



RENEWABLE ENERGY SOLUTIONS

# TERRA

THE WAY TO THE FUTURE  
ECOLOGICAL CHOICE

INVESTMENT IN COMFORT  
AND ENERGY SAVINGS

# TERRA

## CONTENT

- ABOUT US
- HEAT PUMPS - AIR TO WATER
- MONOBLOC R290
  - MONOPHASE 220V - 240V 50HZ/1PH
  - TRIPHASE 380V - 400V 50HZ/3PH
- SPLIT R32
  - MONOPHASE 220V - 240V 50HZ/1PH
  - TRIPHASE 380V - 400V 50HZ/3PH
- DHW/WATER HEATER
  - COMBI TANK (BUFFER + BOILER) ALL IN ONE
- FAN COIL DESIGN
  - ULTRA THIN FLOOR STANDING
  - HIGH WALL MOUNTED
  - BATHROOM MOUNTED
  - 360° ROUND
  - ULTRA THIN DUCT TYPE
  - DUCT TYPE
  - CEILING MOUNTED
  - FLOOR STANDING
- RADIATORS
- UNDERFLOOR HEATING
- PPR PRE - INSULATED PIPES

# ABOUT US



*“Engineering Comfort, Empowering Earth, Enhancing Lives: World of heating and cooling with TERRA Harnessing Renewable Energy for a Sustainable Future.”*  
- since 1988

THE TERRA TEAM IS TRAINED TO IDENTIFY AND RECOMMEND SYSTEM SOLUTIONS SPECIFIC TO YOUR HOME AND YOUR NEEDS WITH A SPECIFIC OFFER TO OBTAIN PRODUCTS WITH A CONTEMPORARY DESIGN THAT ARE ENERGY EFFICIENT, RELIABLE, QUIET AND ENVIRONMENTALLY FRIENDLY. YOUR PROJECTS ARE SAFE IN OUR HANDS.

WITH 35+ YEARS' EXPERTISE ACROSS THE REGION NORTH MACEDONIA, SERBIA, MONTENEGRO, KOSOVO AND BULGARIA, TERRA EXCELS IN HEATING AND COOLING SOLUTIONS.

## TERRA - LEADER IN HEATING AND COOLING SOLUTIONS

TERRA DELIVERS INNOVATIVE PRODUCTS THAT INCORPORATE THE LATEST AND MOST UP-TO-DATE TECHNOLOGIES WITH HIGH STANDARDS FOR AIR CONDITIONING DEVICES.

TERRA CONTINUALLY ENHANCES AND REFINES SOLUTIONS FOR AIR CONDITIONING DEVICES AND HEAT PUMPS. WE ARE COMMITTED TO OFFERING OUR CUSTOMERS INNOVATIVE HEATING AND COOLING PRODUCTS THAT WILL NOT ONLY MEET THEIR REQUIREMENTS, BUT EXCEED THEM. OUR PRODUCTS HAVE MORE EFFICIENT SOLUTIONS AND BETTER TECHNOLOGICAL FUNCTIONS THAT CAN REDUCE ENERGY CONSUMPTION, BUT AT THE SAME TIME PROVIDE SUITABLE TEMPERATURE CONDITIONS FOR THE USERS.

TERRA PRIORITIZES SUSTAINABLE, LONG-TERM BUSINESS, ALIGNING ECONOMY, ECOLOGY, AND SOCIAL RESPONSIBILITY. CONSISTENTLY EVOLVING, INTEGRATING NEW TECHNOLOGIES TO OFFER A MODERN, ECO-FRIENDLY URBAN LIFESTYLE. TERRA INSTALLS ENERGY EFFICIENT HEATING AND COOLING SYSTEMS WITH ZERO HARMFUL EMISSIONS, AS AN ECOLOGICAL PIONEER AND HEATING INDUSTRY LEADER.

TERRA HAS THE KNOWLEDGE AND EXPERIENCE TO ACHIEVE YOUR GOALS AND ENVIRONMENTAL NEEDS. THE INTEGRATED TECHNOLOGY ENABLES EASY INSTALLATION, HIGHLY EFFICIENT PERFORMANCE, ENERGY SAVING AND MAINTENANCE OF YOUR SYSTEM. ALL THESE FEATURES MAKE YOUR LIFESTYLE SIGNIFICANTLY EASIER. THANKS TO THE EXPERIENCE WITH THESE TECHNOLOGIES WE CAN OFFER YOU COST-EFFECTIVE, USER-FRIENDLY, RELIABLE AND INNOVATIVE PRODUCTS. ANOTHER ADVANTAGE WE OFFER TO OUR CLIENTS IS SUPPORT SERVICES FOR PROJECTS AIMING TO RECLAIM FUNDS THROUGH AN ACCREDITED ORGANIZATION SUPPORTED BY THE EUROPEAN BANK FOR RECONSTRUCTION AND DEVELOPMENT.

# HEAT PUMPS

- ENERGY SAVING
- EFFICIENCY
- HEATING AND COOLING
- DOMESTIC HOT WATER
- ECO-FRIENDLY
- MAINTENANCE FREE
- ZERO EMISSIONS
- MULTI-FUNCTIONALITY
- AESTHETICS

o  
o



TERRA PROVIDES SEVERAL TYPES OF AIR TO WATER HEAT PUMPS SUCH AS HOT WATER HEAT PUMPS, DC INVERTER (MONOBLOCK & SPLIT TYPES), EVI LOW TEMP, HOUSEHOLD, AND SWIMMING POOL HEAT PUMPS. SPECIALISING IN AIR SOURCE HEAT PUMP SUPPLY, INSTALLATION, AND CONSULTATION, WE ARE COMMITTED TO PROVIDING EFFICIENT, AND SUSTAINABLE HEATING SOLUTIONS. WE WANT HELP YOU MAKE THE TRANSITION TO RENEWABLE ENERGY SEAMLESS AND BENEFICIAL.

LET US GUIDE YOU ON YOUR JOURNEY TO ENERGY EFFICIENCY, REDUCED CARBON FOOTPRINT, AND SIGNIFICANT SAVINGS ON ENERGY BILLS.

*Join the movement towards greener living. Let us provide you with a tailored quote for your home's energy transformation with our top-tier heat pumps.*

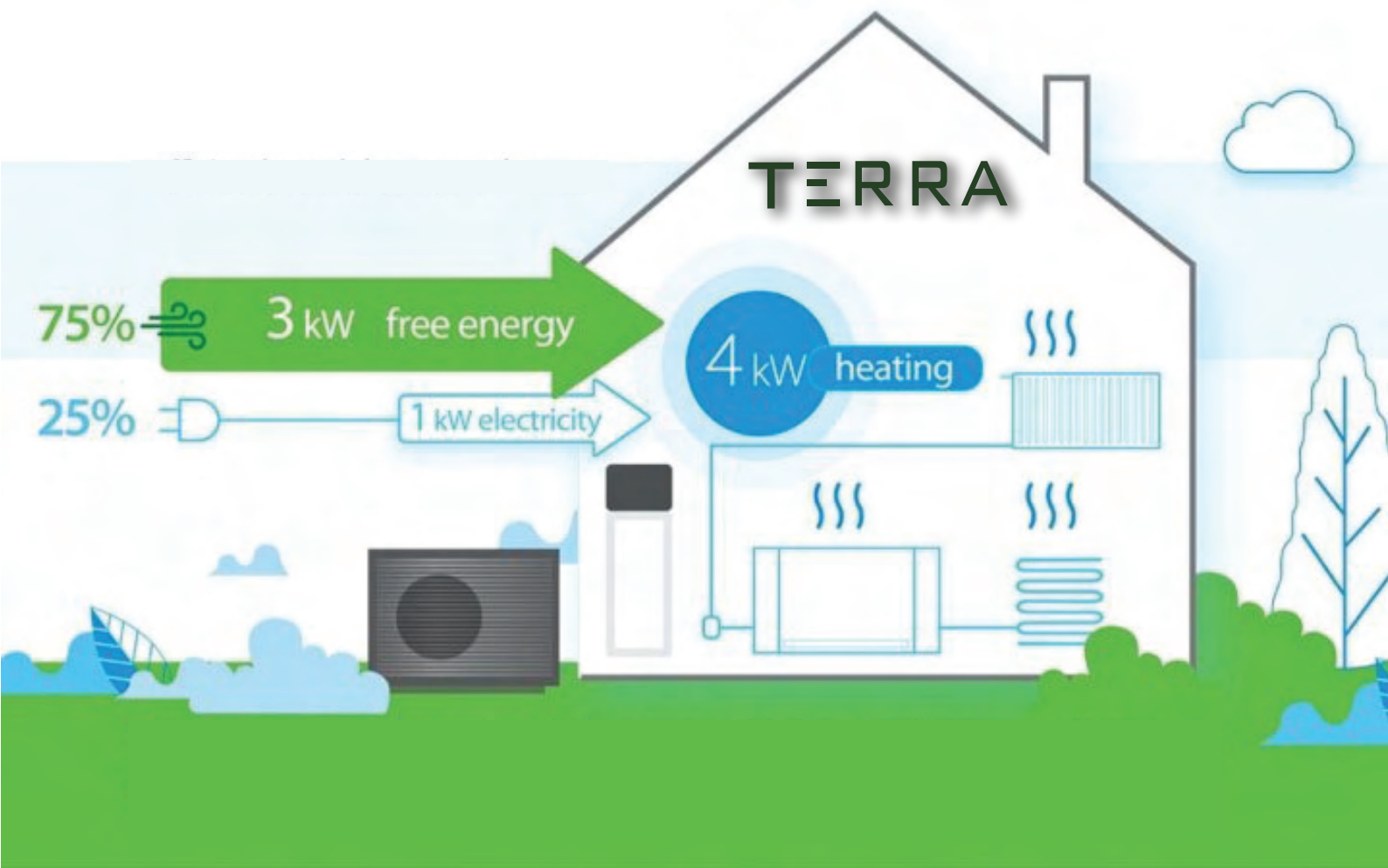
## INVESTMENT IN COMFORT AND ENERGY SAVINGS

AIR-TO-WATER HEAT PUMPS ARE A COST-EFFICIENT, ENVIRONMENTAL - FRIENDLY HEATING SOLUTION, ALL-ROUND HEATING, COOLING AND DOMESTIC HOT WATER SYSTEM.

THE AIR-TO-WATER HEAT PUMP RELIES ON A COMPRESSOR AND A REFRIGERANT TO TRANSFORM THE ENERGY FROM THE AIR TO THE WATER. HEAT FROM THE AIR IS ABSORBED INTO A FLUID. THIS FLUID THEN PASSES THROUGH A HEAT EXCHANGER INTO THE HEAT PUMP, WHICH RAISES THE TEMPERATURE AND THEN TRANSFERS THAT HEAT TO WATER UP TO YOUR NEEDS AND TO DELIVER IT INTO YOUR HOUSE.

THIS IN TURN HEATS YOUR ROOMS VIA RADIATORS OR UNDERFLOOR HEATING, AND COOL IT VIA FAN COIL UNITS. IT CAN ALSO HEAT WATER STORED IN A HOT WATER CYLINDER ( COMBI TANK, ALL IN ONE BOILER + BAFFER) FOR YOUR HOT TAPS, SHOWERS AND BATHS.

THE TERRA OUTDOOR UNIT EXTRACTS UP TO 75 % OF ITS ENERGY IN THE OUTSIDE AIR TO PROVIDE HEATING, COOLING AND HOT WATER, WHILE THE REST IS PROVIDED BY ELECTRICITY. SO, YOU COULD BENEFIT FROM SAVINGS ON YOUR UTILITY BILLS.



AIR TO WATER HEAT PUMP HAS GREAT FINANCIAL BENEFITS. AIR TO WATER HEAT PUMP WILL MOST LIKELY SAVE A LOT OF MONEY ON YOUR ANNUAL FUEL BILLS DUE TO THE UNIT' S HIGH COP, (COEFFICIENT OF PERFORMANCE).

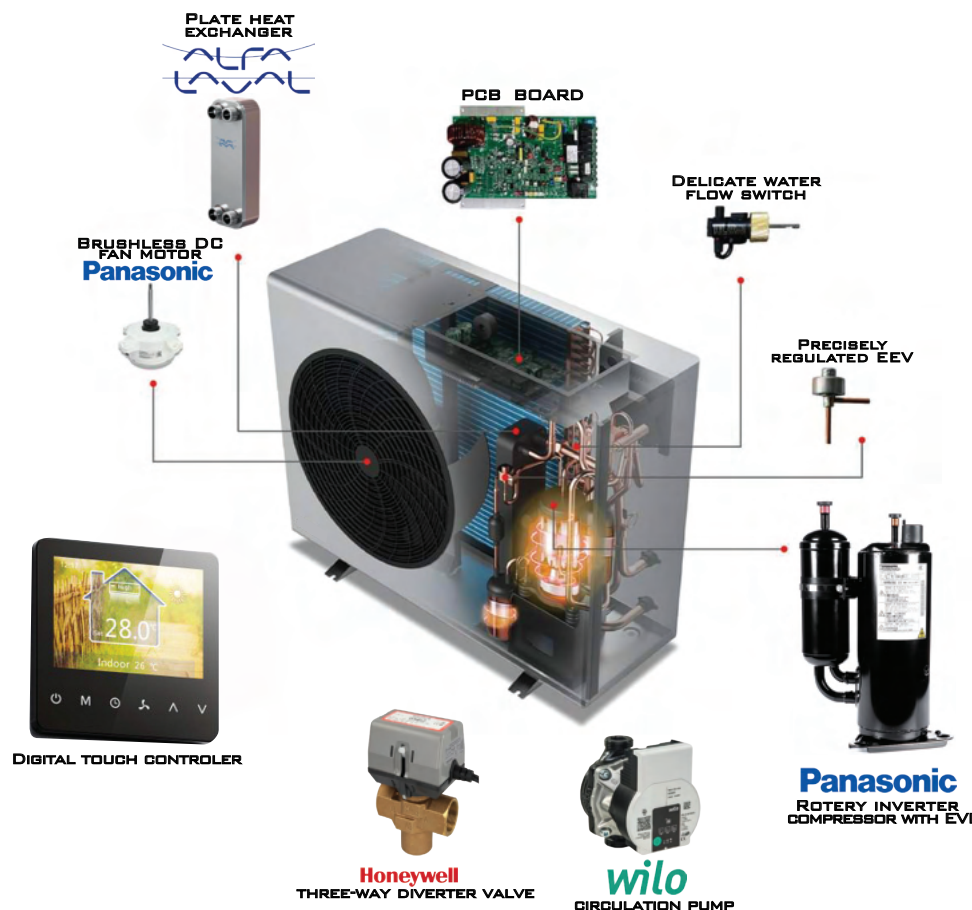
WHEN THE UNIT CAN ACHIEVE COP BETWEEN 3-4, MEANING THE UNIT CAN PRODUCE 3KW TO 4KW OF HEAT FOR EVERY 1KW POWER CONSUMED. THERE- FORE, WE COULD SAY THAT APPROXIMATELY 75% OF THE ENERGY PRODUCED COMES FROM THE EXTERNAL ENVIRONMENT AND THE ELECTRICITY INPUT IS ONLY 25%. SHOULD THE HOUSE HAVE A PHOTOVOLTAIC PANEL SYSTEM, THEN THAT 25% WOULD ALSO BE SAVED AS IT IS PRODUCED BY SOLAR ENERGY AT ZERO COST. AN AIR-TO-WATER HEAT PUMP ONLY NEEDS A SMALL AMOUNT OF ELECTRICITY TO RUN THE COMPRESSOR AND FAN MOTOR.

# HEAT PUMP - AIR TO WATER

## MULTIFUNCTIONAL HEAT PUMP

THE PERFECT PERFORMANCE OF THE R290 OR R32 FULL DC INVERTER HEAT PUMP CAN MEET THE USER'S NEEDS OF HOUSE HEATING, COOLING AND DOMESTIC HOT WATER THROUGHOUT THE YEAR ( BY HONEYWELL 3-WAY DIVERTER VALVE):  
\*DOMESTIC HOT WATER ONLY \*COOLING ONLY \*HEATING ONLY \*HEATING+ DHW (PRIORITY) \*COOLING + DHW (PRIORITY)  
LOW GWP R290 OR R32 REFRIGERANTS

TO REDUCE CARBON EMISSIONS TO THE ENVIRONMENT AND CURB GLOBAL WARMING, TERRA HAS DEVELOPED AN R290 FULL DC INVERTER HEAT PUMP. COMPARED TO R410A REFRIGERANT WITH A GWP OF 2100 AND R32 WITH A GWP OF 675, R290 HAS A GWP OF LESS THAN 20 AND IS RECOGNIZED BY THE INDUSTRY AS THE MOST DEVELOPMENT POTENTIAL AND ECO-FRIENDLY REFRIGERANT



## STABLE AND RELIABLE OPERATE AT -25°C

TERRA HEAT PUMPS ARE DEVELOPED USING THE ENHANCED VAPOR INJECTION (EVI) COMPRESSOR TECHNOLOGY AND HIGH-EFFICIENCY ECO-FRIENDLY REFRIGERANTS R290 OR R32 ALLOWS THEM TO FUNCTION EFFECTIVELY EVEN IN COLD WEATHER WHEN OUTSIDE TEMPERATURES ARE -25°C AND SUPPLY HEATING IN COLD AREAS. THEY CAN ALSO FUNCTION AS COOLING DEVICES IN SUMMER. TERRA HEAT PUMP MAINTAINING A HIGH COP AND OUTPUTTING 75°C HOT WATER TO ENSURE THE HEATING AND COOLING OF THE HOUSE NEED. RELIABLE OPERATION IN EXTREME TEMPERATURES OF -25°C, POWERFUL HEATING CAN OUTPUT 75°C HOT WATER

## FULL INVERTER TECHNOLOGY

THE FULL DC INVERTER TECHNOLOGY MAKES THE UNIT CAN INTELLIGENTLY ADJUST THE OPERATING FREQUENCY AND CONTROL THE WATER TEMPERATURE TO KEEP THE ROOM AT A CONSTANT-TEMPS. IT CAN SAVE UP TO 50% ENERGY ELECTRICITY COMPARED TO ON-OFF UNITS AND UP TO 75% ENERGY COMPARED TO TRADITIONAL BOILER ELECTRIC HEAT PUMPS. DC INVERTER PANASONIC COMPRESSOR, STEPLESS DC INVERTER FAN MOTOR, WILCO WATER CIRCULATION WATER PUMP.

*TERRA Heat Pump is equipped with the latest built-in devices from renowned brands: Panasonic – Rotary compressor, ALFA LAVAL heat exchanger, WILCO circulation pump, Honeywell three-way diverter valve, ensuring smooth and quiet operation, meeting all European standards and regulations.*

## LCD CONTROL PANEL AND WI-FI APP

LCD TOUCH SCREEN CONTROL PANEL AND "SMART LIFE" WI-FI APP SUPPORT 5-10 LANGUAGES + ENGLISH OPTIONS. YOU CAN CONTROL AND CHANGE THE TEMPERATURE AND SET THE SYSTEM MODES EASILY.

## FOUR OPERATING MODES SAVE YOUR ENERGY

BASED ON THE DIFFERENT NEEDS OF USERS, TERRA HAS DEVELOPED 4 OPERATING MODES: POWERFUL MODE, SMART MODE, SILENT MODE, VACATION MODE. USERS CAN CHOOSE MODES WITH DIFFERENT OPERATING FREQUENCIES ACCORDING TO ACTUAL NEEDS, WHICH HELP USERS SAVE A LOT OF ELECTRICITY BILLS.

## HIGHER EFFICIENCY A+++

TERRA DC INVERTER HEAT PUMP HAS PASSED THE ERP A+++ ENERGY CLASS TEST OF TUV. ITS ENERGY EFFICIENCY GRADE CAN NOT ONLY REACH A+++ AT 35°C, BUT ALSO A++ AT 55°C. IN ADDITION, ITS SCOP (SEASONAL COEFFICIENT OF PERFORMANCE) CAN BE AS HIGH AS 4.86, WHICH ENSURES THE PERFECT PERFORMANCE AND ULTRA-HIGH ENERGY EFFICIENCY OF THE UNIT.

## SUPER SILENT OPERATION

CONSTRUCTED WITH A UNIQUE INTERNAL SOUNDPROOF MECHANISM WITH BRUSHLESS DC INVERTER FAN MOTOR, PANASONIC COMPRESSION DUAL SHOCK ABSORPTION, AND STRONG PADS, THE SOUND LEVEL IS WITH LOW NOISE LEVEL OF 49 DBA.

