



Combined (type 1 + 2) lightning and surge arresters **4**



Type 2 surge arresters for DC (PV) networks **4**



Type 2 surge arresters **5**



Arrester bases + Inserts for type 2 arresters **5**



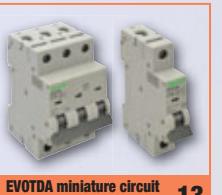
Type 3 surge arresters (fine protection), modular (block) type **6**



Type 2+3 surge arresters (for LED driver) **7**



EVOZ miniature circuit breakers **12**



EVOTDA miniature circuit breakers **13**



EVOH high current miniature circuit breakers **14**



EVON miniature circuit breakers **15**



EVOK combined protection devices **16**



EVOV residual current breakers **17**



EVOTIK isolation switches **19**



EVOSVK modular changeover switches **20**



EVOMS modular lockable disconnection switches **21**



EVOSLJL signal lamps **21**



EVOP modular pushbuttons, push-switches **22**



EVOBT safety (bell) transformers **22**



EVOHK installation contactors **23**



Auto reclose under- and overvoltage relay **24**



MB Circuit breakers **27**



TDZ Circuit breakers **28**



DC type MCB for direct current electric networks **29**



KVK type combined protective switches **31**



RB residual current circuit breakers **32**



Motor-driven automatic reconnection device **35**



Staircase time switch **37**



Impulse-Relay **38**



Signal bells **38**



Modular socket outlet **39**



Surface mounted type socket outlets and switches **40**



Socket-outlet, Shuko with USB port **42**



Wireless door bell **43**



CO sensor **46**



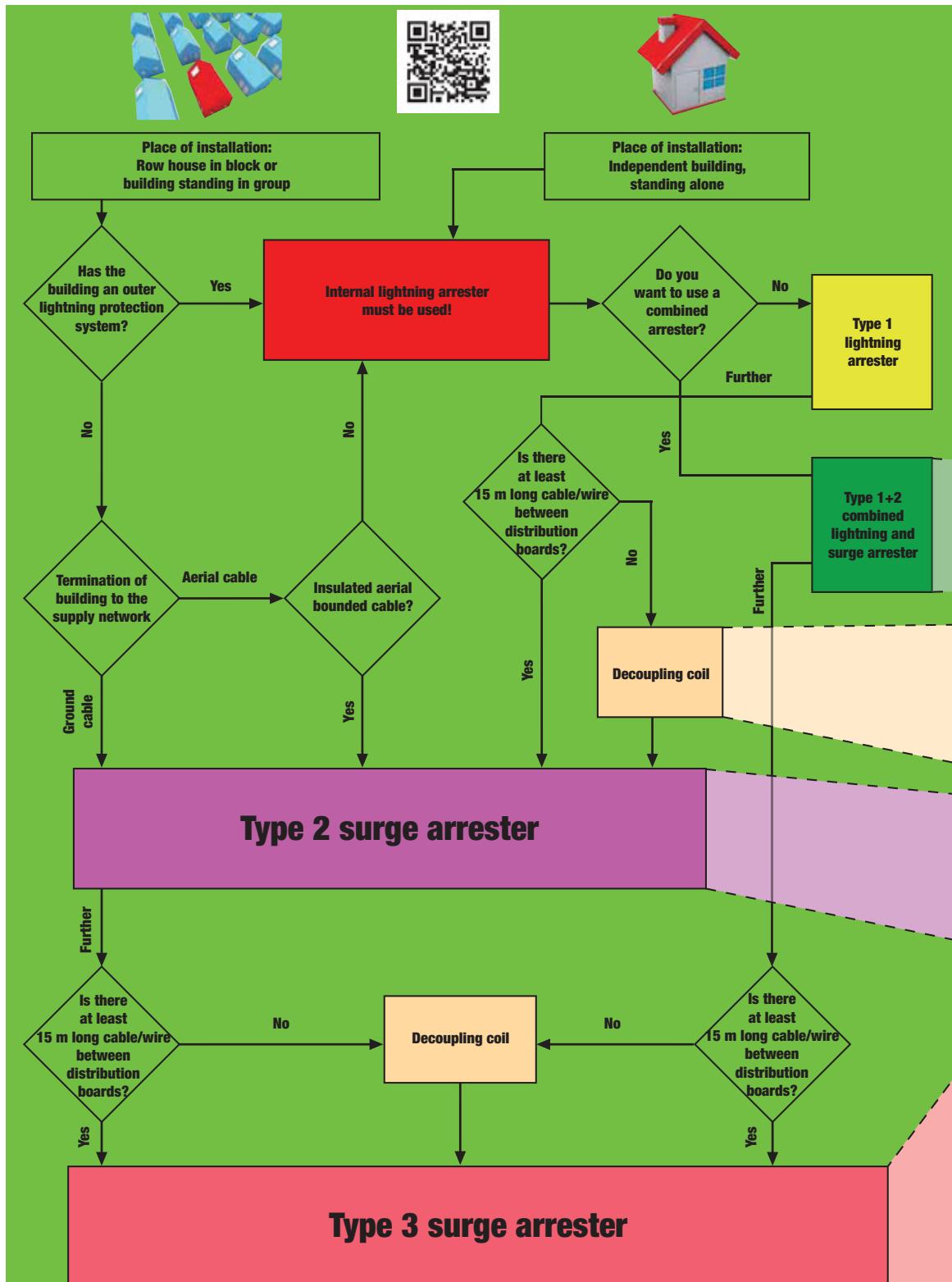
Wireless smoke detector with transmission **47**

## Pictograms of the table head

Notes, additions	Bridging time	Colour	Length of pushbutton circuit
$I_{imp, total}$ 10/350μs Total lightning impulse current	$I_n$ Rated current (A)	$L_D$ Number of LED's (pcs)	Protection degree
$U_p$ Voltage protection level	$I_{imp, 1P}$ 10/350μs Lightning impulse current	$U_n$ Rated voltage (V)	$I_n$ L-N 8/20μs Rated operating current
$I_{cn}$ EN60698 Rated operating short circuit breaking capacity limit of MCB	$U_c$ Continuous operation voltage limit	$I_{max}$ 8/20μs Total discharge current	Dimensions (L × W × H)
$I_{An}$ (mA) Rated residual current	$I_e$ Nominal operational current	$U_m$ Nominal control voltage	mm² Terminal capacity
$U_{up}$ Upper voltage protection level	$P_{max}$ Rated power	$P_s$ Self consumption	NC, NO, co Contacts
$xP$ Number of poles	$U_{down}$ Lower current protection level	$C$ Tripping characteristic	Socket with hinged cover
$I_{sec}$ Upper secondary voltage limit	$\times 17.5$ Modules	$\rightarrow$ Left side of the circuit breaker	$\Sigma$ Number of applicable pushbuttons
side protective contacts	$U_{sec}$ Secondary voltage	$\uparrow$ Up Primary voltage	
Network system	male protective contact	Normal socket	

## Pictograms of the technical data

$230$ $V$ AC Raged voltage (V)	50/60 Hz Rated frequency	Lamp bodies to be installed on ceilings or side walls	IP 54 Protection degree
Volume	Relativ humidity	$T_a$ 40...105 °C Ambient temperature	low batt Low battery display
Changeable insert	Block type	AUX 1xNO Auxiliary contacts	$[mm^2]$ Connectable cable
Ft Thermal fuse	Spark gap	Varistor	Optical signal
63 A gg Suggested backup fuse	$I^{2t}$ 3 Energy efficiency class	E3 Energy efficiency class	$R \geq 0.5m\Omega$ Resistance
LCD Meter with LCD display	Protection class: II.	AC For AC systems	A, AC For AC and pulsed DC systems
$U_{imp}$ 6 kV Rated impulse withstand voltage	$U_i$ 690 V Rated insulation voltage	$\times 10.000$ Electrical life	$\times 10.000$ Mechanical life
$I_{cn}$ EN60698 10 KA Rated operating short circuit breaking capacity limit of MCB	Lamp bodies to be installed on side walls	$P_m$ 0,8 W Self consumption	$20.000$ Lifespan
Seal-leadable on 0-1-2 position	Seal-leadable on OFF position	8mm Distance between open contacts	VO UL94 Flammability according to UL94
35x7.5 Can be install on mounting rail	The devices can be mounted on normal type connecting rails	Type of release: Thermo magnetic	



## Guide to find the suitable overvoltage protection

Planning the suitable internal lightning and overvoltage protection of buildings is a very complex process and we strongly suggest to contact a professional to find the best solution.

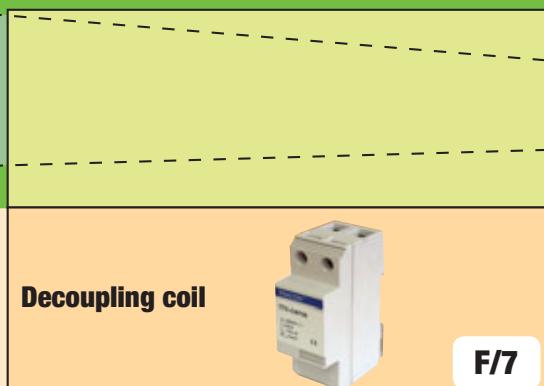
To ease the planning, we have prepared a short flow chart guide where you will find the needed elements to protect your low voltage devices at the installation site.

Start reading the chart at the proper box according to where is located the installation and then follow the arrows until the type 3 arresters. Type 2 and type 3 arresters must be installed to guarantee a minimal protection.

The common place of type 1 and type 1+2 arresters is in the

main distribution board of building; we suggest to install the type2 and type 3 arresters to the side of distribution boards. If the length of the supply cable/wire between the type 3 arrester and the protected device is longer than 30 m then the type 3 arrester have to be doubled at the connection of device. For protection of data network we recommend to use our extension cords with data network protection option.

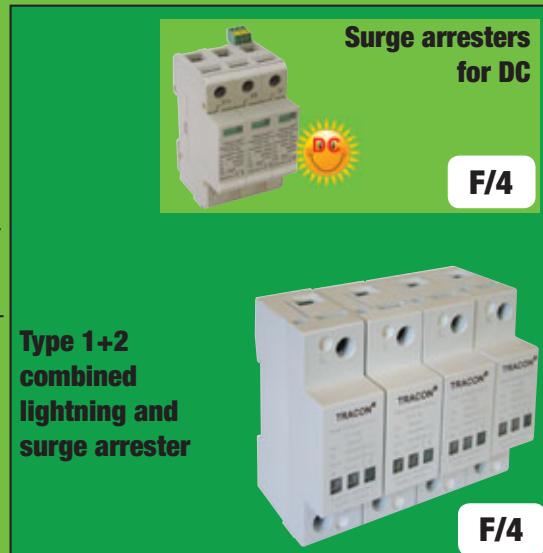
See the ANNEX for further detailed information!



**Decoupling coil**



F/7



**Type 1+2 combined lightning and surge arrester**



F/4



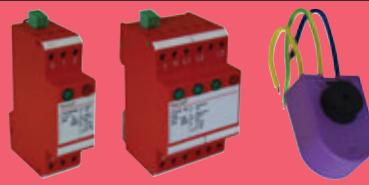
**Type 2 surge arrester**



F/5



**Type 3 surge arrester**



F/6-F/7



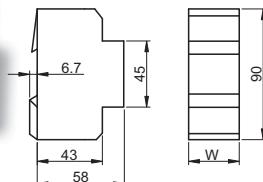
**Protected multi-plug extension cords**



G/9-G/10

**Combined (type 1 + 2) lightning and surge arresters**

TRACON	xP	I <sub>imp</sub> 1P 10/350μs	I <sub>max</sub> 8/20μs	U <sub>n</sub>	U <sub>p</sub>	U <sub>c</sub>	W (mm)	
<b>TTV1+2-100-1P</b>	1P	8 kA	100 kA				27	TN, TT, IT
<b>TTV1+2-100-2P</b>	2P	8 kA	100 kA				54	TN, TT, IT
<b>TTV1+2-100-3P</b>	3P	8 kA	100 kA				81	TN, TT, IT
<b>TTV1+2-100-4P</b>	4P	8 kA	100 kA				108	TN, TT, IT
<b>TTV1+2-100-3P+N/PE</b>	3P+N/PE	8 kA	100 kA				108	TN, TT, IT
<b>TTV1+2-80-1P</b>	1P	8 kA	80 kA	230/400 V, 50 Hz	2,2 kV	385 V AC, 500 V DC	27	TN, TT, IT
<b>TTV1+2-80-2P</b>	2P	8 kA	80 kA				54	TN, TT, IT
<b>TTV1+2-80-3P</b>	3P	8 kA	80 kA		2,2 kV	385 V AC, 500 V DC	81	TN, TT, IT
<b>TTV1+2-80-4P</b>	4P	8 kA	80 kA				108	TN, TT, IT
<b>TTV1+2-80-3P+N/PE</b>	3P+N/PE	8 kA	80 kA				108	TN, TT, IT



The combined devices are applicable to arrest high energy current impulses (10/350μs waveform) which can appear in one- or three-phase overhead lines by lightning and/or discharge overvoltage occurred by switch-type (8/20μs wave-form) over-currents. These arresters have compact (block type) mounting form. The type 1 + 2 lightning arresters must be installed into the main distribution box of the building right after the first main current limitation device and before the power meter.

Attention! The discharge capability of combined devices cannot reach the discharge capability of single devices!

These devices can also be used in properly planned photovoltaic (DC) systems as well.

The selection guide see on page F/2-3.

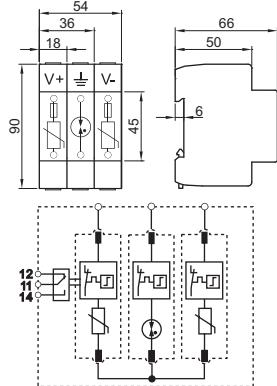
**Type 2 surge arresters for DC (PV) networks**

TRACON	xP	U <sub>n</sub>	U <sub>p</sub>	U <sub>c</sub>	I <sub>n</sub> L-N 8/20μs	I <sub>max</sub> 8/20μs
<b>TTV2-40-DC-600</b>	3P	600 V DC	3 kV	800 V DC	20 kA	40 kA
<b>TTV2-40-DC-1000</b>	3P	1000 V DC	4 kV	1200 V DC	20 kA	40 kA

**Inserts for type 2 arresters**

TRACON	I <sub>n</sub> L-N 8/20μs	I <sub>max</sub> 8/20μs	U <sub>p</sub>
<b>TTV2-40-DC-600-M</b>	20 kA	40 kA	3 kV
<b>TTV2-40-DC-1000-M</b>	20 kA	40 kA	4 kV
<b>TTV2-40-DC-600-V</b>	20 kA	40 kA	3 kV
<b>TTV2-40-DC-1000-V</b>	20 kA	40 kA	4 kV
<b>TTV2-40-DC-600-G</b>	20 kA	40 kA	3 kV
<b>TTV2-40-DC-1000-G</b>	20 kA	40 kA	4 kV

RELEVANT STANDARD  
**EN 61643**



The type 2 surge arresters are suitable to discharge overvoltage occurred by switch-type (8/20 μs wave-form) over-currents. The DC arresters have been especially developed for direct current networks of photovoltaic (PV) systems. These protectors are modular types with changeable insert; the auxiliary contact is mounted to the base of the device.

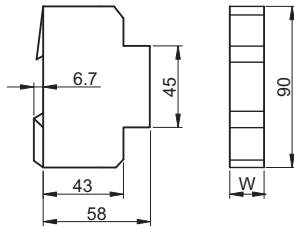
## Type 2 surge arresters



TRACON	xP	I <sub>n</sub> L-N 8/20μs	I <sub>max</sub> 8/20μs	U <sub>n</sub>	U <sub>p</sub>	U <sub>c</sub>	W (mm)	
<b>TTV2-60-1P</b>	1P	30 kA	60 kA	2,0 kV	385 V AC	18	18	TN, TT, IT
<b>TTV2-60-2P</b>	2P	30 kA	60 kA				36	TN, TT, IT
<b>TTV2-60-3P</b>	3P	30 kA	60 kA				54	TN, TT, IT
<b>TTV2-60-3P+N/PE</b>	3P+N/PE	30 kA	60 kA				72	TN, TT, IT
<b>TTV2-60-4P</b>	4P	30 kA	60 kA				72	TN, TT, IT
<b>TTV2-40-1P</b>	1P	20 kA	40 kA				18	TN, TT, IT
<b>TTV2-40-2P</b>	2P	20 kA	40 kA				36	TN, TT, IT
<b>TTV2-40-3P</b>	3P	20 kA	40 kA				54	TN, TT, IT
<b>TTV2-40-3P+N/PE</b>	3P+N/PE	20 kA	40 kA				72	TN, TT, IT
<b>TTV2-40-4P</b>	4P	20 kA	40 kA				72	TN, TT, IT
<b>TTV2-30-1P+N/PE*</b>	1P+N/PE	15 kA	30 kA	1,8 kV	230 V, 3x230/400 V	18	18	TN, TT, IT
<b>TTV2-30-3P+N-PE**</b>	3P+N-PE	15 kA	30 kA				36	TN, TT, IT
<b>TTV2-20-1P</b>	1P	10 kA	20 kA				18	TN, TT, IT
<b>TTV2-20-2P</b>	2P	10 kA	20 kA				36	TN, TT, IT
<b>TTV2-20-3P</b>	3P	10 kA	20 kA	1,5 kV	320 V AC	54	54	TN, TT, IT
<b>TTV2-20-3P+N/PE</b>	3P+N/PE	10 kA	20 kA				72	TN, TT, IT
<b>TTV2-20-4P</b>	4P	10 kA	20 kA				72	TN, TT, IT

\* 2 pcs arrester in one module width for one phase TNC-S and TNS type networks

\*\* 4 pcs arrester in two modules width for three phase TNC-S and TNS type networks



The type 2 surge arresters are applicable to discharge overvoltage caused by switch-type (8/20μs wave-form) over currents.

The type 2 arresters must be installed into sub-distribution boards (at condominium into distribution boards of flats) after main distribution boards containing type 1 arresters. For proper operation at least 10-15 m cable or wire must be placed between type 1 and type 2 arresters. Otherwise a decoupling coil has to be installed between the two devices. These protectors are modular types with changeable insert; the auxiliary contact is built-in into the housing of the device.

