

SELECTION GUIDE

COMPONENTS and SOLUTIONS for AUTOMATION and CONTROL PANELS



finder[®]

SWITCH TO THE FUTURE

Relays for Automation
Contact Multiplication Relays
Power relay for DC switching
Switch Mode Power Supply
SMPS with Battery Charger function
Specialized Relays: SIL2, SIL 3, ATEX relays
Industrial Thermoregulation
Monitoring Relays
Timers
Surge Protection Devices
Time Switches
Panel Lights



YOUR PARTNER IN RELIABILITY: For the AUTOMATION & CONTROL PANELS



Energy Meters
1 or 3 phase
Single or Double tariff
Modbus Communication
LC-Display or Mechanical
Display
35 mm rail mount



Surge Arrester
Surge Protection Devices
for single phase/three phase
applications
for AC & DC systems
Type 1, Type 2, Type 1+2,
Type 3, POE-Ethernet
Data & Telecommunication lines



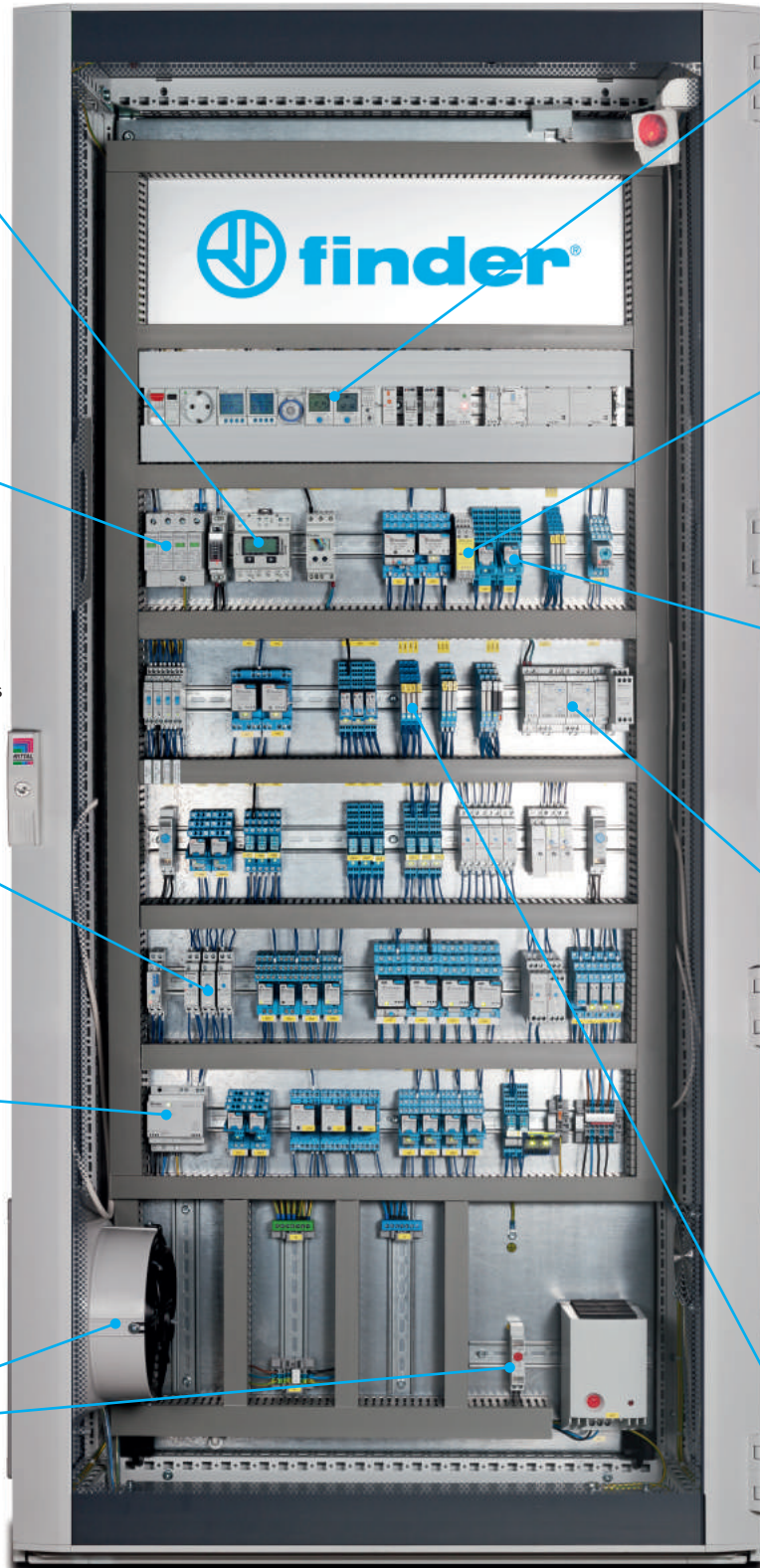
Timers
Multi-functions or
Mono-functions timer



