IMMERGAS
We are the energy of change

VICTRIX TERA V3

Wall–hung combi and heating only condensing boiler

H2 READY
FOR 20% HYDROGEN

Compact dimensions, easy installation and user–friendly interface

VICTRIX TERA V3
Efficiency and Hydrogen Ready technology

The range of VICTRIX TERA condensing boilers renews itself with **a step forward in terms of technology.** Aesthetics with attention to details, operation with **20% hydrogen blends** and the **seasonal efficiency rises to 94%.**

The **new high-efficiency exchanger in stainless steel** rises the seasonal efficiency and allows to reach classification A+ when the gas boiler is associated to specific thermoregulation.
Thanks to the **remarkable dimensional compactness**, the VICTRIX TERA V3 range can be placed in small spaces inside the home or outdoors in partially protected places.
There are three combi versions and two for heating only which can be combined with storage tanks of various capacities.

The new range allows the **renovation of old chimneys even in case of small diameters** moreover, thanks to safety devices equipment and by using a specific kit option, **it can be connected to collective flues** designed in positive pressure.

VICTRIX TERA V3 boilers fall into **class 6**, the most ecological in the European classification, for low emissions of nitrogen oxides (NOx).

HYDROGEN: THE SOLUTION TO REDUCE CO_2 AND GREENHOUSE GAS EMISSIONS INTO THE ENVIRONMENT

The natural gas emits CO_2 into the atmosphere when burned in a gas boiler, while hydrogen does not: **it allows extremely low emissions and is also a fuel more energy efficient.**
As a large part of CO_2 emissions are due to the heating industry, this new technology can be a key weapon in the fight to reach zero CO_2 levels.

To give an idea of the environmental advantages, blending up to 20% hydrogen worldwide **would save about 6 million tons of emissions of carbon dioxide per year and would reduce greenhouse gases by 7%.**

If gas boilers were fully powered by hydrogen the results would be oustanding.

Seasonal efficiency 94% **A+**

CLASS A+
VICTRIX TERA V3 can achieve A+ energy classification if combined with an Immergas advanced thermoregulator as CAR[V2], CAR[V2] WIRELESS, (when associated with external probe) or SMARTECH PLUS.

NEW CONDENSING HEAT EXCHANGER IN STAINLESS STEEL
Very high performance condensing module with single–tube stainless steel coil. Outstanding **seasonal efficiency ŋs 94%**. The absence of manifolds and circuits in parallel, ensures maximum reliability: there are no welds.

The single coil in stainless steel without narrowing allows you to have an hydraulic circuit perfectly balanced, significantly **reducing flow resistances.**

The internal section, wide and constant, allows you to limit deposits, **reducing the risk of clogging** in case of impurities present in the water (for example in the case of replacement of boilers on old systems).

SIMPLE AND FUNCTIONAL AESTHETIC
White dashboard aesthetic cover with gray border and glossy user interface (glass effect) equipped with buttons to make adjustments and a central display to view parameters of boiler operation. Serigraphs and silver gray symbols. The lower grille to cover the connections is standard.

TECHNICAL HIGHLIGHTS
The TERA V3 range allows larger flue gas extensions with 50 flexible ducting system.
20 meters with VICTRIX TERA V3 28 EU/24 PLUS EU, 15 meters with VICTRIX TERA V3 32 EU and 12 meters with VICTRIX TERA V3 38 EU/ 35 PLUS EU.
Furthermore, thanks to the clapet valve kit (code 3.032877 – optional), installation in collective flues designed in positive pressure is permitted.

INDOOR AND OUTDOOR INSTALLATION
VICTRIX TERA V3 is approved for outdoor installation in partially protected area, for example under a balcony. An electrical resistance kit is available to expand antifreeze protection from –5 °C to –15 °C (code 3.017324).

HYDRAULIC CONNECTIONS
The hydraulic connection kit is optional. VICTRIX TERA V3 presents same hydraulics and gas connection position as current models.

