

## Panel Mounted

---

Range:	Type	Preferred range	Page
Keyswitches	E1	E1ACAAAE	284
	M1	M1HAAAAE M1HAEAAE M1HAAAAJ	287
	K2	K23FBA201	290
	P2	P23FBA206 P23FBA209 P23FBC209 P23FMA209	293
	P5	P53FBA201	296

**SICATRON**  
elektronik & automation

- Mikroschalter
- Motoren
- Magnete
- Schalter
- Sensoren
- Steuerungstechnik
- 19" Schranksysteme
- Kabelkonfektion

SICATRON OHG  
Pettenkoferstr. 19  
D-58097 Hagen | Germany  
Tel.: +49 (0) 2331 473329 0  
Fax: +49 (0) 2331 473329 20  
info@sicatron.de

[www.sicatron.de](http://www.sicatron.de)

# E1

## Panel Mounted

Keyswitches

### E1

Panel cut-out (mm)  $\nabla$  15.1 × 15.1

- Characteristics
- tamper proof
  - 2 positions
  - key trapping options
  - gold-plated contacts
  - PCB Terminals

Rating 250 VAC, 100 mA

Dimensions (mm) 18 × 16

Actuator ■ plastic key

Approvals none



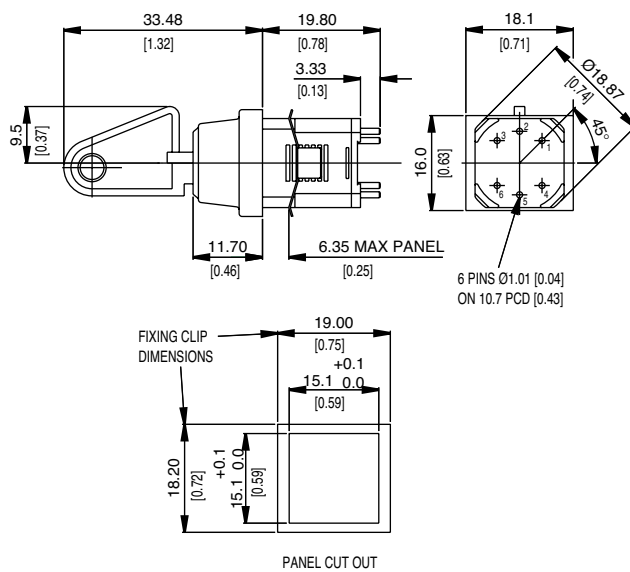
### Preferred Range

Ordering Reference	Terminal	Circuit	Actuator	Contacts	Electrical rating
E1ACAAAE	Pins	2 pole CO	Key	Gold-plated	250 VAC, 100 mA

## Specifications

Key	Glass-fibre reinforced nylon
Body	Glass-fibre reinforced nylon
Springs	Stainless steel
Contacts	Moving - gold-plated phosphor bronze, Fixed - gold-plated brass
Terminals	1.01 mm (0.04 in) dia × 3.3 mm (0.13 in) gold-plated brass
Temperature range °C	-20°C to +60°C
Mechanical life	50,000 operations (minimum)
Mounting	Retaining clip
Actuators	Key
Switching function	Double pole change-over, three circuit selector
Key indexing	90°

### Dimensions



## Recommended maximum electrical ratings

Voltage (max)	Resistive load (A)	Inductive load	Horsepower	Approval
250 VAC	100 mA	-	-	General rating - 50,000 operations
0-15 VDC	100 mA	-	-	General rating - 50,000 operations
15-30 VDC	100 mA	-	-	General rating - 50,000 operations

### Operating Characteristics

Switching function	Reference	Actuator Type	Body style (mm)	Key trapping	Diagram
Double pole change-over	E1AAAAAE	Key	A - 18 × 16	No	
Double pole change-over	E1ACAAAE	Key	A - 18 × 16	Yes	
Three circuit selector	E1AAAAAJ	Key	A - 18 × 16	No	

