

	Licence Number			SKM 10209.1									
Annex to Solar Keymark Certificate							Date issued			2024-11-28			
							by		DQS Hellas				
Licence holder	SOLE	S.A.					y GREECE						
Brand (optional)						http://www.sole.gr							
Street, Number	Laikon	Agonon &	& Lefktror	n in the second s		Web http://www.sole.gr E-mail info@sole.gr							
Postcode, City	_	Acharnai				Tel +30 210 2389500							
Collector Type						Flat plat	e collecto	r					
						Power output per collector							
		Å()	Gross length	Gross width	Gross height	Gb = 850 W/m2, Gd = 150 W/m2 & u = 1.3 m/s							
Collector name		Gross area (A _G)											
		Grc are	en Gr	ž č	hei	0 K	10 K	30 K	50 K	70 K	89 K		
		m²	mm	mm	mm	W	W	W	W	W	W		
SUPERSOL S200 (ECO S200)		1.88	1,960	960	82	1,455	1,389	1,237	1,059	854	635		
SUPERSOL S230 (ECO S230)		2.28	1,960	1,165	82	1,765	1,685	1,500	1,284	1,035	770		
SUPERSOL S260 (ECO S260)		2.64	2,135	1,238	82	2,043	1,950	1,737	1,486	1,199	891		
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			 							╞──┤			
Power output per m ² gross area						774	739	658	563	454	338		
	• • • • •	Charles				774	133	000	505	434	220		
Performance parameters test me Performance parameters (related		-	tate - out a1	a2	a3	- 1	a5	aC	a7	a8	Kd		
		η0, b -	1000 No. 10	dZ W/(m²K²)	J/(m ³ K)	a4 -	J/(m ² K)	a6 s/m	0.00	ao W/(m²K⁴)	KU		
			VV/(III K)	W/(III K)		0.00	10,630	0.000	0.00	0.0E+00	0.93		
Units				0.010				0.000	0.00	0.0E+00	0.95		
Units Test results		0.782	3.34	0.018	0.000	0.00	10,000						
Units Test results Incidence angle modifier test me	thod	0.782	3.34 Steady s	tate - out	door	Construction of the second		5		200			
Units Test results Incidence angle modifier test me Incidence angle modifier	thod	0.782 Angle	3.34 Steady s 10°	tate - out 20°	door 30°	40°	50°	60°	70°	80°	90°		
Units Test results Incidence angle modifier test me Incidence angle modifier Transversal	thod	0.782 Angle K _{0T,coll}	3.34 Steady s 10° 1.00	tate - out 20° 1.00	door 30° 1.00	40° 0.99	50° 0.97	0.92	0.81	0.55	0.00		
Units Test results Incidence angle modifier test me Incidence angle modifier Transversal Longitudinal		0.782 Angle	3.34 Steady s 10°	tate - out 20°	door 30°	40°	50° 0.97 0.97		allow the same t		1 2 4 2 C 1		
Units Test results Incidence angle modifier test me Incidence angle modifier Transversal Longitudinal Heat transfer medium for testing		0.782 Angle K _{0T,coll}	3.34 Steady s 10° 1.00	tate - out 20° 1.00	door 30° 1.00	40° 0.99	50° 0.97 0.97 Water	0.92	0.81 0.81	0.55 0.55	0.00		
Units Test results Incidence angle modifier test me Incidence angle modifier Transversal Longitudinal Heat transfer medium for testing Flow rate for testing (per gross an	ea, A _G)	$\begin{array}{c} 0.782\\ \text{Angle}\\ \text{K}_{\text{\thetaT,coll}}\\ \text{K}_{\text{\thetaL,coll}} \end{array}$	3.34 Steady s 10° 1.00 1.00	tate - out 20° 1.00 1.00	door 30° 1.00	40° 0.99	50° 0.97 0.97 Water dm/dt	0.92 0.92	0.81 0.81 0.020	0.55 0.55 kg/(sm ²	0.00		