Istantaneous
versions

DOMESTIC HOT WATER PRODUCTION
Instantaneous with an excellent supply of domestic hot water.

The VICTRIX TERA V3 38 EU model, thanks to the availability of 36,5 kW for the production of domestic hot water, supplies 18,2 l/min with Δt 30 °C.

COMBINATION WITH SOLAR THERMAL SYSTEMS
In the case of integration with solar systems, the **wide modulation range** guarantees maximum domestic comfort even with incoming water pre heated. In the combi versions, the solar function inhibits the ignition of the circulator and burner for a time equal to the DHW delay value set in the parameters.

This function is even more performing by using the probe kit solar input (code 3.021452) which allows the measurement of the water temperature in the boiler inlet, coming from a solar tank.

The burner and the circulator are keep turned off for the duration of the sample, when the temperature water, coming from a solar tank, is the same or higher than the one set on the selector.

PLUS version with storage tank

The TERA V3 PLUS versions can be used for heating only or connected by means an optional kit (see page 17) to a storage tank unit for domestic hot water production.

IDEAL FOR MULTIPLE WITHDRAWALS OF DOMESTIC HOT WATER
For large domestic hot water needs or for multiple simultaneous withdrawals, it can be combined to a separate storage tank unit (Immergas range is available from 80 up to 2000 litres).

COMBINATION WITH SOLAR THERMAL SYSTEMS
The storage tanks with a capacity of 120 liters or higher are arranged for the combination of solar thermal systems with forced circulation, including UB INOX SOLAR 200 V2 version equipped with a solar circuit integrated. The VICTRIX TERA V3 PLUS can be connected to the whole range of Immergas solar solutions.

FLUE SYSTEMS "GREEN SERIES"
The VICTRIX TERA V3 have a dedicated series of air intake / flue gas exhaust kits to ensure a high resistance to corrosion and a remarkable speed and functionality installation, also thanks to the coupling system and the material seals appropriate.

VICTRIX TERA V3 boilers can be installed in sealed chamber configuration and forced draft or open chamber and forced draft (ideal for outdoor installation in place partially protected).

Open chamber, forced draft configuration

| Type	Code
Flanged stub–pipe + bend + extension pipe Ø 80 0,5 m for flue discharge max lenght 30m*	3.016365
Stainless steel vertical outlet kit Ø 80 (to be combined with Ø 80 kit code 3.016364)	3.024295
Cover kit for VICTRIX TERA V3	3.032844

Sealed chamber, forced draft configuration

Type	Code
Twin pipe complete kit Ø 80/80 max lenght 35 m*	3.012002
Horizontal concentric complete kit Ø 60/100 max lenght 13 m*	3.012000
Horizontal concentric complete kit Ø 60/100 Short max lenght 12 m*	3.024598
Horizontal concentric complete kit Ø 60/100 with swivel terminal max lenght 10 m*	3.024267
Vertical concentric complete kit Ø 60/100 (red ocher colour)*	3.016833

