

SOLAR CHARGING STATION DN32

Technical datasheet Nr 81

DESCRIPTION:



Solar



High efficiency circulator pump

The solar charging station DN32 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 floor mounting and is fully insulated. This station is adapted for up to 140m² aperture of flat-plate collectors SUN 300 and up to 66m² absorber of vacuum tube collectors SUN 400.

Domestic Hot Water Secondary Solar Primary

1 anti-thermosiphon check valve 150mm (can be opened) (secondary flow)

2 piston valves (secondary flow and return with drain valve)

Secondary safety valve 10 bar

Simple domestic high efficiency circulator pump GRUNDFOS UPML 25-105 N

Generously sized exchanger 2x60 brazed plates stainless steel AISI 316 in counter-current

Secondary drain valve

Expanded PolyPropylene insulating elements (can be removed individually)



Primary safety group:

- Solar safety valve 6 bar – 3/4" int
- Solar fill valve
- Pressure gauge 0-6 bar
- Expansion vessel connection 1" ext with flat seal

2 ball valves (primary flow and return) with fill and drain valve

2 anti-thermosiphon check valves 200mmCE (can be opened) (primary flow and return)

Simple high efficiency solar circulator pump GRUNDFOS SOLAR UPM XL 25-125

Permanent primary air bleeder with manual air vent valve and temperature sensor

Solar electronic flowmeter 5-130 l/min and temperature sensor

Fill and drain primary valve

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

TECHNICAL SPECIFICATIONS:

Fonctionning range	Prim.	Sec.
Maximum operating temperature	120°C	95°C
Maximum stagnation temperature	140°C	-
Maximum allowed pressure	6 bar	10 bar
Set pressure of the safety valve	6 bar	10 bar
Maximum percentage of glycol	50%	-

Materials

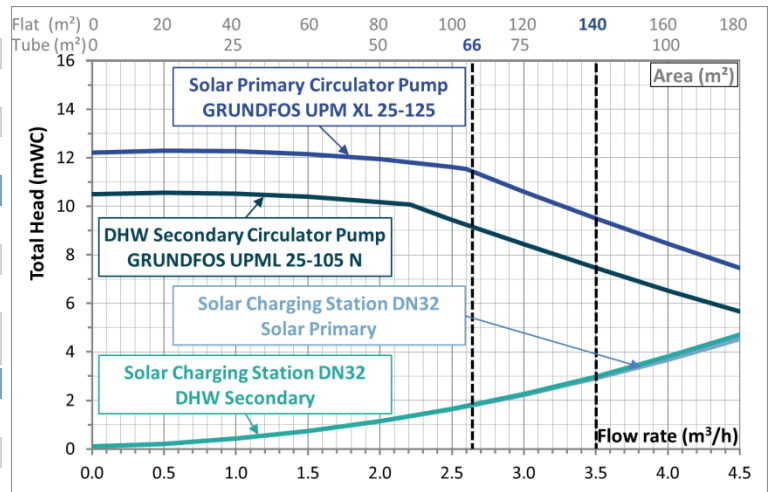
Valves and fittings	Brass/Bronze
Gaskets	EPDM
Anti-thermosiphon check valves	Brass
Insulation	EPP (λ=0,041W/(m.K))

Dimensions

Height (with solar safety valve)	1649 mm
Width (with solar fill valve)	710 mm
Depth (with insulation)	920 mm
Connections for pipes	1"1/2int 1"1/2ext

Connection for expansion vessel	1"ext flat seal
Connection for safety valve	3/4"int

Hydraulic performance curves



Electric characteristics

Power supply	230 V – 50 Hz
Current consumption	3 A

AVAILABLE MODEL:

Reference	Designation
50070204006	Solar charging station DN32 with controller