



DATA SHEET

UE23-2MF2D3

UE23-2MF
Safety relays



Illustration may differ

SAFETY RELAYS

UE23-2MF2D3

ORDERING INFORMATION

Type	part no.
UE23-2MF2D3	6026146

Further device versions and accessories at www.sick.com/UE23-2MF

DETAILED TECHNICAL DATA

SAFETY-RELATED PARAMETERS

Category	Category 3 (EN ISO 13849)
Performance level	PL d (EN ISO 13849)
B _{10d} parameter	5.45 x 10 ⁴ switching cycles (AC-15, 230 V, I = 3 A) 1.26 x 10 ⁶ switching cycles (AC-15, 230 V, I = 1.5 A) 5.9 x 10 ⁶ switching cycles (AC-15, 230 V, I = 0.75 A) 4.35 x 10 ⁵ switching cycles (DC-13, 24 V, I = 2.5 A) 1 x 10 ⁷ switching cycles (DC-13, 24 V, I = 0.63 A)
PFH _d (mean probability of a dangerous failure per hour)	3.0 x 10 ⁻⁶ (EN ISO 13849)
T _M (mission time)	20 years (EN ISO 13849)
Stop category	0 (EN 60204-1)

ELECTRONICS - OPERATING DATA

Protection class	II, safe isolation (EN 50178)
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	III
Rated insulation voltage U _i	300 V AC
Rated impulse withstand voltage U _{imp}	6 kV
Test voltage	3.5 kV (50 Hz) (EN 60439-1)

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

ELECTRONICS - CONTROL VOLTAGE: Y1-Y2-Y3

Control voltage	$U_v - 2 \text{ V DC} \dots U_v$
Control current	$\leq 20 \text{ mA}$
Short-circuit current	$\leq 250 \text{ mA}$
Short-circuit protection	PTC resistor
Reset time	Manual $\leq 70 \text{ ms}$ Automatic $\leq 600 \text{ ms}$

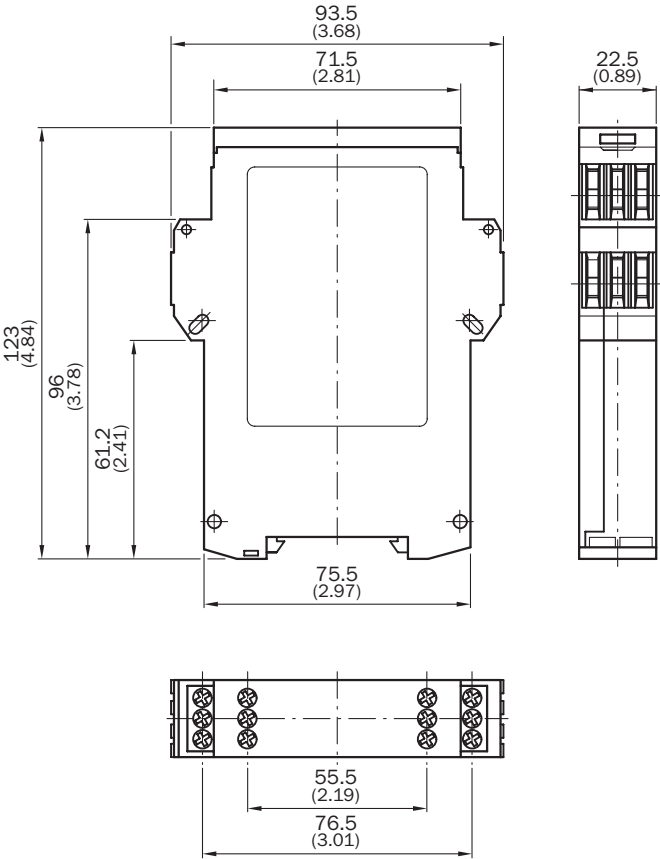
ELECTRONICS - OUTPUT CURRENT PATHS: 13/14, 23/24, 31/32

Response time	$(\leq 80 \text{ ms})^{\text{†}}$
Number of enabling current paths (N/O)	2, 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 10 V ... 230 V AC 10 V ... 300 V DC Signaling current path 10 V AC, 10 V DC ... 230 V AC, 300 V DC
Current loading	Enabling current path 10 mA ... 6 A Signaling current path 10 mA ... 6 A Total current $\leq 12 \text{ A}$
Usage category	AC-15/DC-13 (EN 60947-5-1)
Rated operating current (voltage)	4 A (230 V AC) 360 switching cycles/h 3 A (230 V AC) 3600 switching cycles/h 4 A (24 V DC) 360 switching cycles/h 2.5 A (24 V DC) 3600 switching cycles/h
Switching frequency	$\leq 3600/\text{h}$
Mechanical life (relay contacts)	1×10^7 switching cycles
Electrical life (relay contacts)	2×10^6 switching cycles

[†] K1/K2.**MECHANICS**

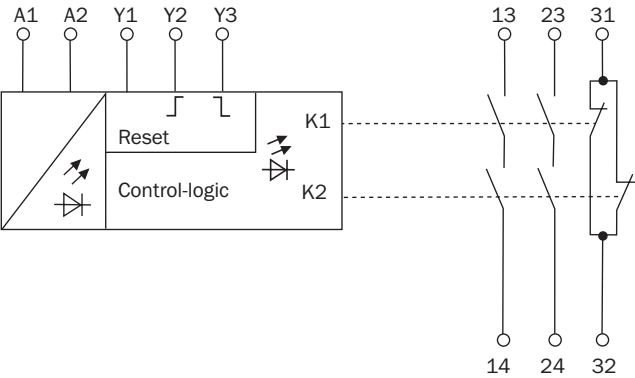
Dimensions (W x H x D)	22.5 mm x 123 mm x 93.5 mm
Contamination rating	3 (EN 50178)
Weight	0.27 kg

DIMENSIONAL DRAWING



Dimensions in mm (inch)

CONNECTION DIAGRAM



Further information as well as suitable accessories, example applications and downloads such as CAD dimensional models, operating instructions and software can be found at www.sick.com/6026146



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SICK AT A GLANCE

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Since 1946, we have been developing innovative technologies with passion and a pioneering spirit. With a global network in around 40 countries, SICK has a global presence and is always close by. The company's headquarters are located in Waldkirch near Freiburg, Germany. Our customers benefit from our understanding of both local and global requirements, which enables us to deliver tailor-made solutions

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