



### Device Description:

Intrinsically safe CCTV camera IKA-1 is designed to deliver real time color image from chambers with danger of methane and / or coal dust explosion using asymmetric coaxial line  $75\Omega$  (in version „CC“), symmetric line  $110\Omega$  (in version „CT“) or SM fiber optic (in version „SM“). The image is transmitting to surface or underground video preview posts. The camera has lens with automatically regulated shutter, depending on the light intensity. In case of very low light intensity the converter automatically switches into black and white mode.

### Technical characteristics:

ATEX certificate number	KDB 13 ATEX 0017X
<b>Supply parameters:</b>	
Supply voltage $U_N$	11,5 ÷ 15 VDC
Maximum supply voltage $U_i$	15,8 VDC
Supply current $I_N$ for version:	
IKA-1/CC, IKA-1/CT	210 mA
IKA-1/SM	260 mA
Maximum supply current	2 A
<b>Video signal parameters:</b>	
Asymmetric video signal (IKA-1/CC):	
- Output impedance	75 $\Omega$
- Output signal level	1 Vpp
Symmetric video signal (IKA-1/CT):	
- Output impedance	110 $\Omega$
- Output signal level	1 Vpp
Optical video signal (IKA-1/SM):	
- Transmitter wave length	1310 nm
- Optical connector type	LC
- Fiber optic connector type	HAN 3A 2xLC duplex
- Fiber optic type	SM 9/125 $\mu$ m
- Optical power	-8,5 dBm
<b>Lens and converter parameters:</b>	
Image converter type	CCD 1/3"
Minimum illumination:	
color mode for F1,2	0,05 Lux
black and white mode for F1,2	0,0001 Lux
Focal change range	3 ÷ 8 mm
Shutter change range	0,95
Angle of view:	
f = 3 mm	94,3 x 68,9°
f = 8 mm	36,0 x 26,9°
<b>Normal working conditions:</b>	
Device category	M1
Casing type	Ex ia op is I Ma
Gas explosiveness group	I
Weight	2 kg
Working temperature range	0°C ÷ 40°C
Air humidity	max 95%
Casing protection degree	IP65
Mechanical exposure	low
Type of work	continuous

### Example of use:

