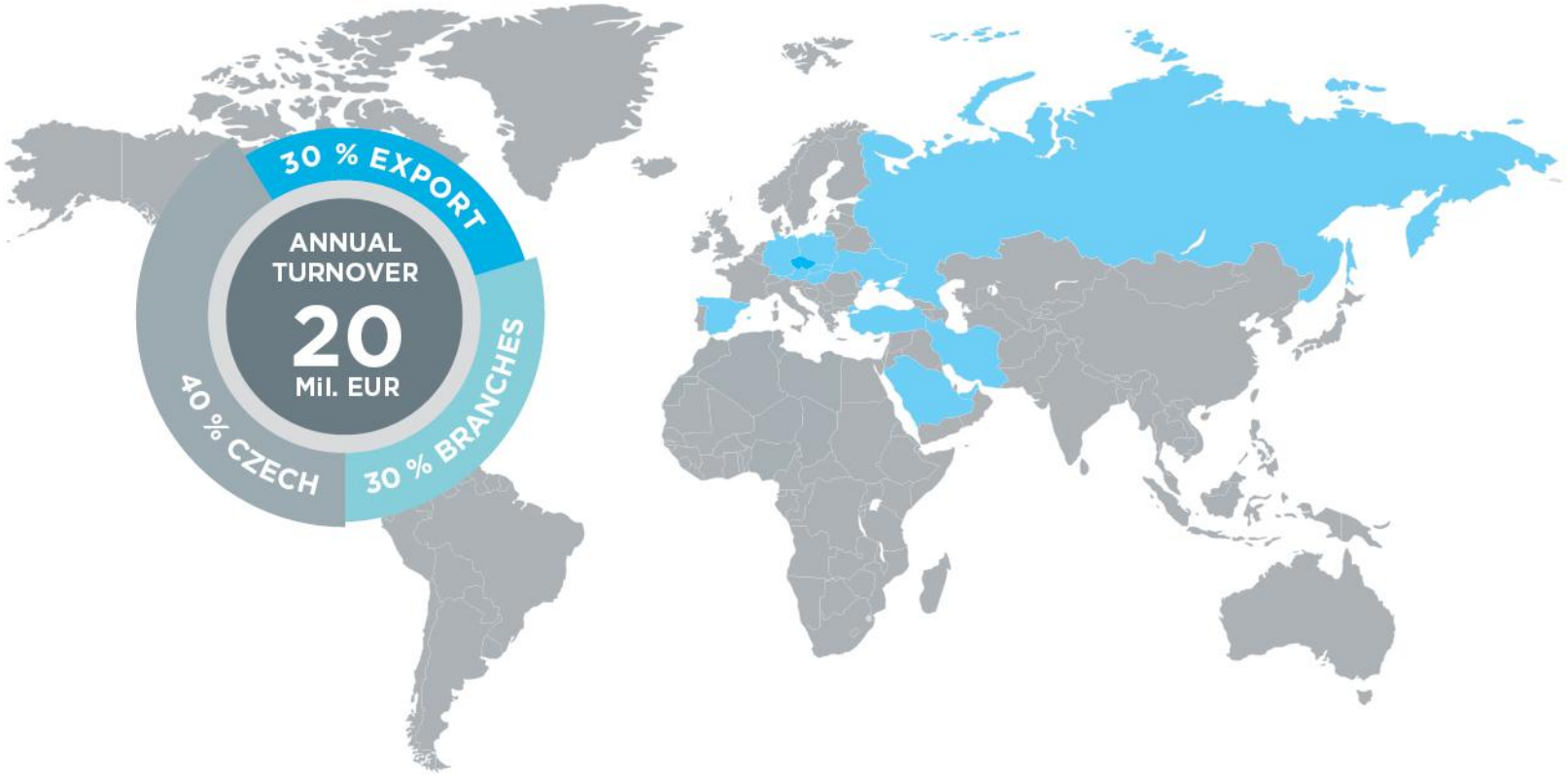
World of electronic devices

Why choose relays from ELKO EP?

Development, Manufacturing, Sales, Support

- under one roof

Facts and Stats



2nd Position in Europe

13 Branches over the world

70 Exporting countries

240 Employees

5 K iNELS installation

12 mil. Manufactured products

Control of quality

- Development tests
- Inspection of the production process
- Long-term load tests

Significant proof our quality

We produce world 7 of 10 bigest electrical companies on the field of electrical installation.

TE connectivity

Schneider Electric

:hager

EATON

SIEMENS

ETI

Kopp

Quality from Czech Republic

- Hi-Tech Technology
- Antistatic area
- Unique tracking

Relay forecast 2022

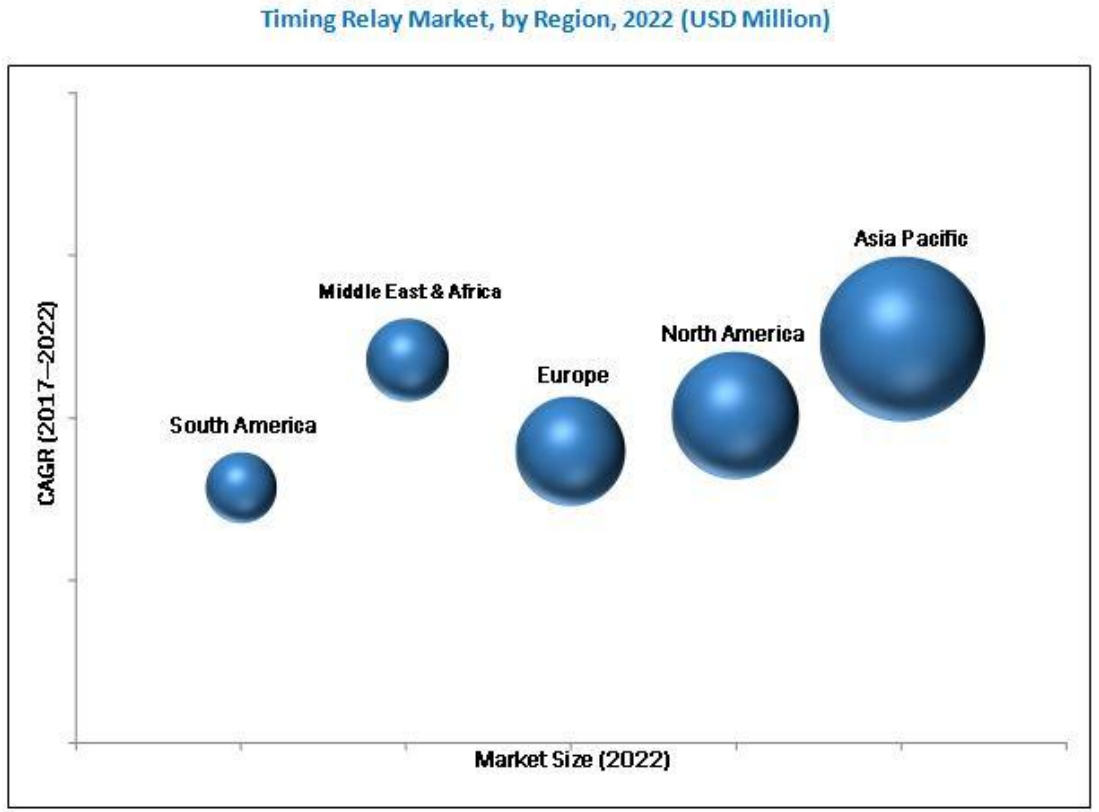
Leaders
ABB, Eaton, Fuji Electric, GE, Infitec, Littelfuse, Macromatic Industrial Controls, Mitsubishi Electric, Mors Smitt, Omron, Phoenix Contact, Rockwell, Schneider, Siemens, TE Connectivity, ELKO EP

"The timing relay market is projected to grow at

a CAGR of 4.32%, from 2017 to 2022." = Market worth 573.5 Million US

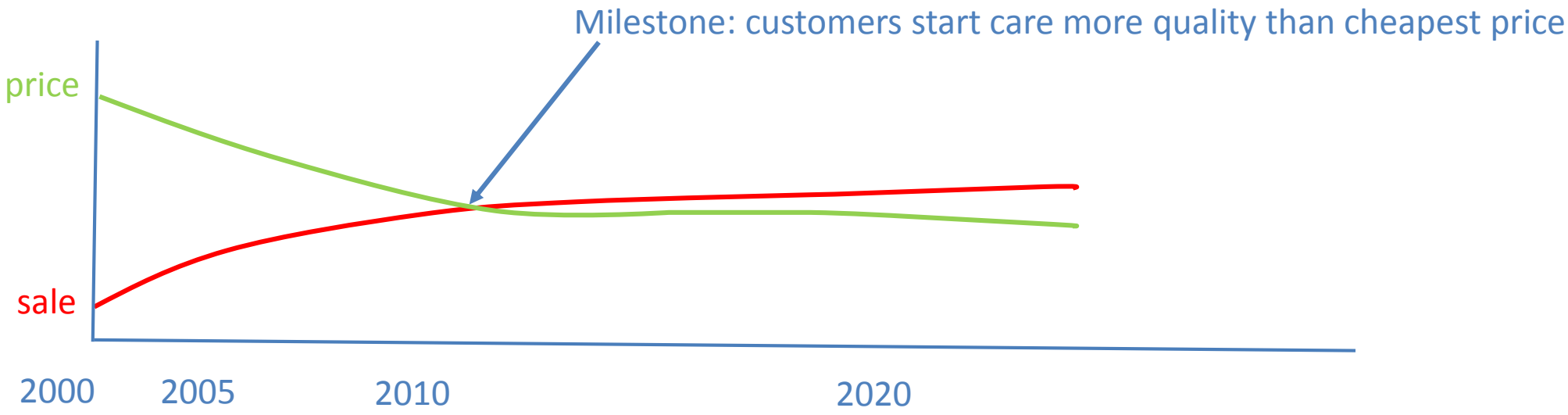
RESEARCHANDMARKETS
THE WORLD'S LARGEST MARKET RESEARCH STORE

analysts forecast the global industrial monitoring relays market to grow at a CAGR of 6.06% during the period 2018-2022



Source: MarketsandMarkets Analysis

Where are relays now

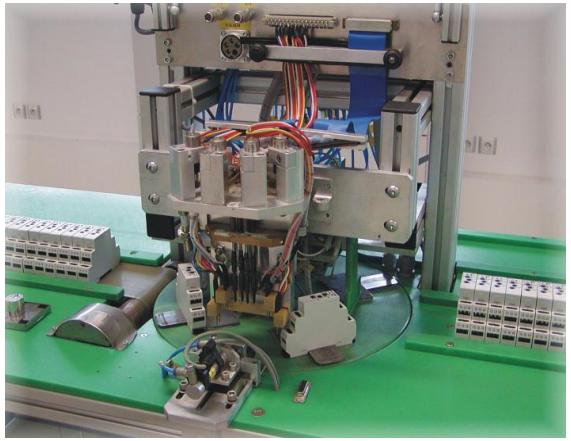


Double vendor inspection

We are purchasing components only from well-known and proofed suppliers.

