STEiNEL®

PROFESSIONAL

Information

NM 5000-3 COM1

3.1

3.2

3.3

A

B

C

C

C

D

C

3.4

Nightmatic 5000-3 COM1

82
38
20
24
48
82
95
95
41,5
95
Ø126
56

94
94
27
24
Ø124
27
24

4.1

2 x

4 h

4.2

①

L
N
⏚

b)   a)

L L ↓ N N N ⏚

c)

②

L
N
⏚

b)   a)

L L ↓ N N N ⏚

c)

③

L
N
⏚

b)   a)

L L ↓ N N N ⏚

d)

④

L
N
⏚

b)   a)

L L ↓ N N N ⏚

e)

5.1

①

② ⚠

③

④

5.2

Ø 6 mm

60 mm

5.3

Ø 6 mm

60 mm

Ø5mm

5.4

L ↓ N N
⇧ ⇩ ⇧ ⇩

L ↓ N N
⇧ ⇩ ⇧ ⇩

N

⊕ N L

9mm/0,36"

⊕ N L

⊕ N ↓

5.5

N ↓ L

6.1

Vario
Morning
OFF   ON
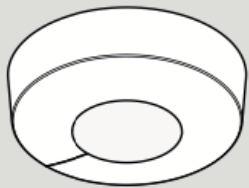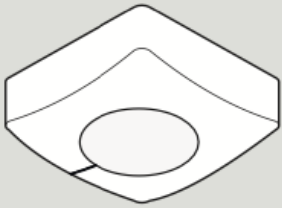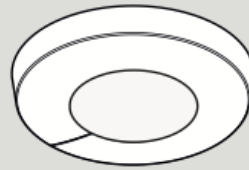