

MINIATURE CIRCUIT BREAKERS SERIES RX 10kA

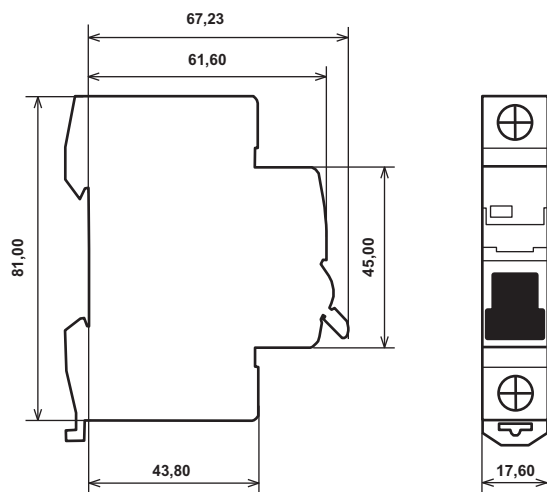
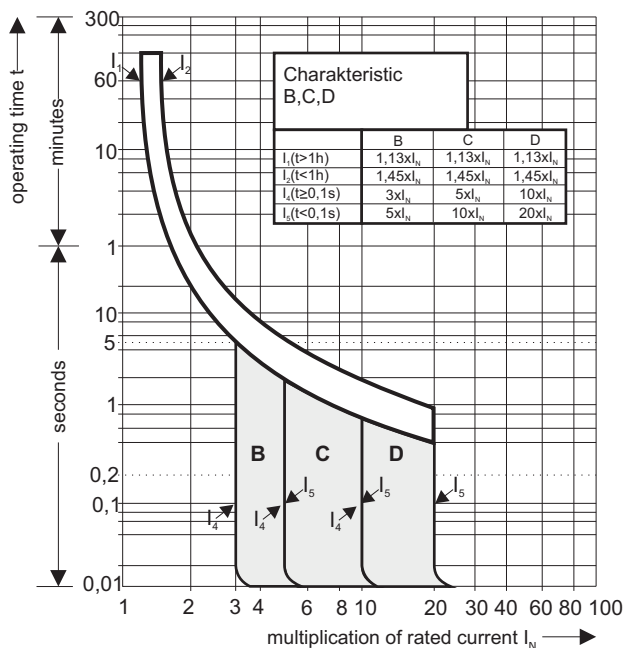
The miniature circuit breakers Hess RX10 have two different releases acting onto the switching mechanism:

- 1.) thermal over-current release for over-current protection, working with time lag
- 2.) electromagnetic high-speed release with ejecting armature for immediate short-circuit protection

They are thus intended to protect the electrical distribution systems and electrical devices against short-circuit and to protect the electrical distribution system against overload.

They are suitable especially for common installation into switchboards and switching points of low voltage end circuits.

With their design as well as technical parameters, the miniature circuit breakers Hess Rx10 conform to the present high world level. They are marked with a logo with a trade mark HESS. The miniature circuit breakers are manufactured in accordance with a particular European standard ČSN EN 60898.



I₁, I₂ : Overload protection (thermobimetal)
I₃, I₄ : Short circuit protection (electromagnetic)
Usage of the time-current characteristics:
B characteristics are designed for protecting wires and receivers in circuits of lighting, plug-in sockets and steering.
C characteristics are designed for devices generally
D characteristics for devices with high current surge

Technical data:

Number of poles	1,1+N,2,3,3+N,4	Class of selectivity	3
Current ratings	1,2,3,4,6,10,13,16,20,25,32,40,50,63A	Protection class	IP 20
Rated voltages	1P 230/400 V 50/60 Hz 3P /400 V 50/60 Hz	Maximal wire	In 63A: 35 mm ²
Breaking capacity	EN 60898 - 10 kA	Mouting	DIN EN 50 022 scren
Characteristics	B: 3 In - 5 In C: 5 In - 10In D: 10 In - 20 In	Endurance	≥8.000



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MINIATURE CIRCUIT BREAKERS SERIES RX 6kA