Prior dispatchment, our products are tested twice during the final check-out:

1x automatic tester



2x manually

Design

DIN RAIL

Module

Digital

OUTSIDE

IP65

IN BUILT

Box

More than 250 types

- TIMERS
- POWER RELAYS
- DIMMERS
- TWILIGHT SWITCHES
- POWER SUPPLY
- MONITORING VOLTAGE / CURRENT / FREQUENCY
- LEVEL SWITCHES
- THERMOSTATS
- CONTACTORS

We are able to develop relays according to your needs

YOUR

\+

OUR

=

Box & Mounting

Clips UP

UV protection = long life box

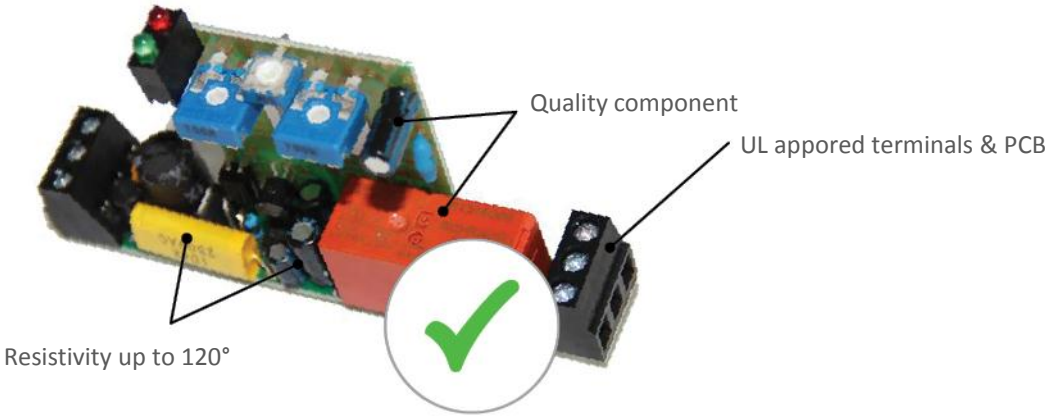
Laser printing = clear description

Non-flammable = safety

Clips DOWN

Quality

ELKO EP

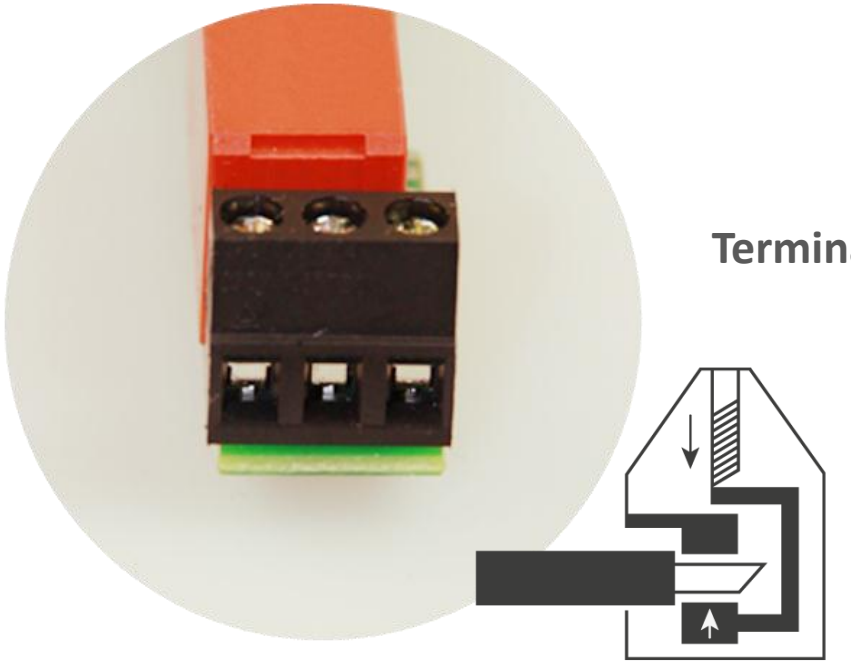


- Innovation power supply with varistor
- Output relay connected on board

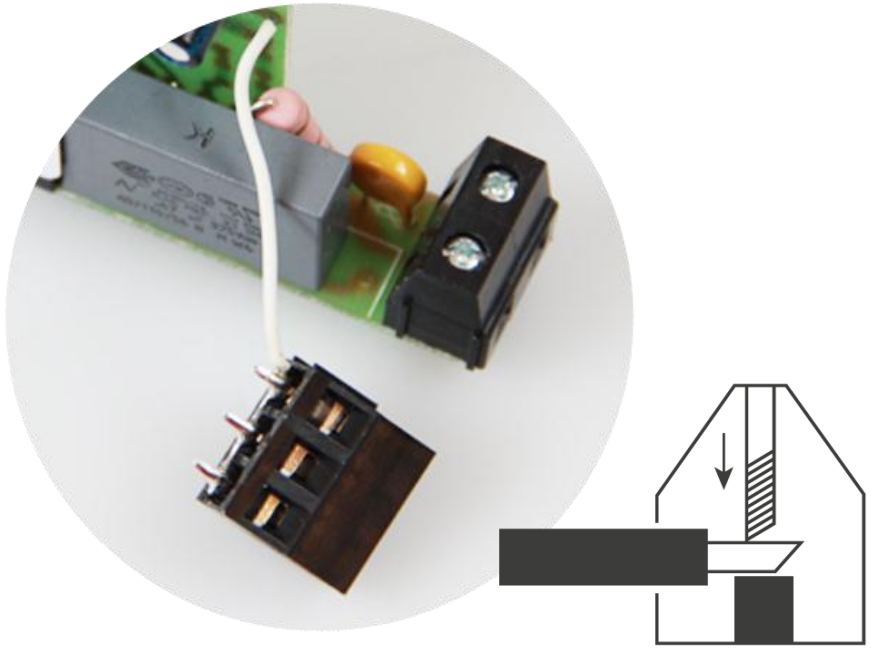
Low cost

- Simply power supply (capacitor) without varistor protection againist voltage fluctulation
- Relay 16 A which is connected on terminals via wire with max current 6 A