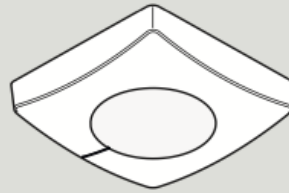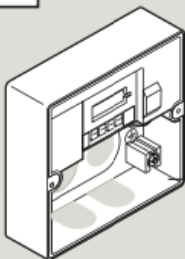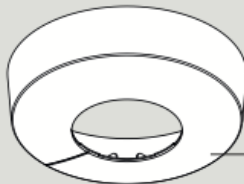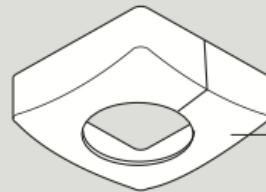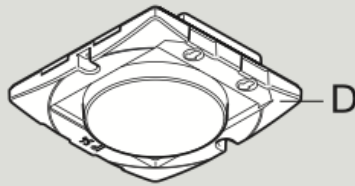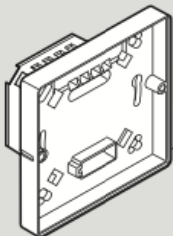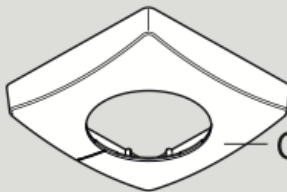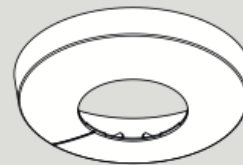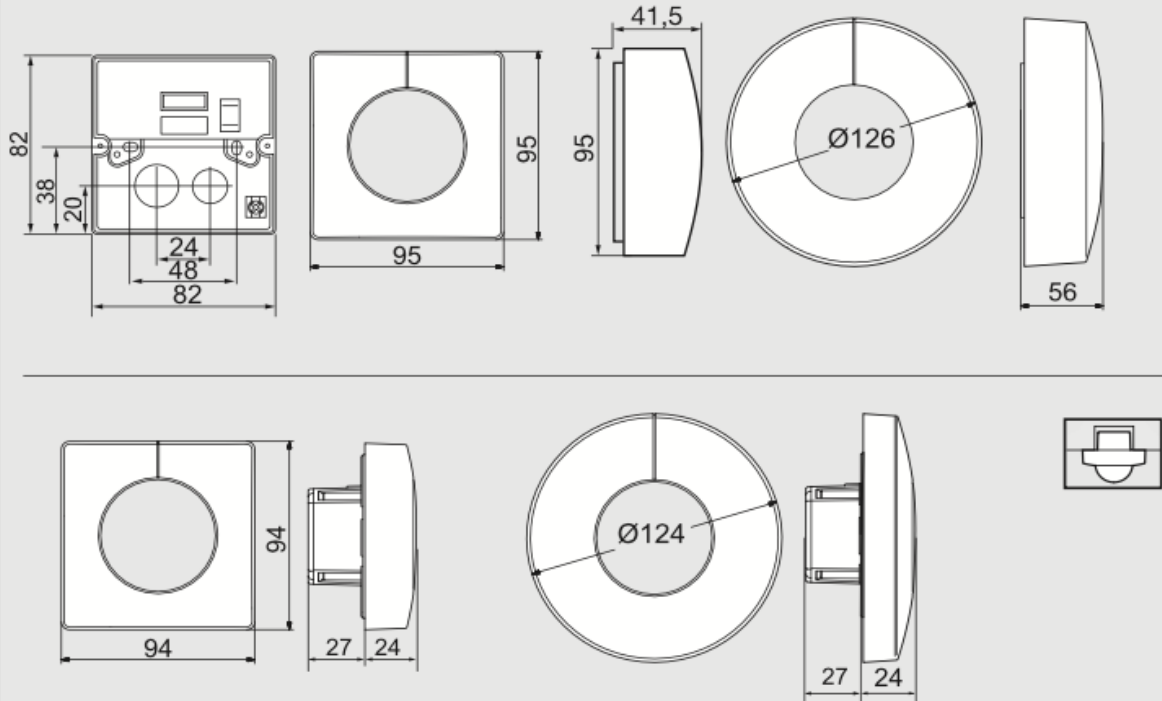