

Solar Thermal

October 2017



SOLAR THERMAL



PRODUCT IN COMPLIANCE WITH EU REGULATIONS ON ECODESIGN* AND ENERGY LABELLING

* Minimum efficiency limits on global primary energy consumption for product & onboard heating system circulators

ECOTECH SOLAR COMPACT KIT ECOTOP VHM ECOUNIT 750-2000 SYSTEM ANCILLARIES SUPPORT SYSTEM FOR SLOPING ROOFS



THERMOSYPHON SYSTEM (NATURAL CIRCULATION) FOR TERRACE INSTALLATION





> PRODUCT SPECIFICATIONS

- Complete system, including solar collector/s, tank and piping, frame for installation on flat roof
- Small visual impact: the tank is behind the collector, then visually hidden
- The Solar collector Ecotop VHT 2,1 incorporates aluminium absorber, high selective surface, laser-welded copper pipes on harp layout. Model HD 250 includes 2 collectors.
- The tank is in enamelled steel, protected by sacrificial anode. Safety valves on water and solar side. Backup electric element.
- Frame for installation on flat surfaces, made in galvanised steel. Fixed, error-free, 25° inclination
- Quality certification "EU Keymark" (EN 12975) of the solar collector

TANK FEATURES			Model 150	Model 200	Model 300
Water volume		1	145	190	273
Primary circuit volume		I	8,6	11,2	15,9
Magnesium anode		diam\ length	22\500 mm	22\650 mm	22\790 mm
Overell dimensions	Diameter	mm	560	560	560
Overall dimensions	Length	mm	1070	1315	1765
Net weight		kg	53	72	83
May working property	Water side	bar	8	8	8
Max working pressure	Heating side	bar	2,5	2,5	2,5
Electric backup capacity		kW	2,0	2,0	3,0
	Water side	type		G 1/2" female	
Connection	Heating side	type		G 1/2" female	
	Elect Heaters	type		G 1/4" female	
SYSTEM CODE			OXDD12XA	OXDD13XA	OXDD14XA
COLLECTOR CODE AND	QUANTITY		1x OXDN1UXA	1x OXDN1UXA	2x OXDN1UXA

IMPORTANT NOTES: It is mandatory to install an expansion vessel on the hydraulic line of domestic hot water (at the inlet point before the storage tank) to protect the tank and the circuit in the house from pressure shocks, and to compensate overpressure in the solar storage tank which may damage or hamper the durability of flexible connection pipes into the house.

> THE COLLECTOR

MODEL		VHT 2.1
Dimensions	mm	1018x2018x89
Gross area of the collector	m ²	2,06
Net useful area (absorber)	m ²	1,84
Total weight	kg	32,0
Stagnation temperature	°C	204,2
Absorber type	%	95
Absorption factor (absorber)	%	5
Solar collector insulation		40 mm high density mineral wool

	DESCRIPTION		CODE	
	Special premixed solar fluid, ready for use, antifreeze protection to -12°C (base: Propilene-glycol, demineralized water, anti-toxic patented pink traceant for pH, specific corrosion inhibitors)		077102X0	
is:			077103X0	
4	Thermostatic mixing valve ½"		013002X0	
	Water temperature safety valve		36903300	

SOLAR COMPACT KIT PRE-ASSEMBLED COMPLETE SOLAR SOLUTION





SOLAR COMPACT KIT MADE OF

- Pump station, pre-assembled on the storage tank, including: 1/2" safety valve, flow meter with flow
 adjuster, filling and drain valves, no return valve and pressure gauge, solar pump, ON/OFF valve, 18
 litres solar expansion tank
- Integrated solar control unit, featuring auto-diagnostic function and monitoring of temperatures in the solar installation through dedicated probes (1 PT 1000 + 1 NTC)
- ECOUNIT 2C enamelled storage cylinder with twin coil
- **ECOTOP VHM 2.1** vertical flat solar collector with prismatic glass (Vertical or Horizontal installation)
- Quick coupling adaptors, with 3/4" M connections to the external side, hydraulic connections included in the package for models ST 200/300 (not included for models BL 200/300)
- Preset for auxiliary electric heater, 1" ½ connection
- Monobloc assembly is eventually available alone and includes tank, pump, controller, expansion vessel: model BL 200/300

