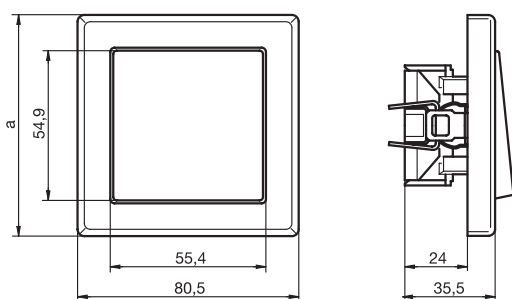
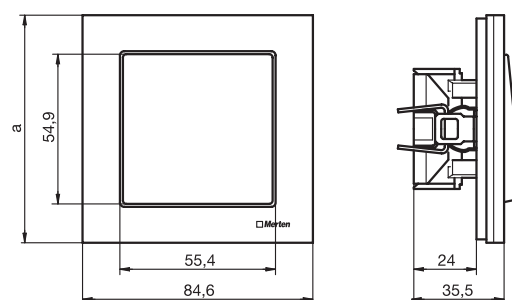


# FLUSH-MOUNTED RANGES

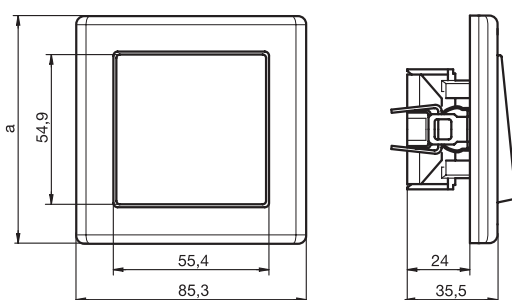
## Dimensions of System M flush-mounted ranges



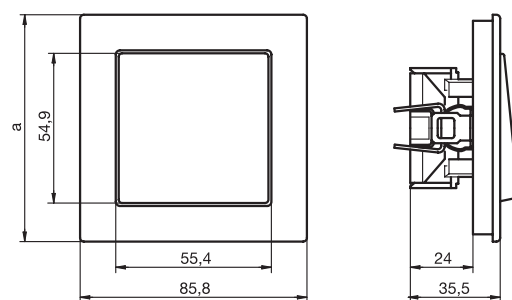
M-SMART rocker switch



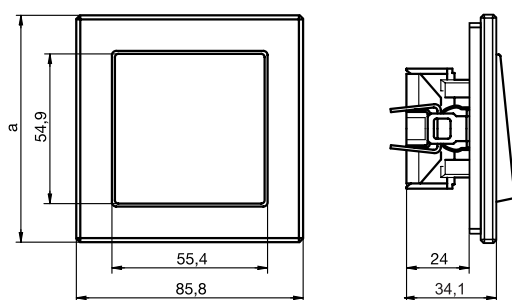
M-ARC rocker switch



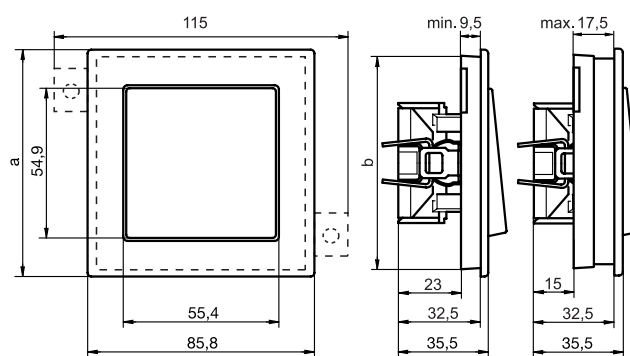
M-STAR rocker switch



M-PLAN rocker switch



M-PLAN real glass rocker switch

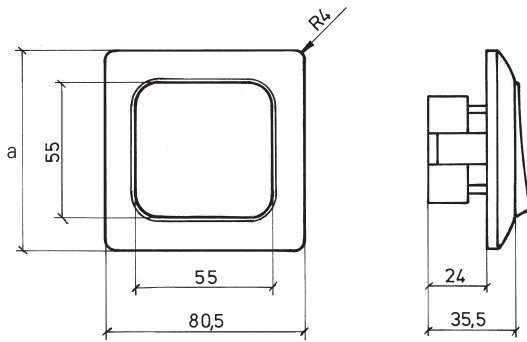


M-PLAN II rocker switch

| System M          | 1-gang           | 2-gang             | 3-gang             | 4-gang  | 5-gang  |
|-------------------|------------------|--------------------|--------------------|---------|---------|
| M-SMART           | a=80.5           | a=151.7            | a=222.9            | a=294.1 | a=365.3 |
| M-ARC             | a=83.4           | a=154.6            | a=225.8            | a=297   | a=368.2 |
| M-STAR            | a=83.9           | a=155              | a=226.2            |         |         |
| M-PLAN            | a=83.4           | a=154.6            | a=225.8            | a=297   | a=368.2 |
| M-PLAN II         | a=83.4<br>b=80.0 | a=154.6<br>b=151.2 | a=225.8<br>b=222.4 |         |         |
| M-PLAN real glass | a=85.8           | a=157.0            | a=228.2            |         |         |

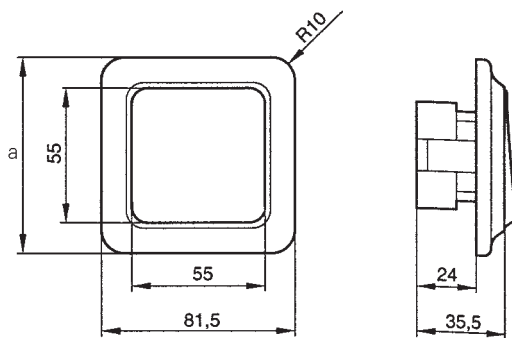
| System M IP44 | 1-gang | 2-gang  | 3-gang  | 4-gang  | 5-gang  |
|---------------|--------|---------|---------|---------|---------|
| M-SMART       | a=80.5 | a=151.7 | a=222.9 | a=294.1 | a=365.3 |
| M-ARC         | a=83.4 | a=154.6 | a=225.8 | a=297   | a=368.2 |
| M-PLAN        | a=83.4 | a=154.6 | a=225.8 | a=297   | a=368.2 |

## Dimensions of System Basis flush-mounted ranges



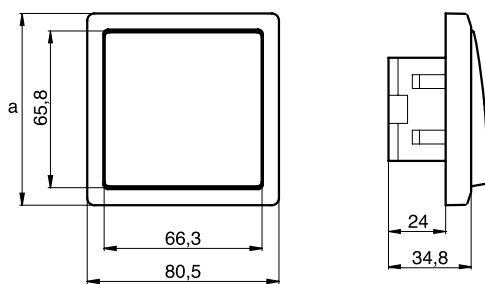
M1 rocker switch

| System Basis | 1-gang | 2-gang  | 3-gang  | 4-gang  | 5-gang  |
|--------------|--------|---------|---------|---------|---------|
| M1           | a=80.5 | a=151.7 | a=222.9 | a=294.1 | a=365.3 |
| ATELIER      | a=81.5 | a=152.5 | a=223.5 | a=294.5 | a=365.5 |

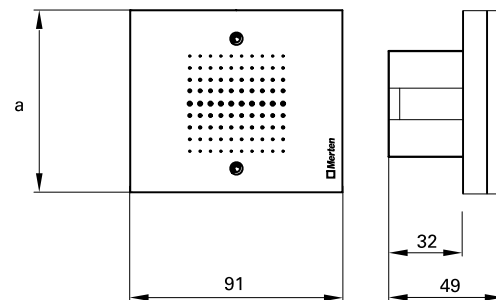


ATELIER rocker switch

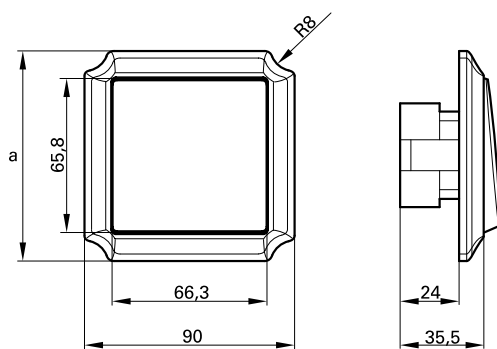
## Dimensions of System Design flush-mounted ranges



ARTEC rocker switch



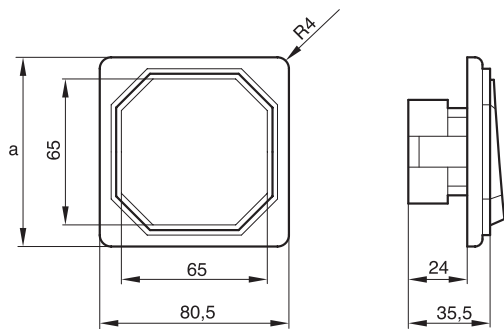
TRANCENT glass push-button



ANTI-K rocker switch

| System Design | 1-gang | 2-gang  | 3-gang  | 4-gang  | 5-gang  |
|---------------|--------|---------|---------|---------|---------|
| ARTEC         | a=80.5 | a=151.7 | a=222.9 | a=294.1 | a=365.3 |
| TRANCENT      | a=78   | a=149   | a=220   |         |         |
| ANTI-K        | a=90   | a=161.2 | a=232.4 | a=303.6 | a=374.8 |

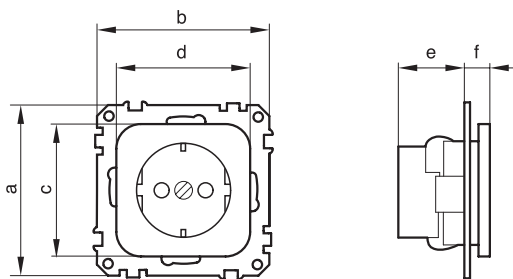
Dimensions of OCTOCOLOR flush-mounted range



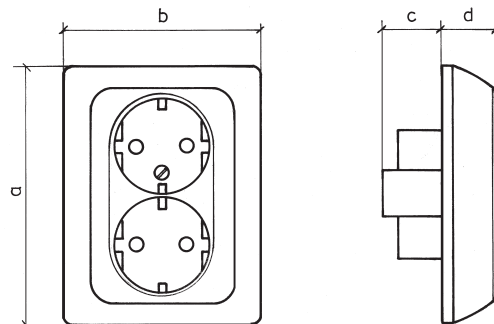
OCTOCOLOR rocker switch

| OCTOCOLOR | 1-gang | 2-gang  | 3-gang  | 4-gang  | 5-gang  |
|-----------|--------|---------|---------|---------|---------|
|           | a=80.5 | a=151.5 | a=222.5 | a=293.5 | a=364.5 |