### Type coding key for standard products

Basic type	E1	Example: E1	A	A	A	A	A	E
Key	A	Standard key						
Key trapping	A	Key removable in all positions						
	C	Key trapped horizontally, right						
Body style	A	18.0 mm (0.710 in) × 16.0 mm (0.630 in) rectangular bezel						
Body colour	A	Black						
Terminal	A	1.01 mm (0.040 in) dia × 3.30 mm (0.130 in)						
Switching function	E	Double pole change-over						
	J	Three circuit selector						

# M1

## Panel Mounted

Keyswitches

### M1

Panel cut-out (mm)  $\nabla$  15.1 × 15.1

Characteristics

- double pole change-over or three circuit selector switching functions
- key trapping option
- two body style options
- gold-plated contacts
- PCB Terminals

Rating 250 VAC, 100 mA

Dimensions (mm)

- 18 × 16  
body style A
- 18 × 18  
body style E

Actuator ■ key (common or differs)

Approvals none



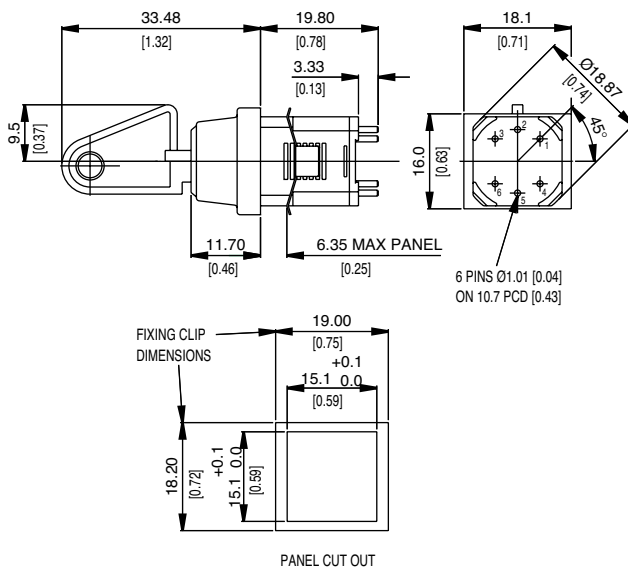
### Preferred Range

Ordering Reference	Terminal	Circuit	Actuator	Contacts	Electrical rating
M1HAAA AE	Pins	2 pole CO	Key	Gold-plated	250 VAC, 100 mA
M1HAEE AE	Pins	2 pole CO	Key	Gold-plated	250 VAC, 100 mA
M1HAAA AJ	Pins	3 circuit selector	Key	Gold-plated	250 VAC, 100 mA

## Specifications

Key	Nickel silver
Body	Glass-fibre reinforced nylon
Springs	Stainless steel
Contacts	Moving - gold-plated phosphor bronze, Fixed - gold-plated brass
Terminals	1.01 mm (0.04 in) dia × 3.3 mm (0.13 in) gold-plated brass
Temperature range °C	-20°C to +60°C
Mechanical life	50,000 operations (minimum)
Mounting	Retaining clip
Actuators	Key
Switching function	Double pole change-over, three circuit selector
Key indexing	90°

### Dimensions



## Recommended maximum electrical ratings

Voltage (max)	Resistive load (A)	Inductive load	Horsepower	Approval
250 VAC	100 mA	-	-	General rating - 50,000 operations
0-15 VDC	100 mA	-	-	General rating - 50,000 operations
15-30 VDC	100 mA	-	-	General rating - 50,000 operations

# M1

## Operating Characteristics

Switching function	Reference	Actuator		Body style (mm)	Key trapping	Diagram
		Type	Code			
Double pole change-over	M1BAAAAE	Key	001	A - 18 × 16	No	
	M1HAAAAE	Key	007	A - 18 × 16	No	
	M1HAEEAE	Key	007	E - 18 × 18	No	
	M1MAAAAE	Key	Production run key coding	A - 18 × 16	No	
	M1MAEEAE	Key	Production run key coding	E - 18 × 18	No	
Double pole change-over	M1MCAAEE	Key	Production run key coding	A - 18 × 16	Yes	
	M1MCEAAE	Key	Production run key coding	E - 18 × 18	Yes	
Three circuit selector	M1HAAAAJ	Key	007	A - 18 × 16	No	
	M1HAEEAJ	Key	007	E - 18 × 18	No	
	M1MAAAAJ	Key	Production run key coding	A - 18 × 16	No	
	M1MAEEAJ	Key	Production run key coding	E - 18 × 18	No	

