

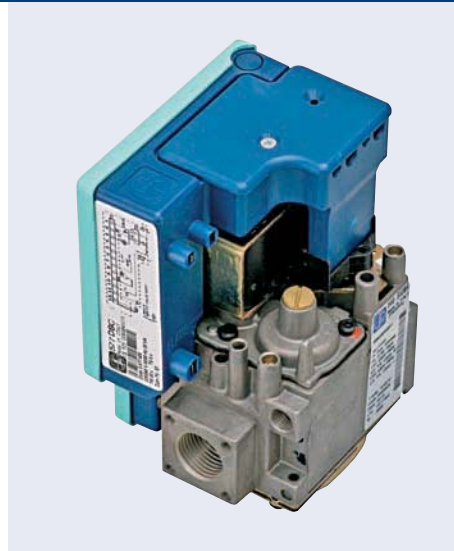
577 DBC

MAIN FEATURES

The 577 Digital Burner Control is a family of electronic devices with integrated functions for the safety and the control of combustion in home gas appliances and has the same functions of 537 ABC family, with which it is interchangeable.

The 577 DBC is dedicated in particular to boilers, water heaters and hot air generators with both natural draught and fan assisted burners.

The 577 DBC family of products has been specifically designed for fixing on SIT 840, 845 and 848 SIGMA multifunctional controls by means of an exclusive plastic box which integrates itself with the valve body and simplifies the connection of the solenoid valves.



CODES

Codes	Working temperature	PROBES	WAITING or PURGE TIME [s]	SAFETY TIME [s]	FAN and APS	FLAME RELAY	SPARK FREQUENCY
0577009	0°C - 60°C	One electrode for both ignition and detection	Without waiting or purge time	'5	NO (Atmospheric burners appliance)	NO	25 Hz
0577010	0°C - 60°C	One electrode for both ignition and detection	Without waiting or purge time	'5	NO (Atmospheric burners appliance)	NO	25 Hz
0577011	0°C - 60°C	2 separate probes (1 ignition + detection)	Without waiting or purge time	10	NO (Atmospheric burners appliance)	NO	25 Hz
0577101	0°C - 60°C	One electrode for both ignition and detection	1.5	10	NO (Atmospheric burners appliance)	YES (only with DBI version)	50 Hz
0577102	0°C - 60°C	One electrode for both ignition and detection	10	'5	NO (Atmospheric burners appliance)	YES (only with DBI version)	25 Hz
0577211	-10°C - 60°C	One electrode for both ignition and detection	Without waiting or purge time	55	YES (Fan assisted appliance)	YES (only with DBI version)	25 Hz
0577301	0°C - 60°C	3 separate probes (2 ignition + 1 detection)	1.5	10	YES (Fan assisted appliance)	NO	25 Hz
0577304	0°C - 60°C	3 separate probes (2 ignition + 1 detection)	1.5	10	YES (Fan assisted appliance)	NO	6 Hz
0577306	0°C - 60°C	One electrode for both ignition and detection	10	10	YES (Fan assisted appliance)	NO	25 Hz
0577307	0°C - 60°C	2 separate probes (1 ignition + detection with sense period)	1.5	6	YES (Fan assisted appliance)	NO	50 Hz
0577308	0°C - 60°C	One electrode for both ignition and detection	30	7	YES (Fan assisted appliance)	NO	25 Hz
0577309	0°C - 60°C	3 separate probes (2 ignition + 1 detection)	1.5	6	YES (Fan assisted appliance)	NO	25 Hz
0577310	0°C - 60°C	3 separate probes (2 ignition + 1 detection)	1.5	10	YES (Fan assisted appliance)	NO	25 Hz