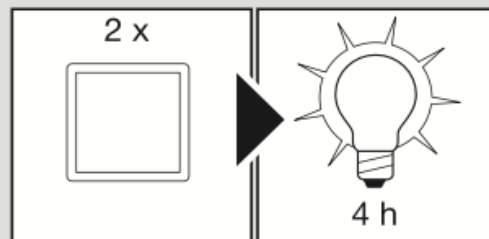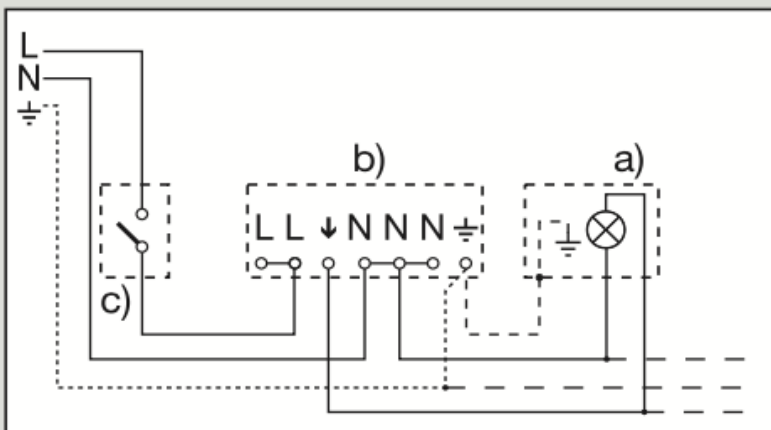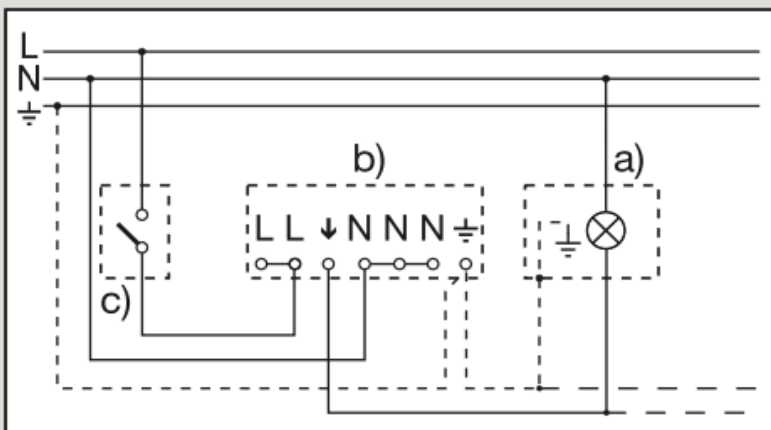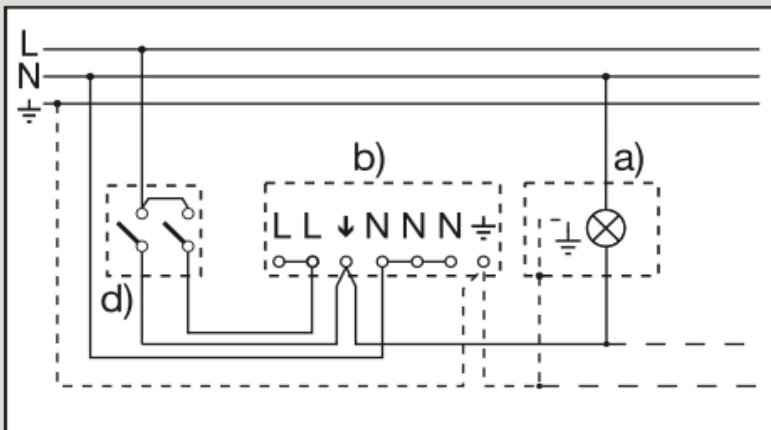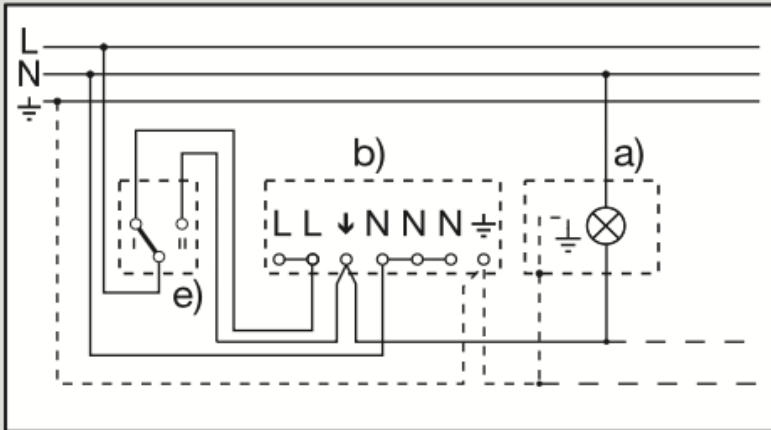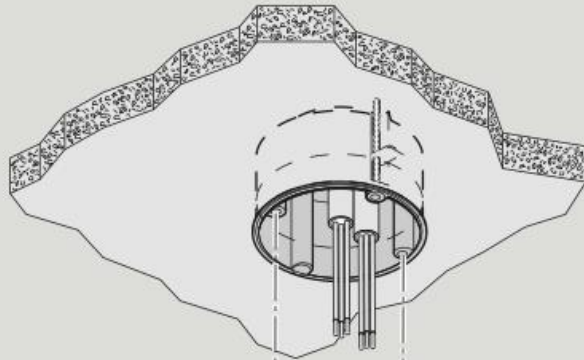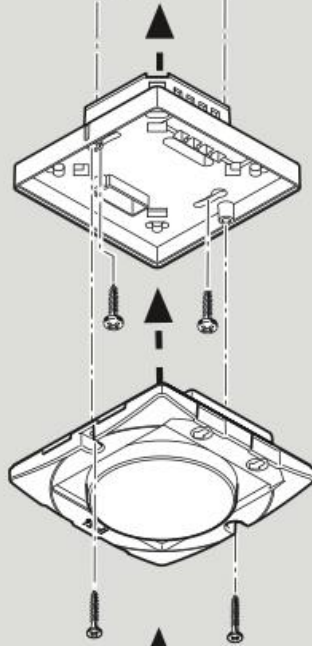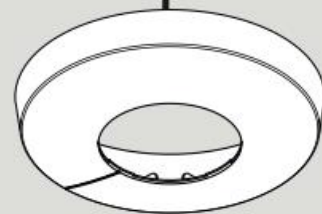