MHG 262V0 – Optical smoke detector

Optical smoke detector with extended spectrum of detected smokes and with isolator is intended for the automatic fire alarm signalling as a smoke detector in autonomous applications and in FDFAS for railway wagons.

It responds to both visible and invisible smoke particles (aerosols) on the principle of detection of scattered infrared radiation.

Detector MHG 262V0 is a conventional (non-addressable) detector derived from interactive addressable detector MHG 262i. Detector connects to an autonomous mounting base MHY 734.037 with screw terminals or to base MHY 734.038 with crimp connector. For use in railway wagons the detector connects to the MHY 734.029V0 mounting base.

Detector evaluates the fire situation based on measuring

The detector contains a program that evaluates the fire situation pursuant to measuring of the surrounding smoke concentration, namely in agreement with the following adjustable characteristics:

- basic sensitivity of the detector; it monitors the surrounding smoke concentration increase compared to the quiescent state, that compensates the climatic and other influences (environs temperature, pressure etc.) continuously; the basic sensitivity can be adjusted in eight degrees that must be selected with reference to the detector's combustion gas load that the detector responds to.
- reaction time; the verification level of the fire situation is concerned; also adjustable in eight degrees, however they can't be expressed by a simple time stamp, because the reaction time depends on the time progression of the fire situation
- dustiness watch; it monitors the rest level of the detector, and upon this it evaluates the dustiness rate of the optical chamber and consequently the reliability of the detector; it can be adjusted in seven degrees, or inactivated.

Adjustable parameters are set by the MHY 536 (535) addressing preparation.

Detector MHG 262V0 has built-in circuit which at detector's fault (e.g. too dusty) disconnects the positive terminals +L1 and +L2, that are in normal state connected. This circuit is used for fault signalling.

When installing the detector to high places, the MHY 736 mounting head on a rod can be used.

The detectors comply with ČSN EN 54-7 standard and are subject to conformity assessment according to Act No. 22/1997 Sb., As amended by Act No. 71/2000 Sb. and relevant government regulations.

Technical parameters

Power supply	autonomous mounting base or railway FDFAS LITES
Optical signalling	couple of red LEDs
Testing	testing rod MHY 506
Protection according to ČSN EN 60529	IP 43
Radio screening degree according to ČSN EN 55022	B class equipment
Checking and setting of parameters	addressing preparation MHY 536
Dimensions	(Ø98 × 58) mm
Weight	120 g
Non-flammability of plastics	according to UL 94 - V0

Product is intended for operation with safe equipment in sense of ČSN EN 60950.

Working conditions

Application of the detector is in areas protected against weather conditions with classification according to ČSN EN 60721-3-3

K: climatic conditions for environment	3K5
- working temperature range	-25°C ÷ +70°C
- max. relative humidity	95 % at 40°C
- without condensation and ice accretion	
Z: special conditions	3Z1 heat radiation negligible 3Z8 irrigation water
B: biological conditions	3B1 without presence of flora and fauna
C: chemical active substances	3C2
S: mechanical active substances	3S1
M: mechanical conditions	3M2
Duration of significant temperature (45°C ÷ 70°C)	2 months/year
Duration of significant humidity (85 % ÷ 95 % / ≤ 40°C)	100 hours/year
Maximum duration of spraying	10 min/month

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