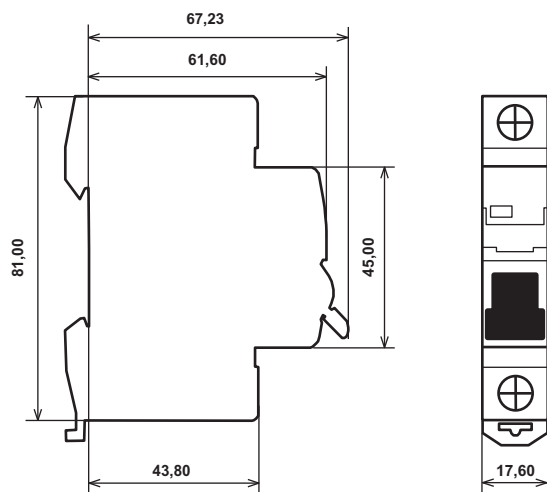
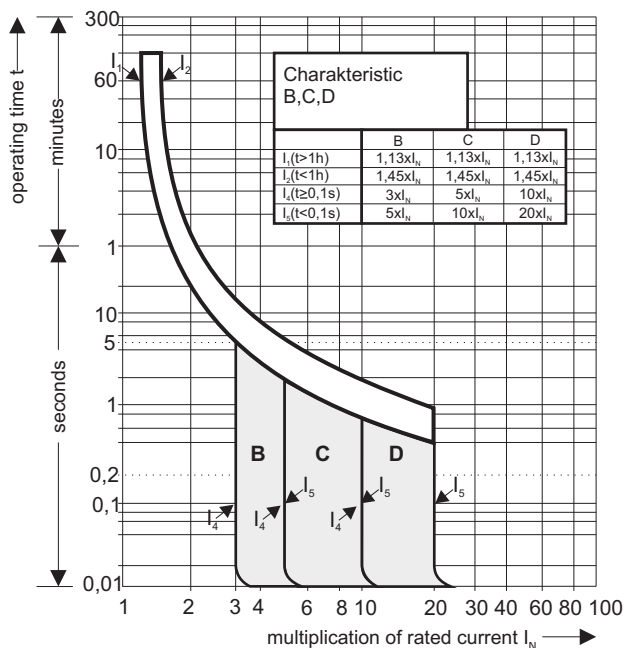
The miniature circuit breakers Hess RX6 have two different releases acting onto the switching mechanism:

- 1.) thermal over-current release for over-current protection, working with time lag
- 2.) electromagnetic high-speed release with ejecting armature for immediate short-circuit protection

They are thus intended to protect the electrical distribution systems and electrical devices against short-circuit and to protect the electrical distribution system against overload.

They are suitable especially for common installation into switchboards and switching points of low voltage end circuits.

With their design as well as technical parameters, the miniature circuit breakers Hess Rx6 conform to the present high world level. They are marked with a logo with a trade mark HESS. The miniature circuit breakers are manufactured in accordance with a particular European standard ČSN EN 60898.



I₁, I₂ : Overload protection (thermobimetal)
I₄, I₅ : Short circuit protection (electromagnetic)
Usage of the time-current characteristics:
B characteristics are designed for protecting wires and receivers in circuits of lighting, plug-in sockets and steering.
C characteristics are designed for devices generally
D characteristics for devices with high current surge

Technical data:

Number of poles	1,1+N,2,3,3+N,4	Class of selectivity	3
Current ratings	1,2,3,4,6,10,13,16,20,25,32,40,50,63A	Protection class	IP 20
Rated voltages	1P 230/400 V 50/60 Hz 3P /400 V 50/60 Hz	Maximal wire	In 63A: 35 mm ²
Breaking capacity	EN 60898 - 6 kA	Mouting	DIN EN 50 022 scren
Characteristics	B: 3 In - 5 In C: 5 In - 10In D: 10 In - 20 In	Endurance	≥8.000



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MINIATURE CIRCUIT BREAKERS SERIES E6000E