Units Test results Incidence angle modifier test me Incidence angle modifier Transversal Longitudinal Heat transfer medium for testing Flow rate for testing (per gross an Maximum temperature difference	rea, A _G) e during	0.782 Angle K _{0T,coll} K _{0L,coll}	3.34 Steady s 10° 1.00 1.00	tate - out 20° 1.00 1.00	door 30° 1.00	40° 0.99	50° 0.97 0.97 Water dm/dt (ϑm-ϑa)n	0.92 0.92	0.81 0.81 0.020 59	0.55 0.55 kg/(sm ² K	0.00		
Units Test results Incidence angle modifier test me Incidence angle modifier Transversal Longitudinal Heat transfer medium for testing Flow rate for testing (per gross an Maximum temperature difference Standard stagnation temperature	rea, A _G) e during e (G = 100	0.782 Angle K _{0T,coll} K _{0L,coll}	3.34 Steady s 10° 1.00 1.00	tate - out 20° 1.00 1.00	door 30° 1.00	40° 0.99	50° 0.97 0.97 Water dm/dt $(\vartheta_m - \vartheta_a)_n$ ϑ_{stg}	0.92 0.92	0.81 0.81 0.020 59 197	0.55 0.55 kg/(sm ² K °C	0.00		
Units Test results Incidence angle modifier test me Incidence angle modifier Transversal Longitudinal Heat transfer medium for testing Flow rate for testing (per gross an Maximum temperature difference Standard stagnation temperature Maximum operating temperature	rea, A _G) e during e (G = 100	0.782 Angle K _{0T,coll} K _{0L,coll}	3.34 Steady s 10° 1.00 1.00	tate - out 20° 1.00 1.00	door 30° 1.00	40° 0.99	$\begin{array}{c} 50^{\circ} \\ 0.97 \\ 0.97 \\ \end{array}$ Water $dm/dt \\ (\vartheta_m \cdot \vartheta_a)_n \\ \vartheta_{stg} \\ \vartheta_{max op} \end{array}$	0.92 0.92	0.81 0.81 0.020 59 197 150	0.55 0.55 kg/(sm ² K °C °C	0.00		
Units Test results Incidence angle modifier test me Incidence angle modifier Transversal Longitudinal Heat transfer medium for testing Flow rate for testing (per gross an Maximum temperature difference Standard stagnation temperature Maximum operating temperature	rea, A _G) e during e (G = 100 e	0.782 Angle $K_{\theta T, coll}$ $K_{\theta L, coll}$	3.34 Steady s 10° 1.00 1.00 performation ∂ _a = 30 °C	tate - out 20° 1.00 1.00	door 30° 1.00	40° 0.99	$\begin{array}{c} 50^{\circ} \\ 0.97 \\ 0.97 \\ \end{array}$ $\begin{array}{c} Water \\ dm/dt \\ (\vartheta_m \cdot \vartheta_a)_n \\ \vartheta_{stg} \\ \vartheta_{max \ op} \\ p_{max, op} \end{array}$	0.92 0.92	0.81 0.81 0.020 59 197 150 1500	0.55 0.55 kg/(sm ² K °C	0.00		
Units Test results Incidence angle modifier test me Incidence angle modifier Transversal Longitudinal Heat transfer medium for testing Flow rate for testing (per gross an Maximum temperature difference Standard stagnation temperature Maximum operating temperature Maximum operating pressure Testing laboratory	ea, A _G) e during e (G = 100 e NCSR "	0.782 Angle $K_{\theta T, coll}$ $K_{\theta L, coll}$ thermal p 0 W/m ² ;	3.34 Steady s 10° 1.00 1.00 performation ∂ _a = 30 °C	tate - out 20° 1.00 1.00	door 30° 1.00	40° 0.99	50° 0.97 0.97 dm/dt (ϑ_m - ϑ_a) _n ϑ_{stg} $\vartheta_{max op}$ $p_{max,op}$ www.sol	0.92 0.92	0.81 0.81 0.020 59 197 150 1500 kritos.gr	0.55 0.55 kg/(sm ² K °C °C kPa	0.00		
