

3SB5

Indicating lamps and push buttons



Answers for industry.

SIEMENS

Blank Page

Commanding and Signalling Devices



2	Introduction
	3SB5 Pushbutton Units and Indicating Lamps, 22 mm
4	General data
	<u>Actuators and Indicating Lamps, Plastic, 22 mm</u>
6	Actuators
9	Contact block
10	Indicating lamps
11	Illumination module
	<u>Accessories and Spare Parts</u>
12	Pusher caps
12	Lamps
12	Protective covers
13	Miscellaneous accessories
	<u>Enclosures</u>
15	General data
16	Enclosures with standard fittings
18	Empty enclosures
19	Contact blocks and lampholders
19	Accessories for enclosures

3SB5 Commanding and Signalling Devices

Introduction

Overview



3SB5

Pushbutton units and indicator lights

Designs

Nominal diameter	22 mm
Version	Plastic, round

Actuators

Pushbutton actuators - opaque	✓
Pushbutton actuators - illuminated	✓
Selector actuators - opaque	✓
Selector actuators - illuminated	✓
Key actuators	✓
E-stop mushroom actuators	✓
Twin push buttons - opaque	✓
Twin push buttons - illuminated	✓

Indicators

Compact indicators - LED	✓
Compact indicators - Filament	✓
Wide voltage band indicators - LED	✓
Modular indicators	✓

Contact blocks

Compact	✓
Regular	✓

Illumination Modules

Integrated LED	✓
BA9S LED	✓
BA9S Filament	✓

Connections

Screw terminals	✓
-----------------	---



3SB5

Enclosures

Enclosures

Plastic	✓
Metal	✓

Actuators

Pushbuttons and switches	✓
Illuminated pushb. and switches	✓
Mushroom pushbuttons	✓
Push-pull buttons	✓
EMERGENCY-STOP mushroom pushbuttons	✓
Selector switches	✓
Locks	✓

Indicators

Indicator lights	✓
------------------	---

Contact blocks

Single-pole	✓
Two-pole	—

Terminals

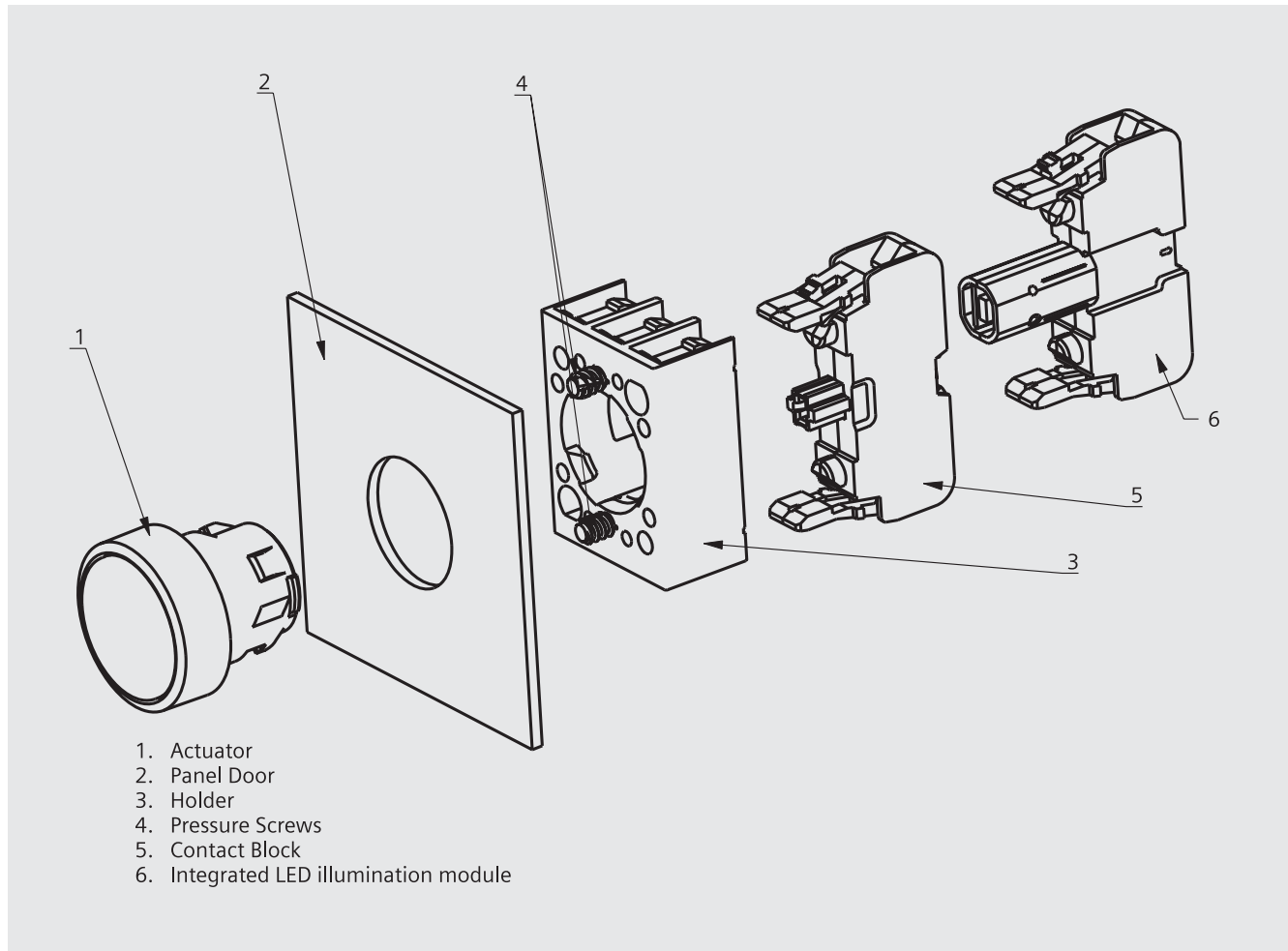
Screw terminals	✓
-----------------	---

3SB5 Pushbutton Units and Indicating Lamps, 22 mm

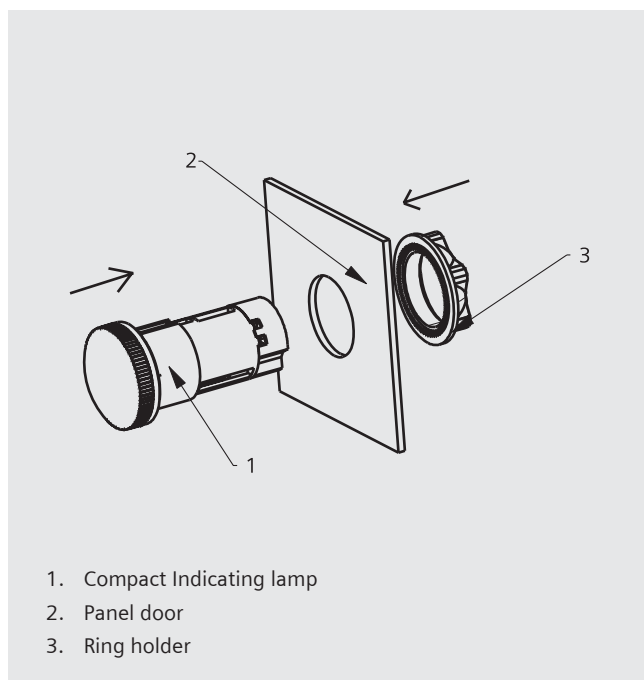
General data

Overview

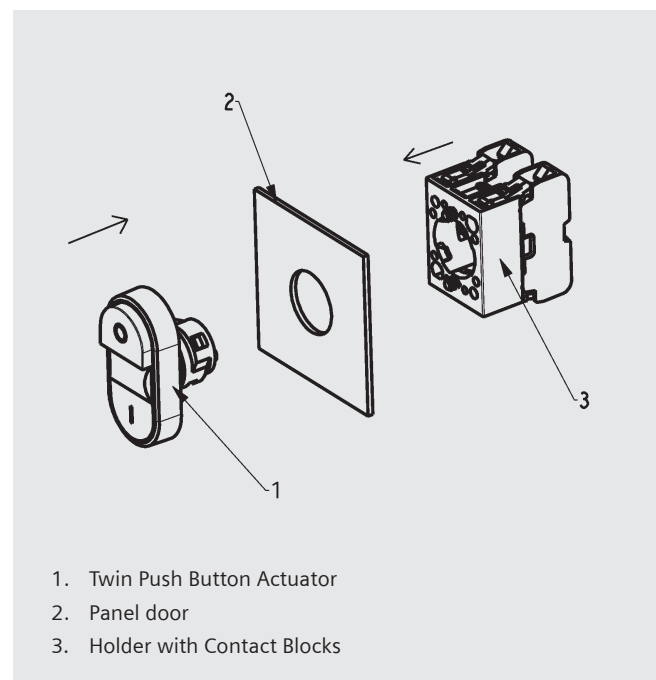
Panel door



3SB5 compact pilot light



3SB5 twin push button



Actuator

Design

The 3SB5 series is a modular range of commanding and signalling devices for front panel mounting and rear conductor connection.



The devices are of modern industrial design and can be mounted rapidly by a single person. The operating surfaces of the pushbuttons and illuminated pushbuttons are concave. The lenses of the indicator lights are convex.

One command position comprises:

- An actuator or lens assembly in front of the control panel
- A holder for mounting behind the control panel
- A comprehensive range of accessories for inscription

Two contact blocks can be snapped onto the actuator in the standard version.

- Holder for 3 contact blocks or for 2 contact blocks and 1 lampholder
- Thrust pad for actuating a central contact block when using selector actuator and key actuator
- Thrust cap for actuating a central contact block when using push button actuator

For all executions the holder is included as standard.

Standards

IEC 60947-5-1, IS 13947-5-1

Connection methods

The devices are available with screw terminals.

