

Holder/Issued to/Manufacturer

## Jiangsu HETE Energy Conservation and Environmental Protection Co., Ltd.

C14 No.9 Kechuang Raod, Liuhe area, Nanjing, Jiangsu China

**Product name and description**

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

Models:	HRZJ-58/1800-75-10	HRZJ-58/1800-75-12	HRZJ-58/1800-75-18
	HRZJ-58/1800-75-20	HRZJ-58/1800-75-24	HRZJ-58/1800-75-30

**Performance specification**

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 (RISE Research Institutes of Sweden AB, No. 012), also see CEN-CENELEC Internal Regulations Part 4 Certification, Annex A.

**Validity**

This certificate is valid until 2023-05-31 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 RISE. RISE certification rules SPCR 402 for Keymark – Solar Thermal Products applies.

Johan Åkesson

Magnus Sturesson

Certificate No. SC0336-18 | issue 1 | 2018-05-31


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2017-08-08



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Annex to Solar Keymark Certificate - Summary of EN ISO 9806:2013 Test Results					Licence Number		SC0336-18																	
					Date issued		2018-05-31																	
					Issued by		RISE																	
Licence holder		Jiangsu HETE Energy Conservation and Environmental Protection Co.,Ltd			Country		China																	
Brand (optional)		HETE			Web		www.hete.cc																	
Street, Number		C14 No.9 Kechuang Raod, Liuhe area			E-mail		zj@hete.cc																	
Postcode, City		Nanjing			Tel		+86 025-58399023																	
Collector Type					Evacuated tubular collector																			
Collector name					Gross area (A <sub>G</sub> )		Gross length		Gross width		Gross height		Power output per collector G <sub>b</sub> = 850 W/m <sup>2</sup> ; G <sub>d</sub> = 150 W/m <sup>2</sup> θ <sub>m</sub> - θ <sub>a</sub>											
					m <sup>2</sup>		mm		mm		mm		0 K		10 K		30 K		50 K		70 K		62 K	
					W		W		W		W		W		W		W		W					
HRZJ-58/1800-75-10					1,58		1962		803		160		716		696		649		593		526		554	
HRZJ-58/1800-75-12					1,86		1962		950		160		844		821		766		699		621		654	
HRZJ-58/1800-75-18					2,75		1962		1400		160		1 249		1 214		1 133		1 034		918		966	
HRZJ-58/1800-75-20					3,04		1962		1550		160		1 380		1 342		1 253		1 143		1 014		1 068	
HRZJ-58/1800-75-24					3,63		1962		1850		160		1 648		1 603		1 496		1 365		1 211		1 275	
HRZJ-58/1800-75-30					4,52		1962		2303		160		2 052		1 996		1 862		1 700		1 508		1 588	
Power output per m <sup>2</sup> gross area													454		442		412		376		334		351	
Performance parameters test method					Steady state - outdoor																			
Performance parameters (related to AG)					η <sub>0,hem</sub>		a <sub>1</sub>		a <sub>2</sub>															
Units					-		W/(m <sup>2</sup> K)		W/(m <sup>2</sup> K <sup>2</sup> )															
Test results					0,454		1,159		0,008															
Incidence angle modifier test method					Steady state - outdoor																			
Bi-directional incidence angle					Yes																			
Incidence angle modifier					Angle		10°		20°		30°		40°		50°		60°		70°		80°		90°	
Transversal					K <sub>θT,coil</sub>		1,04		1,07		1,19		1,30		1,37		1,43		0,95		0,48		0,00	
Longitudinal					K <sub>θL,coil</sub>		1,00		0,99		0,98		0,96		0,92		0,86		0,72		0,31		0,00	
Heat transfer medium for testing					Water																			
Flow rate for testing (per gross area, A <sub>G</sub> )					dm/dt		0,020		kg/(sm <sup>2</sup> )															
Maximum temperature difference for thermal performance calculations					(θ <sub>m</sub> -θ <sub>a</sub> ) <sub>max</sub>		62,02		K															
Standard stagnation temperature (G = 1000 W/m <sup>2</sup> ; θ <sub>a</sub> = 30 °C)					θ <sub>stg</sub>		230		°C															
Effective thermal capacity, incl. fluid (per gross area, A <sub>G</sub> )					C/m <sup>2</sup>		5,45		kJ/(Km <sup>2</sup> )															
Maximum operating temperature					θ <sub>max_op</sub>		98		°C															
Maximum operating pressure					p <sub>max_op</sub>		600		kPa															
Testing		Intertek Testing Services Shenzhen Ltd. Guangzhou Branch			http://www.intertek.com																			
Test report(s)		170518064GZU-001			Dated		2018-04-20																	
Comments of testing laboratory					Datashheet version: 5.01, 2016-03-01																			
No Comments					 <i>William zheng</i>																			
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