

## SPECIAL VALVES

## Thermal Delay Switch

Code: S106/1K

The S106/1K is a miniature single-pole thermal delay switch which incorporates a device to compensate for changes of ambient temperature. Its contacts are normally open.

**HEATER**

Heater voltage	$19 \pm 20\%$	V
Heater current, nominal	0.165	A

**CLOSING DELAY TIME AT 20°C AMBIENT** (Note 1)

	$V_h = 19V$	
Minimum delay	40	s
Maximum delay	66	s

Note 1.—Closing and opening delay time characteristic curves are shown in Figures 1, 2 and 3.

**MAXIMUM RATINGS**

Maximum open-circuit d.c. voltage between contacts	220	V
Maximum open-circuit a.c. voltage between contacts	100	V
Maximum contact current on make d.c. or a.c.	1	A
Maximum peak surge current	5	A
Maximum peak heater-to-contact voltage	750	V

**MECHANICAL DATA**

Base	B7G
Dimensions	As shown in Figure 4
Basing detail	
Mounting position	Vertical, base downwards

**OPERATION OF SWITCH**

The intended method of operation is to arrange for the delay switch to operate an electro-magnetic relay fitted with a "hold-on" contact. By this means large powers can be handled.

The heater supply of the switch should be removed when the contacts have closed to obtain full delay time in the event of a shut-down and to ensure optimum switch life.

These delay switches may be connected in series to obtain multiples of the quoted delay time.

The S106/1K is one of a comprehensive range of thermal delay switches. A description of the types available and full application data are contained in Booklet MS/117, obtainable on request to the address given below.

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S106/1K—1

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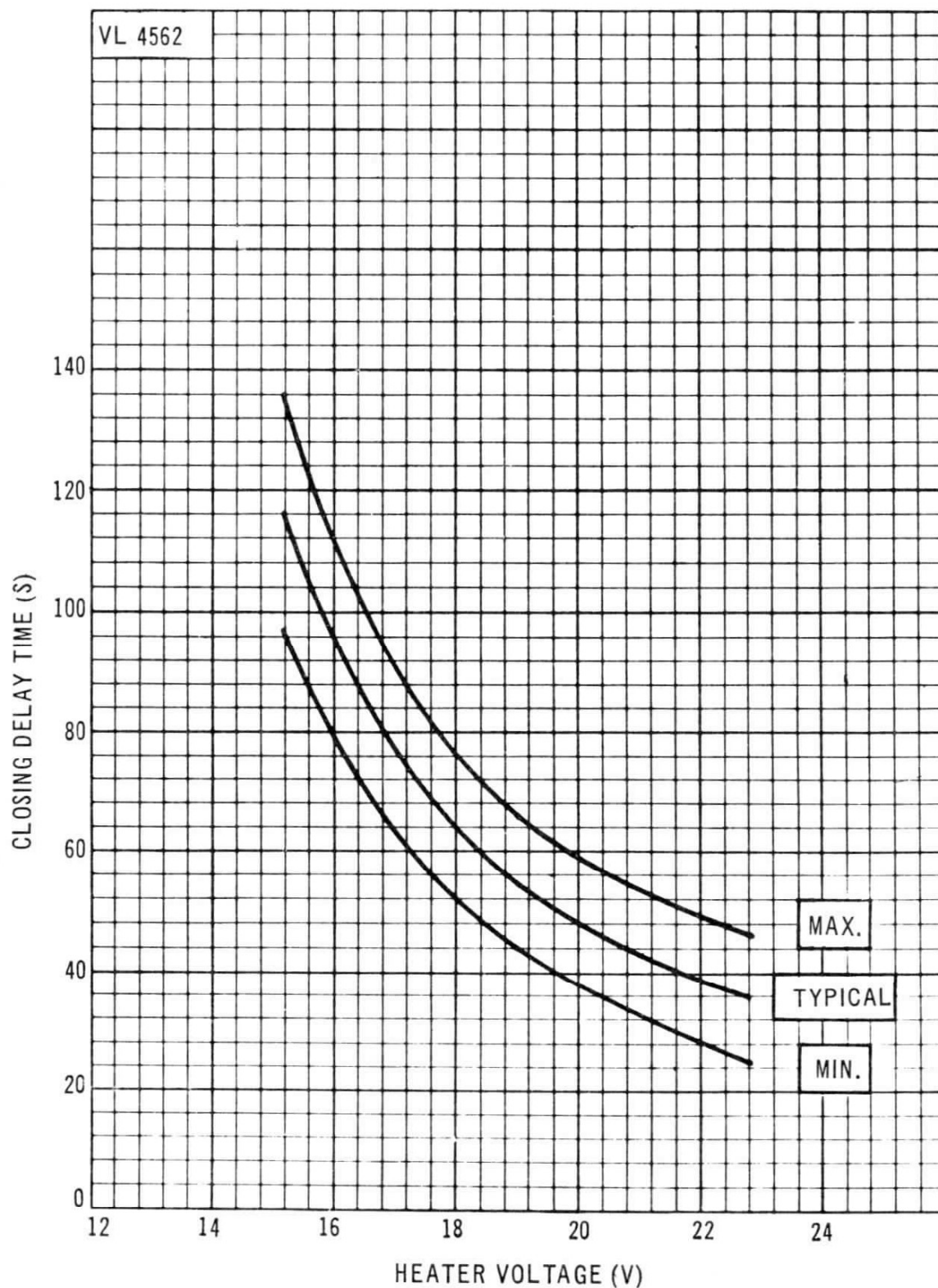
London Sales Office, Telephone: Footscray 3333 Telex: 21836

