

TECHNICAL DATA

Gross surface area X-RAY 10

2,202 m²

Absorber surface X-RAY 10

2,574 m² at 360°

Gross surface area X-RAY 15

3,420 m²

Absorber surface X-RAY 15

3,852 m² at 360°

		X-RAY 10	X-RAY 15
Measurements (length x width x height)	mm	1.975x1.115x120	2000x1710x120
Gross surface area	m ²	2,202	3,420
Aperture area	m ²	1,912	2,866
Absorber surface 360°	m ²	2,574	3,852
Weight when empty	kg	41,5	72,0
Fluid content	l	2,48	3,28
Max. running pressure	bar	1.000	1000
Recommended capacity	l/min	1,5 (for collector)	0,80 (2,30 l/min for collector)
Peak power	W	1.265	1.840
Output η_0	%	66,2	64,20
Transmittance coefficient a_1	W/m ² K	0,735	1,747
Transmittance coefficient a_2	W/m ² K	0,0096	0,0005
Absorption coefficient	%	$\geq 94,5 \pm 2$	93,0
Emission coefficient	%	$\leq 6,50 \pm 0,5$	6,20
Coefficient transfer of the glass	%	$\geq 91,5 \pm 1$	92,0
Connections	inch	6 x 3/4" M	6 x 3/4" M
Stagnation temperature	°C	316	240

EVACUATED SOLAR COLLECTOR X-RAY 10
CODE 1010101021

EVACUATED SOLAR COLLECTOR X-RAY 15
CODE 1010101521

WITH A PARALLEL PLUMBING CONNECTION

X-RAY 10: MAX OF 12 COLLECTORS PER ROW
X-RAY 15: MAX OF 6 COLLECTORS PER ROW

CERTIFICATES



think **P**



PRODUCTION

We combine creativity and strategy, ideas and technology, innovation and design to produce x-ray solar collectors guaranteed by the value of the real **MADE IN ITALY** and the endorsement of the most prestigious international certification bodies.

From the concept to design, through technologically advanced production cycles: we got a outstanding, reliable and performant quality product.

MADE IN PLEION

PLEION
SOLAR ENERGY SYSTEMS

**EVACUATED SOLAR HEATERS
FLAT SOLAR HEATERS
ZERO-EMISSIONS SYSTEMS
UNDERFLOOR HEATING**

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SOLAR ENERGY SYSTEMS

**X-RAY
VACUUM SOLAR
COLLECTORS**



**FORGET THOSE
COLD WINTERS**

PLEION
SOLAR ENERGY SYSTEMS

**X-RAY
EVACUATED
SOLAR COLLECTORS**

**PARALLEL CONNECTIONS
UP TO 15% GREATER
ENERGY OUTPUT**

TOP PERFORMANCES IN WINTER TIME

Perfectly functioning even when
the temperature drops drastically

MODERN DESIGN AND ABSOLUTELY EASY INSTALLATION

Assembly time reduced
to the minimum

X-Ray is the fruit of ITALIAN technology and design, research for materials and manufacturing processes. This Vacuum Tube Solar Collector was created to guarantee **MAXIMUM WINTER OUTPUT** and work perfectly even during the coldest months of the year.

X-Ray was designed to produce domestic hot water and as an integration to the home-heating system to allow users to make the most of both services, **cutting down consumption costs** and ensuring very high cost-effectiveness.

3RD INTEGRATED TUBE INTEGRATED PLUMBING CONNECTIONS: THE TUBE VANISHES, AND PROGRESS TAKES OVER

No tubes are displayed on the roof: an integrated return line
is installed in the collector-header.



**THE
PLEION
METHOD**

USES



WARRANTIES



PLEION®
SOLAR ENERGY SYSTEMS

SOLAR SYSTEMS X-RAY

X-Ray is the ideal element you can integrate to a series of devices used in producing and storing domestic energy. On the side pages, get an in-depth view of the best range of choices for coupling devices and systems that are compatible with X-Ray. Which suits you best?

