

SAFETY RELAYS



Illustration may differ

Ordering information

Type	part no.
UE23-3MF2D2	6034595

Other models and accessories → www.sick.com/UE23-3MF

Detailed technical data

Safety-related parameters

Category	Category 3 (EN ISO 13849)
Performance level	PL d (EN ISO 13849)
B _{10d} parameter	3 x 10 ⁵ switching cycles (AC-15, 230 V, I = 5 A) 2 x 10 ⁶ switching cycles (DC-15, 230 V, I = 2 A) 7 x 10 ⁶ switching cycles (DC-13, 24 V, I = 1 A)
PFH _D (mean probability of a dangerous failure per hour)	2.0 x 10 ⁻⁷ (EN ISO 13849)
T _M (mission time)	20 years (EN ISO 13849)
Stop category	0 (EN 60204-1)

Electronics - Operating data

Supply voltage V _S	A1, A2 24 V DC (19.2 V DC ... 30 V DC)
Residual ripple	(≤ 2.4 V _{pp}) ¹⁾
Power consumption	(≤ 1 W)
Overvoltage category	II
Rated insulation voltage U _i	300 V AC
Rated impulse withstand voltage U _{imp}	4 kV
Test voltage	2.2 kV (50 Hz) (EN 60439-1)

¹⁾ In DC operation, within the limits of V_S.

Electronics - Control voltage: Y1 - Y2 - Y3

Control voltage	U _V - 2 V DC ... U _V
Control current	≤ 20 mA
Short-circuit current	≤ 250 mA
Short-circuit protection	8 A gG, with tripping characteristics B or C
Reset time	
Manual	≤ 70 ms

Automatic	≤ 600 ms
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Electronics - Output current paths: 13/14, 23/24, 31/32

Response time	(≤ 80 ms) ¹⁾
Number of enabling current paths (N/O)	3, relevant for safety
Number of signaling current paths (normally closed)	1, not safety-relevant
Contact type	Positively driven
Contact material	Silver alloy, gold flashed
Switching voltage	
Enabling current path	5 V AC ... 230 V AC 5 V DC ... 300 V DC
Signaling current path	5 V AC, 5 V DC ... 230 V AC, 300 V DC
Current loading	
Enabling current path	10 mA ... 8 A
Signaling current path	10 mA ... 5 A
Usage category	AC-15/DC-13 (EN 60947-5-1)
Rated operating current (voltage)	5 A (230 V AC) 360 switching cycles/h 5 A (24 V DC) 360 switching cycles/h
Switching frequency	≤ 3600/h
Mechanical life (relay contacts)	1 x 10 ⁷ switching cycles
Electrical life (relay contacts)	1 x 10 ⁶ switching cycles

¹⁾ K1/K2.

Mechanics

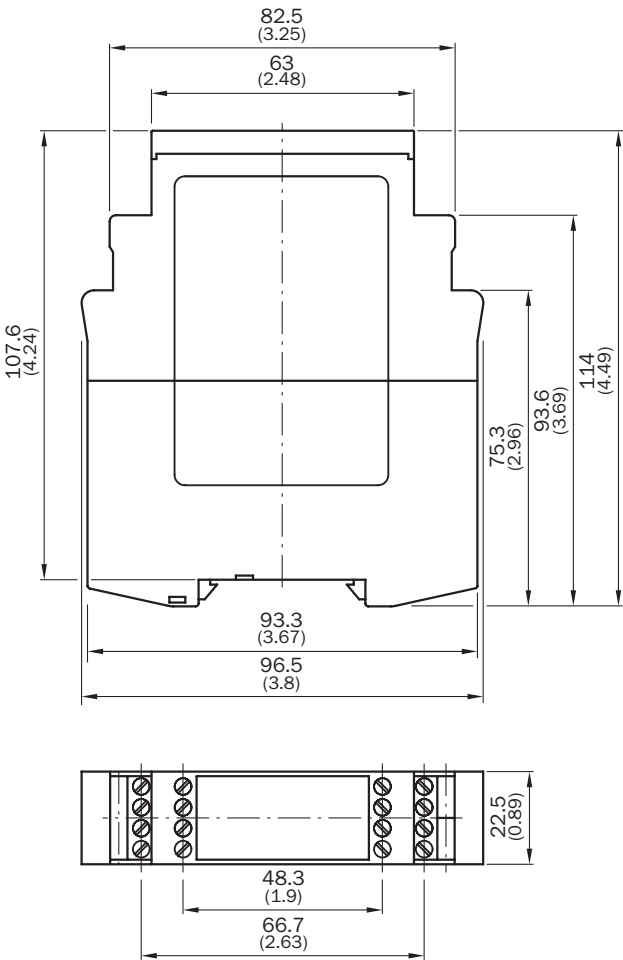
Dimensions (W x H x D)	22.5 mm x 123 mm x 93.5 mm
Contamination rating	3 (EN 50178)
Weight	0.2 kg

Classifications

ECLASS 5.0	27371990
ECLASS 5.1.4	27371990
ECLASS 6.0	27371819
ECLASS 6.2	27371819
ECLASS 7.0	27371819
ECLASS 8.0	27371819
ECLASS 8.1	27371819
ECLASS 9.0	27371819
ECLASS 10.0	27371819
ECLASS 11.0	27371819
ECLASS 12.0	27371819
ETIM 5.0	EC001449
ETIM 6.0	EC001449
ETIM 7.0	EC001449

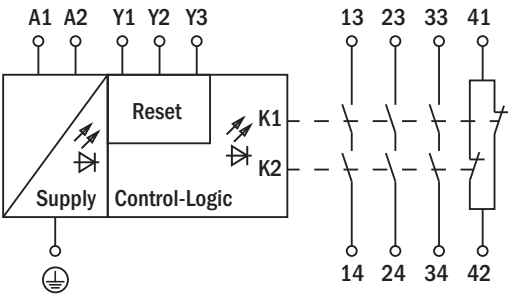
ETIM 8.0	EC001449
UNSPSC 16.0901	41113704

Dimensional drawing Safety relay



Dimensions in mm (inch)

Connection diagram



SICK AT A GLANCE

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We have extensive experience in a wide range of industries and understand their processes and requirements. With intelligent sensors, we can deliver exactly what our customers need. In application centers in Europe, Asia and North America, system solutions are tested and optimized in accordance with customer specifications. All this makes us a reliable supplier and development partner.

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For us, that is “Sensor Intelligence.”

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