Quality



Terminals



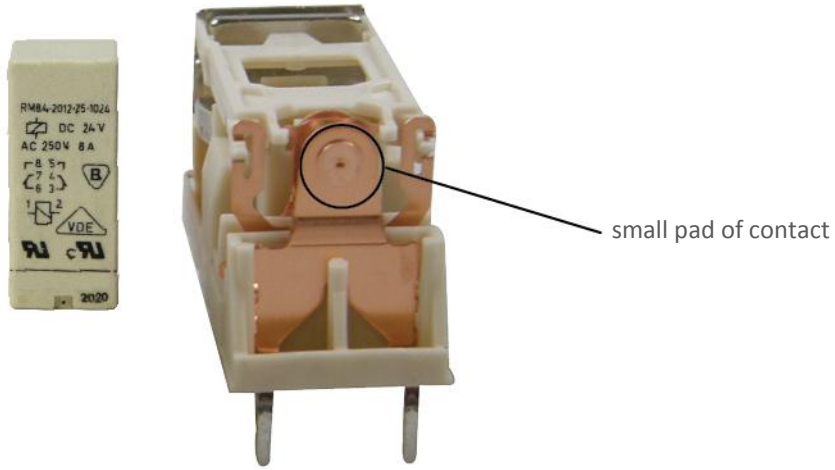
ELKO EP

Terminals are located right on printed circuit boards.
Lift system: secure attachment wires.

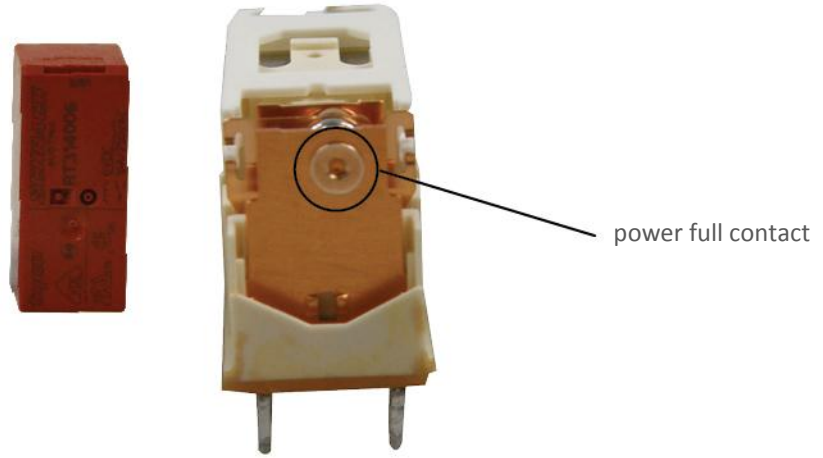
Cheap competitor

Classical conductor attachment. The possibility of loosening the wire.

Quality



- contact AgNi = resistive load
- 6 A
- 1 mil. operations
- sensitive on temperature and shakes (destruction of relay)



- contact AgSnO = resistive; inductive; capacitive load
- 16 A
- 3 mil. operations
- stabil working
- up to 4 kW
- noisless

