Keymark Certificate

078/000317

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 2.0 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	078/000317
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)	Horizontal
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)				Heat store(s)						
Company	FABRISOLIA, S.L.U.			Company	SOLE S.A.					
Keymark lic.no. if available	*078/000266*			*Keymark lic.no. if available*						
Collector name	Per module			Store name	Total nominal volume	Gross height	Gross width	Gross depth	Auxiliary heated volume	Electrical aux. heating power
	Gross Area (AG)	Gross length	Gross width							
	m²	mm	mm		litres	mm	mm	mm	litres	kW
BAXI MEDITERRANEO SLIM 200	2,02	1757	1151	STS LP 300	274	530	1848	--	--	--

Solar loop controller		Solar loop fluid		
Keymark lic.no. if available	--	Recommended/required	Required	
Company	--	Company	BAXI	
Name	--	Name	FAC 10	
Solar loop pump - power range	W to W	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 200	2																											

Testing Laboratory	Fundación CENER-CIEMAT
Website	www.cener.com
Test report id. number	30.3452.1-1 R Test report
Date of test report	2019-06-25

Comments of test lab	
	CENER ADItech NATIONAL RENEWABLE ENERGY CENTRE

Stamp & signature of the lab

Version 4.5, 2017-10-24

Summary of	EN12976-2	test results	Certification No.	078/000317
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 200	2																													

Name of system configuration				BAXI STS 300 2.0 LP	
Collector name	BAXI MEDITERRANEO SLIM 200	**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	5318	0	38,1	16745	5541	0	33,1	22327	5701	0	25,5
WürzburgDE	--	13381	6004	0	44,9	16058	6218	0	38,7	21410	6433	0	30,0
Davos CH	--	15140	8287	0	54,7	18169	8466	0	46,6	24225	8689	0	35,9
Athens GR	--	10398	7581	0	72,9	12478	8242	0	66,1	16637	8992	0	54,0

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	30.3452.1-1 R Test report
Date of test report	2019-06-25
Test method	ISO 9459-5 (DST)

Comments of test lab

No comments

CENER ADItech NATIONAL RENEWABLE ENERGY CENTRE

Stamp of standard 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