$C_{10} – C_{12}$ configuration

Type	Code
Clapet valve kit	3.032877

* For a correct calculation that takes into account curves and the insertion of special kits, refer to the boiler instruction booklet.
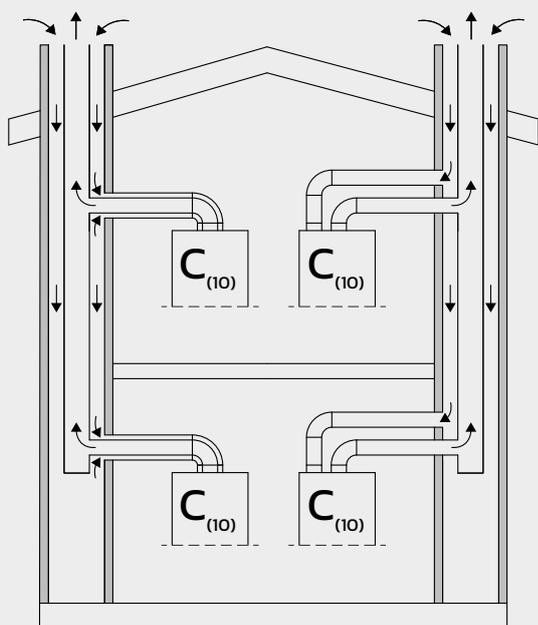
C_{10} configuration
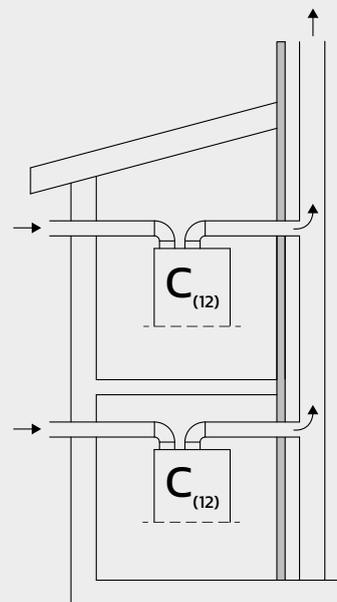
C_{12} configuration

C_{10} – C_{12} CONFIGURATION

The EN 15502 Standard requires two safety devices to avoid the fumes reflux in case of connection to common flue systems working in postivie pressure. VICTRIX TERA V3 features a software function via flue gas probe control for verification of the correct seal of the clapet valve (code 3.032877), in order to intercept fumes recirculation problems.

Furthermore **during the boiler maintenance**, **the exhaust flue clapet avoids the reflux of fumes into the environment** in case of opening of the heat exchanger module, when other boilers are functioning and discharging in the same collective flue system.

Maximum allowed pipe length combining with collective flue systems operating under positive pressure:
– Flue systems Ø 80/125: 10 metres
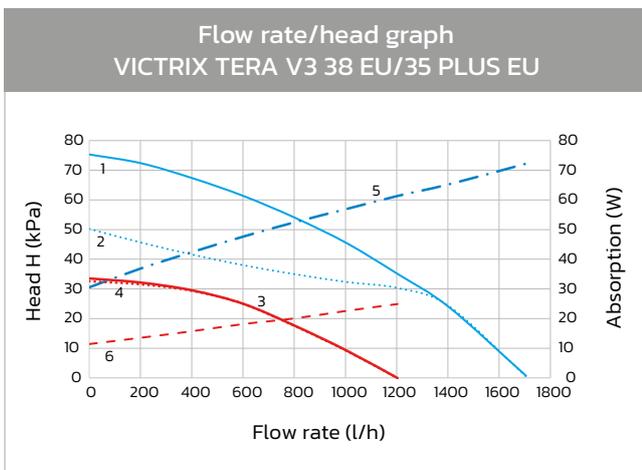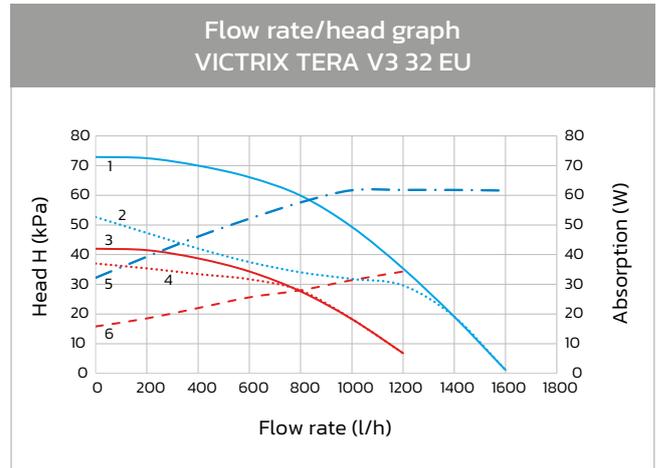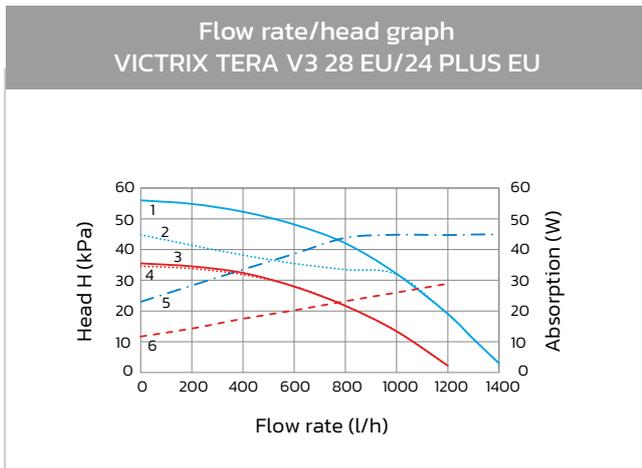– Flue systems Ø 80/80: 15 metres