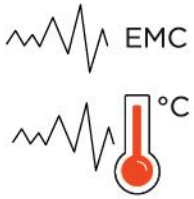
High level of innovations

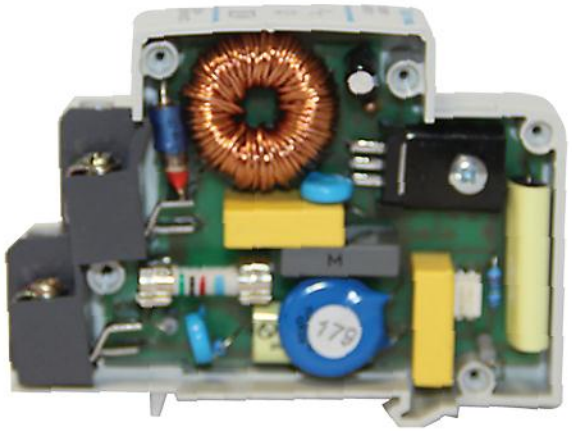
Old fashion

triac

+

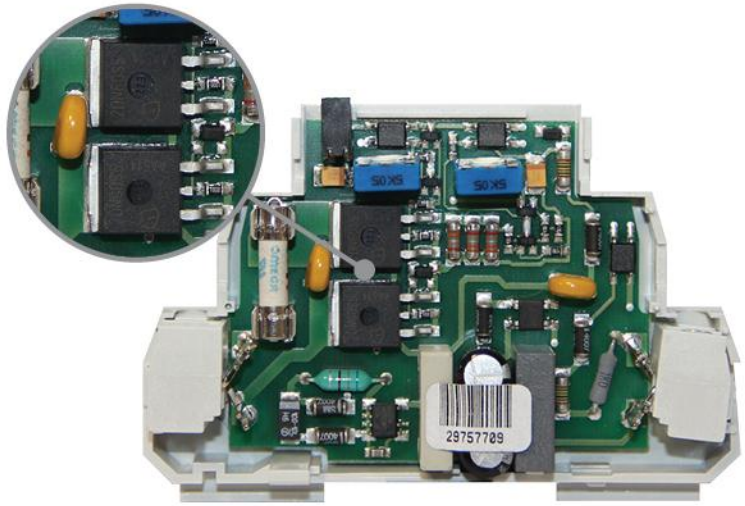
choke

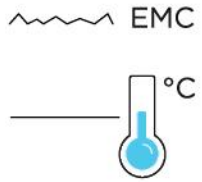




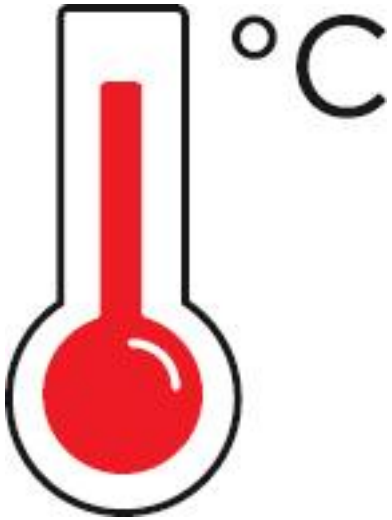
New fashion

2x MOSFET (SMD)





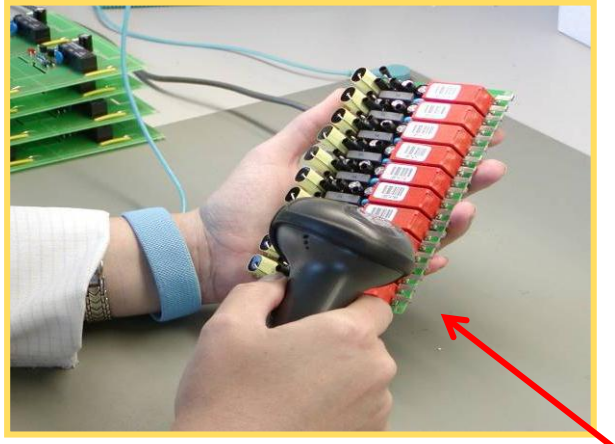
Operating temperature



-20 +55 °C

Tracking

- whole manufacturing process of each unit is monitored and controlled through its EAN code
- easy searching for faulty series or malfunctioned component from supplier, etc.
- each product has unique marking number – easy tracking of product history (backwards up to its ordering)



012345 – EAN code
0524 – year / week of production

New packing with new design

- Every device is packed separatelly
- Better transport protection
- ECO packing

- Strengthened latches
- New design still compatible

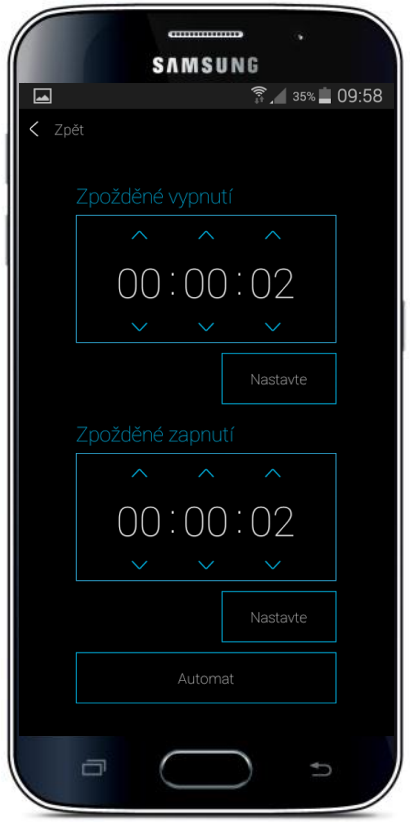
Our bestseller multifunction relay CRM-91H – why ?

1. Universal power supply 12-240 AC/DC
2. Input power tollerance -15% - 10%
3. Works with 50Hz or 60Hz networks
4. Time range from 0,1 s till 10 days
5. 10 frequently-used functions
6. Contact current rating – 16 A
7. Up to 3x 8A in one module
8. Changeover contact
9. Signalization of power supply and output
10. UL, CE, PT certification

We dont sleep and inovate older products to be on TOP technology level

- accuracy of approximately 2%, this increases reliability and distinguishes them from cheap competitors.
- lower power consumption of just 2.5 watts.
- suitable for 50 Hz and 60 Hz networks
- Without the need to change HW, our innovative relays can modify the device parameters utilising the powerful AT Mega 48P processor
- There are no connector connections inside the products, so they are mechanically very resistant to shocks

NEW in 2018
SHT-7 new age of setting relay



NFC

- Digital time switch with weekly program
- Set up via smartphone supporting NFC
- Easy and intuitive setting via app
- Upload / download / copy of setting

NEW in 2018
CRM-100 digital multifunction time relay

- Used for lighting, heating, motor and pump control, time functions
- Thanks to the setting and visualization of time on the display, the manual adjustment of the devices you use is avoided in applications, where the emphasis is on exact time set
- The 17 most frequently used time functions in a single-mode design with UNI power supply

TOP 10 relays

1. CRM-4
2. SHT-1/2 and SHT-4
3. SMR-T
4. DIM-15
5. SOU-1
6. VS 316/VS 116
7. MR-42
8. HRN-55N
9. HRH-5
10. TER-9

Staircase switch | CRM-4

CRM-4

- Used for delayed switching of lights in the corridors, entrances, stairways, halls or for delayed finish (OFF) of fans (WC, bathrooms,…)

Operating system switch

- AUTO –normalfunctionaccordingto theset time
- OFF –permanentlyOFF (e.g. whenchangingbulbs)
- ON –permanentlyON (e.g. whilecleaning, servicing)
- Timerange: 0.5 –10 min, timesettingby potentiometer