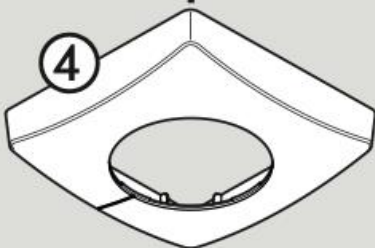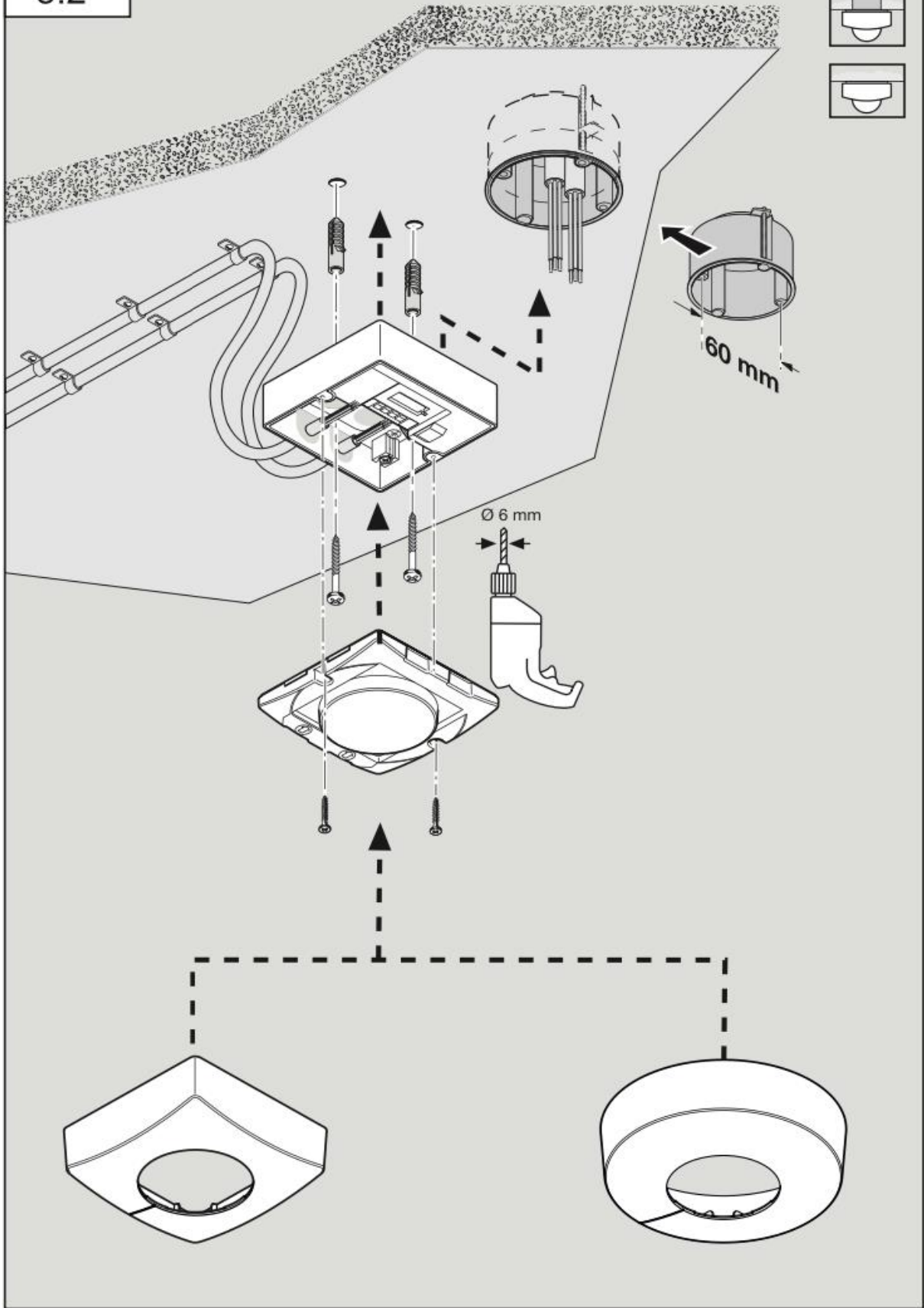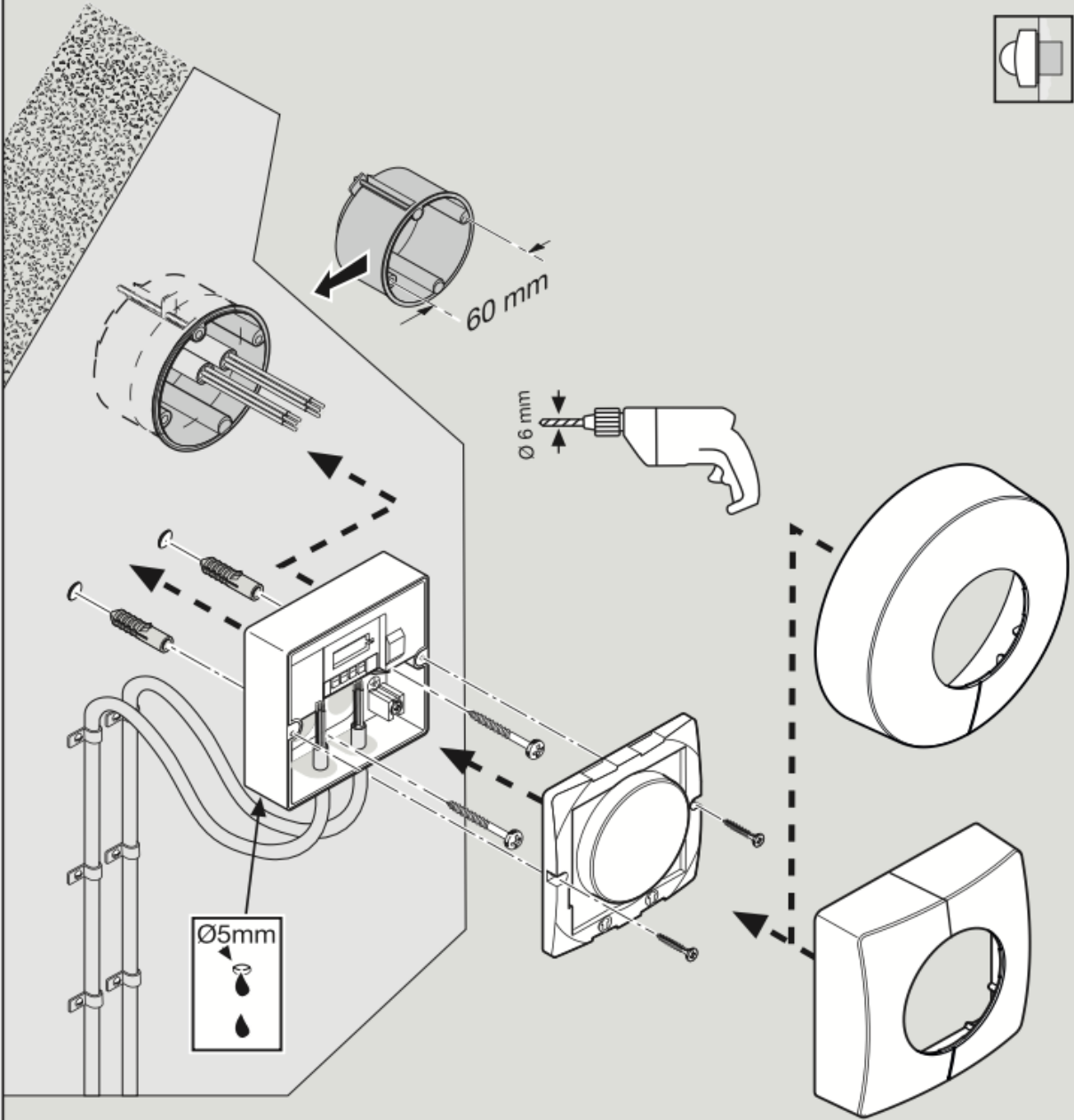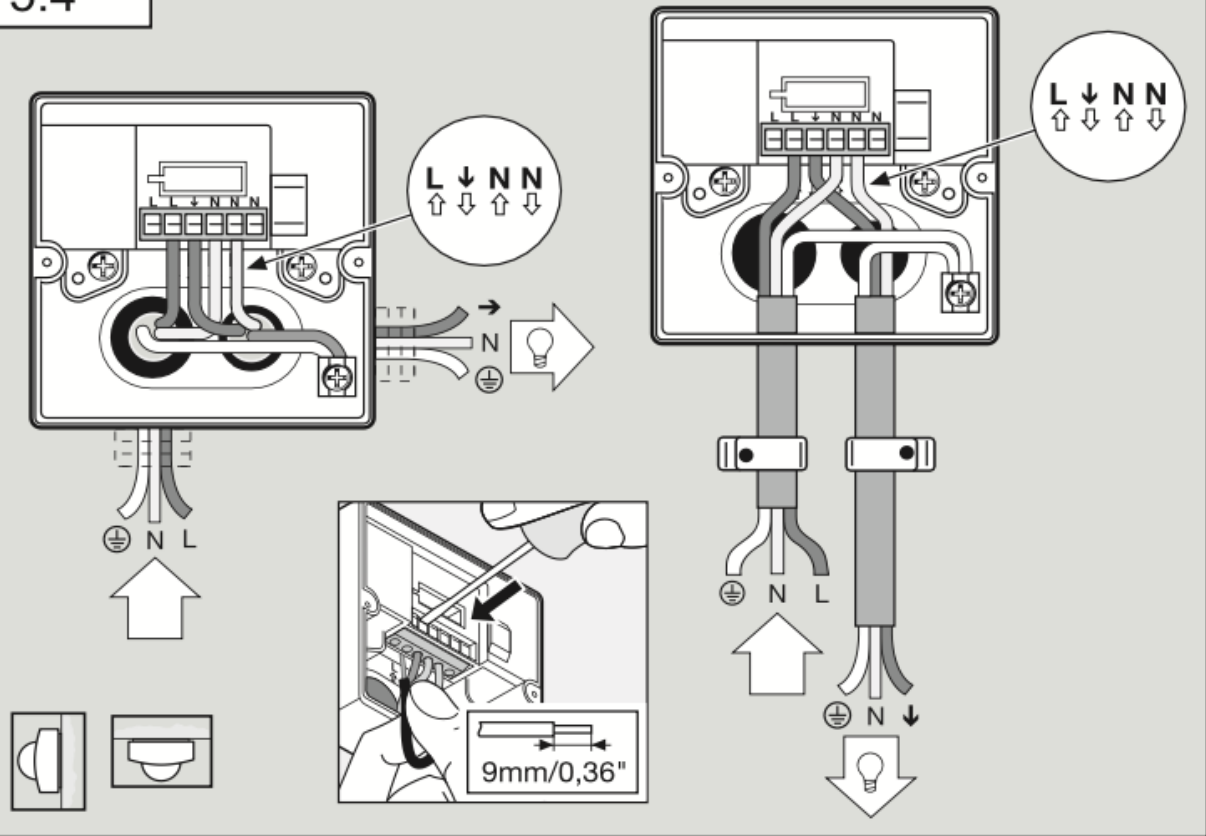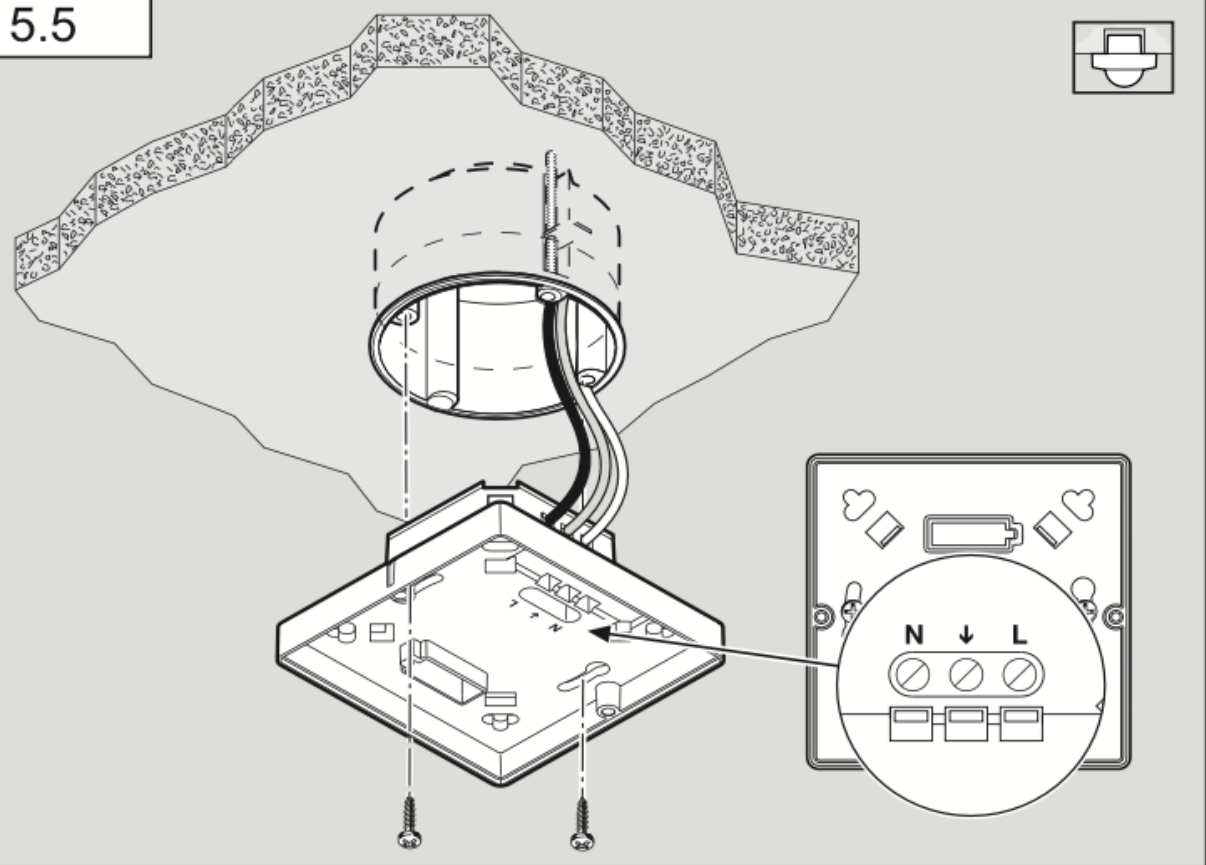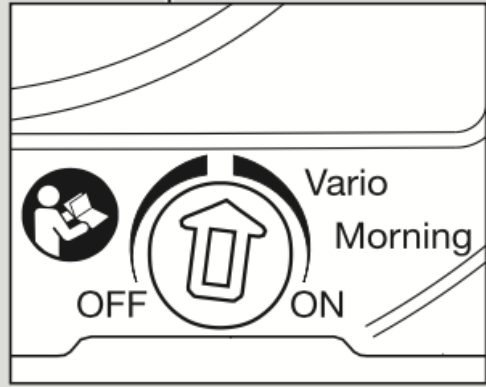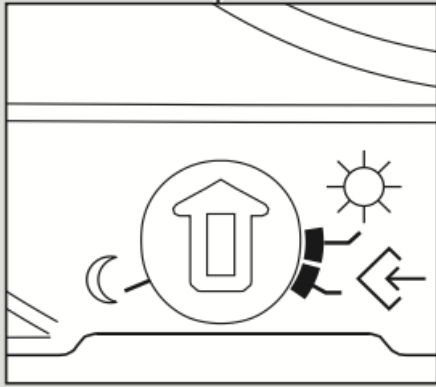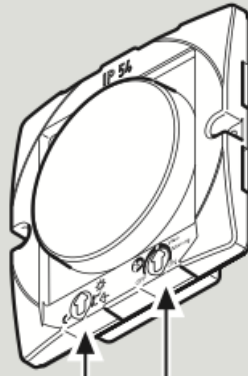
1. About this document