3SB5 Pushbutton Units and Indicating Lamps, 22 mm

Actuators, Plastic, 22 mm

Actuators






Selection and ordering data

Version	Colour	Order No.	Weight per PU approx. kg				
Pushbuttons with holder							
	Opaque normal	Red Green Blue White Yellow Black	3SB50 00-0AC01 3SB50 00-0AE01 3SB50 00-0AF01 3SB50 00-0AG01 3SB50 00-0AD01 3SB50 00-0AB01	0.0215 0.0215 0.0215 0.0215 0.0215 0.0215			
		Opaque raised	Red Green Blue White Yellow Black	3SB50 00-0LC01 3SB50 00-0LE01 3SB50 00-0LF01 3SB50 00-0LG01 3SB50 00-0LD01 3SB50 00-0LB01	0.0215 0.0215 0.0215 0.0215 0.0215 0.0215		
			Illuminated normal	Red Green Amber Blue White Yellow Clear	3SB50 01-0AC01-0PQ0 3SB50 01-0AE01-0PQ0 3SB50 01-0AL01-0PQ0 3SB50 01-0AF01-0PQ0 3SB50 01-0AG01-0PQ0 3SB50 01-0AD01-0PQ0 3SB50 01-0AH01-0PQ0	0.023 0.023 0.023 0.023 0.023 0.023 0.023	
				Illuminated raised	Red Green Amber Blue White Yellow Clear	3SB52 18-0LC01-0PQ0 3SB52 18-0LE01-0PQ0 3SB52 18-0LL01-0PQ0 3SB52 18-0LF01-0PQ0 3SB52 18-0LG01-0PQ0 3SB52 18-0LD01-0PQ0 3SB52 18-0LH01-0PQ0	0.023 0.023 0.023 0.023 0.023 0.023 0.023
				Twin pushbutton with holder			
					Opaque twin pushbutton with 1NO & 1NC		3SB52 01-7EC01
				Illuminated twin¹⁾ pushbutton with 1NO & 1NC		3SB52 34-7EC01	0.04662

1) Use illumination module with integrated LED only

3SB5 Pushbutton Units and Indicating Lamps, 22 mm Actuators, Plastic, 22 mm

Actuators

Version	Colour	Order No.	Weight per PU approx. kg	
Mushroom pushbuttons with holder				
	Mushroom pushbuttons, Ø 40 mm momentary	Black Red	3SB50 00-1NB01 3SB50 00-1NC01	0.029 0.029
		Mushroom pushbuttons, Ø 40 mm push to trip, turn to release	Black	3SB50 00-1CB01
Mushroom pushbuttons for emergency stop				
	Mushroom pushbuttons with 1NC push to trip, turn to release	Red	3SB52 03-0UC01	0.050
	Mushroom pushbuttons, Ø 40 mm push to trip, turn to release	Red	3SB50 00-0UC01	0.050
	Mushroom pushbuttons, Ø 40 mm push to trip, pull to release	Red	3SB50 00-0VC01	0.050
	Mushroom pushbuttons, Ø 40 mm push to trip, key to release	Red	3SB50 00-0TC01	0.050

3SB5 Pushbutton Units and Indicating Lamps, 22 mm

Actuators, Plastic, 22 mm

Actuators

Version	Version	Colour	Order No.	Weight per PU approx. kg
---------	---------	--------	-----------	--------------------------

Selector switches with holder

2 position

Selector switches with 2 switch positions



Switching sequence O-I,
100° operating angle

Opaque Maintained

Black
Red

3SB50 00-2AB01
3SB50 00-0AC01

0.024
0.024

Switching sequence O-I,
50° operating angle

Opaque Momentary

Black
Red

3SB50 00-2BB01
3SB50 00-2BC01

0.024
0.024



Switching sequence O-I,
100° operating angle

Illuminated Maintained

Red
Green
Blue
Yellow
Clear

3SB50 01-2AC01
3SB50 01-2AE01
3SB50 01-2AF01
3SB50 01-2AD01
3SB50 01-2AH01

0.024
0.024
0.024
0.024
0.024

Switching sequence O-I,
50° operating angle

Illuminated Momentary

Red
Green
Blue
Yellow
Clear

3SB50 01-2BC01
3SB50 01-2BE01
3SB50 01-2BF01
3SB50 01-2BD01
3SB50 01-2BH01

0.024
0.024
0.024
0.024
0.024

3 position

Selector switches with 3 switch positions



Switching sequence I-O-II,
2 x 50° operating angle

Opaque Maintained

Black
Red

3SB50 00-2DB01
3SB50 00-2DC01

0.024
0.024

Switching sequence I-O-II,
2 x 50° operating angle

Opaque Momentary

Black
Red

3SB50 00-2EB01
3SB50 00-2EC01

0.024
0.024



2 x 50° operating angle

Illuminated Maintained

Red
Green
Blue
Yellow
Clear

3SB50 01-2DC01
3SB50 01-2DE01
3SB50 01-2DF01
3SB50 01-2DD01
3SB50 01-2DH01

0.024
0.024
0.024
0.024
0.024

Switching sequence I-O-II,
2 x 50° operating angle,

Illuminated Momentary

Red
Green
Blue
Yellow
Clear

3SB50 01-2EC01
3SB50 01-2EE01
3SB50 01-2EF01
3SB50 01-2ED01
3SB50 01-2EH01

0.024
0.024
0.024
0.024
0.024

Version	Key removal position	Order No.	Weight per PU approx. kg
---------	----------------------	-----------	--------------------------

Key-operated switches with holder

Key-operated switches with 2 keys & 2 switch positions

Switching sequence O-I,
100° operating angle, maintained

L - KR



3SB50 00-4AC01

0.057

KL - R



3SB50 00-4AA01

0.057

KL - KR



3SB50 00-4AB01

0.057

Switching sequence O-I,
50° operating angle, momentary

KL < R



3SB50 00-4TA01

0.057

L > KR



3SB50 00-4TC01

0.057



Key-operated switches with 2 keys & 3 switch positions

Switching sequence I-O-II,
2 x 50° operating angle, maintained

L - KC - R



3SB50 00-4HA01

0.057

KL - C - KR



3SB50 00-4HC01

0.057

KL - KC - KR



3SB50 00-4HB01

0.057

Switching sequence O-I,
2 x 50° operating angle, momentary

L > KC < R



3SB50 00-4JA01

0.057

* Key removable position



L - Left, R - Right, C - Centre, KL - Key at Left, KR - Key at Right, KC - Key at Centre

3SB5 Pushbutton Units and Indicating Lamps, 22 mm

Components for Actuators

Contact blocks

Selection and ordering data

Version	Symbols	Operating travel	Order No.	Weight per PU approx.
		 Contact closed  Contact open		kg

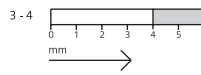
Contact blocks for front plate mounting



Contact blocks with one contact

- Mounting depth: 50 mm

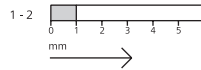
1 NO



3SB54 00-0B

0.011

1 NC



3SB54 00-0C

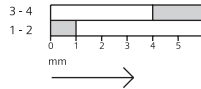
0.011



Contact blocks with 2 contacts

Mounting depth 63 mm (including unit labeling plate)

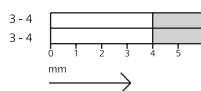
1 NO + 1 NC



3SB54 00-0A

0.018

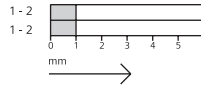
2 NO



3SB54 00-0E

0.018

2 NC



3SB54 00-0F

0.018

3SB5 Pushbutton Units and Indicating Lamps, 22 mm Indicating Lamps

Indicating lamps

Selection and ordering data

Version	Rated Voltage V	Colour	Order No.	Weight per PU approx. kg			
Compact LED indicating lamp							
    	Compact LED indicating lamp	24 V AC/DC	Red Green Amber Blue White Yellow Clear	3SB52 85-6HC01 3SB52 85-6HE01 3SB52 85-6HL01 3SB52 85-6HF01 3SB52 85-6HG01 3SB52 85-6HD01 3SB52 85-6HH01	0.017 0.017 0.017 0.017 0.017 0.017 0.017		
		30 V DC®	Red Green Amber Blue White Yellow Clear	3SB52 85-6HC13 3SB52 85-6HE13 3SB52 85-6HL13 3SB52 85-6HF13 3SB52 85-6HG13 3SB52 85-6HD13 3SB52 85-6HH13	0.017 0.017 0.017 0.017 0.017 0.017 0.017		
		110 V AC 50/60 Hz	Red Green Amber Blue White Yellow Clear	3SB52 85-6HC02 3SB52 85-6HE02 3SB52 85-6HL02 3SB52 85-6HF02 3SB52 85-6HG02 3SB52 85-6HD02 3SB52 85-6HH02	0.017 0.017 0.017 0.017 0.017 0.017 0.017		
		110 V DC®	Red Green Amber Blue White Yellow Clear	3SB52 85-6HC04 3SB52 85-6HE04 3SB52 85-6HL04 3SB52 85-6HF04 3SB52 85-6HG04 3SB52 85-6HD04 3SB52 85-6HH04	0.017 0.017 0.017 0.017 0.017 0.017 0.017		
		220/240 V AC 50/60 Hz	Red Green Amber Blue White Yellow Clear	3SB52 85-6HC03 3SB52 85-6HE03 3SB52 85-6HL03 3SB52 85-6HF03 3SB52 85-6HG03 3SB52 85-6HD03 3SB52 85-6HH03	0.017 0.017 0.017 0.017 0.017 0.017 0.017		
		220 V DC®	Red Green Amber Blue White Yellow Clear	3SB52 85-6HC05 3SB52 85-6HE05 3SB52 85-6HL05 3SB52 85-6HF05 3SB52 85-6HG05 3SB52 85-6HD05 3SB52 85-6HH05	0.017 0.017 0.017 0.017 0.017 0.017 0.017		
	Compact BA9s filament indicating lamp						
	  	Compact BA9s filament indicating lamp	24 V AC/DC	Red Green Amber Blue Clear	3SB52 86-6HC01 3SB52 86-6HE01 3SB52 86-6HL01 3SB52 86-6HF01 3SB52 86-6HH01	0.175 0.175 0.175 0.175 0.175	
			110 V AC/DC	Red Green Amber Blue Clear	3SB52 86-6HC11 3SB52 86-6HE11 3SB52 86-6HL11 3SB52 86-6HF11 3SB52 86-6HH11	0.175 0.175 0.175 0.175 0.175	
			230 V AC/DC	Red Green Amber Blue Clear	3SB52 86-6HC12 3SB52 86-6HE12 3SB52 86-6HL12 3SB52 86-6HF12 3SB52 86-6HH12	0.175 0.175 0.175 0.175 0.175	
		Compact indicating lamp without lamp⁵					
			To be used with BA9s filament lamp of appropriate voltage		Red Green Amber Blue Clear	3SB52 86-6HC00 3SB52 86-6HE00 3SB52 86-6HL00 3SB52 86-6HF00 3SB52 86-6HH00	0.175 0.175 0.175 0.175 0.175

