



DATA SHEET

UE43-3MF2A3

UE43-3MF
Safety relays



Illustration may differ

SAFETY RELAYS

UE43-3MF2A3

ORDERING INFORMATION

Type	part no.
UE43-3MF2A3	6024901

Further device versions and accessories at www.sick.com/UE43-3MF

DETAILED TECHNICAL DATA

SAFETY-RELATED PARAMETERS

Safety integrity level	SIL 3 (IEC 61508)
Category	Category 4 (EN ISO 13849)
Performance level	PL e (EN ISO 13849)
B _{10d} parameter	1 x 10 ⁶ switching cycles (AC-15, 230 V, I = 0.5 A) 3.5 x 10 ⁵ switching cycles (DC-13, 24 V, I = 2 A) 1.2 x 10 ⁶ switching cycles (DC-13, 24 V, I = 0.5 A)
PFH _d (mean probability of a dangerous failure per hour)	3.0 x 10 ⁻⁸ (EN ISO 13849)
T _M (mission time)	20 years (EN ISO 13849)
Stop category	0 (EN 60204-1)

ELECTRONICS - OPERATING DATA

Voltage supply	A1, A2
Output circuit > 25 V AC / 60 V DC	PELV
Output circuit ≤ 25 V AC / 60 V DC	PELV or SELV
Supply voltage V _s	A1, A2 230 V AC (195.5 V AC ... 253 V AC)
Power consumption	(≤ 3.2 VA (AC))
Overvoltage category	II
Rated insulation voltage U _i	300 V AC
Rated impulse withstand voltage U _{imp}	4 kV
Test voltage	2 kV (50 Hz) (EN 60439-1)

ELECTRONICS - CONTROL VOLTAGE: Y11, Y21

Control voltage	24 V DC
Short-circuit current	≤ 1 A, between Y11 and A2
Short-circuit protection	Short-circuit protected transformer
Galvanized decoupling	✓ (between A1, A2 and Y11, Y21, PE)

ELECTRONICS - INPUT CIRCUITS: Y12, Y31, Y22

Input current	≤ 15 mA
Reset time	Manual 150 ms Automatic 800 ms
Synchronous time monitoring	≤ 500 ms ≤ 500 ms
Cable resistance	≤ 70 Ω

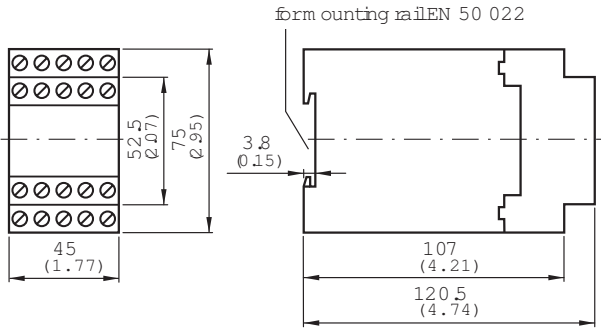
ELECTRONICS - OUTPUT CURRENT PATHS: 13/14, 23/24, 33/34, 41/42

Response time	50 ms (≤ 50 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 10 V AC ... 230 V AC 10 V DC ... 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 ≤ 18 A
Usage category	AC-15/DC-13 (EN 60947-5-1)
Rated operating current (voltage)	6 A (230 V AC) 3600 switching cycles/h 4 A (24 V DC) 360 switching cycles/h 3 A (24 V DC) 3600 switching cycles/h
Switching frequency	≤ 3600/h
Mechanical life (relay contacts)	1 x 10 ⁷ switching cycles
Electrical life (relay contacts)	2 x 10 ⁶ switching cycles

¹⁾ K1/K2.**MECHANICS**

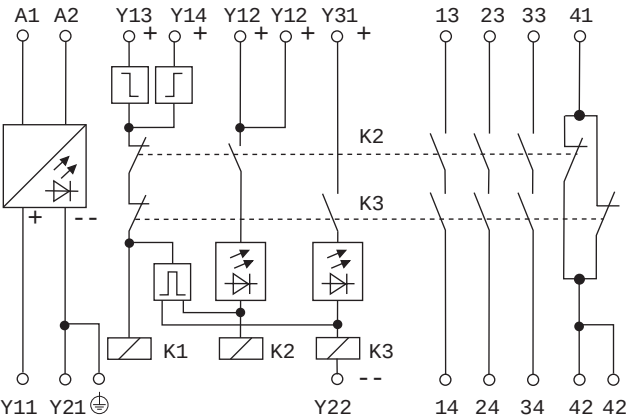
Dimensions (W x H x D)	45 mm x 120.5 mm x 75 mm
Contamination rating	3 (EN 50178)
Weight	0.36 kg

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/6024901



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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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