- Please read it carefully and keep it in a safe place.
- Under copyright.
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- Subject to change in the interest of technical progress.

Symbols

⚠ Hazard warning!

📄 Reference to other information in the document.

2. General safety precautions

⚠ Disconnect the power supply before attempting any work on the sensor.

- During installation, the electric power cable to be connected must not be live. Therefore, switch off the power first and use a voltage tester to make sure the wiring is off-circuit.
- Installing the sensor involves work on the mains power supply. This work must therefore be carried out professionally following national wiring regulations and electrical operating conditions. (ⅮⒺ - VDE 0100, Ⓐ - ÖVE-EN 1, ⒸⒽ - SEV 1000)

3. NM 5000-3 COM1

Proper use

- The NightMatic 5000-3 is suitable for ceiling and wall mounting indoors and outdoors.

The NM 5000-3 COM1 photo-cell controller measures ambient brightness and automatically switches the light ON at dusk and automatically switches it OFF again in line with various setting options. The NM 5000-3 comes with a new diffuse light measurement. This detects the level of light in its entire surroundings, taking better measurements than conventional light sensors.
Optionally, all function settings can be made via the RC5, and RC8 remote controls as well as the Smart Remote**. (➜ "7. Accessories")**

Package contents for surface-mounted installation **(Fig. 3.1)**
Package contents for concealed installation **(Fig. 3.2)**

Product components (Fig. 3.3)
A Load module, power supply lead, surface-mounted
B Load module, power supply lead, concealed installation
C Designer trim, round or square
D Sensor module

Product dimensions
Surface-mounted installation, square / round **(Fig. 3.4)**
Concealed installation, square / round **(Fig. 3.4)**

4. Electrical installation

The mounting location should be selected so that daylight can fall onto the light sensor. An optional corner wall mount (product no. 648015 black or 035174 white) is available for mounting the NM 5000-3 COM1.

The supply lead consists of three wires:
L = phase conductor (usually black, brown, or grey)
N = neutral conductor (usually blue)
PE = protective-earth conductor (green/yellow)
↓= switched phase conductor (usually black, brown, or grey)

Note on manual override function (Fig. 4.1):
A power switch for switching ON and OFF can be installed in the main supply lead. This is a prerequisite for the manual override function **(➜ "6. Function")**

– Surface-mounted installation

If the rubber seal is damaged, the cable entry openings must be sealed with an M16 or M20 (at least IP54) double-seal cable gland.

For mounting on the wall, a condensation water drainage hole (Ø 5 mm drill bit) is marked next to the rubber seal. This must be opened if necessary. (Fig. 5.3)

Connection examples **(Fig. 4.2)**
1. **Light without a neutral conductor**
2. **Light with a neutral conductor**
3. **Connection using a two-circuit single-interruption switch for manual and automatic operation.**
4. **Connection via a two-way switch for manual override and automatic operation**
   Setting I: Automatic operation
   Setting II: Manual operation, light permanently ON

Note: The system cannot be switched OFF, it is only possible to select operation via setting I or II.
a) Load, lighting max. 2000 W (refer to Technical specifications)
b) Sensor connection terminals
c) Indoor switch
d) Indoor two-circuit single-interruption switch, manual, automatic
e) Indoor two-way switch, automatic, light permanently ON

Connecting several sensors in parallel (not illustrated)
In this case, it is important not to exceed a sensor's maximum connected rating. In addition, all units must be connected to the same phase.