@ Use of bridge rectified DC source (filtered O/P) recommended

\$ To be used with BA9s filament lamp at appropriate / required voltage. Bulb will be at an additional charge

3SB5 Pushbutton Units and Indicating Lamps, 22 mm

Indicating Lamps

Indicating lamps

Version	Rated Voltage V	Colour	Order No.	Weight per PU approx. kg					
Indicators									
	Wide band LEDs	42 V to 240 V AC	Red Green Amber Blue	3SB52 35-6HC10 3SB52 35-6HE10 3SB52 35-6HL10 3SB52 35-6HF10	0.060 0.060 0.060 0.060				
		42 V to 220 V DC	White Yellow Clear	3SB52 35-6HG10 3SB52 35-6HD10 3SB52 35-6HH10	0.060 0.060 0.060				
		Modular indicating lamps							
			Lens assembly with holder		Red Green Amber Blue White Yellow Clear	3SB52 01-6BC00 3SB52 01-6BE00 3SB52 01-6BL00 3SB52 01-6BF00 3SB52 01-6BG00 3SB52 01-6BD00 3SB52 01-6BH00	0.019 0.019 0.019 0.019 0.019 0.019 0.019		
				Illumination module with integrated LED					
					24 V AC/DC	Red Green Amber Blue White Yellow	3SB54 00-7CC 3SB54 00-7CE 3SB54 00-7CL 3SB54 00-7CF 3SB54 00-7CG* 3SB54 00-7CD	0.0125 0.0125 0.0125 0.0125 0.0125 0.0125	
110 V AC	Red Green Amber Blue White Yellow					3SB54 00-7EC 3SB54 00-7EE 3SB54 00-7EL 3SB54 00-7EF 3SB54 00-7EG* 3SB54 00-7ED	0.0125 0.0125 0.0125 0.0125 0.0125 0.0125		
	110 V DC®					Red Green Amber Blue White Yellow	3SB54 00-7DC 3SB54 00-7DE 3SB54 00-7DL 3SB54 00-7DF 3SB54 00-7DG* 3SB54 00-7DD	0.0125 0.0125 0.0125 0.0125 0.0125 0.0125	
						230 V AC	Red Green Amber Blue White Yellow	3SB54 00-7TC 3SB54 00-7TE 3SB54 00-7TL 3SB54 00-7TF 3SB54 00-7TG* 3SB54 00-7TD	0.0125 0.0125 0.0125 0.0125 0.0125 0.0125
							220 V DC®	Red Green Amber Blue White Yellow	3SB54 00-7HC 3SB54 00-7HE 3SB54 00-7HL 3SB54 00-7HF 3SB54 00-7HG* 3SB54 00-7HD
		Illumination module with BA9s LED							
			24 V AC/DC		Red Green Blue Yellow			3SB54 00-8CC 3SB54 00-8CE 3SB54 00-8CF 3SB54 00-8CD	0.015 0.015 0.015 0.015
110 V AC/DC#					Red Green Blue Yellow			3SB54 00-8FC 3SB54 00-8FE 3SB54 00-8FF 3SB54 00-8FD	0.25 0.25 0.25 0.25
	240 V AC#				Red Green Blue Yellow			3SB54 00-8SC 3SB54 00-8SE 3SB54 00-8SF 3SB54 00-8SD	0.25 0.25 0.25 0.25
					Illumination module with BA9s filament lamp				
					Lamp holder with BA9s filament lamp	24 V AC/DC (24 V lamp)	3SB54 00-6CC	0.0135	
110 V AC/DC (130 V lamp)						3SB54 00-6FH	0.0135		
230 V AC/DC (230 V lamp)	3SB54 00-6LH	0.0135							

* Can be used with clear lens

@ Use of rectified DC source (filtered O/P) recommended

With voltage reducer






Note: All illumination modules can be used along with illuminated push buttons, illuminated selector actuators and modular indicating lamps.



3SB5 Pushbutton Units and Indicating Lamps, 22 mm



Accessories and Spare Parts

Accessories and spare parts

Selection and ordering data

Version	Colour	Order No.	Weight per PU approx. kg	
Pusher caps and lenses				
	Normal opaque For opaque pushbuttons	Red	3SB59 10-0AC	0.001
		Green	3SB59 10-0AE	0.001
		Blue	3SB59 10-0AF	0.001
		White	3SB59 10-0AG	0.001
		Yellow	3SB59 10-0AD	0.001
		Black	3SB59 10-0AB	0.001
	Raised opaque For opaque pushbuttons	Red	3SB59 10-0BC	0.002
		Green	3SB59 10-0BE	0.002
		Blue	3SB59 10-0BF	0.002
		White	3SB59 10-0BG	0.002
		Yellow	3SB59 10-0BD	0.002
		Black	3SB59 10-0BB	0.002
	Normal illuminated For illuminated pushbuttons	Red	3SB59 10-0CC	0.001
		Green	3SB59 10-0CE	0.001
		Amber	3SB59 10-0CR	0.001
		Blue	3SB59 10-0CF	0.001
		White	3SB59 10-0CG	0.001
		Yellow	3SB59 10-0CD	0.001
		Clear	3SB59 10-0CH	0.001
	Raised illuminated For illuminated pushbuttons raised	Red	3SB59 10-0DC	0.002
		Green	3SB59 10-0DE	0.002
		Amber	3SB59 10-0DR	0.002
		Blue	3SB59 10-0DF	0.002
		White	3SB59 10-0DG	0.002
		Yellow	3SB59 10-0DD	0.002
		Clear	3SB59 10-0DH	0.002
	Lenses For indicator lamps	Red	3SB59 10-1PC	0.006
		Green	3SB59 10-1PE	0.006
		Amber	3SB59 10-1PR	0.006
		White	3SB59 10-1PG	0.006
		Yellow	3SB59 10-1PD	0.006
		Clear	3SB59 10-1PH	0.006







Version	Rated Voltage V	Colour	Order No.	Weight per PU approx. kg
Lamps				
	24V/2W 130V/2.5W 230V/2.7W		3SB59 02-6C	0.0015
			3SB59 02-6D	0.0015
			3SB59 02-6E	0.0015
	24V AC/DC	Red	3SB59 02-3FK	0.002
		Green	3SB59 02-3GK	0.002
		Blue	3SB59 02-3JK	0.002
		Yellow	3SB59 02-3HK	0.002

Version	Use	Colour	Order No.	Weight per PU approx. kg	
Protective caps¹⁾, degree of protection IP67					
	Protective caps	Flat button (plastic)	Clear	3SB59 02-0AK	0.0013
				3SB59 02-0AN	0.0085
	Protective caps	Raised button (plastic)	Clear	3SB59 02-0AN	0.0085

3SB5 Pushbutton Units and Indicating Lamps, 22 mm

Accessories and Spare Parts

Accessories and spare parts

Version	Order No.	Weight per PU approx. kg
Other accessories		
	Adapter plate for replacing 30 mm by 22 mm	3SB59 21-0AE 0.007
	Lamp extractors For lamps with BA 9s lamps and LEDs	3SB59 02-2AD 0.0085
	Plastic front ring	3SB59 11-1BA 0.0016
	Thrust cap for pushbuttons for actuating middle module	3SB59 02-0AA 0.0005
	Thrust pad for selector actuators for actuating middle module	3SB59 12-0AN 0.0001
	Blanking plug for empty enclosures	3SB59 12-0BC 0.0150

3SB5 Pushbutton Units and Indicating Lamps, 22 mm Enclosures

General data

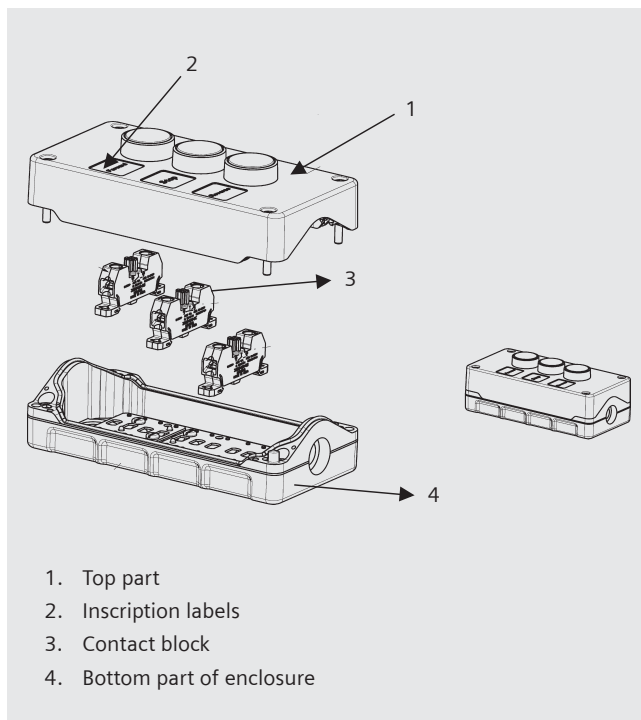
Overview



Enclosed pushbutton units and indicating lamps are used as hand operated control devices for separately allocated control units and cabinets. The devices are suitable for use in any climate.

Enclosures with handle are available for suspension (e.g. for crane control units).

Enclosures with standard fittings



1. Top part
2. Inscription labels
3. Contact block
4. Bottom part of enclosure

Standards

IEC 60947-5-1, IS 13947-5-1

Overview

Enclosures with standard fittings are available with:

- 1 to 3 command positions in metal / plastic enclosures
- 1 way is available in 2 colours, grey & yellow
- Operational voltage up to 440 V
- Vertical mounting type
- Empty plastic enclosures are available in 6 and 4 way
- Contact blocks for base mounting (are snapped into the enclosure base). Screw terminals as standard.

Colour of enclosure cover:

- Gray, RAL 7035, or
- Yellow, RAL 1004 (1 way only)

Colour of enclosure base:

- Black, RAL 9005

3SB5 Pushbutton Units and Indicating Lamps, 22 mm Enclosures

Customer-specific enclosures



Overview

- Operational voltage up to 400 V
- One command position comprises:
 - 1 actuator or indicator
 - Up to 3 contact blocks or up to 2 contact blocks + 1 lampholder
 - 1 inscription label

For plastic and metal enclosures the command positions are equipped as standard with actuators.

For routing the cable in, one hole for M20 (for 1 to 3 command positions) or for M25 (for 4 or 6 command positions) is provided at the top and bottom.

