SICK.COM

DATA SHEET

UE43-3MF2D3

UE43-3MF
Safety relays

SICK Sensor Intelligence

Illustration may differ

SAFETY RELAYS

UE43-3MF2D3

ORDERING INFORMATION

Type	part no.
UE43-3MF2D3	6024897

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	1×10^6 switching cycles (AC-15, 230 V, I = 0.5 A) 3.5×10^5 switching cycles (DC-13, 24 V, I = 2 A) 1.2×10^6 switching cycles (DC-13, 24 V, I = 0.5 A)
PFH_D (mean probability of a dangerous failure per hour)	3.0×10^{-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 24 V DC (20.4 V DC ... 26.4 V DC)
Residual ripple	(≤ 2.4 V_{pp}) [1]
Power consumption	(≤ 1 W (DC))
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)

[1] In DC operation, within the limits of V_s.

ELECTRONICS - CONTROL VOLTAGE: Y11, Y21

Control voltage	24 V DC
Short-circuit current	≤ 1 A, between Y11 and A2
Short-circuit protection	PTC resistor

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

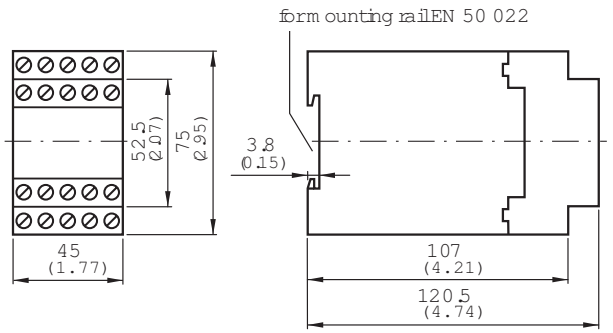
Response time	50 ms (≤ 50 ms) [1]
Number of enabling current paths (N/O)	3, relevant for safety
Number of signaling current paths (normally closed)	1, not safety-relevant
Contact type	Positively driven
Contact material	Silver alloy, gold flashed
Switching voltage	
Enabling current path	10 V AC ... 230 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)	1×10^7 switching cycles
Electrical life (relay contacts)	2×10^6 switching cycles

[1] K1/K2.

MECHANICS

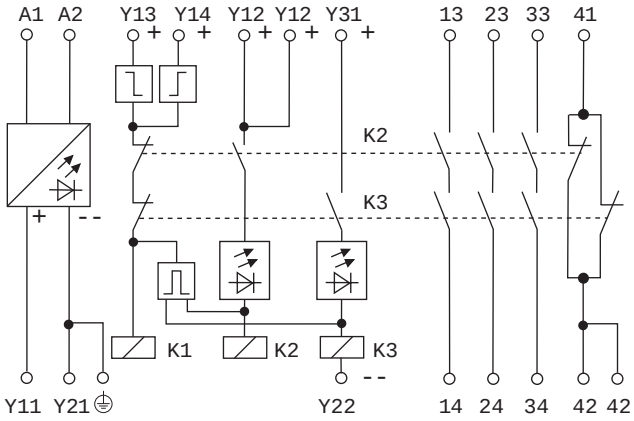
Dimensions (W x H x D)	45 mm x 120.5 mm x 75 mm
Contamination rating	3 (EN 50178)
Weight	0.3 kg

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/6024897

SICK AG
WALDKIRCH
GERMANY
SICK.COM

SICK AT A GLANCE

SICK is a leading global technology company for intelligent sensors and integrated solutions in industrial automation. Our technologies set benchmarks, making your industrial processes more efficient, safer and more sustainable – both in logistics and manufacturing operations.

SICK combines sensor intelligence with industry expertise and certified consulting services. We provide the ideal foundation for scalable as well as tailor-made automation solutions and create added value along the entire value chain. Our close partnerships with our customers are more than just a promise: Together, we optimize productivity, improve quality, protect health and safety, and help build a sustainable future. All with empathy and trust.

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

SICK

Sensor Intelligence