# GREAT FINANCIAL BENEFITS

EVERY ENERGY CRISIS LEADS TO A REASSESSMENT OF ENERGY CONSUMPTION, AND AS WINTER APPROACHES, HEATING BECOMES A TOP PRIORITY LIKE THE REST OF THE WORLD, WE ARE ALSO GRAPPLING WITH A SIGNIFICANT RISE IN HEATING COSTS AND GROWING CONCERNS ABOUT AVAILABILITY

MANY HOUSEHOLDS STILL RELY ON SOLID FUELS FOR HEATING, WHICH DOES NOT ALIGN WITH EUROPEAN UNION STANDARDS THAT WILL NEED TO BE MET IN THE COMING YEARS. WHILE THIS MAY SEEM INSIGNIFICANT NOW, IT WILL INEVITABLY IMPACT FUTURE ENERGY COSTS. SINCE WE CANNOT PREDICT PRICE MOVEMENTS WITH ABSOLUTE CERTAINTY, WE WILL CONDUCT A COMPARATIVE COST ANALYSIS FOR THE AUTUMN OF 2024, COMPARING THE PRICE OF ONE KWH OF THERMAL ENERGY. EVERY ENERGY CRISIS LEADS TO A REASSESSMENT OF ENERGY CONSUMPTION, AND AS WINTER APPROACHES, HEATING BECOMES A TOP PRIORITY. LIKE THE REST OF THE WORLD, WE ARE ALSO GRAPPLING WITH A SIGNIFICANT RISE IN HEATING COSTS AND GROWING CONCERNS ABOUT AVAILABILITY.

## ENERGY EFFICIENCY



| FUEL             | ENERGY PER UNIT | EFFICIENCY OF HEATING DEVICES |
|------------------|-----------------|-------------------------------|
| WOOD             | 1865 KWH/M3     | 70-80%                        |
| PELLETS          | 5000 KWH/T      | 91%                           |
| ELECTRIC HEATING | 1 KWH/KWH       | 100%                          |
| HEAT PUMP        | 4 KWH/KWH       | 400%                          |

## AIR TO WATER HEAT PUMP HELPS TO DECREASE YOUR CARBON FOOTPRINT

COMPARED WITH A ELECTRIC WATER HEATER AND BOILER, A HEAT PUMP WATER HEATER DOES NOT DIRECTLY USE COMBUSTION TO GENERATE HEAT. THEREFORE, THE UNIT DOESN'T CAUSE AS MUCH POLLUTION AND HAS A SMALLER CARBON FOOTPRINT. AN AIR-TO-WATER HEAT PUMP ONLY NEEDS A SMALL AMOUNT OF ELECTRICITY TO RUN THE COMPRESSOR AND FAN MOTOR.

|                    | AIR TO WATER HP   | ELECTRIC WATER HEATER |
|--------------------|-------------------|-----------------------|
| ENERGY RESOURCE    | AIR & ELECTRICITY | ELECTRICITY           |
| CALORIFIC VALUE    | 860KCAL/KWH       | 860KCAL/KWH           |
| AVERAGE EFFICIENCY | 4.6               | 0.95                  |
| CONSUMPTION        | 10KWH             | 48.9KWH               |

THE MOST COMMON HEATING METHOD IN OUR AREA IS STILL WOOD HEATING. THE PRICE PER SQUARE METER OF WOOD HAS INCREASED FROM 33 TO 75 EUROS IN THE LAST FIVE YEARS. FIREWOOD IS STILL RELATIVELY EASY TO OBTAIN, BUT SELLERS CAUTION THAT A SHORT AGE MAY BE EXPECTED IN THE FUTURE. TAKING INTO ACCOUNT ALL OF THIS INFORMATION, AS WELL AS THE EFFICIENCY OF WOOD HEATING DEVICES, WE ARRIVE AT A COMPARATIVE PRICE OF 0.0502 E/KWH OF THERMAL ENERGY

THE PRICE OF PELLETS HAS INCREASED FROM 180 E/T TO 320 E/T IN THE LAST FIVE YEARS, AND THAT WAS BELOW THE PRICE CEILING, WITHOUT WHICH THE PRICE WOULD HAVE BEEN EVEN HIGHER. THE PROBLEM LIES IN ITS PROCUREMENT SINCE IT IS 'OUT OF STOCK' WITH ALL MANUFACTURERS, POSING A SIGNIFICANT CHALLENGE FOR HOUSEHOLDS USING PELLET STOVES OR BOILERS. THE COMPARATIVE PRICE FOR THE ANALYSIS IS 0.0705 E/KWH.

THE COST OF ELECTRICITY, WHOSE PRICE CHANGED FROM 8.37 EUROCENTS/KWH TO APPROXIMATELY 13 EUROCENTS/KWH. IF WE CALCULATE THAT STANDARD HEATING DEVICES PROVIDE 1 KWH OF THERMAL ENERGY FOR THE INVESTED 1 KWH OF ELECTRICAL ENERGY, THE PRICE OF ELECTRIC HEATING IS 0.1 E/KWH. AS THE MOST MODERN SOLUTION FOR THE HEATING PROBLEM, HEAT PUMP SYSTEMS ARE MENTIONED. THEY PROVIDE 4 KWH OF THERMAL ENERGY FOR THE INVESTED 1 KWH OF ELECTRICAL ENERGY, AMOUNTING TO 0.025 E/KWH FOR THE ANALYSIS. IT'S ALSO IMPORTANT TO NOTE THAT THESE SYSTEMS ARE FULLY COMPLIANT WITH ALL GLOBAL ENVIRONMENTAL PROTECTION STANDARDS.



THE EBRD GREEN ECONOMY FINANCING FACILITY (GEFF) IN WESTERN BALKANS PROVIDES FINANCE FOR GREEN ECONOMY INVESTMENTS IN THE RESIDENTIAL SECTOR AS WELL AS TO BUSINESSES WHO PROVIDE ENERGY EFFICIENCY AND RENEWABLE ENERGY PRODUCTS AND SERVICES TO HOUSEHOLDS.

WE, TERRA, CAN OFFER TO OUR CLIENTS IS SUPPORT SERVICES FOR PROJECTS AIMING TO RECLAIM FUNDS THROUGH AN ACCREDITED ORGANIZATION SUPPORTED BY THE EUROPEAN BANK FOR RECONSTRUCTION AND DEVELOPMENT.

THIS ALLOWS HOMEOWNERS TO APPLY FOR UP TO 20% RECLAIM FUNDS TOWARDS THE COST OF A HEAT PUMP AND COMBI TANK.

TERRA



MAKE YOUR HOME ENERGY EFFICIENT  
GET UP TO 20% GRANT NOW!

# HEAT PUMP - SPLIT

EVI  
Technology



## □ SPLIT R32 HEAT PUMPS (09 kW TO 22 kW)

SPLIT HEAT PUMPS ARE A TYPE OF AIR-TO-WATER HEAT PUMPS THAT CONSIST OF AN INDOOR AND AN OUTDOOR UNIT, CONNECTED BY REFRIGERANT LINES. THESE HEAT PUMPS CAN ACHIEVE WATER TEMPERATURES OF UP TO 65°C AND ARE OFTEN USED IN SYSTEMS WHERE HIGHER TEMPERATURES ARE NOT REQUIRED (UNDERFLOOR HEATING AND FAN COIL UNITS). AN ADVANTAGE OVER MONOBLOCK HEAT PUMPS IS THAT GLYCOL (ANTIFREEZE) DOES NOT NEED TO BE ADDED TO THE WATER, AS ALL THE WATER IS INSIDE THE BUILDING AND CANNOT FREEZE.

THE INDOOR UNIT INTEGRATES CONTROL ELECTRONICS, THE HEAT EXCHANGER, THE CIRCULATION PUMP, AN EXPANSION TANK, A SAFETY VALVE, AND A THREE-WAY VALVE FOR DOMESTIC HOT WATER (DHW). THIS ALLOWS EASY CONNECTION TO EXISTING SYSTEMS WITHOUT ADDITIONAL COMPONENTS. THE HEAT PUMP ENABLES USERS TO COMBINE A SYSTEM FOR HEATING DOMESTIC HOT WATER (FOR UNDERFLOOR HEATING OR RADIATORS) WITH A SYSTEM FOR HEATING AND COOLING SPACES USING FAN COIL UNITS.

FOR THE MOST ECONOMICAL ENERGY UTILIZATION, NEW BUILDINGS INCORPORATE TWO INSTALLATIONS: UNDERFLOOR HEATING FOR SPACE HEATING AND FAN COIL UNITS FOR SPACE COOLING.

- R32 EFFICIENTLY WORKS EVEN IN SMALL VOLUME COMPARED TO EXISTING R410A REFRIGERANT, WHICH DECREASES THE POTENTIAL HAZARD OF GLOBAL WARMING. FURTHERMORE, R32 REFRIGERANT IS EASY TO RECYCLE
- LOWER GWP AND CARBON EMISSION (GWP: GLOBAL WARMING POTENTIAL) REDUCE UP TO 75% OF CO<sub>2</sub> EQ COMPARED WITH R410A

## R32 SPLIT

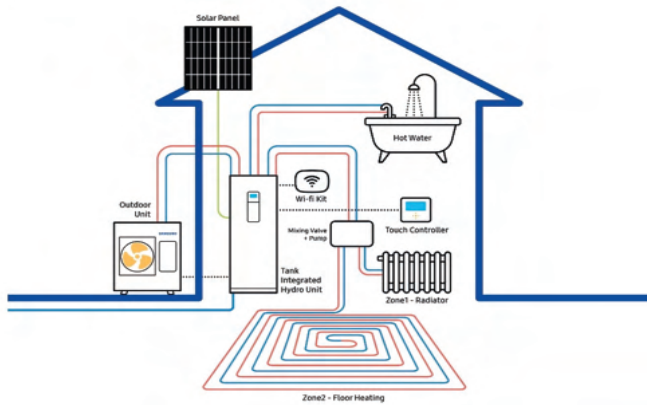
- OPERATION RANGE DOWN TO -25 °C
- MAXIMUM LWT REACH 75 °C
- SINGLE POINT MAXIMUM COP 5.0
- ENERGY EFFICIENCY LEVEL: A+++
- DC INVERTER + EVI TECHNOLOGY



warretny

- 5 years compressor
- 3 years plate heat exchanger
- 3 years whole heat pump

| Split                      |      |       |       |       |       |
|----------------------------|------|-------|-------|-------|-------|
| Model (kW)                 | 9 kW | 12 kW | 15 kW | 18 kW | 22 kW |
| 1 ph - 220V-240V ~/50Hz    | √    | √     | √     | √     | √     |
| 3 ph - 380V-400V ~/3N/50Hz | √    | √     | √     | √     | √     |
| Fan Quantity               | 1    | 1     | 1     | 1     | 2     |



## EXCELLENT PERFORMANCE & EFFICIENCY



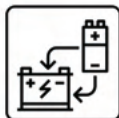
INTELLIGENT  
DEFROST



FULL  
CONTROL



ENERGY  
SAVING



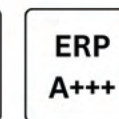
INVERTER  
TECHNOLOGY



R290  
REFRIGERANT



SOLAR  
THERMAL



ERP  
A+++



LWT  
65°C



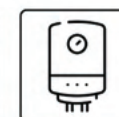
COP 5.0  
@A7W35  
FOR 10kW



INTUITIVE  
INTERFACE



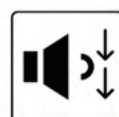
WIFI  
CONTROL



BOILER



DHW



SILENT MODE  
OPTION



AUTO MODE

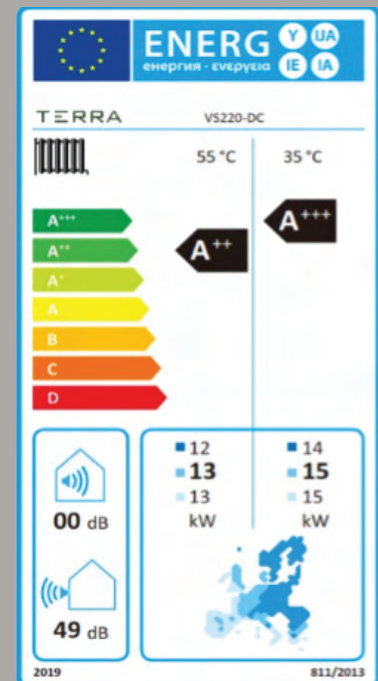


ISO9001

OUR AIR-CONDITIONING & REFRIGERATION DIVISION IS AN ISO9001 APPROVED FACTORY FOR RESIDENTIAL AIR CONDITIONERS AND COMMERCIAL-USE AIR CONDITIONERS (INCLUDING HEAT PUMPS).

ISO14001

OUR AIR-CONDITIONING & REFRIGERATION DIVISION HAS BEEN ASSESSED AND FOUND TO COMPLY WITH THE REQUIREMENTS OF ISO14001.



# HEAT PUMP - SPLIT

EVI  
Technology



## TECHNICAL DETAILS



### FULL INVERTER AIR WATER HOUSE HEATING HEAT PUMP SPLIT TYPE

| Complete model  |                | VS90-DCS                                      | VS120-DCS    | VS150-DCS     | VS180-DCS    | VS220-DCS     |
|---|----------------|---|--------------|---------------|--------------|---------------|
| External model number   |                | VS90-DCS-FW                                   | VS120-DCS-FW | VS150-DCS-FW  | VS180-DCS-FW | VS220-DCS-FW  |
| Power Supply  | /              | 380V-420V ~50Hz/3Ph                           |              |               |              |               |
| Heating Condition-Ambient Temp.(DB/WB):7/6 °C, Water Temp.(In/Out):40/45 °C       |                |   |              |               |              |               |
| Heating Capacity Range  | kW             | 3.8~9.0                                       | 3.8~12.0     | 5.5~15.0      | 5.5~17.5     | 7.3~21.5      |
| Heating Power Input Range   | kW             | 0.89~2.48                                     | 0.89~3.33    | 1.31~4.11     | 1.31~4.85    | 1.73~5.91     |
| COP   |                | 4.25~3.63                                     | 4.25~3.6     | 4.20~3.65     | 4.20~3.61    | 4.22~3.64     |
| Heating Condition-Ambient Temp.(DB/WB):7/6 °C, Water Temp.(In/Out):30/35 °C       |                |   |              |               |              |               |
| Heating Capacity Range  | kW             | 3.7~8.5                                       | 3.7~12.0     | 5.2~14.6      | 5.2~17.4     | 7.0~21.2      |
| Heating Power Input Range   | kW             | 0.67~1.91                                     | 0.67~2.69    | 0.94~3.28     | 0.94~3.95    | 1.27~4.75     |
| COP   |                | 5.55~4.45                                     | 5.55~4.46    | 5.56~4.45     | 5.56~4.41    | 5.52~4.46     |
| Heating Condition-Ambient Temp.(DB/WB):-5/-6 °C, Water Temp.(In/Out):36/41 °C     |                |   |              |               |              |               |
| Heating Capacity Range  | kW             | 3.5~7.0                                       | 4.0~8.5      | 4.5~13.0      | 5.0~15.0     | 5.5~17.0      |
| Heating Power Input Range   | kW             | 0.91~2.33                                     | 1.06~2.85    | 1.17~4.30     | 1.30~5.98    | 1.40~5.45     |
| COP   |                | 3.80~3.00                                     | 3.78~2.98    | 3.85~3.02     | 3.83~3.01    | 3.95~3.12     |
| Heating Condition-Ambient Temp.(DB/WB):-12/-13.5 °C, Water Temp.(In/Out):36/41 °C |                |   |              |               |              |               |
| Heating Capacity Range  | kW             | 3.0~6.0                                       | 4.0~7.5      | 4.0~11.0      | 4.5~13.0     | 5.0~15.0      |
| Heating Power Input Range   | kW             | 1.11~2.45                                     | 1.50~3.06    | 1.45~4.40     | 1.65~5.30    | 1.79~5.88     |
| COP   |                | 2.70~2.45                                     | 2.68~2.45    | 2.75~2.50     | 2.72~2.48    | 2.80~2.55     |
| Heating Condition-Ambient Temp.(DB/WB):20/ ~°C, Water Temp.(In/Out): ~/41°C       |                |   |              |               |              |               |
| Heating Capacity Range  | kW             | 2.5~5.0                                       | 3.0~6.0      | 3.8~9.5       | 4.3~11.0     | 4.7~12.5      |
| Heating Power Input Range   | kW             | 1.04~2.33                                     | 1.26~2.79    | 1.59~4.44     | 1.80~5.19    | 1.92~5.68     |
| COP   |                | 2.40~2.15                                     | 2.38~2.15    | 2.39~2.14     | 2.38~2.12    | 2.45~2.20     |
| Heating Condition-Ambient Temp.(DB/WB):25/ ~°C, Water Temp.(In/Out): ~/41°C       |                |   |              |               |              |               |
| Heating Capacity Range  | kW             | 2.3~4.2                                       | 2.8~5.0      | 3.5~8.5       | 4.0~9.5      | 4.5~10.5      |
| Heating Power Input Range   | kW             | 1.05~2.04                                     | 1.28~2.47    | 1.59~4.10     | 1.84~4.70    | 2.04~5.68     |
| COP   |                | 2.19~2.06                                     | 2.18~2.02    | 2.20~2.07     | 2.17~2.02    | 2.20~2.00     |
| Hot Water Condition-Ambient Temp.(DB/WB):20/15 °C, Water Temp.(In/Out):15/55 °C   |                |   |              |               |              |               |
| Heating Capacity Range  | kW             | 4.0~12.0                                      | 5.0~15.0     | 6.0~18.0      | 7.0~21.0     | 8.0~24.0      |
| Heating Power Input Range   | kW             | 0.83~2.89                                     | 1.05~3.65    | 1.24~4.30     | 1.47~5.08    | 1.66~5.78     |
| COP   |                | 4.80~4.15                                     | 4.76~4.11    | 4.83~4.18     | 4.77~4.13    | 4.82~4.17     |
| Cooling Condition-Ambient Temp.(DB/WB):35/24 °C, Water Temp.(In/Out):12/7 °C      |                |   |              |               |              |               |
| Cooling Capacity Range  | kW             | 2.3~6.5                                       | 2.3~8.0      | 3.2~11.0      | 3.2~13.0     | 4.5~15.0      |
| Cooling Power Input Range   | kW             | 0.65~2.24                                     | 0.65~2.75    | 0.90~3.79     | 0.90~4.48    | 1.25~5.17     |
| EER   |                | 3.53~2.90                                     | 3.53~2.91    | 3.55~2.90     | 3.55~2.90    | 3.6~2.90      |
| ErP Level (35 )   | /              | A+++  | A+++         | A+++          | A+++         | A+++          |
| ErP Level (55 )   | /              | A++   | A++          | A++           | A++          | A++           |
| SCOP (35 )  | /              | 4.80  | 4.84         | 4.79          | 4.60         | 4.86          |
| SCOP (55 )  | /              | 3.42  | 3.45         | 3.52          | 3.41         | 3.77          |
| Water Flow  | m <sup>3</sup> | 1.1   | 1.4          | 1.9           | 2.2          | 2.6           |
| Refrigerant/Proper Input  | kg             | R32/1.5kg                                     | R32/1.5kg    | R32/2.0kg     | R32/2.1kg    | R32/2.8kg     |
| Equivalent CO <sub>2</sub>  | TON            | 1.01  | 1.01         | 1.35          | 1.42         | 1.89          |
| Sound Pressure At Rated Flow (1m)   | dB(A)          | 42  | 43           | 45            | 46           | 47            |
| Sound Power Level(EN12102 (35 )   | dB(A)          | 57  | 59           | 60            | 61           | 62            |
| Cabinet Type  | /              | Galvanized sheet+ABS                          |              |               |              |               |
| Compressor Brand  | /              | Panasonic                                     |              |               |              |               |
| Fan Motor Type  | /              | DC motor                                      |              |               |              |               |
| Operating Ambient Temperature   |                | -35~43  |              |               |              |               |
| Water Connection  | inch           | 1   | 1            | 1             | 1            | 1             |
| Refrigerant circuit   |                | Liquid Dia(OD) : φ9.52 / Gas Dia(OD) : φ15.88 |              |               |              |               |
| Net weight  | kg             | 62  | 62           | 90            | 92           | 120           |
| Unit Dimensions(L/W/H)  | mm             | 945×440×755                                   |              | 1145×440×950  |              | 1055×440×1400 |
| Shipping Dimensions(L/W/H)  | mm             | 990×450×900                                   |              | 1195×450×1100 |              | 1100×450×1550 |

The above data is for reference only;specific data is subject to the product nameplate.