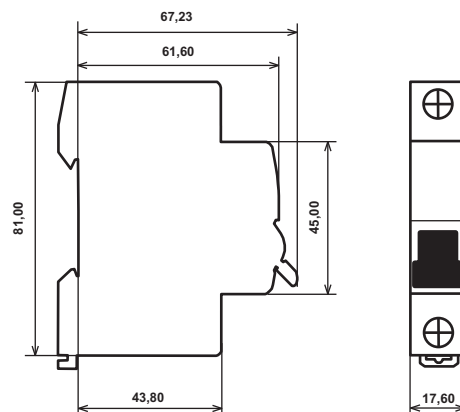
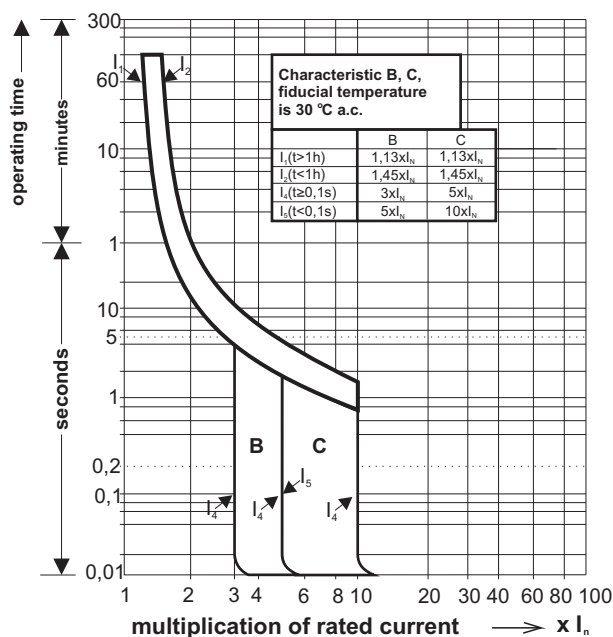
The miniature circuit breakers Hess E6000E have two different releases acting onto the switching mechanism:

- 1.) thermal over-current release for over-current protection, working with time lag
- 2.) electromagnetic high-speed release with ejecting armature for immediate short-circuit protection

They are thus intended to protect the electrical distribution systems and electrical devices against short-circuit and to protect the electrical distribution system against overload.

They are suitable especially for common installation into switchboards and switching points of low voltage end circuits.

With their design as well as technical parameters, the miniature circuit breakers Hess E6000E conform to the present high world level. They are marked with a logo with a trade mark HESS. The miniature circuit breakers are manufactured in accordance with a particular European standard ČSN EN 60898.



I₁, I₂ : Overload protection (thermobimetal)
I₁, I₂ : Short circuit protection (electromagnetic)

Usage of the time-current characteristics:

B characteristics are designed for protecting wires and receivers in circuits of lighting, plug-in sockets and steering.

C characteristics are designed for devices generally

Technical data:

Number of poles	1,3	Class of selectivity	3
Current ratings	1,2,3,4,6,10,13,16,20,25,32,40A	Protection class	IP 20
Rated voltages	1P 230/400 V 50/60 Hz 3P /400 V 50/60 Hz	Maximal wire	In 63A: 35 mm ²
Breaking capacity	EN 60898 - 6 kA	Mouting	DIN EN 50 022 scren
Characteristics	B: 3 In - 5 In C: 5 In - 10In	Endurance	≥8.000



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MINIATURE CIRCUIT BREAKERS SERIES RX N

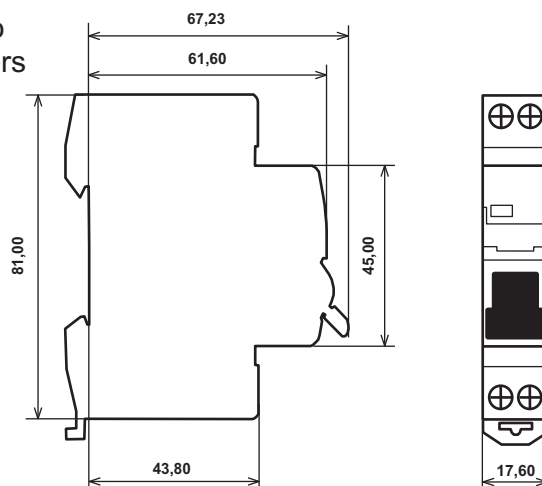
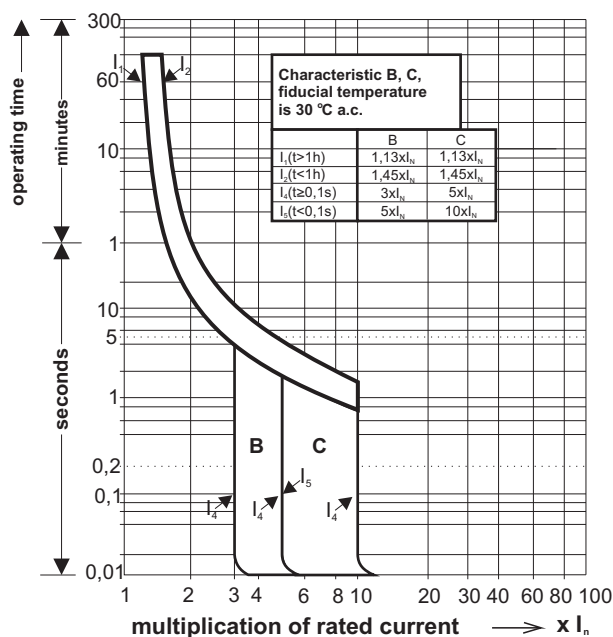
The miniature circuit breakers Hess RX-N have two different releases acting onto the switching mechanism:

- 1.) thermal over-current release for over-current protection, working with time lag
- 2.) electromagnetic high-speed release with ejecting armature for immediate short-circuit protection

They are thus intended to protect the electrical distribution systems and electrical devices against short-circuit and to protect the electrical distribution system against overload.

They are suitable especially for common installation into switchboards and switching points of low voltage end circuits.

With their design as well as technical parameters, the miniature circuit breakers Hess RX-N conform to the present high world level. They are marked with a logo with a trade mark HESS. The miniature circuit breakers are manufactured in accordance with a particular European standard ČSN EN 60898.



I₁, I₂ : Overload protection (thermobimetal)
I₁, I₂ : Short circuit protection (electromagnetic)

Usage of the time-current characteristics:

B characteristics are designed for protecting wires and receivers in circuits of lighting, plug-in sockets and steering.

C characteristics are designed for devices generally

Technical data:

Number of poles	1 (1N)	Class of selectivity	3
Current ratings	4,6,10,13,16, 20,25,32A	Protection class	IP 20
Rated voltages	1P 230/400 V 50/60 Hz	Maximal wire	In 32A: 16 mm ²
Breaking capacity	EN 60898 - 6 kA	Mouting	DIN EN 50 022 scren
Characteristics	B: 3 In - 5 In C: 5 In - 10In	Endurance	≥8.000

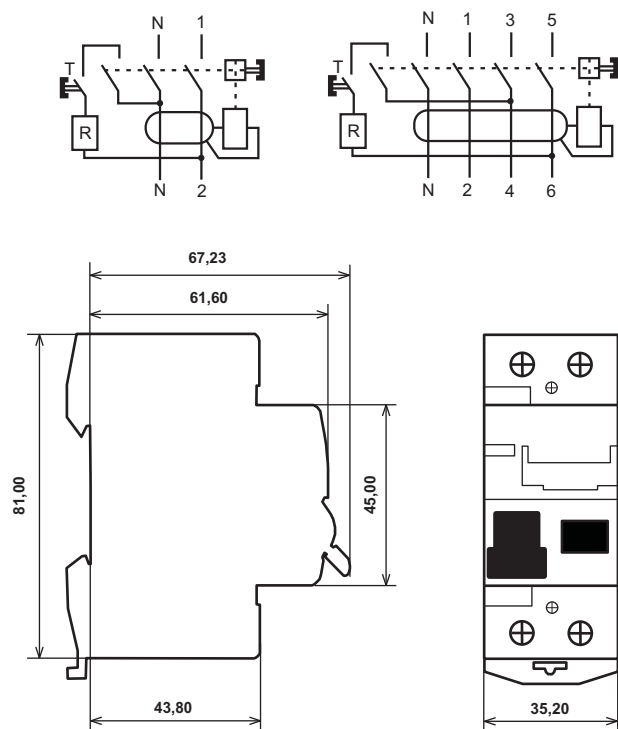


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RESIDUAL CURRENT CIRCUIT BREAKERS RX L

Current protective switches RX provide disconnection, switching and earth-fault protection of circuits. They have an electromagnetic residual current release working without any auxiliary power source. This release disconnects automatically the circuit if the earth fault current between phase and earth is greater than the nominal residual current $I_{\Delta n}$.