SHT-1/2 | SHT-4

Digital time switch clock

- Control appliances depending on real time, automatic control, switching lights, time-controlled el. heating, etc.
- Switching accordingly the program: AUTO, CUBE, MANUALLY
- Winter/summer time, 100 memory locatins
- Backup: real time 3 years, program data 10 years

Digital time switch with an astronomical program

- Used for controlling the lighting (billboards, advertisements, shop windows, etc.) with no light sensor required
- By entering the geographic coordinates, the lighting can be switched on/off by sunrise and sunset
- Operating hours counter for each of two channels
- Automatic switching between winter and summer time

Super-multifunction relay | SMR-T

SMR-T

- Relay is designed for installation into a wiring box or under wall-switch in an existing electrical installation
- 9 function – 3-wire connection, works without the connection of a neutral conductor

Universal dimmer | DIM-15

DIM-15

- Supply voltage 230V AC
- Output status is indicated by red LED:
  - shines when output active
  - flashes while heating overload, at the same time output is disconnected
- 1-MODULE version, DIN rail mounting, saddle terminals

Designed for dimming of:

- R (resistive) – resistive bulb, halogen lamp
- L (inductive) – inductive coil transformer for low-voltage halogen lamps
- C (capacitave) – electronic transformer (capacite load) for low-voltage halogen
- LED – LED lamps and LED light sources, 230 V
- ESL – dimmable energy-saving tubes

Twilight switch | SOU-1

SOU-1

- Used for switching street illumination and garden lights, illumination of advertisements, shop windows, etc.
- Adjustable time delay to eliminate short term fluctuation in illumination
- External sensor IP56 suitable for mounting on the wall – maximum length of lead wire 50 m
- Relay contacts: 1×16A/$AgSnO_2$

VS 116 | VS 316

Power relay VS 116

- designed to switch higher output (load) than is the capacity of a switching element = amplifier -auxiliary relays help, amplify, extend etc.
- VS116K/VS116U – relay contact: 1×16 A/$AgSnO_2$
- Power supply: AC 230 V/50-60 Hz –„K“
- UNI AC/DC 12-240 V (AC 50-60 Hz) –„U“
- VS116B/230 in design MINI, mounting into an installation box

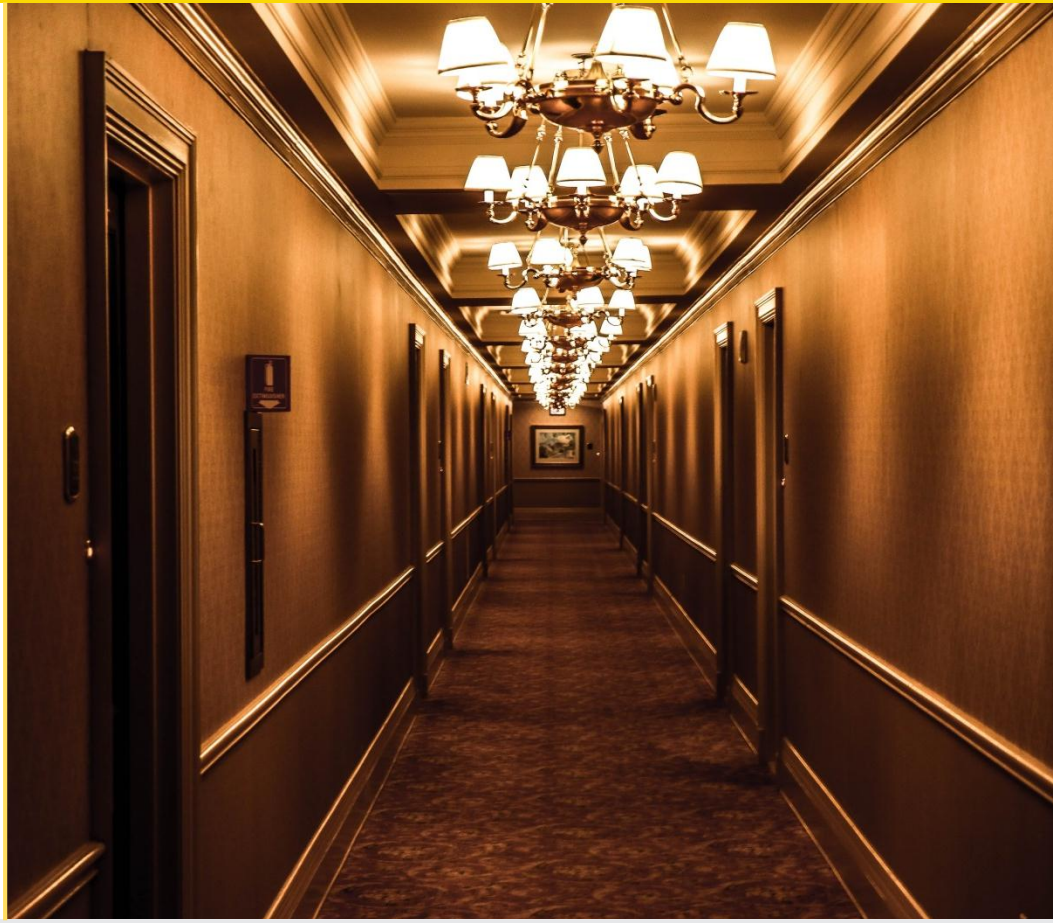
Power relay VS 316

- VS316/230 – power supply: AC 230 V/50-60 Hz
- VS316/24 – power supply: AC/DC 24 V (AC 50-60 Hz)
- Relay contact: 3×16 A/$AgSnO_2$
- Enables switching of different phases or 3 phase voltage
- Different colors of LED lights: red, green, yellow, blue, white