## Type coding key for standard products

Basic type	M1	Example: M1	B	A	A	A	A	E
Keycode	B 001 key H 007 key M Production run key coding							
Key trapping	A Key removable in all positions C Key trapped horizontally, right							
Body style	A 18.0 mm (0.710 in) × 16.0 mm (0.630 in) rectangular bezel E 18.0 mm (0.710 in) square bezel							
Body colour	A Black							
Terminal	A 1.01 mm (0.040 in) dia × 3.30 mm (0.130 in)							
Switching function	E Double pole change-over J Three circuit selector							

# K2

## Panel Mounted

Keyswitches

### K2

Panel cut-out (mm) Ø 19.1

Characteristics ■ choice of off-on or change-over centre off or spring return options  
■ key trapping option  
■ solder terminals

Rating up to 250 VAC, 2 A

Dimensions (mm) Ø 22

Actuator ■ key (common or differs)

Approvals UL and CSA



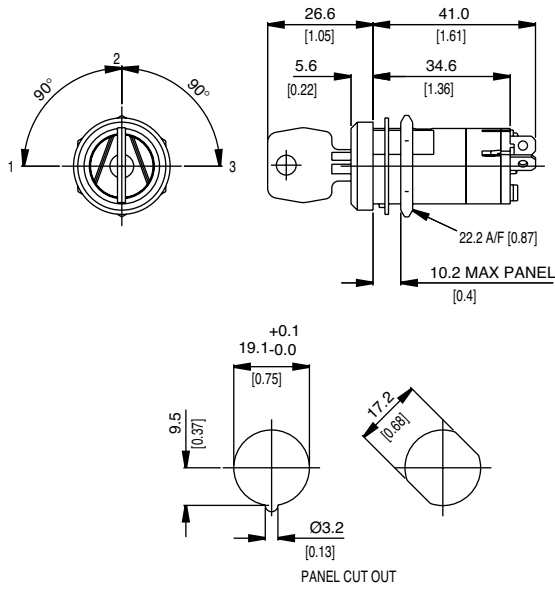
### Preferred Range

Ordering Reference	Terminal	Circuit	Actuator	Contacts	Electrical rating
K23FBA201	Screws	2 pole off-on	Key	Ag	Up to 250 VAC, 2 A

## Specifications

Key	Nickel silver
Body	Glass-fibre reinforced nylon
Springs	Stainless steel
Contacts	Silver
Terminals	4.8 × 0.8 mm (0.19 × 0.032 in) faston (faston) - silver-plated brass
Temperature range °C	-20°C to +85°C
Mechanical life	50,000 operations (minimum)
Mounting	Locknut and washer
Actuators	General duty keylocks
Switching function	Off-on, change-over (centre off)
Key indexing	90°

## Dimensions



## Recommended maximum electrical ratings

Voltage (max)	Resistive load (A)	Inductive load	Horsepower	Approval
125 VAC	4 (0.75 pf)	-	-	UL 1054/CSA 22.2 No. 55 - 6,000 operations
250 VAC	2 (0.75 pf)	-	-	UL 1054/CSA 22.2 No. 55 - 6,000 operations
12 VDC	10	-	-	UL 1054/CSA 22.2 No. 55 - 6,000 operations

# K2

## Operating Characteristics

Switching function	Reference	Actuator Type	Code	Key trapping	Diagram
1 pole change-over with centre off	K23FBA123	Key	001	No	
2 pole off-on	K23FBA201	Key	001	No	

## Type coding key for standard products

Basic type	K2	Example: K2	3F	B	A	2	01
Actuators	3F Key - general duty						
Keycode	B 001 key						
Key trapping	A Key removable in all positions C Key trapped horizontally; right						
Number of poles	1 1 pole 2 2 poles						
Switching function	01 Off-on 23 Change-over with centre off						

