

# Technical Characteristics



	10VTN	14VTN	
<b>Collector:</b>			
Dimensions:	length	1600 mm	1600 mm
	width	1330 mm	1550 mm
	height	100 mm	100 mm
Weight	30 kg	41 kg	
Aperture area	1,60 m <sup>2</sup>	2,26 m <sup>2</sup>	
Number of vacuum tubes	10	14	
Glass cover tube external diameter		47	
Glass cover tube length		1500 mm	
Tested at pressure		1.3 Mpa	
Vacuum tubes material		Borosilicate glass 3.3	
Vacuum		p < 0,005 Pa	
<b>Absorber:</b>			
Inner copper U-pipes		D=9,52 mm thickness 0,65mm	
Inner Aluminum fin		Thickness 0,8mm	
Surface treatment		Selective sputtered	
Absorption coefficient		a>0,92	
Emission coefficient		e<0,08	
Absorbing surface glass tube diameter		33 mm	
Heat transfer medium		Glycol brine	
<b>Insulation and casing:</b>			
Thermal insulation thickness of header		30 mm	
Header insulation		Expanded polyurethane (40-45 kg/m <sup>3</sup> ) and fiberglass	
Frame		Black anodized aluminum	
Diameter of connections		18 or 22 mm	
Reflector		High-reflection aluminum (CPC-Type)	
<b>Limitations and efficiency:</b>			
Maximum temperature of operation		220°C	
Maximum operating pressure		10 bar	
Efficiency (ENEA)		no = 0,665	
Thermal loss factor (ITW)		a1 = 0,7	
<b>Certifications:</b>			
EN 12975-2 / ISO 9001-2000 / Solar Keymark - CSTB			