	ST 200 H	BL 200	ST 300 H	BL 300
	C	C	C	C
It	200	200	300	300
W	67	67	85	85
n	1	1	1	1
n	1	not supplied	2	not supplied
m ²	2,09	0	4,18	0
m ²	1,82	0	3,64	0
	OXDT1AXA	OXDTOAXA	OXDT2BXA	OXDTOBXA
	OXDT1AXA	OXDTOAXA	OXDT2BXA	
	W n n m	C It 200 W 67 n 1 n 1 m ² 2,09 m ² 1,82	It 200 200 W 67 67 n 1 1 n 1 not supplied m² 2,09 0 m² 1,82 0	It 200 200 300 W 67 67 85 n 1 1 1 n 1 not supplied 2 m² 2,09 0 4,18 m² 1,82 0 3,64

VERTICAL MOUNTING	CODE		
FIXING BARS (1 couple for each collector) mod. 2.1	1.	076224X0	
FIXING BARS (1 couple for each collector) mod. 2.7	11.11	076225X0	
ADDITIONAL MOUNTING SET FOR FLAT ROOFS (TERRACE): to be ordered in nr. equal to the total nr. of collectors in one hydraulic battery (or 2 pieces for one single collector) adjustable 30±45°	1	076226X0	

HORIZONTAL MOUNTING	G SETS	CODE
FIXING BARS MOD 2.1 1 couple for each collector	1	076224X0
FIXING BARS MOD 2.7 1 couple for each collector	1.1	076225X0
VHM HORIZONTAL ADAPTING PLATES For Sloping Roofs		076228X0
ADDITIONAL MOUNTING SET FOR FLAT ROOFS (TERRACE): to be ordered in nr. equal to the total nr. of collectors in one hydraulic battery (or 2 pieces for one single collector)))	076227X0
HYDRAULIC INTERCONNECTION SET 2 pcs, insulated (between 2 collectors - horizontal)	-	072243X0

BRACKETS FOR SLOPING ROOFS	CODE
Stainless steel universal flexible brackets for each collector (4 pcs.)	076218X0
Stainless steel brackets for 1 coll metallic roofs (threaded)	076172X0
Stainless steel brackets for each additional collector - metallic roofs (threaded)	076176X0
Stainless steel brackets for 1 coll metallic roofs (self-threading for wood)	076197X0
Stainless steel brackets for each additional collector - metallic roofs (self-threading for wood)	076198X0
Galvanised brackets for 1 coll flat tiles	076173X0
Galvanised brackets for each additional collector - flat tiles	076175X0
Galvanised brackets for 1 coll curved (florence) tiles	076174X0
Galvanised brackets for each additional collector - curved (florence) tiles	076177X0
Galvanised brackets for 1 coll slate tiles	076195X0
Galvanised brackets for each additional collector - slate tiles	076196X0

	DESCRIPTION		CODE	
	Special premixed solar fluid, ready for use, antifreeze protection to -12°C	5 kg	077102X0	
		25 kg	077103X0	
-0-0-0-	Thermostatic mixing valve !	/2"	013002X0	
THE	Airvent for the solar circuit		072237X0	
	2 kW electric auxiliary heater with overtemperature protection thermostat		073107X0	

ECOTOP VHM FLAT PLATE SOLAR COLLECTOR (FOR FORCED SYSTEMS)

ERP





> PRODUCT SPECIFICATIONS

- Solar collector with "tray" aluminium construction for better durability
- Solar collector absorber with vacuum-high-selectivation by sputtering (PVD), laser-welded with harp copper pipes
- Tempered solar glass, high transparency Solar collector insulation: 40 mm high density mineral wool (rear) and 10 mm (side), with ventilation openings
- Vertical or horizontal installation
- Max operating pressure: 10 bar
- Quality certification "EU Keymark" (EN 12975)

MODEL		VHM 2.1	VHM 2.7	
Dimensions	mm	1037x2018x89	1314x2018x89	
Gross area of the collector	m ²	2,09	2,65	
Net useful area (absorber)	m ²	1,82	2,36	
Total weight	kg	34,4	42,4	
Solar circuit fluid content (including storage)	1	0,85	1,09	
Stagnation temperature	°C	204,9	204,9	
Absorber type	%	95		
Absorption factor (absorber)	%	5	i	
Solar collector insulation		40 mm high dens	sity mineral wool	
Connections	Ø	3/4	4"	
Max operating pressure solar circuit	bar	10	0	
Connections	nr.	4		
Number of pieces on 1 pallet	nr.	8	8	
ARTICLE NR.		OXDN1KXA	OXDN2KXA	

