

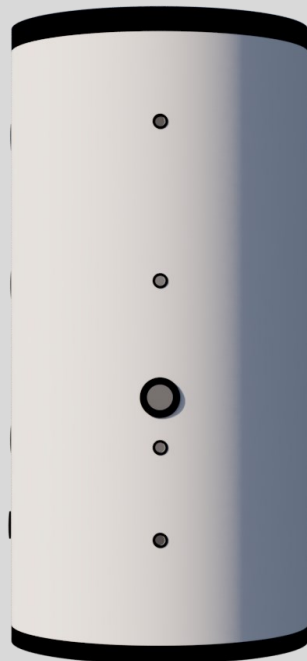
dal 1968



SCAMBIATORI - BOLLITORI - SERBATOI



TANKO



BUFFER VESSEL FOR HOT AND COLD WATER STORAGE

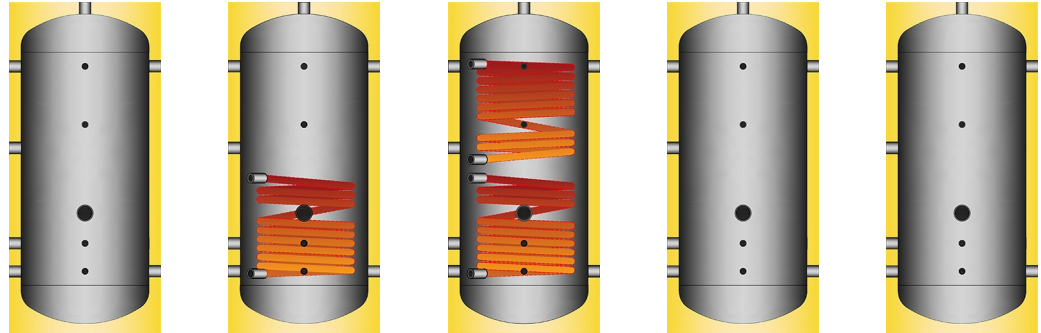
Buffer vessels for hot and cold water storage, designed to increase the thermal inertia in heating and inverter air conditioning systems connected to heat pump or any other heating source.

The thermal insulation of the tank guarantees minimum heat loss and allows limited variations in the temperature of the water stored, resulting in a reduced number of start-ups of the connected heating sources and operating costs saving.

The **TANKO-1** and **TANKO-2** versions are equipped with fixed spiral coils to enable connection of 1 or 2 additional heating sources.

Available in raw carbon steel, galvanized steel or Stainless Steel 316L. The outer cladding is made of PVC for indoor installation or Aluminium for indoor & outdoor installation.

CONSTRUCTION



| | TANKO-G | TANKO-1 | TANKO-2 | TANKO-Z | TANKO-X |
|----------------------------|--|--|--|--|--|
| TANK MATERIAL | Carbon steel | Carbon steel | Carbon steel | Carbon steel | Stainless Steel AISI 316L |
| FIXED COIL MATERIAL | — | Carbon steel | Carbon steel | — | — |
| INTERNAL SURFACE TREATMENT | — | — | — | Hot dip galvanizing | — |
| EXTERNAL SURFACE TREATMENT | Anti-rust primer | Anti-rust primer | Anti-rust primer | Hot dip galvanizing | Pickling |
| CAPACITY | 200 ÷ 500 L | 200 ÷ 500 L | 300-500 L | 200 ÷ 500 L | 200 ÷ 500 L |
| VERSION | Vertical | Vertical | Vertical | Vertical | Vertical |
| CONNECTIONS | Threaded | Threaded | Threaded | Threaded | Threaded |
| INSULATION | Hard foam polyurethane injected 50/55 mm | Hard foam polyurethane injected 50/55 mm | Hard foam polyurethane injected 50/55 mm | Hard foam polyurethane injected 50/55 mm | Hard foam polyurethane injected 50/55 mm |
| CLADDING | • PVC light grey RAL 7035 • Aluminium | • PVC light grey RAL 7035 • Aluminium | • PVC light grey RAL 7035 • Aluminium | • PVC light grey RAL 7035 • Aluminium | • PVC light grey RAL 7035 • Aluminium |