Power Supplies
SMPS Power Supplies –
Industrial Grade
Replaceable input fuse
Overvoltage protection



Industrial Thermoregulation
Panel Thermostat
Panel Hygrostat
Filter Fans & Exhaust Filter
Space Heater



Time Switches
LDR/Day light sensors
Daily/Weekly/Astro
Time Switch



Fast acting Relay
SIL 2 Relays
SIL 3 Relays



Contact Multiplication Relays
– 2, 3, 4 C/O



Monitoring Relays
For single & three-phase
applications
Over & Under voltage
monitoring or current
detecting
Phase asymmetry
Phase rotation
Thermistor temperature
sensing
Level control (Emptying
or Filling)



6.2 mm
Ultra Slim Relays
6.2 mm wide for DI/DOs
Built In output Fuse protection
Timer version
Screw & push-in terminals
Coil with input leakage
current suppression version



Application fields

- Oil & Gas
- Chemical & Fertilizers
- Power Generation
- Transmission & Distribution
- Food & Pharmaceutical
- Renewable Energy
- Railways & Infrastructure
- Automotives
- Paper
- Metallurgy, Mining & Cement



-  Compliance to Directive
-  Quality in design and manufacture
-  Precision and reliability
-  Versatile products



SPECIALIZED RELAYS

Atex Relays Special versions for Zone 2 installations (Gas)



Specific Applications



Compliant with:
EN 60079-0:2012+A11:2013,
EN 60079-15:2010,
EN 60079-7:2015,
Directive 2014/34/EU



39 Series - Relay interface module
Type 39.11.x.xxx.0073 - Screw terminal
Type 39.10.x.xxx.0073 - Push-in terminal
Certification: EPTI 17 ATEX 0303 U

- 1 CO 6 A
- Nominal voltage:
from 6 to 240 V AC/DC
from 6 to 24 V DC
230 V AC
- Integral coil indication
- Multivoltage version



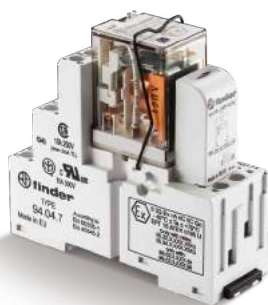
66 Series - Power relay
Certification: EPTI 17 ATEX 0299 U

- 2 changeover contacts: 25 A NO - 10 A NC
- Nominal voltage:
from 6 to 240 V AC
from 6 to 125 V DC
- PCB mount



39 Series - Slim timed interface module
Type 39.81.x.xxx.0073 - Screw terminal
Type 39.91.x.xxx.0073 - Push-in terminal
Certification: EPTI 17 ATEX 0303 U

- 1 CO 6 A
- Nominal voltage: 12 and 24 V AC/DC
- Timer adjustment via top mounted rotary knob with integral coil indication - accessible after assembly
- Multi-function
- DIP-switch for selection from:
8 functions
- 4 time scale: from 0.1s to 6h



58 Series - Relay interface module
Certification: EPT 15 ATEX 0195 U

- 2 or 4 CO - 10 and 6 A
- Nominal voltage: from 12 to 125 V DC
from 12 to 230 V AC
- Supply status indication as standard
- Screw terminal

86 Series - Timer module for use in conjunction with Relay interface module 58 Series ATEX versions
Certification: EPTI 17 ATEX 0264 U

- DIP-switch for selection of:
 - 2 functions (AI: ON-Delay, DI: Interval)
 - 7 time scale: from 0.05s to 100h
- LED indicator
- Plug-in mount





SPECIALIZED RELAYS

Relays for safety applications



Relay module with forcibly guided contacts for applications up to SIL 3 according to IEC 61508.