Units Test results Incidence angle modifier test me Incidence angle modifier Transversal Longitudinal Heat transfer medium for testing Flow rate for testing (per gross an Maximum temperature difference Standard stagnation temperature	rea, A _G) e during e (G = 100 e NCSR " 4422 D	0.782 Angle $K_{\theta T, coll}$ $K_{\theta L, coll}$ thermal p 0 W/m ² ; DEMOKR	3.34 Steady s 10° 1.00 1.00 performation ∂ _a = 30 °C	tate - out 20° 1.00 1.00	door 30° 1.00	40° 0.99	$\begin{array}{c} 50^{\circ} \\ 0.97 \\ 0.97 \\ \end{array}$ $\begin{array}{c} Water \\ dm/dt \\ (\vartheta_m \cdot \vartheta_a)_n \\ \vartheta_{stg} \\ \vartheta_{max \ op} \\ p_{max, op} \end{array}$	0.92 0.92	0.81 0.81 0.020 59 197 150 1500 kritos.gr 28/11/2	0.55 0.55 kg/(sm ² K °C °C kPa 4	0.00		
Units Test results Incidence angle modifier test me Incidence angle modifier Transversal Longitudinal Heat transfer medium for testing Flow rate for testing (per gross an Maximum temperature difference Standard stagnation temperature Maximum operating temperature Maximum operating pressure Testing laboratory	rea, A _G) e during e (G = 100 e NCSR " 4422 D 4423 D	0.782 Angle $K_{\theta T, coll}$ $K_{\theta L, coll}$ thermal p 00 W/m ² ; DEMOKRI E3 E1	3.34 Steady s 10° 1.00 1.00 performation ∂ _a = 30 °C	tate - out 20° 1.00 1.00	door 30° 1.00	40° 0.99	50° 0.97 0.97 dm/dt (ϑ_m - ϑ_a) _n ϑ_{stg} $\vartheta_{max op}$ $p_{max,op}$ www.sol	0.92 0.92	0.81 0.81 59 197 150 1500 kritos.gr 28/11/2 10/10/2	0.55 0.55 K °C °C kPa 4 4	0.00		
Units Test results Incidence angle modifier test me Incidence angle modifier Transversal Longitudinal Heat transfer medium for testing Flow rate for testing (per gross an Maximum temperature difference Standard stagnation temperature Maximum operating temperature Maximum operating pressure Testing laboratory Test report(s)	rea, A _G) e during e (G = 100 e NCSR " 4422 D	0.782 Angle $K_{\theta T, coll}$ $K_{\theta L, coll}$ thermal p 00 W/m ² ; DEMOKRI E3 E1	3.34 Steady s 10° 1.00 1.00 performation ∂ _a = 30 °C	tate - out 20° 1.00 1.00	door 30° 1.00	40° 0.99	50° 0.97 0.97 dm/dt (ϑ_m - ϑ_a) _n ϑ_{stg} $\vartheta_{max op}$ $p_{max,op}$ www.sol	0.92 0.92 nax	0.81 0.81 59 197 150 1500 kritos.gr 28/11/2 10/10/2 10/10/2	0.55 0.55 K °C kPa 4 4	0.00		
Units Test results Incidence angle modifier test me Incidence angle modifier Transversal Longitudinal Heat transfer medium for testing Flow rate for testing (per gross an Maximum temperature difference Standard stagnation temperature Maximum operating temperature Maximum operating pressure Testing laboratory Test report(s)	rea, A _G) e during e (G = 100 e NCSR " 4422 D 4423 D 4424 D	0.782 Angle $K_{\theta T, coll}$ $K_{\theta L, coll}$ thermal p 0 W/m ² ; DEMOKRI E3 E1 Q1	3.34 Steady s 10° 1.00 1.00 performation ∂ _a = 30 °C	tate - out 20° 1.00 1.00	door 30° 1.00	40° 0.99	50° 0.97 0.97 dm/dt (ϑ_m - ϑ_a) _n ϑ_{stg} $\vartheta_{max op}$ $p_{max,op}$ www.sol	0.92 0.92 nax	0.81 0.81 59 197 150 1500 kritos.gr 28/11/2 10/10/2	0.55 0.55 K °C kPa 4 4	0.00		