VERTICAL MOUNTING	VERTICAL MOUNTING SETS		
FIXING BARS (1 couple for each collector) mod. 2.1	11	076224X0	
FIXING BARS (1 couple for each collector) mod. 2.7	11:11	076225X0	
ADDITIONAL MOUNTING SET FOR FLAT ROOFS (TERRACE): to be ordered in nr. equal to the total nr. of collectors in one hydraulic battery (or 2 pieces for one single collector) adjustable 30÷45°	1	076226X0	

HORIZONTAL MOUNTING	SETS	CODE
FIXING BARS MOD 2.1 1 couple for each collector	1	076224X0
FIXING BARS MOD 2.7 1 couple for each collector	1.1	076225X0
VHM HORIZONTAL ADAPTING PLATES For Sloping Roofs		076228X0
ADDITIONAL MOUNTING SET FOR FLAT ROOFS (TERRACE): to be ordered in nr. equal to the total nr. of collectors in one hydraulic battery))	076227X0
HYDRAULIC INTERCONNECTION SET 2 pcs, insulated (between 2 collectors - horizontal)		072243X0

BRACKETS FOR SLOPING ROOFS	CODE
Stainless steel universal flexible brackets for each collector (4 pcs.)	076218X0
Stainless steel brackets for 1 coll metallic roofs (threaded)	076172X0
Stainless steel brackets for each additional collector - metallic roofs (threaded)	076176X0
Stainless steel brackets for 1 coll metallic roofs (self-threading for wood)	076197X0
Stainless steel brackets for each additional collector - metallic roofs (self-threading for wood)	076198X0
Galvanised brackets for 1 coll flat tiles	076173X0
Galvanised brackets for each additional collector - flat tiles	076175X0
Galvanised brackets for 1 coll curved (florence) tiles	076174X0
Galvanised brackets for each additional collector - curved (florence) tiles	076177X0
Galvanised brackets for 1 coll slate tiles	076195X0
Galvanised brackets for each additional collector - slate tiles	076196X0

	DESCRIPTION		CODE	
	Special premixed solar fluid, ready for	5 kg	077102X0	
NG.	use, antifreeze protection to -12°C	25 kg	077103X0	
	Thermostatic mixing valve ½"		013002X0	
-mp 0 0	Hydraulic connections - start set, 4 pcs connections for the first/last collector)	s. (side	072235X0	
99 99	Hydraulic interconnection set 2 pcs, insulated (between 2 collectors - verti	ical)	072236X0	
TH	Airvent for the solar circuit		072237X0	

ECOTOP VHT FLAT PLATE SOLAR COLLECTOR (FOR FORCED SYSTEMS)





> PRODUCT SPECIFICATIONS

- Solar collector with "tray" aluminium construction for better durability
- Solar collector absorber with vacuum-high-selectivation by sputtering (PVD), laser-welded with harp copper pipes
- Tempered solar glass
- Solar collector insulation: 40 mm high density mineral wool (rear) and 10 mm (side), with ventilation openings
- Max operating pressure: 10 bar
- Quality certification "EU Keymark" (EN 12975)

mm m ²	1018x2018x89
m ²	
	2,06
m ²	1,84
kg	32,0
1	0,76
°C	204,2
%	95
%	5
	40 mm high density mineral wool
mm	18
bar	10
nr.	4
nr.	8
nr.	8
	OXDN1UXA
	kg I °C % % mm bar nr. nr.

VERTICAL MOUNTING	CODE		
FIXING BARS (1 couple for each collector)	1	076222X0	
ADDITIONAL MOUNTING SET FOR FLAT ROOFS (TERRACE): to be ordered in nr. equal to the total nr. of collectors in one hydraulic battery (or 2 pieces for one single collector) adjustable 30::45°	1	076226X0	

DESCRIPTION		CODE	
Special premixed solar fluid, ready for use, antifreeze protection to -12°C (base: Propilene-glycol,	5 kg	077102X0	
demineralized water, anti-toxic patented pink traceant for pH, specific corrosion inhibitors)		077103X0	
 Thermostatic mixing valve ½"		013002X0	

