

Contact elements for emergency stop buttons

Matching contact element for every emergency-stop application: The various functions are combined into the contact elements. The functions can be assigned to the corresponding module which is identifiable by its colour.

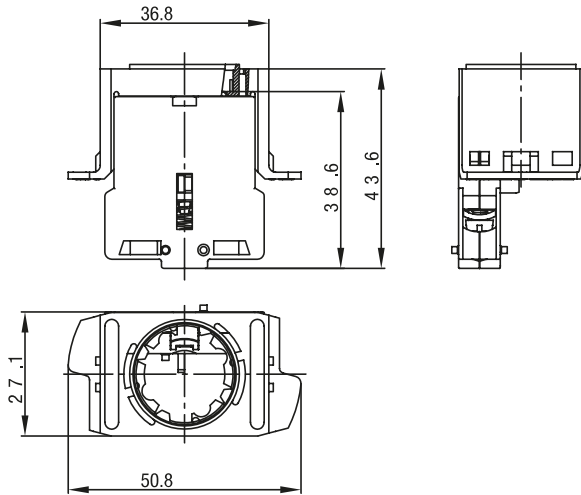
Technical specification

- Preassembled contact elements
- Positively driven safety contacts for switching the emergency-stop function
- Signal contact (N.O. contact) for external diagnosis, e.g. display on the machine control unit
- Failure protection module checks permanent connection of push button and contact element
- Illumination module for push buttons, with LED illumination integrated in the anti-obstruction protective collar

