

# HEATING Control

The INTEGRA control panel, equipped with appropriate devices, is an ideal tool for heating control, considerably reducing energy costs. In contrast to simple controllers based on timers, an intelligent system, apart from a time cycle, considers a number of other factors – such as information on the presence of residents, information on whether any windows are open and it can also consider commands given by the user (locally or even remotely via smartphones or via the SMS system). This type of control not only guarantees a better quality of everyday life in comparison with conventional solutions, but also generates significant savings. Heating control can also be associated with implementation of the automation scenarios available in INT-KSG keypads as well as INT-TSG, INT-TSH and INT-TSI touchscreen keypads.

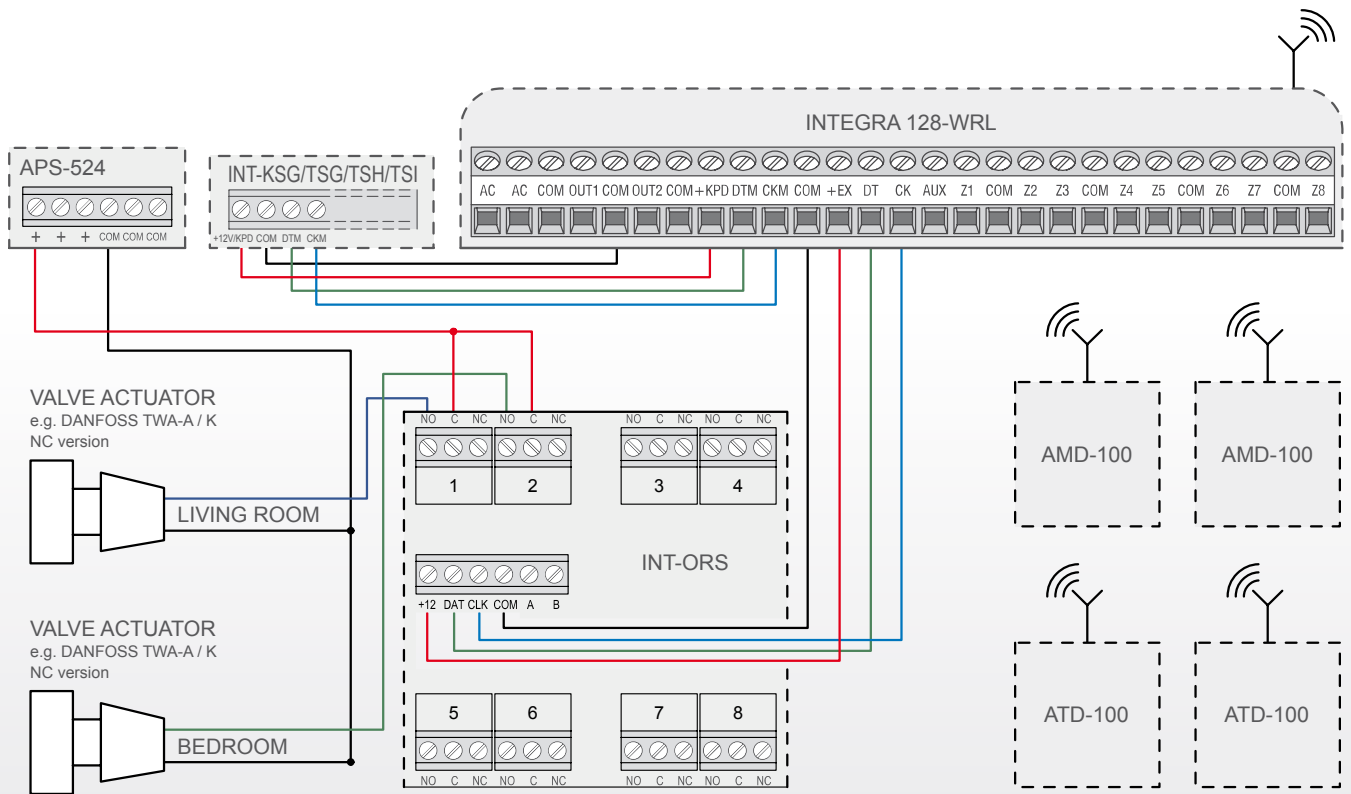
**Implementation example:**

If anyone is present on the premises, the system selects the option of comfortable temperature which is matched to the requirements of the residents. At night or when there is no one at home, the heating system operates in the economical mode. In order to prevent energy losses, the system turns the heating off in rooms where windows have been left open. In addition, the system prevents the water in the pipes from freezing by maintaining a minimum required temperature on the premises.

**Method of operation:**

Underfloor and radiator central heating is controlled via the actuators of the heater and distribution valves within the surface heating system. The actuators are controlled by the INT-ORS modules. With safety in mind, actuators powered by voltage of 24 V from the APS-524 power supply unit have been selected. An additional benefit of such a solution is that the actuators can operate in the absence of the mains power, which would not be possible in the case of 230 V actuators supplied directly from the mains network. The temperature in each room is controlled by ATD-100 detectors. The windows have been equipped with AMD-100 detectors. An installation of this type can sense an open window and accordingly turn the heating off in that particular room. It also informs you about a window which has been left open before you leave the premises.