Dimensions of SCHUKO® socket-outlets



SCHUKO® socket-outlet insert

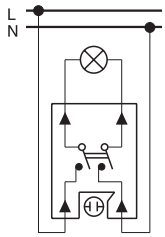


SCHUKO® double socket-outlet

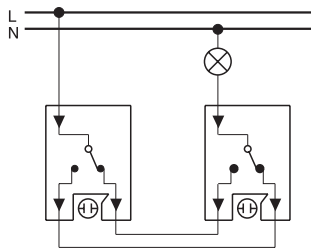
|                     | Dimensions in mm             |    |      |      |    |    |                              |      |    |    |
|---------------------|------------------------------|----|------|------|----|----|------------------------------|------|----|----|
|                     | SCHUKO® socket-outlet insert |    |      |      |    |    | SCHUKO® double socket-outlet |      |    |    |
|                     | a                            | b  | c    | d    | e  | f  | a                            | b    | c  | d  |
| M-SMART             | 71                           | 71 | 55,5 | 55,5 | 30 | 11 | 107,5                        | 80,5 | 24 | 23 |
| M-ARC / M-STAR      | 71                           | 71 | 55,5 | 55,5 | 30 | 11 |                              |      |    |    |
| M-PLAN / M-PLAN II* | 71                           | 71 | 55,5 | 55,5 | 30 | 11 |                              |      |    |    |
| M-PLAN real glass   | 71                           | 71 | 55,5 | 55,5 | 30 | 11 |                              |      |    |    |
| ARTEC               | 71                           | 71 | 67   | 67   | 30 | 11 | 108                          | 80,5 | 24 | 23 |
| TRANCENT            | 71                           | 71 | 67   | 67   | 30 | 18 |                              |      |    |    |
| ANTI-K              | 71                           | 71 | 67   | 67   | 30 | 11 |                              |      |    |    |
| M1                  | 71                           | 71 | 55   | 55   | 30 | 11 | 105                          | 80,5 | 24 | 23 |
| ATELIER             | 71                           | 71 | 55   | 55   | 30 | 11 |                              |      |    |    |
| OCTOCOLOR           | 71                           | 71 | 65   | 65   | 30 | 11 |                              |      |    |    |

\* Dimensions of socket-outlet, not built-in dimensions

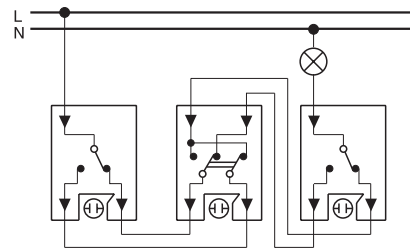
## Circuit diagrams for installation switches and push-buttons



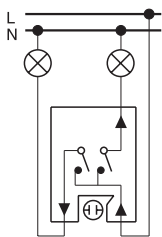
Illuminated one-way switch, 2-pole



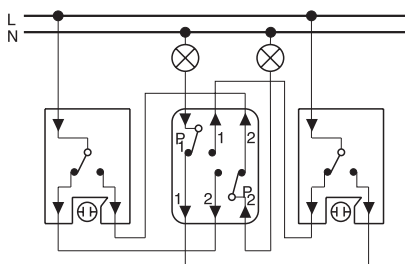
Illuminated two-way switch



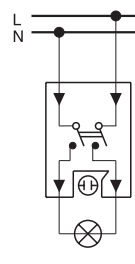
Intermediate switch circuit with illuminated switches



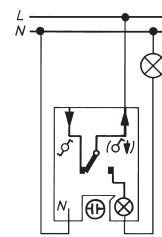
Illuminated two-circuit switch



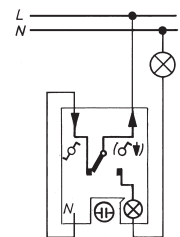
Illuminated two-way switch combined with double two-way switch



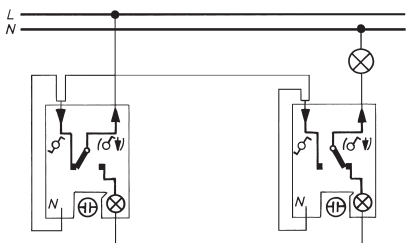
One-way switch, 2-pole with indicator lamp or heating emergency switch, 2-pole



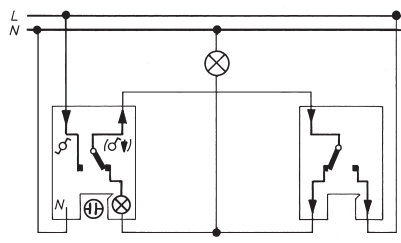
Two-way control switch as one-way control switch or heating emergency switch



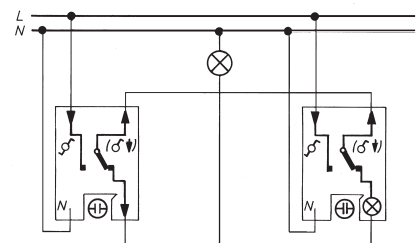
Two-way control switch as illuminated one-way switch



Two-way control switch as illuminated two-way switch

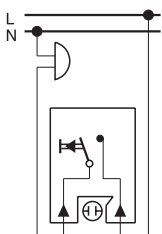


Single-sided two-way circuit with indicator lamp

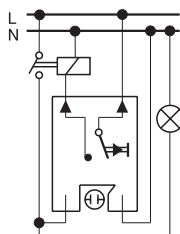


Double-sided two-way circuit with indicator lamp

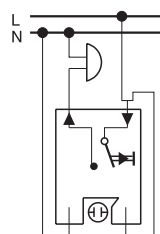
When using push-buttons connected in parallel in surge circuits, instantaneous switching of the surge relay or flickering in the neon lamps, e.g. art. no. 395100, can be prevented by integrating the capacitor, art. no. 542895 or an equivalent capacitor up to 1.5  $\mu\text{F}$  parallel to the relay coil.