NOTE: the insertion of the clapet valve code 3.032877 involves a variation in the flue distance between centers from the one shown in at page 12. For further information, see the instruction booklet supplied with the appliance.

Technical characteristics	Unit of measurement	VICTRIX TERA V3 28 EU/E	VICTRIX TERA V3 32 EU	VICTRIX TERA V3 38 EU	VICTRIX TERA V3 24 PLUS EU	VICTRIX TERA V3 35 PLUS EU
Code		3.036303 3.036303GPL 3.036978 3.036978GPL	3.036304 3.036304GPL	3.036305 3.036305GPL	3.036306 3.036306GPL	3.036307 3.036307GPL
C.H. Energy class		A	A	A	A	A
D.H.W. Energy class–Stated load profile		A – XL	A – XL	A – XL	–	–
Maximum nominal heat input (D.H.W. mode)	kW	28,7	32,8	37,5	28,7	37,5
Maximum nominal heat input (C.H. mode)	kW	24,6	28,6	32,8	24,6	32,8
Minimum nominal heat input	kW	4,2	4,7	5,6	4,2	5,6
Maximum nominal heat output (D.H.W. mode)	kW	28,0	32,0	36,5	28,0	36,5
Maximum nominal heat output (C.H. mode)	kW	24,0	28,0	32,0	24,0	32,0
Minimum nominal heat output	kW	4,0	4,6	5,4	4,0	5,4
Efficiency at nominal heat output (80/60°C)	%	97,8	98,0	98,0	97,8	98,0
Efficiency at nominal heat output (40/30°C)	%	108,0	109,3	109,0	108,8	109,4
Efficiency at 30% of load (delivery temperature 30 °C)	%	109,4	109,3	109,5	109,4	109,5
Central heating adjustable temperature	°C	20–85	20–85	20–85	20–85	20–85
Domestic hot water adjustable temperature	°C	30–60	30–60	30–60	–	–
Fan available head (Min. – Max.)	Pa	4 – 167	5 – 219	7 – 286	4 – 167	7 – 286
Weighted CO	mg/kWh	19	18	25	19	25
Weighted NO_x	mg/kWh	32	33	47	32	47
NO_x class		6	6	6	6	6
Flow rate capacity in continuous duty (ΔT 30°C)	l/min	13,7	15,5	18,2	–	–
Domestic hot water circuit min. pressure (dynamic)	bar	0,3	0,3	0,3	–	–
Central heating expansion vessel nominal capacity (total)	litri	8 (4,9)	10 (5,1)	10 (5,1)	8 (4,9)	10 (5,1)
Electric protection index	IP	X5D	X5D	X5D	X5D	X5D
Full appliance weight (empty)	kg	36,6 (31,2)	38,6 (32,4)	39,2 (33)	35,8 (30,4)	38,2 (32)