Note: The cable between the two sensors must be no more than 50 m in length.

5. Mounting

- Check all components for damage.
- Do not use the product if it is damaged.
- Select an appropriate mounting location, considering the reach and motion detection.

Installation procedure (Fig. 5.1)
- Switch OFF the power supply.
- Detach designer trim from the sensor module.
- Disconnect the sensor module from the load module.
- Connect to the mains power supply.
  -Surface-mounted power supply lead **(Fig. 5.4)**
  -Concealed power supply lead **(Fig. 5.5)**
- Insert the fastening screw and mount the load module.
  Fit the sensor and load module together and screw into place.
- **Switch ON the power supply.**
- Set functions. **(➜ "6. Function")**
- Fit designer trim.

6. Function/operation

Factory settings
Dusk level: 1000 lux
Night economy mode: OFF
Setting for morning hours: light ON in the morning
Remote controls RC5, RC8, or Smart Remote can be used for resetting to the factory settings.

Dusk setting (Fig. 6.1)
On actuating the control dial, the sensor is in programming mode.

This means:
-The light connected always goes out.
-The sensor function is deactivated.

The settings may be altered as often as you wish. The last setting will remain stored in the memory in the event of power failure.

Important: while setting the light sensor, do not cover it or shade it with your own shadow

Teaching mode
The control must be set to the level of light at which you want the sensor to respond to movement from now on. Ambient brightness is calibrated for 10 seconds. The load is deactivated during this period.

Dazzle guard:
This product is equipped with an integrated dazzle guard.

Night economy mode setting
The load connected can be switched OFF automatically at night to save even more electricity. The night economy mode always ends in the early hours of the morning between approx. 4 and 5 a.m. The economy time can be infinitely adjusted at the control inside the unit from 0 to approx. 7 hours. The control is divided into two sections. If the control is set to the left-hand scale side, the load will be switched OFF between 4 and 5 a.m. after the night economy time elapses. If the control is set to the right-hand scale side, the load will be switched OFF after the night economy time elapses and ON again when it gets dark. Wherever possible, avoid setting the control to the middle position. The electronic system does not have a clock. All times are computed by the microprocessor based on light levels at dusk. Seasonal changes in light levels are identified automatically and taken into account.

Setting for morning hours
The control dial set to **OFF** means the light stays OFF in the morning.
The control dial set to **ON** means the light switches ON at dawn and OFF when it is light enough.

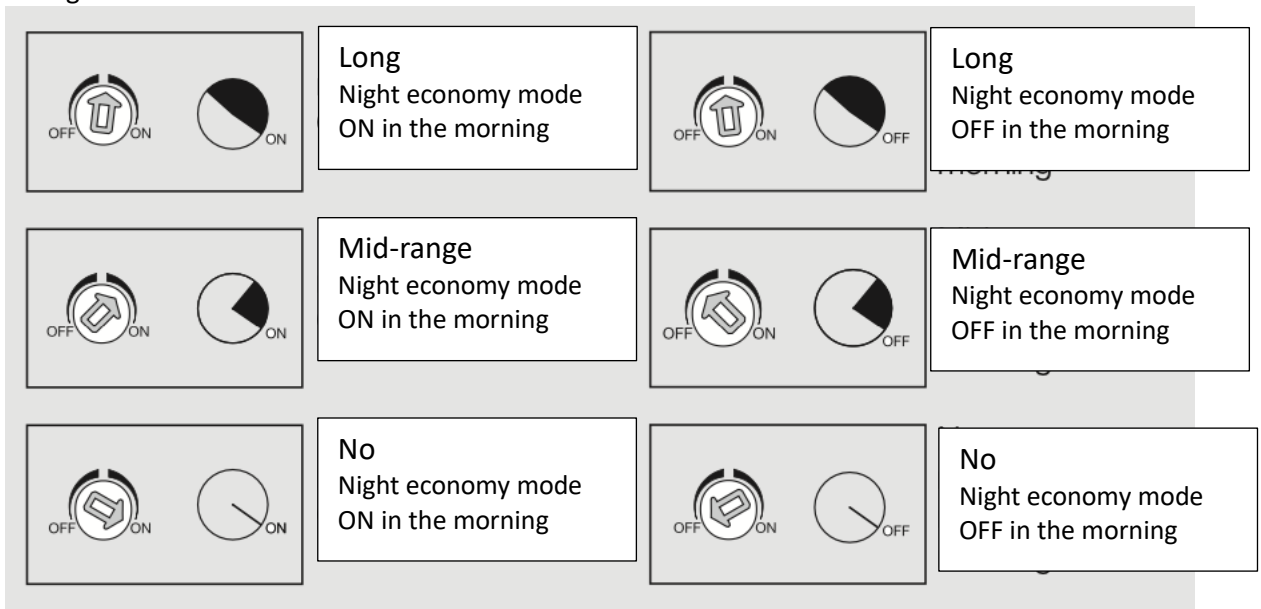|			
	Long Night economy mode ON in the morning		**Long** Night economy mode OFF in the morning
	Mid-range Night economy mode ON in the morning		**Mid-range** Night economy mode OFF in the morning
	No Night economy mode ON in the morning		**No** Night economy mode OFF in the morning

Manual override function (Fig. 4.1)
If a power switch is installed in the supply lead, the following functions are available in addition to simply switching ON and OFF:
Important: The switch should be actuated in rapid succession (in the 0.5-1 s range).