PLEION
EXCLUSIVE
RIGHT



X-RAY 10

**ECO COMPACT RAY
X-PLUS**

X-RAY 15

**ECO COMPACT RAY S
X-PLUS S
X-ENERGY S**

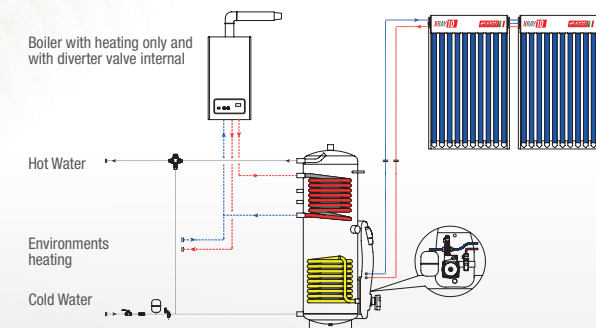


SOLAR SYSTEM ECO COMPACT RAY

Production of domestic hot water

POWERED BY X-RAY 10

ECO COMPACT RAY	200	300	500
No. of people	1-3	3-5	5-8
Gross total surface collectors (m²)	2,2	4,4	6,6
Vacuum tube Collectors X-Ray 10	1	2	3
Cylinder Eco Compact	200 L	300 L	500 L
Expansion vessel capacity	18 L	24 L	35 L
Connection Kit for expansion vessel	1	1	-
Interception fittings 3/4" M	-	-	1
Thermowell	1	1	1
Mixer thermostat	35°/60°C	35°/60°C	35°/60°C
Basic set Tichelmann X-Ray 10	1	1	1
Plus set Tichelmann X-Ray 10	-	1	2
Antifreeze solar fluid R100	10 L	20 L	30 L



BENEFITS

- Production of domestic hot water.
- Pumped station with built-in standard expansion tank on the boiler.
- Speed Control Unit to optimize circulator consumption
- Vacation-safe function (cooling of boiler).
- Dual serpentine boiler.
- Reduced installation time and spaces.
- High cost in producing domestic water.

ECO COMPACT RAY 200
ECO COMPACT RAY 300
ECO COMPACT RAY 500

CODE: 1010202051
CODE: 1010203051
CODE: 1010205061

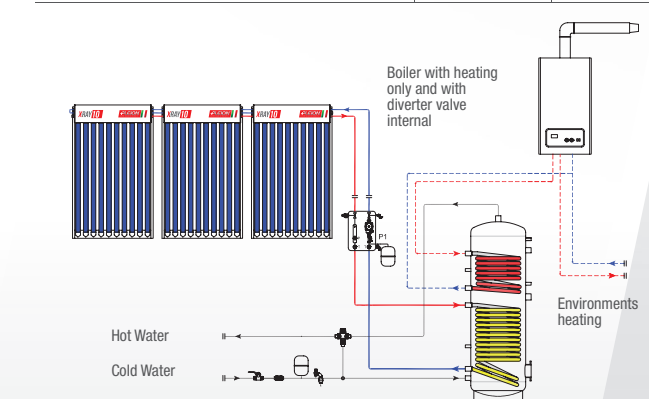


SOLAR SYSTEM X-PLUS

Solar system for the production of domestic hot water combined with heating system heating system

POWERED BY X-RAY 10

X-PLUS	800	1000
No. of people	9-14	14-20
Gross total surface collectors (m²)	11	13,2
Vacuum tube Collectors X-Ray 10	5	6
Cylinder DSF-V	800 L	1000 L
Expansion vessel capacity	TR A501 T	TR A501 T
Connection Kit for expansion vessel	MDT 10-6	MDT 10-6
Interception fittings 3/4" M	80 L	80 L
Thermowell	1 (M 3/4")	1 (M 3/4")
Mixer thermostat	45°/65°	45°/65°
Basic set Tichelmann X-Ray 10	1	1
Plus set Tichelmann X-Ray 10	4	5
Antifreeze solar fluid R100	60 L	80 L



BENEFITS

- Production of domestic hot water.
- Flanged double serpentine boiler.
- Station with illuminated display and Speed Control.
- Ideal for any type of house.
- Antifreeze function.