## Arrester bases + Inserts for type 2 arresters

TRACON	I <sub>n</sub> L-N 8/20μs	I <sub>max</sub> 8/20μs	W (mm)	TTV2-BASE-1P	TTV2-BASE-2P	TTV2-BASE-3P	TTV2-BASE-4P
<b>TTV2-60-M</b>	30 kA	60 kA	18	-	OK	OK	OK
<b>TTV2-40-M</b>	20 kA	40 kA	18	OK	-	-	-
<b>TTV2-30-A-M*</b>	15 kA	30 kA	18	-	-	-	-
<b>TTV2-30-B-M**</b>	15 kA	30 kA	18	-	-	-	-
<b>TTV2-20-M</b>	10 kA	20 kA	18	OK	-	-	-
<b>TTV2-40-N/PE-M</b>	20 kA	40 kA	18	-	OK	OK	OK

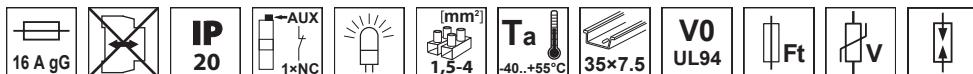


TTV2-20-M



\*2P insert for **TTV2-30-3P+N/PE** arrester

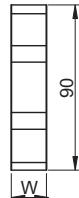
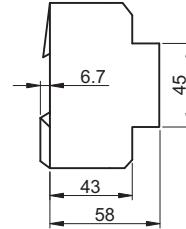
\*\*1P+N/PE insert for **TTV2-30-1P+N/PE** and **TTV2-30-3P+N/PE** arresters.

**Type 3 surge arresters (fine protection), modular (block) type**

TRACON	xP	I <sub>n</sub> L-N 8/20μs	I <sub>max</sub> 8/20μs	U <sub>n</sub>	U <sub>p</sub>	U <sub>c</sub>	W (mm)	
<b>TTV3-10-1P+N/PE</b>	1P+N/PE	5 kA	10 kA	230 V, 50 Hz; 1~			36	TN, TT
<b>TTV3-10-3P+N/PE</b>	3P+N/PE	5 kA	10 kA	3×230/400 V, 50 Hz; 3~	1.5 kV	385/440 V	72	TN, IT



RELEVANT STANDARD  
**EN 61643**



The arresters of type 3 must be installed as close to the protected device as possible. These arresters are secondary protection devices and applicable to protection against discharge overvoltage occurred by switch-type (8/20μs wave-form) over-currents. These arresters have compact (block type) construction.

Attention!

The type 3 devices alone cannot provide complete protection of electric devices against overvoltage!

These types of arresters have to be connected in series or parallel with the protected device and can be mounted into distribution boards for one- and three-phase networks. In case of serial connection the device to be protected has to be installed after the short circuit protection device.

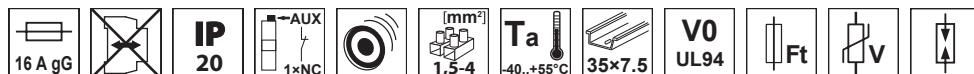
## OFFICIAL SUPPLIER OF EON AND DÉMÁSZ

TRACON is the official supplier of EON and National Utility Network (DÉMÁSZ)

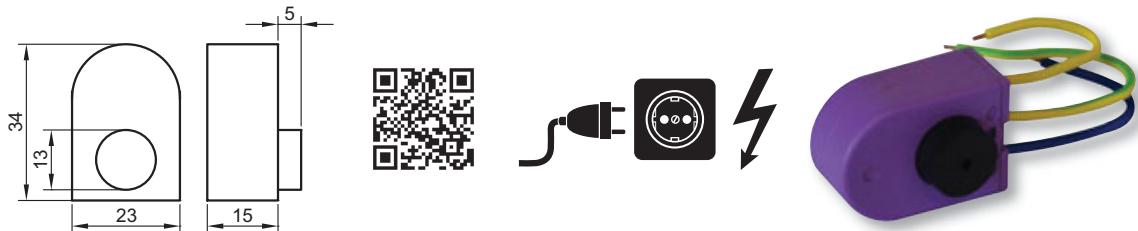
**TRACON**  
-----  
**ELECTRIC®**



## Type 3 surge arresters (fine protection), for wall box mount



TRACON	$\times P$	$I_n$ L-N 8/20μs	$I_{max}$ 8/20μs	$U_n$	$U_p$	$U_c$	
TTV3-5-1P+N-PE	1P+N-PE	2,5 kA	5 kA	230 V, 50 Hz; 1~	1,25 kV	255 V AC	TN, IT

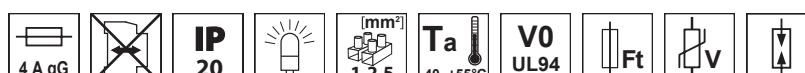


The arresters of type 3 must be installed as close to the protected device as possible. These arresters are secondary protection devices and applicable to protection against discharge overvoltage occurred by switch-type (8/20μs wave-form) over-currents. These arresters have compact (block type) construction.

Attention!

The type 3 devices alone cannot provide complete protection of electric devices against overvoltage!

## Type 2+3 surge arresters (for LED driver)

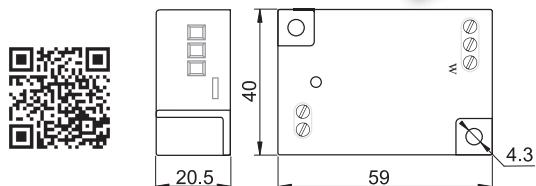
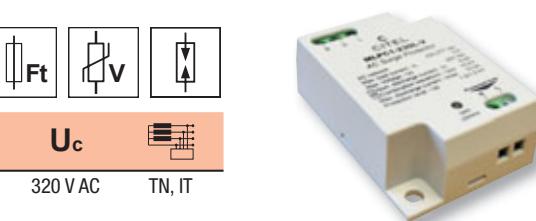


TRACON	$I_n$ L-N 8/20μs	$I_{max}$ 8/20μs	$U_n$	$U_p$	$U_c$	
TTVL2+3-10	5 kA	10 kA	230 V, 50 Hz	1,5 kV	320 V AC	TN, IT

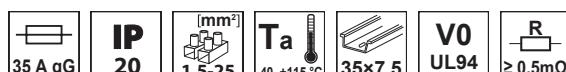
The TTVL2+3-10 is a compact type 2+3 SPD for LED Drivers. The SPD protects any 120-277 VAC single phase driver from the effects of lightning and transient switchings.

Failure is indicated by an illuminated lights on the unit.

For protection of LSJA (E1/10), and LSJB (E1/9) streetlights against secondary effect of lightning strike.



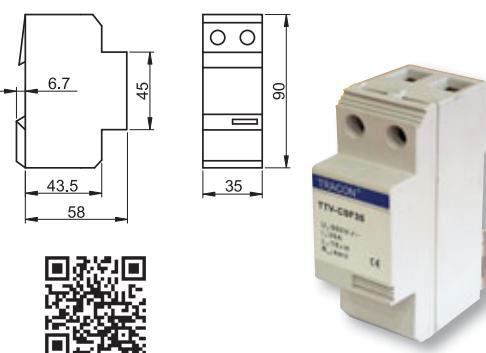
## Decoupling coil



TRACON	$\times 17.5$	$I_n$	$U_n$	L
TTV-CSF35	2	35 A	500 V AC/DC	18 μH ± 10 %

In complex lightning and overvoltage protection systems, sufficient value of cable/wire impedance must be provided to enable voltage drop for well coordinated operation between the type 1 lightning arrester and the type 2 surge arrester.

This condition is satisfied if the length of cable/wire is at least 10 – 15 meters. If this condition can not be satisfied, an inductive reactance (decoupling coil) must be used.



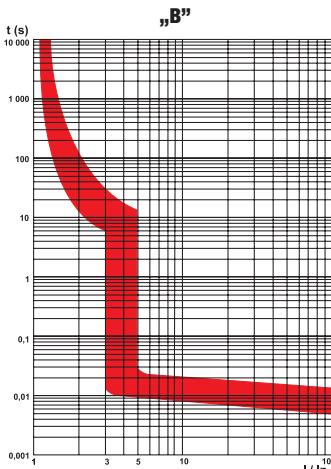
## Circuit breakers

TRACon		xP	$I_n$	$I_{cn}$ EN60698	
<b>EVON</b>	C	1+N	6 – 32 A	4,5 kA	F/15
<b>EVOZ</b>	B, C	1, 2, 3, 4	1 – 63 A	6 kA	F/12
<b>EVOTDA</b>	B, C	1, 2, 3, 4	1 – 63 A	10 kA	F/13
<b>EVOH</b>	C	1, 2, 3, 4	63 – 125 A	10 kA	F/14
<b>DPN</b>	C	1+N	6 – 32 A	4,5 kA	F/26
<b>MB</b>	B, C	1, 2, 3	6 – 63 A	4,5 kA	F/27
<b>TDZ</b>	B, C, D	1, 2, 3, 4	1 – 63 A	6 kA	F/28
<b>DC</b>	C	1, 2, 3, 4	6 – 63 A	6/10 kA	F/29
<b>KMH</b>	C	1, 2, 3, 4	63 – 125 A	6 kA	F/30

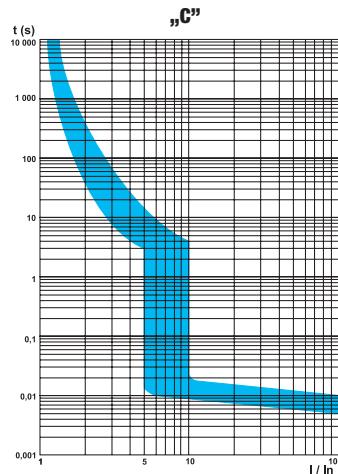
Circuit breakers are meant for overload protection and damage prevention in electrical networks and for the protection against environmental damage and accidents. A bimetal (in case of overload) or electromagnetic (in case of short circuit) breaker unit is used to interrupt the circuit, interruption by hand being an alternative. All poles operate together, simultaneously.

### Trip characteristics

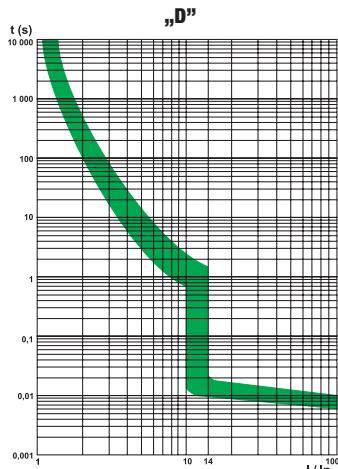
The EN 60898 standard determines the operating parameters, the requirements of performance and structure, and the order of tests. All three type of characteristics (B, C, D) of circuit breakers are operating on the same way ( $<2,55 \times I_n$ ) on the overload range. The difference is seen on the overload range up to  $3 \times I_n$ , where the B type is tripping at  $3...5 \times I_n$ , the C type is tripping at  $5...10 \times I_n$ , the D type is tripping at  $10...15 \times I_n$  fail current.



For general use – for protection of consumers with small starting current, circuits with incandescent lamps, for the protection of wires.



For general use – for protection of household electrical machines, equipments, small shock current motors.



For protection of motors with powerful starting current, transformers and other inductive type users.

### Data related to the outer temperature

The maximum loading current of the circuit breaker decreases with the rise of the outer temperature. E.g. If more circuit breakers are installed side by side into the same distribution box, then the rise in temperature, inside the box has to be considered when choosing the appropriate circuit breakers.

E.g. while the loading current of a 16 A rated current circuit breaker ( $I=16$  A) can be 17,9 A on  $20^\circ\text{C}$ , then this value on  $40^\circ\text{C}$  is only the same 16 A, while on  $60^\circ\text{C}$  it can only be 13,9 A.

The operating reference temperature of the circuit breakers is  $40^\circ\text{C}$ .

### Allowed maximum loading current (A)

$I_n$ (A)	20 °C	30 °C	40 °C	50 °C	60 °C
2	2.18	2.08	2	1.9	1.8
4	4.52	4.24	4	3.72	3.44
6	6.48	6.24	6	5.76	5.46
10	11.4	10.7	10	9.2	8.4
16	17.9	16.9	16	15	13.9
20	22.2	21.2	20	18.8	17.6
25	27.7	26.5	25	23.5	21.7
32	35.2	33.6	32	30.4	28.4
40	44.4	42.4	40	37.5	34.8
50	56	53	50	46.5	43
63	71.8	67.4	63	57.9	52.9

## Combined protection switches

TRACON		xP 	x17.5 	I <sub>n</sub> (A)	I <sub>cn</sub> EN60698	
<b>EVOKE</b>	B, C	2	1	6 – 32 A	6 kA	F/15
<b>EVOK</b>	B, C	2	2	6 – 40 A	4.5 kA	F/16
<b>EVKM</b>	B, C	2	2	6 – 63 A	6 kA	F/16
<b>KVKVE</b>	B, C	2	1	6 – 32 A	6 kA	F/31
<b>KVK</b>	B, C	2	2	6 – 32 A	3 kA	F/31
<b>KVKM</b>	B, C	2	2	6 – 40 A	6 kA	F/32

The combined protective switch is mainly used in electrical installations of buildings, for personal, overload and short circuit protection. It is especially suitable for electrical protection of rooms with increased safety requirements. The current transformer of the protective switch, namely the magnetic quick breaker and the bimetallic, thermal, residual current breaker are placed in the same box. The device has an optical sign, which turns red if the break occurs due to a defect (overload, short circuit, or earth circuit). At manual switching-off, this red colour does not appear. By pressing the "T" pushbutton, the residual current switching part of the product can be checked. This check should be made at least once in a month.

Thanks to its dimensions, this switch can easily replace the existing protective device (circuit breaker).



## Residual current circuit breakers

TRACON		xP 	I <sub>n</sub> (A)	I <sub>Δn</sub> (mA)	I <sub>cn</sub> EN60698	
<b>EVOV</b>		2, 4	25, 40, 63, 80	30, 100, 300	6 kA	F/17
<b>RB</b>		2, 4	25, 40, 63	30, 100, 300, 500	4.5 kA	F/32
<b>TFV</b>		2, 4	16, 25, 40, 63	30, 100, 300	6 kA	F/33
<b>TFVH</b>		4	80, 100	30, 100, 300	6 kA	F/33
<b>EVOG</b>		2, 4	25, 40, 63, 80	30, 100, 300	6 kA	F/18
<b>TFG</b>		2, 4	16, 25, 40, 63	30, 100, 300	6 kA	F/34
<b>TFGA</b>		–	16	30	6 kA	F/34
<b>TFIG</b>		2, 4	16, 25, 40, 63, 80	30, 100, 300	10 kA	F/35

TRACON	Denomination	EVOV	EVOG	RB	TFV	TFVH	TFG	TFIG
<b>EDS-□, EDFK-□</b>	Distribution boxes	✓	✓	✓	✓	✓	✓	✓
<b>TFSS-□</b>	Normal connecting rails	✓	✓	✓	✓	✓	✓	✓
<b>TFSS-□V</b>	Spade type connecting rails	✓	✓	✓	✓	✓	✓	✓
<b>TFSS-1CS</b>	Connecting clip with screw	✓	✓	✓	✓	✓	✓	–
<b>35/7,5□SIN</b>	Mounting rails according to EN 50022	✓	✓	✓	✓	✓	✓	✓

The residual current circuit breakers are the most up-to-date devices and are mainly used for protection against indirect contact, but in some cases also against direct contact.

The residual current breaker automatically starts to operate if the defect current (eg. insulation defect, short circuit etc.) in the protected network exceeds a critical value.

Its installation is suggested, and in some cases even compulsory, in outdoor connections, in building site boxes, concrete mixers, bathrooms, etc. a shunt fuse must be used in case of an independent short circuit current above 6000 A.