BRACKETS FOR SLOPING ROOFS	CODE	
Stainless steel universal flexible brackets for each collector (4 pcs.)	076218X0	
Stainless steel brackets for 1 coll metallic roofs (threaded)	076172X0	
Stainless steel brackets for each additional collector - metallic roofs (threaded)	076176X0	
Stainless steel brackets for 1 coll metallic roofs (self-threading for wood)	076197X0	
Stainless steel brackets for each additional collector - metallic roofs (self-threading for wood)	076198X0	
Galvanised brackets for 1 coll flat tiles	076173X0	
Galvanised brackets for each additional collector - flat tiles	076175X0	
Galvanised brackets for 1 coll curved (florence) tiles	076174X0	
Galvanised brackets for each additional collector - curved (florence) tiles	076177X0	
Galvanised brackets for 1 coll slate tiles	076195X0	
Galvanised brackets for each additional collector - slate tiles	076196X0	

	CODE		
-ap 0 0	Hydraulic connections - start set, 4 pcs. (side connections for the first/last collector)	072238X0	
99	Hydraulic interconnection set 2 pcs, insulated (between 2 collectors - vertical)	072251X0	
ों। स	Airvent for the solar circuit	072237X0	

ECOUNIT F 100-500 DOMESTIC HOT WATER STORAGES WITH SINGLE-DOUBLE COIL

ERP



> PRODUCT SPECIFICATIONS

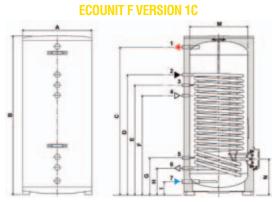
- Vertical storages for DHW, with single heat exchanger/coil (version 1C) or double heat exchanger/ coil (version 2C), made by enamelled steel, for solar systems.
- Rigid insulation 50 mm thickness, exterior in white painted steel.
- Supplied as standard with magnesium anode and electrical backup resistor (1500 Watt) adjustable temperature setpoint: 15-75°C
- 3 probe sockets

DIMENSIONS (mm)										
	100- 1C	150- 1C	200- 1C	300- 1C	400- 1C	500- 1C	200- 2C	300- 2C	400- 2C	500- 2C
Α	500	500	540	620	750	750	540	620	750	750
В	978	1325	1453	1535	1469	1769	1453	1535	1469	1769
C	870	1216	1344	1431	1326	1626	1344	1431	1326	1626
D	736	1088	1084	1161	985	1261	1234	1311	1174	1474
E	636	988	984	1061	885	1161	1134	1211	1074	1374
F	536	888	884	961	785	1061	1034	1111	974	1274
G	336	336	334	361	441	441	934	961	852	1152
Н	236	236	234	261	341	341	834	861	752	1052
I	126	126	124	131	155	155	734	761	661	898
J	-	-	-	-	-	-	234	261	391	398
K	-	-	-	-	-	-	124	131	291	298
L	-	-	-	-	-	-	324	351	155	155
M	400	400	440	520	650	650	440	520	650	650
N	326	326	324	351	418	418	324	351	418	418

HYDRAULIC CONNECTIONS										
	100- 1C	150- 1C	200- 1C	300- 1C	400- 1C	500- 1C	200- 2C	300- 2C	400- 2C	500- 2C
DHW	3/4"	3/4"	3/4"	1"	1"	1"	3/4"	1"	1"	1"
Heat exchanger/coil(s)	3/4"	3/4"	3/4"	1"	1"	1"	3/4"	3/4"	1"	1"
DHW recirculation feed	3/4"	3/4"	3/4"	1"	1"	1"	3/4"	3/4"	3/4"	3/4"

> NOMENCLATURE

- 1 hot water outlet 2 boiler inlet
- 3 thermal probe
- 4 dhw recirculation feed
- **5** thermal probe
- 6 boiler outlet
- 7 cold water inlet
- 8 thermal probe
- 9 solar circuit inlet 10 solar circuit outlet



