100M1B	PRE100M0BV	PRE100M0B
1500H <sup>(1)</sup>	15 (1 x 15)	PRE150M1HV	PRE150M1H	PRE150M0HV	PRE150M0H
1500B <sup>(1)</sup>	15 (1 x 15)	PRE150M1BV	PRE150M1B	PRE150M0BV	PRE150M0B
2000H <sup>(1)</sup>	20 (1 x 20)	PRE200M1HV	PRE200M1H	PRE200M0HV	PRE200M0H
2000B <sup>(1)</sup>	20 (1 x 20)	PRE200M1BV	PRE200M1B	PRE200M0BV	PRE200M0B
2500	24 (1 x 24)	PRE250M1V	PRE250M1	PRE250MOV	PRE250M0
3000	30 (1 x 30)	PRE300M1V	PRE300M1	PRE300MOV	PRE300M0
4000	40 (2 x 20)	PRE400M1V	-	PRE400MOV	-
5000	48 (2 x 24)	PRE500M1V	-	PRE500MOV	-
6000	60 (2 x 30)	PRE600M1V	-	PRE600MOV	-



Heating from 10 to 60°C in 6 hours  
Thermostat (tri-phased for power ≤ 20 kW, unipolar beyond that)

Electric version (electric cartridge(s)):

Cap. (litres)	Power (Nb x kW)	Reference with 60 mm-M1 jacket	Reference with 50 mm-M0 jacket
500	4,5 (1 x 4,5)	PRB050M1V	PRB050MOV
750	6 (1 x 6)	PRB075M1V	PRB075MOV
1000H <sup>(1)</sup>	7,5 (1 x 7,5)	PRB100M1HV	PRB100M0HV
1000B <sup>(1)</sup>	7,5 (1 x 7,5)	PRB100M1BV	PRB100M0BV
1500H <sup>(1)</sup>	15 (6 + 9)	PRB150M1HV	PRB150M0HV
1500B <sup>(1)</sup>	15 (6 + 9)	PRB150M1BV	PRB150M0BV
2000H <sup>(1)</sup>	18 (2 x 9)	PRB200M1HV	PRB200M0HV
2000B <sup>(1)</sup>	18 (2 x 9)	PRB200M1BV	PRB200M0BV
2500	27 (3 x 9)	PRB250M1V	PRB250MOV
3000	27 (3 x 9)	PRB300M1V	PRB300MOV
4000	36 (4 x 9)	PRB400M1V	PRB400MOV
5000	45 (5 x 9)	PRB500M1V	PRB500MOV
6000	54 (6 x 9)	PRB600M1V	PRB600MOV



Heating from 10 to 60°C on 6 hours  
Unipolar thermostat

Version U-tube heater :

Cap. (litres)	Heater power (kW)	Flow rate (m3/h)	Head loss (mWC) <sup>(3)</sup>	Surface area (m2)	Reference with 60 mm-M1 jacket <sup>(2)</sup>	Reference with 50 mm-M0 jacket <sup>(2)</sup>
300	12	0,3	0,1	0,22	PRR030M1B	PRR030M0B
500	12	0,7	0,1	0,58	PRR050M1V	PRR050M0V
750	25	1,1	0,15	0,98	PRR075M1V	PRR075M0V
1000H <sup>(1)</sup>	25	1,1	0,15	0,98	PRR100M1HV	PRR100M0HV
1000B <sup>(1)</sup>	25	1,1	0,15	0,98	PRR100M1BV	PRR100M0BV
1500H <sup>(1)</sup>	34	1,5	0,2	1,8	PRR150M1HV	PRR150M0HV
1500B <sup>(1)</sup>	34	1,5	0,2	1,33	PRR150M1BV	PRR150M0BV
2000H <sup>(1)</sup>	58	2,5	0,35	2,5	PRR200M1HV	PRR200M0HV
2000B <sup>(1)</sup>	58	2,5	0,45	2	PRR200M1BV	PRR200M0BV
2500	58	2,5	0,45	2	PRR250M1V	PRR250M0V
3000	58	2,5	0,45	2	PRR300M1V	PRR300M0V
4000	124	5,4	1,3	3,87	PRR400M1V	PRR400M0V
5000	124	5,4	1,3	3,87	PRR500M1V	PRR500M0V
6000	124	5,4	1,3	3,87	PRR600M1V	PRR600M0V



Primary heater = 90/70°C  
Secondary heater DHW = 10/60°C  
Tapping I/O = DN32

<sup>(1)</sup> H = High version ; B = Low version - <sup>(2)</sup> Ø 250 mm handhole for 300 litres

<sup>(3)</sup> mWC = Meter of water column.