7S Series - Relay module with forcibly guided contacts

- For safety applications, with class A forcibly guided contact relays (EN 50205)
- SIL 2: 2 pole (1 NO + 1 NC), 4 pole (2 NO + 2 NC and 3 NO + 1 NC) or 6 pole (4 NO + 2 NC)
- SIL 3: 3 pole (2 NO + 1 NC)
- For functional reliability in machinery and plant engineering according to EN 13849-1
- For railway applications; materials compliant with fire and smoke characteristics (EN 45545); mechanical and climatic characteristics compliant with EN 61373 and EN 50155
- DC and AC supply versions
- 24 and 110 V DC versions with extended operating range (0.7...1.25)UN
- Coil status visual indication with LED
- Screw and Screwless terminal version available
- 35 mm rail (EN 60715) mount

Relays for control and signaling applications in energy and railway sectors.

RB Series - Bistable relay

- Nominal supply voltages: 24 - 110...125 - 220...250 V DC
- 4 changeover contacts 8 A
- 2 coil type
- Manual SET and RESET on the product or remote via terminals



Type RB.14.9.xxx.0000
- LED indicators green/red for current (SET and RESET)
- Modular, direct 35 mm rail (EN 60715) mount



Type RB.22.9.xxx.9021
- LED indicator green/red for the status of commands (SET and RESET)
- Plug-in, for use with socket type 90.21

RR Series - Fast Acting Relay

- Nominal supply voltages: 24 - 110...125 - 220...250 V DC
- 4 changeover contacts 8 A
- Reaction time < 3ms
- LED indicator for relay status



Type RR.14.9.xxx.0000
- Modular, direct 35 mm rail (EN 60715) mount

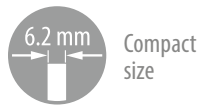


Type RR.24.9.xxx.9021
- Plug-in, for use with socket type 90.21



SLIM RELAY INTERFACE MODULE

Sensor & Actuator wiring



MasterINTERFACE 39 Series - Relay interface modules

- Ultra Slim Space & Cost Saving design
- 6.2 mm wide
- Available in EMR & SSR versions
- DC or AC/DC coil versions
- Special coil/input leakage current suppression types
- Plug-in fuse protection module
- Timer version
- High Electrical Life
- High Temperature resistance
- Versions to suit all needs
- Leader in production of Relays and Socket
- Screw & Push-In terminals
- Accessories: Output fuse module, MasterAdapter, Jumper link, Terminal doubler, plastic separator etc.



Output fuse module



Jumper links are available in three different colours: Blue, Red and Black.



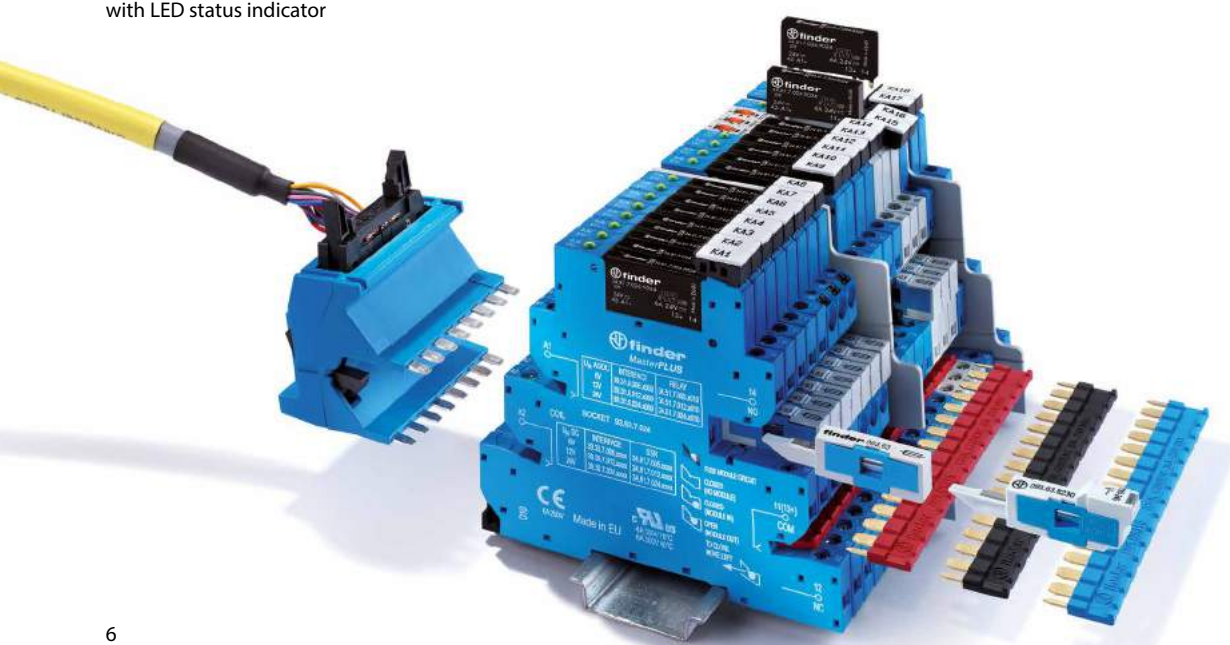
Terminal Doubler



MasterADAPTER permits the easy connection of A1/A2 terminals to PLC outputs via a 14-Pole ribbon cable.