# EVO MODULAR PRODUCT FAMILY



Circuit breakers,  
6 kA-10 kA



F/12

Circuit breakers,  
1+N



F/15

Combined protecting  
devices



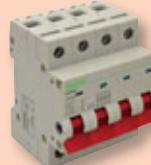
F/15

Residual current  
breakers



F/17

Isolating  
switches



F/19

Change-over  
switches



F/20

Lockable disconnecting  
switches



F/21

Signal  
lamps



F/21

Modular  
pushbuttons



F/22

Safety (bell)  
transformers



F/22

Installation  
contactors



F/23

Auto reclose  
relays



F/24

**Check our new products in our Webshop**

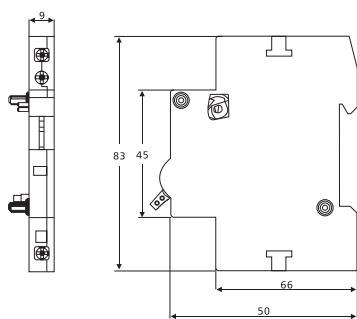
F/10

## Auxiliary and alarm contact

 x5.000								F/0
------------	--	--	--	--	--	--	--	-----

TRACON		I <sub>n</sub> (A)				
		400 V AC	230 V AC	110 V DC	48 V DC	24 V DC

<b>EVOZ-AUX11</b>	EVOZ
<b>EVOH-AUX11</b>	EVOH
<b>EVOTDA-AUX11</b>	EVOTDA
<b>EVOZ-AL</b>	EVOZ
<b>EVOH-AL</b>	EVOH
<b>EVOTDA-AL</b>	EVOTDA



11  
12  
14

EVOZ-AUX11



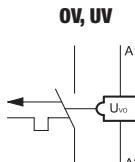
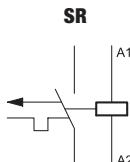
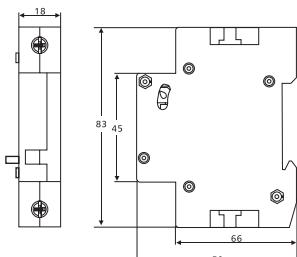
## Shunt release, under- and overvoltage release

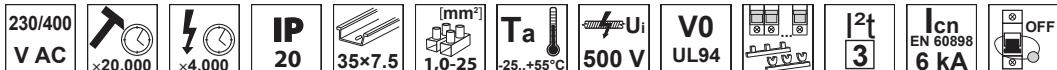
 x4.000						
------------	--	--	--	--	--	--



TRACON		U <sub>m</sub>	U <sub>up</sub>	U <sub>down</sub>
<b>EVOZ-SR*</b>	EVOZ	110-415 V AC / 110-220 V DC	—	—
<b>EVOH-SR*</b>	EVOH	110-415 V AC / 110-220 V DC	—	—
<b>EVOTDA-SR*</b>	EVOTDA	110-415 V AC / 110-220 V DC	—	—
<b>EVOZ-OVR</b>	EVOZ	—	280 V ± 5%	—
<b>EVOZ-UVR</b>	EVOZ	—	—	170 V ± 5%
<b>EVOH-OVR</b>	EVOH	—	280 V ± 5%	—
<b>EVOH-UVR</b>	EVOH	—	—	170 V ± 5%
<b>EVOTDA-OVR</b>	EVOTDA	—	280 V ± 5%	—
<b>EVOTDA-UVR</b>	EVOTDA	—	—	170 V ± 5%

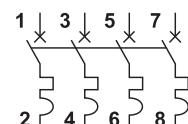
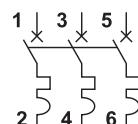
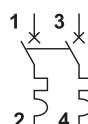
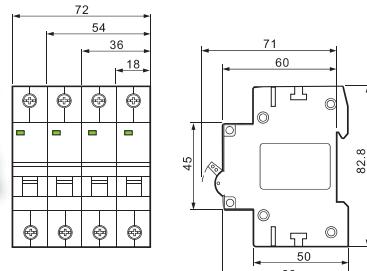
\* Shunt release



**EVOZ miniature circuit breakers**

TRACON		I <sub>n</sub> (A)
B	C	
EVOZ1B1	EVOZ1C1	1
EVOZ1B2	EVOZ1C2	2
EVOZ1B4	EVOZ1C4	4
EVOZ1B6	EVOZ1C6	6
EVOZ1B10	EVOZ1C10	10
EVOZ1B13	EVOZ1C13	13
EVOZ1B16	EVOZ1C16	16
EVOZ1B20	EVOZ1C20	20
EVOZ1B25	EVOZ1C25	25
EVOZ1B32	EVOZ1C32	32
EVOZ1B40	EVOZ1C40	40
EVOZ1B50	EVOZ1C50	50
EVOZ1B63	EVOZ1C63	63
EVOZ2B1	EVOZ2C1	1
EVOZ2B2	EVOZ2C2	2
EVOZ2B4	EVOZ2C4	4
EVOZ2B6	EVOZ2C6	6
EVOZ2B10	EVOZ2C10	10
EVOZ2B13	EVOZ2C13	13
EVOZ2B16	EVOZ2C16	16
EVOZ2B20	EVOZ2C20	20
EVOZ2B25	EVOZ2C25	25
EVOZ2B32	EVOZ2C32	32
EVOZ2B40	EVOZ2C40	40
EVOZ2B50	EVOZ2C50	50
EVOZ2B63	EVOZ2C63	63

TRACON		I <sub>n</sub> (A)
B	C	
EVOZ3B1	EVOZ3C1	1
EVOZ3B2	EVOZ3C2	2
EVOZ3B4	EVOZ3C4	4
EVOZ3B6	EVOZ3C6	6
EVOZ3B10	EVOZ3C10	10
EVOZ3B13	EVOZ3C13	13
EVOZ3B16	EVOZ3C16	16
EVOZ3B20	EVOZ3C20	20
EVOZ3B25	EVOZ3C25	25
EVOZ3B32	EVOZ3C32	32
EVOZ3B40	EVOZ3C40	40
EVOZ3B50	EVOZ3C50	50
EVOZ3B63	EVOZ3C63	63
EVOZ4B1	EVOZ4C1	1
EVOZ4B2	EVOZ4C2	2
EVOZ4B4	EVOZ4C4	4
EVOZ4B6	EVOZ4C6	6
EVOZ4B10	EVOZ4C10	10
EVOZ4B13	EVOZ4C13	13
EVOZ4B16	EVOZ4C16	16
EVOZ4B20	EVOZ4C20	20
EVOZ4B25	EVOZ4C25	25
EVOZ4B32	EVOZ4C32	32
EVOZ4B40	EVOZ4C40	40
EVOZ4B50	EVOZ4C50	50
EVOZ4B63	EVOZ4C63	63



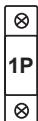
RELEVANT STANDARD  
EN 60898-1

RELEVANT STANDARD  
EN 60947-2

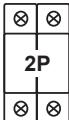


**EVOTDA miniature circuit breakers**230/400  
V AC  
IP  
20  
[mm<sup>2</sup>]  
35x7.5  
Ta  
-25..+55°C  
VO  
UL94  
500 V  
I<sup>2</sup>t  
3  
I<sub>cn</sub>  
EN 60898  
10 kA  
**TRACON**I<sub>n</sub>  
(A)

TDA-1B-1	TDA-1C-1	1
TDA-1B-2	TDA-1C-2	2
TDA-1B-4	TDA-1C-4	4
TDA-1B-6	TDA-1C-6	6
TDA-1B-10	TDA-1C-10	10
TDA-1B-13	TDA-1C-13	13
TDA-1B-16	TDA-1C-16	16
TDA-1B-20	TDA-1C-20	20
TDA-1B-25	TDA-1C-25	25
TDA-1B-32	TDA-1C-32	32
TDA-1B-40	TDA-1C-40	40
TDA-1B-50	TDA-1C-50	50
TDA-1B-63	TDA-1C-63	63
TDA-2B-1	TDA-2C-1	1
TDA-2B-2	TDA-2C-2	2
TDA-2B-4	TDA-2C-4	4
TDA-2B-6	TDA-2C-6	6
TDA-2B-10	TDA-2C-10	10
TDA-2B-13	TDA-2C-13	13
TDA-2B-16	TDA-2C-16	16
TDA-2B-20	TDA-2C-20	20
TDA-2B-25	TDA-2C-25	25
TDA-2B-32	TDA-2C-32	32
TDA-2B-40	TDA-2C-40	40
TDA-2B-50	TDA-2C-50	50
TDA-2B-63	TDA-2C-63	63



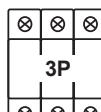
1P



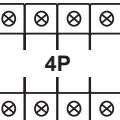
2P

**TRACON****TRACON**I<sub>n</sub>  
(A)

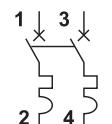
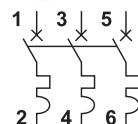
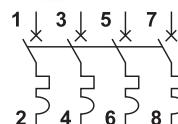
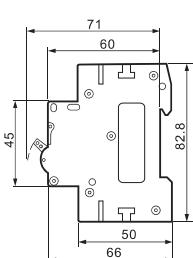
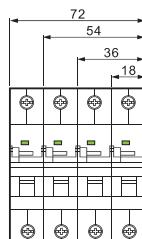
TDA-3B-1	TDA-3C-1	1
TDA-3B-2	TDA-3C-2	2
TDA-3B-4	TDA-3C-4	4
TDA-3B-6	TDA-3C-6	6
TDA-3B-10	TDA-3C-10	10
TDA-3B-13	TDA-3C-13	13
TDA-3B-16	TDA-3C-16	16
TDA-3B-20	TDA-3C-20	20
TDA-3B-25	TDA-3C-25	25
TDA-3B-32	TDA-3C-32	32
TDA-3B-40	TDA-3C-40	40
TDA-3B-50	TDA-3C-50	50
TDA-3B-63	TDA-3C-63	63
TDA-4B-1	TDA-4C-1	1
TDA-4B-2	TDA-4C-2	2
TDA-4B-4	TDA-4C-4	4
TDA-4B-6	TDA-4C-6	6
TDA-4B-10	TDA-4C-10	10
TDA-4B-13	TDA-4C-13	13
TDA-4B-16	TDA-4C-16	16
TDA-4B-20	TDA-4C-20	20
TDA-4B-25	TDA-4C-25	25
TDA-4B-32	TDA-4C-32	32
TDA-4B-40	TDA-4C-40	40
TDA-4B-50	TDA-4C-50	50
TDA-4B-63	TDA-4C-63	63



3P



4P

RELEVANT STANDARD  
EN 60898
 Pictograms

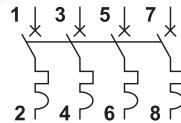
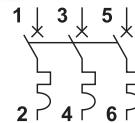
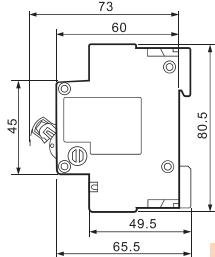
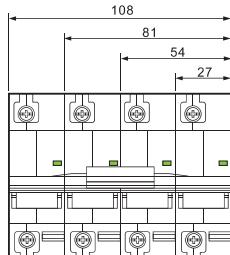
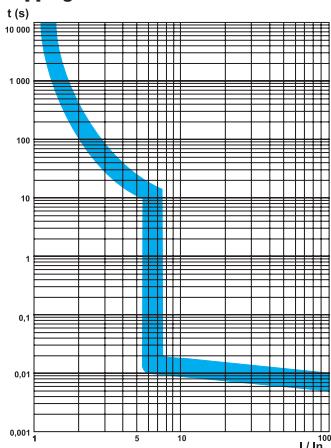
F/0



**EVOH high current miniature circuit breakers**

230/400 V AC		x20.000		x10.000	<b>IP 20</b>		35x7.5		T <sub>a</sub> -25...+55°C		U <sub>i</sub> 500 V	<b>V0 UL94</b>		I <sup>2</sup> t 3	<b>I<sub>cn</sub> EN 60898 10 kA</b>	
--------------	--	---------	--	---------	--------------	--	--------	--	----------------------------	--	----------------------	----------------	--	--------------------	--------------------------------------	--

TRACON		I <sub>n</sub> (A)	TRACON	I <sub>n</sub> (A)
<b>EVOH163</b>	63	<b>EVOH363</b>	63	
<b>EVOH180</b>	80	<b>EVOH380</b>	80	
<b>EVOH1100</b>	100	<b>EVOH3100</b>	100	
<b>EVOH1125</b>	125	<b>EVOH3125</b>	125	
<b>EVOH263</b>	63	<b>EVOH463</b>	63	
<b>EVOH280</b>	80	<b>EVOH480</b>	80	
<b>EVOH2100</b>	100	<b>EVOH4100</b>	100	
<b>EVOH2125</b>	125	<b>EVOH4125</b>	125	

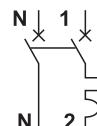
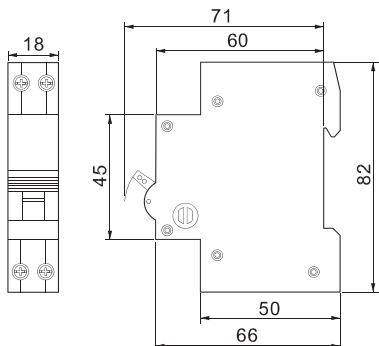
**Tripping characteristic**

**RELEVANT STANDARD  
EN 60898**

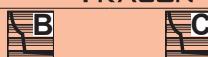


**EVON miniature circuit breakers**230  
V AC
 $\times 10.000$   
ms
IP  
2035x7.5  
[mm<sup>2</sup>]  
1,0-10Ta  
-25..+55°CU<sub>i</sub>  
500 VVO  
UL94I<sub>cn</sub>  
EN 60898  
4,5 kA**TRACON**I<sub>n</sub>  
(A)

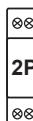
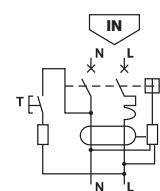
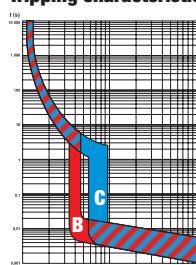
EVONC6	6
EVONC10	10
EVONC16	16
EVONC20	20
EVONC25	25
EVONC32	32



\* Devices with two poles, have one protected (phase) and one switched neutral (N) pole.

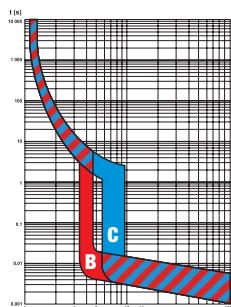
**RELEVANT STANDARD**  
EN 60898-1
**F/0****EVOKE combined protection devices, 1 module width**230  
V AC
 $\times 10.000$   
ms
IP  
2035x7.5  
[mm<sup>2</sup>]  
1-16Ta  
-25..+40°CU<sub>i</sub>  
690 VVO  
UL94I<sub>cn</sub>  
EN 60898  
6 kA**TRACON**I<sub>n</sub>  
(A)  
I<sub>Δn</sub>  
(mA)

EVOKEB603	EVOKEC603	6	30
EVOKEB1003	EVOKEC1003	10	30
EVOKEB1303	EVOKEC1303	13	30
EVOKEB1603	EVOKEC1603	16	30
EVOKEB2003	EVOKEC2003	20	30
EVOKEB2503	EVOKEC2503	25	30
EVOKEB3203	EVOKEC3203	32	30
EVOKEB4003	EVOKEC4003	40	30

**Tripping characteristic****E3**
**RELEVANT STANDARD**  
EN 61009-1

**EVOK combined protection devices**

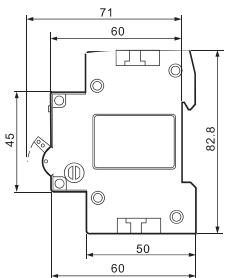
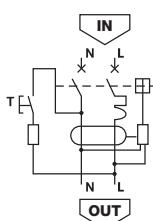
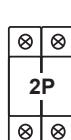
<b>230 V AC</b>			<b>IP 20</b>			<b>T<sub>a</sub> -25...+40°C</b>		<b>V0 UL94</b>		<b>I<sub>cn</sub> EN 60898 4,5 kA</b>	
-----------------	--	--	--------------	--	--	----------------------------------	--	----------------	--	---------------------------------------	--

**Tripping characteristic**

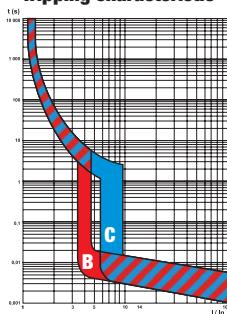
**RELEVANT STANDARD**  
**EN 61009-1**



<b>TRA CON</b>		<b>I<sub>n</sub> (A)</b>	<b>IΔn (mA)</b>
		<b>EVOK2B603</b>	<b>EVOK2C603</b>
		<b>EVOK2B1003</b>	<b>EVOK2C1003</b>
		<b>EVOK2B1603</b>	<b>EVOK2C1603</b>
		<b>EVOK2B2003</b>	<b>EVOK2C2003</b>
		<b>EVOK2B2503</b>	<b>EVOK2C2503</b>
		<b>EVOK2B3203</b>	<b>EVOK2C3203</b>
		<b>EVOK2B4003</b>	<b>EVOK2C4003</b>

**EVOKM combined protection devices, electro-mechanic**

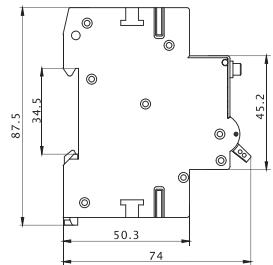
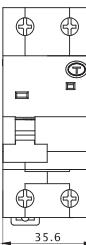
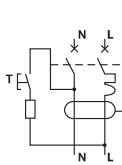
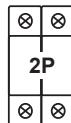
<b>230 V AC</b>			<b>IP 20</b>			<b>T<sub>a</sub> -25...+55°C</b>		<b>V0 UL94</b>		<b>I<sub>cn</sub> EN 60898 6 kA</b>	
-----------------	--	--	--------------	--	--	----------------------------------	--	----------------	--	-------------------------------------	--

**Tripping characteristic**

**RELEVANT STANDARD**  
**EN 61009-1**

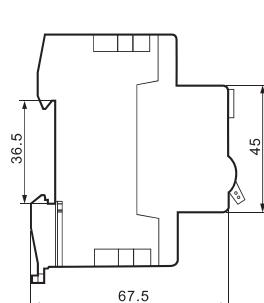
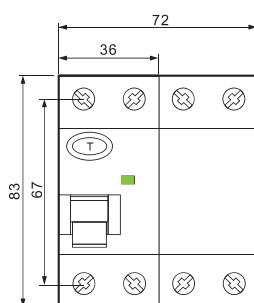
The electro-mechanic RCCB protects against electric shock even in case of braking of neutral-wire!

