

Low-voltage current and voltage transformers



We make energy measurable and take care of your future



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MBS has all important international approvals and certifications

GL (Germanischer Lloyd) certificate

UL certificate (Current transformer series CTB)

IPH (Institute „Prüffeld für elektrische Hochleistungstechnik“)
approval

ISO 9001:2015 and ISO 50001:2011 certificate

PTB (Physikalisch-Technische Bundesanstalt) approval

GOST certificate

International approvals – Switzerland, Austria, Russia, Hungary, Czech Republic, Bulgaria, Romania, Slovakia Croatia and further countries.



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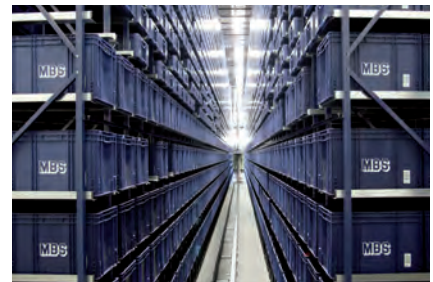
Our philosophy

More engagement // more service // more customer satisfaction



Our strategy

Realizing today, on what others think of only tomorrow.



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Low-voltage current transformers for industrial applications

Split-core current transformer for isolated primary conductors

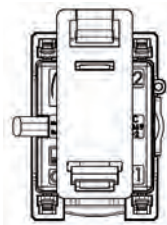
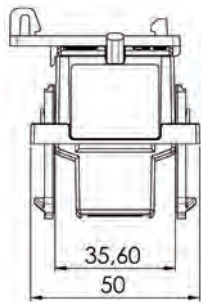
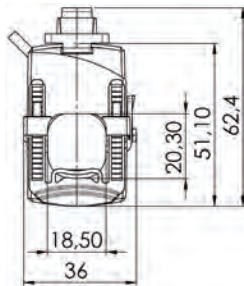
KBR 18S	Round conductor: 18,5 mm Current range: 60 ... 250 A Transformer width: 36 mm	Page: 105
KBR 18	Round conductor: 18,5 mm Current range: 50 ... 250 A Transformer width: 41,6 mm	Page: 106
KBR 18L	Round conductor: 18,4 mm Current range: 100 ... 250 A Transformer width: 49 mm	Page: 107
KBR 28	Round conductor: 27,9 mm Current range: 200 ... 500 A Transformer width: 49 mm	Page: 108
KBR 32	Round conductor: 32,5 mm Current range: 100 ... 600 A Transformer width: 59,2 mm	Page: 109
KBR 42	Round conductor: 42,4 mm Current range: 250 ... 1000 A Transformer width: 67 mm	Page: 110
KBR 42L	Round conductor: 2x 42,4 mm Current range: 250 ... 1000 A Transformer width: 67 mm	Page: 111
KBR 44	Round conductor: 44 mm Current range: 250 ... 1000 A Transformer width: 72,2 mm	Page: 112

KBR 18S

Split-core current transformer



Round conductor	18,5 mm
Transformer width	36,0 mm
Height	62,4 mm
Depth	50 mm



Primary current [A]	Burden [VA]	Secondary current [A] / Class	
		1 A Cl. 3 Art.-no.	1 A Cl. 1 Art.-no.
60	0,4	18S-0001	
75	0,5	18S-0002	
100	0,75	18S-0003	
125	0,75	18S-0004	
150	1	18S-0005	
200	0,4		18S-0006
	1,5	18S-0007	
250	0,5		18S-0008
	2	18S-0009	

		Art.-no.
	Snap-on mounting, type H	55016

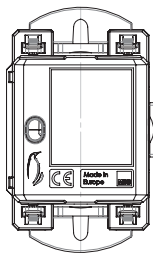
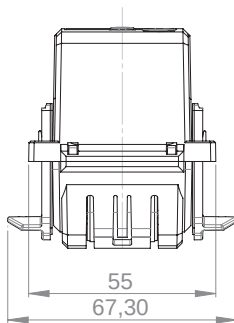
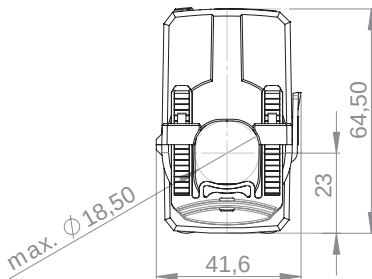
- Split-core current transformers are mainly used for an easy fitment and subsequent assembly into an already existing installation, without separating the primary conductor.
- The compact split-core current transformer KBR 18S has been developed to have easy access in already existing installations.
- Due to the „click“-system and the fixing-clasps even a one-hand mounting is possible.
- The delivery follows with 2.5 m connection cable 2 x 0.5 mm² (color coded; S1 = brown; S2 = blue), other lengths of the connection cables are possible on request.
- Operating temperature: -5°C < T < +50°C
- Storage temperature: -25°C < T < +70°C

KBR 18

Split-core current transformer



Round conductor	18,5 mm
Transformer width	41,6 mm
Height	64,5 mm
Depth	68 mm



Primary current [A]	Burden [VA]	Secondary current [A] / Class	
		1 A Cl. 3 Art.-no.	1 A Cl. 1 Art.-no.
50	1	18-0001	
75	1	18-0006	
100	1,25	18-0011	
125	1,5	18-0016	
150	2	18-0021	
200	1		18-0027
	3	18-0026	
250	1,5		18-0032
	4	18-0031	

