



### Kiwa Cermet Certification For Thermal (TH) Solar Collector Constructional Data Form

Customer Data:		
License holder	Production site	Trademark
Idrocalor S.r.l. Piazza A. Moro 17, Int.1 – 35030 Rubano (PD), Italy	Idrocalor S.r.l. Via L. Einaudi 38 – 35030 Saccolongo (PD), Italy	  TORMENE 1907 INDUSTRIAL OVENS eosth solar energy catcher Built under licence of: greenetica

Product General / Technical Data:	
Collector type	Concentrating collector
Model name	EOS TH
Dimensions: gross length x gross width x gross height (mm)	3500x2010x3880
Gross area (m <sup>2</sup> )	3,863
Aperture area (m <sup>2</sup> )	3,715
Absorber area (m <sup>2</sup> )	0,089
Weight of empty collector (kg)	5 (absorber) 750 (total weight)
Collector loop flow range (kg/s)	0,16/0,55
Max. Operating pressure (kPa)	200
Max. operating temperature (°C)	100
Stagnation temperature (°C) at 1000 W/m <sup>2</sup> and 30°C	196
Fluid capacity (l) (volume of heat transfer fluid)	0,08
Heat transfer fluid (heat transfer medium)	Water-glycole

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List of critical components (as applicable):			
Component	Manufacturer	Model name	Technical data
<b>Transparent cover - glass</b> (only for flat plate glazed collector)	NA	NA	<ul style="list-style-type: none"> <li>Thickness = NA</li> <li>Cover solar transmittance (%) at normal incidence (air mass 1.5) = NA</li> </ul>
<b>Transparent cover - vacuum tube</b> (only for evacuated tube collector)	NA	NA	<ul style="list-style-type: none"> <li>Thickness = NA</li> <li>Cover solar transmittance (%) at normal incidence (air mass 1.5) = NA</li> </ul>
<b>Absorber plate</b>	Greenetica	EOS-P02	<ul style="list-style-type: none"> <li>Thickness = 20 mm</li> <li>Material = aluminium anodized</li> <li>Absorber - fin width =</li> <li>Absorber - fin thickness =</li> <li>Solar absorptance <math>\alpha = 0,54</math></li> <li>Hemispherical emittance <math>\varepsilon = 0,75</math></li> <li>Surface treatment = black paint</li> </ul>
<b>Manifold (header pipe)</b>	NA	NA	<ul style="list-style-type: none"> <li>Manifold diameter or dimensions = NA</li> </ul>
<b>Risers (absorber tubes)</b> (only for flat plate collector)	NA	NA	<ul style="list-style-type: none"> <li>Number of risers = NA</li> <li>Riser diameter or dimensions = NA</li> <li>Distance between risers = NA</li> </ul>
<b>Heat pipe</b> (only for evacuated tube collector with heat pipe technology)	NA	NA	<ul style="list-style-type: none"> <li>Fluid content = NA</li> <li>Internal pressure = NA</li> </ul>
<b>U pipe</b> (only for evacuated tube collector with U pipe technology)	NA	NA	<ul style="list-style-type: none"> <li>Fluid content = NA</li> <li>Internal pressure = NA</li> </ul>
<b>Insulation</b>	Aspen Aerogels	Pyrogel xte	<ul style="list-style-type: none"> <li>Back insulation thickness = 30 mm</li> <li>Side insulation thickness = 10 mm</li> </ul>
<b>Casing (box)</b>	NA	NA	NA

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<b>Diffusion barriers</b> (between absorber and insulation material)	NA	NA	NA
<b>Reflectors</b> (only for evacuated tube collector and concentrating collector)	Reflex S.p.A.	RFX001	<ul style="list-style-type: none"><li>• Material: mirror glass</li><li>• Geometry: parabolic</li><li>• Focal length: 1810 mm</li><li>• Reflector number: 2</li><li>• Tracking system: 2-axis</li></ul>
<b>Heat conductive paste</b> (only for evacuated tube collector)	NA	NA	NA
<b>Electronic unit</b> (only for concentrating collector)	//	//	PLC
<b>Protection systems</b>	//	//	Temperature sensor Flow switch Anemometer
<b>Other components</b> (e.g.: sealing / adhesive material / rubber parts / plastic parts)	NA	NA	NA

Key:

NA = not applicable;

// = not declared by the manufacturer.

Copy of marking plate: -

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