PRODUCT FICHE - Reg. 812/2013 supplementing Directive 2010/30/EU & Reg 814/2013 implementing Directive 2009/125/EC

| | | | Capacity | 200 | 300 | 500 |
|---------|-------------------------|---|----------|----------|----------|----------|
| TANKO-G | Energy efficiency class | | | B | B | C |
| | Standing loss | S | W | 56 | 68 | 90 |
| | Storage volume | V | L | 190 | 288 | 478 |
| TANKO-1 | Energy efficiency class | | | B | B | C |
| | Standing loss | S | W | 55 | 68 | 90 |
| | Storage volume | V | L | 184 | 281 | 469 |
| TANKO-2 | Energy efficiency class | | | | B | C |
| | Standing loss | S | W | | 68 | 90 |
| | Storage volume | V | L | | 273 | 460 |
| TANKO-Z | Energy efficiency class | | | B | B | C |
| | Standing loss | S | W | 56 | 68 | 90 |
| | Storage volume | V | L | 190 | 288 | 478 |
| TANKO-X | Energy efficiency class | | | B | B | C |
| | Standing loss | S | W | 56 | 68 | 90 |
| | Storage volume | V | L | 190 | 288 | 478 |

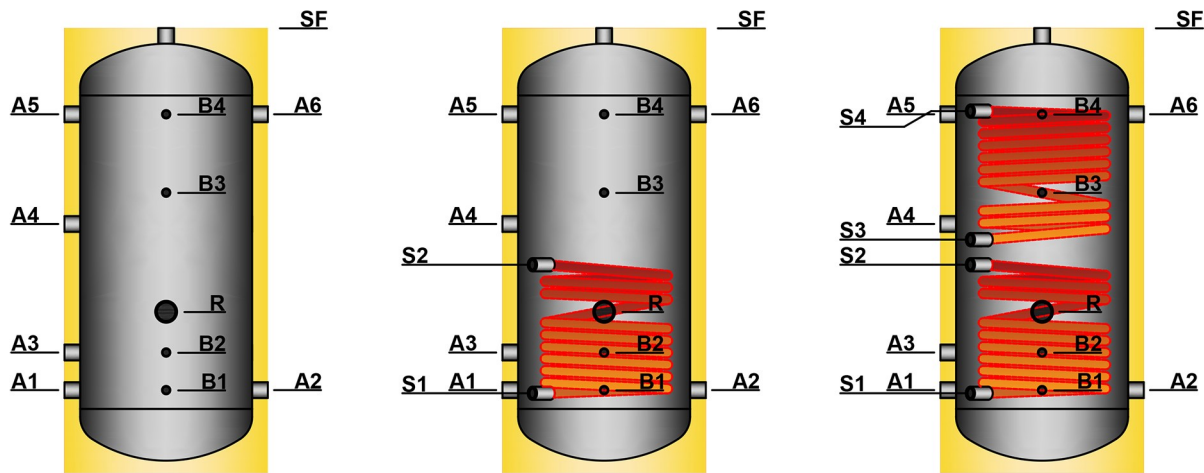
WORKING CONDITIONS

| | | Capacity | 200 | 300 | 500 |
|---|-----|----------|-----------|-----------|-----------|
| Tank working pressure (carbon steel) | bar | | ATM ÷ 8 | ATM ÷ 8 | ATM ÷ 6 |
| Tank working pressure (galvanized steel) | bar | | ATM ÷ 8 | ATM ÷ 8 | ATM ÷ 6 |
| Tank working pressure (Stainless Steel) | bar | | ATM ÷ 10 | ATM ÷ 10 | ATM ÷ 8 |
| Tank working temperature (carbon steel) | °C | | -10 ÷ 99 | -10 ÷ 99 | -10 ÷ 99 |
| Tank working temperature (galvanized steel) | °C | | -10 ÷ 95 | -10 ÷ 95 | -10 ÷ 95 |
| Tank working temperature (Stainless Steel) | °C | | -10 ÷ 99 | -10 ÷ 99 | -10 ÷ 99 |
| Fixed coil working pressure | bar | | ATM ÷ 10 | ATM ÷ 10 | ATM ÷ 10 |
| Fixed coil working temperature | °C | | AMB ÷ 110 | AMB ÷ 110 | AMB ÷ 110 |