X-PLUS 800
X-PLUS 1000

CODE: 1010208003
CODE: 1010210003

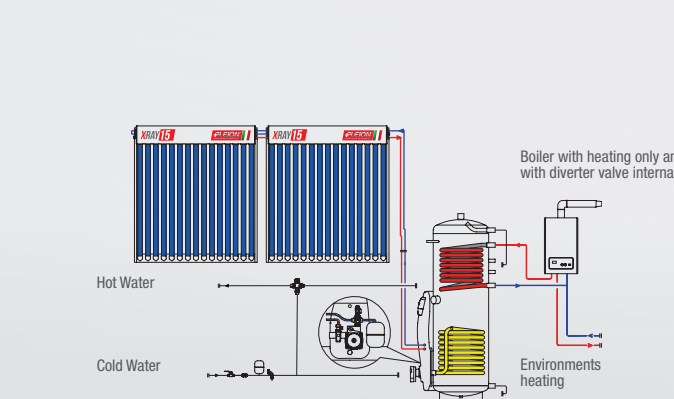


SOLAR SYSTEM ECO COMPACT RAY S

Production of domestic hot water

POWERED BY X-RAY 15

ECO COMPACT RAY S	200	300	500
Gross total surface collectors (m²)	3,43	3,43	6,86
Vacuum tube Collectors X-Ray 15	1	1	2
Cylinder Eco Compact	200 L	300 L	500 L
Expansion vessel capacity	18 L	24 L	35 L
Connection Kit for expansion vessel	1	1	1
Interception fittings 3/4" M	1	1	1
Mixer thermostat	35°/60°C	35°/60°C	35°/60°C
Basic set Tichelmann X-Ray 15	1	1	2
Plus set Tichelmann X-Ray 15	-	-	1
Antifreeze solar fluid R100	20 L	20 L	30 L



BENEFITS

- Production of domestic hot water.
- Pumped station with built-in standard expansion tank on the boiler.
- Speed Control Unit to optimize circulator consumption.
- Vacation-safe function (cooling of boiler).
- Dual serpentine boiler.
- Reduced installation time and spaces.
- High cost efficiently in producing domestic water.

ECO COMPACT RAY S 200
ECO COMPACT RAY S 300
ECO COMPACT RAY S 500

CODE: 1010202061
CODE: 1010203061
CODE: 1010205071

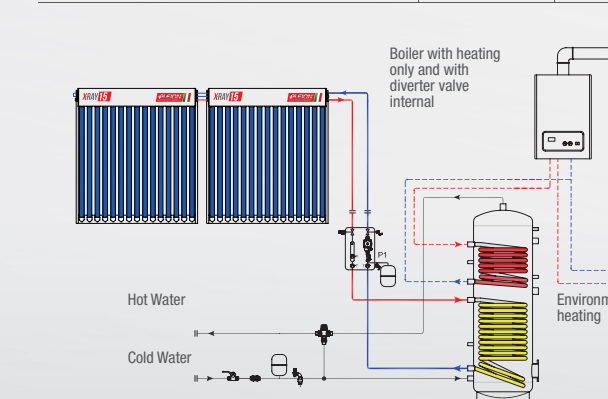


SOLAR SYSTEM X-PLUS S

Solar system for the production of domestic hot water combined with heating system heating system

POWERED BY X-RAY 15

X-PLUS S	1500	2000
No. of people	20-25	25-30
Gross total surface collectors (m²)	20,58	27,44
Number of collectors X-Ray 15	6	8
DSF-V Boiler	1500 L	2000 L
Pumped Station	LDT 13-7	LDT 13-7
Solar Control Unit	TR A501 T	TR A501 T
Expansion tank (1 unit)	100 L	150 L
Mixer thermostat	45°/65°	45°/65°
Basic Set Tichelmann X-Ray 15	1	2
Plus Set Tichelmann X-Ray 15	5	6
Interception fittings 3/4" M	1	0
Antifreeze solar fluid R100	90 L	100 L



BENEFITS

- Production of domestic hot water.
- Flanged double serpentine boiler.
- Station with illuminated display and Speed Control.
- Ideal for any type of house.
- Antifreeze function.