ECOUNIT F VERSION 2C

MODEL	SINGLE COIL					DOUBLE COIL					
		100-1C	150-1C	200-1C	300-1C	400-1C	500-1C	200-2C	300-2C	400-2C	500-2C
ERP Class		C	C	D	D	D	D	D	D	D	D
Total capacity	I	100	150	200	300	400	500	200	300	400	500
Nominal power of the coil ($\Delta t 35^{\circ}C$, upp/low)	KW	18,5	31,25	35	45,75	59,25	84,75	12,5/20,75	18/25	29,6/38,1	29,6/55
Coil surface (upp/low)	m^2	0,74	1,25	1,4	1,83	2,37	3,39	0,83/0,5	1/0,72	1,52/1,19	2,2/1,19
Hydraulic losses of the coil (upp/low)	mbar	228	386	432	565	118	167	155/254	220/308	58/75	58/109
Thermal losses with water temp. 65°C	kWh/24h	1,6	1,8	2,2	2,7	2,9	3,5	2,2	2,7	2,9	3,5
Max operating temperature	°C	95	95	95	95	95	95	95	95	95	95
Primary circuit flow	m³/h	2	2	2	2	2	2	2	2	3	3
Max operating pressure	bar	8	8	8	8	8	8	8	8	8	8
Weight (empty)	kg	45	64	73	103	126	155	73	102	126	155
ARTICLE NR.		GRA1010A	GRA3010A	GRA4110A	GRA6310A	GRA7410A	GRA8410A	GRA4120A	GRA6320A	GRA7420A	GRA8420A

ECOUNIT 750-2000 DOMESTIC HOT WATER STORAGES HIGH CAPACITY (TWIN COILS)

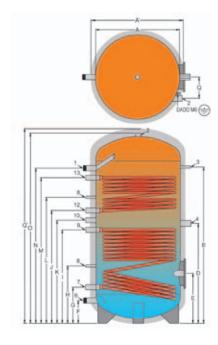




NON	IENCLATURE	750 / 1000	1500/2000
1.	hot water outlet	1" 1/4	1" 1/2
2.	anode	1" 1/2	1" 1/2
3.	thermal probe	1/2"	1/2"
4.	electrical resistor socket	1" 1/2	1" 1/2
6.	cold water return	1" 1/4	1" 1/2
7.	lower coil outlet	1" 1/4	1" 1/4
8.	thermostat	1/2"	1/2"
9.	lower coil inlet	1" 1/4	1" 1/4
10.	dhw recirculation	1"	1"
12.	upper coil outlet	1" 1/4	1" 1/4
13.	upper coil inlet	1" 1/4	1" 1/4

> PRODUCT SPECIFICATIONS

- Vertical storages for DHW, with twin coils for collective buildings, for solar systems.
- Protection threatment by vitrification (DIN 4753)
- Supplied as standard with magnesium anode
- Twin heat exchangers (coils) made by high quality carbon steel 3 probe sockets + 1 inspection opening
- Soft PU insulation (removable) 100 mm
- Warranty 5 years



DIMENSIONS	750	1000	1500	2000
(mm)				
Α	790	790	1000	1100
A'	990	990	1200	1300
В	1465	1830	1820	2000
D	935	1220	1230	1340
E	435	470	515	550
F	210	240	280	260
G	335	380	415	400
Н	535	600	525	660
I	875	1120	1125	1205
J	1055	1345	1315	1425
K	965	1235	1220	1315
L	1180	1495	1410	1487
M	1365	1660	1720	1870
N	1455	1830	1870	1990
0	1790	2140	2120	2405
Q'	1855	2205	2185	2470
Q	200	200	230	230

MODEL		750	1000	1500	2000
Total capacity	1	740	930	1390	1950
Coil surface (upp/low)	m ²	1,6 / 2,7	1,6 / 3,0	1,8 / 3,4	2,8 / 4,6
Water content in the coil (sup.(inf.)	1	9,3 / 15,2	9,3 / 21,0	10,4 / 19,5	16,9 / 28,1
Nominal power of the coil (\Delta t 35°C, upp/low)	KW	40 / 68	40 / 75	47 / 88	73 / 120
Nominal flow to the upper/lower coil	m³/h	1,7 / 2,9	1,7 / 3,2	2,0 / 3,8	3,1 / 5,2
DHW output (with 80/60°C heating flow, 10/45°C inlet/outlet DHW temp) upper/lower coil	m³/h	1,0 / 1,7	1,0 / 1,8	1,2 / 2,2	1,8 / 2,9
Hydraulic losses in the coil (upp/low)	mbar	52 / 236	52 / 329	80 / 499	233 / 1019
Thermal losses with water temp. 65°C	W	174	193	250	305
Weight (empty)	kg	220	265	365	480
Max operating temperature	°C	95	95	95	95
Max operating pressure of the storage	bar	10	10	8	8
Max operating pressure of the coil(s)	bar	10	10	10	10
ARTICLE NR.		0X1016XA	0X1018XA	0X1024XA	0X1029XA