Selection and ordering data

Version	Number of command positions	Order No.	Weight per PU approx. kg	
Metal enclosures				
	Normal opaque push button - Green with 1NO contact block, "START"	1	3SB58 01-8AA3	0.423
	Red mushroom momentary actuator, with 1NC contact block, "STOP"	1	3SB58 01-8AN3	0.430
	Red maintained mushroom actuator, turn to release, with 1NC contact block, "E-STOP"	1	3SB58 01-8AM3	0.440
	Normal opaque push button - Green with 1NO contact block, "START" + Normal opaque push button - Red with 1NC contact block, "STOP"	2	3SB58 02-8AC3	0.520
	Normal opaque push button - Green with 1NO contact block, "START" + Red mushroom-maintained with 1NC contact block, "STOP"	2	3SB58 02-0AE3	
	Normal opaque push button - Green with 1NO contact block, "FORWARD" + Normal opaque push button - Red with 1NC contact block, "STOP" + Normal opaque push button - Black with 1NO contact block, "REVERSE"	3	3SB58 03-8AH3	0.441
Plastic enclosures				
	Normal opaque push button - Green with 1NO contact block, "START"	1	3SB58 01-7AA3	0.196
	Red mushroom momentary actuator, with 1NC contact block, "STOP"	1	3SB58 01-7AN3	0.203
	Red maintained mushroom actuator, turn to release, with 1NC contact block, "E-STOP"	1	3SB58 01-7AM3	0.213
	Normal opaque push button - Green with 1NO contact block, "START" + Normal opaque push button - Red with 1NC contact block, "STOP"	2	3SB58 02-7AC3	0.285
	Normal opaque push button - Green with 1NO contact block, "START" + Red mushroom-maintained with 1NC contact block, "STOP"	2	3SB58 02-7AE3	0.302
	Normal opaque push button - Green with 1NO contact block, "FORWARD" + Normal opaque push button - Red with 1NC contact block, "STOP" + Normal opaque push button - Black with 1NO contact block, "REVERSE"	3	3SB58 04-7AG3	0.300

3SB5 Pushbutton Units and Indicating Lamps, 22 mm Enclosures

Customer-specific enclosures

Version	Number of command positions	Order No.	Weight per PU approx. kg
---------	-----------------------------	-----------	--------------------------

Pendant mounting: Metal



Normal opaque push button - Green with 1NO contact block, "START"
+ Normal opaque push button - Red with 1NC contact block, "STOP"

2

3SB58 22-8AC3

0.810

Normal opaque push button - Green with 1NO contact block, "FORWARD"
+ Normal opaque push button - Red with 1NC contact block, "STOP"
+ Normal opaque push button - Black with 1NO contact block, "REVERSE"

3

3SB58 23-8AH3

0.820

Pendant Mounting: Plastic



Normal opaque push button - Green with 1NO contact block, "START"

1

3SB5821-7AA3

0.19678

Normal opaque push button - Green with 1NO contact block, "START"
+ Normal opaque push button - Red with 1NC contact block, "STOP"

2

3SB5822-7AC3

0.28938

Normal opaque push button - Green with 1NO contact block, "FORWARD"
+ Normal opaque push button - Red with 1NC contact block, "STOP"
+ Normal opaque push button - Black with 1NO contact block, "REVERSE"



3

3SB5823-7AH3

0.61525

3SB5 Pushbutton Units and Indicating Lamps, 22 mm Enclosures

Empty enclosures

Version	Number of command positions	Colour	Order No.	Weight per PU approx. kg
Empty enclosures, plastic				
	<i>1 to 3 command positions, 4 and 6 command positions</i>			
	1	Grey	3SB58 01-0AC3	0.187
	2	Grey	3SB58 02-0AC3	0.267
	3	Grey	3SB58 03-0AC3	0.273
	4	Grey	3SB58 04-0AC3	0.310
	6	Grey	3SB58 06-0AC3	0.400
	1	Yellow	3SB58 01-0AD3	0.187
Empty enclosures, metal				
	<i>1 to 3 command positions</i>			
	1		3SB58 01-4AC3	0.414
	2		3SB58 02-4AC3	0.502
	3		3SB58 03-4AC3	0.623

3SB5 Pushbutton Units and Indicating Lamps, 22 mm Enclosures

Lampholders and contact blocks

Selection and ordering data

Version	Rated Voltage V	Screw terminals	Weight per PU approx.
		Order No.	kg

BA9s lampholder



BA 9s lampholders
Without lamp

110 V AC/DC
230 V AC/DC

3SB54 20-2PF0
3SB54 20-2PL0

0.013
0.013

Contact blocks with one contact



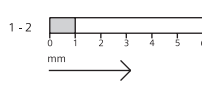
Contact blocks with one contact
1 NO



3SB54 20-0B

0.0105

1 NC



3SB54 20-0C

0.0105

Version	Order No.	Weight per PU approx.
		kg

Accessories



Set of 11 labels
Start, Stop, ON, OFF, Up, Down, Open, Close
Forward, Reverse, Emergency Off

3SB59 01-3EA

0.001



Inscription label
With set of 10
(Right, Left, Test, Reset, Auto Man,
Inch, Trip, Slow, Fast)

3SB59 01-3CH



Tool for fitting actuator on metal enclosure

3SB59 02-2BX

0.150

Blank Page

Commanding and Signalling Devices



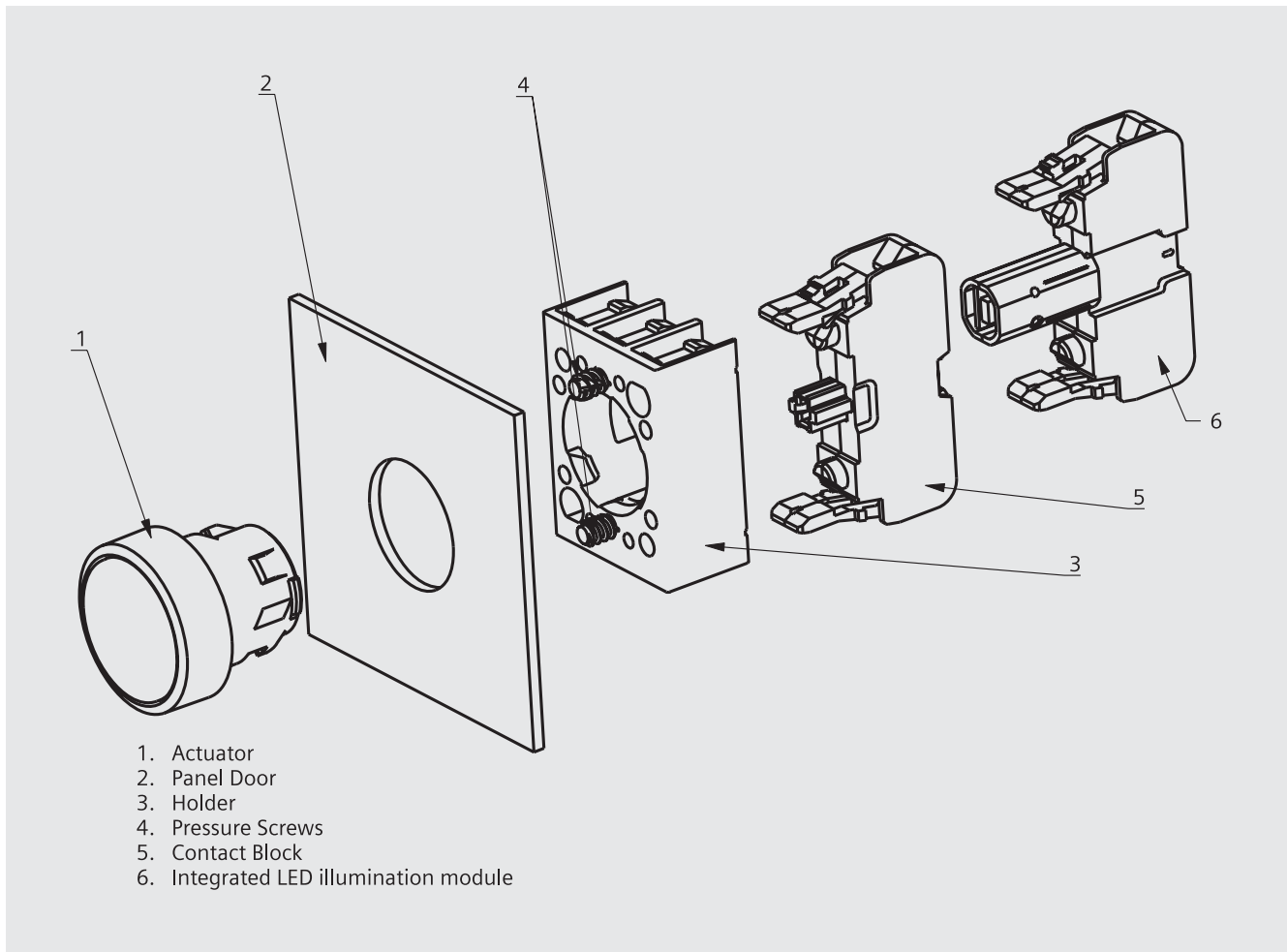
22	Introduction
3SB5 Pushbutton Units and Indicating Lamps, 22 mm	
23	General data
24	Technical data
3SB5 Pushbutton Units and Indicating Lamps, 22 mm Enclosures	
25	General data
27	Project planning aids