Technical drawing

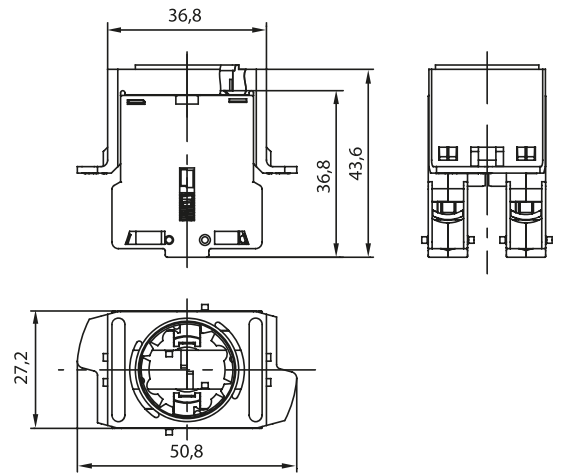
IMAGE 1/3

KE contact element with 1 N.C. contact



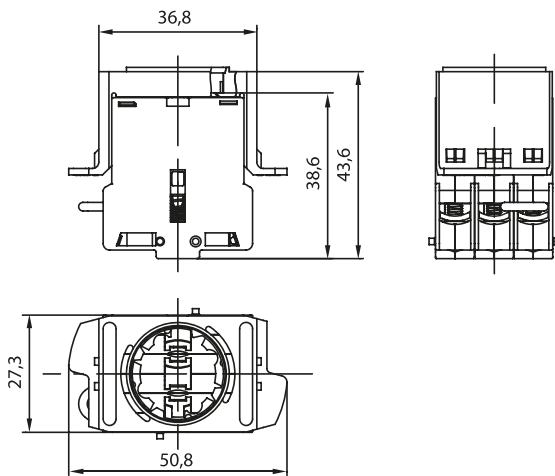
1 x 879901

KE contact element with 2 N.C. contacts



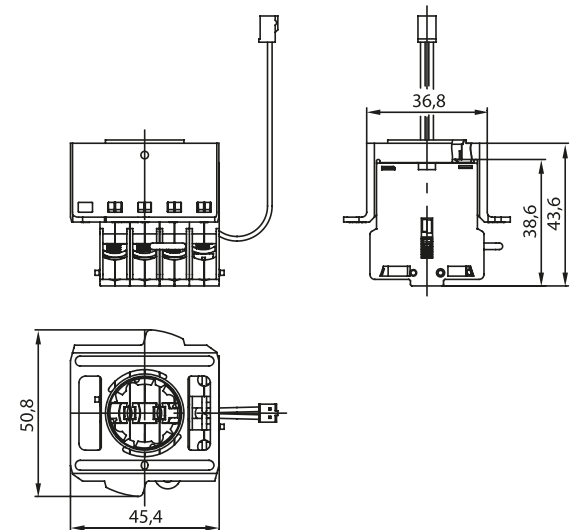
2 x 879901

KE contact element with 2 N.C. contacts / failure protection



2 x 879901
1 x 879902

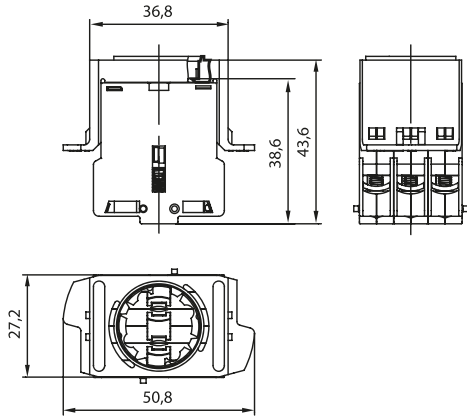
KE contact element with 2 N.C. contacts / failure protection / illumination



2 x 879901
1 x 879902
1 x 879903

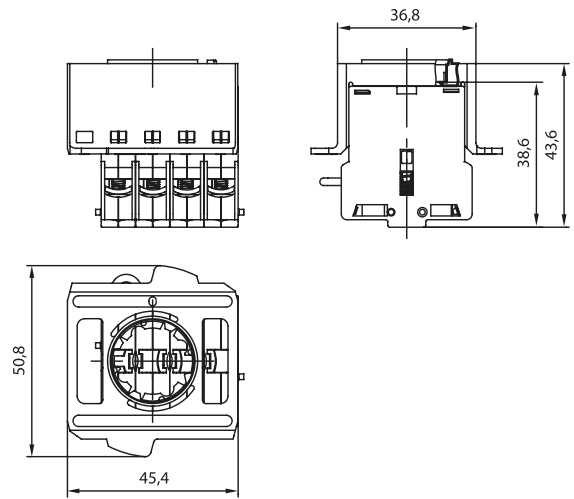
IMAGE 2/3

**KE contact element with 2 N.C. con-
tacts / 1 N.O. contact**



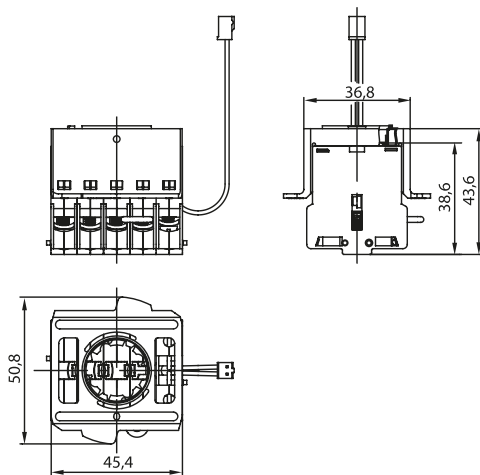
1 x 879900
2 x 879901

**KE contact element with 2 N.C. contacts /
1 N.O. contact / failure protection**



1 x 879900
2 x 879901
1 x 879902

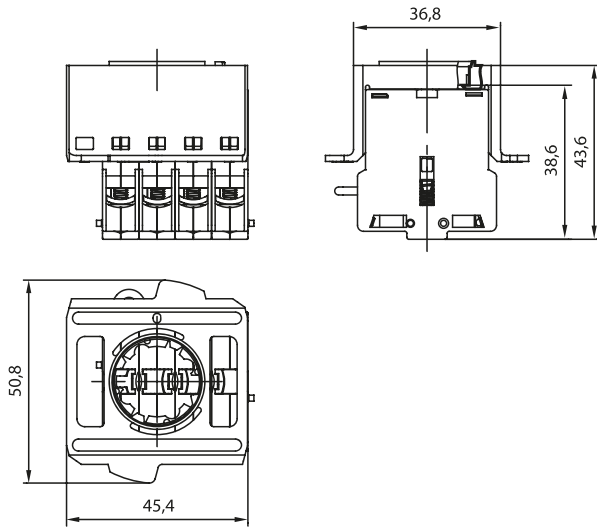
KE contact element with 2 N.C. contacts / 1 N.O. contact / failure protection / illumination