Output fuse module with LED status indicator





CONTACT MULTIPLICATION RELAYS

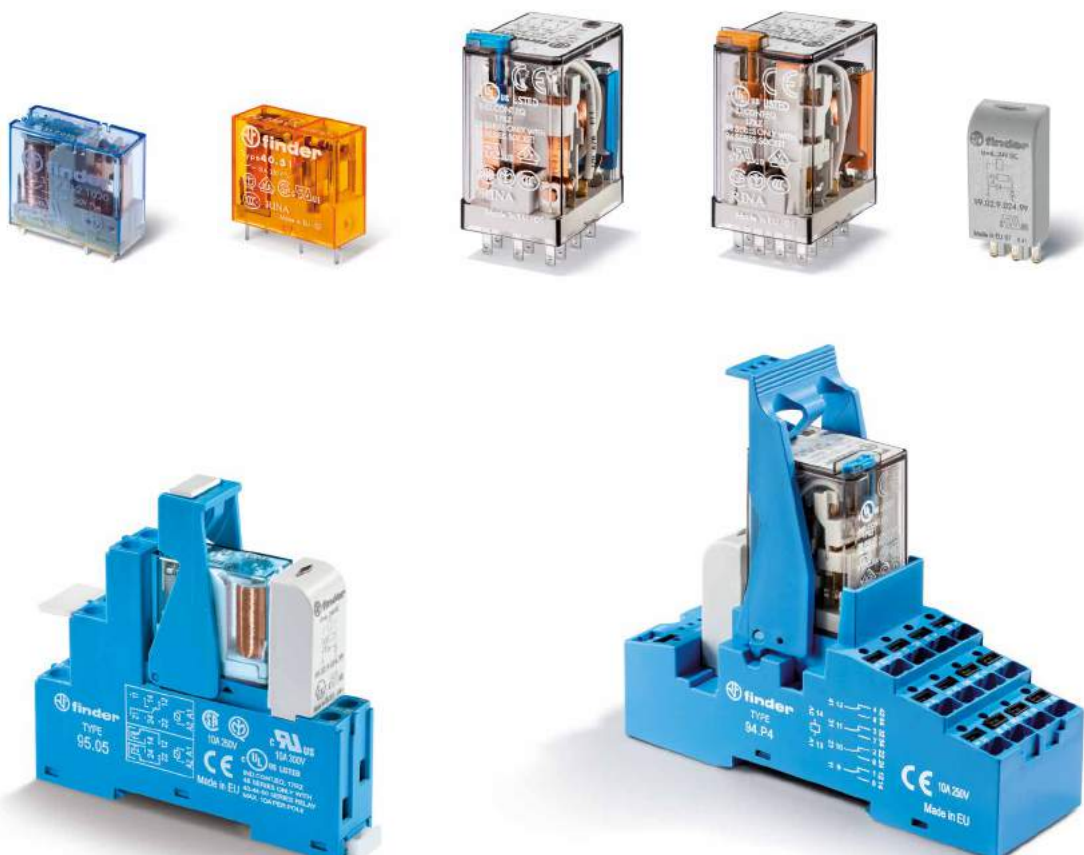
To provide reliable interface



Miniature General Purpose Relays

Used for Signal Multiplication with 2, 3 and 4 Changeover Contact

- AC & DC coils
- PCB or Plug-in mounting
- Available with lockable test button,
- Mechanical flag & LED indicator
- Laser Marking, resistant to wiping
- High Electrical Life ~2 lakhs cycles
- High Insulation between coil & contacts (4KV)
- Wide Ambient temp range: (-40...+85) Deg C
- Touch proof Socket with Screw & Spring loaded base
- Add-on protection and timer modules can be installed directly on socket





MAGNETIC BLOW-OUT RELAYS

For increased DC breaking capacity



62 Series - For high current DC loads such as, motors, circuit breakers, electromagnets and electromagnetic valves

- 1 & 2 Pole NO contacts 16 A
- Breaking capacity DC:
 - 16 A @ 125 V
 - 12 A @ 220 V
- Nominal coil voltage 12, 24, 110, 125, 220 V DC
- Magnetic Blow-out
- High insulation between coil and contacts (6kV)