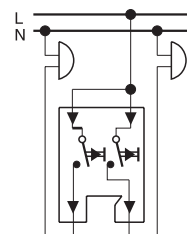
Illuminated push-button, 1-pole, make contact



Push-button, 1-pole, with separate signalling contacts for indicator lamp

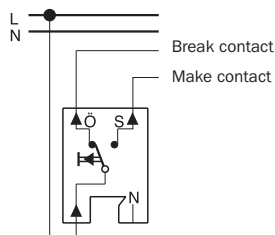


Push-button, 1-pole, with separate contacts for lighting

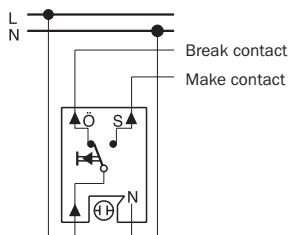


Double push-button, 1-pole, make contact

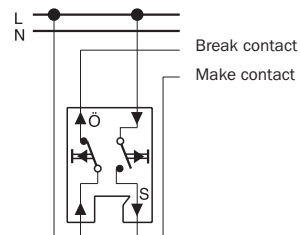
## Circuit diagrams for installation switches and push-buttons



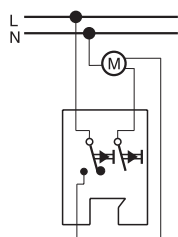
Two-way push-button, 1-pole



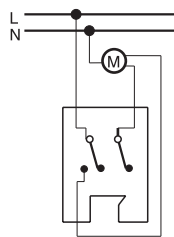
Two-way push-button, 1-pole, with lighting



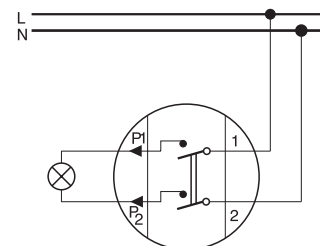
Double push-button  
1 break contact 1 make contact



Roller shutter push-button

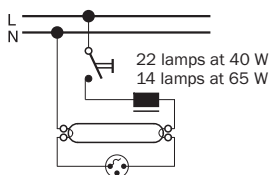


Roller shutter switch

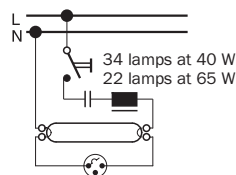


Time switch, 2-pole

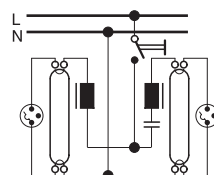
Permitted load for installation switches **10 A, AC 230 V** for different compensation and lamp types



Inductive (uncompensated)

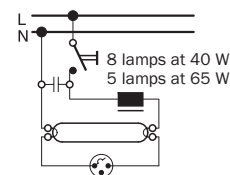


Capacitive (compensated,  $\cos \varphi = 1$ )



Twin-lamp circuit

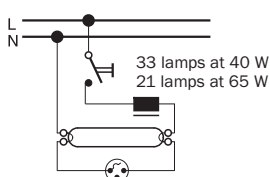
38 lamps at 40 W  
28 lamps at 65 W



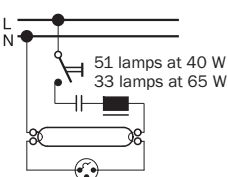
Parallel compensation

The number of lamps stated also applies for complete two-circuit switches

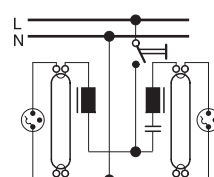
Permitted load for installation switches **16 A, AC 400 V** for different compensation and lamp types



Inductive (uncompensated)

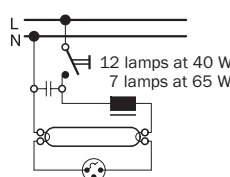


Capacitive (compensated,  $\cos \varphi = 0.5$ )



Twin-lamp circuit

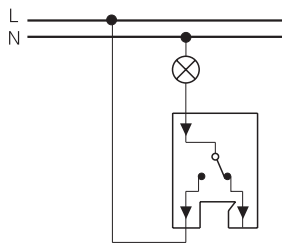
57 lamps at 40 W  
42 lamps at 65 W



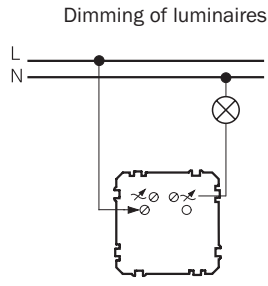
Parallel compensation

## Equivalent circuit diagrams (for TRACENT see following pages)

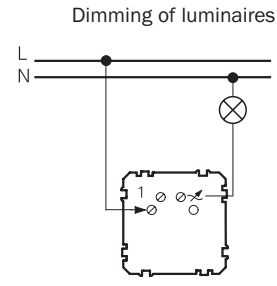
### Existing one-way circuit



One-way/two-way switch

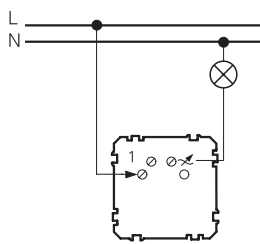


Rotary dimmer



Memory super dimmer

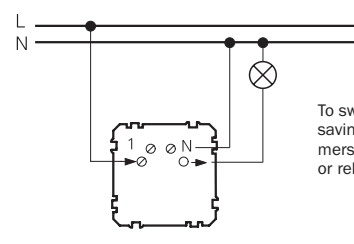
### Switching with electronic switch insert



Only ohmic loads such as incandescent lamps and 230 V halogen lamps may be connected

Electronic switch insert, art. no. 575799  
or electronic time switch insert, art. no. 575697

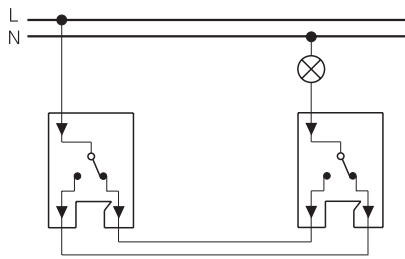
### Switching with relay switch insert



To switch e.g. energy-saving lamps, transformers, fluorescent lamps or relays.