REGULATORY COMPLIANCE

ErP - Reg. 812/2013 & Reg. 814/2013 | CE

European Pressure Equipment Directive (PED) 2014/68/UE | Sound Engineering Practice - excluded from CE marking - Art. 4.3



GENERAL CHARACTERISTICS

| | Capacity | 200 | 300 | 500 |
|-----------------------------|---------------------------|-------------------|------------|------------|
| DIMENSIONS | | | | |
| Diameter without insulation | mm | 450 | 550 | 650 |
| Diameter with insulation | mm | 550 | 650 | 760 |
| Overall height | mm | 1380 | 1420 | 1640 |
| Overturning height | mm | 1486 | 1562 | 1803 |
| CONNECTIONS | | | | |
| A1-A2 | Inlet / Outlet | mm Ø 240 1" | 265 1"¼ | 250 1"¼ |
| A3 | Inlet / Outlet | mm Ø 360 1" | 385 1"¼ | 500 1"¼ |
| A4 | Inlet / Outlet | mm Ø 770 1" | 795 1"¼ | 950 1"¼ |
| A5-A6 | Inlet / Outlet | mm Ø 1120 1" | 1145 1"¼ | 1380 1"¼ |
| B1 | Sensor | mm Ø 240 ½" | 265 ½" | 250 ½" |
| B2 | Sensor | mm Ø 360 ½" | 385 ½" | 500 ½" |
| B3 | Sensor | mm Ø 880 ½" | 895 ½" | 990 ½" |
| B4 | Sensor | mm Ø 1120 ½" | 1145 ½" | 1380 ½" |
| R | Immersion electric heater | mm Ø 615 2" | 535 2" | 650 2" |
| S1 | Lower coil return | mm Ø 240 1" | 255 1" | 240 1" |
| S2 | Lower coil supply | mm Ø 860 1" | 665 1" | 770 1" |
| S3 | Upper coil return | mm Ø — | 745 1" | 860 1" |
| S4 | Upper coil supply | mm Ø — | 1155 1" | 1390 1" |
| SF | Air vent | mm Ø 1380 1"¼ | 1420 1"¼ | 1640 1"¼ |

FIXED COIL CAPACITY

| | | | | |
|--|-----------|------------|------------|------------|
| Lower coil heating surface area | m² | 1,3 | 1,5 | 2,3 |
| Lower coil capacity (Primary 80/60°C - Average storage temperature 60°C) | kW | 12 | 14 | 21 |
| Upper coil heating surface area | m² | — | 1,5 | 2,3 |
| Upper coil capacity (Primary 80/60°C - Average storage temperature 60°C) | kW | — | 14 | 21 |

EMPTY WEIGHT

| | | | | |
|--|----|----|----|-----|
| No coil —> TANKO-G TANKO-Z TANKO-X | kg | 40 | 50 | 71 |
| 1-coil —> TANKO-1 | kg | 57 | 69 | 101 |
| 2-coil —> TANKO-2 | kg | — | 81 | 131 |

