

# D603/D604/D605 Heat Detector Heads

www.boschsecurity.com



**BOSCH**  
Invented for life



- ▶ 12 VDC or 24 VDC operation
- ▶ Mounts on D200 bases
- ▶ Interchangeable two-wire and four-wire bases
- ▶ Easy head removal for cleaning and servicing

Use these detectors for indoor confined areas where a fire increases air temperature slowly and where there is a substantial increase in air temperature before the fire breaks confinement. Furnace rooms, closets, bathrooms, and other confined areas are appropriate applications for fixed temperature detectors.

**i Notice**

These heat detectors are intended for detection circuits that protect property. Use smoke detectors to protect personnel.

Use the D603 or D604 (response rated at 135°F [57°C]) in areas where the ambient temperatures do not exceed 100°F (38°C). Use the D605 (response rated at 190°F [88°C]) in areas where the ambient temperatures exceed 100°F (38°C) but are less than 150°F (66°C). The D603 incorporates a rate-of-rise feature that signals an alarm when it senses a temperature increase greater than 15°F (8.3°C) per min.

When properly installed using the D200 bases, tamper protection is provided by in-out wiring of the positive power line. This causes the control panel to initiate a trouble signal when a detector is removed from its base. Supervision of two-wire systems is provided by

the master control. Four-wire system supervision is provided by an end-of-line (EOL) power supervision device such as a D275, or a D293E with an EOL resistor as specified by the control panel manufacturer.

**Functions**

**Detector Head and Base System**

These heat detectors have two components: the detector base and the detector head. The bases are permanently attached and wired to back boxes. The interchangeable heads quickly detach for replacement and cleaning without affecting the circuit wiring.

**Certifications and approvals**

Region	Certification	
USA	UL	UQGS_S7365 - Heat-automatic Fire Detectors
	UL	UQGS7_S7365 - Heat-automatic Fire Detectors Certified for Canada
	CSFM	7270-1615-0178
Hong Kong	HKFSD	J-005/C/019

## Installation/configuration notes

### Compatible Products

The following products are compatible with the D603, D604, and D605 Heat Detector Heads:

Category	Product ID	Product Description
Control Panels		Two-wire: for compatible control panel listings, see the <i>Two-Wire Smoke Detector Compatibility List Technical Service Note</i>
		Four-wire: Compatible with all UL Listed four-wire control panels.
Detector Bases	D278S	Four-wire addressable detector base (12 VDC)
	D287	Two-wire detector base (12 VDC or 24 VDC)
	D288	Two-wire detector base (24 VDC)
	D292	Four-wire detector base (12 VDC or 24 VDC)
	D293A	Four-wire detector base with auxiliary Form C relay (12 VDC or 24 VDC)
	D293E	Four-wire power supervision detector base (24 VDC)
	D293S	Four-wire detector base with sounder (12 VDC or 24 VDC)
	D298M	24 volt POPIT Base (Multiple)
	D298S	24 volt POPIT Base (Single)

### Mounting

The detector base installs over a back box and contains all the wiring. The detector head attaches to the base by hand. Align the head with the base and turn it clockwise. No tools are required for installation other than the hex key used to tighten the tamper screw.

When mounting on a smooth ceiling, space the detectors 70 ft (21.3 m) apart and no closer than 35 ft (10.7 m) to a wall or partition.

### Wiring

For detailed wiring requirements, see the installation instructions for the specific base.

## Parts included

Quant.	Component
1	D603, D604, or D605 detector head
1	Literature pack

## Technical specifications

### Electrical

Response Time	<120 sec
RMS Ripple (maximum)	25% of DC input
Power-up Time	22 sec maximum
Voltage (standby)	Two-wire: 8.5 VDC to 33.0 VDC Four-wire: 10.0 VDC to 30.0 VDC

### Current

• Alarm	Two-wire: depends on control panel which must limit the alarm current to 100 mA maximum Four-wire: depends on detector base; refer to the installation instructions for the pertinent base
• Standby	0.09 mA maximum at 12 VDC 0.11 mA maximum at 24 VDC 0.12 mA maximum at 33 VDC D293E: 24 mA at 12 and 24 VDC
• Start-up	0.12 mA maximum

### Environmental

Temperature (ambient)	D603 and D604: +32°F to +100°F (0°C to +38°C) D605: +32°F to +150°F (0°C to +66°C)
-----------------------	---

### Mechanical

Color	Bone white
Dimensions (diameter x D)	4 in. x 1.3 in. (10.2 cm x 3.3 cm)

## Ordering information

### D603 Fixed-temperature (135°F [57°C]), Rate-of-Rise Heat Detector Head

Use with two-wire or four-wire bases in 12 VDC or 24 VDC nominal circuits.

**Not Available.**

Order number **D603**

### D604 Fixed-temperature (135°F [57°C]) Heat Detector Head

Use with two-wire or four-wire bases in 12 VDC or 24 VDC nominal circuits.

**Not Available.**

Order number **D604**

### D605 Fixed-temperature (190°F [88°C]) Heat Detector Head

Use with two-wire or four-wire bases in 12 VDC or 24 VDC nominal circuits.

**Not Available.**

Order number **D605**

**Represented by:**

**Americas:**

Bosch Security Systems, Inc.  
130 Perinton Parkway  
Fairport, New York, 14450, USA  
Phone: +1 800 289 0096  
Fax: +1 585 223 9180  
security.sales@us.bosch.com  
www.boschsecurity.us

**Europe, Middle East, Africa:**

Bosch Security Systems B.V.  
P.O. Box 80002  
5617 BA Eindhoven, The Netherlands  
Phone: + 31 40 2577 284  
Fax: +31 40 2577 330  
emea.securitysystems@bosch.com  
www.boschsecurity.com

**Asia-Pacific:**

Robert Bosch (SEA) Pte Ltd, Security  
Systems  
11 Bishan Street 21  
Singapore 573943  
Phone: +65 6571 2808  
Fax: +65 6571 2699  
apr.securitysystems@bosch.com  
www.boschsecurity.asia

**China:**

Bosch (Shanghai) Security Systems Ltd.  
201 Building, No. 333 Fuquan Road  
North IBP  
Changning District, Shanghai  
200335 China  
Phone +86 21 22181111  
Fax: +86 21 22182398  
www.boschsecurity.com.cn

**America Latina:**

Robert Bosch Ltda Security Systems Division  
Via Anhanguera, Km 98  
CEP 13065-900  
Campinas, Sao Paulo, Brazil  
Phone: +55 19 2103 2860  
Fax: +55 19 2103 2862  
latam.boschsecurity@bosch.com  
www.boschsecurity.com