SOLAR CHARGING STATION DN15

Technical datasheet Nr 78

DESCRIPTION:





High efficiency circulator pump

The solar charging station DN15 with integrated exchanger ensures optimal transfer of solar heat energy towards the hot water storage tanks.

The presence of high efficiency circulators and of the controller 600i allows a perfect adaptation of flows in response to fluctuations in solar radiation, temperatures in the storage tanks and different requirements requested.

The station is fully assembled, pre-wired and factory-set to facilitate commissioning. It is designed for wall mounting and is fully insulated. This station is adapted for up to 25m²_{aperture} of flat-plate collectors SUN 300 and up to 15m²_{absorber} of vacuum tube collectors SUN 400.

2 ball valves (primary flow and return) with antithermosiphon check valve 200mmCE (can be opened) and removable metal thermometer 0-160°C

> Permanent primary air bleeder with manual air vent valve

Generoulsy sized exchanger with 24 brazed plates stainless steel AISI 316 in counter-current

Expanded PolyPropylene insulation

2 piston valves (secondary flow and return)

Solar Primary Primary safety group:
____ - Solar safety valve 6 bar – 3/4" int Solar fill valve Pressure gauge 0-6 bar Domestic Hot Water Secondary

- Expansion vessel connection 3/4" ext with flat seal

Simple high efficiency solar circulator pump GRUNDFOS UPM3 SOLAR 15-145

Secondary safety valve 10 bar

Primary solar drain valve

Solar electronic flowmeter 0.5-15 l/min

Simple domestic high efficiency circulator pump GRUNDFOS UPMŽ 15-75 CIL2

Solar controller 600i with 4 temperature sensors Pt1000 including 2 installed on the primary for heat quantity measurement

• TECHNICAL SPECIFICATIONS:

Fonctionning range	Prim.	Sec.	Hydraulic performance curves											
Maximum operating temperature	120°C	95°C	Flat (m²)	0		10	0		20	25	3	30		40
Maximum stagnation temperature	140°C	140°C -		0		5		10		15		20		25
Maximum allowed pressure	6 bar	10 bar											Area (n	n²)
Set pressure of the safety valve	6 bar	6 bar 10 bar								Solar	Primary	/ Circula	tor Pum	р
Maximum percentage of glycol	50% -		X 12							GRUNI	OFOS U	PM3 SO	LAR 15-1	.45
Materials			Total Head (mWC)							-11				
Valves and fittings	Brass		69 10	11				or Pum	-					
Gaskets	EPDM		ta 8 -	GRUNDFOS UPM2 15-75 CIL2										
Anti-thermosiphon check valves	Brass		₽°°											
Insulation	EPP (λ=0,041W/(m.K))		6 -	Sol	ar Char	rging S lar Pri		DN15						
Dimensions			4 -						4	-				
Height (with solar safety valve)	679 mm		2 -	Sol	ar Chai		Station ondary							
Width (with solar fill valve)	426 mm				DHV	/v Sec	ondary			- 11		Elow	rate (m³	/h)
Depth (with insulation)	250 r	mm	0 -	2		0.0			0.5					
Spacing (flow-return)	82 m	nm	0	.0 0	.1	0.2	0.3	0.4	0.5	0.6	0.7	8.0	0.9	1.0
Connections for pipes	3/4"	int	Electric characterist							eristic	S			
Connection for expansion vessel	3/4"ext fl	3/4"ext flat seal Power supply								230 V – 50 Hz				
Connection for safety valve	3/4"	3/4"int Current consumption									1.2	Α		

AVAILABLE MODEL:

Designation Reference 50070204007 Solar charging station DN15 with controller