FIXED COIL PERFORMANCE

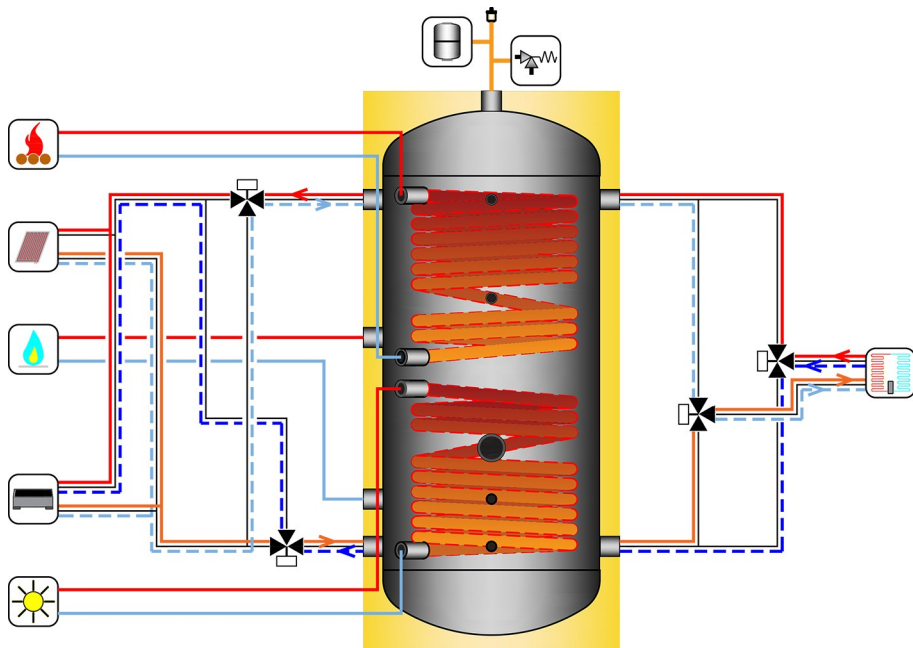
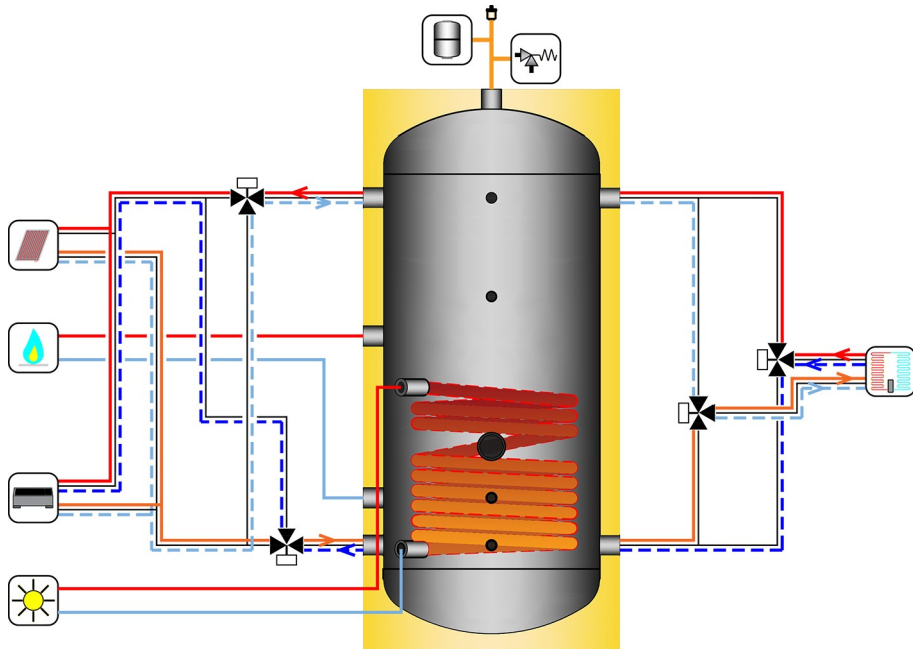
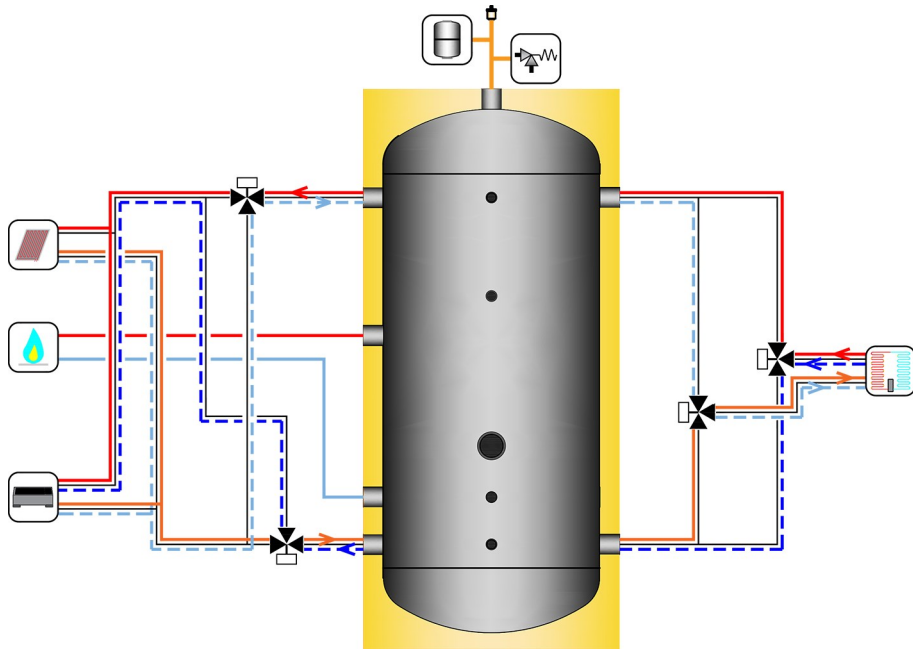
Primary (80-60)°C | Secondary (50-70)°C