C O M P O N E N T S G R O U P

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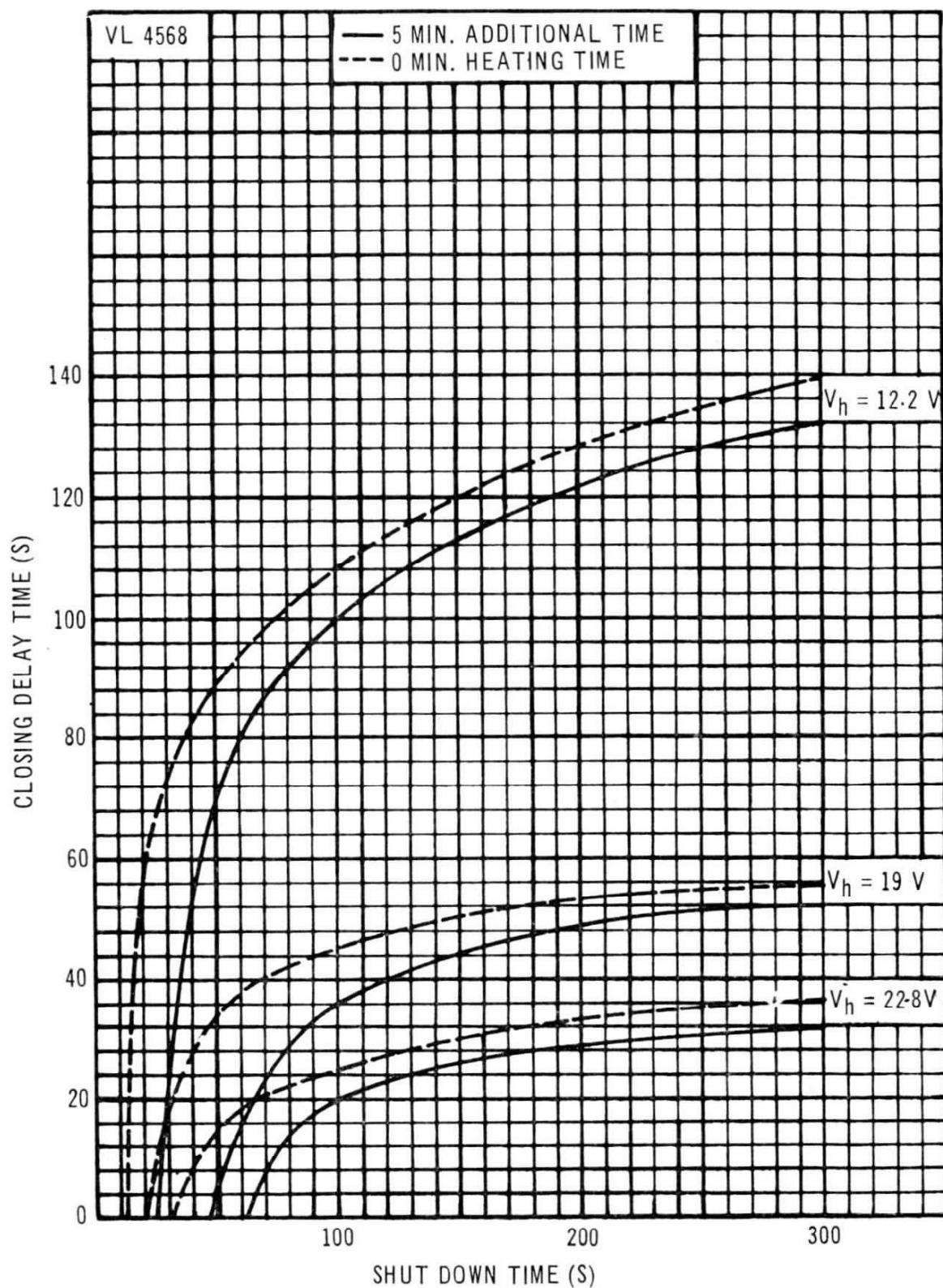
Fig. 1.—Closing Delay Time versus Heater Voltage  
(at room temperature of 20°C)