LOCKOUT	RESET & LOCKOUT SIGNAL	BURNER IGNITION MODE	PROTECTION DEGREE	OVERTEMPERATURE SAFETY THERMOSTAT	POLARITY	INTERPURGE [s]	START ATTEMPTS
Not volatile	Internal only (switch)	DBI (operate EV1 and EV2 simultaneously)	IP 40	NO	NO Polarity dependency	10 sec	2
Not volatile	Internal only (switch)	DBI (operate EV1 and EV2 simultaneously)	IP 40	NO	NO Polarity dependency	NO interpurge (single start attempt)	1
Volatile	External only	DBI (operate EV1 and EV2 simultaneously)	IP 44	NO	NO Polarity dependency	15 sec	3
Not volatile	External only	DBI (operate EV1 and EV2 simultaneously)	IP 40	NO	Polarity dependency	15 sec	3
Not volatile	Internal only (switch)	DBI (operate EV1 and EV2 simultaneously)	IP 40	NO	NO Polarity dependency	10 sec	3
Not volatile	Internal only (switch)	DBI (operate EV1 and EV2 simultaneously)	IP 40	NO	NO Polarity dependency	5 sec	3
Not volatile	External only	DBI (operate EV1 and EV2 simultaneously)	IP 44	YES (Normally closed switch in series with the gas valve)	Polarity dependency	10 sec	3
Not volatile	External only	DBI (operate EV1 and EV2 simultaneously)	IP 40	YES (Normally closed switch in series with the gas valve)	Polarity dependency	15 sec	3
Volatile	External only	DBI (operate EV1 and EV2 simultaneously)	IP 40	NO	NO Polarity dependency	10 sec	2
Not volatile	External only	DBI (operate EV1 and EV2 simultaneously)	IP 40	NO	Polarity dependency	15 sec	3
Not volatile	External only	DBI (operate EV1 and EV2 simultaneously)	IP 44	YES (Normally closed switch in series with the gas valve)	NO Polarity dependency	10 sec	3
Not volatile	External only	DBI (operate EV1 and EV2 simultaneously)	IP 40	NO	NO Polarity dependency	15 sec	3
Not volatile	External only	DBI (operate EV1 and EV2 simultaneously)	IP 40	YES (Normally closed switch in series with the gas valve)	Polarity dependency	10 sec	3



Codes	Working temperature	PROBES	WAITING or PURGE TIME [s]	SAFETY TIME [s]	FAN and APS	FLAME RELAY	SPARK FREQUENCY
0577311	0°C - 60°C	3 separate probes (2 ignition + 1 detection)	1.5	10	YES (Fan assisted appliance)	NO	6 Hz
0577404	0°C - 60°C	2 separate probes (1 ignition + detection)	10	'5	YES (Fan assisted appliance)	YES (only with DBI version)	50 Hz
0577405	0°C - 60°C	2 separate probes (1 ignition + detection)	10	'5	YES (Fan assisted appliance)	YES (only with DBI version)	25 Hz
0577406	0°C - 60°C	One electrode for both ignition and detection	10	'5	YES (Fan assisted appliance)	YES (only with DBI version)	25 Hz
0577408	0°C - 60°C	2 separate probes (1 ignition + detection with sense period)	15	5	YES (Fan assisted appliance)	YES (only with DBI version)	50 Hz
0577409	0°C - 60°C	3 separate probes (2 ignition + 1 detection)	3	5	YES (Fan assisted appliance)	YES (only with DBI version)	50 Hz
0577503	0°C - 60°C	One electrode for both ignition and detection	10	30	YES (Fan assisted appliance)	NO	25 Hz
0577504	0°C - 60°C	2 separate probes (1 ignition + detection)	'5	30	YES (Fan assisted appliance)	NO	25 Hz
0577601	0°C - 60°C	3 separate probes (2 ignition + 1 detection)	1.5	10	YES (Fan assisted appliance)	YES (Optocoupler interface for ECS)	25 Hz
0577602	0°C - 60°C	3 separate probes (2 ignition + 1 detection)	10	'5	YES FAN - NO APS	YES (Optocoupler interface for ECS)	50 Hz
0577603	0°C - 60°C	3 separate probes (2 ignition + 1 detection)	1.5	10	YES FAN - NO APS	YES (Optocoupler interface for ECS)	50 Hz
0577604	0°C - 60°C	3 separate probes (2 ignition + 1 detection)	1.5	10	YES FAN - NO APS	YES (Optocoupler interface for ECS)	50 Hz
0577701	0°C - 60°C	3 separate probes (2 ignition + 1 detection)	3	10	YES (Fan assisted appliance)	NO	12 Hz
0577702	0°C - 60°C	3 separate probes (2 ignition + 1 detection)	Without waiting or purge time	10	NO (Atmospheric burners appliance)	NO	12 Hz
0577703	0°C - 60°C	One for Detection (external ignitor)	3	10	YES (Fan assisted appliance)	NO	External ignitor
0577704	0°C - 60°C	One for Detection (external ignitor)	Without waiting or purge time	10	NO (Atmospheric burners appliance)	NO	External ignitor
0577705	0°C - 60°C	3 separate probes (2 ignition + 1 detection)	Without waiting or purge time	10	NO (Atmospheric burners appliance)	NO	External ignitor
0577706	0°C - 60°C	3 separate probes (2 ignition + 1 detection)	Without waiting or purge time	10	NO (Atmospheric burners appliance)	NO	External ignitor