| Model                           |                   | VS90-DCS/FN                                   | VS120-DCS/FN | VS150-DCS/FN | VS180-DCS/FN | VS220-DCS/FN |
|---------------------------------|-------------------|---|--------------|--------------|--------------|--------------|
| Power Supply                    |                   | 220V-240V ~50Hz/1Ph                           |              |              |              |              |
| Water-side heat exchanger       |                   | Coin heat exchange                            |              |              |              |              |
| Flow switch                     |                   | Built-in                                      |              |              |              |              |
| Pump power                      | kW                | 0.15  | 0.15         | 0.15         | 0.15         | 0.15         |
| External head of pump           | m                 | 6.0   | 5.5          | 4.5          | 3.5          | 3.0          |
| Electric heating power          | kW                | 4.0   |              |              |              |              |
| inlet and outlet pipe connector | /                 | DN25 inner teeth                              |              |              |              |              |
| Rated water flow                | m <sup>3</sup> /h | 1.20  | 1.38         | 1.98         | 2.40         | 2.80         |
| Water side resistance           | kPa               | 30  | 30           | 30           | 30           | 30           |
| Max water outlet temp(Heating)  |                   | 55  |              |              |              |              |
| Min water outlet temp(Cooling)  |                   | 5   |              |              |              |              |
| Refrigerant circuit             | mm                | Liquid Dia(OD) : φ9.52 / Gas Dia(OD) : φ15.88 |              |              |              |              |
| Dimensions                      | mm                | 500*300*790                                   |              |              |              |              |
| Net weight                      | kg                | 41  | 42           | 44           | 44           | 44           |
| Sound pressure level            | dB(A)             | 42  | 42           | 43           | 44           | 45           |

# HEAT PUMP - MONOBLOCK

EVI  
Technology



## MONOBLOCK R290 HEAT PUMPS (09 kW TO 22 kW)

MONOBLOCK HEAT PUMPS ARE PUMPS WHERE THE 'PRIMARY' WORKING FLUID (FREON) IS LOCATED IN THE EXTERNAL UNIT, AND FROM IT, WE HAVE ONLY LINES FOR THE 'SECONDARY' WORKING FLUID (WATER + GLYCOL). THIS DESIGN IS THE MOST ECOLOGICAL BECAUSE IT HAS THE LEAST AMOUNT OF FREON, WITH EXCEPTIONALLY GOOD EFFICIENCY. DUE TO THIS CHARACTERISTIC, FREON THAT IS NOT ACCEPTABLE IN ENCLOSED SPACES CAN BE USED. THUS, WITH THIS MODEL OF A HEAT PUMP, WE CAN ACHIEVE HIGHER WATER TEMPERATURES FOR HEATING THE RADIATORS, WHICH CAN REACH TEMPERATURES OF UP TO 75°C WITHOUT THE USE OF AN ADDITIONAL ELECTRIC HEATER. THE HIGHER WATER TEMPERATURES ENABLE CONNECTION WITH OLD RADIATOR SYSTEMS DESIGNED FOR HIGH WATER TEMPERATURES, MAKING THIS TYPE OF HEAT PUMP AN EXCELLENT CHOICE FOR ALL TYPES OF CENTRAL HEATING DISTRIBUTION (RADIATORS, UNDERFLOOR HEATING, FAN COIL UNITS), AND ALSO PROVIDE HOT WATER FOR SANITARY USE. COOLING THE SPACE IS POSSIBLE BY INSTALLING FAN COIL UNITS, SO WE CAN CONSIDER THAT THIS TASK IN THE HOUSEHOLD IS ALSO SOLVED. MONOBLOC SYSTEMS ARE THE FUTURE DUE TO THEIR ENVIRONMENTALLY MINIMAL IMPACT, AND ALL LEADING GLOBAL ORGANIZATIONS CONSIDER THEM THE MOST ENVIRONMENTALLY FRIENDLY FORM OF HEATING/COOLING CURRENTLY AVAILABLE.



| Monobloc                   |      |       |       |       |       |
|----------------------------|------|-------|-------|-------|-------|
| Model (kW)                 | 9 kW | 12 kW | 15 kW | 18 kW | 22 kW |
| 1 ph - 220V-240V ~/50Hz    | √    | √     | √     | √     | √     |
| 3 ph - 380V-400V ~/3N/50Hz |      |       | √     | √     | √     |
| Fan Quantity               | 1    | 1     | 1     | 1     | 2     |



### HIGH ENERGY EFFICIENCY

### LARGE HEAT CAPACITY

### ENVIRONMENTALLY FRIENDLY

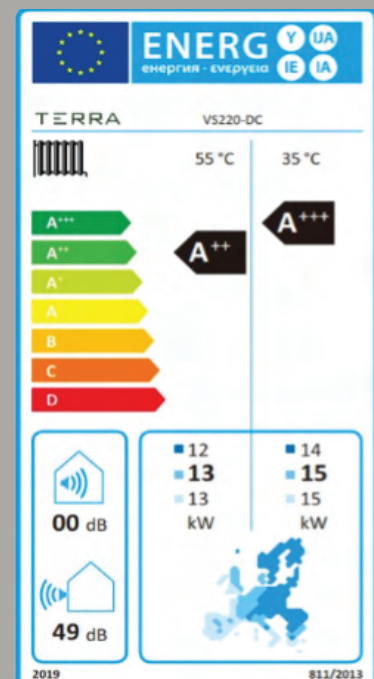
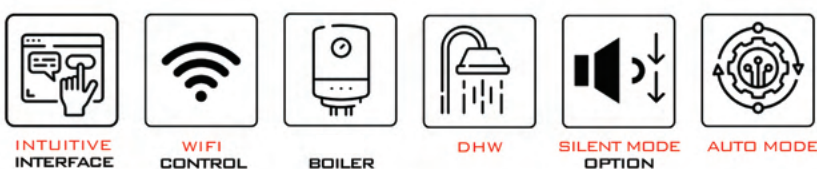
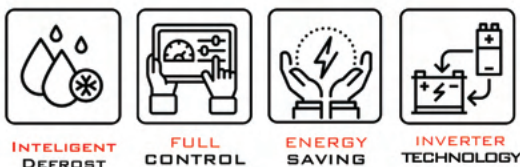
ODP = 0      GWP = 3  
NEUTRAL FOR THE OZONE LAYER      LOW IMPACT ON GLOBAL WARMING

R290 REFRIGERANT, ALSO KNOWN AS PROPANE, IS GAINING TRACTION AS A PROMISING TECHNOLOGY IN THE WORLD OF REFRIGERATION AND AIR CONDITIONING DUE TO ITS IMPRESSIVE EFFICIENCY, MINIMAL ENVIRONMENTAL IMPACT, AND NEUTRALITY TOWARDS THE OZONE LAYER.

## R290 MONOBLOCK

- OPERATION RANGE DOWN TO -25 °C
- MAXIMUM LWT REACH 75 °C
- SINGLE POINT MAXIMUM COP 5.0
- ENERGY EFFICIENCY LEVEL: A+++
- DC INVERTER + EVI TECHNOLOGY

## EXCELLENT PERFORMANCE & EFFICIENCY



# HEAT PUMP - MONOBLOCK

EVI  
Technology



## TECHNICAL DETAILS



| Model  | /     | VS90-DCR1            | VS120-DCR1       | VS150-DCR1       | VS150-DCR           | VS180-DCR1       | VS180-DCR           | VS220-DCR1       | VS220-DCR           |
|--|-------|----------------------|------------------|------------------|---------------------|------------------|---------------------|------------------|---------------------|
| Power Supply   | /     | 220V-240V ~/50Hz     | 220V-240V ~/50Hz | 220V-240V ~/50Hz | 380V-400V ~/3N/50Hz | 220V-240V ~/50Hz | 380V-400V ~/3N/50Hz | 220V-240V ~/50Hz | 380V-400V ~/3N/50Hz |
| Heating Condition-Ambient Temp.(DB/WB): 7/6 , Water Temp.(In/Out): 30/35   |       |                      |                  |                  |                     |                  |                     |                  |                     |
| Heating Capacity Range   | kW    | 2.8~8.0              | 4.0~11.0         | 5.5~14.0         | 5.5~14.0            | 7.0~17.0         | 7.0~17.0            | 8.0~20.0         | 8.0~20.0            |
| Heating Power Input Range  | kW    | 0.56~2.20            | 0.80~3.01        | 1.10~3.84        | 1.10~3.84           | 1.40~4.66        | 1.40~4.66           | 1.60~5.48        | 1.60~5.48           |
| COP  | kW/kW | 5.00~3.64            | 5.00~3.65        | 5.00~3.65        | 5.00~3.65           | 5.00~3.65        | 5.00~3.65           | 5.00~3.65        | 5.00~3.65           |
| Heating Condition-Ambient Temp.(DB/WB): 7/6 , Water Temp.(In/Out): 50/55   |       |                      |                  |                  |                     |                  |                     |                  |                     |
| Heating Capacity Range   | kW    | 2.6~7.2              | 3.8~10.3         | 5.4~13.3         | 5.4~13.3            | 6.5~16.1         | 6.5~16.1            | 8.3~19.1         | 8.3~19.1            |
| Heating Power Input Range  | kW    | 0.81~2.53            | 1.17~3.55        | 1.70~4.70        | 1.70~4.70           | 2.06~5.75        | 2.06~5.75           | 2.61~6.70        | 2.61~6.70           |
| COP  | kW/kW | 3.20~2.85            | 3.26~2.90        | 3.18~2.83        | 3.18~2.83           | 3.15~2.80        | 3.15~2.80           | 3.18~2.85        | 3.18~2.85           |
| Cooling Condition-Ambient Temp.(DB/WB): 35/24 , Water Temp.(In/Out): 12/7  |       |                      |                  |                  |                     |                  |                     |                  |                     |
| Cooling Capacity Range   | kW    | 2.0~6.0              | 3.0~8.0          | 4.5~10.5         | 4.5~10.5            | 5.5~13.0         | 5.5~13.0            | 6.0~15.0         | 6.0~15.0            |
| Cooling Power Input Range  | kW    | 0.65~2.73            | 0.97~3.64        | 1.45~4.77        | 1.45~4.77           | 1.77~5.90        | 1.77~5.90           | 1.94~6.82        | 1.94~6.82           |
| COP  | kW/kW | 3.08~2.20            | 3.09~2.20        | 3.10~2.20        | 3.10~2.20           | 3.10~2.20        | 3.10~2.20           | 3.09~2.20        | 3.09~2.20           |
| Hot Water Condition-Ambient Temp.(DB/WB): 20/15 , Water Temp.From 15 to 55 |       |                      |                  |                  |                     |                  |                     |                  |                     |
| Hot Water Capacity   | kW    | 4.5~10.0             | 5.5~14.0         | 6.0~17.0         | 6.0~17.0            | 6.5~20.0         | 6.5~20.0            | 8.0~25.0         | 8.0~25.0            |
| Hot Water Power Input  | kW    | 0.94~2.41            | 1.16~3.37        | 1.28~4.07        | 1.28~4.07           | 1.36~4.88        | 1.36~4.88           | 1.70~6.02        | 1.70~6.02           |
| Hot Water Current Input Range  | A     | 4.3~10.9             | 5.3~15.3         | 5.8~18.5         | 5.8~18.5            | 6.2~22.2         | 6.2~22.2            | 7.7~27.4         | 7.7~27.4            |
| Max. Power Input   | kW    | 3.3                  | 4.5              | 5.5              | 5.5                 | 6.5              | 6.5                 | 7.5              | 7.5                 |
| Max. Current Input   | A     | 15.0                 | 20.5             | 25.0             | 25.0                | 29.5             | 29.5                | 34.1             | 34.1                |
| ErP Level (35 )  | /     | A+++                 | A+++             | A+++             | A+++                | A+++             | A+++                | A+++             | A+++                |
| ErP Level (55 )  | /     | A++                  | A++              | A++              | A++                 | A++              | A++                 | A++              | A++                 |
| Water Flow   | m³/h  | 1.38                 | 1.89             | 2.41             | 2.41                | 2.92             | 2.92                | 3.44             | 3.44                |
| Refrigerant  | /     | R290                 | R290             | R290             | R290                | R290             | R290                | R290             | R290                |
| Proper Input   | kg    | 0.50                 | 0.70             | 0.85             | 0.85                | 1.00             | 1.00                | 1.20             | 1.20                |
| CO <sub>2</sub> Equivalent   | Tom   | 0.0015               | 0.0021           | 0.0026           | 0.0026              | 0.0030           | 0.0030              | 0.0036           | 0.0036              |
| Sound Power Level  | dB(A) | 57                   | 58               | 60               | 60                  | 62               | 62                  | 64               | 64                  |
| Operating Ambient Temperature  |       | -25~43               |                  |                  |                     |                  |                     |                  |                     |
| Max. Water Temperature   |       | 75                   |                  |                  |                     |                  |                     |                  |                     |
| Compressor Brand   | /     | GMCC                 |                  |                  |                     |                  |                     |                  |                     |
| Water Side Heat Exchanger  | /     | Plate type           |                  |                  |                     |                  |                     |                  |                     |
| Water Side Heat Exchanger Brand  | /     | ALFA LAVAL / Danfoss |                  |                  |                     |                  |                     |                  |                     |
| Water Pressure Drop (max)  | kPa   | 25                   | 30               | 26               | 26                  | 30               | 30                  | 30               | 30                  |
| Fan Motor Type   | /     | DC Moter             |                  |                  |                     |                  |                     |                  |                     |
| Fan Quantity   | /     | 1                    | 1                | 1                | 1                   | 1                | 1                   | 2                | 2                   |
| Water Connection   | inch  | G1"                  | G1"              | G1"              | G1"                 | G1"              | G1"                 | G1"              | G1"                 |
| Circulation Pump   | brand | SHIMGE / WILO / AWMT |                  |                  |                     |                  |                     |                  |                     |
| Circulation Pump Water Head  | m     | 12 / 9 / 12.5        | 12 / 9 / 12.5    | 12 / 9 / 12.5    | 12 / 9 / 12.5       | 12 / 9 / 12.5    | 12 / 9 / 12.5       | 12 / 9 / 12.5    | 12 / 9 / 12.5       |
| Cabinet Type   | /     | Galvanized sheet     |                  |                  |                     |                  |                     |                  |                     |
| Unit Dimension(L/W/H)  | mm    | 1167x407x795         | 1167x407x795     | 1280x458x935     | 1280x458x935        | 1280x458x935     | 1280x458x935        | 1250x540x1330    | 1250x540x1330       |
| Shipping Dimensions(L/W/H)   | mm    | 1300x485x930         | 1300x485x930     | 1457x534x1090    | 1457x534x1090       | 1457x534x1090    | 1457x534x1090       | 1380x570x1480    | 1380x570x1480       |
| Net/Gross weight   | kg    | 95/110               | 100/115          | 140/158          | 140/158             | 145/163          | 145/163             | 165/185          | 165/185             |

## WARRETNY

5 YEARS COMPRESOR

3 YEARS PLATE HEAT EXCHANGER

3 YEARS WHOLE HEAT PUMP



ISO14001

OUR AIR-CONDITIONING & REFRIGERATION DIVISION HAS BEEN ASSESSED AND FOUND TO COMPLY WITH THE REQUIREMENTS OF ISO14001.



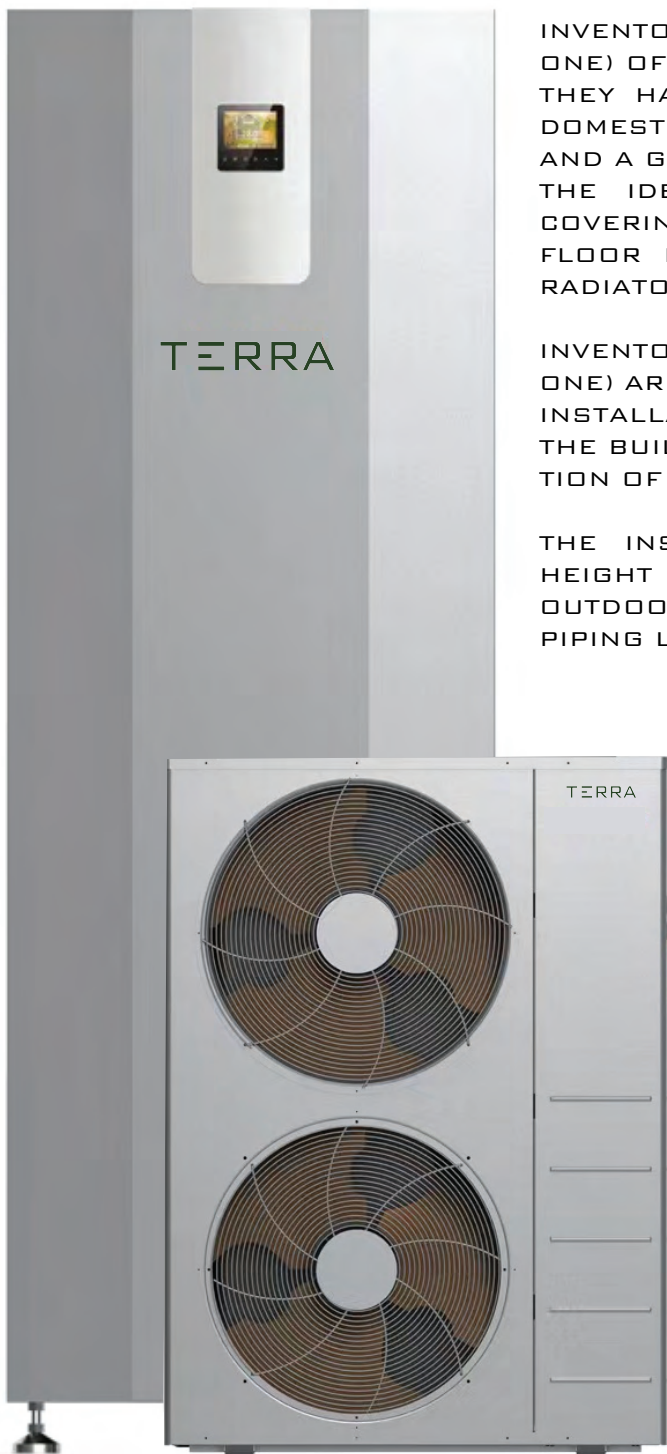
ISO9001

OUR AIR-CONDITIONING & REFRIGERATION DIVISION IS AN ISO9001 APPROVED FACTORY FOR RESIDENTIAL AIR CONDITIONERS AND COMMERCIAL-USE AIR CONDITIONERS (INCLUDING HEAT PUMPS).

# SPLIT INVERTER HEAT PUMP WITH INTEGRATED DHW TANK

**ALL-IN-ONE DESIGN FOR TOTAL COMFORT, FLEXIBILITY, AND GUARANTEED PERFORMANCE!**

- ADVANCED DESIGN AND EASY INSTALLATION
- COMPLETE SOLUTION WHICH GUARANTEES COMFORT AND SPACE SAVING
- BUILT-IN INDOOR UNIT WHICH UPGRADES YOUR SPACE
- A+++ ENERGY CLASS FOR HIGH PERFORMANCE AND ENERGY SAVING
- HIGH EFFICIENCY EVEN AT LOW OUTDOOR AMBIENT TEMPERATURES (-25°C)
- CENTRAL CONTROL WITH TOUCH WIRED CONTROLLER FOR EASY USAGE AND A VARIETY OF FUNCTIONS

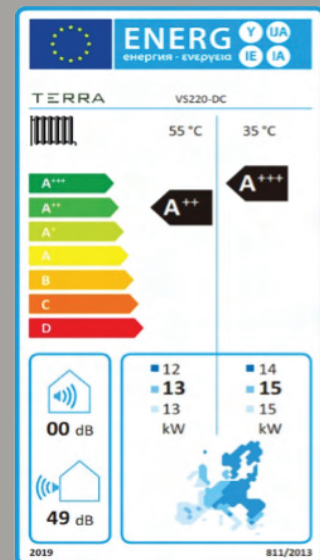


INVENTOR INTEGRATED SPLIT TYPE HEAT PUMPS (ALL IN ONE) OFFER A COMPLETE SOLUTION FOR YOUR HOME, AS THEY HAVE AN INTEGRATED WATER TANK TO PRODUCE DOMESTIC HOT WATER (DHW), OFFERING YOU FLEXIBILITY AND A GUARANTEED RESULT.

THE IDEAL SOLUTION FOR HEATING AND COOLING, COVERING ALL THE NEEDS OF YOUR SPACE SUCH AS FLOOR HEATING AND COOLING, SPACE HEATING WITH RADIATORS, COOLING AND HEATING WITH FAN COILS.

INVENTOR INTEGRATED SPLIT TYPE HEAT PUMPS (ALL IN ONE) ARE THE IDEAL CHOICE FOR EASY AND STRESS-FREE INSTALLATION. THANKS TO THE ALL-IN-ONE DESIGN AND THE BUILT-IN WATER TANK, THERE IS NO NEED OF CONNECTION OF THE UNIT TO AN EXTERNAL WATER TANK DEVICE.

THE INSTALLATION BECOMES EVEN EASIER, AS THE HEIGHT DIFFERENCE BETWEEN THE INDOOR AND OUTDOOR UNIT CAN BE UP TO 20 METERS AND THE TOTAL PIPING LENGTH UP TO 30 METERS.



