Keymark Certificate

078/000318

AENOR certifies that the organization

BDR THERMEA GROUP B.V.

registered office	KANAAL ZUID, 106 7332 BD APELDOORN (Güeldres - Países Bajos)
supplies	**Factory made thermal solar heating systems**
in compliance with	UNE-EN 12976-1:2006 (EN 12976-1:2006)
Trade Mark	BAXI STS 300 2.5 LP
Technical information	Specified in Annexes to the Certificate
Production site	CL MANGANÈS, 2 08755 CASTELLBISBAL (Barcelona - España)
Certification scheme	In order to grant this Certificate, AENOR has tested the product and has verified the quality system implemented for its manufacture. AENOR performs these tasks periodically while the Certificate has not been cancelled, in accordance with Specific Rules RP 078.02.
First issued on	2019-06-18
Last issued on	2024-06-18
Validity	2029-06-18

Rafael GARCÍA MEIRO
CEO

ENAC
CERTIFICACIÓN
ISO 17065
Nº1 / C-PR271

AENOR CONFÍA S.A.U.
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Summary of	EN12976-2	SOLAR SYSTEM test results	Licence Number	078/000318
Annex to Solar KEYMARK Certificate			Issued	2024-06-18

Company	BDR THERMEA GROUP B.V.		Country	NETHERLANDS	
Brand (optional)	BAXI		Website	http://www.bdrthermea.com	
Street	KANAAL ZUID, 106		E-mail	oscar.mogro@bdrthermea.com	
Postal Code	7332 BD	APELDOORN (Güeldres)	Tel. / Fax	+34	936.828.040

System classification	
Application(s)	Hot water
Solar loop, circulation principle	Thermosyphon
Direct solar loop / heat exchanger	Heat exchanger
Open, vented or closed solar loop	Closed
Drain back/down	Always filled (no drain)
Store location	Outdoor
Store orientation (of main axis)	Vertical
Type of auxiliary heating (internal back-up heat)	None
If other auxiliary/internal back-up heating, please specifiy:	
Solar+supplementary OR Solar-only / Solar pre-heat	Solar only / Solar preheat

Collector(s)

Company	FABRISOLIA, S.L.U.
Keymark lic.no. if available	*078/000258*

Collector name	Per module: Gross Area (AG)	Per module: Gross length	Per module: Gross width
	m²	mm	mm
BAXI MEDITERRANEO SLIM 250	2,52	2191	1151

Heat store(s)

Company	SOLE S.A.
Keymark lic.no. if available	

Store name	Total nominal volume	Gross height	Gross width	Gross depth	Auxiliary heated volume	Electrical aux. heating power
	litres	mm	mm	mm	litres	kW
STS LP 300	274	530	1848	--	--	--

Solar loop controller					
Keymark lic.no. if available	--		Solar loop fluid		
Company	--		Recommended/required	Required	
Name	--		Company	BAXI	
Solar loop pump - power range	W to W		Name	FAC 10	
			Freezing point	-10	°C

System family overview

Collector name	Number of collectors in each configuration for each store: Store name: STS LP 300																																	
BAXI MEDITERRANEO SLIM 250	2																																	

Testing Laboratory	Fundación CENER-CIEMAT
Website	www.cener.com
Test report id. number	30.3452.2-1 R Test report
Date of test report	2019-06-25

Comments of test lab	
	CENER NATIONAL RENEWABLE ENERGY CENTRE ADItech

Stamp & Signature of the lab

Version 4.5, 2017-10-24

Summary of	EN12976-2	test results	Certification No.	078/000318
Annex to Solar KEYMARK Certificate			Issued	2024-06-18

Company	BDR THERMEA GROUP B.V.		**Country**	NETHERLANDS	
Brand (optional)	BAXI		**Website**	http://www.bdrthermea.com	
Street	KANAAL ZUID, 106		**E-mail**	oscar.mogro@bdrthermea.com	
Postal Code	7332 BD	APELDOORN (Güeldres)	**Tel. / Fax**	+34	936828040

System family overview

Collector name	For each storage and collector size, give number of collectors				
	STS LP 300				
BAXI MEDITERRANEO SLIM 250	2				

Name of system configuration					BAXI STS 300 2.5 LP
Collector name	BAXI MEDITERRANEO SLIM 250	**No. Collectors**	2	**Storage name**	STS LP 300

Calculated annual results for "solar-only / preheat system"

Location	Qd,sh	Daily drawoff 250 l				Daily drawoff 300 l				Daily drawoff 400 l			
		Qd,hw	QL	Qpar	fsol	Qd,hw	QL	Qpar	fsol	Qd,hw	QL	Qpar	fsol
	MJ/y	MJ/y	MJ/y	MJ/y	%	MJ/y	MJ/y	MJ/y	%	MJ/y	MJ/y	MJ/y	%
Stockholm SE	--	13954	6355	0	45,5	16745	6712	0	40,1	22327	6954	0	31,1
WürzburgDE	--	13381	6668	0	49,8	16058	7093	0	44,2	21410	7371	0	34,4
Davos CH	--	15140	9404	0	62,1	18169	9776	0	53,8	24225	10043	0	41,5
Athens GR	--	10398	8146	0	78,3	12478	9016	0	72,3	16637	10109	0	60,8

Perf. indicators for the table above

Qd,sh	MJ/y	**Not relevant for solar domestic hot water system**
Qd	MJ/y	**Annual heat demand for domestic hot water**
QL	MJ/y	**Annual heat energy delivered by the solar system**
Qpar	MJ/y	**Annual parasitic energy: (electricity for pumps/controllers)**
$f_{sol}=Q_L/Q_d$	-	**Solar fraction**

Ref. conditions		Stockholm SE	Würzburg DE	Davos CH	Athens GR
	G	1.157	1.230	1.684	1.736
	Ta,ave	7,5	9,0	3,2	18,5
	Tc,ave	8,5	10,0	5,4	17,8
	± ΔTc	6,4	3,0	0,8	7,4

G	kWh/m²	**Annual irradiation South, 45°**
Ta,ave	°C	**Annual average outdoor air temperature**
Tc,ave	°C	**Annual average mains cold water temp.**
ΔTc	K	**Seasonal variation of Tc**
Th	45 °C	**Desired hot water temperature (mixing valve temperature).**

Max. operating press. - collector side	1000	kPa	Max. operating press. - tank side	8000	kPa

Testing Laboratory	Fundación CENER-CIEMAT
Website	www.cener.com
Test report id. number	30.3452.2-1 R Test report
Date of test report	2019-06-25
Test method	ISO 9459-5 (DST)

Comments of test lab

No comments

CENER NATIONAL RENEWABLE ENERGY CENTRE ADItech

Stamp of accredited test lab

All values are subject to some uncertainty; e.g. the uncertainty on system output is typically in the range of ± 5 % to ± 15 %

Version 4.5, 2017-10-24