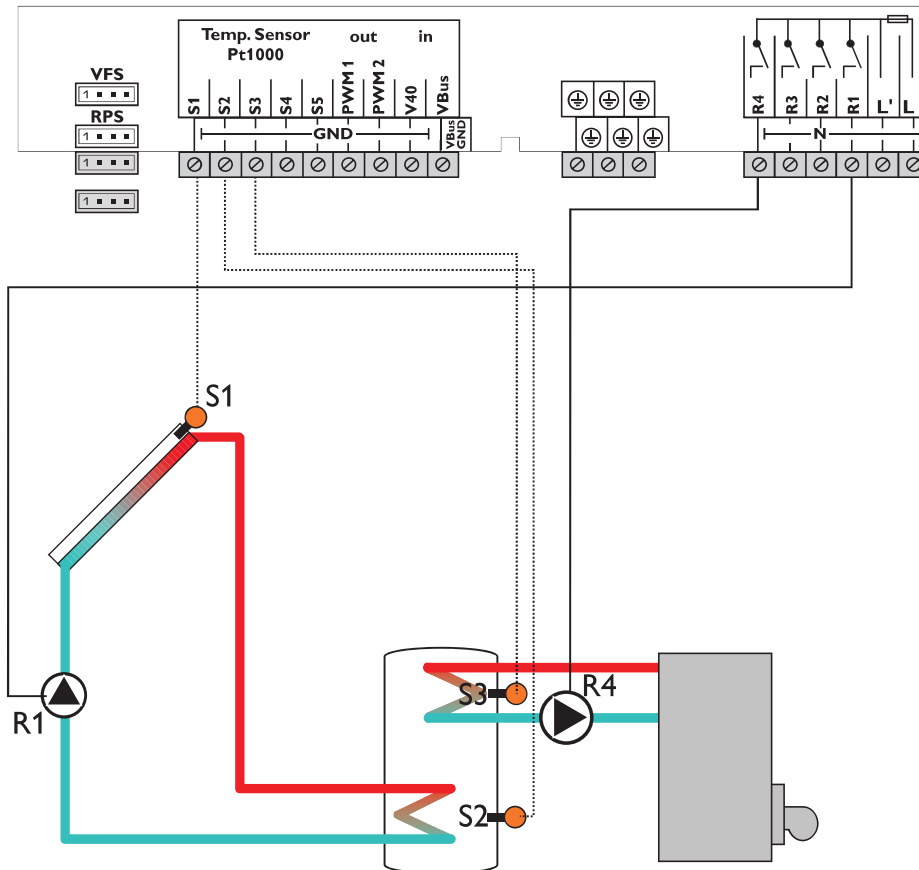


**System 3**

**Solar system with 1 store and afterheating**

The controller calculates the temperature difference between collector sensor S1 and store sensor S2. If the difference is larger than or identical to the adjusted switch-on temperature difference, the pump (R1) will be switched on and the store will be loaded until the switch-off temperature difference or the maximum store temperature is reached.

Domestic hot water afterheating (R4) can be carried out with a thermostat function (S3). If the value at S3 reaches the switch-on temperature for the afterheating, the relay is energised. If the value exceeds the switch-off temperature for the afterheating, the relay is switched off again.



Sensor/Terminal	Designation	Description
S1	TCOL	Temperature collector
S2	TSTB	Temperature store base
S3	TSTT	Temperature store top
S4		Optional sensor for measurement purposes or options
S5		
VFS		
RPS		
V40		

Relay	Description
R1	Solar pump
R2	optional:
R3	Thermal disinfection Booster pump Parallel relay
R4	Heat dump Afterheating/store loading pump

Adjustment channels						
Channel	Sub channel 1	Sub channel 2	Factory setting	Change to	Description	Page
ARR			1	3	System	78
LOAD >					Loading	
	DT O		6 K		Switch-on temperature difference	78
	DT F		4 K		Switch-off temperature difference	78
	DT S		10 K		Set temperature difference	78
	RIS		2 K		Rise	78
	S MAX		60 °C		Store maximum limitation	79
	S MAXS		2		Sensor store max	79
COL >					Collector	
	CEM		130 °C		Collector emergency temperature	80

Adjustment channels						
Channel	Sub channel 1	Sub channel 2	Factory setting	Change to	Description	Page
	OCCO**		OFF		Option collector cooling	80
		CMAX	110 °C		Maximum collector temperature	80
	OCMI		OFF		Option collector minimum limitation	80
		CMIN	10 °C		Minimum collector temperature	80
	OTCO		OFF		Option tube collector function	81
		TCST	07:00		Tube collector starting time	81
		TCEN	19:00		Tube collector ending time	81
		TCRU	30 s		Tube collector runtime	81
		TCIN	30 min		Tube collector standstill interval	81
	OCFR		OFF		Option collector frost protection	81
		CFR O	4 °C		Antifreeze temperature collector on	81
		CFR F	5 °C		Antifreeze temperature collector off	81
LLOGI >					Loading logic	
	ODB >		OFF		Drainback option	83
	OOVRU*		OFF		Overrun option	84
COOL >					Cooling functions	
	OSYC**		OFF		System cooling	85
	OSTC		OFF		Store cooling	85
	OHDP**		OFF		Heat dump	85
AH >					Afterheating option	
	AH O		40 °C		Afterheating switch-on temperature	87
	AH F		45 °C		Afterheating switch-off temperature	87
	t1O		06:00		Switch-on time 1	87
	t1F		22:00		Switch-off time 1	87
	t2O		00:00		Switch-on time 2	87
	t2F		00:00		Switch-off time 2	87
	t3O		00:00		Switch-on time 3	87
	t3F		00:00		Switch-off time 3	87
PUMP >					Pump speed	
	PUMP1		OnOF		Speed variant pump 1	79
	PUMP2		OnOF		Speed variant pump 2	79
	PUMP3		OnOF		Speed variant pump 3	79
MAN >					Manual mode	
	MAN1		Auto		Manual mode 1	88
	MAN2		Auto		Manual mode 2	88
	MAN3		Auto		Manual mode 3	88
	MAN4		Auto		Manual mode 4	88
BLPR >			OFF		Blocking protection	88
OTDIS >			OFF		Thermal disinfection option	88
OPARR >			OFF		Parallel relay option	89
OHQM*** >			OFF		Heat quantity measurement option	90
GFDS >			OFF		Registration Grundfos sensors	90
PRS* >			OFF		Pressure monitoring option	92
DATE >					Enter date	92
LANG >			En		Language	93
UNIT >			°C		Unit	93
OSDC >					SD card option	93
CODE			0000		User code	96
RESET			OFF		Factory setting	

\* This channel is only available if the Grundfos sensors have been registered in the **GFDS** channel.

\*\* are blocked against each other

\*\*\* For heat quantity measurement see the information on p. 90.