Warretny

- 5 years compressor
- 3 years plate heat exchanger
- 3 years whole heat pump



**R32 DC INVERTER AIR TO WATER HEAT-PUMP  
WITH TANK**

| Model                             |                        | VS90-DCT          | VS160-DCT       | VS220-DCT      |                |
|-----------------------------------|------------------------|-------------------|-----------------|----------------|----------------|
| Power supply                      |                        | 220~240V,50Hz     | 3/380~415V/50HZ |                |                |
| Hot water (air+20°C/water15-55°C) | Capacity               | KW                | 8,00            | 13,00          | 15,0           |
|                                   | Heating water capacity | KW                | 2,21            | 3,61           | 4,18           |
| Heating (air+20°C/water55°C)      | Capacity               | KW                | 9,50            | 16,20          | 19,80          |
|                                   | Heating water capacity | KW                | 2,44            | 4,14           | 7,67           |
|                                   | Rated current          | A                 | 10,69           | 6,29           | 5,06           |
|                                   | COP                    | W/W               | 3,88            | 3,91           | 3,92           |
| Heating (air+7°C/water35°C)       | Capacity               | KW                | 9,0             | 15,0           | 18,00          |
|                                   | Heating water capacity | KW                | 2,13            | 3,57           | 4,35           |
|                                   | Rated current          | A                 | 9,35            | 5,61           | 6,70           |
|                                   | COP                    | W/W               | 4,21            | 4,20           | 4,13           |
| Heating (air+2°C/water35°C)       | Capacity               | KW                | 8,50            | 14,5           | 16,95          |
|                                   | Heating water capacity | KW                | 2,35            | 4,00           | 4,72           |
|                                   | Rated current          | A                 | 10,32           | 6,12           | 7,25           |
|                                   | COP                    | W/W               | 3,61            | 3,62           | 3,59           |
| Heating (air0°C/water35°C)        | Capacity               | KW                | 8,18            | 14,05          | 16,52          |
|                                   | Heating water capacity | KW                | 2,46            | 4,18           | 5,00           |
|                                   | Rated current          | A                 | 10,85           | 6,35           | 7,60           |
|                                   | COP                    | W/W               | 3,32            | 3,36           | 3,30           |
| Heating (air-5°C/water35°C)       | Capacity               | KW                | 7,98            | 13,88          | 16,12          |
|                                   | Heating water capacity | KW                | 2,64            | 4,56           | 5,35           |
|                                   | Rated current          | A                 | 11,52           | 6,93           | 8,13           |
|                                   | COP                    | W/W               | 3,02            | 3,04           | 3,01           |
| Heating (air-7°C/water35°C)       | Capacity               | KW                | 7,90            | 13,60          | 15,82          |
|                                   | Heating water capacity | KW                | 2,73            | 4,78           | 5,60           |
|                                   | Rated current          | A                 | 11,95           | 7,35           | 8,58           |
|                                   | COP                    | W/W               | 2,89            | 2,84           | 2,82           |
| Heating (air-10°C/water35°C)      | Capacity               | KW                | 7,50            | 12,88          | 14,98          |
|                                   | Heating water capacity | KW                | 2,84            | 4,89           | 5,73           |
|                                   | Rated current          | A                 | 12,42           | 7,40           | 8,72           |
|                                   | COP                    | W/W               | 2,64            | 2,63           | 2,61           |
| Heating (air-15/water35°C)        | Capacity               | KW                | 7,12            | 11,98          | 13,88          |
|                                   | Heating water capacity | KW                | 3,08            | 5,16           | 6,06           |
|                                   | Rated current          | A                 | 13,47           | 7,84           | 9,20           |
|                                   | COP                    | W/W               | 2,31            | 2,32           | 2,29           |
| Heating (air-20/water35°C)        | Capacity               | KW                | 6,45            | 10,85          | 12,58          |
|                                   | Heating water capacity | KW                | 3,19            | 5,37           | 6,22           |
|                                   | Rated current          | A                 | 13,96           | 8,16           | 9,46           |
|                                   | COP                    | W/W               | 2,01            | 2,02           | 2,02           |
| Heating (air-25/water35°C)        | Capacity               | KW                | 6,03            | 9,89           | 11,61          |
|                                   | Heating water capacity | KW                | 3,48            | 5,65           | 6,75           |
|                                   | Rated current          | A                 | 15,22           | 8,58           | 10,25          |
|                                   | COP                    | W/W               | 1,73            | 1,75           | 1,72           |
| Heating (air+2°C/water45°C)       | Capacity               | KW                | 8,05            | 13,80          | 15,48          |
|                                   | Heating water capacity | KW                | 2,75            | 4,75           | 5,41           |
|                                   | Rated current          | A                 | 12,01           | 7,25           | 8,29           |
|                                   | COP                    | W/W               | 2,92            | 2,90           | 2,86           |
| Heating (air-7°C/water45°C)       | Capacity               | KW                | 7,6             | 13,10          | 13,85          |
|                                   | Heating water capacity | KW                | 3,06            | 5,32           | 5,72           |
|                                   | Rated current          | A                 | 13,44           | 8,12           | 8,75           |
|                                   | COP                    | W/W               | 2,48            | 2,46           | 2,42           |
| Heating (air7°C/water55°C)        | Capacity               | KW                | 8,00            | 14,10          | 15,15          |
|                                   | Heating water capacity | KW                | 3,05            | 5,40           | 5,87           |
|                                   | Rated current          | A                 | 13,31           | 8,25           | 9,02           |
|                                   | COP                    | W/W               | 2,62            | 2,61           | 2,58           |
| Heating (air2°C/water55°C)        | Capacity               | KW                | 7,95            | 13,24          | 14,05          |
|                                   | Heating water capacity | KW                | 3,34            | 5,54           | 5,97           |
|                                   | Rated current          | A                 | 14,56           | 8,45           | 9,15           |
|                                   | COP                    | W/W               | 2,38            | 2,39           | 2,35           |
| Heating (air0°C/water55°C)        | Capacity               | KW                | 7,85            | 12,98          | 13,57          |
|                                   | Heating water capacity | KW                | 3,39            | 5,57           | 5,87           |
|                                   | Rated current          | A                 | 14,85           | 8,46           | 8,92           |
|                                   | COP                    | W/W               | 2,31            | 2,33           | 2,31           |
| Heating (air-5°C/water55°C)       | Capacity               | KW                | 7,38            | 12,26          | 12,62          |
|                                   | Heating water capacity | KW                | 3,63            | 6,06           | 6,31           |
|                                   | Rated current          | A                 | 15,92           | 9,22           | 9,58           |
|                                   | COP                    | W/W               | 2,03            | 2,02           | 2,00           |
| Heating (air-10°C/water55°C)      | Capacity               | KW                | 6,98            | 11,42          | 11,73          |
|                                   | Heating water capacity | KW                | 3,83            | 6,17           | 6,40           |
|                                   | Rated current          | A                 | 16,75           | 9,37           | 9,73           |
|                                   | COP                    | W/W               | 1,82            | 1,85           | 1,83           |
| Heating (air-15°C/water55°C)      | Capacity               | KW                | 6,39            | 10,53          | 10,78          |
|                                   | Heating water capacity | KW                | 3,73            | 6,12           | 6,34           |
|                                   | Rated current          | A                 | 16,33           | 9,30           | 9,63           |
|                                   | COP                    | W/W               | 1,71            | 1,72           | 1,70           |
| Heating (air-20°C/water55°C)      | Capacity               | KW                | 5,75            | 9,54           | 9,75           |
|                                   | Heating water capacity | KW                | 3,73            | 6,11           | 6,41           |
|                                   | Rated current          | A                 | 16,36           | 9,28           | 9,74           |
|                                   | COP                    | W/W               | 1,54            | 1,56           | 1,52           |
| Heating (air-25°C/water55°C)      | Capacity               | KW                | 5,10            | 8,36           | 8,58           |
|                                   | Heating water capacity | KW                | 3,77            | 6,23           | 6,54           |
|                                   | Rated current          | A                 | 16,52           | 9,47           | 9,95           |
|                                   | COP                    | W/W               | 1,35            | 1,34           | 1,31           |
| Electric heating                  |                        | KW                | 3000            |                |                |
| current                           |                        | A                 | 13.6            |                |                |
| water pump                        | Input (L/M/H)          | W                 | 55/70/100       | 135/190/245    | 135/190/245    |
|                                   | Rated current          | A                 | 0.24/0.30/0.43  | 0.58/0.82/1.06 | 0.58/0.82/1.06 |
| Outdoor unit                      | Dimension              | mm                | 940*375*800     | 940*375*1340   | 940*375*1340   |
|                                   | Net/Gross weight       | kg                | 32,0            | 49,0           | 52,00          |
| Indoor unit                       | Dimension              | mm                | 710*680*1980    | 710*680*1980   | 710*680*1980   |
|                                   | Net/Gross weight       | kg                | 182,0           | 216,0          | 232,00         |
| Outdoor air flow                  |                        | m <sup>3</sup> /h | 2800            | 5600           | 5600,00        |
| (water)flow rate                  |                        | m <sup>3</sup> /h | 1,6             | 2,6            | 3,09           |
| Design pressure                   |                        | MPa               | 4.2/2.1         |                |                |
| Refrigerant                       |                        |                   | R32             |                |                |
| Heating water range               |                        | °C                | 20-55           |                |                |
| Cooling water range               |                        | °C                | 7-35            |                |                |
| Ambient temp                      |                        | °C                | -25 °C - 43°C   | -25 °C - 43°C  | -25 °C - 43°C  |
| Noise level(1 M)                  |                        | dB(A)             | 48              | 48             | 49             |

# HEAT PUMP POOL HEATER

TERAA FULL INVERTER SWIMMING POOL HEAT PUMP PROVIDES LUXURIOUS HEATING SOLUTIONS FOR SWIMMING POOL WITH ADVANTAGES OF SUPER SILENCE, HIGH EFFICIENCY AND MODERN PATENTED DESIGN.



THE FULL INVERTER TECHNOLOGY IS ADOPTED BY TERAA INVERTER POOL HEAT PUMP, ENSURING THE OPTIMUM PERFORMANCE OF THE UNIT WHEN RUNNING AT -10 LOW AMBIENT TEMPERATURE, MAINTAINING THE COMFORTABLE WATER TEMPERATURE FOR SWIMMING ALL YEAR ROUND

Warretny

5 years compresor  
3 years plate heat exchanger  
3 years whole heat pump



Full Inverter Technology



Super Silence

WITH TITANIUM HEAT EXCHANGER



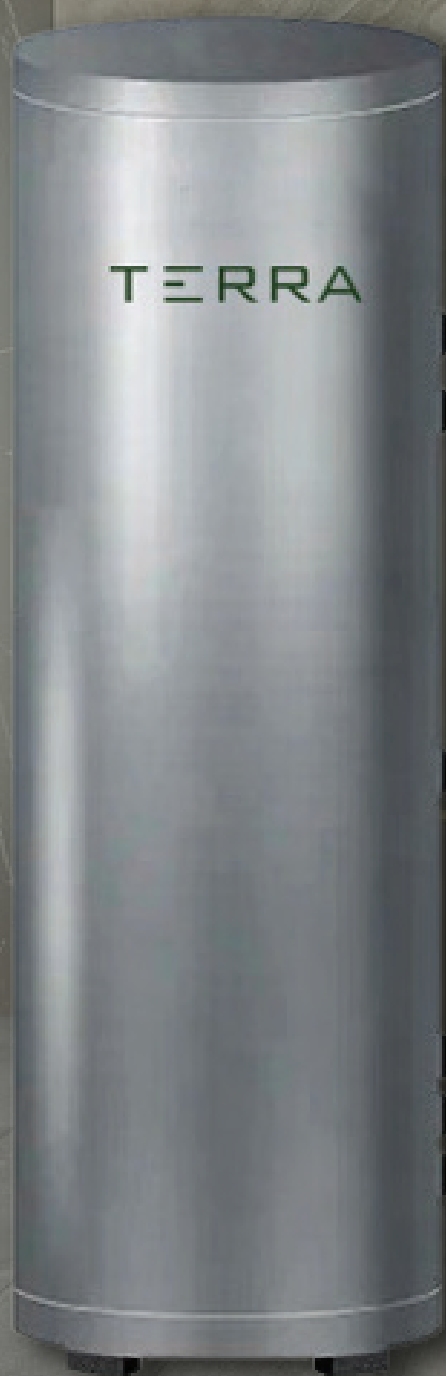


# HEAT PUMP POOL HEATER

| Model  | PX090IN                      | PX110IN      | PX150IN      | PX180IN      | PX220IN      | PX250IN      |
|--|------------------------------|--------------|--------------|--------------|--------------|--------------|
| Advised pool volume(m <sup>3</sup> )                 | 20-40                        | 30-55        | 40-70        | 50-85        | 65-100       | 75-115       |
| Operating air temperature (°C)                       | -10°C~43°C                   |              |              |              |              |              |
| Performance Condition (Air 27°C/Water26°C/Humid,80%) |                              |              |              |              |              |              |
| Heating Capacity (kW)                                | 2.0~7.0                      | 2.5~9.7      | 3.0~12.8     | 3.5~17.0     | 7.0~20.5     | 8.0~25.0     |
| Consumed power                                       | 0.13~1.10                    | 0.16~1.49    | 0.19~1.94    | 0.23~2.74    | 0.45~3.25    | 0.52~4.03    |
| COP  | 15.5~6.36                    | 15.5~6.5     | 15.6~6.6     | 15.3~6.2     | 15.5~6.3     | 15.3~6.2     |
| Performance Condition (Air 15°C/Water26°C/Humid,70%) |                              |              |              |              |              |              |
| Heating Capacity (kW)                                | 1.6~5.4                      | 2.0~7.0      | 2.5~9.0      | 3.0~12.0     | 5.5~15.5     | 6.5~19.0     |
| Consumed power                                       | 0.25~1.29                    | 0.76~1.52    | 0.39~2.0     | 0.48~2.79    | 0.86~3.69    | 1.00~4.22    |
| COP  | 6.5~4.20                     | 6.6~4.6      | 6.5~4.5      | 6.3~4.3      | 6.4~4.2      | 6.5~4.5      |
| Performance Condition (Air 10°C/Water26°C/Humid,64%) |                              |              |              |              |              |              |
| Heating Capacity (kW)                                | 1.2~4.0                      | 1.6~5.5      | 2.0~7.0      | 2.5~9.0      | 4.5~13.8     | 5.5~17.5     |
| Consumed power                                       | 0.30~1.33                    | 0.38~1.77    | 0.48~2.19    | 0.61~2.90    | 1.10~4.31    | 1.31~5.65    |
| COP  | 4.0~3.0                      | 4.2~3.1      | 4.2~3.2      | 4.1~3.1      | 4.1~3.2      | 4.2~3.1      |
| Power Supply   | 220V~/50Hz                   |              |              |              |              |              |
| Casing type  | Metal                        |              |              |              |              |              |
| Compressor   | Twin Rotary DC Inverter type |              |              |              |              |              |
| Fan Form   | DC inverter type             |              |              |              |              |              |
| Fan Quantity   | 1                            |              |              |              |              |              |
| Fan Speed (RPM)                                      | 400-800                      | 400-800      | 400-800      | 400-800      | 400-800      | 400-800      |
| Sound Pressure 1m dB(A)                              | 37-47                        | 37-48        | 40-50        | 40-51        | 41-53        | 42-55        |
| Sound Pressure 10m dB(A)                             | 18-27                        | 18-28        | 21-31        | 21-33        | 23-35        | 24-37        |
| Water Connection (mm)                                | 50                           |              |              |              |              |              |
| Water Flow Volume (m <sup>3</sup> /h)                | 2.4                          | 3.3          | 4.4          | 5.8          | 7.1          | 86.0         |
| Net Dimensions L/W/H (mm)                            | 1030*455*635                 | 1030*455*635 | 1030*455*635 | 1130*500*800 | 1210*530*900 | 1210*530*900 |
| Qty per 20GP/40GP/40HQ                               | 72/156/156                   | 72/156/156   | 72/156/156   | 72/156/156   | 44/84/84     | 44/84/84     |
| Refrigerant  | R32                          |              |              |              |              |              |

# COMBI TANK

BOILER + BUFFER = ALL IN ONE



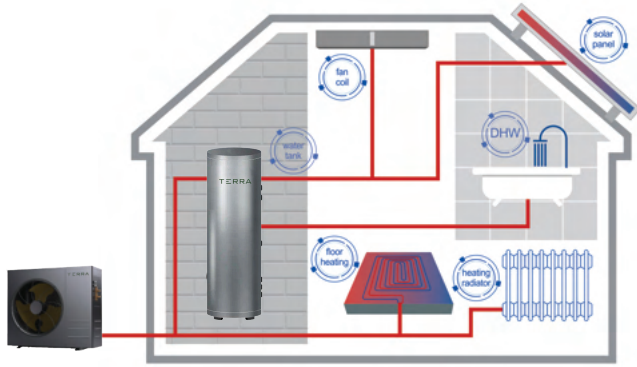
TERRA

# TERRA COMBI TANK

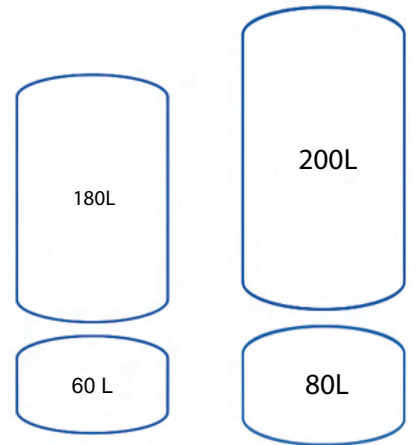
## □ TERRA COMBI TANK (BOILER + BUFFER = ALL IN ONE)

THE TERRA COMBI TANK (BOILER + BUFFER = ALL IN ONE) PROVIDES AN OUTLET WATER TEMPERATURE OF UP TO 70°C, SERVING AS AN ADDITIONAL OPTION FOR USE WITH RADIATOR AND UNDERFLOOR HEATING SYSTEMS, AS WELL AS FOR DOMESTIC HOT WATER, MEETING ALL HOUSEHOLD NEEDS. IT FEATURES A SPECIAL DESIGN WITH A COMBINED DHW CYLINDER (BOILER) AND BUFFER, MADE OF STAINLESS STEEL AND TRIPLE-LAYER INSULATION. THE BOILER ALSO HAS 'DOUBLE COIL' DUAL SPIRALS WITH A SURFACE AREA OF 2.7M<sup>2</sup>, ENABLING ADDITIONAL HEAT EXCHANGE EFFICIENCY. EMBRACE THE MODERN SOLUTION OF THE COMBINED TERRA COMBI TANK (BOILER + BUFFER = ALL IN ONE) AND ENJOY HIGH PERFORMANCE WHILE SAVING ENERGY.

THERE ARE TWO COMBINATIONS FOR THE BUFFER TANK AND STORAGE TANK, SO IT IS FLEXIBLE TO CHOOSE DIFFERENT TANKS ACCORDING TO THE AREA OF THE HOUSE, HEATING NEEDS, AND WATER USAGE NEEDS.