Manual override
1) Activate manual override:
Switch ON and OFF twice. The sensor is set to stay ON for 4 hours (red LED lights up behind the lens). Then it returns automatically to sensor mode (red LED 'OFF').
2) Deactivate manual override:
Switch ON and OFF once. The sensor goes out or switches to sensor mode.

LED function
– Normal mode: LED stays OFF
– Remote control: LED flashes approx. 10 times per second
– Permanently ON/OFF: LED ON

7. Accessories (optional)

User remote control RC5 EAN 4007841 592806

Additional functions, RC5

- Light ON/OFF 4 h
- User reset
- 100 h burn in, 4 h light ON press for ≥ 5 s

Service remote control RC8 EAN 4007841 559410

Additional functions, RC8

- Time setting, CH1
- Test / normal mode
- Dusk setting
- Night-time operation
- Daylight operation
- Teach-IN
- Reset

Smart Remote EAN 4007841 009151

- Control via smartphone or tablet
  - Replaces remote controls RC5 and RC8
  - Download the appropriate app and connect via Bluetooth
  - Identify the sensors and read parameters

Additional functions, Smart Remote

- Light-level setting: teach, 2-1000 lux
- Burn in: 100 h
- Initial state; behavior after applying the light ON/OFF supply voltage
- Eco mode: OFF, ON in the morning, OFF in the morning
- Eco mode duration: 2 h-10 h
- Sensor

Detailed descriptions are provided in the operating instructions for the particular remote control.

8. Warranty Declaration

As a buyer, you are entitled to your statutory rights against the vendor. If these rights exist in your country, they are neither curtailed nor restricted by our Warranty Declaration. We guarantee that your STEINEL Professional sensor product will remain in perfect condition and in proper working order for 5 years. We guarantee that this product is free from material-, manufacturing- and design flaws. In addition, we guarantee that all electronic components and cables function properly and that all materials used and their surfaces are without defects.

Making Claims
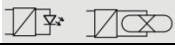
If you wish to make a claim, please send your product complete and carriage paid with the original receipt of purchase, which must show the date of purchase and product designation, either to your retailer or contact us at **STEINEL (UK) Limited, 25 Manasty Road, Axis Park, Orton Southgate, Peterborough, PE2 6UP**, for a returns number. For this reason, we recommend that you keep your receipt of purchase in a safe place until the warranty period expires. STEINEL shall assume no liability for the costs or risks involved in returning a product.

For information on making claims under the terms of the warranty, please go to
www.steinel-professional.de/garantie

If you have a warranty claim or would like to ask any questions regarding your product, you are welcome to call us at any time on our **Service Hotline at 01733 366700.**

9. Technical specifications

Dimensions (LxWxH)	Surface-mounted installation, round Ø 126 × 56 mm Surface-mounted installation, square 95 × 95 × 41.5 mm Concealed installation, round Ø 124 × 51 mm Concealed installation, square 94 × 94 × 51 mm
Output	Incandescent lamps, max. 2000 W at 230 V AC Fluorescent tube, max. 1000 W at cos j = 0.5, inductive load at 230 V AC 8 × max 58 W each, C ≤ 176 µF at 230 V AC *
Mains power supply	220 - 240 V, 50 / 60 Hz max. 2.5 mm^2
Angle of coverage	Diffuse
Sensor technology	Photo diode
Dusk setting	2-1000lux + teaching mode
Manual override (permanent light)	Selectable (4 hours)
IP rating	Surface-mounted: IP54 Concealed: IP20
Temperature range	-20°C to +50°C

* Fluorescent lamps, low-energy lamps, LED lights with electronic ballast (total capacity of all ballasts connected below the level stated).

10. Troubleshooting

Malfunction	Cause	Solution
NightMatic 5000-3 COM1 without power	-fuse faulty, not switched ON, break in wiring -short circuit	-new fuse, turn ON power switch, check wiring with voltage tester -check connections
Light does not switch ON	-load faulty -no power supply -Surroundings are still too bright	-change load -see „NightMatic 5000-3 COM1 without power" -wait until ambient light reaches ON brightness; if necessary, define a new switch-on value (using a button)
Light does not switch OFF	-Surroundings not yet bright enough	-wait until there is enough light; if necessary, define a new light ON brightness (in the evening)
Light does not switch ON in the morning	-function is not properly activated	-set function as described in „Settings for morning hours"
Light switches ON or OFF at unusual times	-change from summer to winter time or vice versa -switching times incorrect -sensor near Wi-Fi or other wireless communication source	-switching times are geared towards light levels- Change setting if necessary. -Re-define switch-ON light level (switching times will be re-computed) -install at least 2 m away from the wireless communication source
LED flashes once every 15 s	-load connected is too high	-reduce load or use contactor