

SOLAR CHARGING STATION DN25

Technical datasheet Nr 80

DESCRIPTION:



Solar



High efficiency circulator pump

The solar charging station DN25 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 80m² aperture of flat-plate collectors SUN 300 and up to 45m² absorber of vacuum tube collectors SUN 400.

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

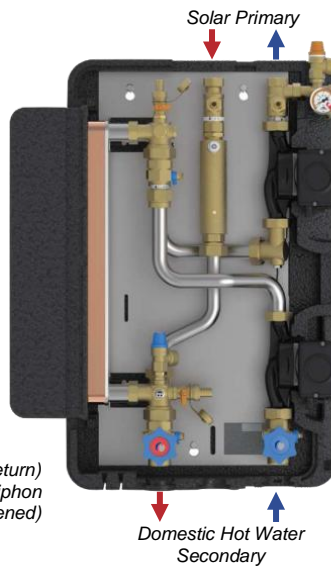
Fill and drain secondary valve

Permanent primary air bleeder with manual air vent valve

Generously sized exchanger with 60 brazed plates stainless steel AISI 316 in counter-current

Expanded PolyPropylene insulation

2 piston valves (secondary flow and return) of which 1 (return) incorporating anti-thermosiphon check valve 150mmCE (can be opened)



Primary safety group:

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

Solar electronic flowmeter 2-50 l/min

Simple high efficiency solar circulator pump GRUNDFOS SOLAR PML 25-145



Secondary safety valve 10 bar

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

Secondary drain valve

Primary solar drain 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%	-

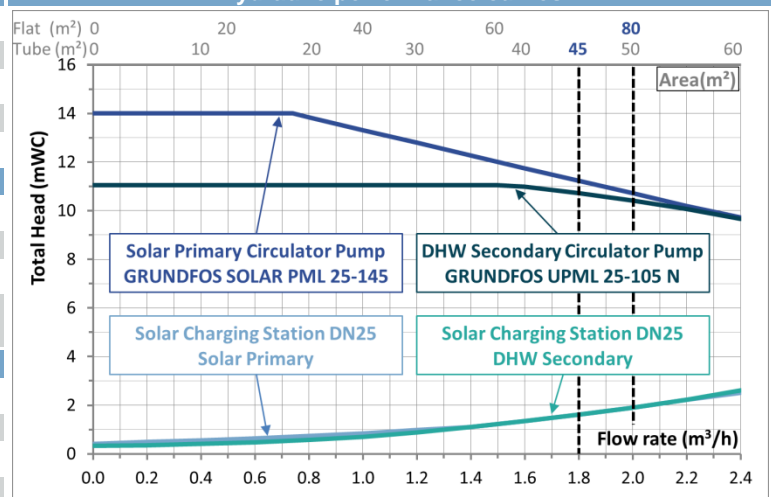
Materials

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

Dimensions

Height (with solar safety valve)	829 mm
Width (with solar fill valve)	674 mm
Depth (with insulation)	298 mm
Spacing (flow-return)	120mm 220mm
Connections for pipes	1"int 1"1/4ext
Connection for expansion vessel	3/4"ext flat seal
Connection for safety valve	3/4"int

Hydraulic performance curves



Electric characteristics

Power supply	230 V – 50 Hz
Current consumption	2.3 A

AVAILABLE MODEL:

Reference	Designation
50070204005	Solar charging station DN25 with controller