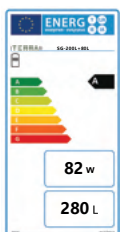
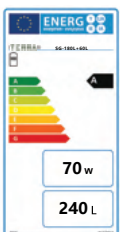
### AVAILABLE CAPACITY



## TECHNICAL DETAILS

### Combi tank ( boiler + buffer) all in one

| Name                      |                            | Combi water tank  | Combi water tank  | Combi water tank  | Combi water tank  | Combi water tank  | Combi water tank  |
|---------------------------|----------------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|
| Model                     |                            | SG-120L+60L       | SG-150L+80L       | SG-180L+60L       | SG-200L+80L       | SG-260L+120L      | SG-330L+120L      |
| Inner liner Material      |                            | SUS304            | SUS304            | SUS304            | SUS304            | SUS304            | SUS304            |
| Inner Liner Thickness(mm) |                            | 1,2               | 1,4               | 1,4               | 1,4               | 1,4               | 1,5               |
| Shell Material            |                            | Color steel plate | Color steel plate | Color steel plate | Color steel plate | Color steel plate | Color steel plate |
| Shell Thickness(mm)       |                            | 0,4               | 0,4               | 0,4               | 0,4               | 0,4               | 0,4               |
| Max Working Pressure(bar) |                            | 8                 | 8                 | 8                 | 8                 | 8                 | 8                 |
| Hot Water Tank            | Capacity                   | 120L              | 150L              | 180L              | 200L              | 260L              | 330L              |
|                           | Circulating Inlet&Outlet   | G1" M             | G1" M             | G1" M             | G1" M             | G1" M             | G1" M             |
|                           | Cold&Hot Water Inlet       | G3/4" M           | G3/4" M           | G3/4" M           | G3/4" M           | G3/4" M           | G3/4" M           |
|                           | Recirculation              | G3/4" M           | G3/4" M           | G3/4" M           | G3/4" M           | G3/4" M           | G3/4" M           |
|                           | Temperature Port           | G3/8" F           | G3/8" F           | G3/8" F           | G3/8" F           | G3/8" F           | G3/8" F           |
|                           | Anode Rod                  | G3/4" F           | G3/4" F           | G3/4" F           | G3/4" F           | G3/4" F           | G3/4" F           |
|                           | P/TP valve                 | G3/4" F           | G3/4" F           | G3/4" F           | G3/4" F           | G3/4" F           | G3/4" F           |
|                           | Immersion Heater Port      | Optional          | Optional          | Optional          | Optional          | Optional          | Optional          |
|                           | Immersion Heater           | Optional          | Optional          | Optional          | Optional          | Optional          | Optional          |
|                           | Drain                      | G3/4" F           | G3/4" F           | G3/4" F           | G3/4" F           | G3/4" F           | G3/4" F           |
| Coil material             | SUS304                     | SUS304            | SUS304            | SUS304            | SUS304            | SUS304            |                   |
| Buffer Tank               | Capacity                   | 60L               | 80L               | 60L               | 80L               | 120L              | 120L              |
|                           | Circulating Inlet&Outlet 1 | G1" F             | G1" F             | G1" F             | G1" F             | G1" F             | G1" F             |
|                           | Circulating Inlet&Outlet 2 | G1" F             | G1" F             | G1" F             | G1" F             | G1" F             | G1" F             |
|                           | Temperature Port           | G3/8" F           | G3/8" F           | G3/8" F           | G3/8" F           | G3/8" F           | G3/8" F           |
|                           | Immersion Heater Port      | Optional          | Optional          | Optional          | Optional          | Optional          | Optional          |
|                           | Immersion Heater           | Optional          | Optional          | Optional          | Optional          | Optional          | Optional          |
|                           | Drain                      | G3/4" F           | G3/4" F           | G3/4" F           | G3/4" F           | G3/4" F           | G3/4" F           |
| Air Vent                  | G1/2" F                    | G1/2" F           | G1/2" F           | G1/2" F           | G1/2" F           | G1/2" F           |                   |
| Product Size(mm)          |                            | φ520*1575         | φ560*1595         | φ560*1595         | φ560*1845         | φ700*1595         | φ700*1875         |
| Package Size(mm)          |                            | 605*605*1600      | 645*645*1670      | 645*645*1670      | 645*645*1950      | 790*790*1690      | 790*790*1950      |
| Net Weight (kg)           |                            | 43                | 52                | 52                | 60                | 74                | 86                |
| Gross Weight(kg)          |                            | 47                | 56                | 56                | 65                | 81                | 92                |



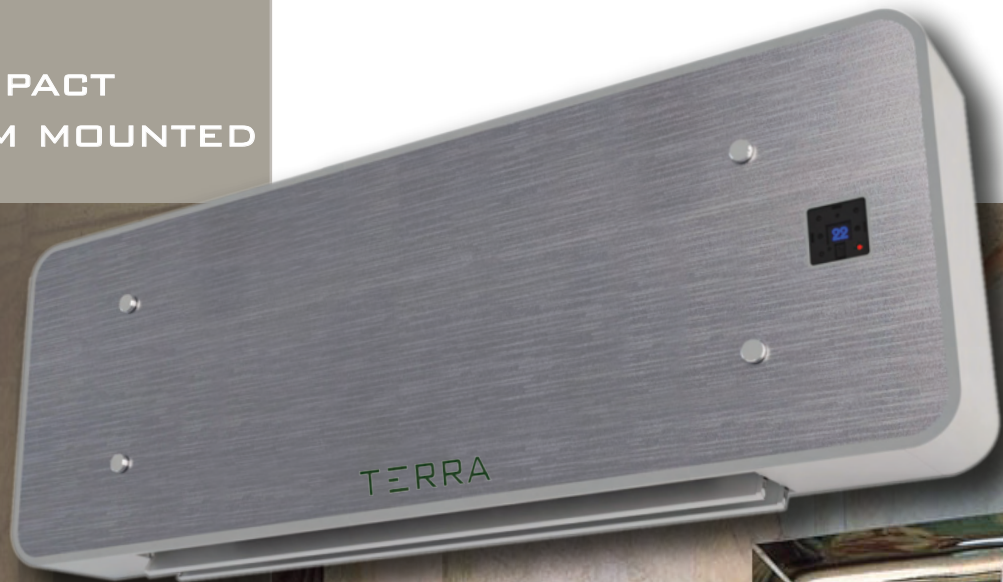
**WARRETNY**  
2 YEARS COMBI TANK



# FAN COIL

## DESIGN FAN COIL

- ❑ FLOOR STANDING
- ❑ HIGH WALL MOUNTED
- ❑ 360 ROUND
- ❑ CEILING
- ❑ WALL COMPACT
- ❑ BATHROOM MOUNTED



*Stylish fan coil, as customizable as your environment  
Performance and efficiency at the top of the category*

# TERRA ULTRA THIN FLOOR STANDING

## THE THINNEST FAN COIL ONLY 12 CM

THE ABSENCE OF FRONT GRIDS ALLOWS THE TERRA FAN INSTALLATION IN A VERSATILE WAY EVEN IN THE MOST CONFINED SPACES. THANKS TO THE INNOVATIVE VENTILATION SYSTEM, BATTERY PERFORMANCE IS GUARANTEED BY WORKING WITH NEGATIVE PRESSURE. THE FRONT PANEL IN TEMPERED GLASS CAN BE MOUNTED ON BOTH SIDES TO ALLOW LEFT/RIGHT PIPES CONNECTION WITHOUT ADDITIONAL OPERATIONS (VSL MODEL).

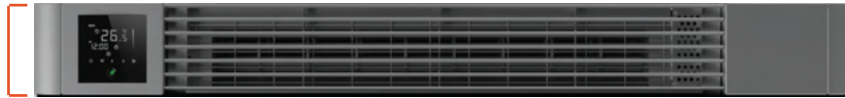
DC INVERTER TECHNOLOGY: EXTREME LOW NOISE. OPTIONAL ON BOARD CONTROL.

TOP CONTROLS, WITH BLACK TOUCH SCREEN DISPLAY AND WI-FI FUNCTION FOR EASY MANAGEMENT FROM SMARTPHONE VIA APP. THE ENTIRE REVERSO RANGE IS EASY TO MANAGE THANKS TO THE CONTROLS TOUCH SCREEN AND CONVENIENT APP. IT IS POSSIBLE TO MANAGE A NETWORK OF MACHINES BOTH FOR RESIDENTIAL AND FOR HOTEL STRUCTURES, OFFICES AND PUBLIC BUILDINGS. THE APP IS AVAILABLE FOR BOTH IOS AND ANDROID SYSTEMS.

## 1 YEAR WARRANTY, SPARE PARTS AVAILABILITY AND SERVICE GUARANTEED



ONLY 12 CM



### THE FEATURES THAT SET IT APART FROM PRODUCTS OF THE SAME CATEGORY ARE:

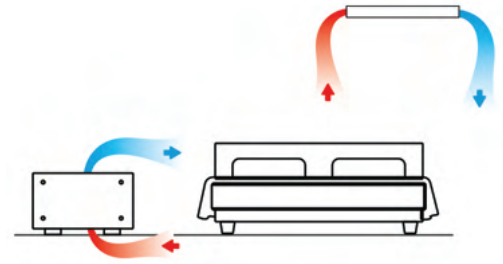
- ADJUSTABLE AIR FLOW WITH MOVABLE GRILLES IN EXTRUDED ALUMINUM
- EIGHT SPEED PROGRAMS
- ALL UNITS WITH MODULATING THERMAL POWER.
- COOLING, HEATING AND DEHUMIDIFICATION FUNCTION
- THERMAL POWER FROM 0.5 TO 4, 7 kW
- SUPER THIN THICKNESS, ONLY 12 CM
- MINIMUM NOISE LEVEL BELOW THE THRESHOLD OF THE AUDIBLE, 20 DB (A)
- DC INVERTER TECHNOLOGY
- LOW POWER CONSUMPTION, ONLY 4 WATTS
- WI-FI CONTROLS FOR EASY MANAGEMENT BY SMARTPHONE VIA CONVENIENT APP
- FRONT PANEL IN TEMPERED GLASS CRYSTAL
- DOUBLE FACADE, FRONT AND REAR, ON REQUEST
- LEFT OR RIGHT HYDRAULIC CONNECTIONS ALWAYS AVAILABLE WITHOUT EXTRA WORK
- PLEATED STAINLESS STEEL FILTERS OF UNLIMITED DURATION
- TANGENTIAL ALUMINUM FAN FOR GREATER EFFICIENCY
- CONTROLS BUILT-IN OR WITH REMOTE WALL PANEL
- RADIANT PANEL ON REQUEST
- MODERN DESIGN



# TERRA ULTRA THIN FLOOR STANDING

## THE THINNEST FAN COIL ONLY 12 CM

- FOUR SIZES 200-400-600-800
- 2 AND 4 PIPE INSTALLATION
- 2-WAY AND 3-WAY BY-PASS VALVES
- EASY INSTALLATION AND MAINTENANCE



## TECHNICAL DATA FS

| Model   | U.M.              | FS200    | FS400    | FS600    | FS800    |
|---|-------------------|----------|----------|----------|----------|
| Total cooling capacity                          | KW                | 0,88     | 1,81     | 2,7      | 3,38     |
| Total heating capacity main exchanger           | KW                | 1,10     | 2,40     | 3,20     | 4,23     |
| Air flow rate (min-max)                         | m <sup>3</sup> /h | 80-180   | 155-315  | 240-450  | 310-540  |
| Electric power absorption (min-max)             | watt              | 3-12     | 4-13     | 5-14     | 8-17     |
| Minimum sound pressure (SPL)                    | db(A)             | 20,5     | 21,6     | 23,5     | 21,7     |
| Width   | mm                | 681      | 873      | 1065     | 1257     |
| Height  | mm                | 553      | 553      | 553      | 553      |
| Depth   | mm                | 122      | 122      | 122      | 122      |
| DC Inverter motor low power                     |                   | yes      | yes      | yes      | yes      |
| Tangential aluminum fan                         |                   | yes      | yes      | yes      | yes      |
| Remote control                                  |                   | no       | no       | no       | no       |
| LCD display                                     |                   | no       | no       | no       | no       |
| Pleated stainless steel filter                  |                   | yes      | yes      | yes      | yes      |
| Front panel in tempered glass                   |                   | yes      | yes      | yes      | yes      |
| Machine frame in powder-coated steel            |                   | yes      | yes      | yes      | yes      |
| Supply voltage                                  | V-Hz              | 220-50   | 220-50   | 220-50   | 220-50   |
| OPTIONAL  |                   |          |          |          |          |
| Luxury touch screen built-in control with wi-fi |                   | optional | optional | optional | optional |
| Water temperature probe                         |                   | optional | optional | optional | optional |
| 2-way valve kit with by pass for 2pipes         |                   | optional | optional | optional | optional |
| 3-way valve kit with by pass for 2pipes         |                   | optional | optional | optional | optional |



LEFT OR RIGHT HYDRAULIC CONNECTIONS  
ALWAYS AVAILABLE WITHOUT EXTRA WORK



WI-FI CONTROLS FOR EASY MANAGEMENT  
BY SMARTPHONE



LOW ENERGY CONSUMPTION



HEATING



COOLING



DEHUMIDIFICATION



# TERRA HIGH WALL MOUNTED FAN COIL

## ULTRA FLAT FAN COIL FOR HIGH WALL INSTALLATION

PERFECT ON THE WALL INSTALLATION. BY ITS 12 CM OF THICKNESS, IT'S THINNER THAN A SPLIT.

TOP CONTROLS, WITH BLACK TOUCH SCREEN DISPLAY AND WI-FI FUNCTION FOR EASY MANAGEMENT FROM SMARTPHONE VIA APP. THE ENTIRE REVERSO RANGE IS EASY TO MANAGE THANKS TO THE CONTROLS TOUCH SCREEN AND CONVENIENT APP. IT IS POSSIBLE TO MANAGE A NETWORK OF MACHINES BOTH FOR RESIDENTIAL AND FOR HOTEL STRUCTURES, OFFICES AND PUBLIC BUILDINGS. THE APP IS AVAILABLE FOR BOTH IOS AND ANDROID SYSTEMS.



## 1 YEAR WARRANTY, SPARE PARTS AVAILABILITY AND SERVICE GUARANTEED

### THE FEATURES THAT SET IT APART FROM PRODUCTS OF THE SAME CATEGORY ARE:

- DOUBLE FLAP FOR ACCURATE CONTROL OF THE AIR FLOW
- EIGHT SPEED PROGRAMS
- ADJUSTABLE THERMAL POWER
- COOLING, HEATING AND DEHUMIDIFICATION FUNCTION
- ADJUSTABLE THERMAL POWER FROM 0.5 TO 4 kW
- SUPER THIN THICKNESS, ONLY 12 CM
- MINIMUM NOISE LEVEL BELOW THE THRESHOLD OF THE AUDIBLE, 20 DB (A)
- DC INVERTER TECHNOLOGY
- LOW POWER CONSUMPTION, ONLY 4 WATTS
- MODERN DESIGN
- FRONT PANEL IN TEMPERED GLASS CRYSTAL
- PLEATED STAINLESS STEEL FILTERS OF UNLIMITED DURATION
- TANGENTIAL ALUMINUM FAN FOR GREATER EFFICIENCY
- CONTROLS WITH INFRARED HANDSET OR WITH REMOTE WALL PANEL
- DIGITAL INDICATOR OF THE ROOM TEMPERATURE
- WI-FI CONTROLS FOR EASY MANAGEMENT BY SMARTPHONE



# TERRA HIGH WALL MOUNTED FAN COIL

## ULTRA FLAT FAN COIL FOR HIGH WALL INSTALLATION

- THREE SIZES 400-600-800
- 2 AND 4 PIPE INSTALLATION
- 2-WAY AND 3-WAY BY-PASS VALVES
- EASY INSTALLATION AND MAINTENANCE



LOW ENERGY CONSUMPTION



DEHUMIDIFICATION



COOLING



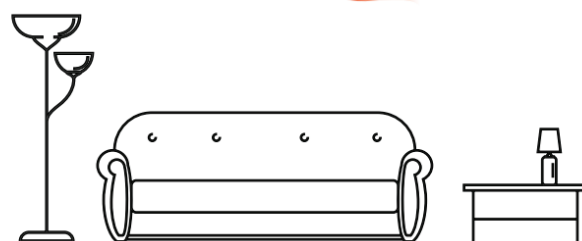
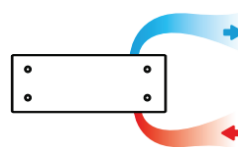
HEATING



LEFT OR RIGHT HYDRAULIC CONNECTIONS  
ALWAYS AVAILABLE WITHOUT EXTRA WORK



WI-FI CONTROLS FOR EASY MANAGEMENT  
BY SMARTPHONE



## Technical data HW

| Model   | U.M.              | HW400    | HW600    | HW800    |
|---|-------------------|----------|----------|----------|
| Total cooling capacity                          | KW                | 1,20     | 1,70     | 2,45     |
| Total heating capacity main exchanger           | KW                | 1,68     | 2,45     | 3,30     |
| Air flow rate (min-max)                         | m <sup>3</sup> /h | 155-315  | 240-450  | 310-540  |
| Electric power absorption (min-max)             | watt              | 4-11     | 5-14     | 8-17     |
| Minimum sound pressure (SPL)                    | db(A)             | 23,0     | 23,4     | 25,0     |
| Width   | mm                | 873      | 1065     | 1257     |
| Height  | mm                | 383      | 383      | 383      |
| Depth   | mm                | 122      | 122      | 122      |
| DC Inverter motor low power                     |                   | yes      | yes      | yes      |
| Tangential aluminum fan                         |                   | yes      | yes      | yes      |
| Remote control                                  |                   | yes      | yes      | yes      |
| LCD display                                     |                   | yes      | yes      | yes      |
| Pleated stainless steel filter                  |                   | yes      | yes      | yes      |
| Front panel in tempered glass                   |                   | yes      | yes      | yes      |
| Machine frame in powder-coated steel            |                   | yes      | yes      | yes      |
| Supply voltage                                  | V-Hz              | 220-50   | 220-50   | 220-50   |
| OPTIONAL  |                   |          |          |          |
| Luxury touch screen built-in control with wi-fi |                   | optional | optional | optional |
| Water temperature probe                         |                   | optional | optional | optional |
| 2-way valve kit with by pass for 2pipes         |                   | optional | optional | optional |
| 3-way valve kit with by pass for 2pipes         |                   | optional | optional | optional |



# TERRA BATHROOM MOUNTED FAN COIL

ULTRA FLAT FANCOIL FOR BATHROOMS AND BEHIND THE DOORS

1 YEAR WARRANTY, SPARE PARTS AVAILABILITY  
AND SERVICE GUARANTEED

THE FEATURES THAT SET IT APART FROM PRODUCTS OF  
THE SAME CATEGORY ARE:

- ADJUSTABLE AIR FLOW WITH MOVABLE GRILLES IN EXTRUDED ALUMINUM
- EIGHT SPEED PROGRAMS
- MODULATING THERMAL POWER THROUGH VARIOUS FAN SPEED SETTINGS
- COOLING, HEATING AND DEHUMIDIFICATION FUNCTION
- HEATING CAPACITY UP TO 1.65 KW
- IT CAN BE INSTALLED BEHIND THE DOORS
- SUPER THIN THICKNESS, ONLY 12 CM
- MINIMUM NOISE LEVEL BELOW THE THRESHOLD OF THE AUDIBLE, 20 DB (A)
- DC INVERTER TECHNOLOGY
- LOW POWER CONSUMPTION, ONLY 4 WATTS
- MODERN DESIGN
- FRONT PANEL IN TEMPERED GLASS CRYSTAL
- RADIANT PANEL OF 200WATT AS STANDARD
- PLEATED STAINLESS STEEL FILTERS OF UNLIMITED DURATION
- TANGENTIAL ALUMINUM FAN FOR GREATER EFFICIENCY
- CONTROL WITH INFRARED HANDSET
- SMART DISPLAY
- IT CAN BE INSTALLED BEHIND THE DOORS
- WI-FI CONTROLS FOR EASY MANAGEMENT BY SMARTPHONE



# TERRA BATHROOM MOUNTED FAN COIL

## ULTRA FLAT FANCOIL FOR BATHROOMS AND AND BEHIND THE DOORS

- TWO SIZES 200-400
- 2 PIPE INSTALLATION
- 2-WAY AND 3-WAY BY-PASS VALVES
- EASY INSTALLATION AND MAINTENANCE



LOW ENERGY CONSUMPTION



DEHUMIDIFICATION



COOLING



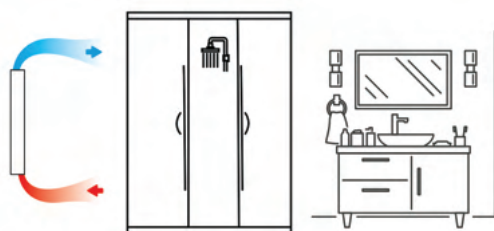
HEATING



LEFT OR RIGHT HYDRAULIC CONNECTIONS  
ALWAYS AVAILABLE WITHOUT EXTRA WORK



WI-FI CONTROLS FOR EASY MANAGEMENT  
BY SMARTPHONE



## Technical data BT

| Model   | U.M.              | BT200    | BT400    |
|---|-------------------|----------|----------|
| Total cooling capacity                          | KW                | 0,43     | 1,20     |
| Total heating capacity main exchanger           | KW                | 0,68     | 1,45     |
| Air flow rate (min-max)                         | m <sup>3</sup> /h | 72 - 135 | 120-225  |
| Electric power absorption (min-max)             | watt              | 3 - 9    | 4-11     |
| Minimum sound pressure (SPL)                    | db(A)             | 19,1     | 19,1     |
| Width   | mm                | 457      | 565      |
| Height  | mm                | 798      | 1100     |
| Depth   | mm                | 122      | 122      |
| DC Inverter motor low power                     |                   | yes      | yes      |
| Tangential aluminum fan                         |                   | yes      | yes      |
| Remote control                                  |                   | yes      | yes      |
| LCD display                                     |                   | yes      | yes      |
| Pleated stainless steel filter                  |                   | yes      | yes      |
| Front panel in tempered glass                   |                   | yes      | yes      |
| Machine frame in powder-coated steel            |                   | yes      | yes      |
| Supply voltage                                  | V-Hz              | 220-50   | 220-50   |
| OPTIONAL  |                   |          |          |
| Luxury touch screen built-in control with wi-fi |                   | optional | optional |
| Water temperature probe                         |                   | optional | optional |
| 2-way valve kit with by pass for 2pipes         |                   | optional | optional |
| 3-way valve kit with by pass for 2pipes         |                   | optional | optional |

# TERRA 360° ROUND FAN COIL

ROUND CASSETTE WITH AN INNOVATIVE 360° AIRFLOW ENSURES OPTIMAL AIR CONDITIONING WHICH ALSO ELIMINATES DEAD ZONES. 360 DEGREE DIRECTIONAL WIND COMING OUT FROM CIRCULAR HEAT EXCHANGER CAN DELIVER AIR EVENLY THROUGHOUT EVERY CORNER IN ANY SPACE.

