

# DHW PRODUCTION TANKS

ELECTRIC - U-TUBE HEATER

ENERGY RECOVERY FROM HEAT PUMP - DUAL VERSION

STAINLESS STEEL AISI 316L RANGE - FROM 500 TO 3 000L



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



U-tube heaters



Immersion heaters or electric cartridges



Stainless steel AISI 316L tank

## DESCRIPTION

### Description

#### Common features for all versions:

- Vertical stainless steel AISI 316L tank with 3 feet.
- Capacity from 500 to 6 000L.
- Maximum working pressure = 7 bar - Test pressure = 10 bar.
- Tappings (in accordance with the following diagram).
- Ø 400 mm inspection manhole<sup>(1)</sup>.
- 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  $\leq 20 \text{ kW}$  : 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.

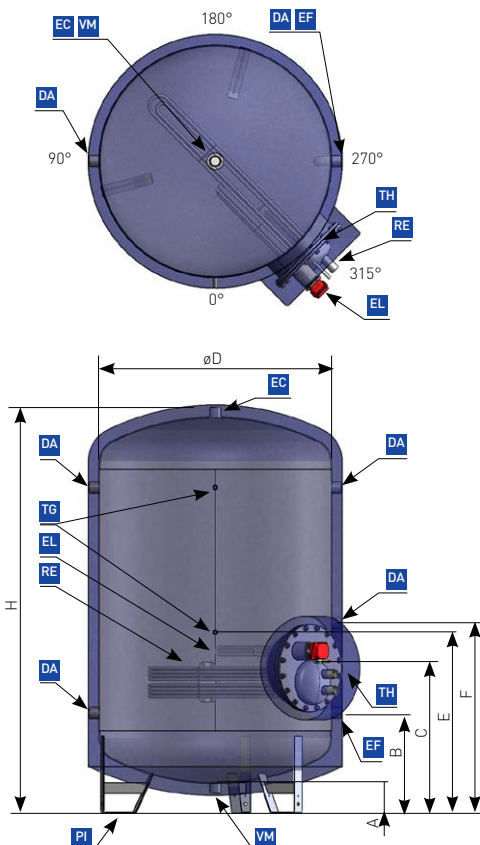
#### Options

- Accessories kit (thermometer, DN25 safety valve, DN50 drainage valve, air vent valve).
- Upon request : non-standard capacity, dimensions, working pressure and tappings implantation.

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

- Tank and heater = 7 years.
- Other items = 1 year.

## DIMENSIONS



Cap. (Litres)	A (mm)	B (mm)	C (mm)	$\phi D$ (mm)	E (mm)	F (mm)	G (mm)	H (mm)	Weight (kg)
500	90	410	660	650	860	870	1 420	1 760	140
750	90	440	690	800	890	900	1 450	1 820	175
1 000 <sup>(1)</sup>	90	440	690	800	890	900	1 940	2 330	210
1 000B <sup>(1)</sup>	90	475	725	800	925	935	1 485	1 900	235
1 500H <sup>(1)</sup>	90	475	725	800	925	935	2 035	2 450	280
1 500B <sup>(1)</sup>	90	510	760	1 100	960	970	1 520	1 960	290
2 000H <sup>(1)</sup>	90	510	760	1 100	960	970	2 070	2 510	345
2 000B <sup>(1)</sup>	90	560	810	1 300	1 010	1 020	1 570	2 050	400
2 500	90	560	810	1 300	1 010	1 020	1 820	2 300	430
3 000	90	560	810	1 300	1 010	1 020	2 120	2 600	470

<sup>(1)</sup>Note : H = High version ; B = Low version.

- DA Outlet/loop return (50/60 G ext. thread)
- EC Hot water outlet (50/60 G ext. thread)
- EF Cold water inlet (50/60 G ext. thread)
- EL Electric heater
- PI Support feet
- TH Ø 400 mm manhole
- TG Tapping 15/21 for thermometer and thermostat
- RE U-tube heater
- PR Threaded bearing with cover for attaching an immersion heater
- VM Threaded drainage outlet 50/60

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		With manhole	
500	6 (1 x 6)	INE050M1V	INE050MOV		
750	9 (1 x 9)	INE075M1V	INE075MOV		
1000H <sup>(1)</sup>	12 (1 x 12)	INE100BM1V	INE100BMOV		
1000B <sup>(1)</sup>	12 (1 x 12)	INE100HM1V	INE100HMOV		
1500H <sup>(1)</sup>	15 (1 x 15)	INE150BM1V	INE150BMOV		
1500B <sup>(1)</sup>	15 (1 x 15)	INE150HM1V	INE150HMOV		
2000H <sup>(1)</sup>	20 (1 x 20)	INE200BM1V	INE200BMOV		
2000B <sup>(1)</sup>	20 (1 x 20)	INE200HM1V	INE200HMOV		
2500	24 (1 x 24)	INE250M1V	INE250MOV		
3000	30 (1 x 30)	INE300M1V	INE300MOV		



