

SONNENKRAFT®

Stratified Charging Module

Stratified Charging Module SLM120 / SLM200

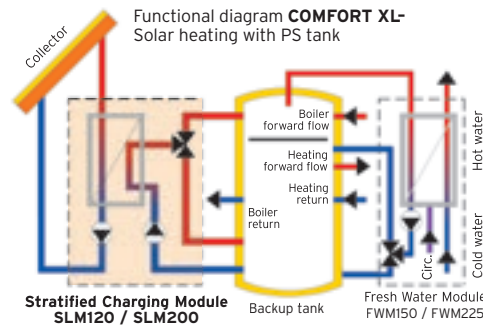


Stratified Charging Module SLM120 / SLM200

Solar heating systems by SONNENKRAFT: For safe and economical solar heating. Plug-and-flow design. Stratified charging modules SLM120 and SLM200 by SONNENKRAFT facilitate speed-controlled solar stratified charging of large-scale backup tanks.

Specifications SLM120 / SLM200

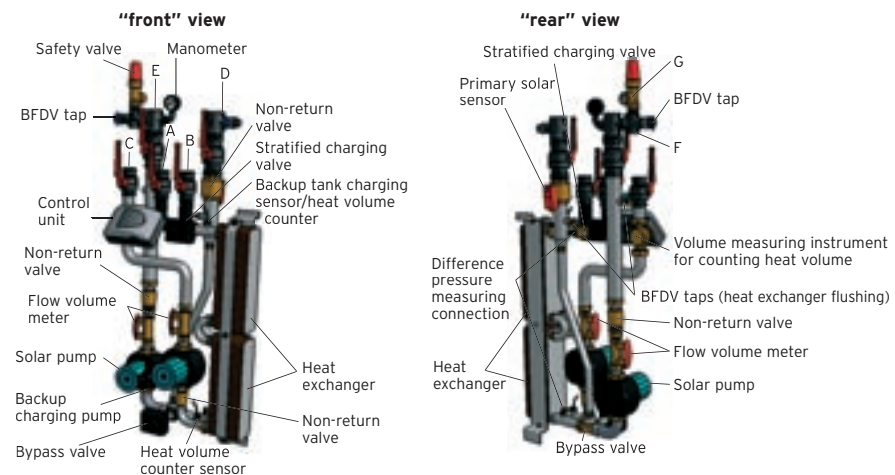
Dimensions	Width: 780mm Height: 1150mm Depth: 430mm
Cover	Galvanized steel plate, incl. 20mm Insulation
Solar piping	2", painted steel
Backup piping	6/4", painted steel
Weight	85kg / 95kg
Connections	A = upper backup charger (hot), 6/4" female thread B = lower backup charger (warm), 6/4" female thread C = return flow backup tank charging, 6/4" female thread D = solar forward flow (from collector), 2" female thread E = solar return flow (to collector), 2" female thread F = connection solar expansion tank, 1" female thread G = connection blow out lead safety valve, 5/4" female thread
Spread, prim./sec.	60° C - 35° C / 29° C - 54° C
Flow, prim./sec	0.663/0.575kg/s 1.106/0.958kg/s
Pressure loss, prim./sec	26kPa / 22kPa
Heat exchanger transfer capacity	60kW 100kW
Pumps	Solar pump / backup charging pump
Rated voltage	230V / 50Hz
Power consumption	0.4kW / 0.177kW
Max. current consumption	2.02A / 0.85A
Rated speed	2600 rpm / 2660 rpm
Max. delivery head	113kPa / 39kPa
Components	Antifreeze thermostat, 35° C, kvs18 Flow volume meter, 20 - 70l/min, kvs17 Heat volume counter, 2.5m³/h Stratified charging valve, kvs18 Non-return valve (forward flow/return) Shut-off valves Solar flushing connections Solar heat exchanger difference pressure measuring connection Safety valve 6bar, 1" Manometer 0 - 6bar 3-Loop solar control unit (+ 1 floating output) incl. sensors
Min. perm. operating temp.	2° C
Max. perm. operating temp.	95° C
Max. permitted operating pressure	Solar 6bar / Heating 3bar



Operation of Stratified charging system SLM120 / SLM200

The stratified charging system is designed for speed-controlled, stratified charging of a backup storage tank and uses a solar energy system. The module's solar and storage systems are fully connected before delivery and ready for use. The integrated SONNENKRAFT control system controls interaction between the collector pump and the backup tank charging pump independent of radiation influx. Electric and hydraulic systems for the module are prefitted and ready for connection.

Schematic diagram SLM120 / SLM200



Features of Stratified charging system SLM120 / SLM200

- **Coating:** Premium external coating for all backup tanks
- **Single storage tank system:** One central large backup storage tank for everything
- **Greater convenience:** Practical hot water priority control system
- **Increased output:** Optimal solar yield by using a preset, self-optimising control system with digital display
- **Better heat transfer:** High performance heat exchangers mean little or no heat loss during heat transfer
- **Better energy production:** Speed control system for backup charging pump ensures maximum possible energy efficiency
- **Commissioning:** Preset control, filling and flushing connections and difference pressure connections make commissioning easy
- **Safety:** Solar-side heat exchanger bypass prevents the heat exchanger freezing
- **Options:** Additional control outputs, data logger connection option for data readout and remote maintenance via modem