AIR FLOW: 500 – 1400CFM

COOLING CAPACITY: 4.5KW -12.6KW



## FEATURES:

- HIGH EFFICIENCY ROUND DESIGN
- SILENT HI-QUALITY PLASTIC WHEEL FAN
- FRESH AIR INTAKE OPTIONAL
- BUILT-IN DRAIN PUMP & FLOAT SWITCH

## UNIT BODY

MADE OF GALVANIZED STEEL, WITH PRE-FORMED EXPANDED POLYSTYRENE AIR PASSAGES SUITABLE SHAPED TO ALLOW PASSAGE OF AIR, THICKNESS ENOUGH FOR THERMAL AND ACOUSTICAL INSULATION.

## PANEL ASSEMBLY-WITH DIGITAL LED DISPLAY

AESTHETIC PANEL DESIGN, IN ABS MATERIAL WITH SYNTHETIC WASHABLE AND REMOVAL AIR FILTER AND EQUIPPED WITH DIGITAL LED DISPLAY.

## PLASTIC WHEEL-QUIET RUNNING

ONE-TIME INJECTION FORMING, NO WELDING BETWEEN THE FAN BLADES AND INLET CONE/END PLATE, IT MAKES THE WHEEL GOOD BALANCING; AN ANTIVIBRATION RUBBER IS INSTALLED ON THE HUB TO ENSURE LESS VIBRATION, LOW NOISE ON THE WHEELS AND MOTORS. EACH WHEEL WILL BE BALANCED UNDER 0.5 MM/S.

## FRESH AIR INTAKE

FRESH AIR INTAKE IS SANDARD FOR FOR THE UNIT.

**18 MONTHS WARRANTY, SPARE PARTS AVAILABILITY AND SERVICE GUARANTEED**

360 CST



## CIRCULAR HEAT EXCHANGER

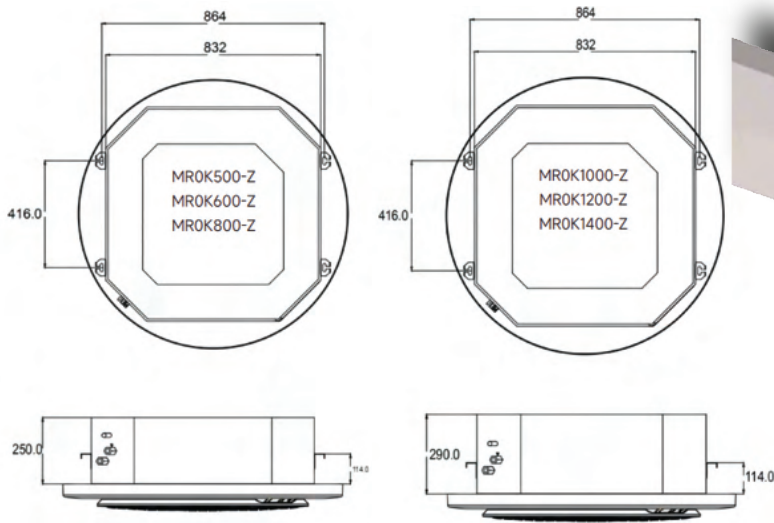
HIGH EFFICIENCY CIRCULAR COIL ARE MADE OF COPPER TUBES AND HIGH EXCHANGE SURFACE AREA ALUMINUM BLUE FINNS. WITH BUILT-IN EEV, EXTERNAL EEV IS OPTIONAL.

## CONDENSATE DRAIN PAN

IN THERMOFORMING HIGH DENSITY EXPANDED POLYSTYRENE, COVERED WITH A VACUUM FORMING POLYVINYL CHLORIDE, FITTED WITH A CONDENSATES DRAINING PUMP AND A SAFETY FLOAT.

## DRAIN PUMP AND FLOAT SWITCH

700MM HEAD DRAIN PUMP WITH NO RETURN VALVE IS INSTALLED IN THE UNIT; AN FLOAT SWITCH INSIDE AS WELL TO PREVENT FROM LEAKING. IF THE WATER RAISING TO A CERTAINLY POSITION, THE FLOAT SWITCH WILL ACT AND ALARM, THEN THE UNIT WILL CUT OFF THE WATER VALVE OR STOP THE FAN MOTOR.



| Unit model AC /EC          |                                     |   | MROK500-Z   | MROK600-Z   | MROK800-Z   | MROK1000-Z  | MROK1200-Z  | MROK1400-Z |
|----------------------------|-------------------------------------|---|-------------|-------------|-------------|-------------|-------------|------------|
| Air volum                  | H                                   | m <sup>3</sup> /h                           | 850         | 1020        | 1360        | 1700        | 2040        | 2380       |
|                            | L                                   |   | 638         | 765         | 1020        | 1275        | 1530        | 1785       |
|                            | M                                   |   | 425         | 510         | 680         | 850         | 1020        | 1190       |
| Cooling                    | cooling capacity                    | H   | 4.50        | 5.40        | 7.20        | 9.00        | 10.80       | 12.60      |
|                            |                                     | L   | 3.60        | 4.32        | 5.76        | 7.20        | 8.64        | 10.08      |
|                            |                                     | M   | 2.70        | 3.24        | 4.32        | 5.40        | 6.48        | 7.56       |
|                            | water flow                          | L/h   | 780         | 940         | 1200        | 1650        | 1850        | 2150       |
| water resistance           | kPa                                 | 30  | 40          | 40          | 40          | 40          | 50          |            |
| Heating                    | 60 °C water intake heating capacity | H   | 6.75        | 8.10        | 10.80       | 13.50       | 16.20       | 18.90      |
|                            |                                     | L   | 5.40        | 6.48        | 8.64        | 10.80       | 12.96       | 15.12      |
|                            |                                     | M   | 4.05        | 4.86        | 6.48        | 8.10        | 9.72        | 11.34      |
|                            | 45 °C water intake heating capacity | H   | 4.50        | 5.40        | 7.20        | 9.00        | 10.80       | 12.60      |
|                            |                                     | L   | 3.60        | 4.32        | 5.76        | 7.20        | 8.64        | 10.08      |
|                            |                                     | M   | 2.70        | 3.24        | 4.32        | 5.40        | 6.48        | 7.56       |
| FAN                        | FORM                                | Centrifugal wind wheel                      |             |             |             |             |             |            |
|                            | SIZE                                | mm  | Φ 450       | Φ 450       | Φ 450       | Φ 476       | Φ 476       | Φ 476      |
|                            | quantity                            |   | 1           |             |             |             |             |            |
| Power mode                 | V/Ph/Hz                             | 220/1/50-60                                 |             |             |             |             |             |            |
| input power                | W                                   | 74  | 93          | 130         | 147         | 183         | 221         |            |
| operating current          | A                                   | 0.34  | 0.42        | 0.59        | 0.67        | 0.83        | 1.00        |            |
| noise                      | dB (A)                              | 43  | 45          | 46          | 48          | 50          | 52          |            |
| control mode               |                                     | Remote control (remote controller optional) |             |             |             |             |             |            |
| Machine dimensions (L*W*H) | mm                                  | 835*835*255                                 | 835*835*255 | 835*835*255 | 835*835*290 | 835*835*290 | 835*835*290 |            |
| Panel sue                  | mm                                  | 1100*105                                    | 1100*105    | 1100*105    | 1100*105    | 1100*105    | 1100*105    |            |
| net weight                 | kg                                  | 25  | 25          | 25          | 34          | 34          | 34          |            |
| Water pipe                 | wet return                          | in  | ZG3/4"      | ZG3/4"      | ZG3/4"      | ZG3/4"      | ZG3/4"      | ZG3/4"     |
|                            | outlet pipe                         | in  | ZG3/4"      | ZG3/4"      | ZG3/4"      | ZG3/4"      | ZG3/4"      | ZG3/4"     |
| drain pipe (EXT)           | mm                                  | 26  | 26          | 26          | 26          | 26          | 26          |            |

Test conditions

Cooling-Clrtet dry bulb temperix: 27° C. net bulb temperature 19.5°C, inlet temperature 7° C, outlet temperature 12°C

Heating :Intet air dry bulb temperatu, re: 20°C; The inlet water temperature is 60° C /45° C, and the flow rate is the same as that of refrigeration

# TERRA ULTRA THIN DUCT TYPE FAN COIL

## FEATURES:

- GALVANIZED METAL PLATE.
- PURE COPPER TUBE.
- HYDROPHILIC ALUMINUM FINS.
- 5 SPEED DC MOTOR CONTROLS.
- INTEGRATED CONDENSATE DRAIN PUMP.
- THE UNIT THICKNESS IS 190 MM

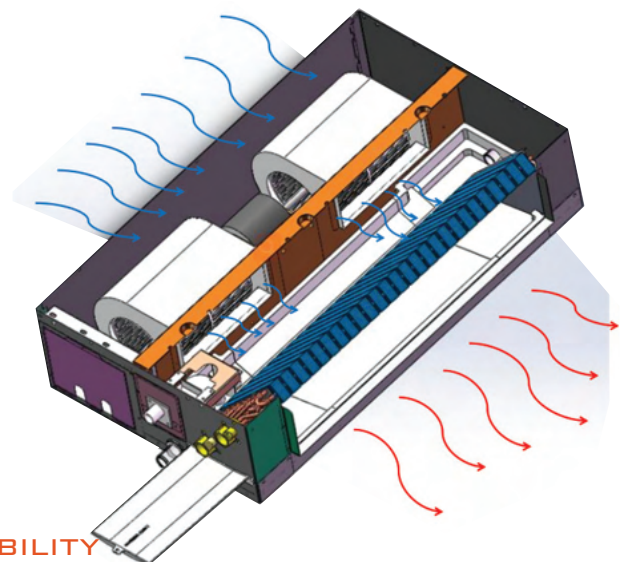


ULTRA-THIN, CEILING CONCEALED TYPE FCUs,  
SUITABLE FOR HOT/CILLED WATER SYSTEM.

AIR FLOW: 530 – 1750 M<sup>3</sup>/H  
COOLING CAPACITY: 2.95KW - 9.0KW  
INTEGRATED CONDENSATE DRAIN PUMP

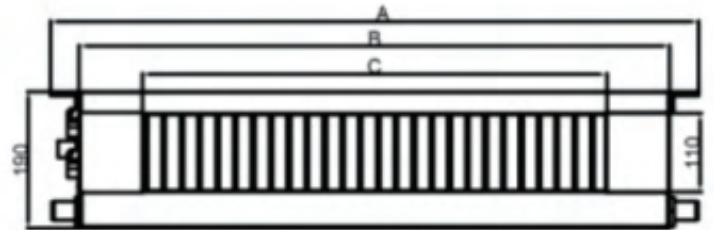
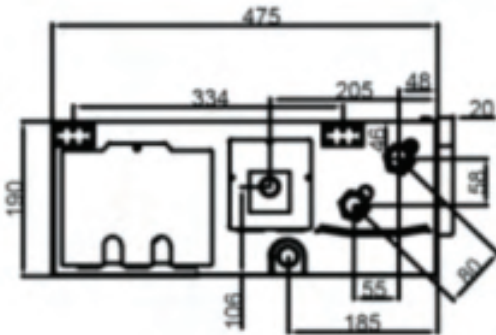
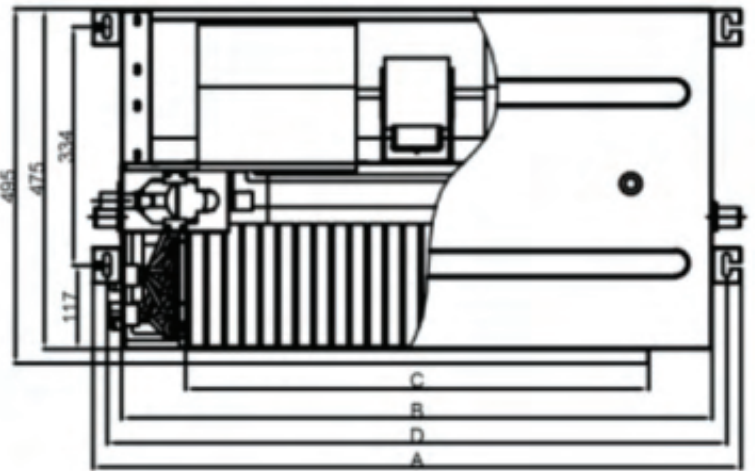
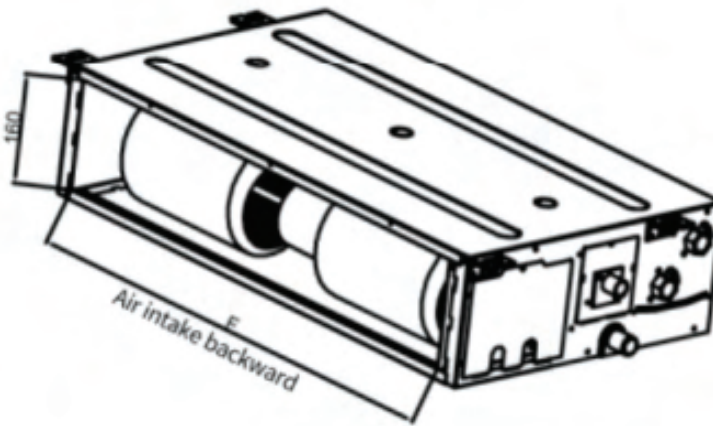
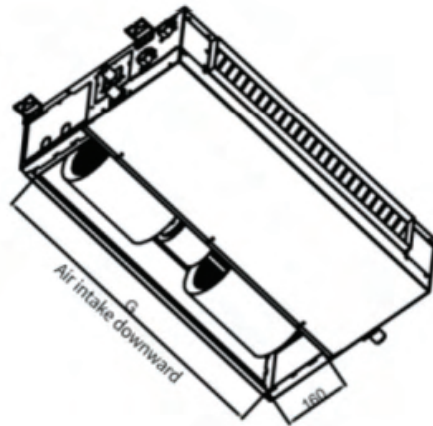
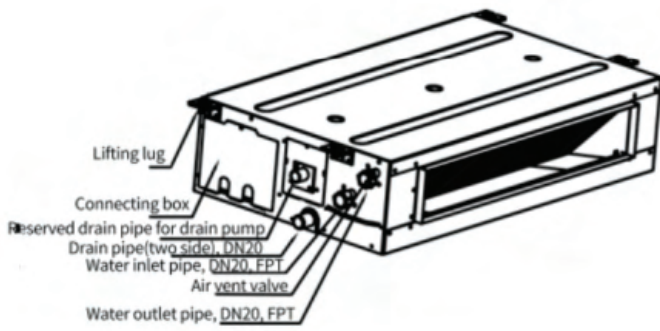
THE DEMAND FOR ULTRA-THIN FAN COILS IS INCREASING AS SPACE BECOMES MORE AND MORE PRECIOUS AND FAN COILS ARE USED MORE WIDELY IN THE HOMES, DUE TO THE CEILING SPACE LIMITATIONS, THE DEMAND FOR ULTRA-THIN FAN COILS IS INCREASING. THE HEIGHT OF THIS FAN COIL UNIT IS ONLY 19CM, OR IT IS 45-100MM THINNER THAN THE NORMAL FAN COIL UNIT.

THE WORKING PRINCIPLE OF FAN COIL UNIT IS TO SEND INDOOR AIR OR OUTDOOR MIXED AIR INTO THE ROOM AFTER COOLING OR HEATING THROUGH THE COIL, SO AS TO REDUCE OR INCREASE THE INDOOR TEMPERATURE. THE COLD (HOT) WATER IN THE COIL IS SUPPLIED BY THE HEAT PUMP OR CHILLER.



18 MONTHS WARRANTY, SPARE PARTS AVAILABILITY  
AND SERVICE GUARANTEED

# TERRA ULTRA THIN DUCT TYPE FAN COIL



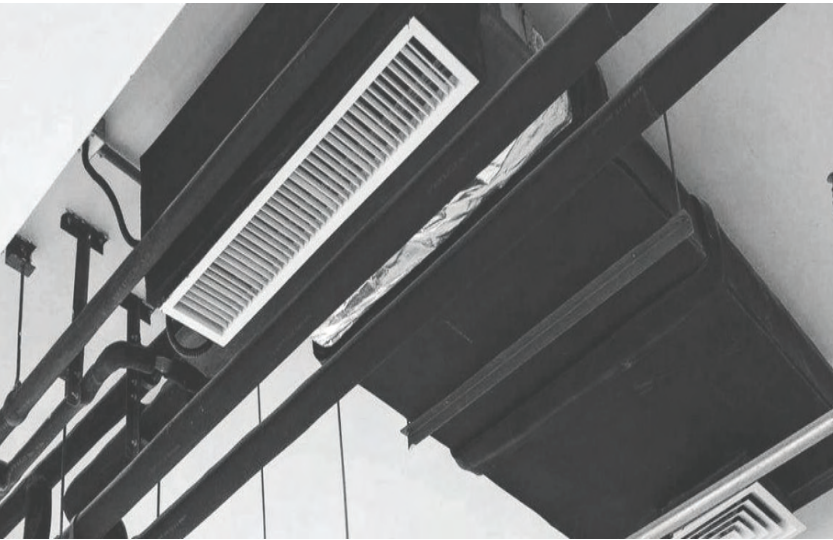
| Model   | A Total length | B Body length | C air outlet length | D lifting eye distance | F & G Air intake length |
|---------|----------------|---------------|---------------------|------------------------|-------------------------|
| TFP-51  | 763            | 675           | 500                 | 720                    | 600                     |
| TFP-68  | 913            | 825           | 650                 | 870                    | 750                     |
| TFP-85  | 1023           | 935           | 760                 | 980                    | 860                     |
| TFP-102 | 1163           | 1075          | 900                 | 1120                   | 1000                    |
| TFP-136 | 1593           | 1505          | 1330                | 1550                   | 1430                    |
| TFP-170 | 1593           | 1505          | 1330                | 1550                   | 1430                    |

# TERRA CONCEALED FAN COIL

1 YEAR WARRANTY, SPARE PARTS AVAILABILITY  
AND SERVICE GUARANTEED

## FEATURES:

- GALVANIZED METAL PLATE.
- PURE COPPER TUBE.
- HYDROPHILIC ALUMINUM FINS.
- THE UNIT THICKNESS IS 245 MM
- CONDENSATE DRAINS ARE PROVIDED ON BOTH SIDES OF THE UNIT.
- THREE SPEED MOTOR, WITH RETURN PLENUM.



ULTRA-THIN, CEILING CONCEALED TYPE FCUs, SUITABLE FOR HOT/CHILLED WATER SYSTEM.

AIR FLOW: 340 – 2300 M<sup>3</sup>/H

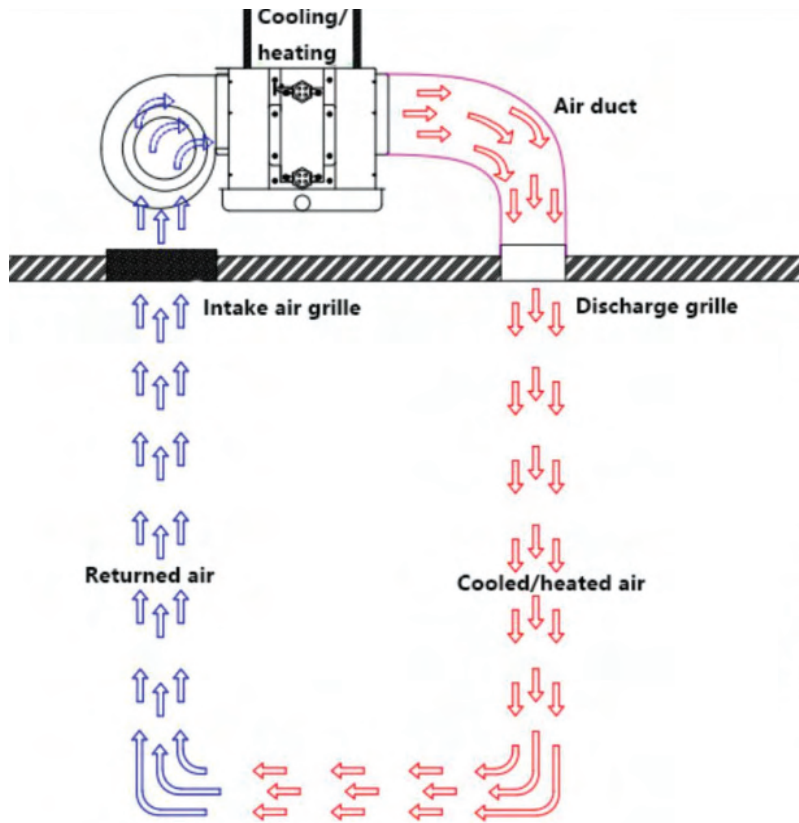
COOLING CAPACITY: 2.0KW-12.6KW

HORIZONTAL CONCEALED FAN COIL IS THE MOST DURABLE SERIES OF ALL FAN COIL UNITS. LARGE AIR VOLUME, HIGH HEAT EXCHANGE EFFICIENCY, ULTRA-THIN. THIS FAN COIL UNIT IS HIDDEN INSIDE THE CEILING AND DOES NOT OCCUPY INDOOR DECORATION SPACE, OFFERING VERY CONVENIENT INSTALLATION.