- standart type for common application at households and industrial installation up to 63A, AC 230/400V
- for protection of live parts ($I_{\Delta n} \leq 30\text{mA}$)
- for fire or short-circuit protection of lifeles parts (of buildings, machines etc.), If the insulating capability of any devices has been reduced ($I_{\Delta n} \leq 100\text{mA}$)
- they are designed for work with alternative current
- they include the filtering apparatus to avoid the unwished switching-off caused by different network failures
- colourful indication of switch-on and switch off position
- marked with logo 
- manufactured in compliance to the standard CSN EN 61 008.
- 2 yares guarantee



Technical data:

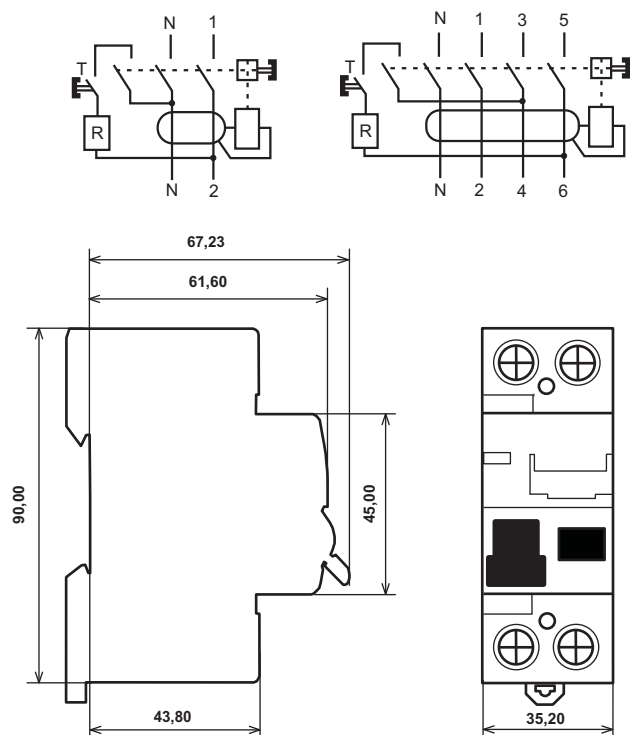
Number of poles	2,4	Nominal residual current $I_{\Delta n}$	0,03 , 0,1 ,0,3A
Type	AC	Protection	IP 20
Nominal currents	25,40A,63A;	Max.conductor	35/25 mm ²
Nominal voltage	2P 230 V 50/60 Hz 4P 230/400 V 50/60 Hz	Fastening	onto the strip DIN EN 50 022
Nominal conditioned short-circuit resistance	10 000 A	Switch-off indication	with red parachute
Max.pre-arranged short-circuit fuse	63A gG	Lifetime	1.000 switching cycles



RESIDUAL CURRENT CIRCUIT BREAKERS RX LB

Current protective switches RX provide disconnection, switching and earth-fault protection of circuits. They have an electromagnetic residual current release working without any auxiliary power source. This release disconnects automatically the circuit if the earth fault current between phase and earth is greater than the nominal residual current $I_{\Delta n}$.

- standart type for common application at households and industrial installation up to 100A AC 230/400V
- for protection of live parts ($I_{\Delta n} \leq 30\text{mA}$)
- for fire or short-circuit protection of lifeles parts (of buildings, machines etc.), If the insulating capability of any devices has been reduced ($I_{\Delta n} \leq 100\text{mA}$)
- they are designed for work with alternative current
- they include the filtering apparatus to avoid the unwished switching-off caused by different network failures
- colourful indication of switch-on and switch off position
- marked with logo 
- manufactured in compliance to the standard CSN EN 61 008.
- 2 yares guarantee



Technical data:

Number of poles	2,4	Nominal residual current $I_{\Delta n}$	0,03 , 0,1 ,0,3A
Type	AC	Protection	IP 20
Nominal currents	63,80,100A	Max.conductor	70/50mm ²
Nominal voltage	2P 230 V 50/60 Hz 4P 230/400 V 50/60 Hz	Fastening	onto the strip DIN EN 50 022
Nominal conditioned short-circuit resistance	10 000 A	Switch-off indication	with red parachute
Max.pre-arranged short-circuit fuse	100A gG	Lifetime	1.000 switching cycles

