

R4780B/C/D

Protectorelay Flame Safeguard Controls

The R4780B/C/D are flame safeguard controls used to provide automatic operation and safety of combustion in oil-fired, gas-fired, or oil-gas fired burners that have a burning capacity of 580kW/h (500,000Kcal/h) or greater.

They are constructed from reliable components to ensure that the combustion equipment operates in the correct sequence without fail.



Specifications

Model No.	R4780B	R4780C	R4780D
Flame detector	C7007A, C7008A, or C7012A	C7027A, C7035A	C554A, CN700
Standard flame current	2μA min.	4μA min.	—
Power consumption	9W +25% max.		
Ambient temperature	-20 to +60°C		
Ambient humidity	90% RH at 40°C		
Mounting of Protectorelay	Plug-in to subbase		
Mass	Approx. 1.0kg		
Auxiliary devices	Flame current tester and flame simulator		
Flame/alarm indicator LED	Lit: normal combustion Flashing: loss of flame while burner operating, ground short-circuit, or false flame signal at start-up		
Accessories	Surge absorber 83968019-109 (for R4780B), 83968019-001 (for R4780C)		

Selection Guide

Model No.	Power (50/60Hz)	Sequence timing (at normal temperature, normal humidity, rated voltage)								Flame response
		Pre-purge	Ignition waiting	Ignition trial	Pilot-only	Main trial	Main stabilized	Post-purge	Lockout	
R4780B1003-1	100Vac									When flame current is 2μA 1.5 ± 0.5s
R4780B1011-1	200Vac									When flame current is 8.5μA, 1.5 ± 0.5s
R4780C1001-2	100Vac	35 ± 5s	7.5 ± 2.5s	4 ± 1s	8.5 ± 3.5s	6.5 ± 2s	8.5 ± 3s	20 ± 8s	Max. 30s	When flame sensitivity is 1kΩ, 1.5 ± 0.5s
R4780C1019-2	200Vac									
R4780D1009-1	100Vac									
R4780D1017-1	200Vac									

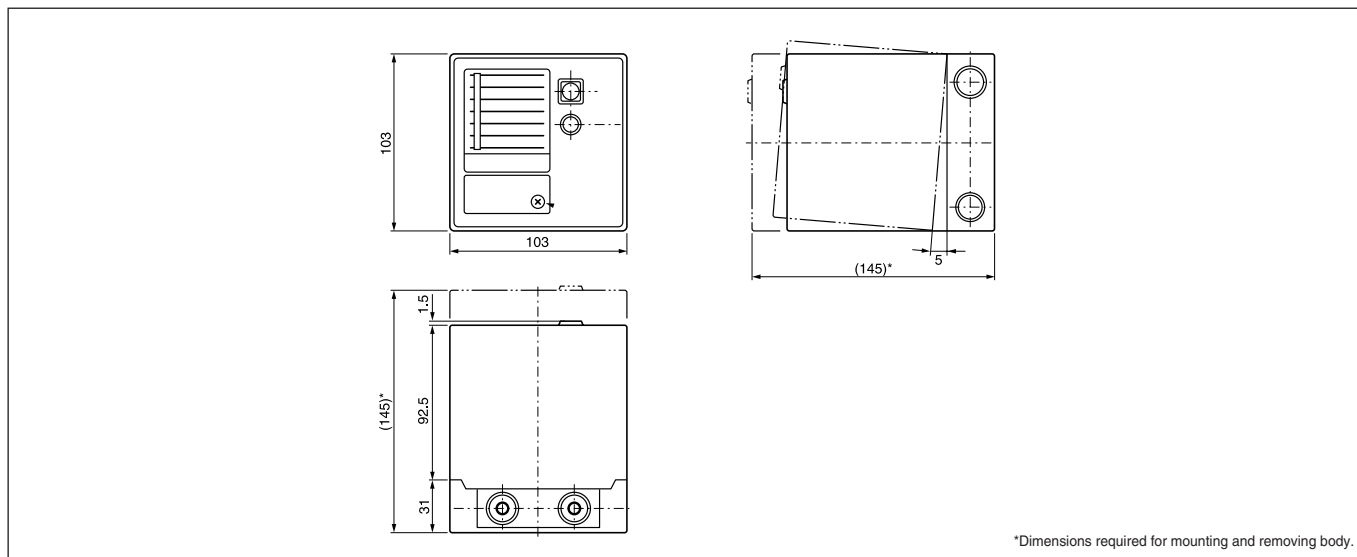
Note: Sequence at flame failure: non-recycle (for a pilot system, it is possible to use either an interrupted pilot or an intermittent pilot).

Accessories (sold separately)

Model No.	Description
123514A	Flame simulator (for R4780B)
123514B	Flame simulator (for R4780C)

Dimensions

(Unit: mm)



*Dimensions required for mounting and removing body.