<b>TRA CON</b>		<b>I<sub>n</sub> (A)</b>	<b>IΔn (mA)</b>
		<b>EVOKM2B603</b>	<b>EVOKM2C603</b>
		<b>EVOKM2B1003</b>	<b>EVOKM2C1003</b>
		<b>EVOKM2B1603</b>	<b>EVOKM2C1603</b>
		<b>EVOKM2B2003</b>	<b>EVOKM2C2003</b>
		<b>EVOKM2B2503</b>	<b>EVOKM2C2503</b>
		<b>EVOKM2B3203</b>	<b>EVOKM2C3203</b>
		<b>EVOKM2B4003</b>	<b>EVOKM2C4003</b>
		<b>EVOKM2B5003</b>	<b>EVOKM2C5003</b>
		<b>EVOKM2B6303</b>	<b>EVOKM2C6303</b>



**EVOV residual current breakers**

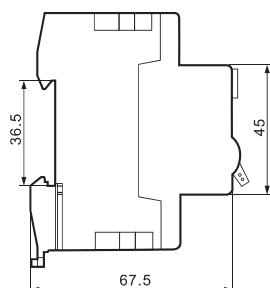
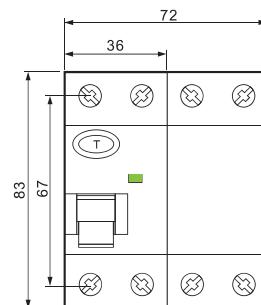
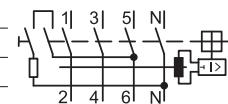
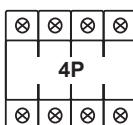
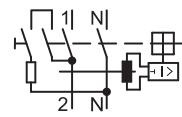
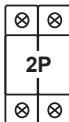
<b>230/400 V AC</b>																
<b>V</b>	<b>AC</b>	<b>x20.000</b>	<b>IP</b>	<b>20</b>												
TRACON		$I_n$ (A)														
	<b>EVOV2P2503</b>	25														
	<b>EVOV2P4003</b>	40														
	<b>EVOV2P6303</b>	63														
	<b>EVOV2P8003</b>	80														
	<b>EVOV2P251</b>	25														
	<b>EVOV2P401</b>	40														
	<b>EVOV2P631</b>	63														
	<b>EVOV2P801</b>	80														
	<b>EVOV2P253</b>	25														
	<b>EVOV2P403</b>	40														
	<b>EVOV2P633</b>	63														
	<b>EVOV2P803</b>	80														
	<b>EVOV4P2503</b>	25														
	<b>EVOV4P4003</b>	40														
	<b>EVOV4P6303</b>	63														
	<b>EVOV4P8003</b>	80														
	<b>EVOV4P251</b>	25														
	<b>EVOV4P401</b>	40														
	<b>EVOV4P631</b>	63														
	<b>EVOV4P801</b>	80														
	<b>EVOV4P253</b>	25														
	<b>EVOV4P403</b>	40														
	<b>EVOV4P633</b>	63														
	<b>EVOV4P803</b>	80														

**H/4****For AC systems!**
**RELEVANT STANDARD**  
**EN 61008-1**


**EVOG residual current breakers**

230/400 V AC	IP 20	35x7.5 [mm <sup>2</sup> ]	Ta -25...+55°C	U <sub>i</sub> 500 V	V0 UL94	A, AC	I <sub>cn</sub> EN 60898 6 kA	OFF
--------------	-------	---------------------------	----------------	----------------------	---------	-------	-------------------------------	-----

TRACON	I <sub>n</sub> (A)	I <sub>Δn</sub> (mA)
<b>EV0G2P2503</b>	25	30
<b>EV0G2P4003</b>	40	30
<b>EV0G2P6303</b>	63	30
<b>EV0G2P8003</b>	80	30
<b>EV0G2P251</b>	25	100
<b>EV0G2P401</b>	40	100
<b>EV0G2P631</b>	63	100
<b>EV0G2P801</b>	80	100
<b>EV0G2P253</b>	25	300
<b>EV0G2P403</b>	40	300
<b>EV0G2P633</b>	63	300
<b>EV0G2P803</b>	80	300
<b>EV0G4P2503</b>	25	30
<b>EV0G4P4003</b>	40	30
<b>EV0G4P6303</b>	63	30
<b>EV0G4P8003</b>	80	30
<b>EV0G4P251</b>	25	100
<b>EV0G4P401</b>	40	100
<b>EV0G4P631</b>	63	100
<b>EV0G4P801</b>	80	100
<b>EV0G4P253</b>	25	300
<b>EV0G4P403</b>	40	300
<b>EV0G4P633</b>	63	300
<b>EV0G4P803</b>	80	300



For AC and pulsed DC systems!



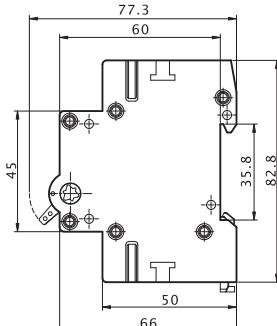
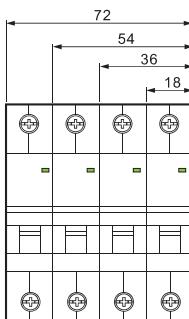
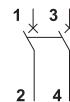
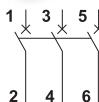
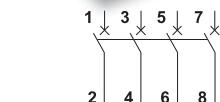
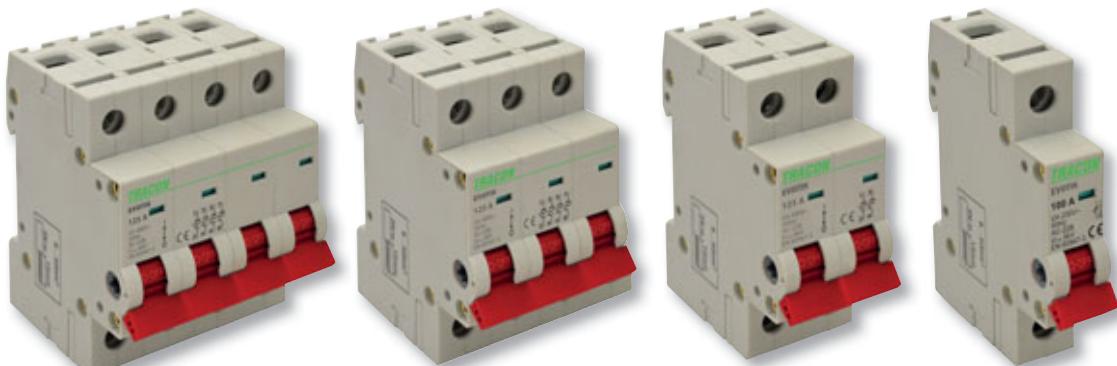
RELEVANT STANDARD  
EN 61008-1



J/10-J/21

**EVOTIK isolation switches**

	230/400 V AC			IP 20			V0 UL94			
	x20.000		x10.000		35x7.5	Ta -25..+55°C				
<b>TRACON</b>					<b>I<sub>n</sub> (A)</b>	<b>mm<sup>2</sup></b>				
 <b>TIK1-20</b> <b>TIK1-25</b> <b>TIK1-32</b> <b>TIK1-40</b> <b>TIK1-63</b> <b>TIK1-80</b> <b>TIK1-100</b> <b>TIK1-125</b>					20	1,5-50				
 <b>TIK2-20</b> <b>TIK2-25</b> <b>TIK2-32</b> <b>TIK2-40</b> <b>TIK2-63</b> <b>TIK2-80</b> <b>TIK2-100</b> <b>TIK2-125</b>					20	1,5-50				
 <b>TIK3-20</b> <b>TIK3-25</b> <b>TIK3-32</b> <b>TIK3-40</b> <b>TIK3-63</b> <b>TIK3-80</b> <b>TIK3-100</b> <b>TIK3-125</b>					20	1,5-50				
 <b>TIK4-20</b> <b>TIK4-25</b> <b>TIK4-32</b> <b>TIK4-40</b> <b>TIK4-63</b> <b>TIK4-80</b> <b>TIK4-100</b> <b>TIK4-125</b>					20	1,5-50				



**RELEVANT STANDARD**  
**EN 60947-3**

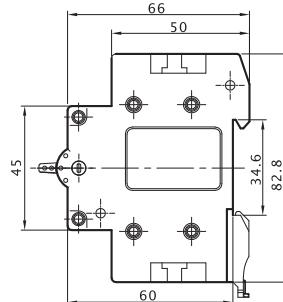
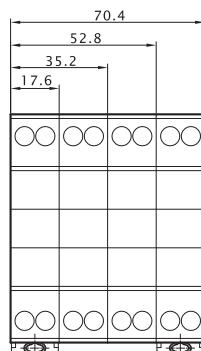
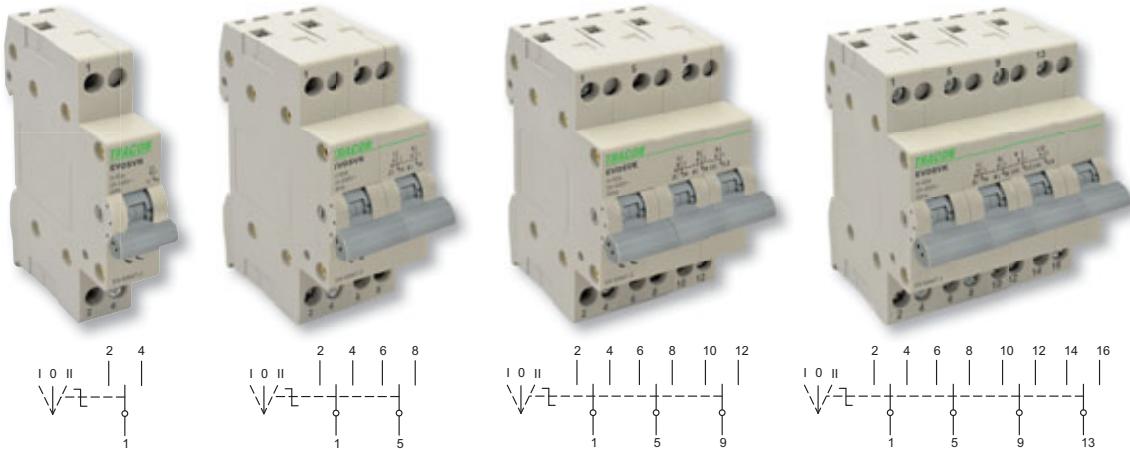


**F/21**

**EVOSVK modular changeover switches**

230/400 V AC		x30.000		x10.000		20		35x7.5 [mm²]		Ta -25...+55°C		Ui 690 V		V0 UL94		Uimp 6 kV		1		0		2
--------------	--	---------	--	---------	--	----	--	--------------	--	----------------	--	----------	--	---------	--	-----------	--	---	--	---	--	---

TRACon	I <sub>n</sub> (A)	TRACon	I <sub>n</sub> (A)		
	SVK1-16	16		SVK3-16	16
	SVK1-32	32		SVK3-32	32
	SVK1-63	63		SVK3-63	63
	SVK2-16	16		SVK4-16	16
	SVK2-32	32		SVK4-32	32
	SVK2-63	63		SVK4-63	63

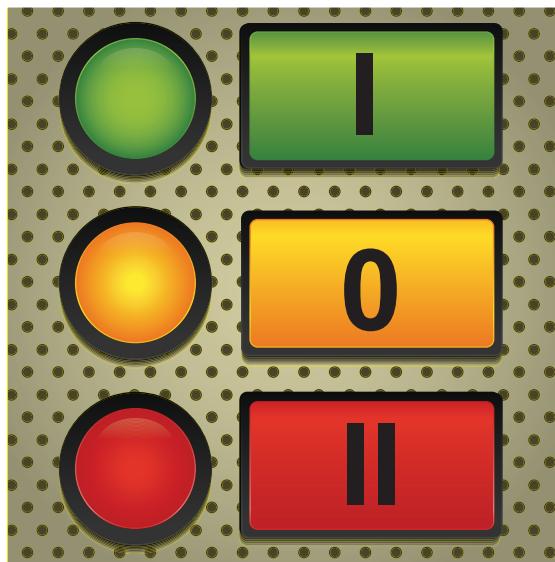


**RELEVANT STANDARD**  
**EN 60947-3**



**RELEVANT STANDARD**  
**EN 60669-1**

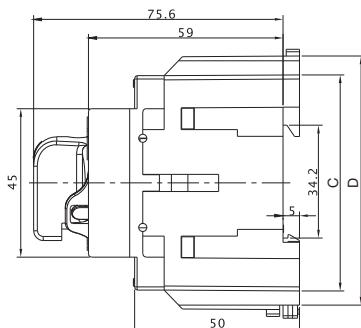
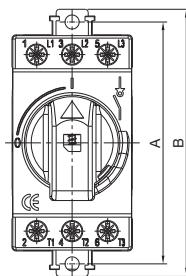
**TÜV MEEI TEST DOCUMENTATION**  
**28211822 001**



**EVOMS modular lockable disconnection switches**

230/400 V AC	IP 20	35x7.5	Ta $25\text{...}+55^\circ\text{C}$	$U_i$ 800 V	
--------------	-------	--------	------------------------------------	-------------	--

TRACON	I <sub>th</sub> (40 °C)	A (mm)	B (mm)	C (mm)	D (mm)	E (mm)	
<b>EVOMS16/3</b>	16A/3P						
<b>EVOMS20/3</b>	20A/3P						
<b>EVOMS25/3</b>	25A/3P	73,3	81	65,5	75,5	36,5	1,5-16
<b>EVOMS40/3</b>	40A/3P						
<b>EVOMS80/3</b>	80A/3P						
<b>EVOMS100/3</b>	100A/3P	88	97,5	76,5	93,5	52	25-50
<b>EVOMS125/3</b>	125A/3P						

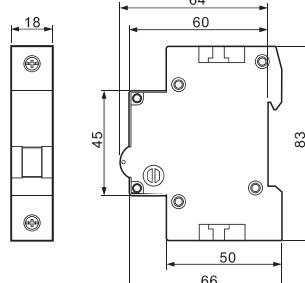


RELEVANT STANDARD  
EN 60947-3

**EVOSLJL signal lamps**

P <sub>m</sub> 0,8 VA	[h] 20.000		IP 20	 1-25	35x7.5	Ta $25\text{...}+55^\circ\text{C}$
--------------------------	---------------	--	-------	----------	--------	------------------------------------

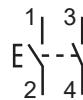
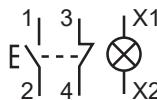
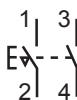
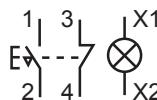
TRACON		U <sub>n</sub>	L D
<b>SLJL-AC230-P</b>		230 V AC	× 1 LED
<b>SLJL-AC230-Z</b>		230 V AC	× 1 LED
<b>SLJL-AC230-S</b>		230 V AC	× 1 LED
<b>SLJL-AC230-F</b>		230 V AC	× 1 LED
<b>SLJL-AC230-K</b>		230 V AC	× 1 LED
<b>SLJL-AC24-P</b>		24 V AC	× 1 LED
<b>SLJL-AC24-Z</b>		24 V AC	× 1 LED
<b>SLJL-AC24-S</b>		24 V AC	× 1 LED
<b>SLJL-AC24-F</b>		24 V AC	× 1 LED
<b>SLJL-AC24-K</b>		24 V AC	× 1 LED
<b>SLJL-AC230-SZP</b>		3×230 V AC	× 3 LED
<b>SLJL-DC220-P</b>		220 V DC	× 1 LED
<b>SLJL-DC220-Z</b>		220 V DC	× 1 LED
<b>SLJL-DC220-S</b>		220 V DC	× 1 LED
<b>SLJL-DC220-F</b>		220 V DC	× 1 LED
<b>SLJL-DC220-K</b>		220 V DC	× 1 LED
<b>SLJL-DC24-P</b>		24 V DC	× 1 LED
<b>SLJL-DC24-Z</b>		24 V DC	× 1 LED
<b>SLJL-DC24-S</b>		24 V DC	× 1 LED
<b>SLJL-DC24-F</b>		24 V DC	× 1 LED
<b>SLJL-DC24-K</b>		24 V DC	× 1 LED



RELEVANT STANDARD  
EN 62094-1  
EN 60947-5

**EVOP modular pushbuttons, push-switches**230  
V ACIP  
20[mm<sup>2</sup>]  
1-10Ta  
-5...+55 °CVO  
UL94

Pictograms

**F/O****EVOPB****EVOPBL****EVOPS****EVOPB2****EVOPSL**RELEVANT STANDARD  
EN 60947-5-1**TRACON**I<sub>th</sub>I<sub>e</sub> (AC-14)  
(230V AC)

NC

NO

**EVOPS**

16 A

6 A

2 NO

**EVOPB**

16 A

6 A

2 NO

**EVOPB2**

16 A

6 A

1 NO, 1 NC

**EVOPBL**

16 A

6 A

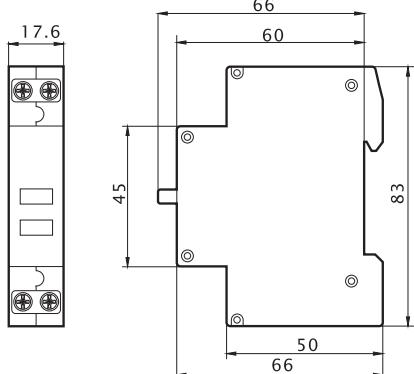
1 NO+1 NC

**EVOPSL**

16 A

6 A

1 NO+1 NC

**EVOBT safety (bell) transformers**IP  
20[mm<sup>2</sup>]  
35x7.5Ta  
-25...+55 °CVO  
UL94

Pictograms

**F/O****EVOBT15/1****EVOBT30/1**RELEVANT STANDARD  
EN 60947-5-1RELEVANT STANDARD  
EN 61558-2-8**TRACON**P<sub>s</sub>**EVOBT15/1** max. 15 VA

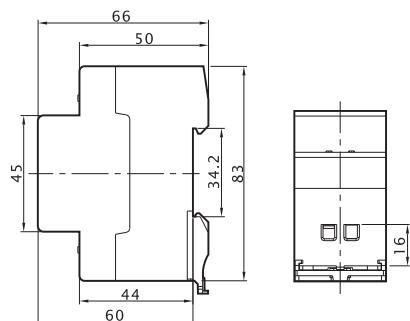
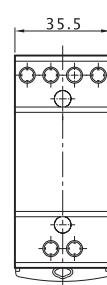
4-8-12 V AC 1,25 A

**EVOBT24/1** max. 15 VA 230 V AC

12-24 V AC 0,62 A

**EVOBT30/1** max. 30 VA

12-12-24 V AC 1,25 A

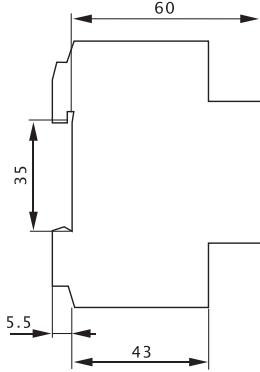
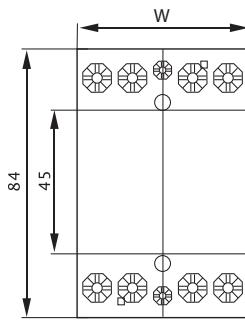


**EVOHK installation contactors**IP  
2035x7.5  
mm<sup>2</sup>1,5-30  
mm<sup>2</sup>Ta  
-5...+55 °C

500 V

V0  
UL94ON-OFF-ON...  
sc/h x360  
Uimp  
4 kV

TRACON	U <sub>m</sub>	I <sub>n</sub> (A)	W (mm)	P <sub>e</sub> (kW)				P <sub>s</sub>	NC	NO
				AC1 / AC7a 230V	AC3 / AC7b 230V	AC1 / AC7a 400V	AC3 / AC7b 400V			
<b>EVOHK2-25</b>	230 V AC	25	17,5	5	1,5	—	—	1,35 W	20A gG	2 × NO
<b>EVOHK2-25-24</b>	24 V AC	25	17,5	5	1,5	—	—	1,35 W	20A gG	2 × NO
<b>EVOHK2-25V</b>	230 V AC	25	17,5	5	1,5	—	—	1,35 W	20A gG	1 × NO+1 × NC
<b>EVOHK2-40</b>	230 V AC	40	35,4	9	2,2	—	—	1,55 W	32A gG	2 × NO
<b>EVOHK2-63</b>	230 V AC	63	35,4	11,6	3,3	—	—	1,55 W	50A gG	2 × NO
<b>EVOHK2-80</b>	230 V AC	80	54	16	5,5	—	—	1,55 W	63A gG	2 × NO
<b>EVOHK2-100</b>	230 V AC	100	54	19	6	—	—	1,55 W	80A gG	2 × NO
<b>EVOHK4-25</b>	230 V AC	25	35	5	1,5	16	4	1,35 W	20A gG	4 × NO
<b>EVOHK4-25-24</b>	24 V AC	25	35	5	1,5	16	4	1,35 W	20A gG	4 × NO
<b>EVOHK4-40</b>	230 V AC	40	53,3	9	2,2	27,5	12,5	1,55 W	32A gG	4 × NO
<b>EVOHK4-63</b>	230 V AC	63	53,3	11,6	3,3	40	15	1,55 W	50A gG	4 × NO
<b>EVOHK4-80</b>	230 V AC	80	108	16	5,5	50	18,5	1,55 W	63A gG	4 × NO
<b>EVOHK4-100</b>	230 V AC	100	108	19	6	60	22	1,55 W	80A gG	4 × NO

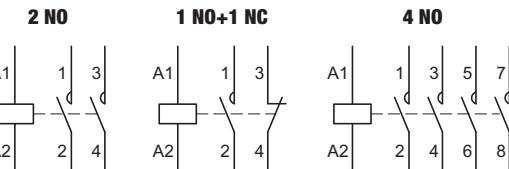


RELEVANT STANDARD

EN 60947-4-1

RELEVANT STANDARD

EN 61095

**SCAN THE QR CODE!**

- Check our new products
- Be updated

Our range of products is continuously and quickly expanding. Our catalogue shows our products as of April 2019. Check our website to stay up-to-date.