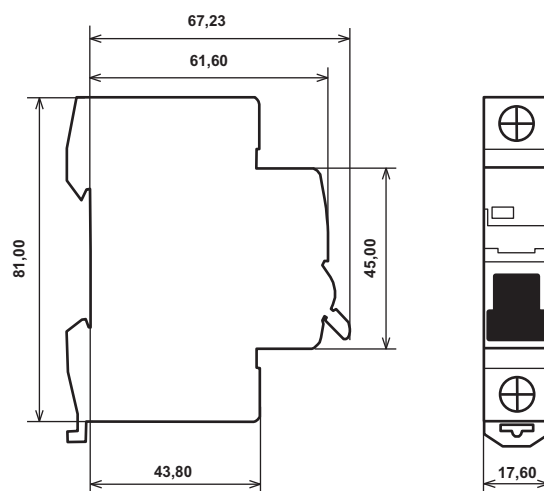


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ISOLATOR SERIES RX S

They are intended to be built into the switchboards attached to the rail DIN 35mm. Together with devices create an optimal combination of instruments for any modern solution of wiring systems. With their construction and technical parameters, the isolators RX are in compliance with the present world level.

They are marketed with the logo **HESS**® and manufactured in accordance with the standard IEC 947-3.



Technical data:

Number of poles	1,2,3,4,1+N,3+N	Protection class	IP 20
Current ratings	16,25,32,40,63A	Maximal wire	In 16,25,32,40,63A: 35 mm ²
Rated voltages	230/400 V 50/60 Hz		

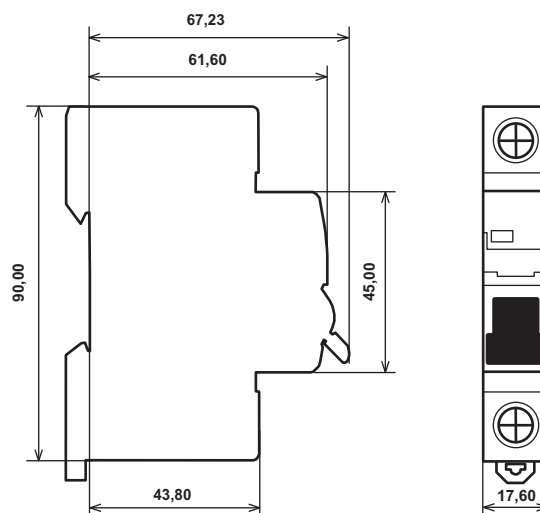


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ISOLATOR SERIES RX SB

They are intended to be built into the switchboards attached to the rail DIN 35mm. Together with devices create an optimal combination of instruments for any modern solution of wiring systems. With their construction and technical parameters, the isolators RX are in compliance with the present world level.

They are marketed with the logo **HESS**® and manufactured in accordance with the standard IEC 947-3.



Technical data:

Number of poles	1,2,3,4,1+N,3+N	Protection class	IP 20
Current ratings	63, 80, 100, 125A	Maximal wire	In 63, 80, 100, 125A: 50/70 mm ²
Rated voltages	230/400 V 50/60 Hz		



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MODULAR BELL TRANSFORMERS

MODULAR BELLS

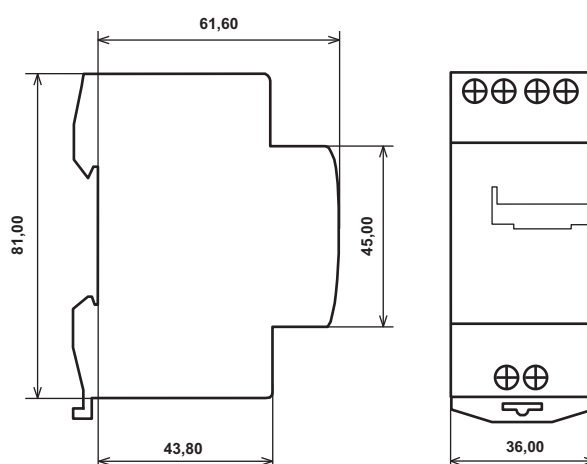
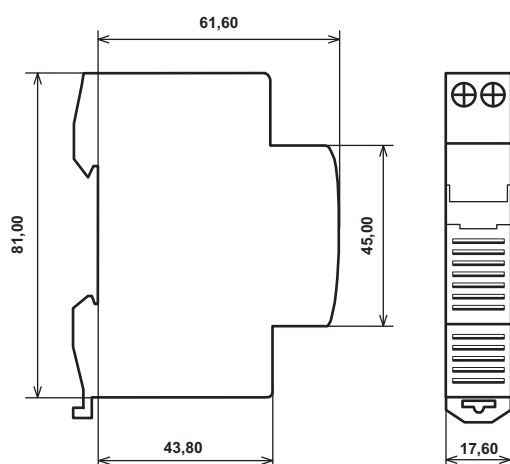
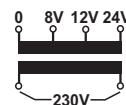
Modular bell transformers and modular bells are for their compact size an import accessory of householding switchboards.