Units Test results Incidence angle modifier test me Incidence angle modifier Transversal Longitudinal Heat transfer medium for testing Flow rate for testing (per gross an Maximum temperature difference Standard stagnation temperature Maximum operating temperature Maximum operating pressure Testing laboratory Test report(s)	rea, A _G) e during e (G = 100 e NCSR " 4422 D 4423 D 4424 D	0.782 Angle $K_{\theta T, coll}$ $K_{\theta L, coll}$ thermal p 0 W/m ² ; DEMOKRI E3 E1 Q1	3.34 Steady s 10° 1.00 1.00 performation ∂ _a = 30 °C	tate - out 20° 1.00 1.00	door 30° 1.00	40° 0.99	50° 0.97 0.97 Water dm/dt (ϑ _m -ϑ _a) _n ϑ _{stg} ϑ _{max op} p _{max,op} www.sol Dated	0.92 0.92 nax ar.demo	0.81 0.81 0.020 59 197 150 1500 kritos.gr 28/11/2 10/10/2 10/10/2 6.2 (13.01.	0.55 0.55 kg/(sm ² K °C kPa 4 4 4 2022)	0.00 0.00		
Units Test results Incidence angle modifier test me Incidence angle modifier Transversal Longitudinal Heat transfer medium for testing Flow rate for testing (per gross an Maximum temperature difference Standard stagnation temperature Maximum operating temperature Maximum operating pressure Testing laboratory Test report(s)	rea, A _G) e during e (G = 100 e NCSR " 4422 D 4423 D 4424 D	0.782 Angle $K_{\theta T, coll}$ $K_{\theta L, coll}$ thermal p 0 W/m ² ; DEMOKRI E3 E1 Q1	3.34 Steady s 10° 1.00 1.00 performation ∂ _a = 30 °C	tate - out 20° 1.00 1.00	door 30° 1.00	40° 0.99	50° 0.97 0.97 Water dm/dt (ϑ _m -ϑ _a) _n ϑ _{stg} ϑ _{max op} P _{max,op} www.sol Dated	0.92 0.92 nax ar.demo Ver.	0.81 0.81 0.020 59 197 150 1500 kritos.gr 28/11/2 10/10/2 6.2 (13.01	0.55 0.55 kg/(sm ² K °C kPa 4 4 4 2022) s "	0.00 0.00		
Units Test results Incidence angle modifier test me Incidence angle modifier Transversal Longitudinal Heat transfer medium for testing Flow rate for testing (per gross an Maximum temperature difference Standard stagnation temperature Maximum operating temperature Maximum operating pressure Testing laboratory	rea, A _G) e during e (G = 100 e NCSR " 4422 D 4423 D 4424 D	0.782 Angle $K_{\theta T, coll}$ $K_{\theta L, coll}$ thermal p 0 W/m ² ; DEMOKRI E3 E1 Q1	3.34 Steady s 10° 1.00 1.00 performation ∂ _a = 30 °C	tate - out 20° 1.00 1.00	door 30° 1.00	40° 0.99	50° 0.97 0.97 Water dm/dt (ϑ_m - ϑ_a) _n ϑ_{stg} $\vartheta_{max.op}$ Pmax.op Pmax.op Dated	0.92 0.92 nax ar.demo Ver.	0.81 0.81 0.020 59 197 150 1500 kritos.gr 28/11/2 10/10/2 6.2 (13.01. KRITO ABORATO	0.55 0.55 kg/(sm ² K °C kPa 4 4 4 2022) S	0.00 0.00		
