MHG 331 Combined Temperature Detector

The MHG 331 Combined Temperature Detector is a conventional fire detector with voltage characteristics intended for an automatic fire signalling as a detector of a temperature rise, in cooperation with the central control units of the electric fire signalling system LITES Liberec.



The MHG 331 Combined Temperature Detector is designed for places where in case of fire a temperature rise or a sudden temperature increase can be anticipated. This detector responds to a reached temperature rate or to temperature changes before and during a fire.

The MHG 331 detector is to install to the socket MHY 734.029. It is possible to connect it to the central control units MHU 113, MHU 108, MHU 106 with the loop unit JSM-5, or to the addressable central control units of the electric fire signalling system LITES by means of the addressing unit MHY 409. It is also possible to attach the signal lighting units MHS 409, MHS 408 (parallel signalling).

For use in the electric fire signalling system the detector is liable to the agreement examination according to law No. 22/1997 Sb., in wording law No. 71/2000 Sb. and the relevant orders of the government.

It fulfils the requirements of the European standard specification EN 54 - 5.

Technical specifications

Supply voltage range	16 to 24 V d. c.
Nominal voltage	21,5 V d. c.
Steady state current (on typical use	Gr. A2R max. 45 µA
temperature)	Gr. BR max. 60 μA
Current at alarm mode (including optical signalling)	max. 100 mA (limited by the control unit)
Operating voltage at fire alarm	6 - 8 V d. c. at 10 mA
Optical signalling	a couple of red LED (light emitting diodes)
Parallel signalling	type LITES
Detector classification	according to EN 54-5 adjustable A2R and BR
Typical use temperature	for the class A2R 25 ℃, f or BR 40 ℃
Maximum use temperature	for the class A2R 50 ℃, f or BR 65 ℃
Statical response temperature	for A2R (54 ÷ 70) ℃ , for BR (69 ÷ 85) ℃
Response time at temperature increase	according to EN 54-5 class A2R and BR
from the typical use temperature	
Testing procedure	by the test bar MHY 533
Protection according to ČSN EN 60529	IP44
Safety requirements	product intended for a plant with safety
	arrangement in terms of ČSN EN 60950
Radioscreening degree	B-class equipment
Dimensions	(98 x 42) mm
Weight	c. 100 g

Working conditions

The MHG 331 detector is intended for environments protected against weather influence, without occurence of agressive substances, and for places where its protection and climatic immunity suits, and where sudden temperature changes leading to dew and ice accretion don't occur.

Working temperature range	-25℃ až +65℃
Period of significant temperature (45℃ ÷ 70℃)	2 m onth in a year
Relative humidity	max. 95% at +40 ℃
Period of significant humidity	100 hours in a year
(85%÷95%/≤40℃)	

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