- Contacts material AgSnO_2
- Ambient temperature range $-40...+70^\circ\text{C}$
- Cadmium Free contact material
- Plug-in (92 series sockets) or Faston 187 (4.8x0.5 mm) with optional mounting adaptors





SWITCH MODE POWER SUPPLY

For stable, smart and strong control



AC or AC/DC input



Battery chargers (according to types)

78 Series - Industrial Grade SMPS for DCS/PLC/CNC panels (Features - according to type)

- Supply available from 0.5 to 10 A
- Input voltage AC or AC/DC
- Input protection: replaceable internal fuse plus spare
- Overvoltage protection: varistor
- High efficiency: up to 94%

- Short circuit protection-hiccup (auto-recovery) mode, Over protection: fold-back mode
- Dual and series connection permissible
- Thermal protection: internal with pre-alert alarm via LED and auxiliary contact, and with Vout shutdown for safety
- Pre-alert alarm via LED and auxiliary contact indication



Auxiliary NO contact operates on:

- Power failure
- Short circuit
- Thermal alarm

Adjustable output 24-28 V DC

GREEN LED for signalling:

- OK output
- Overload
- Short circuit

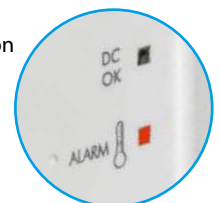


Front panel replaceable fuse for Input protection

RED LED for signalling:

- Pre-Alarm for thermal protection
- Alarm for thermal protection

Dedicated input terminals





SOLID STATE RELAYS

SSR's offer high switching speed and long electrical life



77 Series - Modular Solid State Relays (SSR)

Particularly suitable for resistive loads and for industrial applications where high switching frequencies and high inrush currents can be problematic.

- 1 NO output, from 5 to 50 A
- Versions available for "Zero Crossing" or "Random" switching
- Versions available with DC output
- High-speed switching and high electrical life
- Silent switching without electric arcing or "contact" bounce
- 35 mm rail (EN 60715) mount or panel mount
- Input AC or DC
- Suitable for lamp loads
- 17.5 and 22.5 mm housing





TIMERS

Time Management with Precision



Multi-function, Bi-function or Mono-function timers. Multi-voltage timers.



80 Series - Modular timers

- Six time ranges from 0.1 s to 24 h
- Nominal voltage (12...240) V AC/DC
- Contact rated current: 6, 8 or 16 A
- Solid state output (SSR): 1 A
- 17.5 mm wide



83 Series - Multi-function timer range

- Eight time scales from 0.05 s to 10 days
- Wide supply range (24...240)V AC/DC
- 1 or 2 Pole, 22.5 mm wide
- Complies with EN 45545-2:2013 (protection against fire of materials), EN 61373 (resistance against random vibrations and shock, Category 1, Class B), EN 50155 (resistance to temperature and humidity, T1 class)



81 Series - Modular timers

- Six time ranges from 0.1 s to 10 h
- Seven functions (4 with supply start and 3 with signal start with Reset function)
- Nominal voltage (12...230) V AC/DC
- Reset function



SMARTimer Type 84.02



Digital Timer "Two in one": two totally independent programmable channels, in a single product

- Two programming modes: "Smart" mode via smartphone with NFC communication or "Classic" mode via the joystick
- Wide backlit display for easy reading of all information during the programming phase and during normal operation
- Flexibility: it's possible to create new specific functions, mixing the 30 available functions on each channel
- High precision, possibility of choice in time set-up:
 - Time units; 0.1 seconds, seconds, minutes, hours
 - Set-time to 4 digits, anywhere between 000.1 second and 9999 hours
- Large display allows easy viewing: set time, current time, timing in progress, input command state, output state
- 1 CO (16 A) + 1 CO (16 A) output contacts



85 Series - Miniature plug-in timers

- Seven time ranges from 0.05 s to 100 h
- AC/DC supply non polarized
- 2, 3 or 4 pole



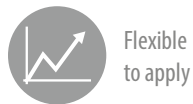
86 Series - Timer modules

- Time ranges from 0.05 s to 100 h
- Wide supply range in AC or DC coils
- Plug-in for use with 90, 94, 95, 96.02 and 97 Series sockets