| Storage volume | Fixed coil heating surface area | Capacity | Primary flow | SECONDARY SIDE | |
|----------------|---------------------------------|----------|--------------|----------------|---------------|
| | | | | Hydraulic head | Water content |
| L | m² | kW | litri/h | kPa | L |
| 200 | 1,3 | 12 | 516 | 1,8 | 6,5 |
| 300 | 1,5 | 14 | 602 | 2 | 7,5 |
| 500 | 2,3 | 21 | 903 | 4 | 11,5 |

Note: All the measurements of the connections are considered "from the ground" - The threads are female GAS type (unless otherwise specified)
The products higher than 2200mm will be packaged horizontally. In this case, should the cladding be Aluminium type, it will come disassembled to avoid transportation damages.

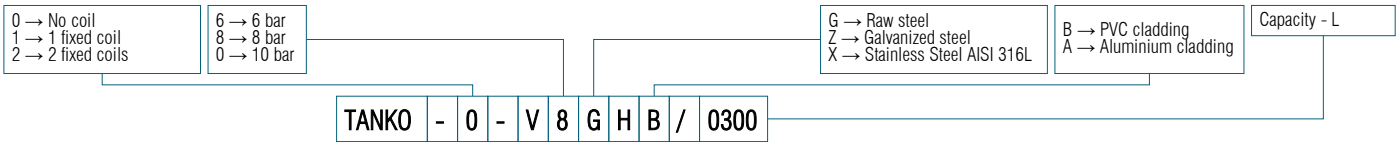


INSTALLATION DIAGRAM






The proposed diagrams are purely by way of example.


HOW TO ORDER



ACCESSORIES & SPARE PARTS

| ITEM | PART NO. | | |
|---|------------------|---|--------------|
| THERMOMETER Ø65 mm L=50 mm (0÷120)°C | TERMOMETRO-D65_S |  | THERMOMETER |
| PROBE SOCKET Ø½" L=50 mm Ø _{int} 10 mm | POZZETTO_S |  | PROBE SOCKET |
| THERMOSTAT Ø½" (0÷90)°C | TERMOSTATO |  | THERMOSTAT |

