SONNENKRAFT

CHARGING MODULE BM25HE

E3

EASY

Easy retrofitting of existing heating systems with solar thermal.

EFFICIENT

Efficient and affordable external buffer charging with high-efficiency pumps and powerful plate heat exchanger.

EXTRA

Solar control unit with an extra-configured and preset scheme for the charging module.

BM25HE

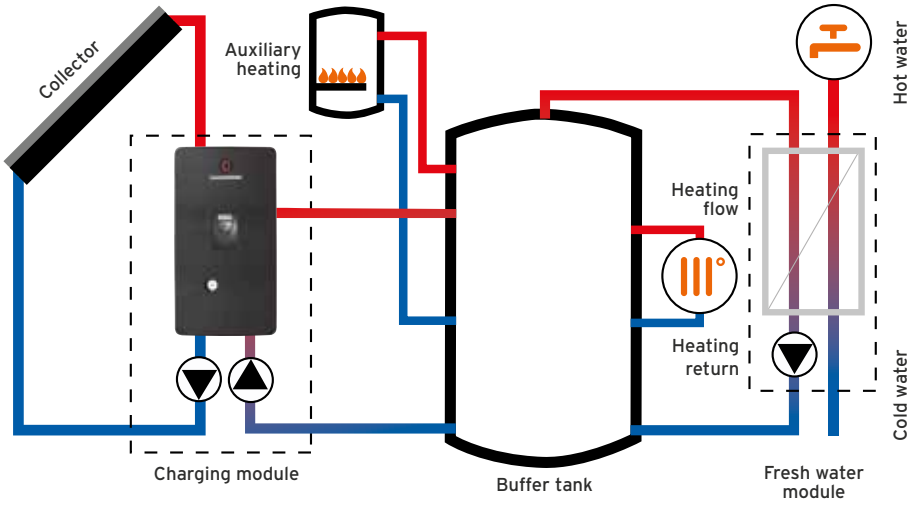
The charging module BM25HE makes it possible to charge a buffer tank cost effective via a solar system with up to 25m⌖ collector area. The charging of the buffer tank is made with speed regulated and energy efficient pumps an a high-performance plate heat exchanger. This type of external charging is especially for existing buffers in wood-/pellets-/.. heating systems.

WHAT IT DOES

The charging module BM25HE makes it possible to charge a buffer tank speed regulated and energy efficient depending on the temperatures.

HOW IT WORKS

The pump of the primary circuit starts if the temperature of the solar fluid is high enough. A highly efficient heat exchanger transfers the solar heat from the collector circuit to the buffer circuit. The intelligent control unit ensures the optimum interaction between solar and buffer charging pump depending on the sun irradiation. This and the temperature- and speed-controlled tank charging is the basis for a optimal heat transfer performance.



FITS WITH

PS-E

YOUR BENEFITS AS AN INSTALLER

EASY

All hydraulic connections for commissioning work are arranged at the bottom of the module for easy handling.

EFFICENT

Optimum use of solar energy because of speed controlled high efficiency pumps and a powerful plate heat exchanger.

EXTRA

Solar controller with an extra-configured and preset scheme for the charging module.

YOUR BENEFITS AS A CUSTOMER

EASY

Easy retrofitting of existing heating systems with solar thermal.

EFFICENT

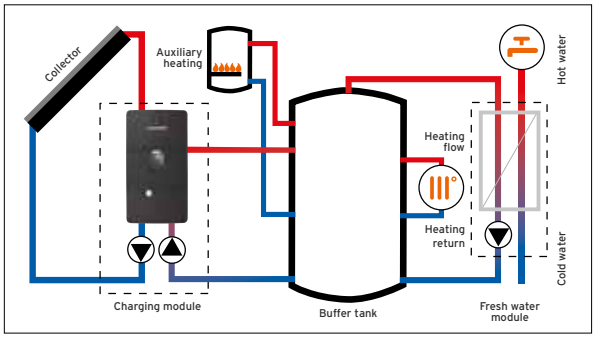
80% less energy demand thanks to new Energy efficiency class A pumps.

EXTRA

No costs for external counters because of integrated heat meter.

EASY AND ECONOMICAL

Easy retrofitting of existing heating systems with solar thermal - in particular of heating systems with buffer tanks (e.g. wood-/-pellet heating systems). This effects that a large part of the energy requirement for hot water and heating is covered by the sun's energy. Also the boiler run times are reduced significantly - especially in summer.