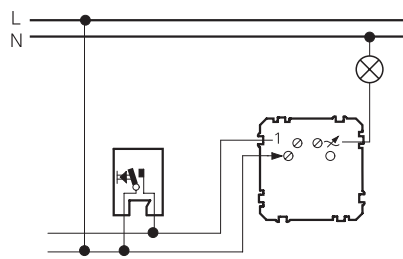
Universal relay insert, art. no. 575897

### Existing two-way circuit



Two-way switch

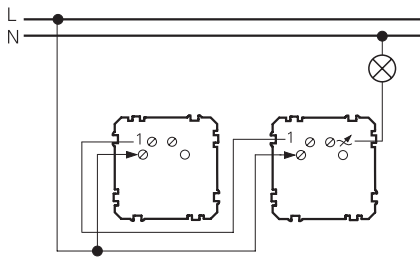
### Dimmable two-way circuit with push-button



Push-button

Memory super dimmer as main unit

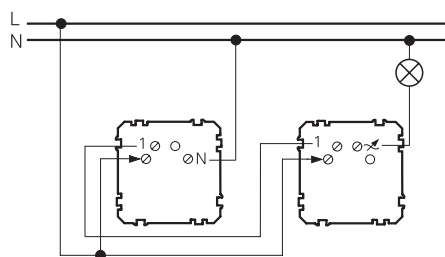
### Dimmable two-way circuit with extension unit



Electronic extension unit, art. no. 573999

Memory super dimmer as main unit

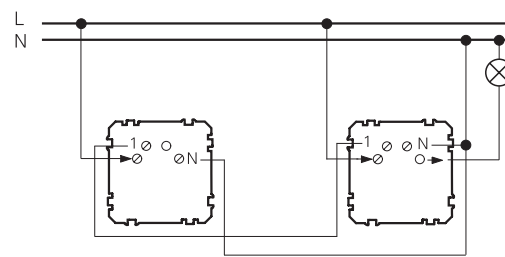
### Dimmable two-way circuit with TELE extension unit



TELE extension unit, art. no. 573998

Memory super dimmer as main unit

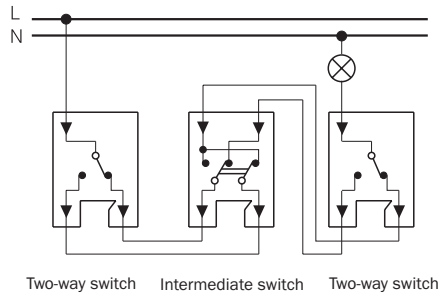
### Switching with relay switch insert and TELE extension unit



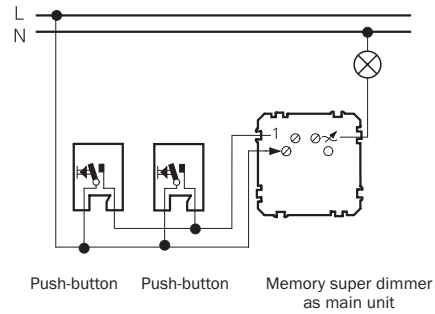
TELE extension unit, art. no. 573998

Universal relay insert, art. no. 575897

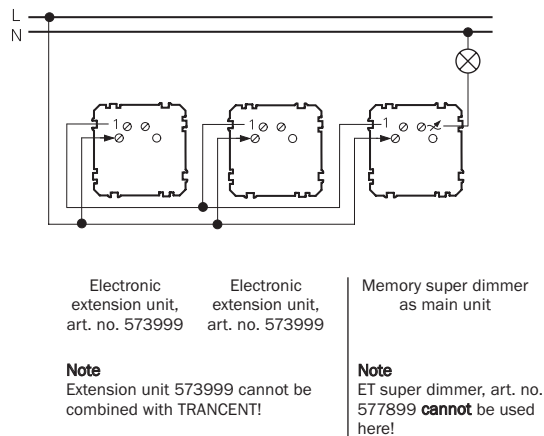
## Existing intermediate switch circuit



## Dimmable intermediate switch circuit with push-button



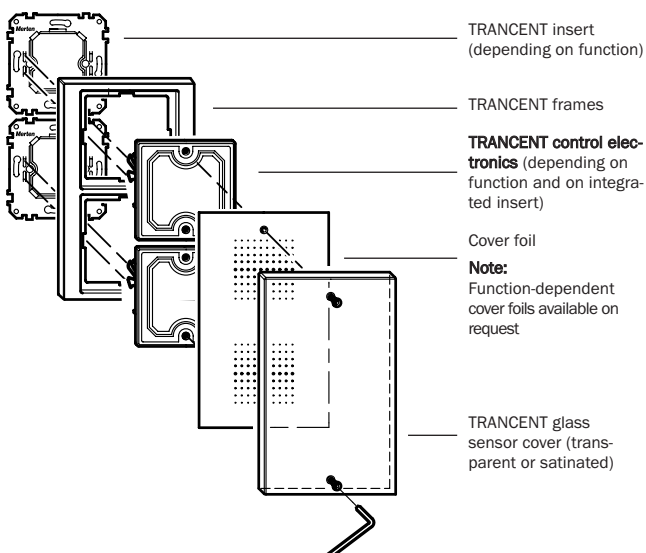
## Dimmable intermediate switch circuit with extension unit



## TRANCENT

### Structure

The system consists of the following components:  
(The illustration shows the structure of a 2-gang combination)



### TRANCENT control electronics

The TRANCENT control electronics are also elements of the system module. They are plugged onto the corresponding electronic switches, relay switches and memory super dimmers, together with frame. The glass sensor cover, containing the individually labelled cover foil, is then screwed on.