## Auto reclose under- and overvoltage relay

230/400  
V ACIP  
20[mm<sup>2</sup>]  
1,5-25U<sub>i</sub>  
500 V

Pictograms

F/O

TRACON

2P

4P

EVOU02

EVOU04

Rated voltage	230 V AC	230 V AC (L-N)
Rated frequency	50 Hz	
Rated current	40 A (AC 1)	
Self power consumption	AC max. 3 VA	
Upper protection level	265 V (fix)	265 V (L-N) (fix)
Upper reclosing level	257 V (fix)	257 V (L-N) (fix)
Lower protection level	175 V (fix)	175 V (L-N) (fix)
Lower reclosing level	180 V (fix)	180 V (L-N) (fix)
Switching time	1 s	
Switching delay	2 s	
Reclosing time	30 s	
Measuring accuracy	≤1%	

Weight

120 g

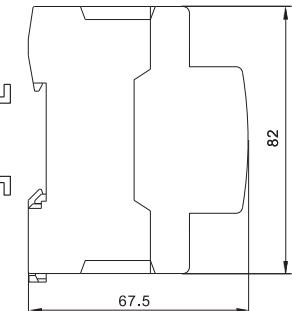
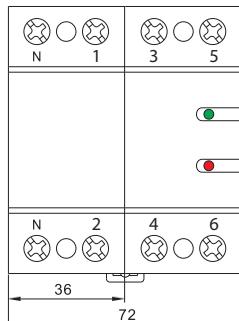
250 g



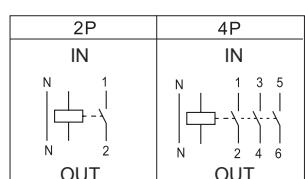
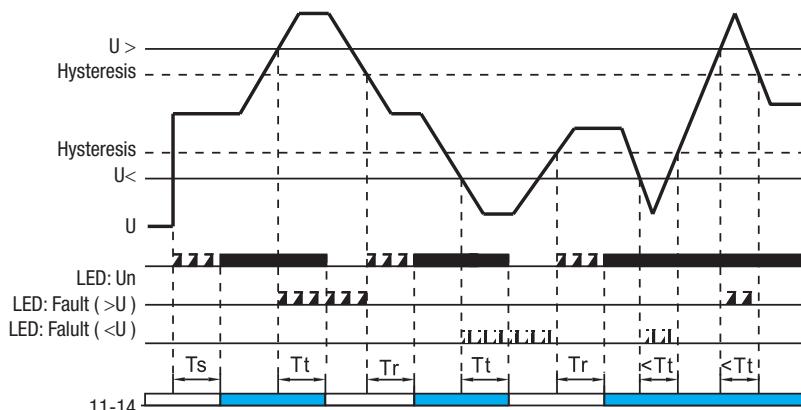
EVOU02



EVOU04



- Protection against over- and undervoltage for household devices
- Automatically reclose after the voltage is restored
- LED status signalling



LED-fault  $T_s$ : Operation run-up time  
 LED-fault  $T_t$ : Switch-OFF delay  
 Tr: Reset time

## Auxiliary units

230/400 V AC		$\times 6.000$		$\times 5.000$	<b>IP 20</b>		$35 \times 7.5$		$[mm^2]$	<b>Ta</b>	$-25..+55^\circ C$		$U_i$	<b>500 V</b>	<b>V0</b>	<b>UL94</b>		Pictograms	<b>F/0</b>
--------------	--	----------------	--	----------------	--------------	--	-----------------	--	----------	-----------	--------------------	--	-------	--------------	-----------	-------------	--	------------	------------

TRACON		<b>TDZ</b>	$I_n$ (A) (415 V AC)	$I_n$ (A) (240 V AC)	$I_n$ (A) (125 V DC)	$I_n$ (A) (48 V DC)	$I_n$ (A) (24 V DC)
<b>TDZ-F2</b>			3 A	6 A	1 A	2 A	4 A
			This contact shows the ON/OFF state of the circuit breaker's contact.				

## Working current (shunt) release

230/400 V AC		$\times 6.000$		$\times 4.000$	<b>IP 20</b>		$35 \times 7.5$		$[mm^2]$	<b>Ta</b>	$-25..+55^\circ C$		$U_i$	<b>500 V</b>	<b>V0</b>	<b>UL94</b>		Pictograms	<b>F/0</b>
--------------	--	----------------	--	----------------	--------------	--	-----------------	--	----------	-----------	--------------------	--	-------	--------------	-----------	-------------	--	------------	------------

TRACON		<b>TDZ</b>	$U_m$
<b>C60-S2</b>			110-415 V AC / 110-220 V DC
			It switches off the connected circuit breaker by impulse operating voltage, thus being suitable for remote control. In case of release the reset button jumps out and the circuit breaker can be switched on again only after pushing this button in. Attention: the operating coil is allowed to be under voltage for 10 sec maximum!

## Under/over voltage release

230/400 V AC		$\times 6.000$		$\times 4.000$	<b>IP 20</b>		$35 \times 7.5$		$[mm^2]$	<b>Ta</b>	$-25..+55^\circ C$		$U_i$	<b>500 V</b>	<b>V0</b>	<b>UL94</b>		Pictograms	<b>F/0</b>
--------------	--	----------------	--	----------------	--------------	--	-----------------	--	----------	-----------	--------------------	--	-------	--------------	-----------	-------------	--	------------	------------

TRACON		<b>TDZ</b>	$U_{up}$	$U_{down}$
<b>C60-U2/02</b>			$280 V \pm 5\%$	$170 V \pm 5\%$
			The release switches off the circuit breaker if the supply voltage is beyond rated operating range, protecting the attached device from harmful impacts of voltage variation. The circuit breaker is able to switch on only when the voltage on the contacts of the release gets back into the operating range (170 V – 280 V). In case of release the reset button jumps out and the circuit breaker can be switched on again only after pushing this button in.	

## Lockable latch for modular protecting devices

The modular protecting devices can be locked with padlock on "OFF" position by using this latch. It is suitable for devices with 8 – 10 mm actuator lever cutting and two 1 - 1,5 mm hole are needed on the top of lever arch to fix the latch. The shackle diameter of used padlock can be up to 8 mm. Using the latch to lock "ON" position is forbidden!

TRACON

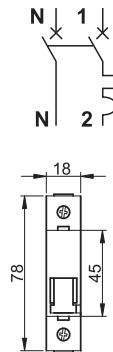
MDL

MB, RB, TDZ, KVKM, VVK, KVKE, TFG, TFIG, TVF, EVO..



## DPN (1+N poles) type circuit breakers

230/400 V AC		x20.000		x6.000		35x7.5		[mm²] 1,5-10		-25...+55°C		500 V		UL94			I <sup>2</sup> t 3		EN 60898 4,5 kA	
--------------	--	---------	--	--------	--	--------	--	--------------	--	-------------	--	-------	--	------	--	--	--------------------	--	-----------------	--



TRACON	I <sub>h</sub> (A)
C	6
DPN-C-6	6
DPN-C-10	10
DPN-C-13	13
DPN-C-16	16
DPN-C-20	20
DPN-C-25	25
DPN-C-32	32

\* Devices with two poles, have one protected (phase) and one switched neutral (N) pole.



**MB Circuit breakers**230/400  
V AC  
 x20.000

x6.000

IP  
20

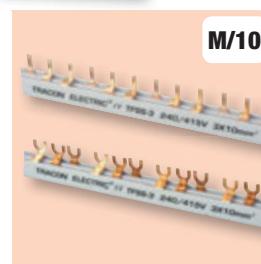
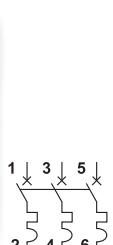
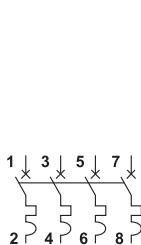
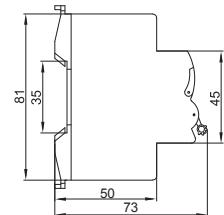
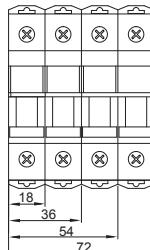
35x7.5

[mm<sup>2</sup>]  
1,5-25Ta  
-25...+55°C U<sub>i</sub>  
500 VVO  
UL94 I<sup>2t</sup>  
3I<sub>cn</sub>  
EN 60898  
4,5 kA**TRACON**I<sub>n</sub>  
(A)  
1P  

<b>MB-1B-6</b>	<b>MB-1C-6</b>	6
<b>MB-1B-10</b>	<b>MB-1C-10</b>	10
<b>MB-1B-13</b>	<b>MB-1C-13</b>	13
<b>MB-1B-16</b>	<b>MB-1C-16</b>	16
<b>MB-1B-20</b>	<b>MB-1C-20</b>	20
<b>MB-1B-25</b>	<b>MB-1C-25</b>	25
<b>MB-1B-32</b>	<b>MB-1C-32</b>	32
<b>MB-1B-40</b>	<b>MB-1C-40</b>	40
<b>MB-1B-50</b>	<b>MB-1C-50</b>	50
<b>MB-1B-63</b>	<b>MB-1C-63</b>	63
<b>MB-2B-6</b>	<b>MB-2C-6</b>	6
<b>MB-2B-10</b>	<b>MB-2C-10</b>	10
<b>MB-2B-13</b>	<b>MB-2C-13</b>	13
<b>MB-2B-16</b>	<b>MB-2C-16</b>	16
<b>MB-2B-20</b>	<b>MB-2C-20</b>	20
<b>MB-2B-25</b>	<b>MB-2C-25</b>	25
<b>MB-2B-32</b>	<b>MB-2C-32</b>	32
<b>MB-2B-40</b>	<b>MB-2C-40</b>	40
<b>MB-2B-50</b>	<b>MB-2C-50</b>	50
<b>MB-2B-63</b>	<b>MB-2C-63</b>	63

  
2P  
**TRACON**I<sub>n</sub>  
(A)  
3P  
  
4P  

<b>MB-3B-6</b>	<b>MB-3C-6</b>	6
<b>MB-3B-10</b>	<b>MB-3C-10</b>	10
<b>MB-3B-13</b>	<b>MB-3C-13</b>	13
<b>MB-3B-16</b>	<b>MB-3C-16</b>	16
<b>MB-3B-20</b>	<b>MB-3C-20</b>	20
<b>MB-3B-25</b>	<b>MB-3C-25</b>	25
<b>MB-3B-32</b>	<b>MB-3C-32</b>	32
<b>MB-3B-40</b>	<b>MB-3C-40</b>	40
<b>MB-3B-50</b>	<b>MB-3C-50</b>	50
<b>MB-3B-63</b>	<b>MB-3C-63</b>	63
-	<b>MB-4C-10</b>	10
-	<b>MB-4C-16</b>	16
-	<b>MB-4C-20</b>	20
-	<b>MB-4C-25</b>	25
-	<b>MB-4C-32</b>	32
-	<b>MB-4C-40</b>	40
-	<b>MB-4C-50</b>	50
-	<b>MB-4C-63</b>	63

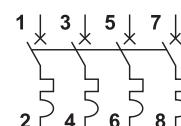
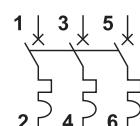
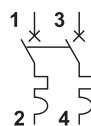
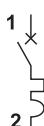
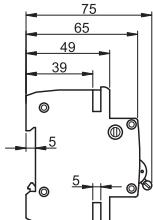
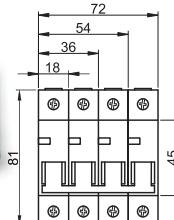
**RELEVANT STANDARD**  
EN 60898**TÜV MEEI TEST DOCUMENTATION**  
03401-2014183F

**TDZ Circuit breakers**

230/400 V AC								
--------------	--	--	--	--	--	--	--	--

TRACon				$I_n$ (A)
TDZ-1B-1	TDZ-1C-1	TDZ-1D-1		1
TDZ-1B-2	TDZ-1C-2	TDZ-1D-2		2
TDZ-1B-4	TDZ-1C-4	TDZ-1D-4		4
TDZ-1B-6	TDZ-1C-6	TDZ-1D-6		6
TDZ-1B-10	TDZ-1C-10	TDZ-1D-10		10
TDZ-1B-13	TDZ-1C-13	TDZ-1D-13		13
TDZ-1B-16	TDZ-1C-16	TDZ-1D-16		16
TDZ-1B-20	TDZ-1C-20	TDZ-1D-20		20
TDZ-1B-25	TDZ-1C-25	TDZ-1D-25		25
TDZ-1B-32	TDZ-1C-32	TDZ-1D-32		32
TDZ-1B-40	TDZ-1C-40	TDZ-1D-40		40
TDZ-1B-50	TDZ-1C-50	TDZ-1D-50		50
TDZ-1B-63	TDZ-1C-63	TDZ-1D-63		63
TDZ-2B-1	TDZ-2C-1	TDZ-2D-1		1
TDZ-2B-2	TDZ-2C-2	TDZ-2D-2		2
TDZ-2B-4	TDZ-2C-4	TDZ-2D-4		4
TDZ-2B-6	TDZ-2C-6	TDZ-2D-6		6
TDZ-2B-10	TDZ-2C-10	TDZ-2D-10		10
TDZ-2B-13	TDZ-2C-13	TDZ-2D-13		13
TDZ-2B-16	TDZ-2C-16	TDZ-2D-16		16
TDZ-2B-20	TDZ-2C-20	TDZ-2D-20		20
TDZ-2B-25	TDZ-2C-25	TDZ-2D-25		25
TDZ-2B-32	TDZ-2C-32	TDZ-2D-32		32
TDZ-2B-40	TDZ-2C-40	TDZ-2D-40		40
TDZ-2B-50	TDZ-2C-50	TDZ-2D-50		50
TDZ-2B-63	TDZ-2C-63	TDZ-2D-63		63

TRACon				$I_n$ (A)
TDZ-3B-1	TDZ-3C-1	TDZ-3D-1		1
TDZ-3B-2	TDZ-3C-2	TDZ-3D-2		2
TDZ-3B-4	TDZ-3C-4	TDZ-3D-4		4
TDZ-3B-6	TDZ-3C-6	TDZ-3D-6		6
TDZ-3B-10	TDZ-3C-10	TDZ-3D-10		10
TDZ-3B-13	TDZ-3C-13	TDZ-3D-13		13
TDZ-3B-16	TDZ-3C-16	TDZ-3D-16		16
TDZ-3B-20	TDZ-3C-20	TDZ-3D-20		20
TDZ-3B-25	TDZ-3C-25	TDZ-3D-25		25
TDZ-3B-32	TDZ-3C-32	TDZ-3D-32		32
TDZ-3B-40	TDZ-3C-40	TDZ-3D-40		40
TDZ-3B-50	TDZ-3C-50	TDZ-3D-50		50
TDZ-3B-63	TDZ-3C-63	TDZ-3D-63		63
TDZ-4B-1	TDZ-4C-1	TDZ-4D-1		1
TDZ-4B-2	TDZ-4C-2	TDZ-4D-2		2
TDZ-4B-4	TDZ-4C-4	TDZ-4D-4		4
TDZ-4B-6	TDZ-4C-6	TDZ-4D-6		6
TDZ-4B-10	TDZ-4C-10	TDZ-4D-10		10
TDZ-4B-13	TDZ-4C-13	TDZ-4D-13		13
TDZ-4B-16	TDZ-4C-16	TDZ-4D-16		16
TDZ-4B-20	TDZ-4C-20	TDZ-4D-20		20
TDZ-4B-25	TDZ-4C-25	TDZ-4D-25		25
TDZ-4B-32	TDZ-4C-32	TDZ-4D-32		32
TDZ-4B-40	TDZ-4C-40	TDZ-4D-40		40
TDZ-4B-50	TDZ-4C-50	TDZ-4D-50		50
TDZ-4B-63	TDZ-4C-63	TDZ-4D-63		63