CUSTOMIZED CONTROL UNIT

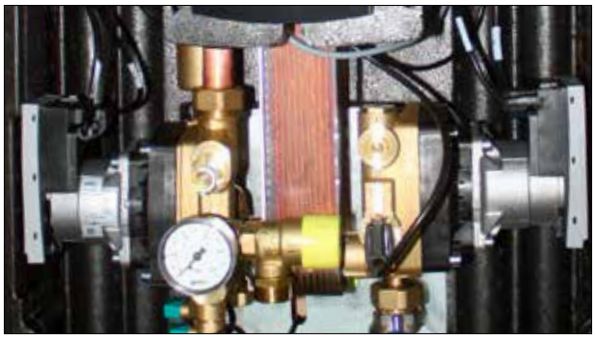
The solar control unit comes with an extra-configured and preset scheme for the charging module. In addition the control unit contains vast variety of optional functions like:

- Function control
- Operating hours counter
- Vacuum tube collector function
- Speed control
- Thermostatic function
- heat metering

HIGH EFFICIENCY

The charging module guarantees high efficiency

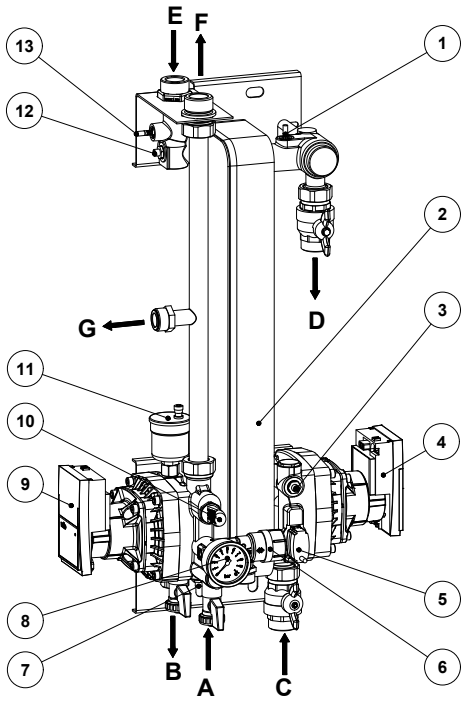
- high efficiency pumps
- high-performance plate heat exchanger
- preset solar control unit with PWM-signals for speed controlled pump operation



TECHNICAL SPECIFICATIONS

	BM25HE
Art. no.	131 233
Controller	SKSC2HE-BM
Dimensions (W x H x D)	470 x 850 x 285mm
Cover	EPP black
Solar piping	Copper pipe ø 22mm * 0,8mm
Buffer piping	Corrugated VA pipes 1.4404, ø 26,2mm * 0,18mm
Weight	~ 22kg
CONNECTIONS	
A	Filling valve G3/4" male thread
B	Draining valve G3/4" male thread
C	Buffer return G1" male thread
D	Buffer flow, middle, G1" male thread
E	Solar flow G1" male thread
F	Solar return G1" male thread
G	Connection explansion tank G3/4" male thread, position in solar return on pressure side
MAXIMUM OPERATING PRESSURE	
Collector circuit	6bar
Buffer circuit	3bar
SOLAR PUMP/BUFFER CHARGING PUMP	
Type	Yonos Para HU 25/7.0
Nominal voltage	230VAC / 50Hz
Nominal output	3 - 45W
Max. delivery height	7m
ErP data	
Power consumption acc. ErP Lot2	45
Standby power consumption acc. ErP Lot2	0,8
PLATE HEAT EXCHANGER (GLYCOL/WATER)	
Power	~ 15kW
Inlet temperature	60°C (glycol) / 29°C (water)
Outlet temperature	35°C (glycol) / 54°C (water)
Flow rate	500l/h
Installation options	
	Wall (Wallmounting-set included)

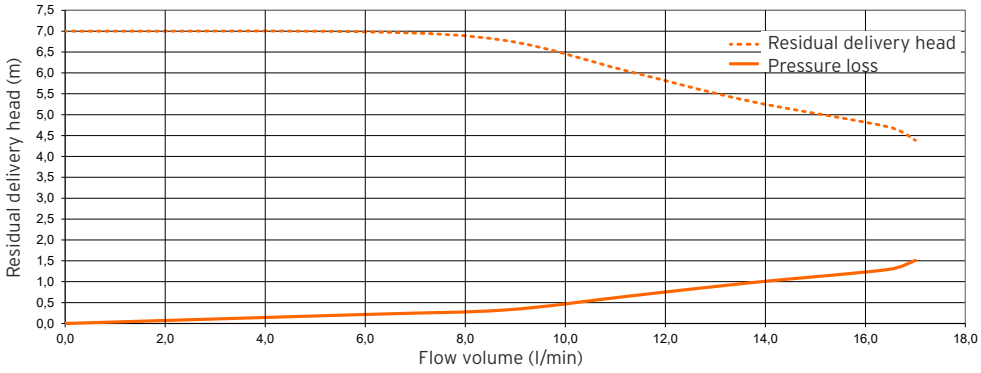
COMPONENTS



1 Temperature sensor buffer flow
2 Plate heat exchanger
3 Reset valve buffer circuit
4 High-efficiency pump buffer circuit
5 Flow meter buffer circuit (electronic)
6 Pressure relief valve 6 bar
7 Reset valve solar circuit, return flow
8 Manometer
9 High-efficient pump solar circuit
10 Flow meter solar circuit (mechanical)
11 Solar vent
12 Valve solar flow
13 Temperature sensor solar flow line

Connections
A Villing nozzle solar
B Draining nozzle solar
C Buffer return
D Buffer flow line centre
E Solar flow line
F Solar return line
G Expansion tank

PRESSURE LOSS AND RESIDUAL DELIVERY HEIGHT



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