1 x 879900
2 x 879901
1 x 879902
1 x 879903

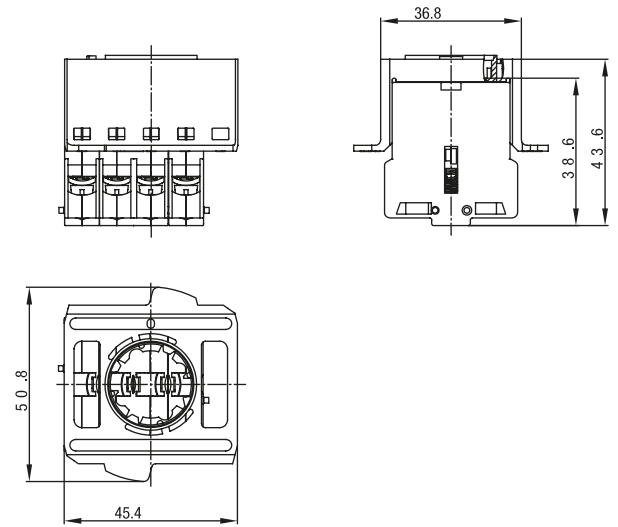
IMAGE 3/3

**KE contact element with 3 N.C. contacts /
failure protection**



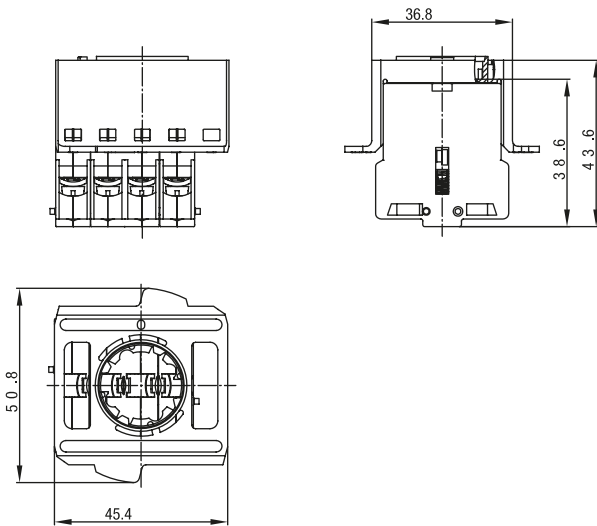
3 x 879901
1 x 879902

**KE contact element with 3 N.C. contacts /
1 N.O. contact**



1 x 879900
3 x 879901

KE contact element with 4 N.C. contacts



4 x 879901

Product options

IMAGE 1/1

ORDERING KEY

KE			Contact element with frame
			Number and type of contact elements
	10		1 N.C.
	20		2 N.C.
	20	SF	2 N.C. / failure protection
	20	SFB	2 N.C. / failure protection / illumination
	21		2 N.C. / 1 N.O.
	21	SF	2 N.C. / 1 N.O. / failure protection
	21	SFB	2 N.C. / 1 N.O. / failure protection / illumination
	30	SF	3 N.C. / failure protection
	31		3 N.C. / 1 N.O.
	40		4 N.C.
			Other contact elements on request

Article characteristics

Attribute	KE10	KE20	KE20SF	KE20SFB	KE21	KE21SF ▶
Min. switching voltage	5 V DC		12 V DC		5 V DC	
Min. switching voltage	5 V AC		12 V AC		5 V AC	
Min. switching current	0.01 A					
Conv. thermal continuous current I _{th}	16 A					
Bounce time	10 ms					
Utilization category	AC15 A600 / DC13 Q600					
Rated operating current (I _e)	3000 / 1600 ; 120 / 200 / 400 / 2000 mA					
Rated operating voltage (U _e)	240 / 440 ; 440 / 250 / 125 / 60 / 24 V					
Rated insulation voltage (U _i)	600 V					
Rated voltage U _e	250 VAC / 440 VAC					
Rated current I _e (ohmic load)	16 A / 10 A					
Rated current I _e (inductive load)	10 A / 6 A					
Protection class	II					
Operating voltage max.	-		30 V DC		-	
Operating voltage max.	-		30 V AC		-	
LED service life	-		100000 (T=25°C, I=20mA) 70000 (T=55°C, I=20mA) h		-	
Service life, electrical at nominal load (Cycles)	1000000					
Illumination	No		Yes		No	
Number of safety contacts (positively opening)	1	2				
Number of signalling contacts (N.O.)	0				1	
Failure protection	no		yes		no yes	
Actuation path	6 mm					
Max. switching current	-		0.04 A		-	
Max. contact resistance	0.02 Ohm					
Operating voltage min.	-		12 V DC		-	
Operating voltage min.	-		12 V AC		-	