## input configuration

No.	Zone name	Part.	Wiring type	Sensitivity	Zone type	Entry delay	Max.Viol. Tim	Max.No Viol.Tim	Power	Priorit	Video	Video	Bypas	Bypas	Auto-	Auto-	Clear	Pre-al	Bell d	Abort
9	Window Living room	1	5: 2EOL/NO	320 ms.	4: Perimeter	0 sec.	0 sec.	0 h.							X					X
10	Window Bedroom	1	5: 2EOL/NO	320 ms.	4: Perimeter	0 sec.	0 sec.	0 h.							X					X
11	Temp. Living room H	1	5: 2EOL/NO	320 ms.	47: No alarm action	0 sec.	0 sec.	0 h.							X					X
12	Temp. Living room L	1	5: 2EOL/NO	320 ms.	47: No alarm action	0 sec.	0 sec.	0 h.							X					X
13	Temp. Bedroom H	1	5: 2EOL/NO	320 ms.	47: No alarm action	0 sec.	0 sec.	0 h.							X					X
14	Temp. Bedroom L	1	5: 2EOL/NO	320 ms.	47: No alarm action	0 sec.	0 sec.	0 h.							X					X



125	Bedroom H	1	8: follow output	OUT:122	67: Bypassing-group:4	0 sec.	0 sec.	0 h.							X					X
126	Living room H	1	8: follow output	OUT:123	66: Bypassing-group:3	0 sec.	0 sec.	0 h.							X					X
127	Bedroom L	1	8: follow output	OUT:124	65: Bypassing-group:2	0 sec.	0 sec.	0 h.							X					X
128	Living room L	1	8: follow output	OUT:125	64: Bypassing-group:1	0 sec.	0 sec.	0 h.							X					X

## output configuration

No.	Output name	Output function	Cut off time	Pol.+	Puls.	Latch	Triggering:	Triggering:	Trigg
8	Valve Living room	46: Outputs logical AND	0 min. 0 sec.	X			outputs: 119,121		
9	Valve Bedroom	46: Outputs logical AND	0 min. 0 sec.	X			outputs: 118,120		



118	Window Bedroom	17: READY status	0 min. 30 sec.	X			zones: 10		
119	Window Living room	17: READY status	0 min. 30 sec.	X			zones: 9		
120	Heat Bedroom	17: READY status	0 min. 30 sec.	X			zones: 13+14		
121	Heat Living room	17: READY status	0 min. 30 sec.	X			zones: 11+12		
122	Bedroom H	47: Outputs logical OR	0 min. 30 sec.				outputs: 124		
123	Living room H	47: Outputs logical OR	0 min. 30 sec.				outputs: 125		
124	Red. Bedroom	47: Outputs logical OR	0 min. 30 sec.	X			outputs: 126,128		
125	Red. Living room	47: Outputs logical OR	0 min. 30 sec.	X			outputs: 127+128		
126	Timer Bedroom	26: Timer	0 min. 30 sec.	X			timers: 2		
127	Timer Living room	26: Timer	0 min. 30 sec.	X			timers: 1		
128	Output 128	42: Power supply on arm	0 min. 30 sec.	X		X			1+32

temperature detector configuration

No.	Name	Type	Device type	Serial num	ARU	Always act	Configuration	Filter
1	Z-9	Window Living r	Perimeter (with TAMPER)	AMD-100 (Magn. contact)	0225365	X	0:Bottom contact	40
2	Z-10	Window Bedroo	Perimeter (with TAMPER)	AMD-100 (Magn. contact)	0225363	X	0:Bottom contact	40
3	Z-11	Temp Living roo	No alarm action (with TAMPER)	ATD-100 (Temperature detecto	0225676		L 22.0°C + 0.0°C	40
4	Z-12	Temp Living roo	No alarm action (with TAMPER)	^ (Temperature detecto			L 16.0°C + 0.0°C	
5	Z-13	Temp Bedroom I	No alarm action (with TAMPER)	ATD-100 (Temperature detecto	0159813		H 24.0°C + 0.0°C	40
6	Z-14	Temp Bedroom I	No alarm action (with TAMPER)	^ (Temperature detecto			L 20.0°C + 0.0°C	

configuration of timers

No.	Name	User edits	Monday		Tuesday		Wednesday		Thursday		Friday		Saturday		Sunday	
			On	Off	On	Off	On	Off	On	Off	On	Off	On	Off	On	Off
1	Reducing Living room		23:00	0:00	23:00	0:00	23:00	0:00	23:00	0:00	23:00	0:00	23:59	10:00	23:59	10:00
2	Reducing Bedroom		23:59	5:00	23:59	5:00	23:59	5:00	23:59	5:00	23:59	5:00		8:00		8:00

configuration of locking devices

Group 1

Group 2

Group 3

Group 4

# Notes