Units Test results Incidence angle modifier test me Incidence angle modifier Transversal Longitudinal Heat transfer medium for testing Flow rate for testing (per gross an Maximum temperature difference Standard stagnation temperature Maximum operating temperature Maximum operating pressure Testing laboratory Test report(s) Comments	rea, A _G) e during e (G = 100 e NCSR " 4422 D 4423 D 4424 D	0.782 Angle $K_{\theta T, coll}$ $K_{\theta L, coll}$ thermal p 0 W/m ² ; DEMOKRI E3 E1 Q1	3.34 Steady s 10° 1.00 1.00 performation ∂ _a = 30 °C	tate - out 20° 1.00 1.00	door 30° 1.00	40° 0.99	50° 0.97 0.97 Water dm/dt $(\vartheta_m - \vartheta_a)_n$ ϑ_{stg} $\vartheta_{max,op}$ www.sol Dated	0.92 0.92 nax ar.demo Ver. "D E M O ENERGY	0.81 0.81 0.020 59 197 150 1500 kritos.gr 28/11/2 10/10/2 10/10/2 6.2 (13.01. kRIT O LABORATO xr +210 6544	0.55 0.55 kg/(sm ² K °C kPa 4 4 4 4 2022) s "	0.00 0.00		
Units Test results Incidence angle modifier test me Incidence angle modifier Transversal Longitudinal Heat transfer medium for testing Flow rate for testing (per gross an Maximum temperature difference Standard stagnation temperature Maximum operating temperature Maximum operating pressure Testing laboratory Test report(s)	rea, A _G) e during e (G = 100 e MCSR " 4422 D 4423 D 4424 D est repor	0.782 Angle K _{θT,coll} K _{θL,coll} thermal μ 0 W/m ² ; DEMOKR E3 E1 Q1 ts 4422 D	3.34 Steady s 10° 1.00 1.00 performat ∂ _a = 30 °C ITOS"	tate - out 20° 1.00 1.00	door 30° 1.00 1.00	40° 0.99 0.99	50° 0.97 0.97 dm/dt (ϑ_m - ϑ_a) _n ϑ_{stg} $\vartheta_{max.op}$ pmax.op pmax.op WWW.Sol Dated	0.92 0.92 nax ar.demo Ver. "D E M O ENERGY i503815 - Fa 037, 15310 Ag	0.81 0.81 0.020 59 197 150 1500 kritos.gr 28/11/2 10/10/2 6.2 (13.01 KRITO ABORATO x: +210 6544 Paraskevi, Gr	0.55 0.55 kg/(sm ² K °C kPa 4 4 4 4 2022) S" K	0.00 0.00		

Annex to Solar Keymark Certifi Supplementary Information Gross Thermal Yield in kWh/colle Standard Location Collector name SUPERSOL S200 (ECO S200) SUPERSOL S230 (ECO S230) SUPERSOL S260 (ECO S260) 	ctor at r s <u>2,372</u> 2,877	Athens 50°C 1,727	75°C 1,132 1,373	25°C 1,826 2,214	Davos 50°C 1,272	Issued 75°C 791		tockholi	m	2024- v	11-20 Vürzbur		
Gross Thermal Yield in kWh/colle Standard Location Collector name থি SUPERSOL S200 (ECO S200) SUPERSOL S230 (ECO S230)	s 25°C 2,372 2,877	Athens 50°C 1,727 2,094	75°C 1,132 1,373	25°C 1,826 2,214	Davos 50°C 1,272	75°C			m	v	Vürzbur		
Standard Location Collector name থি SUPERSOL S200 (ECO S200) SUPERSOL S230 (ECO S230)	s 25°C 2,372 2,877	Athens 50°C 1,727 2,094	75°C 1,132 1,373	25°C 1,826 2,214	Davos 50°C 1,272	75°C			m	v	Vürzbur	~	
Collector name8SUPERSOL S200 (ECO S200)SUPERSOL S230 (ECO S230)	2,372 2,877	50°C 1,727 2,094	75°C 1,132 1,373	1,826 2,214	50°C 1,272	_			m	V	vurzbur		
SUPERSOL S200 (ECO S200) SUPERSOL S230 (ECO S230)	2,372 2,877	1,727 2,094	1,132 1,373	1,826 2,214	1,272	_	25 C		75°C	25°C	50°C	g 75°C	
SUPERSOL S230 (ECO S230)	2,877	2,094	1,373	2,214			1,342	50°C 888	532	1,459	963	568	
	· ·					959	1,627	1,077	646	1,769		689	
						1,110		1,247	748	2,049		798	
	-												
Gross Thermal Yield per m ² gross area	1,262	918	602	971	677	421	714	472	283	776	512	302	
