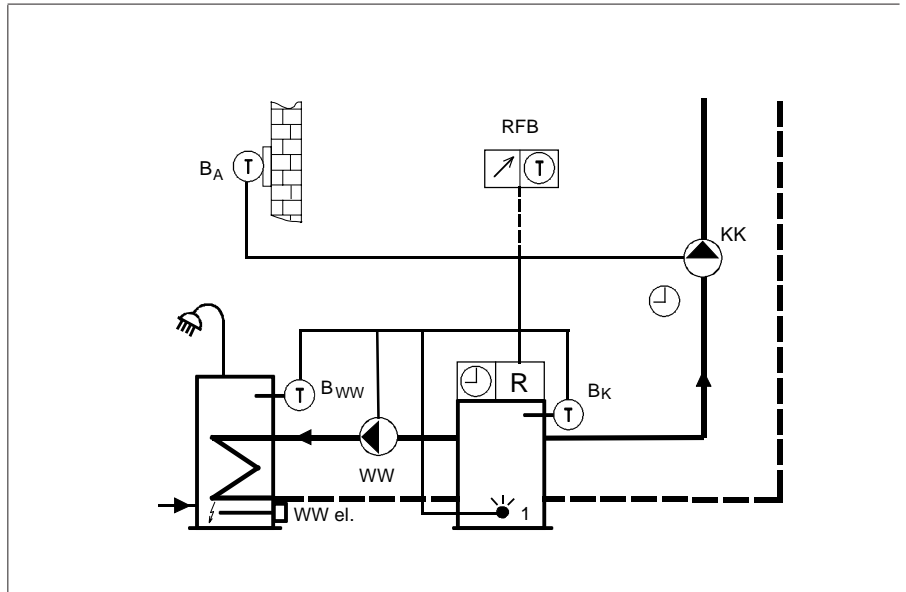


Application 01

Direct boiler-heating circuit
Single stage burner
Domestic hot water

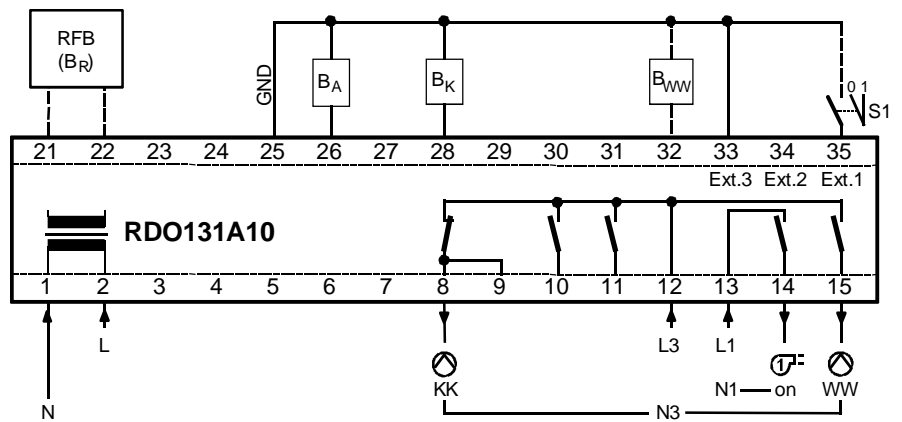


Application

Direct boiler-heating circuit for outside driven and/or room temperature driven control of the boiler temperature.
A **single stage burner** and the **domestic hot water** with loading pump are controllable.

Installation / wiring diagram

Wire according to application diagram or total current flow plan. Connection through specialists according to local regulations. The temperature sensor- and remote control-connections to the controller are supplied with low voltage protection. It is advantageous to lay these separate from the power supply cables.






S1 external standby heating (switching off the heating operation)
0 = Controller operation mode not influenced
1 = Heating blocked and hot water loading blocked ; frost protection active

Controller configuration:

Ext.3 (33)	Ext.2 (34)	Ext.2 : (terminal 34) Ext.3 : (terminal 33)	-- = open X = connected to GND
X	--	Direct boiler-heating circuit	
--	--	Mixing valve-heating circuit (with or without limitation of return temperature)	
--	X	Mixing valve-heating circuit for a floor heating-circuit and a direct boiler-heating circuit (auxiliary-heating circuit) for radiators with thermostat valve connected in series. (The Pumps will be energized with the same relay)	
X	X	Mixing valve-heating circuit (with or without limitation of return temperature) without boiler control. (by external "fixed value"-control of boiler; i.e. through boiler thermostat)	



Parameter list

Parameter	Adjustment	Factory	Min.	Max.	Installation value	Dim.
Boiler circuit						
control action		2-point				
switching differential (SD1)	Potentiometer 	8	4	12		K
slope boiler-heating circuit (S)	Potentiometer 	1	0,2	3		
heating curve fixed-point	fixed	20				°C
boiler low limit (TKmin)	Potentiometer 	30	0 / 20	50		°C
(O = boiler start up and hot water discharge protection, OFF)						
boiler maximum limit (TKmax)	fixed	90				°C
minimum burner running time	fixed	2				min
Domestic hot water circuit (WW-circuit)						
priority of hot water loading	fixed	full priority				
overrun time hot water loading pump	fixed	2				min
set value hot water temperature	Potentiometer	50	ϕ / 40	70		°C
(with position : ϕ = frost protection)						
set value hot water temperature "frost protection"	fixed	5				°C
switching differential	fixed	6				K
elevation of boiler temperature (compared to hot water set value)	fixed	20				K
Values						
set value room temperature "normal"	Potentiometer	20	14	26		°C
set value room temperature "reduced" (= f[room temp."normal"])	Potentiometer	-6	-2	-10		K
set value room temperature "frost protection"	fixed	5				°C
insert point of automatic day heating limit	f[S and room influence]					
system frost protection temperature (= f[outside temperature])	fixed	1				°C
room influence (B _A &B _R : room temperature influence)	fixed	25				%
(only B _R : room temperature regulation)	fixed	150				%

Pos	Unit		Type	Pcs:
	We recommend:			
	Heating controller DOMOTESTA	Daily clock, with spring reserve; LED indication	RDO131A100	
	Heating controller DOMOTESTA	Weekly clock, with spring reserve; LED indication	RDO131A102	
B _A	Outside temperature sensor	10kΩ NTC; IP40; Screw terminal	FT12A	
B _K	Cable, temperature sensor	1kΩ PTC; IP54; l=1,6m; Tmax=120°C	RFT203A16	
		1kΩ PTC; IP54; l=2,5m; Tmax=120°C	RFT203A25	
B _{WW}	Cable, hot water sensor	1kΩ PTC; IP54; l=4,0m; Tmax= 80°C	RFT213A40	
RFB	Room remote control	like RFB411A with new case	RFB410A	
	Room remote control	Wall mounting; 10kΩ NTC	RFB411A	
		Room set value correction;		
		Program switch ("normal"/Auto/"reduced")		
B _R	Room sensor	like RFT016A02 with new case	RFT410A	
	Room sensor	Wall mounting; 10kΩ NTC (white)	RFT016A02	
	Connector strip for AMP	2x15 terminals; without AMP-knife	RZB500A	
	Connector strip with screw terminals	2x15 terminals; wire cross section 2x1,5mm ²	RZB510A	
	Base-plate	with screw connector strip 2x15	RZB520A	
	1 Accessory for base plate	Connection area expansion for cable glands	RZB521A	
RFV	Detector multiplier	230VAC; Sensor-Inputs : 1xNTC; 3xPTC max. 5 controllers per output connectable)	RFV400A	