Pictograms

F/0

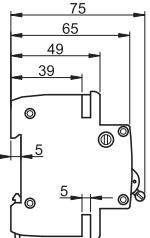
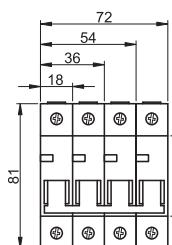
RELEVANT STANDARD  
EN 60898

F/25

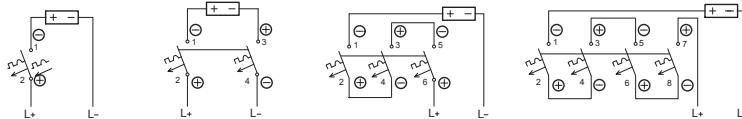
**DC type MCB for direct current electric networks**

TRACON	 $U_i$	$U_e$ (6kV)	$U_e$ (10kV)	$I_{cu}$ EN 60898-2	$I_{cu}$ EN 60947-2
<b>DC-1C-..</b>	500 V DC	125 V, 250 V	110 V, 220 V	6 kA	10 kA
<b>DC-2C-..</b>	500 V DC	250 V, 500 V	220 V, 440 V	6 kA	10 kA
<b>DC-3C-..</b>	1000 V DC	375 V, 750 V	330 V, 660 V	6 kA	10 kA
<b>DC-4C-..</b>	1000 V DC	500 V, 1000 V	440 V, 880 V	6 kA	10 kA

TRACON	$I_n$ (A)	TRACON	$I_n$ (A)
<b>DC-1C-6</b>	6	<b>DC-3C-6</b>	6
<b>DC-1C-10</b>	10	<b>DC-3C-10</b>	10
<b>DC-1C-13</b>	13	<b>DC-3C-13</b>	13
<b>DC-1C-16</b>	16	<b>DC-3C-16</b>	16
<b>DC-1C-20</b>	20	<b>DC-3C-20</b>	20
<b>DC-1C-25</b>	25	<b>DC-3C-25</b>	25
<b>DC-1C-32</b>	32	<b>DC-3C-32</b>	32
<b>DC-1C-40</b>	40	<b>DC-3C-40</b>	40
<b>DC-1C-50</b>	50	<b>DC-3C-50</b>	50
<b>DC-1C-63</b>	63	<b>DC-3C-63</b>	63
<b>DC-2C-6</b>	6	<b>DC-4C-6</b>	6
<b>DC-2C-10</b>	10	<b>DC-4C-10</b>	10
<b>DC-2C-13</b>	13	<b>DC-4C-13</b>	13
<b>DC-2C-16</b>	16	<b>DC-4C-16</b>	16
<b>DC-2C-20</b>	20	<b>DC-4C-20</b>	20
<b>DC-2C-25</b>	25	<b>DC-4C-25</b>	25
<b>DC-2C-32</b>	32	<b>DC-4C-32</b>	32
<b>DC-2C-40</b>	40	<b>DC-4C-40</b>	40
<b>DC-2C-50</b>	50	<b>DC-4C-50</b>	50
<b>DC-2C-63</b>	63	<b>DC-4C-63</b>	63



TÜV MEEI TEST DOCUMENTATION  
28216230 001



**SCAN THE QR CODE!**

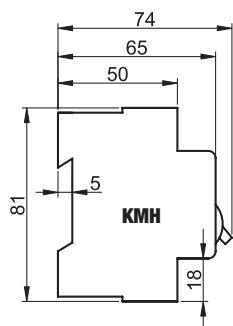
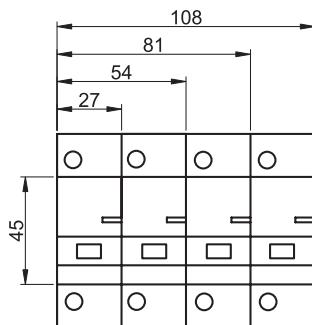
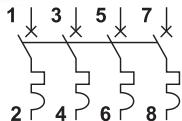
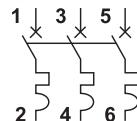
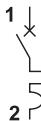
- Check our new products
- Be updated

Our range of products is continuously and quickly expanding. Our catalogue shows our products as of April 2019. Check our website to stay up-to-date.

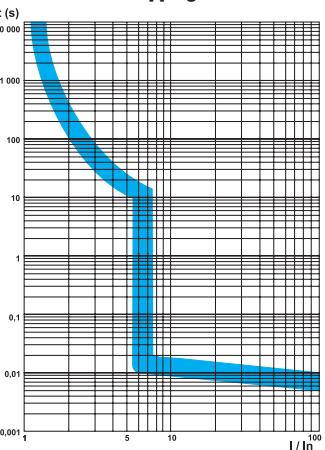
**KMH type high current overload circuit breakers**

230/400 V AC			IP 20		Ta -25...+55°C		VO UL94		Icn EN 60898 6 kA	
--------------	--	--	-------	--	----------------	--	---------	--	-------------------	--

TRACON		$I_n$ (A)	TRACON	$I_n$ (A)
	C			C
KMH-163	63	KMH-363	63	
KMH-180	80	KMH-380	80	
KMH-1100	100	KMH-3100	100	
KMH-1125	125	KMH-3125	125	
KMH-263	63	KMH-463	63	
KMH-280	80	KMH-480	80	
KMH-2100	100	KMH-4100	100	
KMH-2125	125	KMH-4125	125	



Tripping characteristic



Pictograms

F/0

RELEVANT STANDARD  
EN 60898

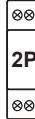
F/30

TRACON  
ELECTRIC®

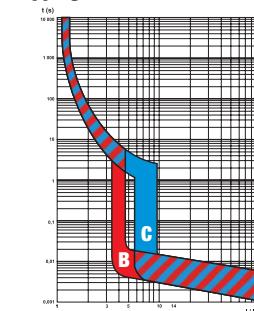
**KVKVE Combined protective switch with one-module width**

TRACON

		$I_n$ (A)	$I_{\Delta n}$ (mA)
KVKVEB-6/30	KVKVE-6/30	6	30
KVKVEB-6/100	KVKVE-6/100	6	100
KVKVEB-10/30	KVKVE-10/30	10	30
KVKVEB-10/100	KVKVE-10/100	10	100
KVKVEB-13/30	KVKVE-13/30	13	30
KVKVEB-13/100	KVKVE-13/100	13	100
KVKVEB-16/30	KVKVE-16/30	16	30
KVKVEB-16/100	KVKVE-16/100	16	100
KVKVEB-20/30	KVKVE-20/30	20	30
KVKVEB-20/100	KVKVE-20/100	20	100
KVKVEB-25/30	KVKVE-25/30	25	30
KVKVEB-25/100	KVKVE-25/100	25	100
KVKVEB-32/30	KVKVE-32/30	32	30
KVKVEB-32/100	KVKVE-32/100	32	100



Tripping characteristic

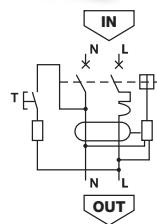
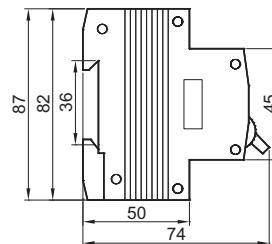
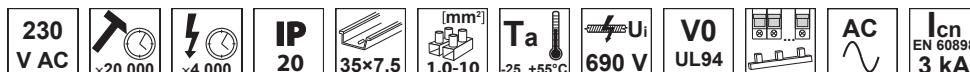


E3



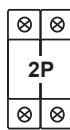
Pictograms

F/0

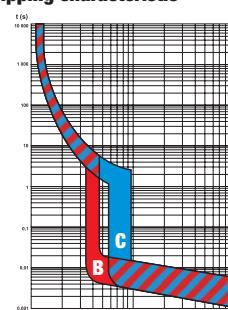
RELEVANT STANDARD  
EN 61009-1**KVK type combined protective switches**

TRACON

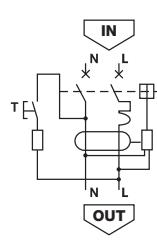
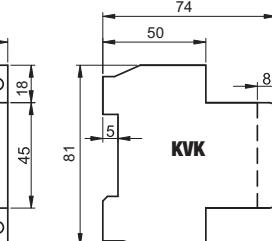
		$I_n$ (A)	$I_{\Delta n}$ (mA)
KVKB-6/03	KVK-6/03	6	30
KVKB-6/10	KVK-6/10	6	100
KVKB-6/30	KVK-6/30	6	300
KVKB-10/03	KVK-10/03	10	30
KVKB-10/10	KVK-10/10	10	100
KVKB-10/30	KVK-10/30	10	300
KVKB-16/03	KVK-16/03	16	30
KVKB-16/10	KVK-16/10	16	100
KVKB-16/30	KVK-16/30	16	300
KVKB-20/03	KVK-20/03	20	30
KVKB-20/10	KVK-20/10	20	100
KVKB-20/30	KVK-20/30	20	300
KVKB-25/03	KVK-25/03	25	30
KVKB-25/10	KVK-25/10	25	100
KVKB-25/30	KVK-25/30	25	300
KVKB-32/03	KVK-32/03	32	30
KVKB-32/10	KVK-32/10	32	100
KVKB-32/30	KVK-32/30	32	300



Tripping characteristic

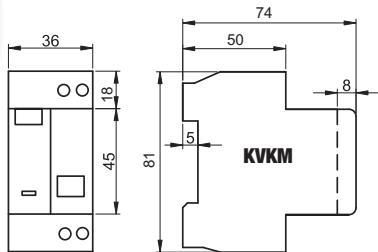
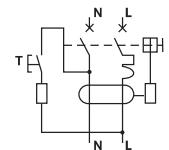


E3



**KVKM type combined protective switches, electromechanical**

<b>230 V AC</b>			<b>IP 20</b>			<b>T<sub>a</sub> -25...+55°C</b>		<b>V0 UL94</b>		<b>I<sub>cn</sub> EN 60898 6 kA</b>	
-----------------	--	--	--------------	--	--	----------------------------------	--	----------------	--	-------------------------------------	--

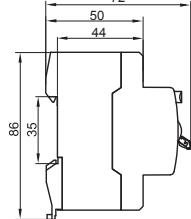
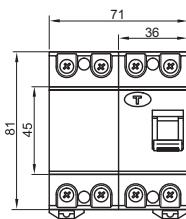
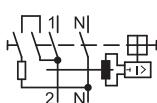


<b>TRACON</b>		<b>I<sub>n</sub></b> (A)	<b>I<sub>An</sub></b> (mA)
<b>B</b>	<b>C</b>		
<b>KVKMB-6/030</b>	<b>KVKM-6/030</b>	6	30
<b>KVKMB-6/100</b>	<b>KVKM-6/100</b>	6	100
<b>KVKMB-6/300</b>	<b>KVKM-6/300</b>	6	300
<b>KVKMB-10/030</b>	<b>KVKM-10/030</b>	10	30
<b>KVKMB-10/100</b>	<b>KVKM-10/100</b>	10	100
<b>KVKMB-10/300</b>	<b>KVKM-10/300</b>	10	300
<b>KVKMB-16/030</b>	<b>KVKM-16/030</b>	16	30
<b>KVKMB-16/100</b>	<b>KVKM-16/100</b>	16	100
<b>KVKMB-16/300</b>	<b>KVKM-16/300</b>	16	300
<b>KVKMB-20/030</b>	<b>KVKM-20/030</b>	20	30
<b>KVKMB-20/100</b>	<b>KVKM-20/100</b>	20	100
<b>KVKMB-20/300</b>	<b>KVKM-20/300</b>	20	300
<b>KVKMB-25/030</b>	<b>KVKM-25/030</b>	25	30
<b>KVKMB-25/100</b>	<b>KVKM-25/100</b>	25	100
<b>KVKMB-25/300</b>	<b>KVKM-25/300</b>	25	300
<b>KVKMB-32/030</b>	<b>KVKM-32/030</b>	32	30
<b>KVKMB-32/100</b>	<b>KVKM-32/100</b>	32	100
<b>KVKMB-32/300</b>	<b>KVKM-32/300</b>	32	300
<b>KVKMB-40/030</b>	<b>KVKM-40/030</b>	40	30
<b>KVKMB-40/100</b>	<b>KVKM-40/100</b>	40	100
<b>KVKMB-40/300</b>	<b>KVKM-40/300</b>	40	300

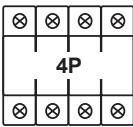
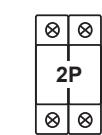
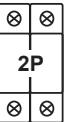
The electro-mechanic RCCB protects against electric shock even in case of braking of neutral-wire!

**RB residual current circuit breakers**

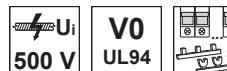
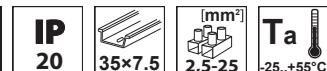
<b>230/400 V AC</b>			<b>IP 20</b>			<b>T<sub>a</sub> -25...+55°C</b>		<b>V0 UL94</b>		<b>I<sub>cn</sub> EN 60898 4.5 kA</b>	
---------------------	--	--	--------------	--	--	----------------------------------	--	----------------	--	---------------------------------------	--



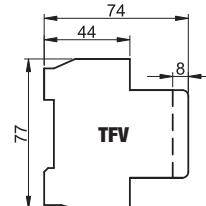
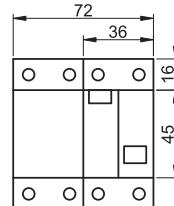
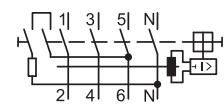
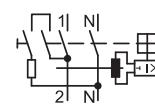
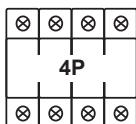
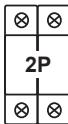
<b>TRACON</b>		<b>I<sub>n</sub></b> (A)	<b>I<sub>An</sub></b> (mA)
<b>B</b>	<b>C</b>		
<b>RB2-25030</b>		25	30
<b>RB2-25100</b>		25	100
<b>RB2-25300</b>		25	300
<b>RB2-25500</b>		25	500
<b>RB2-40030</b>		40	30
<b>RB2-40100</b>		40	100
<b>RB2-40300</b>		40	300
<b>RB2-40500</b>		40	500
<b>RB4-25030</b>		25	30
<b>RB4-25100</b>		25	100
<b>RB4-25300</b>		25	300
<b>RB4-25500</b>		25	500
<b>RB4-40030</b>		40	30
<b>RB4-40100</b>		40	100
<b>RB4-40300</b>		40	300
<b>RB4-40500</b>		40	500
<b>RB4-63030</b>		63	30
<b>RB4-63100</b>		63	100
<b>RB4-63300</b>		63	300
<b>RB4-63500</b>		63	500



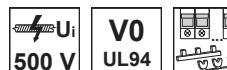
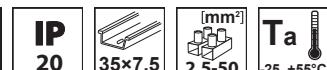
## TFV residual current circuit breakers



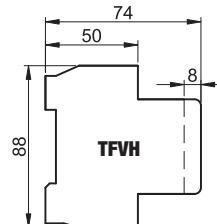
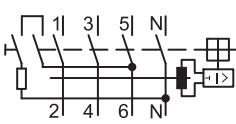
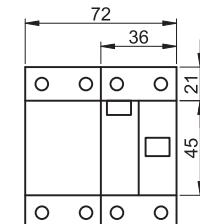
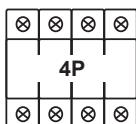
TRACon	$I_n$ (A)	$I_{\Delta n}$ (mA)
<b>TFV2-16030</b>	16	30
<b>TFV2-16100</b>	16	100
<b>TFV2-16300</b>	16	300
<b>TFV2-25030</b>	25	30
<b>TFV2-25100</b>	25	100
<b>TFV2-25300</b>	25	300
<b>TFV2-40030</b>	40	30
<b>TFV2-40100</b>	40	100
<b>TFV2-40300</b>	40	300
<b>TFV2-63030</b>	63	30
<b>TFV2-63100</b>	63	100
<b>TFV2-63300</b>	63	300
<b>TFV4-16030</b>	16	30
<b>TFV4-16100</b>	16	100
<b>TFV4-16300</b>	16	300
<b>TFV4-25030</b>	25	30
<b>TFV4-25100</b>	25	100
<b>TFV4-25300</b>	25	300
<b>TFV4-40030</b>	40	30
<b>TFV4-40100</b>	40	100
<b>TFV4-40300</b>	40	300
<b>TFV4-63030</b>	63	30
<b>TFV4-63100</b>	63	100
<b>TFV4-63300</b>	63	300



## TFVH residual current circuit breakers for high current



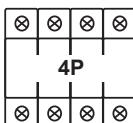
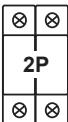
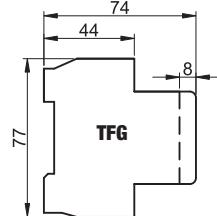
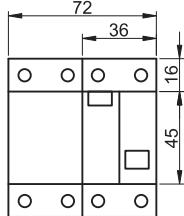
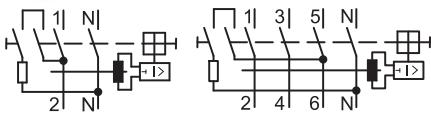
TRACon	$I_n$ (A)	$I_{\Delta n}$ (mA)
<b>TFVH4-80030</b>	80	30
<b>TFVH4-80100</b>	80	100
<b>TFVH4-80300</b>	80	300
<b>TFVH4-100030</b>	100	30
<b>TFVH4-100100</b>	100	100
<b>TFVH4-100300</b>	100	300



TÜV MEEI TEST DOCUMENTATION  
M1 2792130 01

**TFG residual current circuit breakers**

<b>230/400 V AC</b>			<b>IP 20</b>				<b>V0 UL94</b>			<b>Icn EN 60898 6 kA</b>	
---------------------	--	--	--------------	--	--	--	----------------	--	--	--------------------------	--



**Pictograms**

**F/0**

**RELEVANT STANDARD**  
**EN 61008-1**

<b>TRACON</b>	<b>I<sub>n</sub></b> (A)	<b>I<sub>An</sub></b> (mA)
<b>TFG2-16030</b>	16	30
<b>TFG2-16100</b>	16	100
<b>TFG2-16300</b>	16	300
<b>TFG2-25030</b>	25	30
<b>TFG2-25100</b>	25	100
<b>TFG2-25300</b>	25	300
<b>TFG2-40030</b>	40	30
<b>TFG2-40100</b>	40	100
<b>TFG2-40300</b>	40	300
<b>TFG2-63030</b>	63	30
<b>TFG2-63100</b>	63	100
<b>TFG2-63300</b>	63	300
<b>TFG4-16030</b>	16	30
<b>TFG4-16100</b>	16	100
<b>TFG4-16300</b>	16	300
<b>TFG4-25030</b>	25	30
<b>TFG4-25100</b>	25	100
<b>TFG4-25300</b>	25	300
<b>TFG4-40030</b>	40	30
<b>TFG4-40100</b>	40	100
<b>TFG4-40300</b>	40	300
<b>TFG4-63030</b>	63	30
<b>TFG4-63100</b>	63	100
<b>TFG4-63300</b>	63	300

**TFGA adaptor with residual current circuit breaker**

<b>TRACON</b>		<b>I<sub>n</sub></b> (A)	<b>I<sub>An</sub></b> (mA)	<b>P<sub>max</sub></b>	<b>IP..</b>
---------------	--	-----------------------------	-------------------------------	------------------------	-------------

<b>TFGA-1</b>			16	30	3.600 W	IP 40
<b>TFGA-1F</b>			16	30	3.600 W	IP 40
<b>TFGA-4F</b>			16	30	3.600 W	IP 44



<b>230 V AC</b>			

The TFGA type adaptor with residual current circuit breaker is a very modern protective device against direct touch of electric network with protective conductor, and in some cases protects against indirect touch too. The RCCB switches off automatically when the leakage current is too high on the protected network.