Annual efficiency, η _a	71%	52%	34%	60%	42%	26%	61%	41%	24%	62%	41%	24%	
Fixed or tracking collector						tude - 1	-			· · ·			
Annual irradiation on collector plane		65 kWh,	/m²	163	30 kWh	/m²	116	56 kWh/	′m²	124	4 kWh	'm²	
Mean annual ambient air temperature	-	18.5°C	- 0		3.2°C			7.5°C	- 0	9.0°C			
Collector orientation or tracking mode		outh, 2			,			outh, 45		South, 35°			
The collector is operated at constant t collector performance is performed w													
description of the calculations is availa								ic ver. c	.2 (15.0)1.2022)	. A ueta	neu	
	DIE at IIt												
		Add	ditiona	al Infoi	matio	n				14/-1	Character		
Collector heat transfer medium	forroof	intograt	ian							Water-	-		
The collector is deemed to be suitable	101 1001	megrat	1011							IN	0		
The collector was tested successfully u	nder the	followi	ng cond	itions:									
Climate class (A+, A, B or C)										4	-	-	
G (W/m ²) > 1000	θ	a (°C) >			20			H _x (MJ	/m²) >		60	00	
Maximum tested positive load									30	000	Р	а	
Maximum tested negative load									30	000	Р	а	
Hail resistance using steel ball (maxim										2	r	n	
		dditio					() (10					
Using external power source(s) for nor		ration	No			ve mea	sure(s) f	or selt-p	orotecti	on		No	
Co-generating thermal and electrical p			No	Façade	collect	. /			Task			No	
Energy Labelling Information							-		e Technical Data				
	Reference Area, A _{sol} (m ²)			Hydraulic Designation Co 11-V-1234S-A:7.2-1892-C:16.0				Aperture Area, A _a (m ²) 4 1.77			m²)		
SUPERSOL S200 (ECO S200)	1.88												
SUPERSOL S230 (ECO S230)	2.28			14-V-1234S-A:7.2-1892-C:16.6-: 15-V-1234S-A:7.2-2067-C:16.6-:									
SUPERSOL S260 (ECO S260)		2.64			234S-A:	7.2-206	7-C:16.	6-1301	2.54				
	1												
Data required for CDR (EU) No 811/20	013 - Ref	erence /	Area	Data re	quired	for CDF	R (EU) N	o 812/2	013 - R	eferenc	e Area /	Asol	
Collector efficiency (η _{col})		61%				ency (ŋ				77	-	-	
Remark: Collector efficiency (ncol) is defin	ined in CDR (EU) No			First-order coefficient (a ₁)					3.	34	W/(I	n²K)	
811/2013 as collector efficiency of the solar collector at a				Second-order coefficient (a_2) 0.018 W/(m ² K ²)									
temperature difference between the solar collector and the					Incidence angle modifier IAM (50°) 0.97 Remark: The data given in this section are related to collector reference								
surrounding air of 40 K and a global solar ir						-					-		
expressed in % and rounded to the nearest integer. Deviating from										ding to El ither apel			
the regulation ηcol is based on reference area (Asol) which is aperture area for values according to EN 12975-2 or gross area for				-						on 811 a		-	
ISO 9806:2017.		J			on progi								
Central Offices: Kalavriton 2, 145 64	kificia A	there .	ر +ام	1 62224	93_/	av. ⊤3∪	1 6722/	195 h++.	<u>//</u>	w daca	ohal co	m e-	
	<i>a, P</i>			exiou@		an. r30	- 02334	, nu	.,,vvv		5541.00	, e-	