



CERTIFICATE

Solar Keymark Certificate

No. SP SC0988-14

Holder/Issued to/Manufacturer

Company: Zhejiang Jiadele Solar Energy Co Ltd

Address: No.12 Fenghuang Rd, Dingqiao Town, Haining, Jiaxing, Zhejiang, China

Product name and description

Vacuum tube solar thermal collectors for water heating. For technical information see Appendix (2 pages).

Models:	JDL-HP100 JDL-HP150 JDL-HP180 JDL-HP200 JDL-HP240 JDL-HP250 JDL-HP300
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Certificate

The product is found to comply with the requirements in EN 12975-1:2006+A1:2010 Solar collectors Part 1: General requirements and the Specific CEN Keymark Scheme Rules for Solar Thermal Products, and are based on test results according to EN ISO 9806:2013 Solar thermal collectors – Test methods.

Marking

Products conforming to this certificate shall be marked in accordance with the requirements in the Specific CEN Keymark Scheme Rules for Solar Thermal Products. The marking shall, together with the Keymark logo, show the identification code of the empowered certification body (SP Technical Research Institute of Sweden, No. 012), also see CEN-CENELEC Internal Regulations Part 4 Certification, Annex A.

Validity

This certificate is valid until 2019-11-17 provided that the conditions in the Solar Keymark Rules are fulfilled and the standard or rules are not modified significantly. The validity of the certificate can be checked in the database, see Solar Keymark website <http://www.solarkeymark.org>.

Miscellaneous

The manufacturer's factory production control procedures are under surveillance by the responsibility of SP. This certificate was first issued 2014-11-17. This is issue no. 2.

Borås, Sweden 2017-01-16

SP Technical Research Institute of Sweden Certification

Lennart Aronsson
Certification Manager

Magnus Sturesson
Certification Officer





Appendix to Solar Keymark Certificate



Annex to Solar Keymark Certificate - Summary of EN ISO 9806:2013 Test Results					Licence Number		SP SC0988-14							
					Date issued		2017-01-16							
					Issued by		SP							
Licence holder		Zhejiang Jiadele Solar Energy Co., Ltd			Country		China							
Brand (optional)		JiaDeLe			Web		www.sh-jiadele.com							
Street, Number		No. 12 Fenghuang Rd, Dingqiao Town			E-mail		webmaster@sh-jiadele.com							
Postcode, City		314413	Haining, Zhejiang		Tel		+86 573-87797660							
Collector Type					Evacuated tubular collector									
Collector name					Power output per collector G _b = 850 W/m ² ; G _d = 150 W/m ² ∅ _m - ∅ _a									
					Gross area (A _G)	Gross length	Gross width	Gross height	0 K	10 K	30 K	50 K	70 K	51 K
					m ²	mm	mm	mm	W	W	W	W	W	W
JDL-HP100					1,54	1 920	800	100	705	676	611	536	451	532
JDL-HP150					2,26	1 920	1 175	100	1 036	993	897	787	663	781
JDL-HP180					2,69	1 920	1 400	100	1 234	1 183	1 069	938	790	931
JDL-HP200					2,98	1 920	1 550	100	1 366	1 310	1 184	1 039	874	1 031
JDL-HP240					3,55	1 920	1 850	100	1 630	1 564	1 413	1 240	1 044	1 230
JDL-HP250					3,70	1 920	1 925	100	1 696	1 627	1 470	1 290	1 086	1 280
JDL-HP300					4,42	1 920	2 300	100	2 027	1 944	1 757	1 541	1 297	1 530
Power output per m² gross area									459	440	398	349	294	346
Performance parameters test method					Steady state - outdoor									
Performance parameters (related to A_G)					η _{0,hem}	a ₁	a ₂							
Units					-	W/(m ² K)	W/(m ² K ²)							
Test results					0,459	1,800	0,008							
Incidence angle modifier test method					Steady state - outdoor									
Bi-directional incidence angle modifiers					Yes									
Incidence angle modifier					Angle	10°	20°	30°	40°	50°	60°	70°	80°	90°
Transversal					K _{θT, coll}	1,03	1,05	1,14	1,23	1,27	1,30	0,87	0,43	0,00
Longitudinal					K _{θL, coll}	0,98	0,96	0,94	0,92	0,90	0,68	0,45	0,23	0,00
Heat transfer medium for testing					Water-Glycole									
Flow rate for testing (per gross area, A_G)					dm/dt		0,020	kg/(sm ²)						
Maximum temperature difference for thermal performance calculations					(∅ _m -∅ _a) _{max}		51	K						
Standard stagnation temperature (G = 1000 W/m²; ∅_a = 30 °C)					∅ _{stg}		200	°C						
Effective thermal capacity, incl. fluid (per gross area, A_G)					C/m ²		4,53	kJ/(Km ²)						
Maximum operating temperature					∅ _{max, op}		120	°C						
Maximum operating pressure					P _{max, op}		600	kPa						
Testing laboratory					Intertek Testing Services Shenzhen Ltd. Guangzhou Branch			http://www.intertek.com						
Test report(s)					140609195GZU-001			Dated		2016.12.19				
Comments of testing laboratory					Datashet version: 5.01, 2016-03-01									
<u>No comments</u>														
Certification Body: SP Technical Research Institute of Sweden Box 857, 501 15 Borås, Sweden www.sp.se info@sp.se tel +4610 516 5000														