MONITORING RELAYS

To control the single and three-phase applications



Flexible to apply

70, 71 and 72 Series

- Multifunctional types, providing the flexibility of monitoring Under voltage, Overvoltage, Window Mode, Phase rotation, Phase loss, Asymmetry and Neutral loss, Thermistor temperature sensing, Level Monitoring, Current Monitoring Relays
- Colored LEDs for clear & immediate visual indication

- Modular housing, 17.5 or 35 mm wide
- 1 or 3 phase systems
- Adjustable or Fixed values
- Positive safety logic
- 35mm rail (EN 60715) mount





SURGE ARRESTER

To prevent failures from surges



6P Series - Surge Protection Device (SPD)

SPD Type 2, SPD Type 3

- Surge arrester for 230 V or 415 V system/application
- Single phase systems or three-phase systems
- Replaceable Pluggable modules
- Visual and remote signalling of status
- 35 mm rail (EN 60715) mount



7P Series - Surge Protection Device (SPD)

SPD Type 1+2, SPD Type 2, SPD Type 3, Ethernet (POE) and dataline SPD

- Surge arrester for 230 V or 400 V system/application
- Single phase systems or three-phase systems
- Replaceable Pluggable modules
- Visual and remote signalling of status
- 35 mm rail (EN 60715) mount





INDUSTRIAL THERMOREGULATION

To ensure the optimum temperature and prevent the formation of condensation



Perfect climate inside panels

7T Series - Thermo-hygrostat and Thermostats



Ensures performance of components and instrumentation in control panels and enclosures, and can prolong product life.

- Small, compact, 17.5mm wide
- Type 7T.51 - Multifunction electronic control
- Type 7T.81 - Snap action Thermo-static Bimetal sensor
- Wide temperature setting range
- Long electrical life
- 35mm rail (EN 60715) mount



7F Series - Filter Fan with Exhaust Filter

New filter fan range to ventilate and safeguard against high enclosure temperatures.

- Very low acoustic noise
- Minimal depth within enclosure
- Easily replaceable filter mat
- Air volume (14...370) m³/h (with Exhaust Filter installed in cabinet)
- Air volume (24...500) m³/h (free flow)
- Operating voltage: 24 V DC, 230 V AC

7H Series - Panel Space Heater

Prevents the formation of condensation and ensures the optimum temperature within electrical enclosures. Heating power from 50 W to 400 W.



- Heating power 25, 50, 100, 150 W
- Heating power 250-400 W fan assisted
- Power supply voltage 110...230 V AC/DC, 120 V AC or 230 V AC
- PTC self-regulating heating system
- Aluminium profile encased in a plastic housing
- Operating temperature range: -45...+50°C
- Screw terminals
- Vertical positioning
- 35 mm rail (EN 60715) mounting with clip



LED PANEL LIGHT

Finder's new LED light for electrical panels - with magnetic mounting



Perfect lighting inside panels

7L Series - Mounting "Two in one" - Direct magnetic mounting or through a screw-fixed metallic support

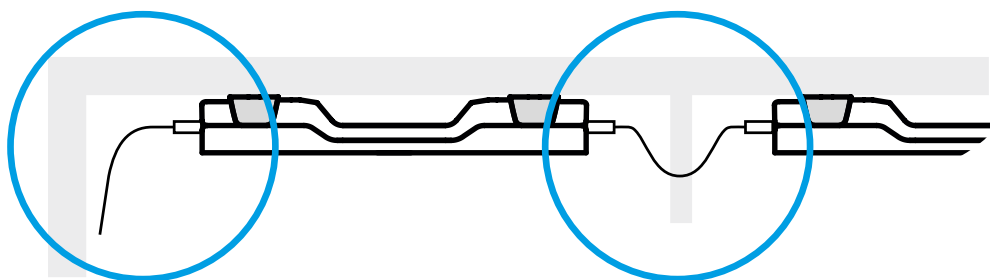
Type 7L.43 (600 lumens)

Type 7L.46 (1200 lumens)

- Versions for switching via an ON/OFF switch or via integral movement detector
- Direct magnetic mounting or through a screw-fixed metallic support
- Power supply: 12...48 V AC/DC and 110...240 V AC/DC
- Nominal power consumption: 9 W (600 lm), 13 W (1200 lm)
- Radiation angle: 120°
- Light colour: 5,000 K
- Protection category: IP20
- Connector included



Quick and simple wiring system via **push-in terminals** for the connection to a single unit, or via **plug-in terminals** for the connection to a single or multiple units.



Multiple connection

Easily connected with plug connectors (up to max. 7 lamps)

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