LOCKOUT	RESET & LOCKOUT SIGNAL	BURNER IGNITION MODE	PROTECTION DEGREE	OVERTEMPERATURE SAFETY THERMOSTAT	POLARITY	INTERPURGE [s]	START ATTEMPTS
Not volatile	External only	DBI (operate EV1 and EV2 simultaneously)	IP 44	YES (Normally closed switch in series with the gas valve)	Polarity dependency	15 sec	3
Not volatile	External only	DBI (operate EV1 and EV2 simultaneously)	IP 40	NO	NO Polarity dependency	10 sec	3
Not volatile	External only	DBI (operate EV1 and EV2 simultaneously)	IP 40	NO	NO Polarity dependency	10 sec	3
Not volatile	External only	DBI (operate EV1 and EV2 simultaneously)	IP 40	NO	NO Polarity dependency	10 sec	2
Not volatile	External only	DBI (operate EV1 and EV2 simultaneously)	IP 40	NO	NO Polarity dependency	15 sec	2
Volatile	External only	DBI (operate EV1 and EV2 simultaneously)	IP 40	NO	NO Polarity dependency	10 sec	3
Not volatile	External only	Intermittent pilot (operate EV1 and EV2 separately)	IP 44	YES (Normally closed switch in series with the gas valve)	NO Polarity dependency	10 sec	5
Not volatile	External only	Intermittent pilot (operate EV1 and EV2 separately)	IP 44	NO	NO Polarity dependency	NO interpurge (single start attempt)	1
Not volatile	External only	DBI (operate EV1 and EV2 simultaneously)	IP 40	NO	Polarity dependency	NO interpurge (single start attempt)	1
Not volatile	External only	DBI (operate EV1 and EV2 simultaneously)	IP 40	YES (Normally closed switch in series with the gas valve)	Polarity dependency	10 sec	3
Not volatile	External only	DBI (operate EV1 and EV2 simultaneously)	IP 44	YES (Normally closed switch in series with the gas valve)	Polarity dependency	10 sec	3
Not volatile	External only	DBI (operate EV1 and EV2 simultaneously)	IP 44	YES (Normally closed switch in series with the gas valve)	Polarity dependency	10 sec	3
Not volatile	Serial communication	DBI (operate EV1 and EV2 simultaneously)	IP 40	YES (Normally closed switch in series with the gas valve)	Polarity dependency	NO interpurge (single start attempt)	1
Not volatile	Serial communication	DBI (operate EV1 and EV2 simultaneously)	IP 40	YES (Normally closed switch in series with the gas valve)	Polarity dependency	NO interpurge (single start attempt)	1
	Serial communication	DBI (operate EV1 and EV2 simultaneously)	IP 40	YES (Normally closed switch in series with the gas valve)	Polarity dependency	NO interpurge (single start attempt)	1
	Serial communication	DBI (operate EV1 and EV2 simultaneously)	IP 40	YES (Normally closed switch in series with the gas valve)	Polarity dependency	NO interpurge (single start attempt)	1
Not volatile	Serial communication	DBI (operate EV1 and EV2 simultaneously)	IP 40	YES (Normally closed switch in series with the gas valve)	Polarity dependency	NO interpurge (single start attempt)	1
Not volatile	Serial communication	DBI (operate EV1 and EV2 simultaneously)	IP 40	YES (Normally closed switch in series with the gas valve)	Polarity dependency	NO interpurge (single start attempt)	1