By their technical construction and technical parameters the products match the recent world-class level. The products are marked with **HESS**® logo.

They conform to the standard STN EN 60 742.



U_{PRIM} AC 230 V 50 Hz
 U_{SEC} AC 8/12/24 V
6 V.A
IP 30



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INSTALLATION CONTACTORS

Installation contactors are applied for automatic control of electric devices in installations of dwellings, offices, shops and hospitals. They are particularly suitable for switching lighting, heat pumps, air-conditioning and similar equipment, and are also intended for switching single phase and three phase electric motors. They excel in silent operation.

Contactors can be built in electric distribution panels on 35mm mounting rails (in compliance with EN 607 15).

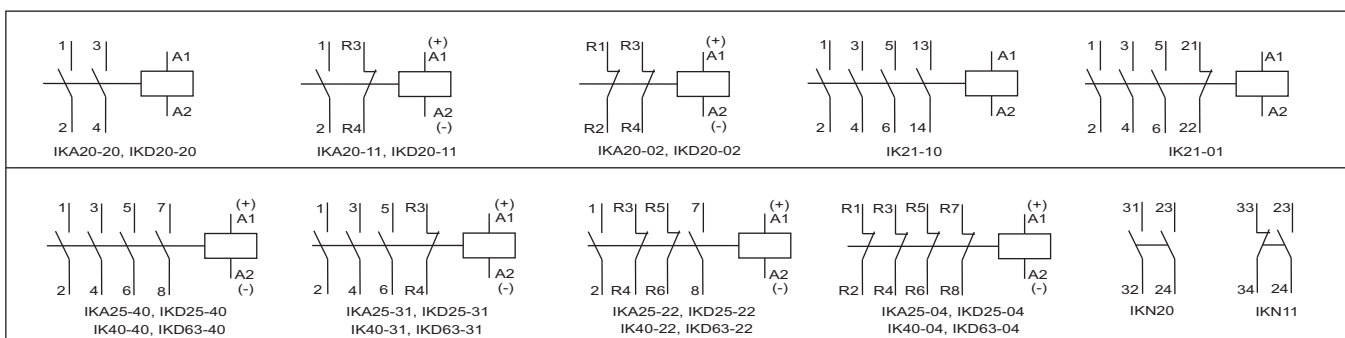
Sealing of a contactor cover is also possible.

IKD20, IKD25, IK40, IK63 are DC driven contactors with overvoltage protection and with a rectifier which enables DC or AC voltage control. Four -pole make contacts of a contactor can be applied as main or auxiliary contacts.

IKA20, IK21, IKA25 are AC driven contactors only.

Special version IKA/IKD 20/25-R are with manual operating mechanism (override function).

