Technical Data Flame Monitoring Device F152



Fig. 1 F152 ...

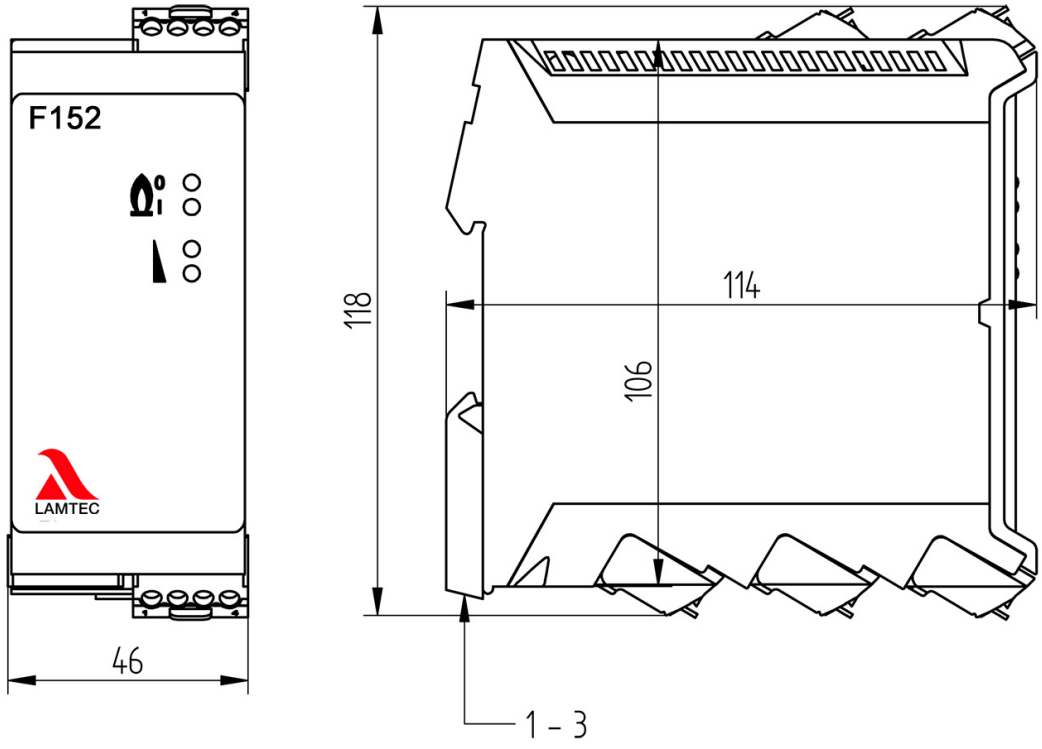


Fig. 2 Dimensional drawing F152

Technical Data Flame Monitoring Device F152

Dimensions	
Dimensions (HxWxD)	118 x 114 x 46 mm | 4.64 "x 4.49 "x 1.81 " in
Weight	0.5 kg | 1.1 lb

Input parameters	
Axillary energy	
Supply voltage	230 VAC +10 % -15 % 120 VAC +10 % -20 %, UL listed (also supports 115 VAC +10 % -15 %)
Mains frequency	50/60 Hz
Mains frequency suppression	– none – 50 Hz or 60 Hz (depending on the mains frequency)
Power consumption	≤ 5 VA
Device fuse (soldered)	0.1 A (230 V); 0,2 A (115/120 V); delay fuse

Output parameters	
Output contact indicator signal	NC (changer floating) - non-failsafe
Output contact flame signal	NO (changer floating) - failsafe
Permissible switching voltage[1]	max. 250 VAC; 120 VDC min. 10 VAC/DC
Permissible switching current [1]	max. 0.5 A cosφ 0.4 at ≤ 60 °C | 140 °F[2] min. 10 mA[2] Provide spark suppression externally for inductive loads, do not switch capacitive loads.
Contact fuse (soldered)[1]	0,5 A delay fuse IEC 60127-3
Safety time (FFDT) Response time in the event of the flame going out	t_{VAus} ≤ 1 s typ. 0,9 s (F152) > 0,5 s typ. 0,6 s (F152 ON1)
Start-up delay	t_{VEin} ≤ 1,3 s typ. 1,2 s (F152) ≤ 0,8 s typ. 0,7 s (F152 ON1)
Axillary energy for flame scanners	
Voltage	max. 30 VDC min. 24 VDC

1 If limit load is exceeded i.e. because of a contact or burden, the described minimum value can not be guaranteed. The minimum value is important for PLC-applications.

2 Please note: Gold-plated relay contacts
The maximum load for inductive/capacitive loads (recurring current peaks during switching) is 100 mA. If this is exceeded, even briefly (current peaks), the specified minimum value of 10 mA can no longer be guaranteed. Provide external spark suppression.

Technical Data Flame Monitoring Device F152

Self-monitoring pulse	
Pulse	approx. 1.5 s

Current loop	**Flame intensity - non-failsafe**
Current	0 … 20 mA
Load	max. 500 Ω
Open circuit voltage	22 ... 26 V
Base error	± 2 %

Spare parts	
	non

Technical capacity	
Cross section	flexible 0.25 ... 2,5 mm^2 | 23 ... 13 AWG rapid 0.20 ... 2.5 mm^2 | 24 ... 13 AWG
Operating mode	permanent operation 72 h operation according to TRD 604
Safety integrity level	DIN EN 61508 part 2 - SIL 3
Overvoltage category	DIN EN 60730-1, ÜK III
Electromagnetic interference	DIN EN 60730-1
Emitted interference	DIN EN 55022, class B

Operating Condition	
Relative humidity	20 % ... 90 % non-condensing

Environmental Conditions[1]		
Operation	permissible temperate range	-10 … +60 °C | +14 ... +140 °F
Transport	permissible temperate range	-10 … +60 °C | +14 ... +140 °F
Storage	Location	in enclosed spaces
Degree of protection	DIN EN 60529	IP20

1 The product must not be transported, stored or operated outside the specified range. If it is, any guarantees with regard to safety-related functions lose their validity.

Order Information

Flame monitoring device F152 (SIL 3 in according to IEC 61508-2) in combination with flame sensor FFS07/08

Description / type	Order no.
Flame monitoring device F152, power supply voltage 230 VAC	659G0501
Flame monitoring device F152, power supply voltage 230 VAC, without mains frequency suppression	659G0501/--Hz
Flame monitoring device F152, power supply voltage 230 VAC, reduced switch-on time	659G0501/ON1
Flame monitoring device F152, power supply voltage 120 VAC	659G0502
Flame monitoring device F152, power supply voltage 120 VAC, without mains frequency suppression	659G0502/--Hz
Flame monitoring device F152, power supply voltage 230 VAC, reduced switch-on time	659G0502/ON1
Flame monitoring device F152, power supply voltage 230 VAC, 3 seconds	659G0504

Approvals

The information in this publication is subject to technical changes.

LAMTEC GmbH & Co. KG
Josef-Reiert-Straße 26
69190 Walldorf
GERMANY
Telefon: +49 (0) 6227 6052-0
Telefax: +49 (0) 6227 6052-57
info@lamtec.de
www.lamtec.de

Printed in Germany | Copyright © 2026
Publication no. DLT7674-26-EN-007