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Fig. 2.—Typical Closing Delay Time versus Shut-down Time\*

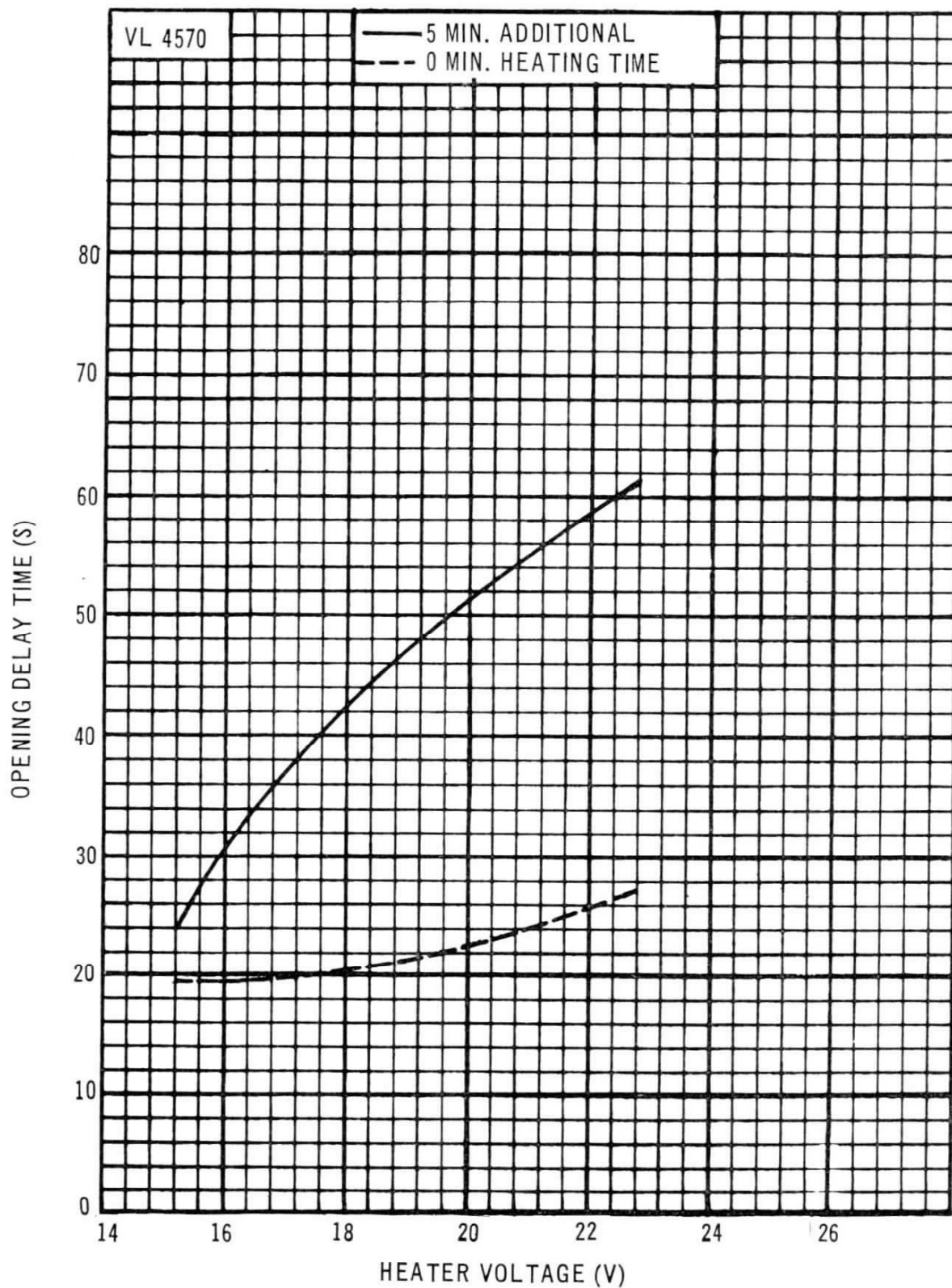


\*Shut-down time is that period, after the switch contacts have closed, between the removal of heater voltage and its re-application.

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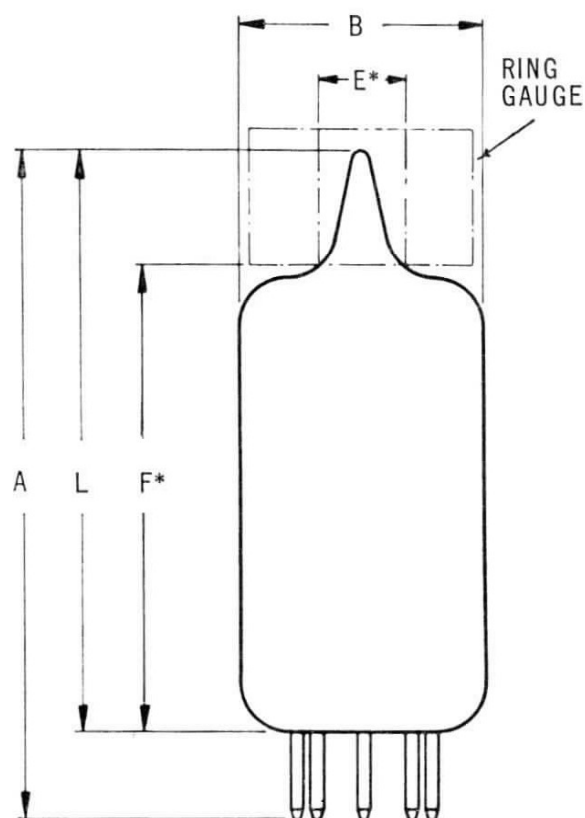
Fig. 3.—Typical Opening Delay Time versus Heater Voltage  
(at room temperature of 20°C)



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Fig. 4.—Outline and Basing Detail



DIM.	MILLIMETRES	INCHES
A	54 MAX.	2.1/8 MAX.
B	19,1 MAX.	3/4 MAX.
E	11,1	7/16
F	38,1 $\pm$ 2,4	1.1/2 $\pm$ 3/32
L	47,6 MAX.	1.7/8 MAX.

\* DENOTES:- MEASURED FROM  
BASE SEAT TO BULB TOP LINE,  
AS DETERMINED BY RING GAUGE  
OF 'E' INT. DIA.

NOTE:- BASIC DIMENSIONS ARE  
IN INCHES.