Article characteristics

Attribute	KE10	KE20	KE20SF	KE20SFB	KE21	KE21SF ▶
Max. switching voltage		-		30 V DC		-
Max. switching voltage		-		30 V AC		-
B10d acc. to EN ISO 13849-1	180000					
Service life, mechanical (Cycles)	1 x 10 ⁶					
Dimensions	43,6 x 50,8 x 27,3 mm (H/B/T)			43,6 x 50,8 x 45,4 mm (H/B/T)	43,6 x 50,8 x 27,3 mm (H/B/T)	43,6 x 50,8 x 45,4 mm (H/B/T)
Positive opening path	3 mm					
Contact material	AgNi					
Operating temperature min.	-30 °C					
Max. operating temperature	85 °C			65 °C	85 °C	
Min. storage temperature	-50 °C					
Max. storage temperature	85 °C					
Mounting type	inserted/latched					
Installation	from below					
Connection type	-			10cm Litze und Stecker für Beleuchtung	-	
Screw terminals	yes					
Max. connection cross section	2.5 mm ²					
Wire cross section	-			0.25 mm ²	-	
Certified in accordance with	EN 60947-5-5 EN 60947-5-1 EN ISO 13850 UL 508 / CSA 22.2					
CE label	yes					

Article characteristics

Attribute	KE21SFB	KE30SF	KE31	KE40
Min. switching voltage	12 V DC		5 V DC	
Min. switching voltage	12 V AC		5 V AC	
Min. switching current		0.01 A		
Conv. thermal continuous current I _{th}		16 A		
Bounce time		10 ms		
Utilization category		AC15 A600 / DC13 Q600		
Rated operating current (I _e)	3000 / 1600 120 / 200 / 400 / 2000 mA	3000 / 1600 ; 120 / 200 / 400 / 2000 mA		
Rated operating voltage (U _e)	240 / 440 440 / 250 / 125 / 60 / 24 V	240 / 440 ; 440 / 250 / 125 / 60 / 24 V		
Rated insulation voltage (U _i)		600 V		
Rated voltage U _e		250 VAC / 440 VAC		
Rated current I _e (ohmic load)		16 A / 10 A		
Rated current I _e (inductive load)		10 A / 6 A		
Protection class	III		II	
Operating voltage max.	30 V DC		-	
Operating voltage max.	30 V AC		-	
LED service life	100000 (T=25°C, I=20mA)70000 (T=55°C, I=20mA) h		-	
Service life, electrical at nominal load (Cycles)		1000000		
Illumination	Yes		No	
Number of safety contacts (positively opening)	2		3	4
Number of signalling contacts (N.O.)	1	0	1	0
Failure protection		yes		no
Actuation path		6 mm		
Max. switching current	0.04 A		-	
Max. contact resistance		0.02 Ohm		
Operating voltage min.	12 V DC		-	
Operating voltage min.	12 V AC		-	
Max. switching voltage	30 V DC		-	

Article characteristics

Attribute	KE21SFB	KE30SF	KE31	KE40
Max. switching voltage	30 V AC		-	
B10d acc. to EN ISO 13849-1		180000		
Service life, mechanical (Cycles)		1 x 10 ⁶		
Dimensions		43,6 x 50,8 x 45,4 mm (H/B/T)		
Positive opening path		3 mm		
Contact material		AgNi		
Operating temperature min.		-30 °C		
Max. operating temperature	65 °C		85 °C	
Min. storage temperature		-50 °C		
Max. storage temperature		85 °C		
Mounting type		inserted/latched		
Installation		from below		
Connection type	10cm Litze und Stecker für Beleuchtung		-	
Screw terminals		yes		
Max. connection cross section		2.5 mm ²		
Wire cross section	0.25 mm ²		-	
Certified in accordance with		EN 60947-5-5 EN 60947-5-1 EN ISO 13850 UL 508 / CSA 22.2		
CE label		yes		