Flow rate/head graph
VICTRIX TERA V3 28 EU/24 PLUS EU

Flow rate/head graph
VICTRIX TERA V3 32 EU

Flow rate/head graph
VICTRIX TERA V3 38 EU/35 PLUS EU

Key

1 = Head available to the system at speed 95% with by–pass closed
2 = Head available to the system at speed 95% with by–pass open
3 = Head available to the system at speed 65% with by–pass closed
4 = Head available to the system at speed 65% with by–pass open
5 = Circulator absorbed power at 95% speed with closed by–pass
6 = Circulator absorbed power at 65% speed with closed by–pass

Area between curves 1 and 3 = Head available to the system with by–pass closed
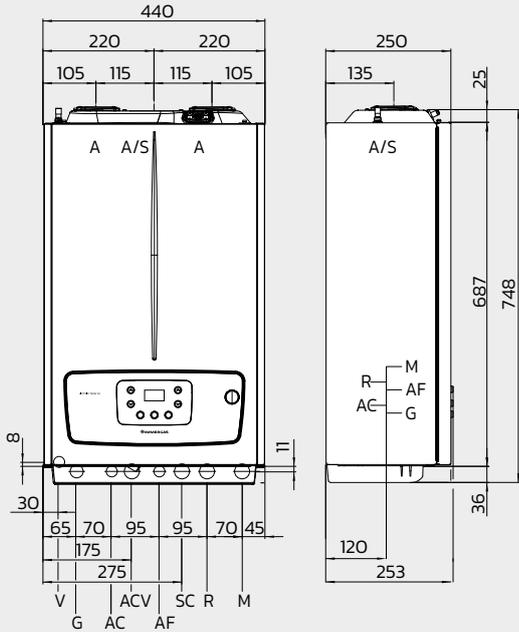**Area between curves 2 and 4** = Head available to the system with by–pass open
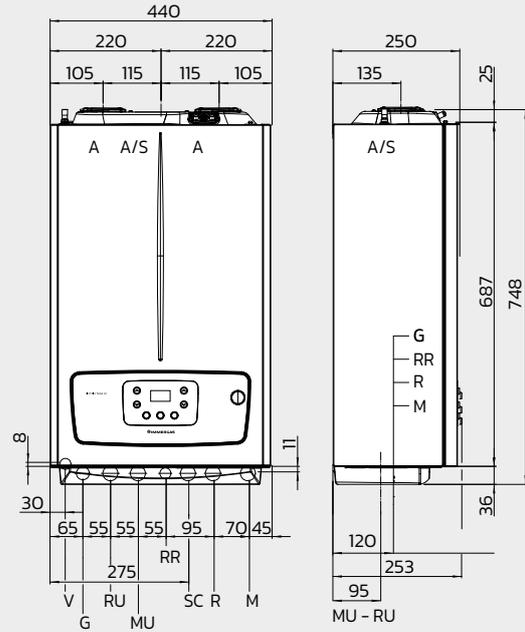**Area between curves 5 and 6** = Circulator absorbed power with bypass closed

VICTRIX TERA V3 boilers are equipped with adjustable system by–pass.

VICTRIX TERA V3 24/32/38 EU

VICTRIX TERA V3 24/35 PLUS EU

VICTRIX TERA V3 28/32/38 EU hydraulic connections				
Gas	D.H.W.		System	
G	AC	AF	R	M
¾"	½"	½"	¾"	¾"

VICTRIX TERA V3 24/35 PLUS EU hydraulic connections			
Gas	D.H.W		System
G	MU–RU	RR	M–R
¾"	¾"	½"	¾"

Connection kit is option.