3SB5 Pushbutton Units and Indicating Lamps, 22 mm

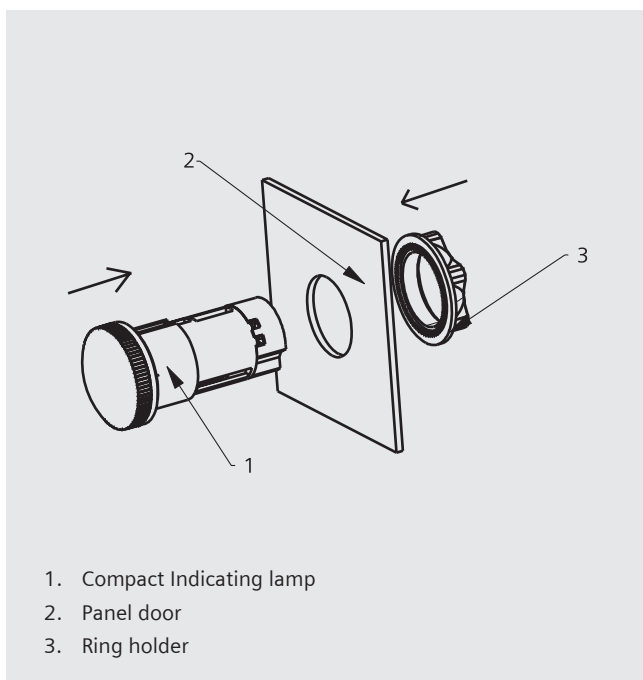
Technical data
General data

Overview

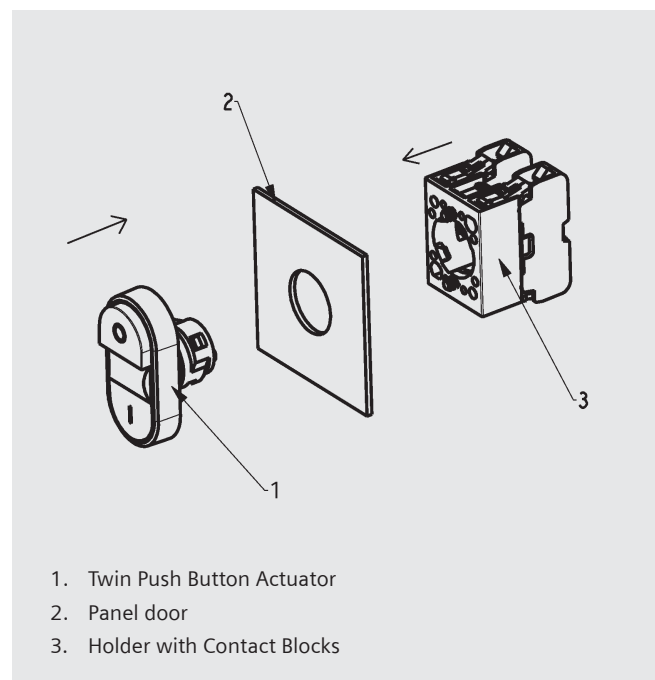
Front plate mounting



3SB5 compact pilot light



3SB5 twin push button



Design

Holders

The holders are used for mounting the actuating or signalling elements and are plugged into the rear of the panel door.

The holder for the round versions is set to a switchboard thickness of 1 to 6 mm.

When label holders, protective caps or similar accessories are used, the greatest permissible panel thickness must be reduced by the wall thickness of the accessory part.

Contact blocks and lampholders

The contact blocks are fitted with (1 NO contact or 1 NC contact) with double operating contacts. These ensure a high switching reliability even with small voltages and currents, such as 5 V/1 mA.

The switch contacts of the NC contact are positively driven.

For illuminated elements, lampholders with an integrated LED or with a base for replaceable bulbs can be supplied.

For indicating lamps holder, ring holder helps in faster assembly thus reducing installation time.

Wider voltage range 3SB5 wide band indicating lamps are supplied with integrated LEDs. This would help in reducing the inventory cost.

Mounting

The 3SB5 devices can be easily and quickly mounted:

- Actuators or indicator lights are positioned in the opening of the front panel from the front
- Position the holder from the rear
- Tighten the screw on the holder
- Snap on the contact block or the lampholder directly onto the actuator from the back

Connection methods

The following devices are available:

- Screw terminal (SIGUT termination)

The devices with screw terminals have open terminals, screws that cannot be lost, funnel-shaped cable entries and screwdriver fed openings, all of which saves time when connecting and enables the use of motorized screwdrivers.

Enclosures

Plastic enclosures are available with 1, 2, 3, 4 or 6 command positions. Metal enclosures are available in 1, 2 or 3 command positions.

3SB5 Pushbutton Units and Indicating Lamps, 22 mm

Technical data General data

Pushbuttons and indicating lamps

Rated insulation voltage U_i	All executions except lamp holder	AC 690V, 50Hz
	BA9s lamp holder	AC 250V, 50Hz; DC 250V
	Illumination module with integrated LED / Compact Pilot Light	AC 440V, 50Hz; DC 250V
Rated operational voltage U_e	For contact blocks	660V, 50Hz
	For Illumination modules with integrated LED	24V AC/DC, 110V AC, 110V DC, 230V AC, 220V DC
	For Illumination modules with BA9s LED lamp	24V AC/DC, 110V AC/DC, 240V AC
	For Illumination modules with BA9s filament lamp	24V AC/DC, 110V AC/DC, 230V AC/DC
	For Compact LED indicating lamps	24V AC/DC, 110V AC, 110V DC, 220/240V AC, 220V DC
	For compact BA9s filament indicating lamp	24V AC/DC, 110V AC/DC, 230V AC/DC
Back-up HRC fuse rating	16A quick acting cartridge	
	10A delayed acting cartridge	
Mechanical life	All actuators (except the following)	10×10^6 cycles
	Luminous actuators	3×10^6 cycles
	Selector, key and latched mushroom actuator	3×10^5 cycles
Electrical life	Depends on load current e.g. 10×10^6 cycles with 3TH30, 3TF30/31 contactors	
Voltage limits	+10% -15% nominal supply voltage	
Switching frequency	1200 cycles per hour	
Degree of protection	Pushbuttons & Indicating Lamps	Standard execution - IP65 With protective cover - IP67
	Terminals of contact blocks and illumination modules Key execution IP 54	Standard execution - IP20
Permissible service temperature range	-25°C to +60°C	
Terminal capacity	Finely stranded cable with end sleeves (end sealing ferrule)	2×0.5 to 1.5 mm^2
	Solid conductor	2×1 to 2.5 mm^2
	Solid conductor with end sleeves (end sealing ferrule)	2×0.5 to 0.75 mm^2
	Finely stranded cable with end sleeves (end sealing ferrule)	2×1 to 1.5 mm^2 (for compact variants)

Continuous current, rated operational current I_e , contact blocks

I_e /AC-12	I_e /AC-15	U_e Volts (40-60 Hz)	I_e /DC-12	I_e /DC-13	U_e Volts-DC
10 A	6 A	24V	10 A	6 A	24V
	6 A	110V	8 A	4 A	48V
	6 A	220/230V	3.5 A	1.2 A	110V
	4 A	380/400V	1 A	0.4 A	220V

Contact block / Illumination module configuration

Actuator - Illuminated Push button and selector	Voltage	Max. possible lamp holders (lamp holder always in middle position)	Max. possible contact blocks (1st block-left, 2nd-right, 3rd-middle)		Accessory to operate middle contact block (Order separately & snap-fit on actuator)
			Rear connection	Front connection	
With BA9s LED	24V AC/DC	1	2	2	Not applicable
	110V AC/DC,	1	1	1	
	240V AC	1	1	1	
With BA9s Filament lamp	24V AC/DC	1	2	2	Not applicable
	110V AC/DC,				
	230V AC				
Integrated LED	24V AC/DC, 110V AC	1	2	-	Not applicable
	230V AC, 100V DC, 220V DC				
Actuator / Opaque					
Push button	-	-	3	3	Thrust cap
Selector	-	-	3	3	Thrust pad
Key	-	-	3	3	Thrust pad
Mushroom - momentary	-	-	3	3	Thrust cap

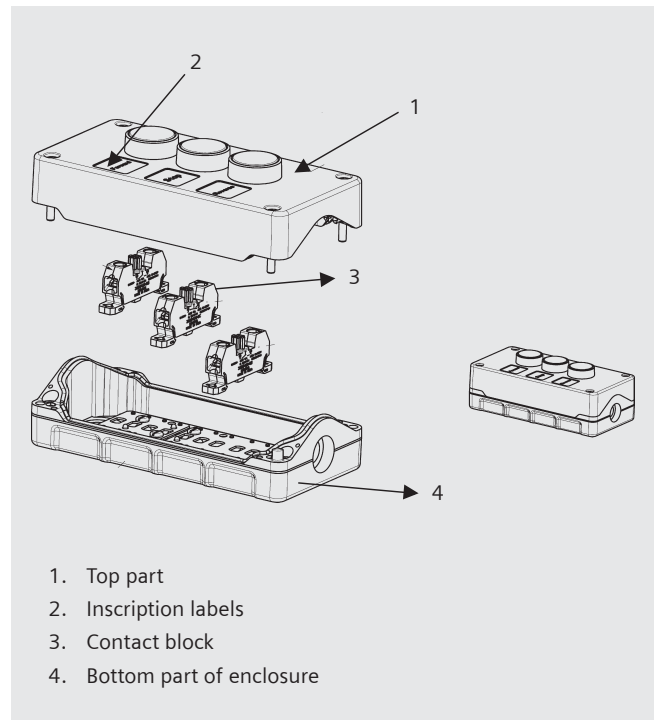
3SB5 Pushbutton Units and Indicating Lamps, 22 mm Enclosures

Technical data
General data

Overview



Enclosures with standard fittings



Enclosed pushbutton units and indicator lights are used as hand operated control devices for separately allocated control units and cabinets. The devices are suitable for use in any climate.

Enclosures with handle are available for suspension (e.g. for crane control units).

The following versions are available:

- Enclosure with standard fittings with 1 to 3 command positions
- Empty enclosures (individual parts must be ordered separately).

Standards

IEC 60947-5-1, IS 13947-5-1

3SB5 Pushbutton Units and Indicating Lamps, 22 mm Enclosures

Technical data General data

Design

Enclosures

Plastic enclosures with 1, 2, 3, 4 or 6 command positions are available. Metal enclosures with 1, 2 or 3 command positions are available.

Cable routing: on the top and bottom narrow ends of the enclosure for an M20 or M25 metric cable gland.

Enclosure colour:

- Cover: RAL 7035 (light gray),
- For EMERGENCY-STOP: RAL 1004 (yellow),
- Base: RAL 9005 (black).

The plastic enclosures comply with the "total insulation" protective measure.

Actuators

Round actuators and lens assemblies for a nominal diameter of 22 mm can be used.

The actuators are fitted through the hole in the cover of the enclosure and are connected to the holder supplied with the actuator and secured in position.

Plastic and metal enclosures are equipped as standard with actuators and indicators made of plastic.