The permitted combinations can be found in the functional and device overview table for TRANCENT devices.

The inserts can then be operated through the glass cover.

The active cover, which is touched to trigger the switch, is indicated by the dotted area.

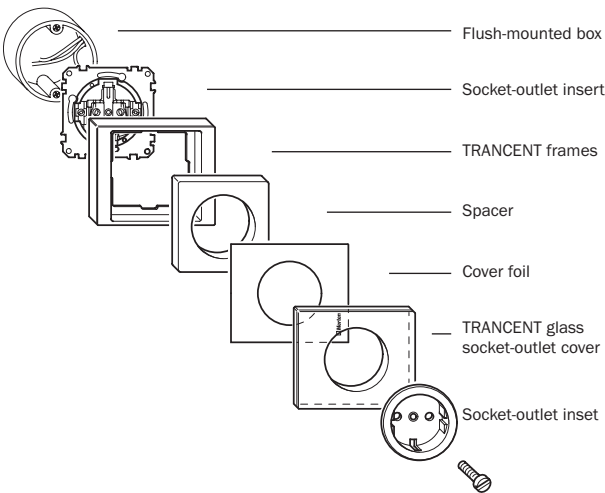
The function is triggered by simply touching the active cover - there is no need to apply pressure.

A minimum area of coverage is required when touching the glass (such as the tip of one or two fingers).

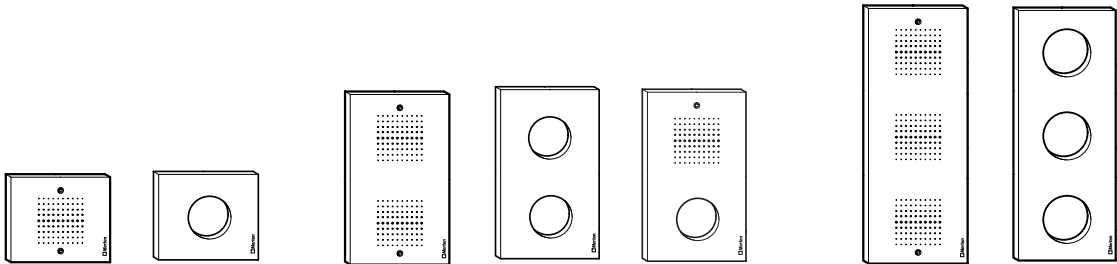
The minimum time period for which the cover must be touched is 0.5 seconds.

When installed horizontally, the TRANCENT insert is mounted at a rotated angle of 90°.

TRACENT socket-outlets



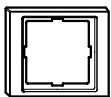
TRACENT glass cover



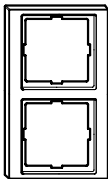
|             | Glass sensor cover, 1-gang | Glass socket-outlet cover, 1-gang | Glass sensor cover, 2-gang | Glass socket-outlet cover, 2-gang | Glass sensor cover, 1-gang, with glass socket-outlet cover, 1-gang | Glass sensor cover, 3-gang | Glass socket-outlet cover, 3-gang |
|-------------|----------------------------|-----------------------------------|----------------------------|-----------------------------------|--------------------------------------------------------------------|----------------------------|-----------------------------------|
| transparent | 569100                     | 569400                            | 569200                     | 568200                            | 569500                                                             | 569300                     | 568300                            |
| satinated   | 569101                     | 569401                            | 569201                     | 568201                            | 569501                                                             | 569301                     | 568301                            |

Delivered with standard cover foil and screws

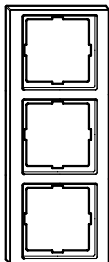
Frame



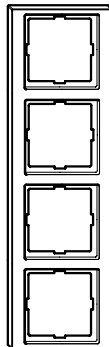
TRACENT frame, 1-gang,  
art. no. 482160