Memory & latching relays | MR-42

MR-42

- Mono stable flip-contact, pulse control from more locations via two wires, this is useful for lights in stairs, hallways, etc.
- Options:
  - 2× parallel contacts or the other relay is latching
  - function selected via external jumper between B1-B2
  - output contact: 2× changeover/SPDT 16 A



Monitoring voltage relay | HRN-55N

HRN-55 N

- Relay monitors phase sequence and failure, exceeding of monitored voltage in 3 phase main
- Supply L1-N, it means that relay also monitors break of neutral point
- Output contact 1× changeover 8 A/250 V AC1

Level switch | HRH-5

HRH-5

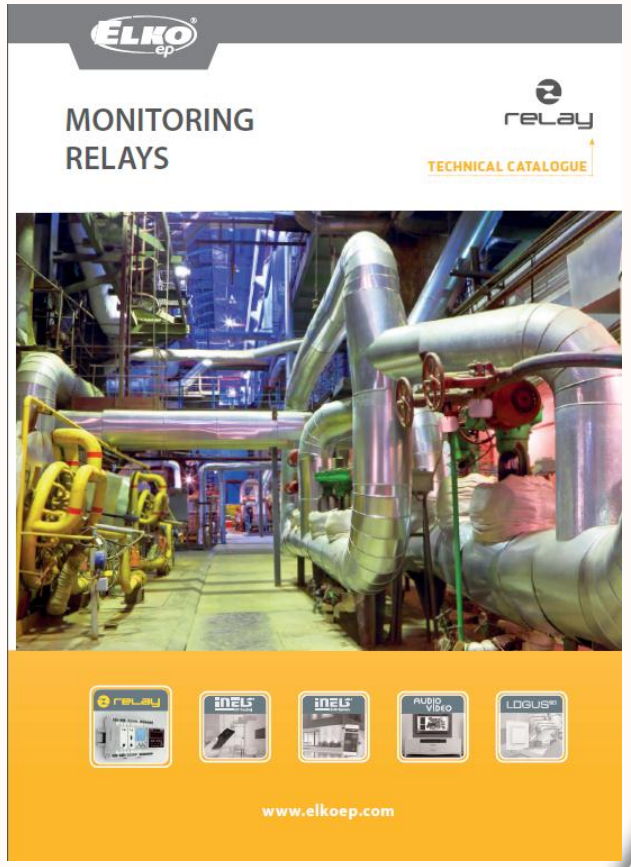
- This level switch is used for monitoring levels in wells, reservoirs, pools, tanks and so on
- Relay contact 1×8 A/AgNi
- Options:
  - single-state monitoring (full/empty)
  - double-state monitoring (ON –1st, OFF –2nd)
  - PUMP IN/PUMP OUT/combination
  - adjustable time delay 0,5-10 s
  - adjustable sensitivity 5-100 k ohm
- Galvanically isolated power supply (from circuit)
- Measuring parameters: AC 3,5 V/10 Hz
- Set of level switch, switch board ECH-4G with IP 65 protection and gland

Thermostat with the switch clock | TER-9

TER-9

- Temperature monitoring and control based on real-time with two temperature inputs NTC, two thermostats in one device with 6 functions
- Relay contact 2×8 A/AgNi
- Options:
  - two independent thermostats
  - 1x dependent
  - differential thermostat
  - 2-stage thermostat
  - zone thermostat
  - thermostat with dead zone
- Other functions:
  - monitoring of short-circuit and sensor disconnection
  - SW settings
  - reference temperature calibration

New range of monitoring relays
OVER 30 types



- Voltage
- Current
- Frequency
- Graund fault relay
- Reverese power
- Synchro check
- Speed sensing
- For one phase and three phase network

New range of monitoring devices
FEATURES

- Auxiliary power supply
- Extended power supply 24 – 240V AC / DC
- Suitable for 50 / 60 Hz networks
- Thanks to newest components, increased measurement accuracy
- Focused on industrial apliactions
- Bigger range of monitored current / voltage devided to 10 types

Your big stock of RELAYS is in our company

- Next day shipment
- Flexibility deliver on projects

Project support

ELCAD

ePLAN electric P8

ECS

TECHNODAT

SPAC START

CADdy

PC SCHEMATIC

DOWNLOAD

Cross reference chart

CROSS-REFERENCE CHART

discontinued products / no longer available.

For more information click on the device's picture after click on " + " options appear

		Time relays										Time relays	Monitoring relays
		Multifunction time relay, power supply 230V, output 1x16A	Multifunction time relay with external control, power supply 12 - 240 V AC/DC, output 1x16A	Multifunction time relay, 10 functions, power supply 12 - 240 V AC/DC, output 3x8A	Multifunction time relay with contact-free output, power supply 12 - 240 V AC/DC, output 0.7A	Time relay, asymmetric cycler (external control), power supply 12 - 240 V AC/DC, output 1x16A	Delay ON star/delta relay, power supply 12 - 240 V AC/DC, output 2x16A	Delay off without supply voltage, output 2x8A, power supply 12 - 240 V AC/DC, output 2x8A	Programmable digital relay, 16 functions, output 2x16A, time 100h, power supply 12 - 240 V AC/DC, output 2x16A	Staircase switch, 0.5-10min., power supply 230V AC, output 16A	Time switch digital, power supply 12 - 240 V AC/DC, pulse output		
Company	Type	CRM-91H	CRM-91HE	CRM-93H	CRM-9S	CRM-2H/HE	CRM-2T	CRM-82TO	PDR-2	CRM-4	SMT-1		
ABB													
Allen Bradley													
ABL Sursum	MRU1W	✔	-	-	-	-	-	-	-	-	-		
	AVU1W	✔	-	-	-	-	-	-	-	-	-		
	RVU1W	-	-	-	-	-	-	✔	-	-	-		
	TIU1W	✔	-	-	-	-	-	-	-	-	-		
	DZ201	-	-	-	-	-	-	-	-	-	✔		
	DZ302	-	-	-	-	-	-	-	-	-	✔		
	TZA2301	-	-	-	-	-	-	-	-	✔	-		
ABL Sursum													
Alstom													
BMR													
BTR NETCOM													
Carlo Gavazzi													
Crouzet													
Comat													
Eberle													
Eltako													
Finder													
DOLD													
F&F													
Hager													
Hiquel													
GE Power Controls / AEG													
Geyer													
Legrand													
Lovato													
Matig													
Merlin-Gerin (Schneider-electric)													
Felten&Guilleaume (Moeller-EATON)													