Contact blocks and lampholders

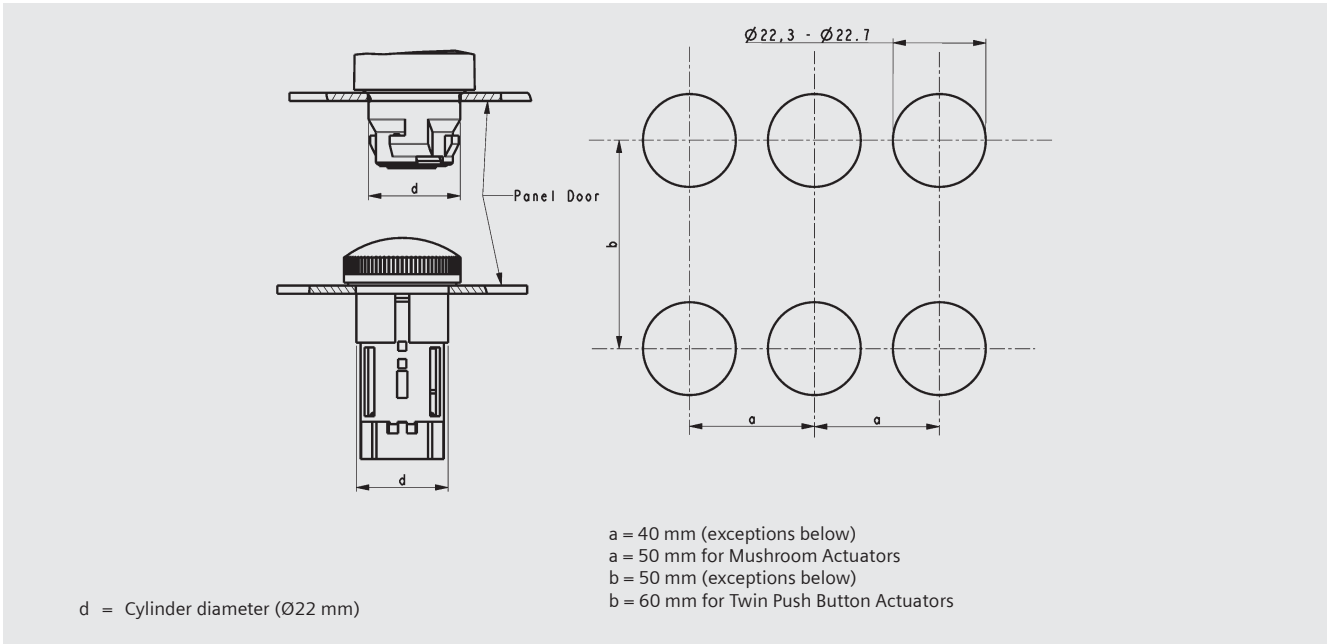
Contact blocks and lampholders for base mounting are snapped into the bottom part of the enclosure. For each command positions, the following components can be fitted:

- 3 contact blocks or
- 2 contact blocks + 1 lampholder

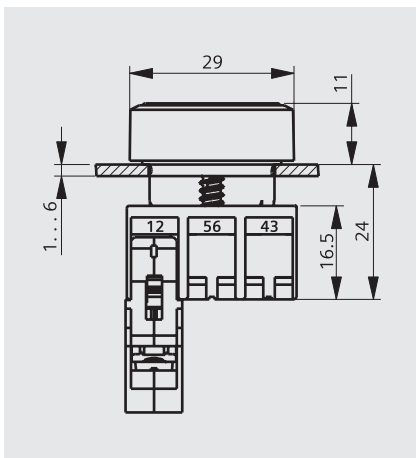
The contact blocks have moving double-break contacts and therefore a high contact.

Dimensional drawings

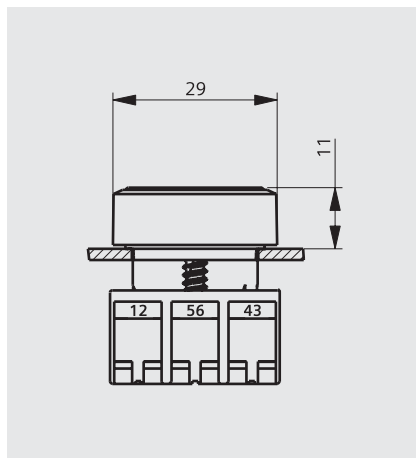
Mounting details for cylinder Ø22 mm



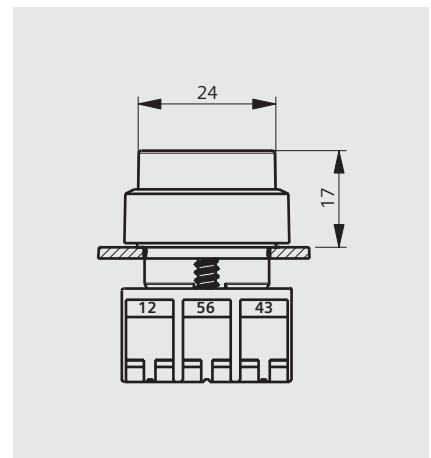
Normal Push Button Actuator with Holder and 1NC Contact Block



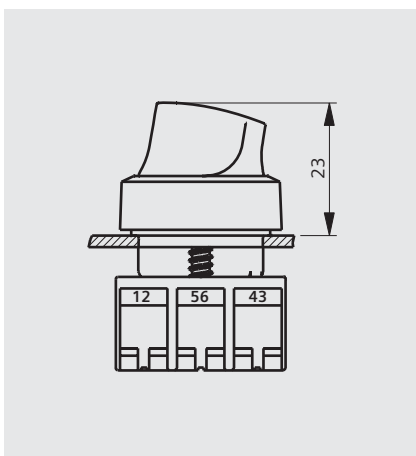
Normal Push Button Actuator with Holder



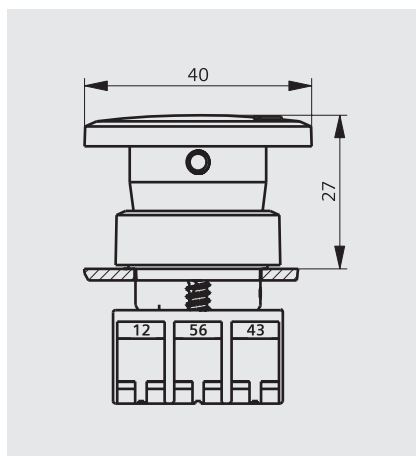
Raised Push Button Actuator with Holder



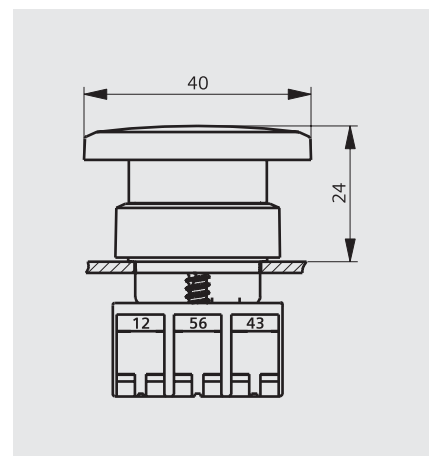
Selector Actuator with Holder



Mushroom Twist to release Actuator with Holder



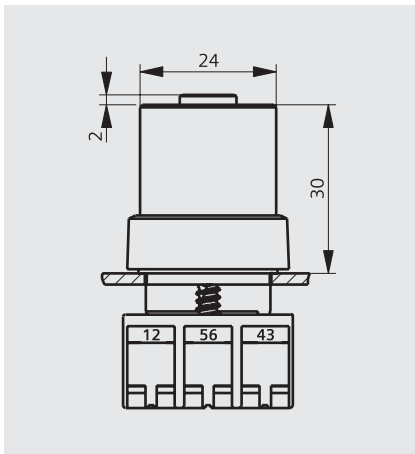
Mushroom Momentary Actuator with Holder



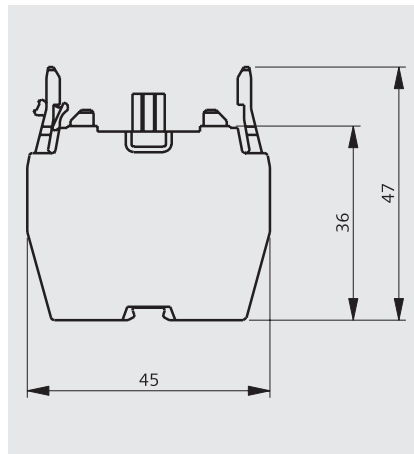
3SB5 Pushbutton Units and Indicating Lamps, 22 mm

Technical data Project planning aids

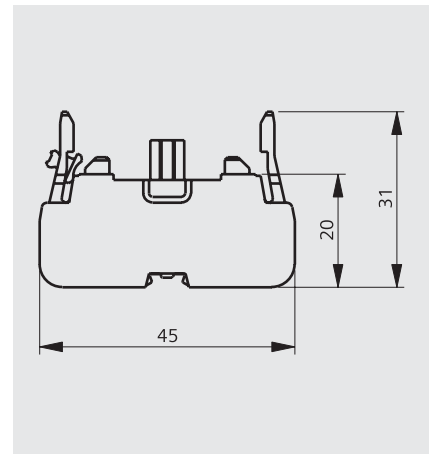
Key Actuator with Holder



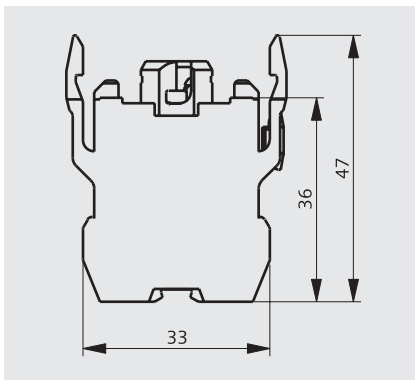
2NO/2NC/1NO+1NC Contact Block
(Front Mounting)



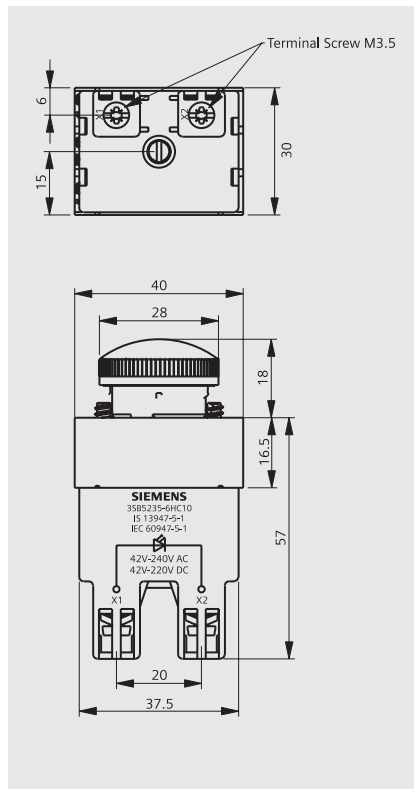
1NO/1NC Contact Block
(Front Mounting)