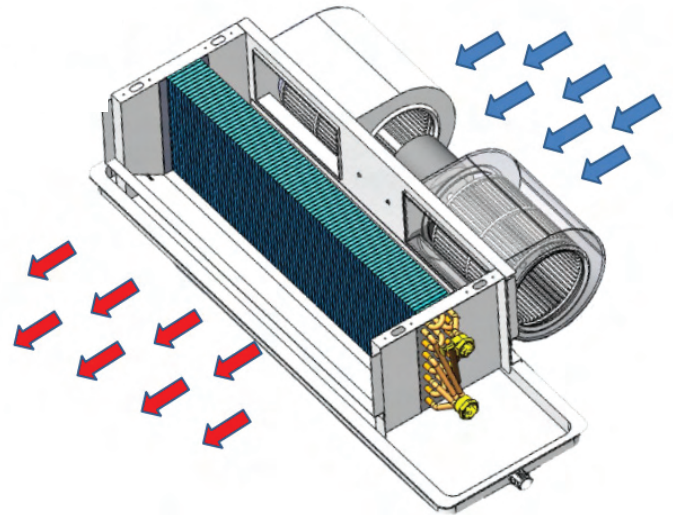
THIS UNIT CAN BE WIDELY USED IN HOTELS, RESTAURANTS, FACTORIES, HOSPITALS, EXHIBITION HALLS, SHOPPING MALLS AND OFFICE BUILDINGS AND OTHER MULTI-ROOM OR LARGE SPACE INDUSTRIAL AND CIVIL BUILDING APPLICATIONS. TO MEET THE NEEDS OF COOLING, DEHUMIDIFICATION AND HEATING. CAN ALSO BE APPLIED TO AGRICULTURAL GREENHOUSE AND LIVESTOCK FARM FOR COOLING AND HEATING.

# TERRA CONCEALED TYPE FAN COIL



THE WORKING PRINCIPLE OF FAN COIL UNIT IS TO SEND INDOOR AIR OR OUTDOOR MIXED AIR INTO THE ROOM AFTER COOLING OR HEATING THROUGH THE COIL, SO AS TO REDUCE OR INCREASE THE INDOOR TEMPERATURE.

THE COLD (HOT) WATER IN THE COIL IS SUPPLIED BY THE HEAT PUMP OR CHILLER.



| All Figures in mm |       |       |       |       |        |        |        |        |        |
|-------------------|-------|-------|-------|-------|--------|--------|--------|--------|--------|
| Model             | FP-34 | FP-51 | FP-68 | FP-85 | FP-102 | FP-136 | FP-170 | FP-204 | FP-238 |
| A                 | 755   | 855   | 955   | 1055  | 1055   | 1355   | 1655   | 1855   | 2055   |
| B                 | 500   | 630   | 700   | 810   | 810    | 1150   | 1400   | 1600   | 1800   |
| C                 | 477   | 607   | 677   | 787   | 787    | 1127   | 1377   | 1577   | 1777   |

| Model                           | FP-34 | FP-51 | FP-68 | FP-85 | FP-102 | FP-136 | FP-170 | FP-204 | FP-238 |  |
|---------------------------------|-------|-------|-------|-------|--------|--------|--------|--------|--------|--|
| Cooling Ca. (kw) (Water in 7°C) | 1.8   | 2.7   | 3.6   | 4.5   | 5.4    | 7.2    | 9      | 10.8   | 12.6   |  |
| Heating Ca. (kw) (Water in 60C) | 2.7   | 4.1   | 5.4   | 6.8   | 8.1    | 10.8   | 13.5   | 16.2   | 18.9   |  |
| Air flow (m3/h)                 | 340   | 510   | 680   | 850   | 1020   | 1360   | 1700   | 2040   | 2380   |  |
| Power Input (W)                 | 37    | 52    | 62    | 76    | 96     | 134    | 152    | 189    | 228    |  |
| Noise dB (A)                    | 37    | 39    | 41    | 43    | 45     | 46     | 48     | 50     | 52     |  |
| Motor No.                       | 1     |       |       |       |        | 2      |        |        |        |  |
| Fan No.                         | 1     | 2     |       |       |        | 3      | 4      |        |        |  |
| Static pressure (Pa)            | 12    |       |       |       |        |        |        |        |        |  |
| Condenser length                | 450   | 580   | 650   | 760   | 900    | 1100   | 1350   | 550    | 1750   |  |
| Condenser height (mm)           | 200   |       |       |       |        |        |        |        |        |  |
| Condenser Width (mm)            | 65    |       |       |       |        |        |        |        |        |  |
| Weight (kg)                     | 13.6  | 16    | 17    | 18.2  | 21     | 26.4   | 31     | 33.7   | 36.6   |  |
| Package length                  | 770   | 870   | 970   | 1070  | 1170   | 1370   | 670    | 1870   | 2070   |  |
| Package width                   | 485   |       |       |       |        |        |        |        |        |  |
| Package height                  | 250   |       |       |       |        |        |        |        |        |  |



# TERRA CEILING MOUNTED FAN COIL

VARIABLE SPEED, CONSTANT AIR FLOW



## FEATURES:

- HIGH EFFICIENCY COIL WITH ALUMINIUM FINS
- GALVANIZED STEEL FAN
- POWDER COATED STEEL DRAIN PAN
- SYMMETRICAL DESIGN PIPE CONNECTION

ULTRA-THIN, CEILING CONCEALED TYPE FCUS, SUITABLE FOR HOT/CHILLED WATER SYSTEM.

AIR FLOW: 340 – 1360 M<sup>3</sup>/H

COOLING CAPACITY: 1.8KW-7.2KW

### HIGH EFFICIENCY HEAT EXCHANGER

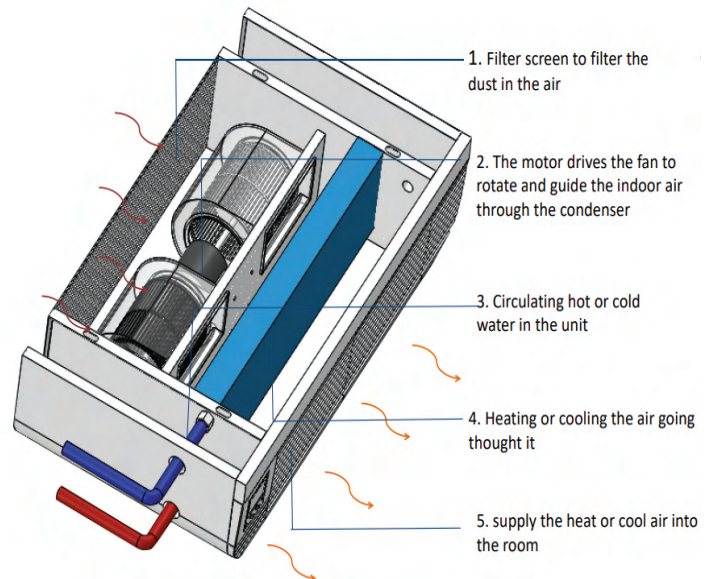
THE HEAT EXCHANGER COILS ARE MADE OF COPPER TUBES AND ALUMINIUM FINS. ALL COILS ARE PRESSURE TESTED AT 30BAR(3MPA) PRESSURE.

### DRAIN PAN

THE DRAIN PAN IS MADE OF POWDER COATED STEEL WHICH ENSURES CORROSION RESISTANCE. THE DRAIN PAN IS INSULATED WITH FOAM INSULATION TO PREVENT CONDENSATION.

### DRAIN PUMP

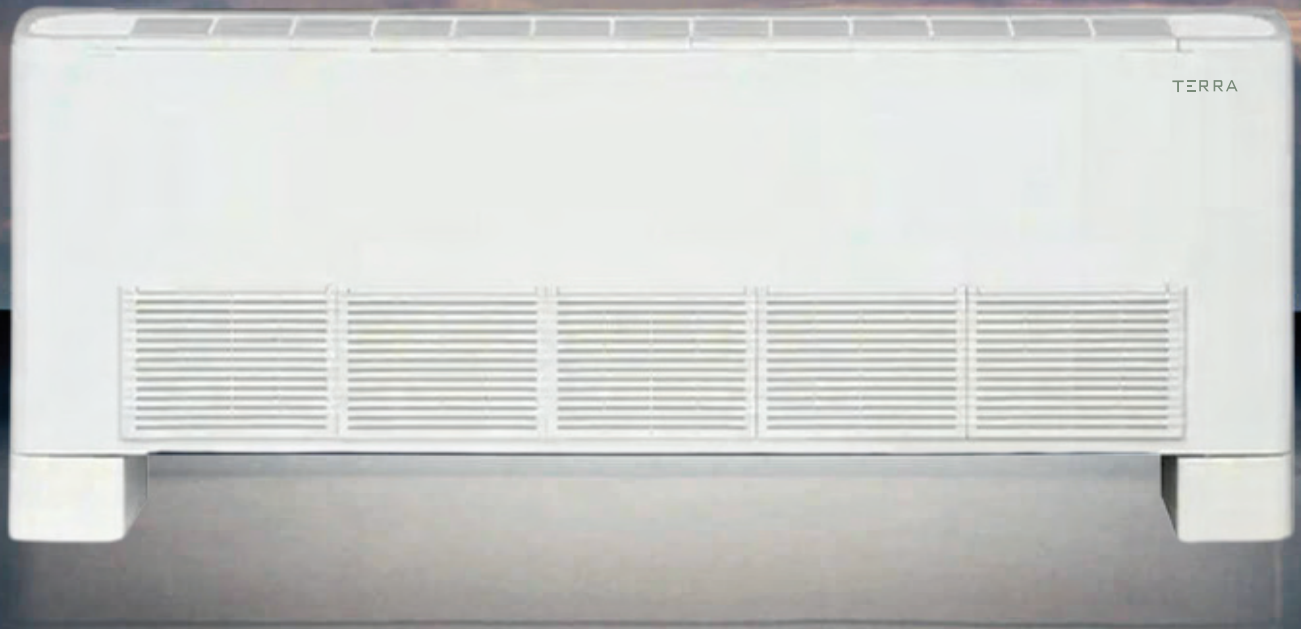
A 700MM HEAD DRAIN PUMP WITH CHECK VALVE IS INSTALLED IN THE UNIT. IT IS OPERATED BY A FLOAT SWITCH TO PREVENT OVERFLOWING OF CONDENSATE.



18 MONTHS WARRANTY, SPARE PARTS AVAILABILITY AND SERVICE GUARANTEED



# TERRA FLOOR STANDING FAN COIL



AIR FLOW: 200 – 1400 M<sup>3</sup>/H  
COOLING CAPACITY: 1.80KW-12.60KW

3 YEAR WARRANTY, SPARE PARTS AVAILABILITY  
AND SERVICE GUARANTEED

## CENTRIFUGAL FAN

CENTRIFUGAL FAN WITH GALVANIZED STEEL WHICH IS DYNAMICALLY BALANCED.

## CONDENSATE DRAIN PAN

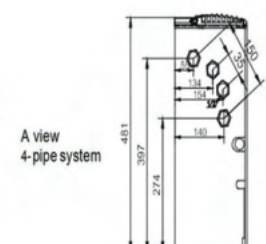
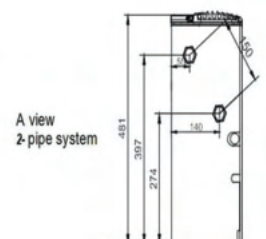
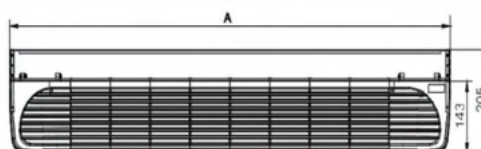
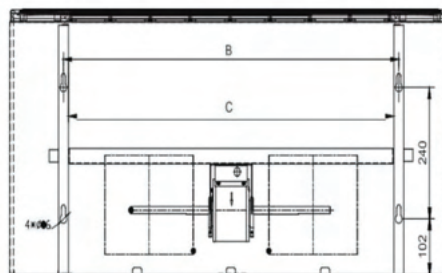
L SHAPED DRAIN PAN, SUITABLE FOR HORIZONTAL AND/OR VERTICAL INSTALLATION.

## HIGH EFFICIENCY HEAT EXCHANGER

THE HEAT EXCHANGER COILS ARE MADE OF COPPER TUBES AND ALUMINIUM FINS. ALL COILS ARE PRESSURE TESTED AT 30BAR(3MPA) PRESSURE.

## CONTROL VALVE

2-WAY VALVE OR 3-WAY VALVE (OPTIONAL).



# TERRA FLOOR STANDING FAN COIL

| Dim    | TR200 | TR300 | TR400 | TR500 | TR600 | TR700 | TR800 | TR1000 | TR1200 | TR1400 |
|--------|-------|-------|-------|-------|-------|-------|-------|--------|--------|--------|
| A      | 1015  | 1015  | 1015  | 1015  | 1370  | 1370  | 1725  | 1725   | 2080   | 2080   |
| B      | 735   | 735   | 735   | 735   | 1090  | 1090  | 1445  | 1445   | 1800   | 1800   |
| C      | 710   | 710   | 710   | 710   | 1065  | 1062  | 1420  | 1420   | 1775   | 1775   |
| Height | 100   | 100   | 100   | 100   | 100   | 100   | 100   | 100    | 100    | 100    |

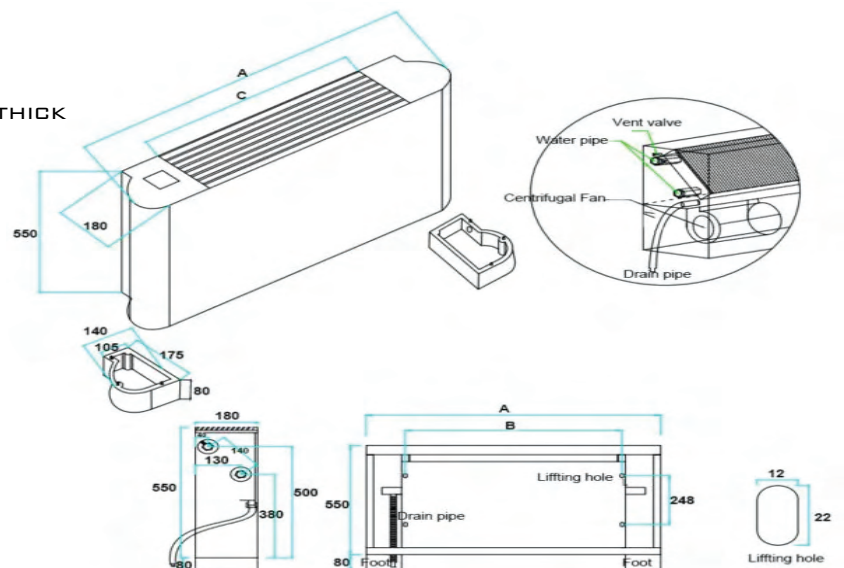
| Unit model AC/EC              |                                   |                        | MRUM200-Z    | MRUM300-Z    | MRUM400-Z    | MRUM500-Z    | MRUM600-Z    | MRUM700-Z    | MRUM800-Z    | MRUM1000-Z   | MRUM1200-Z   | MRUM1400-Z |
|-------------------------------|-----------------------------------|------------------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|------------|
| Air volum                     | H                                 | m <sup>3</sup> /h      | 340          | 510          | 680          | 850          | 1020         | 1190         | 1360         | 1700         | 2040         | 2380       |
|                               | L                                 |                        | 255          | 383          | 510          | 638          | 765          | 893          | 1020         | 1275         | 1530         | 1785       |
|                               | M                                 |                        | 170          | 255          | 340          | 425          | 510          | 595          | 680          | 850          | 1020         | 1190       |
| cooling                       | cooling capacity                  | H                      | 1.8          | 2.7          | 3.6          | 4.5          | 5.4          | 6.3          | 7.2          | 9            | 10.8         | 12.6       |
|                               |                                   | L                      | 1.44         | 2.16         | 2.88         | 3.6          | 4.32         | 5.04         | 5.76         | 7.2          | 8.64         | 10.08      |
|                               |                                   | M                      | 1.08         | 1.62         | 2.16         | 2.7          | 3.24         | 3.78         | 4.32         | 5.4          | 6.48         | 7.56       |
|                               | water flow                        | L/h                    | 320          | 500          | 610          | 780          | 940          | 1100         | 1200         | 1650         | 1850         | 2150       |
|                               | water resistance                  | kPa                    | 30           | 30           | 30           | 30           | 40           | 40           | 40           | 40           | 40           | 40         |
| heating                       | 60°C water                        | H                      | 2.7          | 4.05         | 5.4          | 6.75         | 8.1          | 9.45         | 10.8         | 13.5         | 16.2         | 18.9       |
|                               |                                   | L                      | 2.16         | 3.24         | 4.32         | 5.4          | 6.48         | 7.56         | 8.64         | 10.8         | 12.96        | 15.12      |
|                               |                                   | M                      | 1.62         | 2.43         | 3.24         | 4.05         | 4.86         | 5.67         | 6.48         | 8.1          | 9.72         | 11.34      |
|                               | 45°C water                        | H                      | 1.8          | 2.7          | 3.6          | 4.5          | 5.4          | 6.3          | 7.2          | 9            | 10.8         | 12.6       |
|                               |                                   | L                      | 1.44         | 2.16         | 2.88         | 3.6          | 4.32         | 5.04         | 5.76         | 7.2          | 8.64         | 10.08      |
|                               |                                   | M                      | 1.08         | 1.62         | 2.16         | 2.7          | 3.24         | 3.78         | 4.32         | 5.4          | 6.48         | 7.56       |
| FAN                           | FORM                              | Centrifugal wind wheel |              |              |              |              |              |              |              |              |              |            |
|                               | SIZE (Dia.)                       | mm                     | Φ156*175     | Φ156*175     | Φ156*175     | Φ156*175     | Φ156*175     | Φ156*175     | Φ156*175     | Φ156*175     | Φ156*175     | Φ156*175   |
| quantity                      |                                   |                        | 1            | 2            | 2            | 2            | 2            | 2            | 4            | 4            | 4            | 4          |
| Power mode                    | V/Ph/Hz                           | 220/1/50-60            |              |              |              |              |              |              |              |              |              |            |
| Input power                   | W                                 | 36                     | 50           | 60           | 74           | 93           | 112          | 130          | 147          | 183          | 221          |            |
| Operating current             | A                                 | 0.16                   | 0.23         | 0.27         | 0.34         | 0.42         | 0.51         | 0.59         | 0.67         | 0.83         | 1            |            |
| noise                         | dB(A)                             | 37                     | 39           | 41           | 43           | 45           | 46           | 46           | 48           | 50           | 52           |            |
| Control mode                  | Three speed switch/remote control |                        |              |              |              |              |              |              |              |              |              |            |
| Dimensions of machine with    | mm                                | 1015*584*246           | 1015*584*246 | 1015*584*246 | 1015*584*246 | 1370*584*246 | 1370*584*246 | 1725*584*246 | 1725*584*246 | 2080*584*246 | 2080*584*246 |            |
| Net weight of machine with    | kg                                | 20.7                   | 20.7         | 21.2         | 21.2         | 28.3         | 28.3         | 38.3         | 38.3         | 45.3         | 45.3         |            |
| Dimensions of machine without | mm                                | 1015*484*246           | 1015*484*246 | 1015*484*246 | 1015*484*246 | 1370*484*246 | 1370*484*246 | 1725*484*246 | 1725*484*246 | 2080*484*246 | 2080*484*246 |            |
| Net weight of machine without | kg                                | 19.9                   | 19.9         | 20.4         | 20.4         | 27.5         | 27.5         | 37.5         | 37.5         | 44.5         | 44.5         |            |
| water                         | wet return                        | in                     | ZG3/4"       |              |              |              |              |              |              |              |              |            |
| pipe                          | outlet pipe                       | in                     | ZG3/4"       |              |              |              |              |              |              |              |              |            |
| drain                         | pipe (external)                   | mm                     | 20           |              |              |              |              |              |              |              |              |            |

