


<b>Annex to Solar Keymark Certificate</b>					<b>Licence Number</b>		<b>011-7S517 F</b>							
					<b>Date issued</b>		<b>2020-12-04</b>							
					<b>Issued by</b>		<b>DIN CERTCO</b>							
<b>Licence holder</b>		<b>SDECCI SAS</b>			<b>Country</b>		<b>France</b>							
<b>Brand (optional)</b>					<b>Web</b>		<b>www.vaillant.de</b>							
<b>Street, Number</b>		<b>17, rue de la Petite Baratte</b>			<b>E-mail</b>		<b>info@vaillant.com</b>							
<b>Postcode, City</b>		<b>44300 Nantes</b>			<b>Tel</b>		<b>+49 (0) 2191 18-0</b>							
<b>Collector Type</b>					<b>Flat plate collector</b>									
<b>Collector name</b>					<b>Gross area (<math>A_G</math>)</b> m <sup>2</sup>	<b>Gross length</b> mm	<b>Gross width</b> mm	<b>Gross height</b> mm	<b>Power output per collector</b> G <sub>b</sub> = 850 W/m <sup>2</sup> , G <sub>d</sub> = 150 W/m <sup>2</sup> & u = 1.3 m/s $\vartheta_m - \vartheta_a$					
									0 K	10 K	30 K	50 K	70 K	102 K
<b>Saunier Duval SCV 2.3/2</b>					2.51	2 033	1 233	80	1 748	1 642	1 412	1 161	887	403
<b>Hermann Saunier Duval SCV 2.3/2</b>					2.51	2 033	1 233	80	1 748	1 642	1 412	1 161	887	403
<b>Power output per m<sup>2</sup> gross area</b>														
<b>Performance parameters test method</b>					<b>Quasi dynamic</b>									
<b>Performance parameters (related to <math>A_G</math>)</b>					$\eta_0, b$	a1	a2	a3	a4	a5	a6	a7	a8	Kd
<b>Units</b>					-	W/(m <sup>2</sup> K)	W/(m <sup>2</sup> K <sup>2</sup> )	J/(m <sup>3</sup> K)	-	J/(m <sup>2</sup> K)	s/m	W/(m <sup>2</sup> K <sup>4</sup> )	W/(m <sup>2</sup> K <sup>4</sup> )	-
<b>Test results</b>					0.700	4.130	0.011	0.000	0.00	12 000	0.000	0.00	0.0	0.97
<b>Incidence angle modifier test method</b>					<b>Quasi dynamic - outdoor</b>									
<b>Incidence angle modifier</b>					Angle	10°	20°	30°	40°	50°	60°	70°	80°	90°
<b>Transversal</b>					$K_{\theta T, coll}$	1.00	1.00	1.00	0.99	0.97	0.92	0.79	0.40	0.00
<b>Longitudinal</b>					$K_{\theta L, coll}$	1.00	1.00	1.00	0.99	0.97	0.92	0.79	0.40	0.00
<b>Heat transfer medium for testing</b>					<b>Water</b>									
<b>Flow rate for testing (per gross area, <math>A_G</math>)</b>					$dm/dt$		0.020		kg/(sm <sup>2</sup> )					
<b>Maximum temperature difference during thermal performance test</b>					$(\vartheta_m - \vartheta_a)_{max}$		72		K					
<b>Standard stagnation temperature (G = 1000 W/m<sup>2</sup>; <math>\vartheta_a</math> = 30 °C)</b>					$\vartheta_{stg}$		190		°C					
<b>Maximum operating temperature</b>					$\vartheta_{max, op}$		190		°C					
<b>Maximum operating pressure</b>					$p_{max, op}$		1000		kPa					
<b>Testing laboratory</b>					Institut für Gebäudeenergetik, Thermotechnik und Energiespeicherung (IGTE)					<a href="http://www.igte.uni-stuttgart.de">http://www.igte.uni-stuttgart.de</a>				
<b>Test report(s)</b>					20COL1577OEM01 20COL1577QOEM01					<b>Dated</b>		04.12.2020 04.12.2020		
<b>Comments of testing laboratory</b>					Datasheet version: 6.1, 2019-09-26									
					 <b>Forschungs- und Testzentrum für Solaranlagen</b> Institut für Thermodynamik und Wärmetechnik Universität Stuttgart Pfaffenwaldring 6, 70550 Stuttgart (Vaihingen)									
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