Portable, it can be used for any network not equipped with residual current protection.

The device can be switched on by the RESET button. Before the first use the device must be tested by the TEST button. After pushing the button, the device has to switch off the plug from the network. If the device is continuously used then it must be tested every month by pushing the TEST button. After installing the adaptor the protected device or net can be plugged into the socket-outlet.

**TÜV MEEI TEST DOCUMENTATION**  
**M1 2792130 01**

**ETL-SEMKO CERTIFICATE NO.**  
**630406**

## Motor-driven automatic re-connection device

230/400 V AC  
x10.000

$\downarrow$  x4.000

IP 20

35x7.5 [mm<sup>2</sup>]

Ta -25..+55°C

U<sub>i</sub> 500 V

V0 UL94

A, AC

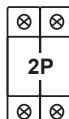
I<sub>cn</sub> EN 60898 10 kA

OFF

### TRACON

I<sub>Δn</sub> = 30 mA I<sub>Δn</sub> = 100 mA I<sub>Δn</sub> = 300 mA

I<sub>n</sub> (A)



TFIG2-16030	TFIG2-16100	TFIG2-16300	16
TFIG2-25030	TFIG2-25100	TFIG2-25300	25
TFIG2-40030*	TFIG2-40100*	TFIG2-40300	40
TFIG2-63030	TFIG2-63100	TFIG2-63300	63
TFIG2-80030	TFIG2-80100	TFIG2-80300	80
TFIG4-16030	TFIG4-16100	TFIG4-16300	16
TFIG4-25030	TFIG4-25100	TFIG4-25300	25
TFIG4-40030	TFIG4-40100*	TFIG4-40300	40
TFIG4-63030	TFIG4-63100	TFIG4-63300*	63
TFIG4-80030	TFIG4-80100	TFIG4-80300	80

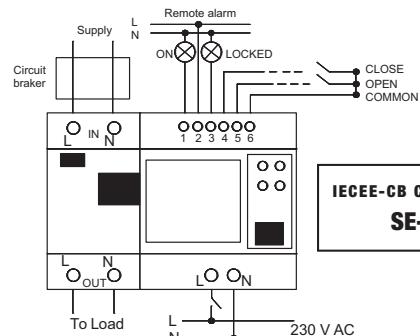
TFIG4-16030	TFIG4-16100	TFIG4-16300	16
TFIG4-25030	TFIG4-25100	TFIG4-25300	25
TFIG4-40030	TFIG4-40100*	TFIG4-40300	40
TFIG4-63030	TFIG4-63100	TFIG4-63300*	63
TFIG4-80030	TFIG4-80100	TFIG4-80300	80

\*Available from stock; other types can be ordered with 4 weeks shipping time



This device automatically re-connects the previously disconnected consumer (due to overcurrent generated by failure or atmospheric phenomena), once the current into the circuit has fallen back into the normal range. Such devices are an advantage in places where circuit break-off is expected to take long until the arrival of the service personnel (telecommunication stations, traffic control by signal lamps, remote control switching devices).

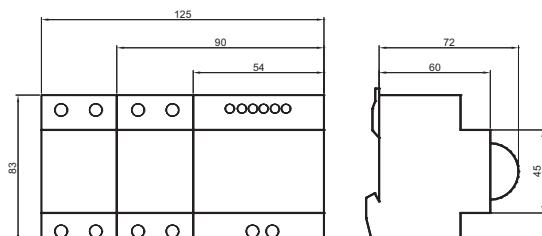
The cause of the overcurrent is usually transitory, long time interruption is unnecessary and causes important disturbance.



IECEE-CB CERTIFICATE NO.  
**SE-58939**

Re-connection devices are easy to be installed and adjusted. For automatic operation just pull the convex cover in the direction of the ON arrow.

If the re-connection device fails to re-connect the controlled circuit breaker after the pre-set number of attempts (1 - 8), the break-off status will persist. Once the deflection causing break-off was eliminated, the contactor can be switched on manually. For maintenance work on the circuit, before switching off the circuit breaker, the convex cover of the re-connection device shall be pushed in the direction of the OFF arrow; otherwise the reconnection device will automatically switch on the circuit breaker. To prevent unwanted reconnection, the re-connection device can be locked.



### Technical data

### Circuit breaker

### Motor-driven automatic re-connection device

Adjustable number of re-connections	–	1, 2, 4, 6, 8
Break-off time / Switch-off time	0,1 s	1 s
Switch-on time	–	2 s
Adjustable re-connection time delay	–	10 – 30 – 60 – 120 – 180 s
Status LED-s	–	green: ON, red: OFF, flashing red: waiting for re-connection
Manual ON / OFF switching	with handle	with the convex cover
Load-bearing of the auxiliary contact	–	250 V AC, 5 A
Remote control input	–	NC / NO / CO

## Contactors for installations

230/400  
V AC

x1.000.000

x30.000

IP  
20

35x7.5

[mm<sup>2</sup>]  
1,5-25Ta  
-25...+55°CU<sub>i</sub>  
500 VVO  
UL94ON-OFF-ON...  
sc/h  
x360

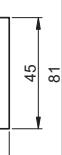
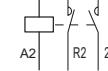
Pictograms

F/O

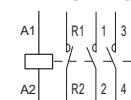
TRACON	U <sub>m</sub>	I <sub>n</sub> (A)	W (mm)	P <sub>e</sub> (kW)				P <sub>s</sub>	NC	NO	[mm <sup>2</sup> ]
				AC1/AC7a 230V	AC3/AC7b 230V	AC1/AC7a 400V	AC3/AC7b 400V				
<b>SHK2-25</b>	230 V AC	25	18	5 kW	1,5 kW	-	-	1,35 W	20A gG	2 × NO	1-6
<b>SHK2-25V11</b>	230 V AC	25	18	5 kW	1,5 kW	-	-	1,35 W	20A gG	1 × NO+1 × NC	1-6
<b>SHK2-25-24</b>	24 V AC	25	18	5 kW	1,5 kW	-	-	1,35 W	20A gG	2 × NO	1-6
<b>SHK2-40</b>	230 V AC	40	36	9 kW	2,2 kW	-	-	1,55 W	32A gG	2 × NO	2,5-25
<b>SHK2-40V11</b>	230 V AC	40	36	9 kW	2,2 kW	-	-	1,55 W	32A gG	1 × NO+1 × NC	2,5-25
<b>SHK2-63</b>	230 V AC	63	36	14 kW	5,5 kW	-	-	1,55 W	50A gG	2 × NO	2,5-25
<b>SHK2-63V11</b>	230 V AC	63	36	14 kW	5,5 kW	-	-	1,55 W	50A gG	1 × NO+1 × NC	2,5-25
<b>SHK3-25</b>	230 V AC	25	36	5 kW	1,5 kW	9,5 kW	3,4 kW	1,35 W	20A gG	3 × NO	1-6
<b>SHK3-40</b>	230 V AC	40	54	9 kW	2,2 kW	16 kW	4 kW	1,55 W	32A gG	3 × NO	2,5-25
<b>SHK3-63</b>	230 V AC	63	54	14 kW	5,5 kW	24 kW	9 kW	1,55 W	50A gG	3 × NO	2,5-25
<b>SHK4-25</b>	230 V AC	25	36	5 kW	1,5 kW	9,5 kW	3,4 kW	1,35 W	20A gG	4 × NO	1-6
<b>SHK4-25V22</b>	230 V AC	25	36	5 kW	1,5 kW	9,5 kW	3,4 kW	1,35 W	20A gG	2 × NO+2 × NC	1-6
<b>SHK4-40</b>	230 V AC	40	54	9 kW	2,2 kW	16 kW	4 kW	1,55 W	32A gG	4 × NO	2,5-25
<b>SHK4-40V22</b>	230 V AC	40	54	9 kW	2,2 kW	16 kW	4 kW	1,55 W	32A gG	2 × NO+2 × NC	2,5-25
<b>SHK4-63</b>	230 V AC	63	54	14 kW	5,5 kW	24 kW	9 kW	1,55 W	50A gG	4 × NO	2,5-25
<b>SHK4-63V22</b>	230 V AC	63	54	14 kW	5,5 kW	24 kW	9 kW	1,55 W	50A gG	2 × NO+2 × NC	2,5-25
<b>SHK2-25K</b>	230 V AC	25	18	5 kW	1,5 kW	-	-	1,35 W	20A gG	2 × NO	1-6
<b>SHK2-40K</b>	230 V AC	40	36	9 kW	2,2 kW	-	-	1,55 W	32A gG	2 × NO	2,5-25
<b>SHK2-63K</b>	230 V AC	63	36	14 kW	5,5 kW	-	-	1,55 W	50A gG	2 × NO	2,5-25
<b>SHK4-25K</b>	230 V AC	25	36	5 kW	1,5 kW	9,5 kW	3,4 kW	1,35 W	20A gG	4 × NO	1-6
<b>SHK4-40K</b>	230 V AC	40	54	9 kW	2,2 kW	16 kW	4 kW	1,55 W	32A gG	4 × NO	2,5-25
<b>SHK4-63K</b>	230 V AC	63	54	14 kW	5,5 kW	24 kW	9 kW	1,55 W	50A gG	4 × NO	2,5-25



1 NO+1 NC



2 NO+2 NC



3 NO



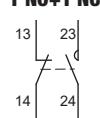
4 NO



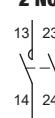
## Auxiliary contact unit for SHK contactor

TRACON	U <sub>m</sub>	I <sub>n</sub> (A)	W (mm)	AC12 (230V)	AC15 (230V)	DC13 (130V)	NC	NO	[mm <sup>2</sup> ]
<b>SHK-S11</b>	230 V AC	5 A	9 mm	5 A (AC12)	2 A (AC15)	1 A	1 × NO + 1 × NC		1-6 mm <sup>2</sup>
<b>SHK-S20</b>	230 V AC	5 A	9 mm	5 A (AC12)	2 A (AC15)	1 A	2 × NO		1-6 mm <sup>2</sup>

1 NO+1 NC



2 NO



## Staircase time switch

230 V AC	[mm <sup>2</sup> ] 1-2,5	IP 20	T <sub>a</sub> 20...+55°C	35x7,5	AUX	U <sub>i</sub> >40.000	V0 500 V UL94	Pictograms	F/0
----------	--------------------------	-------	---------------------------	--------	-----	------------------------	---------------	------------	-----

TRACON	P <sub>s</sub>	I <sub>n</sub>	L	Σ	P <sub>max</sub>
TLA-3	30 sec - 12 min	1 VA	16 A (cos φ = 1)	max. 250 m	max. × 50 max. 2.300 W max. 800 W
NARS	30 sec - 20 min	1.5 VA	16 A (cos φ = 1)	max. 250 m	max. × 50 max. 2.000 W max. 400 W

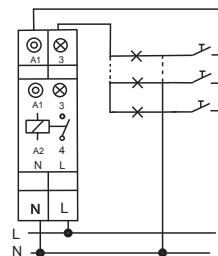
### Application

These bistable modular Impulse-Relays can be used for remote control of electric circuits and can also be manually switched. Both phase and neutral wire must carry through the relay but only phase will be switched.

RELEVANT STANDARD  
EN 60730

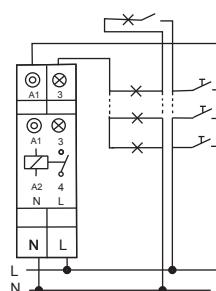
RELEVANT STANDARD  
EN 60669-2

3-wire connection

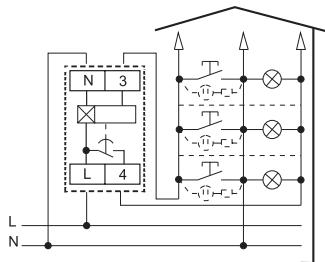


Max. 50 pcs

4-wire connection

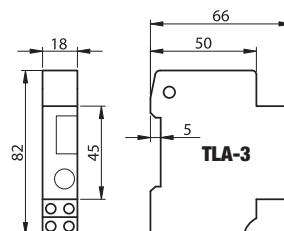
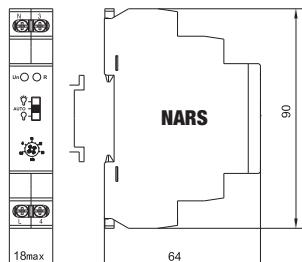
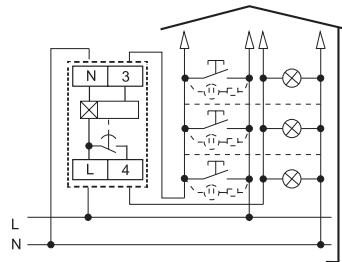


3-wire connection



Max. 50 pcs

4-wire connection



SCAN THE QR CODE!

- Check our new products
- Be updated

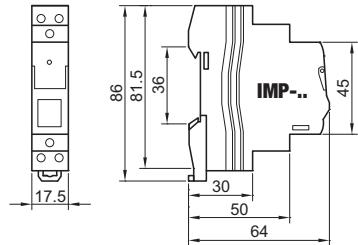
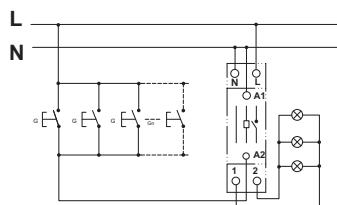
Our range of products is continuously and quickly expanding. Our catalogue shows our products as of April 2019. Check our website to stay up-to-date.

**Impulse-Relay**

Pictograms

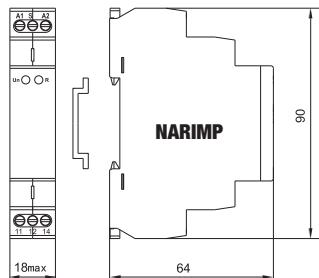
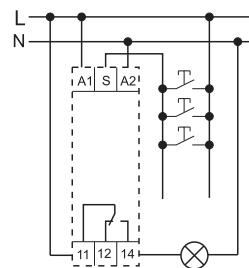
**F/O**

TRACON	$U_m$	$P_{max}$		$\text{cos} \varphi = 1$	$\text{cos} \varphi = 0,6$
<b>IMP-12</b>	12 V AC	max. 3.500 W	max. 1.300 W	$\times 100.000$	$\times 50.000$
<b>IMP-24</b>	24 V AC	max. 3.500 W	max. 1.300 W	$\times 100.000$	$\times 50.000$
<b>IMP-230</b>	230 V AC	max. 3.500 W	max. 1.300 W	$\times 100.000$	$\times 50.000$
<b>NARIMP</b>	AC/DC12V-240V	max. 2.000 W	max. 900 W	$\times 500.000$	$\times 250.000$

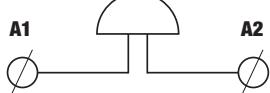
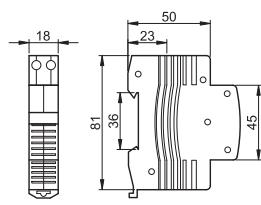


## Application

These bistable modular Impulse-Relays can be used for remote control of electric circuits and can also be manually switched. Both phase and neutral wire must carry through the relay but only phase will be switched.

**Signal bells**

TRACON	$U_m$		
<b>C60-CSEN</b>	230 V AC	60 dB	max. 60 min.
<b>C60-CSEN-24</b>	24 V AC	60 dB	max. 60 min.
<b>C60-CSEN-12</b>	12 V AC	60 dB	max. 60 min.
<b>C60-CSEN-8</b>	8 V AC	60 dB	max. 60 min.



**Safety (bell) transformer**

<b>IP</b> 20		<b>[mm²]</b> 35x7,5	<b>Ta</b> -25...+55°C	<b>Ui</b> 500 V	<b>V0</b> UL94
-----------------	--	------------------------	--------------------------	--------------------	-------------------



Pictograms

**F/0**

TRACON	P <sub>s</sub>	U <sub>Up</sub>	U <sub>sec</sub>	I <sub>sec</sub>
--------	----------------	-----------------	------------------	------------------

**BT-8/1**

max. 8 VA

230 V AC

4, 8, 12 V AC

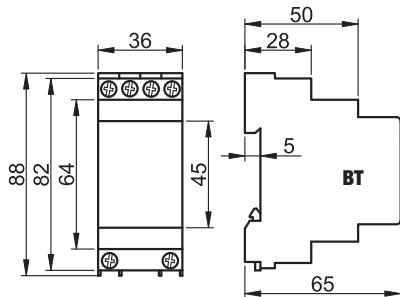
0,66 A

**BT-8/2**

8, 12, 24 V AC

0,33 A

Safe separating transformers supplying extra low voltage. Used as bell power supply it can also be used for other purposes according to the secondary voltage, e.g. supplier for other electric devices.