# TERRA FLOOR STANDING FAN COIL



**3 YEAR WARRANTY, SPARE PARTS AVAILABILITY  
AND SERVICE GUARANTEED**

ULTRA THIN EXPOSED FAN COIL UNIT 180MM THICK  
AIR FLOW 340M<sup>3</sup>/H-1360M<sup>3</sup>/H  
POWER 31W-110W  
LOW NOISE 37DBA-47DBA  
COOLING CAPACITY 1.9KW-7.2KW



# TERRA FLOOR STANDING FAN COIL

| Dim    | TP-34 | TP-51 | TP-68 | TP-85 | TP-102 | TP-136 | TP-170 | TP-204 |
|--------|-------|-------|-------|-------|--------|--------|--------|--------|
| A      | 752   | 902   | 1002  | 1052  | 1252   | 1402   | 1652   | 1852   |
| B      | 400   | 550   | 650   | 700   | 900    | 1050   | 1300   | 1500   |
| C      | 508   | 658   | 758   | 808   | 1008   | 1158   | 1408   | 1608   |
| Height | 550   | 550   | 550   | 550   | 550    | 550    | 550    | 550    |

| Model                         | FP-34 | FP-51 | FP-68 | FP-85 | FP-102 | FP-136 |
|-------------------------------|-------|-------|-------|-------|--------|--------|
| Cooling capacity(kw)(CHW 7°C) | 1.9   | 2.7   | 3.6   | 4.5   | 5.4    | 7.2    |
| Heating capacity(kw)(HW 60°C) | 2.7   | 4.05  | 5.4   | 6.75  | 8.1    | 10.8   |
| Air flow(m <sup>3</sup> /h)   | 340   | 510   | 680   | 850   | 1020   | 1360   |
| Power input(w)                | 31    | 47    | 55    | 70    | 83     | 110    |
| Noise dba                     | 37    | 39    | 41    | 43    | 45     | 47     |
| Motor NO.                     | 1     |       |       |       |        |        |
| Fan NO.                       | 1     |       | 2     |       |        | 3      |
| Weight(kg)                    | 14.7  | 15.1  | 17.2  | 17.9  | 20.6   | 22.5   |
| Packing length(mm)            | 770   | 920   | 1020  | 1070  | 1270   | 1420   |
| Packing height(mm)            | 590   |       |       |       |        |        |
| Packing width(mm)             | 240   |       |       |       |        |        |
| Condenser length(mm)          | 400   | 550   | 650   | 700   | 900    | 1050   |
| Condenser height(mm)          | 210   |       |       |       |        |        |
| Condenser thickness(mm)       | 45    |       |       |       |        |        |

# ALUMINIUM RADIATORS



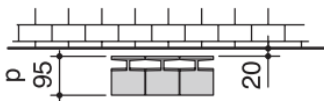
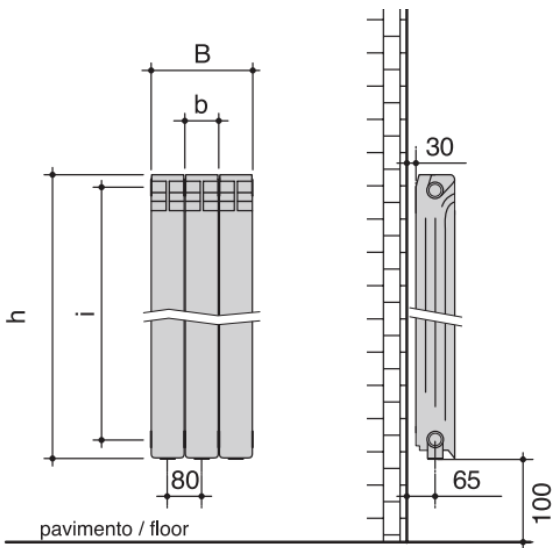
# TERRA ALUMINIUM RADIATORS

**HIGH THERMAL OUTPUT** ALLOWS LESS BULKY RADIATORS TO BE INSTALLED.

**ENERGY SAVING WITH MAXIMUM COMFORT** WITH THE TERRA RADIATORS THE REGULATION OF THE TEMPERATURE IS EASY AND INEXPENSIVE. AN IDEAL TEMPERATURE FOR EVERY ENVIRONMENT ACCORDING TO PERSONAL NEEDS IS RAPIDLY ACHIEVED

**VERY LONG DURATION** THANKS TO THE HIGH QUALITY OF THE MATERIAL, THAT GIVES THE MAXIMUM GUARANTEE OF RESISTANCE AND DURATION. THE PROTECTION OF THE EPOXY POWER ENAMELING GUARANTEES A PERFECT AND DURABLE FINISH.

**EASIER INSTALLATION** DUE TO THE LIGHTNESS OF THE ALUMINUM AND THE SECTIONAL ELEMENTS THAT ALLOW GREATER EASE AND FLEXIBILITY OF INSTALLATION.



$$B = (8 \times N) + 20 \text{ mm}$$

$$N = (\text{max } 14) \text{ n}^\circ \text{ elements battery}$$

## ACCESSORIES



*Basic valve and detentor set*



*Caps, adaptors and brackets kit*

**3 YEAR WARRANTY  
AND SERVICE GUARANTEED**

## Technical Details

| Model  | Size(MM)  | Central D(mm) | Weight(KG) | Thermal Output(w) | Water Content(ml) | working pressure(MPA) | Testing Pressure(Mpa) |
|--------|-----------|---------------|------------|-------------------|-------------------|-----------------------|-----------------------|
| C500A  | 580*80*96 | 500           | 1.43       | 180               | 430               | 0.8-1.6               | 2                     |
| C500C  | 580*80*96 | 500           | 0.96       | 170               | 330               |                       |                       |
| B600C  | 682*80*96 | 600           | 1.25       | 220               | 450               |                       |                       |
| B350   | 420*80*85 | 350           | 0.85       | 168               | 300               |                       |                       |
| B600A  | 682*80*85 | 600           | 1.42       | 240               | 460               |                       |                       |
| C500EN | 582*80*96 | 500           | 1.2        | 180               | 430               |                       |                       |
| C500BN | 582*80*96 | 500           | 1.12       | 170               | 430               |                       |                       |



# UNDERFLOOR HEATING



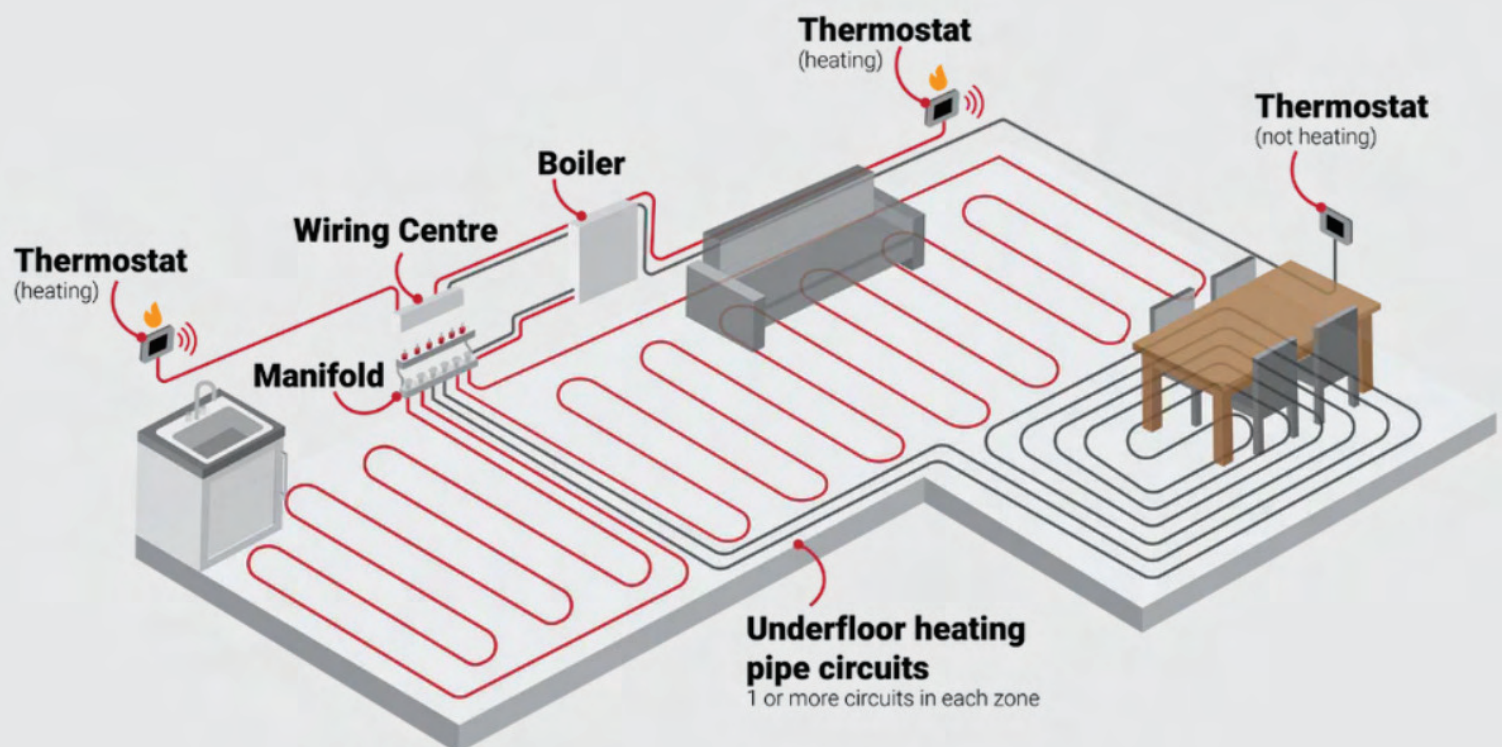
# TERRA UNDERFLOOR HEATING

THERE ARE A NUMBER OF BENEFITS THAT UNDERFLOOR HEATING HAS OVER TRADITIONAL HEATING. BECAUSE THE HEAT RISES FROM THE FLOOR, THE WHOLE ROOM WILL HEAT UP EVENLY, UNLIKE RADIATORS. IT IS ENVIRONMENTALLY FRIENDLY, HEALTHIER AND CAN BE UP TO 40% MORE ENERGY EFFICIENT TO RUN, SAVING YOU MONEY ON YOUR HEATING BILLS OVER TIME. BOTH ELECTRIC AND WATER CAN BE USED FOR ANY ROOM IN THE PROPERTY. DEPENDING ON CERTAIN FACTORS OF YOUR PROJECT, ONE MAY BE BETTER SUITED THAN THE OTHER. TAKE INTO ACCOUNT THE SIZE OF THE ROOM, TYPE OF SUBFLOOR, POWER, OR WATER SOURCES AND DECIDE WHICH HEATING OPTION WILL MEET YOUR NEEDS

WATER SYSTEMS WORK IN CONJUNCTION WITH YOUR CENTRAL HEATING, WHERE WARM WATER IS PUSHED THROUGH A SYSTEM OF PIPES TO HEAT UP A ROOM. USING A SINGLE LENGTH OF PIPE MEANS THERE IS LESS CHANCE OF A LEAK. AS THE CENTRAL HEATING SYSTEM DOESN'T HAVE TO HEAT THE WATER TO AS HIGH A TEMPERATURE AS A RADIATOR, YOUR WATER HEATING COSTS WILL BE LOWER.



- MANIFOLDS ARE SUPPLIED PRE-MOUNTED ON INSTALLATION BRACKETS
- CONNECTIONS ARE EUROCONUS AND A RANGE OF FITTINGS ARE AVAILABLE
- MAX WORKING PRESSURE 3 BAR
- MAX TEST PRESSURE 10 BAR
- EASY FITTING
- WATER TEMPERATURE IN THE CIRCUITS IS CONTROLLED BY THE INDIVIDUAL ROOM THERMOSTATS
- TEMPERATURE RANGE: 30°C - 45°C
- COMPRESSION TYPE CONNECTIONS FOR EASE OF INSTALLATION



# PPR INSULATED PIPES

- INSULATION PERFORMANCE IS 4-9 TIMES HIGHER THAN STANDARD PIPE INSULATION
- PIPES COME PRE-INSULATED SO THERE ARE NO INSULATION LABOR COSTS
- INSULATION THICKNESS IS CUSTOMIZABLE
- WE OFFER OUTER SHELLS FOR INSULATING THE PIPE FITTINGS

PPR-Pipe  
Compressed Polyurethane layer  
PVC-Pipe



# TERRA PPR INSULATED PIPES

ONE OF THE MOST ENERGY-EFFICIENT METHODS OF TRANSPORTING WATER FOR HEATING OR COOLING APPLICATIONS OVER LONG DISTANCES UNDERGROUND.

PRE-INSULATED PP-R PIPE SYSTEM FOR HEATING, COOLING AND OUTDOOR PLUMBING INCLUDES A COMPLETE RANGE OF PRE-INSULATED FITTINGS AND PIPES.

TERRA PRE-INSULATED PIPE SYSTEM IS A COMPREHENSIVE SOLUTION FOR CONNECTING YOUR HEAT PUMP AND OUTDOOR PLUMBING. WE OFFER PPR PIPES ENCLOSED WITHIN A PVC PIPE, WITH A LAYER OF COMPRESSED POLYURETHANE INSULATION IN BETWEEN. THIS INSULATION SERVES TO PREVENT CONDENSATION ON THE PIPE, WHILE THE PVC LAYER ADDS RIGIDITY AND PROTECTS THE INSULATION LAYER. PVC SHELLS ARE ALSO PROVIDED TO ENSURE PROPER INSULATION FOR FITTINGS.



## Our Advantage

**1** Convenient construction  
Shorten the duration, control cost, save labor cost

**4** Long service life  
Proper installation and use can lead to a network life of 30-50 years and very low maintenance costs



**2** Low comprehensive cost  
Strong corrosion and water resistance

**3** Save Energy  
Low heat loss Energy savings Heat loss is only 25% of the traditional pipe.

# TERRA PPR INSULATED PIPES



## Internal structure diagram of PPR thermoplastic pipe

Three layers of protective insulation, more than 5 times better than rubber and plastic cotton insulation effect

Layer 1: PVC outer layer protection-anticorrosion, sunscreen, frost resistance and unbreakability

Layer 3: High quality PPR tubes for long service life

Layer 2: High density polyurethane foam, insulation effect far superior rubber cotton

1



CUT THE PVC AND INSULATION LAYER

2



REMOVE THE INSULATION LAYER AND CLEAN THE PPR PIPE

3



INSTALL THE REQUIRED FITTING TO THE PIPE

4



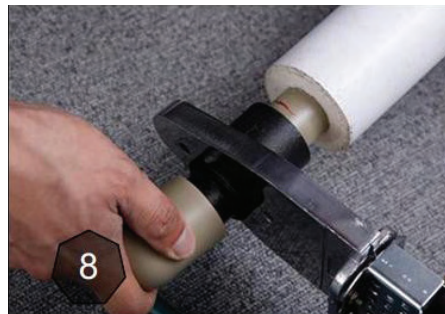
APPLY THE CORRECT PVC SHELL TO THE FITTING AND FILL IT WITH PU FOAM

5



SCREW THE TOP OF THE SHELL AND LET THE FOAM EXPAND

# TERRA PPR INSULATED PIPES - MANUAL



# TERRA PPR INSULATED PIPES

| Type               | Diameter Ø | Length (m) | Insulation Thickness |
|--------------------|------------|------------|----------------------|
| Pre-insulated pipe | PRCR-20    | 4          | 50                   |
| Pre-insulated pipe | PRCR-25    | 4          | 50                   |
| Pre-insulated pipe | PRCR-32    | 4          | 63                   |
| Pre-insulated pipe | PRCR-40    | 4          | 75                   |
| Pre-insulated pipe | PRCR-50    | 4          | 90                   |
| Pre-insulated pipe | PRCR-63    | 4          | 110                  |
| Pre-insulated pipe | PRCR-75    | 4          | 125                  |
| Pre-insulated pipe | PRCR-90    | 4          | 160                  |
| Pre-insulated pipe | PRCR-110   | 4          | 160                  |
| Pre-insulated pipe | PRCR-160   | 4          | 250                  |



| Type                       | Diameter Ø  |
|----------------------------|-------------|
| PVC T-shaped Reducer Shell | 63*50*63    |
| PVC T-shaped Reducer Shell | 63*63*50    |
| PVC T-shaped Reducer Shell | 75*50*75    |
| PVC T-shaped Reducer Shell | 75*75*50    |
| PVC T-shaped Reducer Shell | 75*63*75    |
| PVC T-shaped Reducer Shell | 75*75*63    |
| PVC T-shaped Reducer Shell | 90*50*90    |
| PVC T-shaped Reducer Shell | 90*90*50    |
| PVC T-shaped Reducer Shell | 90*63*90    |
| PVC T-shaped Reducer Shell | 90*90*63    |
| PVC T-shaped Reducer Shell | 90*75*90    |
| PVC T-shaped Reducer Shell | 90*90*75    |
| PVC T-shaped Reducer Shell | 110*63*110  |
| PVC T-shaped Reducer Shell | 110*110*63  |
| PVC T-shaped Reducer Shell | 110*75*110  |
| PVC T-shaped Reducer Shell | 110*90*100  |
| PVC T-shaped Reducer Shell | 125*63*125  |
| PVC T-shaped Reducer Shell | 125*75*125  |
| PVC T-shaped Reducer Shell | 125*90*125  |
| PVC T-shaped Reducer Shell | 125*110*125 |
| PVC T-shaped Reducer Shell | 160*90*125  |
| PVC T-shaped Reducer Shell | 160*110*160 |
| PVC T-shaped Reducer Shell | 160*125*160 |



# TERRA PPR INSULATED PIPES

| Type               | Diameter Ø |
|--------------------|------------|
| PVC 90 Elbow Shell | 50         |
| PVC 90 Elbow Shell | 63         |
| PVC 90 Elbow Shell | 75         |
| PVC 90 Elbow Shell | 90         |
| PVC 90 Elbow Shell | 110        |
| PVC 90 Elbow Shell | 125        |
| PVC 90 Elbow Shell | 160        |



| Type               | Diameter Ø |
|--------------------|------------|
| PVC 45 Elbow Shell | 50*45      |
| PVC 45 Elbow Shell | 63*45      |
| PVC 45 Elbow Shell | 75*45      |
| PVC 45 Elbow Shell | 90*45      |
| PVC 45 Elbow Shell | 110*45     |
| PVC 45 Elbow Shell | 125*45     |
| PVC 45 Elbow Shell | 160*45     |



| Type                    | Diameter Ø |
|-------------------------|------------|
| PVC Straight Muff Shell | 50         |
| PVC Straight Muff Shell | 63         |
| PVC Straight Muff Shell | 75         |
| PVC Straight Muff Shell | 90         |
| PVC Straight Muff Shell | 110        |
| PVC Straight Muff Shell | 125        |
| PVC Straight Muff Shell | 160        |



| Type               | Diameter Ø |
|--------------------|------------|
| PVC T-shaped Shell | 50         |
| PVC T-shaped Shell | 63         |
| PVC T-shaped Shell | 75         |
| PVC T-shaped Shell | 90         |
| PVC T-shaped Shell | 110        |
| PVC T-shaped Shell | 125        |
| PVC T-shaped Shell | 160        |



| Type                       | Diameter Ø |
|----------------------------|------------|
| PVC Straight Reducer Shell | 63*50      |
| PVC Straight Reducer Shell | 75*63      |
| PVC Straight Reducer Shell | 75*50      |
| PVC Straight Reducer Shell | 90*75      |
| PVC Straight Reducer Shell | 110*90     |
| PVC Straight Reducer Shell | 160*110    |





# TERRA

## CONTACT US

### MACEDONIA

☎ TEL: +38923130306

📞 MOB: +38978441737

✉ INFO@TERRA.MK

#### 📍 ADDRESS:

STR. BAGDADSKA NO. 17  
SKOPJE,  
REPUBLIC OF NORTH MACEDONIA

### SERBIA

☎ TEL: +38163653888

✉ INFO@TERRA.MK

#### 📍 ADDRESS:

DR AGOSTINA NETA 14A  
BEOGRAD, SERBIA

### KOSOVO

☎ TEL: +38344135317

✉ INFO@TERRA.MK

#### 📍 ADDRESS:

15 QERSHORI 99, NO 14,  
GJILAN, KOSOVO

### BULGARIA

☎ TEL. +359 89 8340575

✉ INFO@TERRA.MK /  
OFFICE@KEREMIDSKI.COM

#### 📍 ADDRESS 1:

BUL. OKOLOVRASTEN PAT 130  
SOFIA, BULGARIJA

#### 📍 ADDRESS 2:

BOULEVARD TSAR BORIS III 262  
SOFIA, BULGARIJA

## FOLLOW US



INSTAGRAM:

@HEATPUMPTERRA



FACEBOOK:

TERRA HEAT PUMP



WEBSITE:

WWW.TERRA.MK

TERRA