1-3 PHASE IMMERSION ELECTRIC HEATER - STAINLESS STEEL 316I / INCOLOY TUBES
Threaded plug 2" | Aluminium box IP55 | V230/400

| Capacity Watt | Capacity/L matching L | Length mm | 1-THERMOSTAT Temperature adjusting only PART NO. | 2-THERMOSTAT Temperature adj. & overheating protection PART NO. | |
|------------------|-----------------------------|--------------|--|---|---|
| 2000 | 200÷500 | 280 | RES020-200-L280-6-M | RES020-200-L280-6-B |  |
| 3000 | 200÷500 | 380 | RES030-200-L380-6-M | RES030-200-L380-6-B | |
| 5000 | 300-500 | 500 | RES050-200-L500-6-M | RES050-200-L500-6-B | |
| 6000 | 300-500 | 600 | RES060-200-L600-6-M | RES060-200-L600-6-B | |
| 9000 | 500 | 680 | RES090-200-L680-1-M | RES090-200-L680-1-B | |
| 10000 | 500 | 680 | RES100-200-L680-1-M | RES100-200-L680-1-B | |

ANTI-CORROSION PROTECTION STEEL TREATMENT

PROTECTIVE TREATMENTS FOR CARBON STEEL TANKS**Hot dip galvanizing**

The corrosion treatment by hot dip galvanizing in accordance with UNI EN ISO 1461 is carried out by immersion of the tank in a bath of liquid zinc at a temperature of approximately 450°C.

PROTECTIVE TREATMENTS FOR STAINLESS STEEL TANKS**Pickling**

Buffer vessels made of Stainless Steel 316L are treated with full immersion pickling procedures

INSULATIONS

| Insulating material | Removable | Thickness | Density | Thermal conductivity coefficient at 45°C | Operating temperature | Fire reaction class Euroclass EN13501-1 |
|---------------------------------|-----------|------------|---------------------------|--|-----------------------|---|
| Hard foam Polyurethane injected | X | 50 ÷ 55 mm | 40 ÷ 42 kg/m ³ | $\lambda = 0,019 \text{ W/mK}$ | -10°C / +99°C | F |

Hard foam Polyurethane

Thermal and anti-condensation insulation made of hard closed cell polyurethane foam (PU), free from CFC and HCFC. It is available in various thickness and can be injected directly to the shell of the tank to prevent it from condensation and provide the lower thermal dispersion.

CLADDINGS

PVC

External cladding made of coloured PVC with hinge closing, suitable for installations in locations protected against adverse weather conditions. The standard colours of each product are indicated in their construction characteristics, but different colours can be requested for each model as shown in the following table.

**ITEM***PART NO.*

| | |
|---------------------------------|----------------------|
| PVC CLADDING YERLLOW RAL1023 | <i>COVER-RAL1023</i> |
| PVC CLADDING OREANGE RAL2004 | <i>COVER-RAL2004</i> |
| PVC CLADDING RED RAL3000 | <i>COVER-RAL3000</i> |
| PVC CLADDING BLUE RAL5015 | <i>COVER-RAL5015</i> |
| PVC CLADDING WHITE RAL9016 | <i>COVER-RAL9016</i> |
| PVC CLADDING LIGHT GREY RAL7035 | <i>COVER-RAL7035</i> |
| PVC CLADDING DARK GREY RAL7024 | <i>COVER-RAL7024</i> |
| PVC CLADDING BLACK RAL9004 | <i>COVER-RAL9004</i> |

**ALUMINIUM**

External cladding made of embossed aluminium sheeting suitable also for outdoor installations. The insulations made with this type of cladding consist of panels joined together by means of rivets and extruded aluminium slats with an exclusive design, specifically designed to facilitate assembly even directly at the installation site.

The coverings and flange covers made of same material securely anchored to the insulation guarantee the same levels of quality in terms of duration and outside appearance and do not risk being damaged by the wind and adverse weather conditions.

This page is left intentionally blank.

www.pacetti.it



MADE IN ITALY

PACETTI S.r.l.

Via G. Marconi, 240/242

44122 - Ferrara - ITALY

Tel. +39 0532 774066

Fax +39 0532 773835

info@pacetti.it