




Summary of	EN12976-2	SOLAR SYSTEM test results	Licence Number	ICIM-CLS-000153						
Annex to Solar KEYMARK Certificate			Issued	2018-06-25						
Company	Cordivari S.r.l.		Country	Italy						
Brand (optional)	--		Website	www.cordivari.it						
Street	Zona Industriale Pagliare		E-mail	info@cordivari.it						
Postal Code	IT-64020	Morro d'Oro (TE)	Tel. / Fax	+39	(0) 85 8040 1					
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	Int. collector-store									
Store orientation (of main axis)	Horizontal									
Type of auxiliary heating (internal back-up heat)	None									
If other auxiliary/internal back-up heating, please specify:	--									
Solar+supplementary OR Solar-only / Solar pre-heat	Solar only / Solar preheat									
Collector(s)			Heat store(s)							
Company	Cordivari S.r.l.		Company	Cordivari S.r.l.						
Keymark lic.no. if available	N/A		Keymark lic.no. if available	N/A						
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							
STRATOS 4S ROTOSHIELD MOD 120	1,77	820	2160	STRATOS 4S ROTOSHIELD MOD 120	45	820	2160	162	--	--
Solar loop controller			Solar loop fluid							
Keymark lic.no. if available	--		Recommended/required	Required						
Company Name	--		Company Name	--						
Solar loop pump - power range	-- W	to	-- W	Freezing point	-- °C					
System family overview										
Collector name	Number of collectors in each configuration for each store									
	STRATOS 4S ROTOSHIELD MOD 120					Store name				
STRATOS 4S ROTOSHIELD MOD 120	1									
Testing Laboratory	Institut für Solartechnik SPF, CH-8640 Rapperswil									
Website	www.spf.ch									
Test report id. number	S234COLL; S234EN									
Date of test report	2018-06-14									
Comments of test lab	--									
					 INSTITUT FÜR SOLARTECHNIK 					

Summary of		EN12976-2		test results		Certification No.		ICIM-CLS-000153					
Annex to Solar KEYMARK Certificate						Issued		2018-06-25					
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Brand (optional)	--					Website	www.cordivari.it						
Street	Zona Industriale Pagliare					E-mail	info@cordivari.it						
Postal Code	IT-64020	Morro d'Oro (TE)				Tel. / Fax	+39	(0) 85 8040 1					
System family overview													
For each storage and collector size, give number of collectors													
Collector name	STRATOS 4S ROTOSHIELD MOD 120												
STRATOS 4S ROTOSHIELD MOD 120	1												
Name of system configuration						STRATOS 4S ROTOSHIELD MOD 120							
Collector name	DS 4S ROTOSHIELD MOD 120	No. Collectors	1	Storage name	DS 4S ROTOSHIELD MOD 120								
Calculated annual results for "solar-only / preheat system"													
Location	Qd,sh MJ/y	Daily drawoff 110 l				Daily drawoff 140 l				Daily drawoff 170 l			
		Qd,hw MJ/y	QL MJ/y	Qpar MJ/y	fsol %	Qd,hw MJ/y	QL MJ/y	Qpar MJ/y	fsol %	Qd,hw MJ/y	QL MJ/y	Qpar MJ/y	fsol %
Stockholm SE	--	6150	1999	0	32,5	7821	2026	0	25,9	9492	2041	0	21,5
WürzburgDE	--	5897	2111	0	35,8	7506	2147	0	28,6	9114	2160	0	23,7
Davos CH	--	6654	2841	0	42,7	8483	2876	0	33,9	10281	2889	0	28,1
Athens GR	--	4573	2853	0	62,4	5834	3034	0	52,0	12110	2894	0	23,9
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/m ²	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				400	kPa	Max. operating press. - tank side				400	kPa		
Testing Laboratory						Institut für Solartechnik SPF, CH-8640 Rapperswil							
Website						www.spf.ch							
Test report id. number						S234COLL; S234EN							
Date of test report						2018-06-14							
Test method						ISO 9459-5 (DST)							
Comments of test lab													
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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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