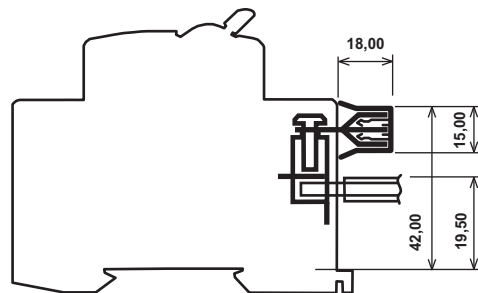
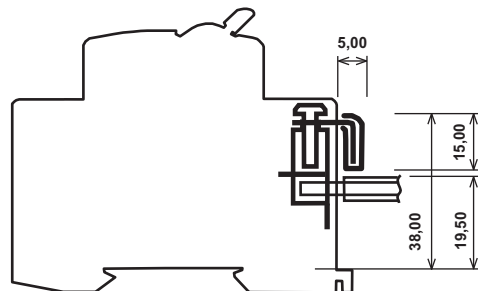
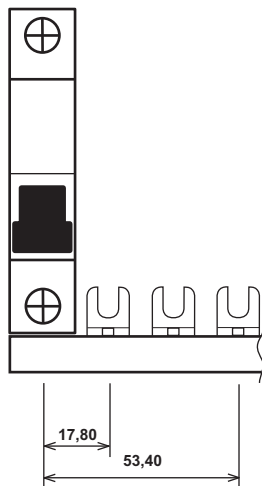
Type			IKA20	IKD20	IK21	IKA25	IKD25	IK40	IK63	Aux. switch HHSLa	Aux. switch IKN	
General	Standards		IEC 947-4-1, IEC 947-5-1, IEC 1095, EN 60947-4-1, EN 60947-5-1 EN 61095, VDE 0660, VDE 0637									
	Permissible ambient temperature		°C	-5...+55						-5...+40	-5...+55	
	Storage temperature		°C	-30...+80								
	Overvoltage protection		V	-	430	-	-	430	430	430	-	-
	Mechanical endurance (switching cycles)			3 x 10 ⁷								
	Protection class to DIN 40 050, IEC 529			IP20								
	Finger safe in accordance with VDE 0106 Part 100											
Main contacts	Side-by-side assembly at V _α		40°C	no limitation							-	-
			55°C	no limitation							-	-
	Rated insulation voltage		U _i	V	440	440	415	440	440	500	440	440
			U _{imp}	kV	4	4		4	4	4	4	4
	Rated thermal current		I _{th}	A	20	20	20	25	25	40	63	6
	AC1	Rated operational current	I _N	A	20	20	20	25	25	40	63	-
	AC7a	Operational power rating	230V 400V	kV	4	4	7.5	9	9	16	24	-
	AC3	Operational power rating	230V 400V	kV	1.3 ONLY FOR NO	1.3 ONLY FOR NO	1.1	2.2	2.2	5.5	8.5	-
	DC 1	Rated operational current at:	1 pole	U _N =24V	20	20	20	25	25	40	63	-
	U _N =110V			1	1	2	2	4	4	-		
	U _N =220V			0.5	0.5	0.5	0.5	0.8	0.8	-		
	2 poles connected in series			-	20	20	-	-	40	63	-	
	U _N =24V			3	3	4	4	4	10	10	-	
	U _N =110V			1.5	1.5	1.5	1.5	6	6	-		
	U _N =220V			-	-	20	-	40	63	-		
	3 poles connected in series			-	-	6	6	30	35	-		
	U _N =110V			-	-	2.5	2.5	20	30	-		
	U _N =220V			-	-	20	25	40	63	-		
	4 poles connected in series			-	-	6	6	40	63	-		
	U _N =110V			-	-	3.5	3.5	40	63	-		
	U _N =220V			-	-	3.5	3.5	40	63	-		
	Electrical endurance at 230/400 V	AC1	op.c.	200000	200000	200000	200000	200000	100000	100000	-	-
		AC3		300000	300000	300000	500000	500000	150000	150000	-	-
AC5a Highpressure vapour lamps		100000		100000	100000	100000	100000	100000	100000	100000	-	-
AC5b Incandescent lamps		-		-	50000 at 1.5 kV	100000 at 1.5 kV	100000 at 1.5 kW	100000 at 4 kW	100000 at 6 kW	100000	-	-
AC7a Resistive household devices		200000		200000	200000	200000	100000	100000	100000	100000	-	-
AC7b Inductive household devices		300000		300000	300000	500000	500000	150000	150000	-	-	
Maximum operating frequency		op.c/h		600	600	360	600	600	120	120	600	600
Stray power per current path		W	1.7	1.7	2	2.2	2.2	4	8	-	-	
Back-up fuse gL max. rating		A	20	20	25	35	35	63	80	6	6	



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INTERCONNECTING RAILS

The interconnecting rails enable more Miniature Circuit Breakers, Isolator and Residual Current Circuit Breakers to be interconnected between each other. There are two types of these rails - forked and reed. The rails are supplied either with the cross-section of 16mm² or 10mm², always with insulating material made of self-extinguishing ABS-VO. The copper contacts (reeds) are located closed at the rail edges.



Technical data:

Number of poles	1,3	Material of the strip	Cu
Load current	63,80 A	Material of insulation	ABS-VO
Rated voltages	230/400 V 50/60 Hz	Short-circuit resistance	25 kA
Strip cross-section	16mm ² 10mm ²	Supplied length	1m



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