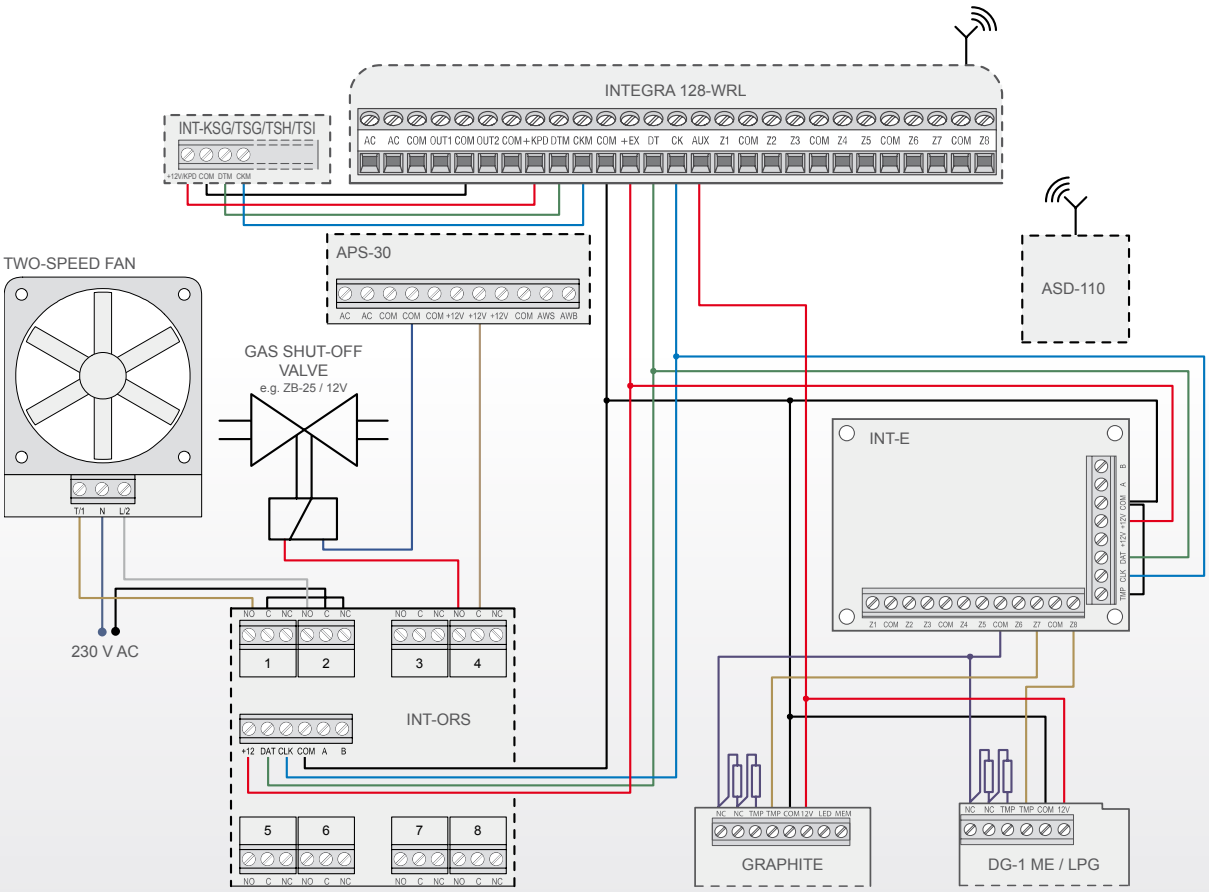
Intelligent
Security Solutions

FORCED VENTILATION Control

One of the functions of an intelligent system based around the INTEGRA control panel, is the control of forced ventilation. Fans responsible for the air exchange in various rooms use data they receive about the presence of residents in the house and signals received from other detectors. For example, it is possible to configure the system to activate the fans using the highest operating speed on the detection of smoke in the kitchen to ensure a rapid removal of any unpleasant smells.

Implementation example:
A two-speed fan has been installed in the kitchen. If anyone is present in the kitchen, the fan uses the first speed setting to provide efficient ventilation. If any smoke is created, e.g. from a slightly burnt meal, the smoke is detected by the ASD-110 detector and the control panel sets the fan to operate using the maximum speed. In addition, the supply of gas will be cut off by an electric control valve. The kitchen is also equipped with the DG-1 ME gas detector. The detection of escaping gas can also result in the gas supply being cut off and in the activation of the fan.

Method of operation:
The fan and the gas shut-off valve are controlled by the INT-ORS module. In the example provided, a gas valve with a solenoid coil has been installed. A single impulse is sufficient to completely cut off the gas supply. The valve is supplied by 12 V voltage, which makes it possible to shut it down from an uninterruptible power source of the control panel, in the event of the 230 V power supply failure. The fan in the example can operate at two different speeds. The detection of movement in the kitchen by the movement detector actuates the fan at the first speed setting for 30 minutes, in order to remove odours created by dishes being prepared. The appearance of smoke (detected through the ASD-110 detector) or dangerous gas (detected by the DG-1 ME detector) cuts off the gas supply and actuates the fan at its maximum efficiency.



input configuration

No.	Zone name	Part.	Wiring type	Sensitivity	Zone type	Entry delay	Max.Viol. Tim	Max.No Viol.Time	Powe	Priorit	Video	Video	Bypa	Bypas	Auto-	Auto-	Clear	Pre-al	Bell d	Abort	Resto	Restore	Alarm	Alarm	Tamp	Rep
15	Graphite Kitchen	1	4: 2EOL/NC	320 ms.	5: Instant	0 sec.	0 sec.	0 h.							X								X			X
16	Gas Kitchen	1	4: 2EOL/NC	320 ms.	49: 24h Gas detector	0 sec.	0 sec.	0 h.																X	X	X
17	Fire Kitchen	1	5: 2EOL/NO	320 ms.	32: 24h Fire	0 sec.	0 sec.	0 h.												X				X	X	X

output configuration

No.	Output name	Output function	Cut off time	Pol.+	Puls.	Latch	Triggering:	Triggering:	Triggering: P	Alarm c
9	Fan Low	24: MONO switch	30 min. 0 sec.	X			zones: 15		1÷32	
10	Fan High	47: Outputs logical OR	0 min. 0 sec.	X			outputs: 127÷128			
11	Output 11	0: Not used	0 min. 0 sec.	X						
12	Valve	14: Zone violation	0 min. 15 sec.	X			zones: 16÷17			
...										
127	Gas	13: Tech. Alarm	0 min. 30 sec.	X		X	zones: 16			1÷32
128	Fire	3: FIRE alarm	0 min. 30 sec.	X		X	zones: 17	0÷7	1÷32	1÷32

configuration of the **wireless smoke and heat detector**