

Ritter Specifications

Ritter Design Evacuated tube collectors CPC OEM

For domestic water heating and backup space heating, series connection
Heat exchanger material: copper

Series	CPC 6 OEM	CPC 12 OEM	CPC 18 OEM
Number of evacuated tubes	6	12	18
η_0 in relation to aperture, EN 12975	64.2%	64.2%	64.2%
a1 with wind, in relation to aperture	0.89 W/(m ² k)	0.89 W/(m ² k)	0.89 W/(m ² k)
a2 with wind, in relation to aperture	0.001 W/(m ² k ²)	0.001 W/(m ² k ²)	0.001 W/(m ² k ²)
$K_{\theta,trans}$ (50°), in relation to aperture	1	1	1
$K_{\theta,long}$ (50°), in relation to aperture	0.9	0.9	0.9
Yield forecast (reference location Würzburg, Germany, aperture area 3 m ²)	651 kWh/m ² a	651 kWh/m ² a	651 kWh/m ² a
Yield forecast (reference location Würzburg, Germany, aperture area 5 m ²)	589 kWh/m ² a	589 kWh/m ² a	589 kWh/m ² a
Grid dimensions(length, height, depth)	0.70x1.64x0.1 (m)	1.39x1.64x0.1 (m)	2.08m x 1.64m x 0.1m
Gross surface area	1.15 m ²	2.28 m ²	3.41 m ²
Aperture area	1.0 m ²	2.0 m ²	3.0 m ²
Collector contents	0.8 l	1.6 l	2.4 l
Weight	19 kg	37 kg	54 kg
Max. working overpressure	10 bar	10 bar	10 bar

Table continued...

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Max. stagnation temperature	272°C	272°C	272°C
Connection diameter diameter, clamping ring	15 mm	15 mm	15 mm
Sensor sleeve	6 mm	6 mm	6 mm
Collector material	Al / Cu / glass / silicone / PBT / EPDM / TE		
Glass tube material	borosilicate glass 3.3		
Selective absorber coating material	aluminium nitrite		
Glass tube (Ø ext./Ø int./wall thickness/tube len.)	47/37/1.6/1500 mm		
Colour (aluminium frame profile, anodised)	aluminium grey		
Colour (plastic parts)	black		
Thermal shock test	ITW test no. 06COL513/1		
Hailstone test according to DIN EN 12975-2	ITW test no. 435/142448		
Other tests and approvals	EN 12975, RAL UZ 73, Solar Keymark · ISO 9001		
DIN CERTCO - Register number	011-75113R		

Pressure loss of the Ritter Solar evacuated tube collectors CPC 6/12/18 OEM Heat distribution medium: Tyfocor LS, medium temperature 40°C

Our German designed Ritter tubes take advantage of solar radiation in overcast weather conditions. Ritter won the Design Awards in 2000 for its sophisticated and efficient solar collector and has been honoured by the WWF (World Wide Nature Federation) for its achievements. This remarkable product has been welcomed in the UK mainly for its ability to work in a more overcast climate.