HYDRAULIC MODULES FOR SOLAR SYSTEMS

PUMP + SAFETY VALVES + PRESSURE AND TEMPERATURE GAUGE + FILLING PORTS

IDRO 6-F







> PRODUCT SPECIFICATIONS

- High efficiency (ERP) solar circulator
- Fill/flush hydraulic connections for system charge
- Flow/return analogic thermometers integrated in the pump station
- PP insulation with mechanical rear plate for wall installation
- Hydraulic connection for solar expansion vessel
- Safety valve (6 bar) and pressure gauge of the solar circuit incorporated in the pump station
- Flowmeter (adjustable)
- Check valve (non-return valve) to block passive circulation incorporated in the pump station
- Lodging for Ecotronic controller (Idro 12/30)
- Manual de-aerator integrated in the Idro 12/30 (recommended in any case, mandatory if the filling is not made with high-pressure pumps, is the use of a de-aerator on top of the collector's field)
- Idro 6 includes only return pipe from tank, with accessories.

MODEL		6-E	12-E	30-E	70-E
Dimensions (WxHxL)	mm	155x425x150	308x434x169	308x434x169	285x500x170
Hydraulic connections diameter		3/4"M	1"M	1"M	1"1/4 M
Min-max nominal flow	I/min	1 - 6	2 - 12	8 - 28	20 - 70
Max operating pressure	bar	8	8	8	8
ARTICLE NR.		0X2022XA	0X2021XA	0X2023XA	0X2027XA

EXPANSION VESSELS FOR THE SOLAR CIRCUIT

SPECIFIC HIGH-TEMPERATURE AND GLYCOL-RESISTANT SOLAR VESSELS



> PRODUCT SPECIFICATIONS

- Suitable for high temperatures
- Suitable for high pressures
- Specific membrane for glycol-based solutions
- 50 and 80 lt models with legs for free-standing installation

MODEL	12	18	24	35	50	80
ARTICLE NR.	072101X0	072102X0	072103X0	072117X0	072118X0	072119X0

	DESCRIPTION	CODE	
1	Bracket for wall-mounting (except 50 and 80 lt models), includes flexible steel connection pipe	072120X0	



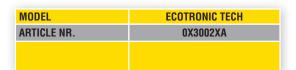
ELECTRONIC CONTROL

FOR SINGLE OR DOUBLE EXPOSURE SOLAR FIELDS

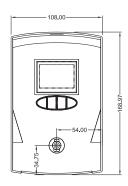


> PRODUCT SPECIFICATIONS

- Electronic control for DHW solar thermal systems, with capability to control single exposure or double exposure collectors' fields *
- Self-diagnose function
- Digital display with graphical symbols of the solar circuit main components
- 3 probes supplied (2 x PT 1000 + 1 x NTC)
- Voltage supply range: 210-250 V
- Possibility to integrate and manage an auxiliary heater (boiler or electrical backup heater) with an additional thermal probe
- Output signal to control a device (blind) to cover the solar collectors (anti.stagnation function)
- * in case of double exposure collectors' fields the control can operate two solar pumps, or alternatively one solar pump + a couple of two-way valves via an external relay with double inputs (not supplied) which activates the single pump when the control opens either one or both the two way valves.







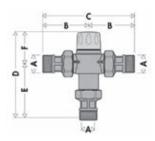
THERMOSTATIC MIXING VALVE

MIXING VALVE SPECIFIC FOR SOLAR SYSTEMS



> PRODUCT SPECIFICATIONS

- DHW thermostatic mixing valve, limestone-proof, adjustable, to prevent injuries due to water overheating (e.g. by thermosiphon uncontrolled solar systems) to persons at the DHW tapping point.
- Adjustable in the range: 30-65°C
- Diameter 1/2",
- EN 12165 compliant
- Max inlet temperature: 100°C
- Max operating pressure: 5 bar
- Two check-valves (non-return valves) included



