AENOR

Keymark Certificate
Solar thermal energy

078/000317

AENOR certifies that the organization

BDR THERMEA GROUP B.V

registered office	MARCHANTSTRAAT, 55 7300 AA APELDOORN *(*Holanda - Países Bajos*)*
supplies	Factory made thermal solar heating systems
in compliance with	UNE-EN 12976-1:2006 *(*EN 12976-1:2006*)*
Trade Mark Technical information	BAXI STS 300 2.0 LP Specified in Annexes to the Certificate
Production site	CL MANGANÉS, 2 POLIG. INDUSTRIAL CAN ALBAREDA 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 Validity date	2019-06-18 2024-06-18

Rafael GARCÍA MEIRO
Chief Executive Officer

Original Electronic Certificate

AENOR INTERNACIONAL S.A.U.
Génova, 6. 28004 Madrid. España
Tel. 91 432 60 00.- www.aenor.com

Product certification body accredited by ENAC, number 01/C-PR002.078

Summary of	EN12976-2	SOLAR SYSTEM test results	Licence Number	078/000317
Annex to Solar KEYMARK Certificate			Issued	2019-06-18

Company	BDR THERMEA GROUP B.V.		Country	NETHERLANDS	
Brand (optional)	BAXI		Website	www.bdrthermea.com	
Street	MARCHANSTRAAT 55		E-mail	oleguer.fuertes@BDRThermea.com	
Postal Code	7300 AA	APPELDOORN	Tel. / Fax	+34	902.898.989

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)

Company	FABRISOLIA, S.L.U.
Keymark lic.no. if available	*078/000266*

Collector name	Per module: Gross Area (AG)	Gross length	Gross width
	m²	mm	mm
BAXI MEDITERRANEO SLIM 200	2,02	1757	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				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 Test report
Date of test report	2019-05-10

Comments of test lab

CENER | NATIONAL RENEWABLE ENERGY CENTRE
ADItech

Stamp & signature of the lab

Summary of	EN12976-2	test results	Certification No.	078/000317
Annex to Solar KEYMARK Certificate			Issued	2019-06-18

Company	BDR THERMEA GROUP B.V.	Country	NETHERLANDS
Brand (optional)	BAXI	Website	www.bdrthermea.com
Street	MARCHANSTRAAT 55	E-mail	oleguer.fuertes@BDRThermea.com
Postal Code	7300 AA APPELDOORN	Tel. / Fax	+34 902898989

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					
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 Test report
Date of test report	2019-05-10
Test method	ISO 9459-5 (DST)

Comments of test lab

No comments

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Stamp of the 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 %

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