X-PLUS S 1500
X-PLUS S 2000

CODE: 1010215021
CODE: 1010220021

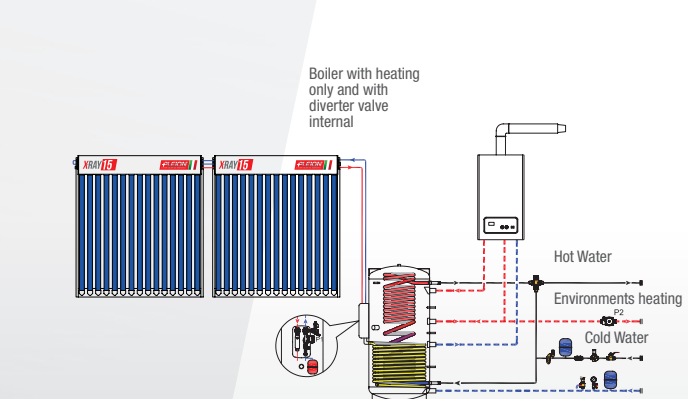


SOLAR SYSTEM X-ENERGY S

Solar system for the production of domestic hot water combined with heating system heating system

POWERED BY X-RAY 15

ECO COMPACT RAY S	600	800	1000
Gross total surface collectors (m²)	6,86	10,29	13,72
Number of collectors X-Ray 15	2	3	4
Duo Compact Boiler	600 L	800 L	1000 L
Pumped Station	MDT 10-6	MDT 10-6	MDT 10-6
Solar Control Unit	TRA A502 TT	TRA A502 TT	TRA A502 TT
Expansion tank (1 unit)	50 L	80 L	80 L
Mixer thermostat	35°/60°	35°/60°	45°/65°
Basic Set Tichelmann X-Ray 15	1	1	1
Plus Set Tichelmann X-Ray 15	1	2	3
Interception fittings 3/4" M	1	1	1
Antifreeze solar fluid R100	40 L	50 L	60 L



BENEFITS

- Production of domestic hot water combined with heating system.
- Flanged double serpentine boiler.
- Ideal for any type of house.
- Antifreeze functions.

X-ENERGY S 600
X-ENERGY S 800
X-ENERGY S 1000

CODE: 1010206021
CODE: 1010208011
CODE: 1010210051

ROOF FITTINGS

ACCESSORIES	CODE
Tile-hook	X-RAY 10 BASE 1030905141 PLUS 1030905251
	X-RAY 15 BASE 1030905671
Screws	X-RAY 10 BASE 1030505281 PLUS 1030905291
	X-RAY 15 BASE 1030905711
Roof plane	X-RAY 10 BASE 1030905301 PLUS 1030905351
	X-RAY 15 BASE 1030905731
Fret sheet	X-RAY 10 BASE 1030905271 PLUS 1030905311
	X-RAY 15 BASE 1030905771
Seamed-sheet	X-RAY 10 BASE 1030905321 PLUS 1030905331
	X-RAY 15 BASE 1030905751
Imbrex-hook	X-RAY 10 BASE 1030905261 PLUS 1030905341
	X-RAY 15 BASE 1030905691

PLUMBING CONNECTIONS

CONNECTIONS	CODE
Plumbing connection Tichelmann X-Ray 10 - 15	BASE 1030905091
Plumbing connection Tichelmann X-Ray 10 - 15	PLUS 1030905101

ACCESSORIES and SPARE PARTS X-RAY 10 / X-RAY 15

Vacuum tube	Adduction kit	Flat gaskets kit 3/4"	Flat gaskets kit 1"
CODE 1030905101	CODE 1030905601	CODE 1030905611	CODE 1030905621