## Dual version (immersion heater + U-tube heater):

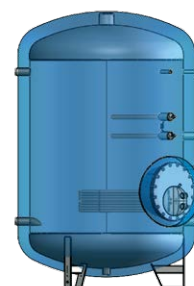
Cap. (litres)	Power (Nb x kW)	Heater power (kW)*	Reference 60 mm-M1 jacket <sup>(2)</sup>	Reference 60 mm-M1 jacket <sup>(2)</sup>
300	3 (1 x 3)	12	PRM030M1B	PRM030M0B
500	6 (1 x 6)	12	PRM050M1V	PRM050M0V
750	9 (1 x 9)	25	PRM075M1V	PRM075M0V
1 000H <sup>(1)</sup>	12 (1 x 12)	25	PRM100M1HV	PRM100M0HV
1 000B <sup>(1)</sup>	12 (1 x 12)	25	PRM100M1BV	PRM100M0BV
1 500H <sup>(1)</sup>	15 (1 x 15)	34	PRM150M1HV	PRM150M0HV
1 500B <sup>(1)</sup>	15 (1 x 15)	34	PRM150M1BV	PRM150M0BV
2 000H <sup>(1)</sup>	20 (1 x 20)	58	PRM200M1HV	PRM200M0HV
2 000B <sup>(1)</sup>	20 (1 x 20)	58	PRM200M1BV	PRM200M0BV
2 500	24 (1 x 24)	58	PRM250M1V	PRM250M0V
3 000	30 (1 x 30)	58	PRM300M1V	PRM300M0V
4 000	40 (2 x 20)	124	PRM400M1V	PRM400M0V
5 000	48 (2 x 24)	124	PRM500M1V	PRM500M0V
6 000	60 (2 x 30)	124	PRM600M1V	PRM600M0V



Heating from 10 to 60°C in 6H  
 Thermostat (tri-phased power ≤ 20 kW)  
 Heater :  
 Primary regime=90/70°C - DHW=10/60°C

## "RECUPAC" heater version (energy recovery via a heat pump):

Cap. (litres)	Heater power (kW)	Tapping I/O	Flow rate (m3/h)	Head loss (mWC) <sup>(3)</sup>	Surface area (m2)	Ref. 100 mm-M1 jacket <sup>(2)</sup>	Ref. 100 mm-M0 jacket <sup>(2)</sup>
500	18	DN32	3,5	0,6	1,72	PRC050M11V	PRC050M01V
750	35	DN65	4,5	0,2	4,1	PRC075M11V	PRC075M01V
1 000H <sup>(1)</sup>	35	DN65	4,5	0,2	4,1	PRC100M11HV	PRC100M01HV
1 000B <sup>(1)</sup>	35	DN65	4,5	0,2	4,1	PRC100M11BV	PRC100M01BV
1 500H <sup>(1)</sup>	35	DN65	4,5	0,2	4,1	PRC150M11HV	PRC150M01HV
1 500B <sup>(1)</sup>	40	DN65	5,1	0,3	4	PRC150M11BV	PRC150M01BV
2 000H <sup>(1)</sup>	45	DN65	5,8	0,4	4,5	PRC200M11HV	PRC200M01HV
2 000B <sup>(1)</sup>	45	DN65	5,8	0,4	4,56	PRC200M11BV	PRC200M01BV
2 500	50	DN65	6,3	0,4	5,1	PRC250M11V	PRC250M01V
3 000	50	DN65	6,3	0,4	5,1	PRC300M11V	PRC300M01V
4 000	60	DN65	7,7	0,7	5,9	PRC400M11V	PRC400M01V
5 000	60	DN65	7,7	0,7	5,9	PRC500M11V	PRC500M01V
6 000	60	DN65	7,7	0,7	5,9	PRC600M11V	PRC600M01V



Primary (glycol water 30%) = 55/47,5°  
 Secondary = 10/45°C

\*Technical characteristics of the U-tube heater (flow rate (m3/h), head loss (mWC) and surface area (m2) presented in the table "U-tube heater version" (previous page)

<sup>(1)</sup> H = High version ; B = Low version - <sup>(2)</sup> ∅ 250 mm handhole for 300 litres - <sup>(3)</sup> mWC = Meter of water column.

## OPTIONS

Reference	Description
<b>KA1S</b>	Accessories kit - DN25 safety valve calibrated at 7-bar - Brass dial thermometer 0/120 C deg - DN50 drainage valve - Air vent valve
<b>CCT</b>	Thermal shock box, anti-legionella box

## Integrated loop heater (ILH kits for DHW cylinders)

- Additional immersion heater located in the top section of the tank (230/400 V tri-phase)
- Double unipolar safety thermostat.

Reference	Immersion heater power (kW)	Minimum diameter of tank (mm)
<b>RBI3</b>	3	550
<b>RBI4</b>	4,5	550
<b>RBI6</b>	6	550
<b>RBI9</b>	9	650
<b>RBI12</b>	12	800



Note : Integrated loop heater is not pre-assembled on tank.