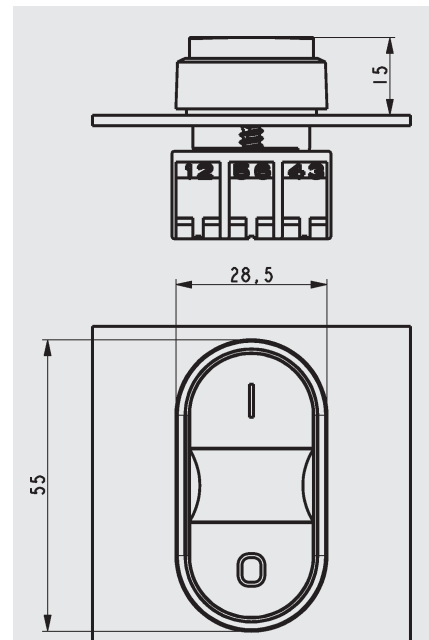
BA9s Lamp Holder



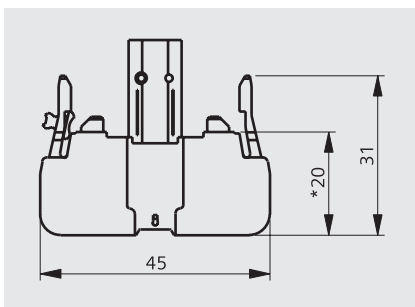
Wide Band LED with Holder and Lens Assembly



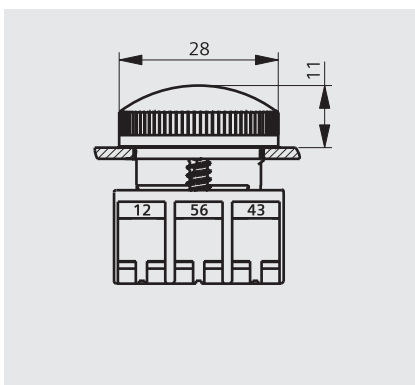
Twin Push Button Actuator with Holder



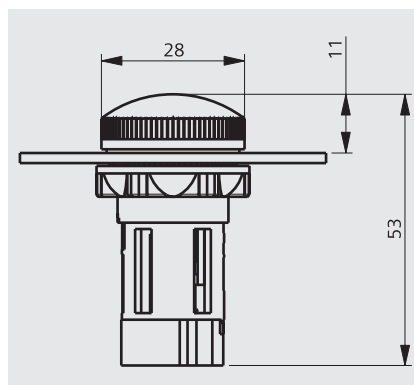
Integrated LED



Lens assembly with Holder



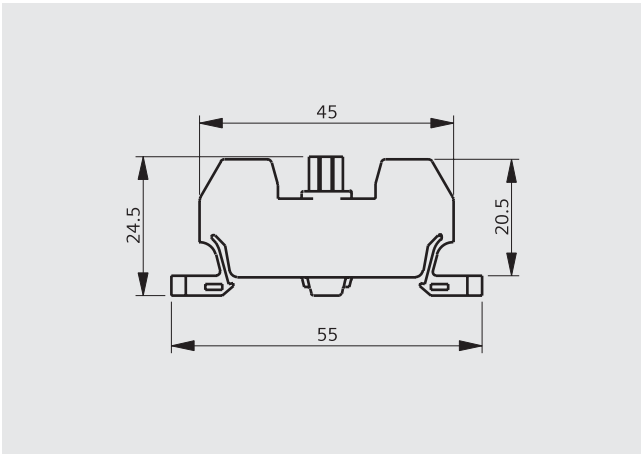
Compact LED/BA9s Pilot Light



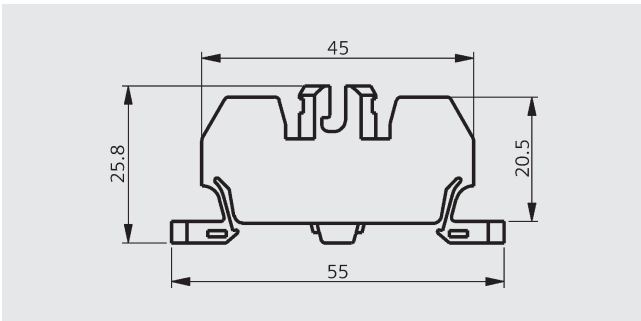
3SB5 Pushbutton Units and Indicating Lamps, 22 mm

Technical data Project planning aids

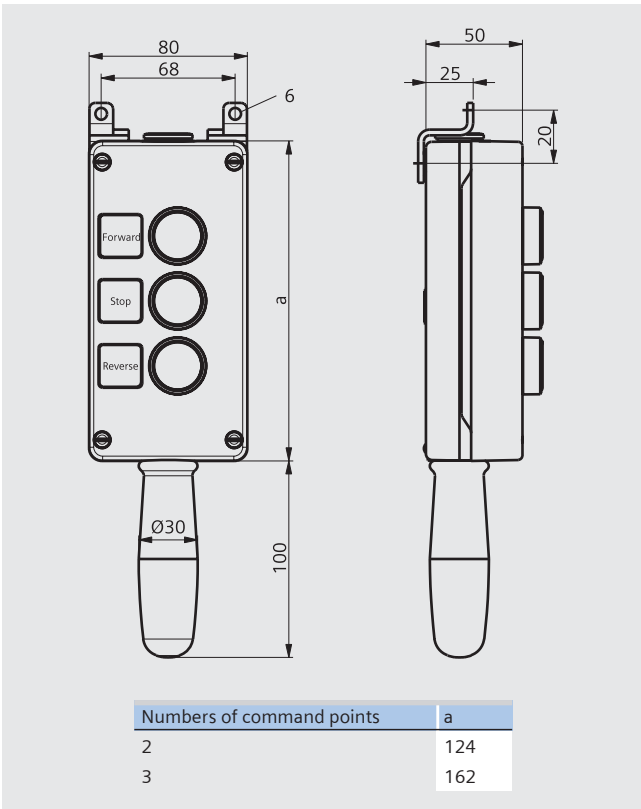
1NC/1NO Contact Block (Base Mounting)



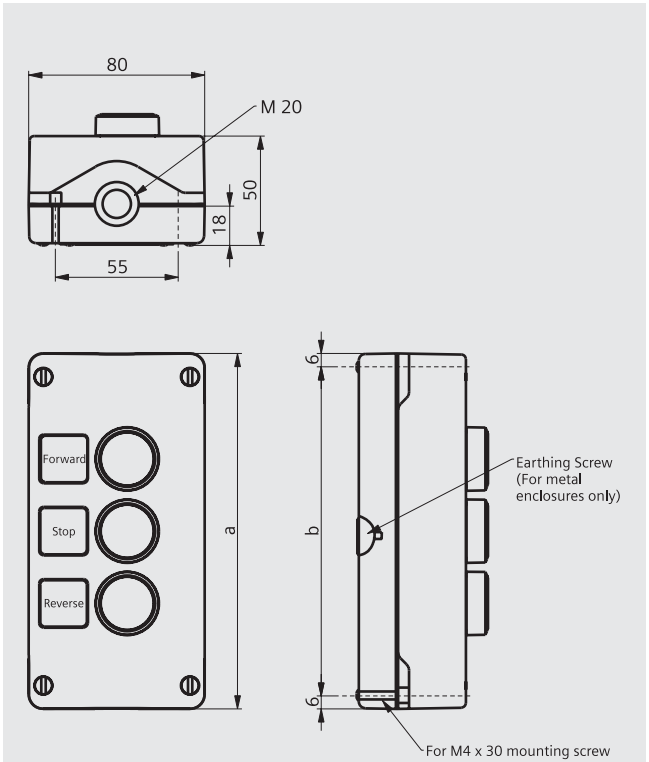
Lamp holder front connection



Pendant Push Button Enclosures (Metal and plastic)



Push Button Enclosures (Plastic & Metal)



* For plastic enclosures only.

Your partners

Sales offices:

Ahmedabad

3rd Floor, Prerna Arbur
Girish Cold Drinks Cross Roads, Off G.C.Road
Ahmedabad - 380009
☎ : +91 79 40207600
Fax: +91 79 40207699

Bengaluru

1st Floor, Jyoti Mahal, No. 49, St. Marks Road
Bengaluru - 560001
☎ : +91 80 22042000
Fax: +91 80 22224131

Chandigarh

SCO 188/191, 3rd Floor, Sector-17 C
Chandigarh - 160017
☎ : +91 172 4690300
Fax: +91 172 4690399

Territory managers:

Aurangabad

A9, Yogeshwari Vrundavan, Nr. Malhar Chowk
Garkheda Parisar, Prem Nagar
Aurangabad - 431210, Maharashtra
Mobile: +91 9766316446
E-mail: santosh.rajhans@siemens.com

Baroda

3rd Floor, OHM Business Park
Opp. Balaji Hospital, Ellora Park, Shubhanpura
Baroda - 390023
☎ : +91 265-669210
Mobile: +91 9825506962
E-mail: bhushan.sawant@siemens.com

Belgaum

H.No.713, Narvekar Lane, Shahpur
Belgaum - 590008, Karnataka
☎ : +91 831 2495156
Mobile: +91 9740277991
E-mail: anand.gawade@siemens.com

Bhilai

25/2, Nehru Nagar (West), SBI Colony
Bhilai - 490020, Chhattisgarh
Mobile: +91 7869913404
E-mail: prashant.ghate@siemens.com

Bhopal

Flat No. 104, Sagar Home Phase-2
Sarvadhama Society, Nayapura Road
Bhopal - 462042, Madhya Pradesh
Mobile: +91 9977228084
E-mail: prajwal.khapekar@siemens.com

Bhubaneswar

Flat No. 109, Hara Priya Apartment
Vivekanand Marg
Bhubaneswar - 751002, Orissa
Mobile: +91 9937097504
E-mail: sumit.sengupta@siemens.com

Calicut

Door No. 19/C - 192 CPM House
Naderi (PO), Koyilandy (via)
Calicut - 673326
Mobile: +91 9645963636
E-mail: ragesh.ri@siemens.com