Key

V	Electrical connection
G	Gas supply (optional)
AC	Domestic hot water outlet (optional)
ACV	Solar valve domestic hot water inlet (optional)
AF	Domestic cold water inlet (optional)
SC	Condensate drain (minimum internal diameter Ø 13 mm)
M	System flow (optional)
R	System return (optional)
RR	System filling (optional)
RU	Storage tank return (optional)
MU	Storage tank flow (optional)
A/S	Outlet/inlet
A	Inlet
S	Outlet
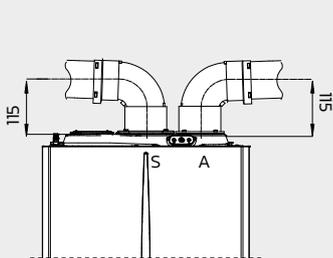
Twin pipe kit
Ø 80/80
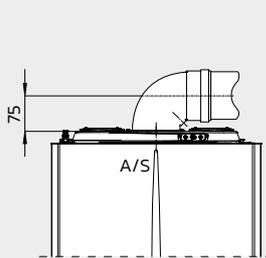
Horizontal kit
Ø 60/100
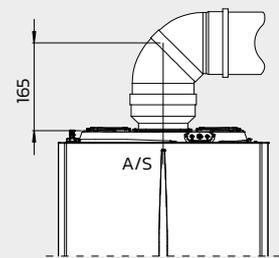
Horizontal kit
Ø 80/125

Combining VICTRIX TERA V3 with a climatic regulation device is an excellent investment because it improves the seasonal energy efficiency of the heating system.

CAR^{V2} (modulating remote control)

Type			Code
Modulating back-lighted chronothermostat and remote control. Special features including antifreeze temperature setting and antilegionella function (only for gas boilers with storage tank).		Dimensions (H x L x P) mm 103 x 142 x 31	3.021395

CAR^{V2} WIRELESS (wireless modulating remote control)

Weekly digital chronotermostat.		Dimensions (H x L x P) mm 103 x 142 x 31	3.021623
		Dimensions (H x L x P) mm 82 x 105 x 26	

SMARTECH PLUS

Modulating chronothermostat SMART and wireless remote control with Bluetooth technology Equipped with gateway, wall fixing base (with integrated bubble level), table stand Transmission technology: Wi-Fi 802.11 b/g/n 2.4 GHz Distance between thermostat and gateway: max 10 mt* Power supply 2 batteries (standard) Operating ambient temperature 0 – + 40 ° C Protection class IP 20		Dimensions (Ø x D) mm 71,5 x 35,5 Dimensions (Ø x D) mm 70 x 27	3.030909
Expansion kit To manage the temperature in several areas of the house (example living and sleeping areas). Up to 2 expansions can be controlled, for a total of 3 zones, with supervision of the various temperatures. It includes: additional SMART chronothermostat and wifi relay (wifi network needed in the home).			3.030911
Electrical box cover plate kit It allows covering the hole in the wall for electrical boxes type 503.			3.031013
Kit bluetooth repeater SMARTECH PLUS Consente di amplificare il segnale Bluetooth.			3.034395

* The maximum distance may be less if there are walls, ceilings or obstacles between the two devices. The Gateway must be installed inside the home.

MINI CRD (Modulating remote control)

Type		Code
Modulating chronothermostat and compact remote control. *Note: It can only be installed for 1 zone plants and without external probe or DOMINUS interface kit*	Dimensions (H x W x D) mm 80 x 80 x 23	3.020167

CRONO 7

Type		Code
Weekly digital chronotermostat.	Dimensions (H x W x D) mm 103 x 142 x 31	3.021622

CRONO 7 WIRELESS

Type		Code
Weekly digital chronotermostat.	Dimensions (H x W x D) mm 103 x 142 x 31 Dimensions (H x W x D) mm 82 x 105 x 26	3.021624

External probe

Type		Code
To work according to the climatic conditions		3.014083

DOMINUS V2 interface kit

Type		Code
Wi-fi interface kit to remote control by App. The Wi-Fi transmitter kit is to be interposed with a wireless modem/router (not supplied by Immergas) and must be installed outside the boiler.	Dimensions (H x W x D) mm 113,5 x 123,5 x 33,5	3.034903