TRACENT frame, 2-gang,  
art. no. 482260

















































TRACENT frame, 3-gang,  
art. no. 482360



TRACENT frame, 4-gang,  
art. no. 482460

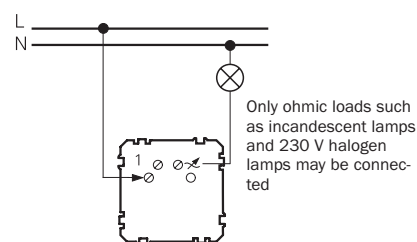


## Overview of TRACENT functions and devices

| Function                                                                                                                                                                                                                                                                                                                                                                     | Inserts                                                                             | Control electronics                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                                                                                                                  |                                                                                                                                     |                                                                                                                                    |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------|
|                                                                                                                                                                                                                                                                                                                                                                              |                                                                                     | <br>Control electronics, 1-gang<br>569090                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | <br>Two-circuit control electronics<br>569091 | <br>Roller shutter control electronics<br>569092 | <br>Control electronics, 1- to 4-gang<br>623190 |
| Electronic switch (2 conductors)                                                                                                                                                                                                                                                                                                                                             |                                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                                                                                                                  |                                                                                                                                     |                                                                                                                                    |
| <b>Switching of ohmic loads</b><br>- Incandescent lamps, 230 V halogen lamps<br>- Neutral conductor not required<br>- Extension input for push-buttons and extension TELE inserts                                                                                                                                                                                            |    | <b>Electronic switch insert</b><br>575799 (25-400 W)<br>AC 220-230 V, 50-60 Hz<br>                                                                                                                                                                                                                                                                                                                                                       | ■                                                                                                                                |                                                                                                                                     |                                                                                                                                    |
| <b>Timed switching of ohmic loads</b><br>- Incandescent lamps, 230 V halogen lamps<br>- Fully electronic timer<br>- Neutral conductor not required<br>- Extension input for push-buttons and extension TELE inserts<br>- Time period 5 s–5 min.                                                                                                                              |    | <b>Electronic time switch insert</b><br>575697 (25-400 W)<br>                                                                                                                                                                                                                                                                                                                                                                            | ■                                                                                                                                |                                                                                                                                     |                                                                                                                                    |
| <b>Pulse generator for surge switches or protective circuits</b><br>- The switching function is determined by the surge switch or protective circuit used.<br>- Neutral conductor not required.<br>- Extension input for push-buttons and extension TELE inserts                                                                                                             |    | <b>Electronic push-button insert</b><br>574697 (4-100 VA)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | ■                                                                                                                                |                                                                                                                                     |                                                                                                                                    |
| Relay switch (3 conductors)                                                                                                                                                                                                                                                                                                                                                  |                                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                                                                                                                  |                                                                                                                                     |                                                                                                                                    |
| <b>Switching, timed switching, push-button operation of ohmic, inductive and capacitive loads</b><br>- Push-button function, time function, switch function<br>- Incandescent lamps, energy-saving lamps, LV halogen lamps with conventional transformer, fluorescent lamps<br>- Neutral conductor required<br>- Extension input for push-buttons and extension TELE inserts |    | <b>Universal relay insert</b><br>575897<br>AC 220-230 V, 50-60 Hz<br>max. 1000 W/VA<br>500 VA for LV halogen lamps with conventional transformer; max. 140 µF capacitive load<br>     | ■                                                                                                                                |                                                                                                                                     |                                                                                                                                    |
| <b>Switching of ohmic, inductive or capacitive loads via two outputs</b><br>- Neutral conductor required                                                                                                                                                                                                                                                                     |  | <b>Roller shutter/two-circuit insert</b><br>576499<br>                                                                                                                      |                                                                                                                                  | ■                                                                                                                                   |                                                                                                                                    |
| Dimmer (2 conductors)                                                                                                                                                                                                                                                                                                                                                        |                                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                                                                                                                  |                                                                                                                                     |                                                                                                                                    |
| <b>Dimming of ohmic, inductive and capacitive loads</b><br>- Incandescent lamps, 230 V halogen lamps<br>- Dimmable, wound transformers<br>- Electronic transformers<br>- Phase control or phase alignment<br>- Extension input for push-buttons and extension TELE inserts                                                                                                   |  | <b>Universal super dimmer insert</b><br>577099<br>at 50 Hz: 25 - 420 VA<br>at 60 Hz: 25 - 340 W<br>                                                                         | ■                                                                                                                                |                                                                                                                                     |                                                                                                                                    |
| <b>Dimming of ohmic loads</b><br>- Incandescent lamps, 230 V halogen lamps<br>- Phase control<br>- Extension input for push-buttons and extension TELE inserts                                                                                                                                                                                                               |  | <b>Memory super dimmer insert for ohmic load</b><br>573399 (60-400 W)<br>577299 60-600 W, halogen 500 W<br>                                                                                                                                                                                                                                       | ■                                                                                                                                |                                                                                                                                     |                                                                                                                                    |
| <b>Dimming of inductive loads</b><br>- Dimmable, wound transformers and incandescent lamps<br>- Phase control<br>- Extension input for push-buttons and extension TELE inserts                                                                                                                                                                                               |  | <b>Memory halogen super dimmer insert for inductive load</b><br>573599 (20-500 VA)<br>                                                                                                                                                                         | ■                                                                                                                                |                                                                                                                                     |                                                                                                                                    |
| <b>Dimming of capacitive loads</b><br>- Electronic transformers and incandescent lamps<br>- Phase alignment<br>- Extension unit operation with mechanical push-buttons or universal relay insert (art. no. 575897) with configured push-button function.                                                                                                                     |  | <b>Memory ET super dimmer insert for capacitive load</b><br>577899 (20-315 W)<br>                                                                                                                                                                              | ■                                                                                                                                |                                                                                                                                     |                                                                                                                                    |
| Extension unit                                                                                                                                                                                                                                                                                                                                                               |                                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                                                                                                                  |                                                                                                                                     |                                                                                                                                    |
| <b>Operator function for extension unit as main unit</b><br>- Control of the extension input of the main unit<br>- Neutral conductor required                                                                                                                                                                                                                                |  | <b>Extension TELE insert</b><br>573998                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | ■                                                                                                                                |                                                                                                                                     |                                                                                                                                    |
| Roller shutter/blind                                                                                                                                                                                                                                                                                                                                                         |                                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                                                                                                                  |                                                                                                                                     |                                                                                                                                    |
| <b>Control of a blind/roller shutter drive</b><br>- Neutral conductor required                                                                                                                                                                                                                                                                                               |  | <b>Roller shutter/serial insert</b><br>576499                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                                  | not permitted                                                                                                                       | ■                                                                                                                                  |
| INSTABUS EIB                                                                                                                                                                                                                                                                                                                                                                 |                                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                                                                                                                  |                                                                                                                                     |                                                                                                                                    |
|                                                                                                                                                                                                                                                                                                                                                                              |  | <b>Bus coupler, flush-mounted 2</b><br>690299                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                                  |                                                                                                                                     | ■                                                                                                                                  |