# P2

## Panel Mounted

Keylock

### P2

Panel cut-out (mm) Ø 19.1

- Characteristics
- up to 12 contact pairs
  - 2 security options with key actuation
  - from 2 to 4 switch positions
  - key trapping option
  - solder terminals

Rating 250 VAC, 2 A

Dimensions (mm) Ø 22

Actuator ■ key (common or differs)

Approvals UL (optional)



### Preferred Range

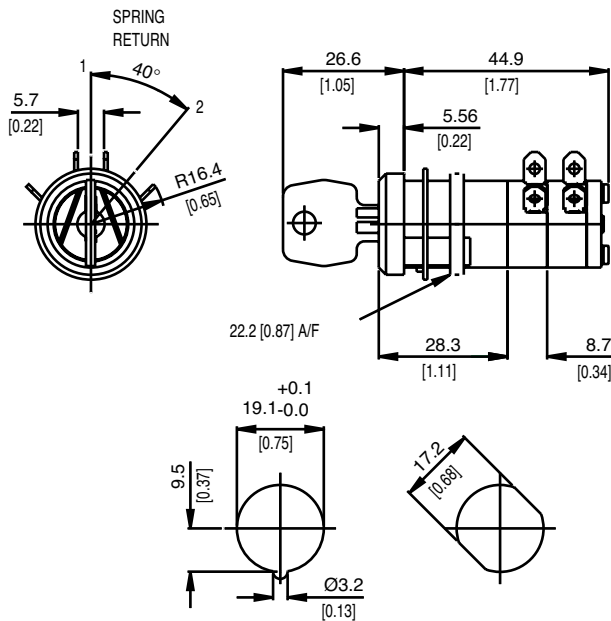
Ordering Reference	Terminal	Circuit	Actuator	Contacts	Electrical rating
P23FBA206	Screws	2 pole CO	Key	Ag	Up to 250 VAC, 2 A
P23FBA209	Screws	2 pole CO	Key	Ag	Up to 250 VAC, 2 A
P23FBC209	Screws	2 pole CO	Key	Ag	Up to 250 VAC, 2 A
P23FMA209	Screws	2 pole CO	Key	Ag	Up to 250 VAC, 2 A



## Specifications

Key	Nickel silver
Body	Glass-fibre reinforced nylon
Springs	Stainless steel
Contacts	Silver
Terminals	4.8 × 0.8 mm (0.19 × 0.032 in) faston (faston) - silver-plated brass
Temperature range °C	-20°C to +85°C
Mechanical life	50,000 operations (minimum)
Mounting	Locknut and washer
Actuators	General duty keylocks
Switching function	Change-over (spring return), change-over (separate circuits)
Key indexing	90°

### Dimensions



## Recommended maximum electrical ratings

Voltage (max)	Resistive load (A)	Inductive load	Horsepower	Approval
125 VAC	4 (0.75 pf)	-	-	UL 1054/CSA 22.2 No. 55 - 6,000 operations
250 VAC	2 (0.75 pf)	2	-	UL 1054/CSA 22.2 No. 55 - 6,000 operations
12 VDC	10	-	-	UL 1054/CSA 22.2 No. 55 - 6,000 operations

### Operating Characteristics

Switching function	Reference	Actuator Type	Code	Key trapping	Diagram
2 pole change-over, spring return	P23FBA206 P23FMA206	Key Key	001 Production run key coding	No No	
2 pole change-over, separate circuits	P23FBA209 P23FMA209	Key Key	001 Production run key coding	No No	
2 pole change-over, separate circuits	P23FBC209 P23DMC209	Key Key - increased security	001 Production run key coding	Yes Yes	

### Type coding key for standard products

Basic type	P2	Example: P2	3F	B	A	2	06
Actuators	3F Key - general duty						
Keycode	B 001 key M Production run key coding						
Key trapping	A Key removable in all positions C Key trapped horizontally, right						
Number of poles	2 2 poles						
Switching function	06 Change-over with spring return 09 Change-over with separate circuits						

