

537 ABC

MAIN FEATURES

The 537 ABC is an electronic flame safety device for controlling a gas appliance using the principles of flame rectification.

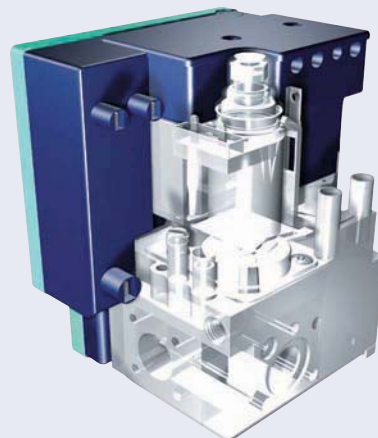
The 537 ABC automatic device has been designed for domestic gas appliances with or without a fan in the combustion circuit; with direct ignition or ignition by means of an intermittent pilot in applications which require either non-volatile or volatile lockout.

The 537 ABC family of products has been specifically designed for fixing on SIT 840, 845 and 848 SIGMA multifunctional controls by means of an exclusive plastic container which integrates itself with the valve body and simplifies connection of the solenoid valves.

The 537 ABC is an automatic ignition control for applications with intermittent operation in accordance with EN 298 for:

- boilers with natural draught
- boilers with forced draught including dynamic control of the air pressure switch.

Standard reference EN 298



TECHNICAL DATA

• Ambient working temperature	-20... + 60 °C	• Flame sensing	Minimum flame current: 0.5 µA Recommended flame current: > 3 times the minimum current
• Humidity	95% max. at 40 °C		
• Supply voltage	230 Vac - 15%, + 10%, 50/60 Hz	• Fusing	Internal: 4 A fast not replaceable External: 3.15 A fast or less depending on the electrical loads. This fuse protects the device in the event of overloading or short circuits and prevents the intervention of the internal fuse.
• Power consumption	10 VA		Ignition voltage: 15 KV at 30 pF load Repetition rate: 25 Hz standard (1÷25 Hz) Max length of the cable 2 m Spark gap recommended: 2-4 m
• Electrical ratings	Gas valves: 230 Vac, 0.5 A, $\cos\varphi \geq 0.4$ Fan: 230 Vac, 1 A, $\cos\varphi \geq 0.4$ (optional) Alarm: 230 Vac, 1 A, $\cos\varphi = 1$	• Ignition	
• Electrical connections	High voltage probe: male fast-on connectors 2.8 x 0.5 mm Flame detection probe: male fast-on connector 4.8 x 0.8 mm Other connections: male Molex series 2599 suitable for female Molex series 3001 and 3002 or compatible	• Mounting	Integrated on SIT SIGMA multifunctional gas controls
• Protection degree	Standard IP 40 IP 44 with gaskets		
• Timing	Minimum waiting time T_w or purge time T_p : 1.5...40 sec. Maximum safety time T_s : 3...60 sec.		

CODES

Codes	Equivalent code	Electrodes	Waiting or purge time [s]	Safety time [s]	Connections for FAN/APS	Flame relay	Ignition (*)	Lockout
0537001	0507001	3	1.5	10	no	no	DBI	not volatile
0537002	0507002	1	1.5	7.5	no	yes optocoupled	DBI	volatile
0537003	0507003	2	1.5	10	no	no	DBI	not volatile
0537005	/	2(**)	1.5	7.5	no	no	DBI	not volatile
0537007	/	1	1.5	5	no	yes optocoupled	DBI	volatile
0537008	/	3	1.5	10	no	no	DBI	volatile
0537009	/	3	1.5	5	no	no	DBI	not volatile
0537101	/	1	1.5	10	no	yes	DBI	not volatile
0537102	/	3	1.5	30	no	yes	DBI	volatile
0537103	/	1	1.5	10	no	yes	DBI	volatile
0537201	0507201	3	1.5	60	no	no	IP	not volatile
0537203	/	1	1.5	60	no	no	IP	not volatile
0537204	/	3	1.5	25	no	no	IP	not volatile
0537301	0507301	3	1.5	10	yes	no	DBI	volatile
0537304	0507304	3	1.5	10	yes	no	DBI	not volatile
0537305	0507305	1	1.5	5	yes	no	DBI	not volatile
0537307	/	3	1.5	5	yes	no	DBI	not volatile
0537309	/	3	10	10	yes	no	DBI	not volatile
0537401	0507401	3	1.5	10	yes	yes	DBI	not volatile
0537402	/	3	5	10	yes	yes	DBI	volatile
0537403	/	3	30	5	yes	yes	DBI	volatile
0537404	/	3	1.5	10	yes	yes	DBI	volatile
0537501	0507501	3	1.5	60	yes	no	IP	not volatile

(*) DBI: Direct burner ignition (operate EV1 and EV2 simultaneously)

IP: Ignition by intermittent pilot (operate EV1 and EV2 separately)

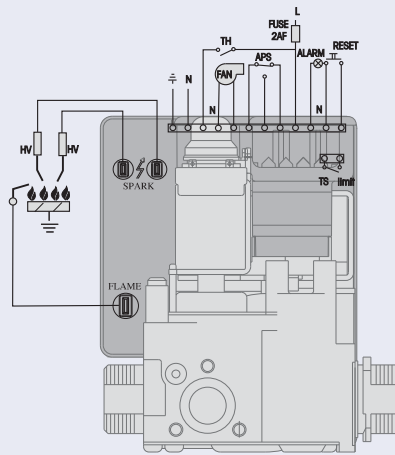
(**) Spark electrode Ø 4mm



ACCESSORIES

N.	Code	Description	Q.ty	N.	Code	Description	Q.ty
1	0.948.074	Gasket (IP 44 protection)	100	3b	0.996.095	Housing molex 3001 (3 positions)	100
2	0.996.093	Terminal molex 3001	100	3c	0.996.096	Housing molex 3001 (9 positions)	100
3a	0.996.094	Housing molex 3001 (2 positions)	100	3d	0.996.097	Housing molex 3001 (12 positions)	100

ELECTRICAL CONNECTIONS



DIMENSIONS