**RELEVANT STANDARD**  
**EN 61558-2-8**

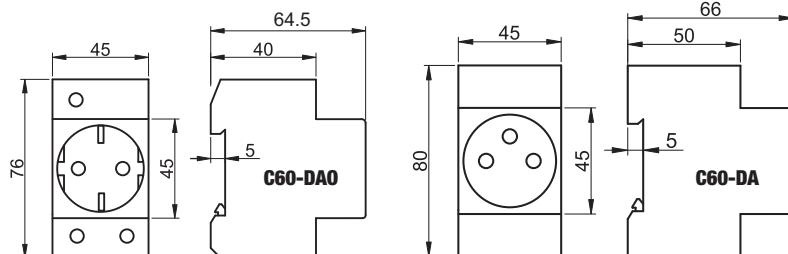
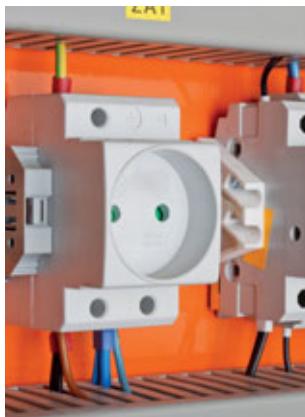

∅-----∅ U <sub>1</sub>	∅-----∅ U <sub>2</sub>	∅-----∅ U <sub>3</sub>
∅-----∅-----∅-----∅ U <sub>1</sub>	∅-----∅-----∅-----∅ U <sub>2</sub>	∅-----∅-----∅-----∅ U <sub>3</sub>

230 V, 50 Hz

**Modular socket outlet**

<b>IP</b> 20		<b>[mm²]</b> 35x7,5	<b>Ta</b> -25...+55°C	<b>Ui</b> 500 V	<b>V0</b> UL94
-----------------	--	------------------------	--------------------------	--------------------	-------------------

TRACON		I <sub>n</sub> (A)	U <sub>n</sub>
<b>C60-DAO</b>	2P+ 	16	250 V AC
<b>C60-DA</b>	2P+ 	16	250 V AC


**RELEVANT STANDARD**  
**MSZ 9872**
**RELEVANT STANDARD**  
**IEC 60884-1**
**TÜV MEEI TEST DOCUMENTATION**  
**28208191 001**

## Surface mounted type socket outlets and switches

230  
V ACV1  
UL94IP  
54[mm<sup>2</sup>]  
1-2,5Ta  
-25...+55°CU<sub>i</sub>  
500 V

F/O

TR-PH02



TR-PH01



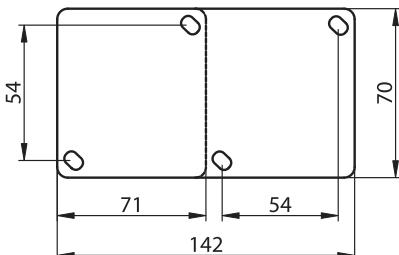
TR-PH08V



TR-PH01



TR-PH03

RELEVANT STANDARD  
EN 60669-1TÜV MEEI TEST DOCUMENTATION  
28208176 001

## TRACon

TR-PH01



x1

-



x1



-

TR-PHF01



-

x1



-

-

TR-PH02



x2

-



-



-

TR-PH03



-

x1



101

TR-PHF03



-

x1



101

TR-PH08



x1

-



106

TR-PHF08



-

x1



106

TR-PH03V



x1

-



101

TR-PHF03V



-

x1



101

TR-PH08V



x1

-



106

TR-PHF08V



-

x1



106

TR-PH09V



x1

-



2x101

TR-PHF09V



-

x1



2x101

TR-PH10V



x1

-



2x106

TR-PHF10V



-

x1



2x101

TR-PH09



x1

-



2x101

TR-PHF09



-

x1



2x101

TR-PH10



x1

-



2x101

TR-PHF10



-

x1



2x101

TR-PH04



-

-



102

TR-PH05



-

-



101

TR-PH05L\*



-

-



101

TR-PH06



-

106



106

TR-PH06L \*



-

-



106

TR-PH07



-

-



N101

TR-PH07L\*



-

-



N101

TR-PH05-2



-

-



2x101

TR-PH06-2



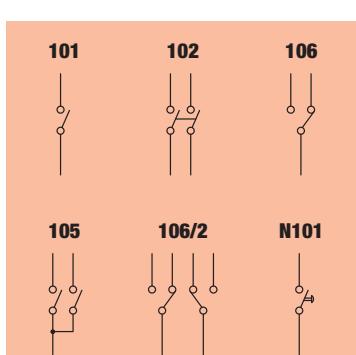
-

-



2x106

\* with light



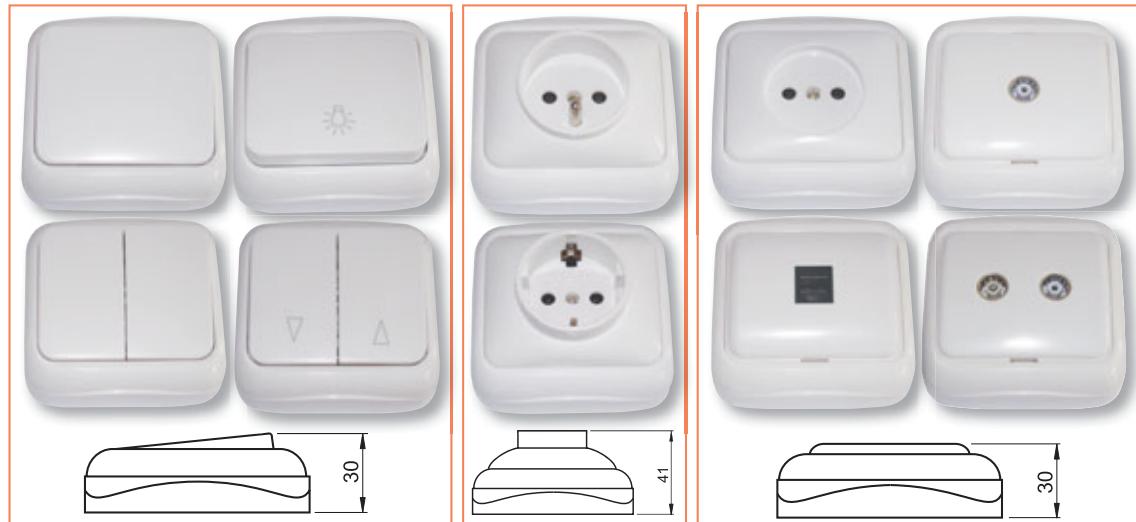
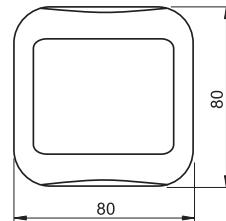
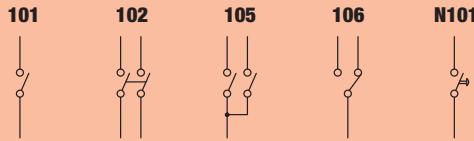
**TTK types surface mounted switches and socket outlets****F/0****TRACON**

TTK-11	TTK-12	TTK-13*	TTK-21	TTK-31	TTK-32
SCHUKO	FRENCH	NO EARTH*	(RJ11 6/4) Telephone	9,5 mm TV	9,5 mm TV+FM

**TRACON**

TTK-01	TTK-02	TTK-03	TTK-04B	TTK-04L	TTK-04W	TTK-05	TTK-06	TTK-07

\* to be used only for old installations as replacement;


**RELEVANT STANDARD**  
**EN 60669-1**
**RELEVANT STANDARD**  
**IEC 60884-1**
**RELEVANT STANDARD**  
**MSZ 9871-2**
**TÜV MEEI TEST DOCUMENTATION**  
**28208176 001**

**TFK type surface mounted switches and socket outlets**

230 V AC	V1 UL94	IP 20	[mm <sup>2</sup> ] 1-2,5	T <sub>a</sub> -25...+55°C	U <sub>i</sub> 500 V	50/60 Hz
----------	---------	-------	--------------------------	----------------------------	----------------------	----------

TRACON

TFK101	TFK101B	TFK102	TFK105	TFK106	TFKSCH	TFKSCH-2	TFKSCH-3
10 AX/250 V IP 20, (101)	10 AX/250 V IP 20, (N101)	10 AX/250 V IP 20, (102)	10 AX/250 V IP 20, (2x101)	10 AX/250 V IP 20, (106)	16 A/250 V, IP 20	16 A/250 V, IP 20	16 A/250 V, IP 20

**TFK101B**

**TFK102**

**TFK105**

**TFKSCH-2**

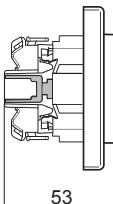
**TFKSCH-3**

**TFKSCH**

67.3

67.3

30

**Socket-outlet, Shuko with USB port**

230 V AC	V1 UL94	IP 20	[mm <sup>2</sup> ] 1-2,5	T <sub>a</sub> -25...+55°C	U <sub>i</sub> 500 V	50/60 Hz
----------	---------	-------	--------------------------	----------------------------	----------------------	----------



TRACON

**USB-21**16 A/250 V,  
IP 20

USB:5V, 2100mA



SCHUKO + USB



## Wireless door bell

Ta  
-20..+45°CIP  
44

F/0

TRACON			A  B						
<b>BELLW1-1V1</b>	3xAA	1xCR2032	100 m	82 dB	10	✓	✓	1 pcs	1 pcs
<b>BELLW1-1V2</b>	3xAA	1xCR2032	100 m	82 dB	10	✓	✓	1 pcs	2 pcs
<b>BELLW1-2V1</b>	3xAA	1xCR2032	100 m	82 dB	10	✓	✓	2 pcs	1 pcs
<b>BELLW2-2V1</b>	3xAA	1xCR2032	100 m	82 dB	10	✓	✓	2 pcs	1 pcs
<b>BELLW3-1V1</b>	2xAA	1xCR2032	100 m	82 dB	32	-	-	1 pcs	1 pcs
<b>BELLW4-1V1</b>	230 V AC	Kinetic	100 m	82 dB	16	✓	✓	1 pcs	1 pcs
<b>BELLW5-1V1</b>	230 V AC	Kinetic	100 m	82 dB	16	✓	✓	1 pcs	1 pcs

BELLW1-1V1,  
BELLW1-1V2,  
BELLW1-2V1

BELLW3-1V1



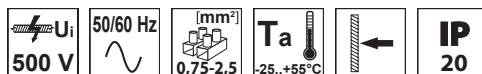
BELLW2-2V1



BELLW4-1V1



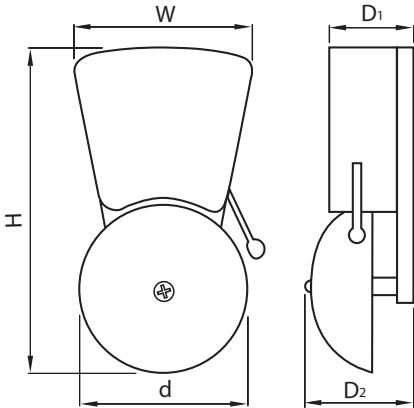
BELLW5-1V1

**Safety (bell) transformer**

TRACON	<b>U<sub>m</sub></b>	<b>I<sub>n</sub></b>		[h]	<b>H</b> (mm)	<b>W</b> (mm)	<b>D<sub>1</sub></b> (mm)	<b>D<sub>2</sub></b> (mm)	<b>d</b> (mm)
<b>BELL8S</b>	8 V AC	0,33 A	65 dB	max. 60 min.	148	72	36	36	76
<b>BELL8</b>	8 V AC	0,55 A	85 dB	max. 60 min.	220	124	47	61	120
<b>BELL24</b>	24 V AC	0,17 A	85 dB	max. 60 min.	220	124	47	61	120
<b>BELL230</b>	230 V AC	0,03 A	85 dB	max. 60 min.	220	124	47	61	120



**BELL8,  
BELL24,  
BELL230**



## LED STREETLIGHTS AND HIGH BAY LIGHTS

Die casted aluminum housing

Meanwell driver

Epistar chip

5 years Guarantee

**TRACON**  
-----  
**ELECTRIC®**



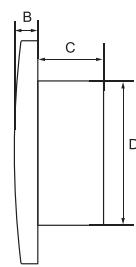
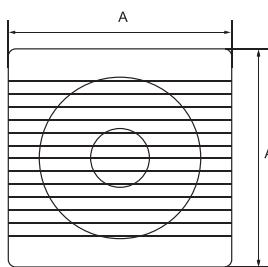
**VF Bathroom fans**

Pictograms

**F/O**

With front grid (VF)

TRACON					A (mm)	B (mm)	C (mm)	D (mm)	
<b>VF100-B</b>	✓	—	—	—	161x161	22	55	98	100 mm
<b>VF100-BT</b>	✓	—	—	✓	161x161	22	55	98	100 mm
<b>VF100-BTS</b>	✓	✓	—	✓	161x161	22	55	98	100 mm
<b>VF100-BTSH</b>	✓	✓	✓	✓	161x161	22	55	98	100 mm



**15 W**

**33 dB**

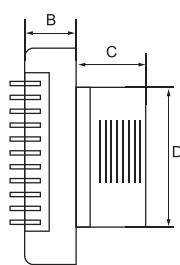
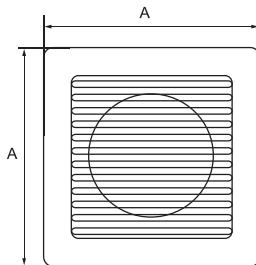
**80 m³/h**



**VF...**

With automatic jalousie (VFM)

TRACON					A (mm)	B (mm)	C (mm)	D (mm)	
<b>VFM100-B</b>	✓	—	—	—	150x150	50	42	98	100 mm
<b>VFM100-BT</b>	✓	—	—	✓	150x150	50	42	98	100 mm
<b>VFM100-BTH</b>	✓	—	✓	✓	150x150	50	42	98	100 mm



**15 W**

**33 dB**

**80 m³/h**



**VFM...**

Outer grids

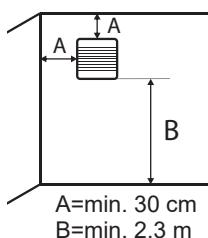
TRACON	A (mm)	B (mm)	Ø D (mm)
<b>VFG100</b>	151	45	96
<b>VFS100</b>	151	45	96

ball bearing

jalousie

humidity

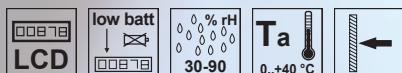
timer



**VFG100**



**VFS100**

**CO sensor**

Pictograms

F/O

CO gas concentration	30 ppm	50 ppm	100 ppm	300 ppm
<b>Requirement of EN 50291 standard</b>	No alarm	60 - 90 min.	10 - 40 min.	<3 min.
<b>Measuring values according to Test Report No. R-546875 by TÜV SÜD</b>	No alarm	66 - 71 min.	26 – 33 min.	64 – 85 s
<b>Measuring values according to Test Report No. G/265/2015 by Szenzorteknika Ltd.</b>	No alarm	71 – 72 min.	20 min.	31 – 50 s

These compact size sensors detect the presence of CO in the air of flats. The colorless and odorless CO gas can appear on defective heaters as the result of the incomplete combustion and can cause death by suffocation. The device gives both visual and audio signals in 4 steps if the detected CO level steps over a preset value saving the life of people living in the flat.

But the device does not protect against the chronic effects of CO gas and does not give full protection against special risks! Using the sensor does not replace the proper installation and maintenance of heaters and an adequate ventilation!

Sensor type:	electro-chemistry cell
Power supply:	3 pcs 1.5 V AA battery
Current:	standby mode: <80 µA alarm mode: 0,4 - 1,5 mA
Alarm signal:	optical and sound
Display (LCD):	standby: PPM, room temperature, battery state alarm/test: ERR –error; --- - test; HCO – high CO value operation (green), error (yellow), alarm(red)
Optical display (LED):	
Standup time:	5 s
Built-in test button	

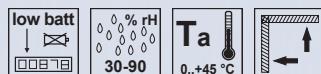


The lifetime of sensor is 7 years from the first installation. The device has „end of lifetime“ displaying option.



# Prevent the accident!

## Wireless smoke detector with transmission



TRACON



Hz

**SD101LD** > 85 dB / 3 m 433,92 MHz Ø125 x 125 x 48 mm

These compact size wireless sensors detect the presence of smoke in the air and are an excellent protection against fire.

The sensor gives a tone alarm in case of smoke and this signal can be forwarded to other similar devices. In this way, the detection of smoke inside a closed area can be reported to other open areas.

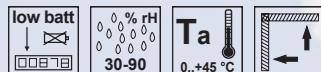
Power supply:	3 pcs 1,5 V AA battery (sender) 1 pcs 9 V 6LR61 battery (receiver)
Alarm signal:	optical and sound
Current:	Standby (9 V): <12 µA Alarm (9 V): <20 mA Signal (4,5 V): <230 µA
Built-in test and learn button	



RELEVANT STANDARD  
**EN 14604:2005**



## Smoke detector without transmission



TRACON

**SD133A** > 85 dB / 3 m 103x103x35 mm

The mode of operation of these sensors is very similar to the wireless ones but they have no wireless transmission modules.

Power supply:	1 pcs 9 V 6LR61 battery (receiver)
Alarm signal:	optical and sound
Current:	Standby (9 V): <12 µA Alarm (9 V): <20 mA Signal (4,5 V): <230 µA
Built-in test button	



RELEVANT STANDARD  
**EN 14604:2005**



**THE DETAILED DATA SHEET OF PRODUCTS  
PLEASE FIND IN OUR WEB SHOP!**