# P5

## Panel Mounted

Keyswitches

### P5

Panel cut-out (mm)	Ø 20.6
Characteristics	<ul style="list-style-type: none"><li>■ high electrical rating</li><li>■ key trapping option</li><li>■ choice of off-on, change-over with spring return or change-over with separate circuits</li></ul>
Rating	up to 125 VAC, 10 A up to 250 VAC, 5 A
Dimensions (mm)	Ø 38.1 × 45.7 off-on Ø 38.1 × 58.4 change-over
Actuator	■ key (common or different)
Approvals	UL and CSA



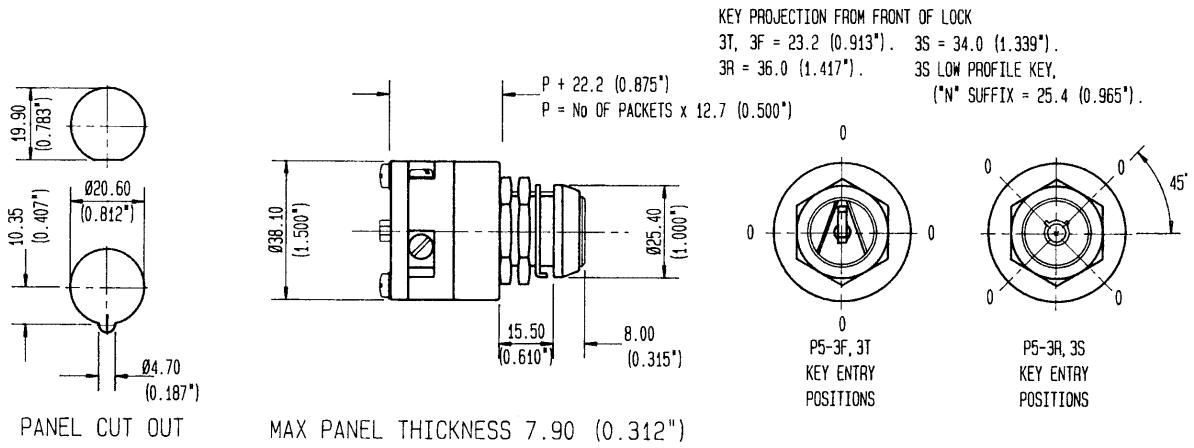
### Preferred Range

Ordering Reference	Terminal	Circuit	Actuator	Contacts	Electrical rating
P53FBA201	Screws	2 pole off-on	Key	Ag	Up to 125 VAC, 10 A Up to 250 VAC, 5 A

### Specifications

Key	Nickel silver
Body	Phenolic
Springs	Stainless steel
Contacts	Silver
Terminals	4BA screw - silver-plated brass
Temperature range °C	-20°C to +85°C
Mechanical life	25,000 operations (minimum)
Mounting	Locknut and washer
Actuator	Key
Switching function	Off-on, change-over (spring return), change-over (separate circuits)
Key indexing	90°

Dimensions



### Recommended maximum electrical ratings

Voltage (max)	Resistive load (A)	Inductive load	Horsepower	Approval
125 VAC	10 (0.75 pf)	-	-	UL 1054/CSA 22.2 No. 55 - 6,000 operations
250 VAC	5 (0.75 pf)	-	-	UL 1054/CSA 22.2 No. 55 - 6,000 operations
24 VDC	15	-	-	UL 1054/CSA 22.2 No. 55 - 6,000 operations

## Operating Characteristics

Switching function	Reference	Actuator Type	Code	Key trapping	Diagram
2 pole off-on	P53FBA201	Key	001	No	
2 pole change-over, spring return	P53FBA206 P53FMA206	Key Key	001 Production run	No No	
2 pole change-over, separate circuits	P53FBA209 P53FMA209	Key Key	001 Production run	No No	
2 pole change-over, separate circuits	P53FBB209 P53FMB209	Key Key	001 Production run	Yes Yes	

### Type coding key for standard products

		Example: P5	3F	B	A	2	01
Basic type	P5						
Actuators	3F	Key - general duty					
Keycode	B	001 key					
	M	Production run key coding					
Key trapping	A	Key removable in all positions					
	B	Key trapped vertically, up					
Number of poles	2	2 poles					
Switching function	01	Off-on					
	06	Change-over with spring return					
	09	Change-over with separate circuits					