GSM telephonic control

Type		Code
For buildings not equipped with telephone network. Combinable with CAR^{V2} and CRONO 7.	Dimensions (H x W x D) mm 140 x 85 x 44	3.017182

Telephonic control

For buildings equipped with telephone network. Available for all models. Combinable with CAR^{V2} and CRONO 7.	Dimensions (H x W x D) mm 85 x 85 x 31	3.013305

Multi-zone electronic board

It can manage 4 zones at the same temperature or 1 mixed and 1 direct zone by remote modulating controls (CAR^{V2}). In order to set it, at least 1 CAR^{V2} is needed.	Dimensions (H x W x D) mm 175 x 110 x 50	3.028444

Mixing valve kit

For multi-zone electronic board (code 3.028444).		3.027084

Solar probe kit

It allows the detection of the water temperature coming from a solar storage tank. (suitable only if using the specific copper pipes). For combi boiler only.		3.021452

Low temperature safety thermostat kit

For boilers set on direct low temperature (suitable only if using the specific connection kit).		3.019229

Zones control board V2 kit

It can manage 3 zones at the same temperature or 2 mixed and 1 direct.	3.030912

OPTIONS KIT

Among the wide range of options it is possible to find out any specific accessories to complete the installation of VICTRIX TERA V3. The use of original kits enhances quality and reliability of the products.

Magnetic cyclone filter kit

Type		Code
To prevent system ferrous residual (only for internal installation).		3.024176

Condensate discharge pump kit for wall-hung boilers

To be used in case of opposite slope between siphon and discharge It can only be installed inside the building.		3.026374

Bottom cover kit

Aesthetic frame (250 mm height) that covers connections zone and the main option kits.		3.027341

Condensate neutralizer kit

Necessary to neutralize the acidity of the condensation. Inclusive of granulate.		3.019857

Anti freeze protection kit -15 ˚C

Including electrical resistance for frost protection untill – 15 ˚C.		3.017324

Additional expansion vessel

2 litres additional expansion vessel.		3.017514

Connection kit

Type		Code
Connection kit for combi models.		3.019264
Connection kit for heating only model.		3.024907
Storage tank connection kit for heating only model (in combination with connection kit code 3.024907).		3.024609

Anti-scale kit

Approved for installation inside the building (for combi version)		3.017323

Shut off knobs kit

Shut off knobs ¾".		3.5324
Shut off knobs with filter ¾".		3.015854

All purpose connection kit

For wall hung boiler.		3.011667

Non return valve kit

For combi boiler only		3.016301

VICTRIX TERA V3 can be connected to the DIM Range (Multisystem distribution manifolds). DIM can be connected considering that it's possible to manage zones only with CRONO 7 (no CAR^V2) and DIM connection to boiler via zone signal state isn't possible.

OPTIONS KIT

Stainless steel storage tank units for DHW

Type		Code
UB INOX 80 V2 equipped with 1 coil water/water heat exchangers Efficiency class C Dimensions (H x W x D) mm 850 x 550 x 550		3.027817
UB INOX 120 V2 equipped with 2 concentric coil water/water heat exchangers Efficiency class C Dimensions (H x W x D) mm 850 x 650 x 650		3.027818
UB INOX 200 V2 equipped with 2 concentric coil water/water heat exchangers Efficiency class C Dimensions (H x W x D) mm 1250 x 650 x 650		3.027819
UB INOX SOLAR 200 V2 equipped with 2 coils water/water heat exchangers built-in solar circuit Efficiency class C Dimensions (H x W x D) mm 1250 x 650 x 75		3.027820

Storage tank NTC probe kit

For VICTRIX TERA V3 PLUS (provided as standard with all Immergas storage tanks for D.H.W.)		3.019375

Solar valve kit

Allows the connection between combi boiler and solar system. Available for wall-hung combi boiler.		3.018911

¾" mixing valve kit

Range 42–60 °C		3.019099

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