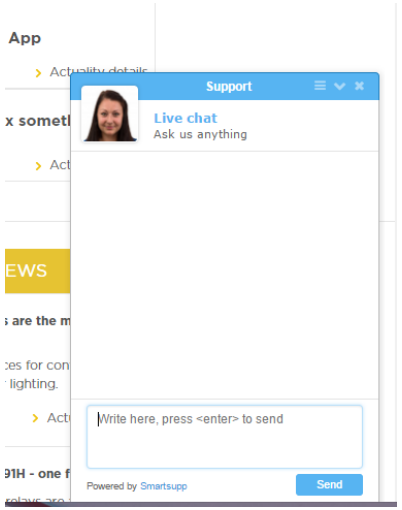
[Source in XLS]

[Standard as PDF]

Support & Servis

Our technical department is always at your avaiable to help you with technical questions. Anytime will help you to choose a correct relay.

We will be pleased to advise you also at:



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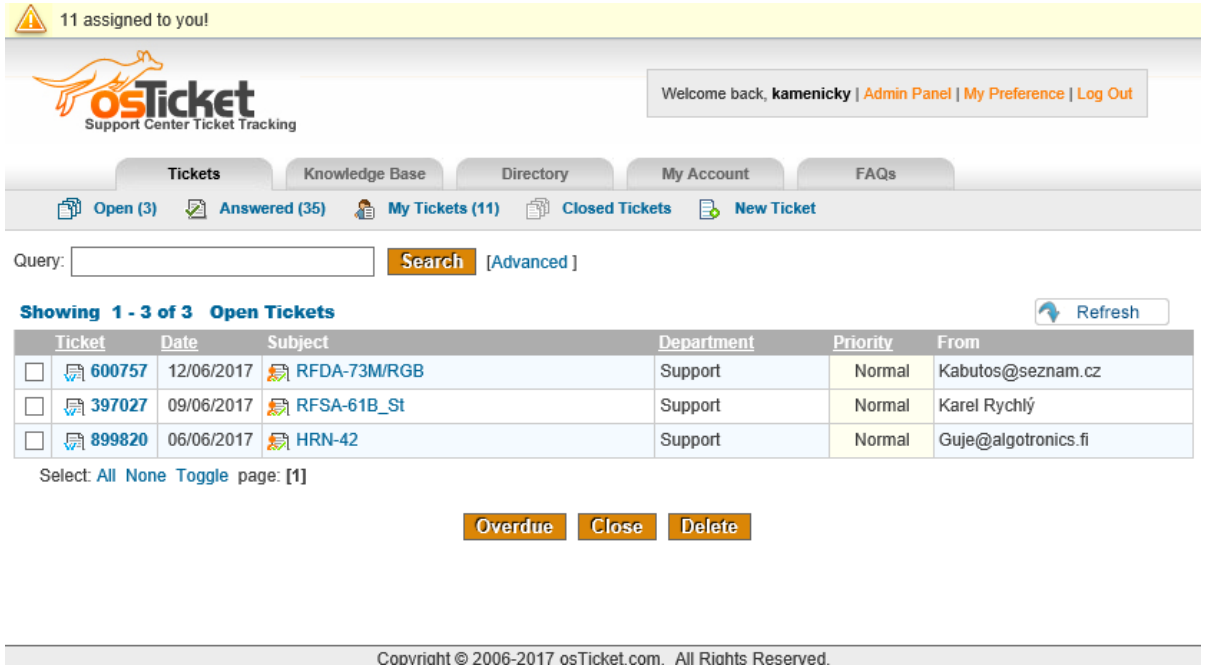


Marketing support

Demo case RELAY Modular Electronic Devices

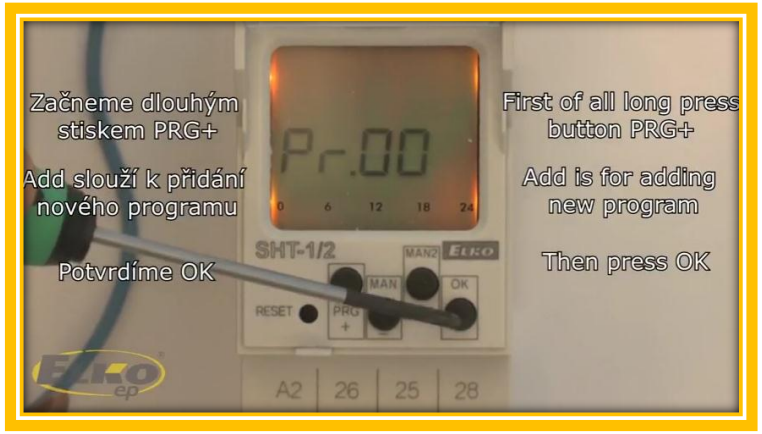
Display oards

Marketing support

Technical catalogue

Product overview

All about dimming



YouTube

Total produced devices

6 000 000

Thank you for your attention!

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