Cochin

K.G.Oxford Business Centre
3A, Shreekanth Rd, Ravipuram
Cochin - 682016
☎ : +91 4028611222
Mobile: +91 9387384848
E-mail: sudheer.ts@siemens.com

Cochin

K.G.Oxford Business Centre
3A, Shreekanth Rd, Ravipuram
Cochin - 682016
Mobile: +91 9744511109
E-mail: sajeen.s@siemens.com

Dehradun

32, Dhronpuri, Main lane, G.M.S.
Deharadun - 248001, Uttarakhand
Mobile: +91 8650404404
E-mail: shashibhushan.prasad@siemens.com

Durg

Pancham Nivas, B-1, Zone-2, New Adarsh Nagar
Durg - 491001, Chhattisgarh
Mobile: +91 9425016197
E-mail: jitendra.potdar@siemens.com

Chennai

Sathak Centre, No.4., Mahatma Gandhi Road
Chennai - 600034
☎ : +91 44 28334000
Fax: +91 44 28334088

Coimbatore

7th Floor, Global Towers, 1057, Avinash Road
Coimbatore - 641018
☎ : +91 422 4336300
Fax: +91 422 4336310

Hyderabad

5-9-19, 4th & 5th Floor, Laxmi Narasinh Estate
Opp. Secretariat Road, Saifabad
Hyderabad - 500004
☎ : +91 40 23482500
Fax: +91 40 23243145

Durgapur

14, Dinabandhu Mitra Path
Near Kavi Guru Middle Stop
SAIL Co-Operative Area, City Centre
Durgapur - 713216
Mobile: +91 9874343052
E-mail: rana.mitra@siemens.com

Guwahati

G-1, Hill View Apartment
Navagraha Path, Chenikuthi Hill Side
Guwahati - 781003, Assam
Mobile: +91 9864110684
E-mail: biplab.datta@siemens.com

Guwahati

G-1, Hill View Apartment
Navagraha Path, Chenikuthi Hill Side
Guwahati - 781003, Assam
Mobile: +91 9435346708
E-mail: Sourav.Bhattacharya@siemens.com

Haridwar

6, Nand Puri, Nr.Aya Nagar Chowk, Jwalapur
Haridwar - 249407, Uttarakhand
☎ : +91 1334 251943
Mobile: +91 9897070133
E-mail: ankur.singh@siemens.com

Hubli

24, 1st Floor, 2nd Cross Street
Kadeswar Colony, Kheswapur
Hubli - 580023, Karnataka
☎ : +91 836 2282947
Mobile: +91 9880662047
E-mail: balajim@siemens.com

Indore

Flat No.102, Panchavati Apart.
40 Chandralok Colony, Khajrana Road
Indore - 452001, Madhya Pradesh
Mobile: +91 9926939993
E-mail: prashant.joshi@siemens.com

Jaipur

6, Park Street, Opp. Pink City Petrol Pump, M.I.Road
Jaipur - 302001, Rajasthan
☎ : +91 141 5152108
Mobile: +91 9829244313
E-mail: gupta.arun@siemens.com

Jalandhar

H.No.943, Urban Estate, Phase I
Jalandhar - 144022, Punjab
☎ : +91 181 4613929
Mobile: +91 9876047929
E-mail: sunil.single@siemens.com

Jamshedpur

823, Udaigiri Vijaya Heritage, Uliyan, Kadma
Jamshedpur - 831005, Jharkhand
☎ : +91 657 6451637
Mobile: +91 9934311352
E-mail: shaibal.parial@siemens.com

Jodhpur

371, Gauri House
Kamala Nehru Nagar, Nr.SBI Bank
Jodhpur - 342008, Rajasthan
☎ : +91 291 2760371
Mobile: +91 9828327200
E-mail: naveen.sahariya@siemens.com

Kanpur

Flat No.403, Gulmohar Garden Phase II
Near Mariampur Hospital, Chain Factory
Shastri Nagar
Kanpur - 208005
Mobile: +91 8009900939
E-mail: shagun.gupta@siemens.com

Kolkata

43, Shanti Pally, Rashbihari Bypass Connector
Eastern Metropolitan Bypass
Kolkata - 700042
☎ : +91 33 24449000, 24428641-47
Fax: +91 33 24449010/13

Lucknow

28/45, Ashok Marg, Opp. Indira Bhawan
Lucknow - 226001
☎ : +91 522 4031022, 4031000
Fax: +91 522 4031019

Mumbai

8th Floor, R&D Technology Centre
Thane Belapur Road, Airoli Node
Navi Mumbai - 400708
☎ : +91 22 27645005-6
Fax: +91 22 27645867

Kolhapur

Flat No.101, Shrushti Mahabharat Apartment
Mahavir Garden To Mahavir College Road
Nagala Park
Kolhapur - 416003
☎ : +91 231 2663330
Mobile: +91 9881465421
E-mail: sachin.chavan@siemens.com

Ludhiana

H.No.95, Lajpat Nagar, Near Bus Stand
Ludhiana - 141002, Punjab
☎ : +91 161 2770574
Mobile: +91 9815502480
E-mail: rohit.jagga@siemens.com

Ludhiana

H.No.95, 1st Floor, Model Gram Extension
Near Bank of India
Ludhiana - 141002, Punjab
Mobile: +91 9888484066
E-mail: padam.sharma@siemens.com

Madurai

8/12, Ground Flr
Sakhti Vellammal Street, SS colony
Madurai - 625010, Tamil Nadu
Mobile: +91 9894617780
E-mail: mahendiran.murugan@siemens.com

Nashik

"Aditya Avenue", Flat No.27, 4th Floor, B-Wing
Near Chandak Circle, Tidke Colony
Nashik - 422001, Maharashtra
Mobile: +91 9822193204
E-mail: kiran.kanhurkar@siemens.com

Pondicherry

"Raghavendra ILLAM", Ground Floor
No. 21, 3rd Cross Street, Anna Nagar
Pondicherry - 605005
Mobile: +91 9840143536
E-mail: lakshmanan.s@siemens.com

Raipur

Flat No.103, First Floor, Block-B
Shilp Enclave Nr. IAS Colony, Shankar Nagar
Raipur - 492007, Chhattisgarh
Mobile: +91 9425057945
E-mail: brajesh.rathor@siemens.com

Rajkot

"Vrujraj", Chandanpark Society
Opp. Gyanganga Vidhyapith, Nr.Raiya Circle
Rajkot - 360005, Gujarat
Mobile: +91 9825021026
E-mail: hiren.raythatha@siemens.com

Ranchi

H-1/187, Harmu Housing Colony, Harmu
Ranchi - 834002, Jharkhand
Mobile: +91 9234610953
E-mail: sourav.dasgupta@siemens.com

Renukot

Above ICICI Prudential Office, Patel Nagar
Murdhewa, Distt. Sonebhadra
Renukot - 231217, Uttarpradesh
☎ : +91 544 254693
Mobile: +91 9838007897
E-mail: bhav.srivastava@siemens.com

Rourkela

HIG - B/207, Phase - 3, Kalinga Vihar, Chhend
Rourkela - 769015, Orissa
Mobile: +91 9438529778
E-mail: samir.chintak@siemens.com

Nagpur

5th Floor, Land Mark Building
Wardha Road, Ramdas Peth
Nagpur - 440010
☎ : +91 712 6633000
Fax: +91 712 6633111

New Delhi

4A, Ring Road, I.P.Estate, Box No.7036
New Delhi - 110002
☎ : +91 11 2345 5000-09
Fax: +91 11 42995030

Pune

Tower B/701-705, ICC Trade Tower
403A, Senapati Bapat Road
Pune - 411016
☎ : +91 20 2570 6000
Fax: +91 20 2570 6060

Rudrapur

13/14, Model Colony, Nr.Gopinath Mandir
Station Road, Rudrapur - 263153
Distt. Udham Singh Nagar, Uttarakhand
Mobile: +91 9839813707
E-mail: singh.ajay@siemens.com

Salem

3/25, Santosh Nagar
PACB Backside, Chinnathirupathi
Salem - 8
☎ : +91 427 2401981
Mobile: +91 9894617772
E-mail: rubengerald.s@siemens.com

Surat

Flat No. 202, D-1, Suryam Residence
Cause Way Road, Opp. Hari Darshan
Shingapur-Dabholi Road, Katargam
Surat - 395004, Gujarat
Mobile: +91 9925001779
E-mail: chandrakant.keshrani@siemens.com

Trichy

Door No. 106, Grid Flr., 5th Cross Street
Vidyalasalai Road, Ganapthy Nagar, Thiruvananai Koi
Trichy - 605005
☎ : +91 431 4345621
Mobile: +91 9840843121
E-mail: k.saravanakumar@siemens.com

Trivandrum

Udayakiran, T.C.No.28/535
Krishnakovil Road, Kaitthamukku
Trivandrum - 695024, Kerala
Mobile: +91 9895979604
E-mail: antony.john@siemens.com

Udaipur

303, Oasis Park, PP Singhal Marg, Ambavgarh
Udaipur - 313001, Rajasthan
☎ : +91 294 2430345
Mobile: +91 9829039120
E-mail: ajit.parashar@siemens.com

Vapi

Flat No.302, Samrajya IV, Royal Residency
Gokul Vihar Township, Charwada Road
Vapi - 396195, Gujarat
☎ : +91 260 6451156
Mobile: +91 9825147957
E-mail: sachin.paradkar@siemens.com

Vijaywada

74-32-1, Flat No.304, Tummala Residency
Opp. Current Office Pandaripuram, Ashok Nagar
Vijayawada - 520007, Andhra Pradesh
☎ : +91 866 3060833
Mobile: +91 9866463639
E-mail: santosh.p@siemens.com

Vizag

Flat No. 401, Door No. 9-19-6
Vinayagar South Avenue, CBM Compound
Vishakhapatnam - 530 003, Andhra Pradesh
☎ : +91 891 6462229
Mobile: +91 98492 12555
E-mail: kvs.prasad@siemens.com

Siemens Ltd.
Industry Sector
Control and Global Components
R&D Technology Centre
Thane Belapur Road, Airoli Node, Navi Mumbai - 400 708
Fax: +91 22 27645627
E-mail: lvsgr-mktg.india@siemens.com
www.siemens.com/industry

Order No.: 102596208
SGR-01-105-017

Customer Care Toll free no.
1800 220 987 / 1800 209 0987
Email: adscs.india@siemens.com

Product upgradation is a continuous process. Hence, data in this datasheet is subject to change without prior notice. For the latest information, please get in touch with our Sales Offices.