DIMENSIONS (mm)					
Α	В	C	D	E	F
1/2"	67	134	152	86,5	65,5

MODEL	THERMOSTATIC MIXING VALVE		
ARTICLE NR.	013002X0		



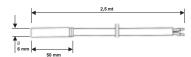
SOLAR PROBE

SOLAR PROBE FOR FORCED SOLAR COLLECTORS, UV-RESISTANT, FOR OUTDOOR USE



> PRODUCT SPECIFICATIONS

- PT 1000 solar probe, AISI 304 Ø6x500 mm sensor head
- Bipolar silicon cable, 22 AWG; L = 2500 mm
- Operating temperature: -20 to +180 °C
- Max operating temperature: 200 °C



MODEL	PT 1000
ARTICLE NR.	043007X0

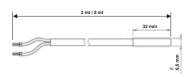
STORAGE PROBE

STORAGE PROBE FOR FORCED SOLAR SYSTEM



> PRODUCT SPECIFICATIONS

- Material: copper
- Insulation voltage strenght: 1500 V
- Resistance at 25°C: 10.000 Ω
- Available in 2 m or 5 m size



MODEL	NTC 2 mt	NTC 5 mt
ARTICLE NR.	1KWMA11W	043005X0

FERSOL - PREMIXED SOLAR FLUID

READY-FOR USE SOLAR FLUID FOR HIGH TEMPERATURES, WITH FROST PROTECTION



> PRODUCT SPECIFICATIONS

- Special premixed solar fluid, ready for use, antifreeze protection to -12°C (base: Propilene-glycol, demineralized water, anti-toxic patented pink traceant for pH, specific corrosion inhibitors), 5 kg or 25 kg.
- The change in colour (from purple to transparent) of the fluid means the pH is no longer suitable for the solar circuit (danger of corrosion), and the fluid must be replaced
- Can resist to stagnation temperatures up to 300 °C
- To be refilled/replaced ONLY with the same type of fluid.

MODEL	LT 5 KG	LT 25 KG
ARTICLE NR.	077102X0	077103X0

SUPPORT SYSTEM FOR SLOPING ROOFS



> UNIVERSAL STUD

Stainless steel fastening system with stud insert (M12x250 mm) for ECOTECH (all models)*, ECOTOP

Stainless steel fastening system with self-tapping screw for wood (M12x120 min.) for ECOTECH (model 150 and 200), ECOTOP

Specifically for fastening on cement tiles, bitumen tiles, flat metallic surfaces or corrugated one; can also be used for all other types of covering and tiles using drilled studs (lock nut required under the roof) or self-tapping screws for wood (Fischer type anchor required).

*For installation on sloping roofs, use n°1 code 076172X0 + n° 1 code 076176X0 (for model 250).









THREADED	FIRST COLLECTOR	ADDITIONAL COLLECTOR
ARTICLE NR.	076172X0	076176X0
SELF-THREADING	FIRST COLLECTOR	ADDITIONAL COLLECTOR
SELF-THREADING ARTICLE NR.	FIRST COLLECTOR 076197X0	ADDITIONAL COLLECTOR 076198X0

> UNIVERSAL UNDER-TILES **BRACKET**

Universal flexible stainless steel fixing set (4 pcs), for ECOTOP series

Fit for under-tile application for any type of sloping roof











MODEL	FOR EACH COLLECTOR		
ARTICLE NR.	076218X0		

> BRACKET FOR FLAT TILES

Adjustable galvanised steel fastening system for ECOTOP series Suitable for roofs with flat tiles ("Marseille" style)









MODEL	FIRST COLLECTOR	ADDITIONAL COLLECTOR
ARTICLE NR.	076173X0	076175X0

> BRACKET FOR CURVED TILES

Adjustable galvanised steel fastening system for ECOTOP series

Suitable for roofs with curved tiles









MODEL	FIRST COLLECTOR	ADDITIONAL COLLECTOR	
ARTICLE NR.	076174X0	076177X0	

> BRACKET FOR SLATE TILES

Adjustable galvanised steel fastening system for **ECOTOP** series

Suitable for roofs with slate tiles











MODEL	FIRST COLLECTOR	ADDITIONAL COLLECTOR	
ARTICLE NR.	076195X0	076196X0	

CERTIFICATION





In accordance with the constant efforts to improve its range of products and thus raise the level of customer satisfaction, the Company stresses that the appearance and/or size, technical specifications and accessories may be subject to variation.

Ferroli spa

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