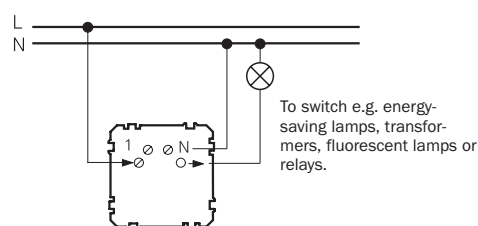
TRACENT circuit diagrams

Switching with electronic switch insert



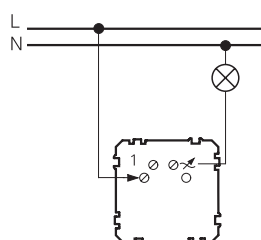
Electronic switch insert, art. no. 575799 or electronic time switch insert, art. no. 575697  
+  
Control electronics, 1-gang, art. no. 569090.

Switching with universal relay insert



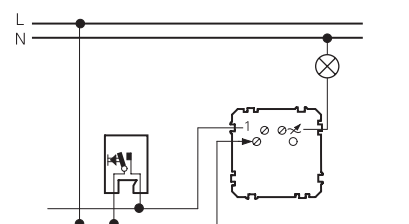
Universal relay insert, art. no. 575897  
+  
Control electronics, 1-gang, art. no. 569090.

Dimming of luminaires



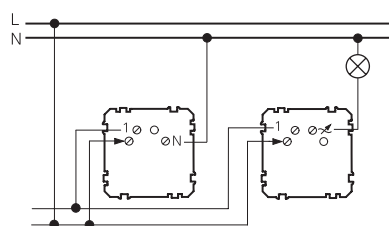
Memory super dimmer (dependent on the load)  
+  
Control electronics, 1-gang, art. no. 569090.

Two-way circuit: Replaced by TRACENT insert and push-buttons



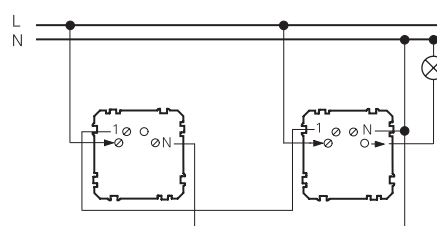
Push-button  
Super dimmer or electronic switch insert, art. no. 575799 or art. no. 575697  
+  
Control electronics, 1-gang, art. no. 569090.

Two-way circuit: Replaced by TRACENT insert and TELE extension unit



TELE extension unit, art. no. 573998  
+  
Control electronics, 1-gang, art. no. 569090  
Super dimmer or electronic switch insert, art. no. 575799 or art. no. 575697  
+  
Control electronics, 1-gang, art. no. 569090

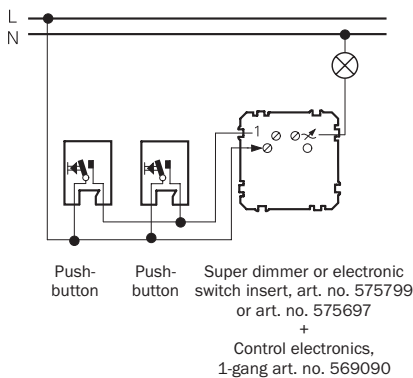
Two-way circuit: Replaced by universal relay insert and TELE extension unit



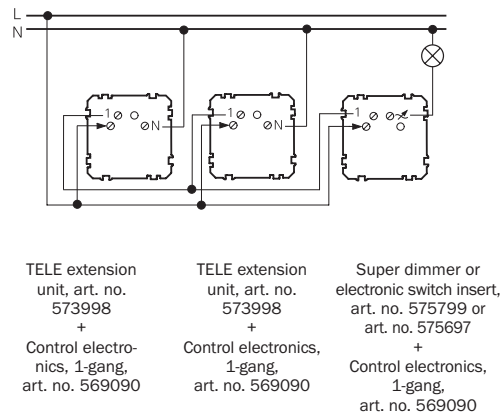
TELE extension unit, art. no. 573998  
+  
Control electronics, 1-gang, art. no. 569090  
Universal relay insert, art. no. 575897  
+  
Control electronics, 1-gang, art. no. 569090

## TRACENT circuit diagrams

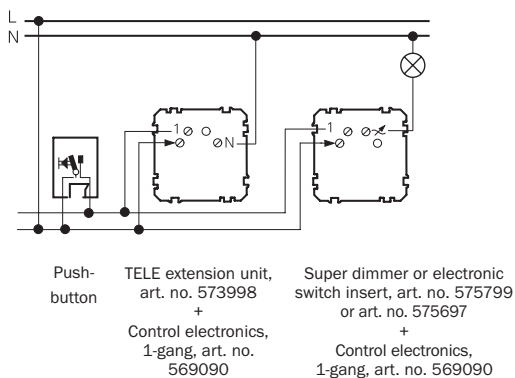
Intermediate switch circuit: Replaced by TRACENT insert and push-buttons



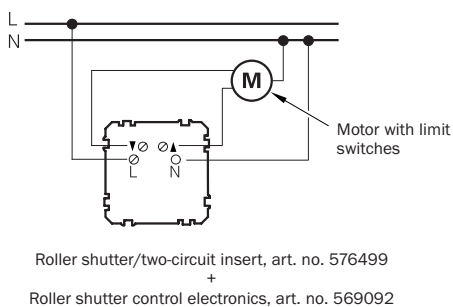
Intermediate circuit: Replaced by TRACENT insert and TELE extension unit



Intermediate switch circuit: Replaced by TRACENT insert, push-button and TELE extension unit



Control of a blind/roller shutter drive



Switching of two outputs