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

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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)	INB050M1V	INB050MOV
750	6 (1 x 6)	INB075M1V	INB075MOV
1000H <sup>(1)</sup>	7,5 (1 x 7,5)	INB100BM1V	INB100BMOV
1000B <sup>(1)</sup>	7,5 (1 x 7,5)	INB100HM1V	INB100HMOV
1500H <sup>(1)</sup>	15 (6 + 9)	INB150BM1V	INB150BMOV
1500B <sup>(1)</sup>	15 (6 + 9)	INB150HM1V	INB150HMOV
2000H <sup>(1)</sup>	18 (2 x 9)	INB200BM1V	INB200BMOV
2000B <sup>(1)</sup>	18 (2 x 9)	INB200HM1V	INB200HMOV
2500	27 (3 x 9)	INB250M1V	INB250MOV
3000	27 (3 x 9)	INB300M1V	INB300MOV



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

Version U-tube heater :

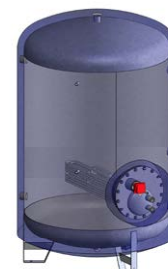
Cap. (litres)	Heater power (kW)	Flow rate (m3/h)	Head loss (mWC) <sup>(3)</sup>	Surface area (m2)	Ref. 60 mm-M1 jacket	Ref. 50 mm-M0 jacket
500	12	0,7	0,1	0,58	INR050M1V	INR050MOV
750	25	1,1	0,15	0,98	INR075M1V	INR075MOV
1000H <sup>(1)</sup>	25	1,1	0,15	0,98	INR100BM1V	INR100BMOV
1000B <sup>(1)</sup>	25	1,1	0,15	0,98	INR100HM1V	INR100HMOV
1500H <sup>(1)</sup>	34	1,5	0,2	1,8	INR150BM1V	INR150BMOV
1500B <sup>(1)</sup>	34	1,5	0,2	1,33	INR150HM1V	INR150HMOV
2000H <sup>(1)</sup>	58	2,5	0,35	2,5	INR200BM1V	INR200BMOV
2000B <sup>(1)</sup>	58	2,5	0,45	2	INR200HM1V	INR200HMOV
2500	58	2,5	0,45	2	INR250M1V	INR250MOV
3000	58	2,5	0,45	2	INR300M1V	INR300MOV



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

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

Cap. (litres)	Power (Nb x kW)	Heater power (kW)*	Ref. 60 mm-M1 jacket	Ref. 50 mm-M0 jacket
500	6 (1 x 6)	12	INM050M1V	INM050MOV
750	9 (1 x 9)	25	INM075M1V	INM075MOV
1000H <sup>(1)</sup>	12 (1 x 12)	25	INM100BM1V	INM100BMOV
1000B <sup>(1)</sup>	12 (1 x 12)	25	INM100HM1V	INM100HMOV
1500H <sup>(1)</sup>	15 (1 x 15)	34	INM150BM1V	INM150BMOV
1500B <sup>(1)</sup>	15 (1 x 15)	34	INM150HM1V	INM150HMOV
2000H <sup>(1)</sup>	20 (1 x 20)	58	INM200BM1V	INM200BMOV
2000B <sup>(1)</sup>	20 (1 x 20)	58	INM200HM1V	INM200HMOV
2500	24 (1 x 24)	58	INM250M1V	INM250MOV
3000	30 (1 x 30)	58	INM300M1V	INM300MOV



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

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

Cap. (litres)	Heater power (kW)	Tapping I/O	Flow rate (m <sup>3</sup> /h)	Head loss (mWC) <sup>(2)</sup>	Surface area (m <sup>2</sup> )	Ref. 100 mm-M1 jacket	Ref. 100 mm-M0 jacket
<b>500</b>	18	DN32	3,5	0,6	1,72	INC050M01V	INC050M11V
<b>750</b>	35	DN65	4,5	0,2	4,1	INC075M01V	INC075M11V
<b>1 000H<sup>(1)</sup></b>	35	DN65	4,5	0,2	4,1	INC100BM01V	INC100BM11V
<b>1 000B<sup>(1)</sup></b>	35	DN65	4,5	0,2	4,1	INC100HM01V	INC100HM11V
<b>1 500H<sup>(1)</sup></b>	35	DN65	4,5	0,2	4,1	INC150BM01V	INC150BM11V
<b>1 500B<sup>(1)</sup></b>	40	DN65	5,1	0,3	4	INC150HM01V	INC150HM11V
<b>2 000H<sup>(1)</sup></b>	45	DN65	5,8	0,4	4,5	INC200BM01V	INC200BM11V
<b>2 000B<sup>(1)</sup></b>	45	DN65	5,8	0,4	4,56	INC200HM01V	INC200HM11V
<b>2 500</b>	50	DN65	6,3	0,4	5,1	INC250M01V	INC250M11V
<b>3 000</b>	50	DN65	6,3	0,4	5,1	INC300M01V	INC300M11V



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

<sup>(1)</sup> H = High version ; B = Low version -

<sup>(2)</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.