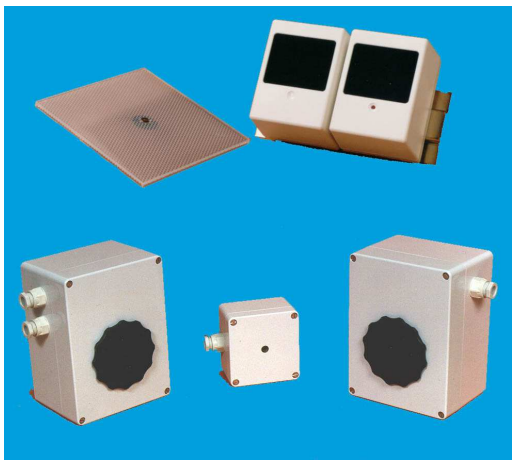
MHG 661

Linear Smoke Detector



The MHG 661 Linear Smoke Detector is intended for the automatic fire alarm signalling as a smoke detector of the addressable or the non-addressable Electric Fire Detection and Alarm System LITES.

It is intended to indicate a rising fire on the principle of reducing the infrared ray trough smoke particles. To be placed at locations of anticipated smoke occurance and concentration.

It is produced in the following versions:

MHG 661.039 protection IP 40	separated transmitter and receiver
MHG 661.040 protection IP 54	separated transmitter and receiver
MHG 661.010 protection IP 54	reflex version

The Linear Detectors MHG 661.039 and MHG 661.040 are made up from a transmitter and a receiver, which are to install on stable walls of the protected room opposite to each other. The reflex version can be created either through installing the MHG 661.039 detector on the 6XA 655 075 holder, or by means of the MHG 661.010 detector - the ray reflects by the help of the right number of reflex glasses 6XV 825 112.

The detector can work in these modes:

- non-addressable with voltage characteristic (a)
- non-addressable with current characteristic (b)
- interactiv (c)

In accordance with the receiver mode it is possible to connect the detector to the C.I.E`s MHU 102, MHU 103, MHU 105, MHU 106, MHU 108, MHU 113, MHU 109, MHU 110 or MHU 111

At the detector connection to the C.I.E. MHU 109 in the (c)-mode the pre-alert cannot be used and the dustiness is displayed as a loss of address. As parallel signalling the light fittings MHS 409, MHS 408 (MHS 407, MHS 405) or the Indicating Preparation MHY 737 can be used; at the same time the MHY 737 is instrumental to set-up and control the detector.

For its use in the Electric Fire Detection and Alarm System the detector is liable to the compliance examination according to law No. 22/1997 Sb., in wording law No. 71/2000 Sb. and the relevant orders of the government. The detectors are not intended for their use in environs with explosion danger, they conform to the European Norm EN 54-12.

Technical specifications

Power supply (c) (a), (b)	Addressable C.I.E.`s (16 ÷ 24) Vss
Power take-off if inactive	max. 300 µA (pursuant to the range)
Power take-off at fire alarm (a) (b)	max. 100 mA (limited by the C.I.E.) 20^{+1}_{-5} mA
Voltage at fire alarm (a)	(6 ÷ 8) V
Reaction time, adjustable* (a), (b)	c. 5 s, 30 s
Sensitivity, adjustable* (a), (b)	20, 29, 40 and 60 % radiation absorbtion through smoke
Optical signalling MHG 661.039 MHG 661.040, MHG 661.010	 red LED in receiver & Indicating Preparation red LED in Indicating Preparation & receiver (only by removed covering)
Parallel signalling	type LITES

Range MHG 661.039, MHG 661.040 with separated transmitter and receiver MHG 661.039 in reflex version on the holder 6XA 655 075 MHG 661.010 in reflex version	 (10 ÷ 100) m (5 ÷ 60) m (5 ÷ 70) m
Protected area	(max. 100 × 14) m
Testing procedure	by means of a reducing shutter
Attachable conductors cut	(0,2 ÷ 1,5) mm^2
Protection according to ČSN EN 60529 MHG 661.039 MHG 661.040, MHG 661.010	 IP 40 IP 54
Radioscreening degree according to ČSN EN 55 022	B-class equipment
Dimensions MHG 661.039 (transmitter & receiver) MHG 661.040 (transmitter & receiver) MHG 661.010 Reflex glass 6XV 825 112	 (100 × 75 × 62) mm (160 × 120 × 90) mm (120 × 160 × 92) mm (140 × 140) mm
Weight transmitter MHG 661.039 receiver MHG 661.039 transmitter MHG 661.040 receiver MHG 661.040 detector MHG 661.010	 250g 260g 700g 750g 820g
Safety requirements	detector intended for a plant with safety arrangement in terms of ČSN EN 60950

*If the detector is setup as an interactive one (c), it is possible to adjust its sensitivity in eight degrees, its reaction time in four degrees and its dustiness lookout in three degrees, or make the lookout inactive. Herewith the pre-alert can be adjusted in up to eight degrees, its sensitivity must be always higher then the alarm sensitivity (only the C.I.E.`s MHU 110 and MHU 111 evaluate the pre-alert).

The adjustable characteristics can be set either into the configuration program and recorded to the detector through an analog C.I.E., or they can be programmed right by means of the preparation MHY 535.

Working conditions

The MHG 661 Linear Smoke Detector is intended for the interior of objects without occurrence of agressive substances, and for places where its protection and climatic immunity conform, and where sudden temperature changes leading to dew and ice accretion don`t occur.	
Working temperature range	-25℃ ÷ +70℃
Relative humidity	max. 95% at +40℃
Atmospheric pressure	(66 ÷ 106) kPa

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