Optional mit Spannungsausgang:

Primary current [A]	Spannungsausgang [mV]	Class 1
50	0...333	18-1001
75	0...333	18-1006
100	0...333	18-1011
125	0...333	18-1016
150	0...333	18-1021
200	0...333	18-1026
250	0...333	18-1031

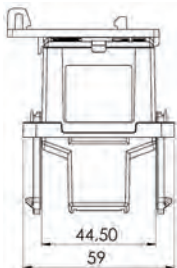
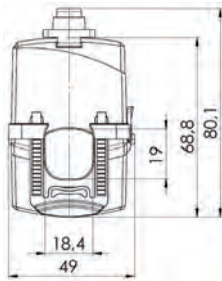
- Split-core current transformers are mainly used for an easy fitment and subsequent assembly into an already existing installation, without separating the primary conductor.
- The compact split-core current transformer KBR 18 has been developed to have easy access in already existing installations.
- Due to the „click“-system and the fixing-clasps even a one-hand mounting is possible.
- The delivery follows with 2.5 m connection cable 2 x 0.75 mm² (color coded; S1 = brown; S2 = blue), other lengths of the connection cables are possible on request.
- For the use as a current sensor the KBR 18 is optionally deliverable with a voltage output of 0 – 333 mV (Min. burden resistance ≥ 1 kΩ).
- Operating temperature: -5°C < T < +50°C
- Storage temperature: -25°C < T < +70°C

KBR 18L

Split-core current transformer



Round conductor 18,4 mm
 Transformer width 49,0 mm
 Height 80,1 mm
 Depth 59 mm



Primary current [A]	Burden [VA]	Secondary current [A] / Class			
		5 A Cl. 1 Art.-no.	5 A Cl. 0,5 Art.-no.	1 A Cl. 1 Art.-no.	1 A Cl. 0,5 Art.-no.
100	0,3			18L-0001	
125	0,5			18L-0002	
150	1	18L-5001		18L-0003	
200	0,2				18L-0004
	1,5	18L-5002		18L-0005	
250	0,5				18L-0006
	1		18L-5003		
	2	18L-5004			
	2,5			18L-0007	

	Art.-no.
	Snap-on mounting, type I 55017

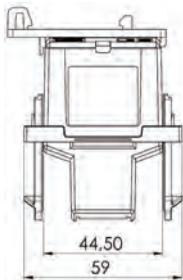
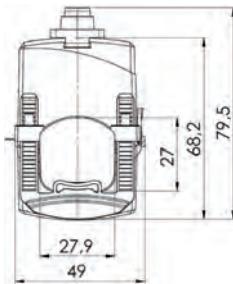
- Split-core current transformers are mainly used for an easy fitment and subsequent assembly into an already existing installation, without separating the primary conductor.
- The compact split-core current transformer KBR 18L has been developed to have easy access in already existing installations.
- Due to the „click“-system and the fixing-clasps even a one-hand mounting is possible.
- The KBR 18L with secondary 1A will be delivered with 2.5 m connection cable 2 x 0.5 mm² (color coded; S1 = brown; S2 = blue). Other lengths of the connection cables are possible on request.
- The secondary 5A – version will be delivered with 0.5m connection cable 2 x 1.5 mm².
- Operating temperature: -5°C < T < +50°C
- Storage temperature: -25°C < T < +70°C

KBR 28

Split-core current transformer



Round conductor 27,9 mm
Transformer width 49,0 mm
Height 79,5 mm
Depth 59 mm



Primary current [A]	Burden [VA]	Secondary current [A] / Class			
		5 A Cl. 1 Art.-no.	5 A Cl. 0,5 Art.-no.	1 A Cl. 1 Art.-no.	1 A Cl. 0,5 Art.-no.
200	0,3			28-0001	
250	1	28-5001		28-0002	
300	1,5	28-5002		28-0003	
400	0,5				28-0004
	2,5	28-5003		28-0005	
500	1		28-5004		28-0006
	3	28-5005		28-0007	

		Art.-no.
	Snap-on mounting, type I	55017

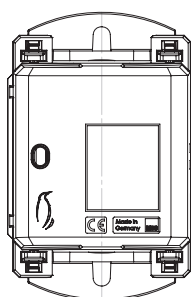
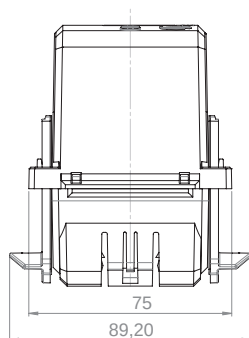
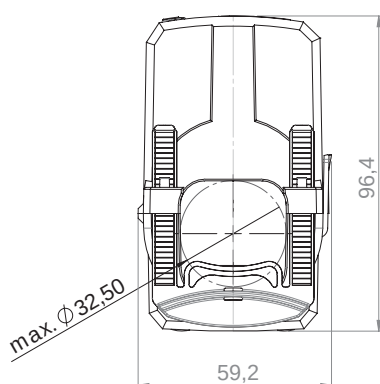
- Split-core current transformers are mainly used for an easy fitment and subsequent assembly into an already existing installation, without separating the primary conductor.
- The compact split-core current transformer KBR 28 has been developed to have easy access in already existing installations.
- Due to the „click“-system and the fixing-clasps even a one-hand mounting is possible.
- The KBR 28 with secondary 1A will be delivered with 2.5 m connection cable 2 x 0.5 mm² (color coded; S1 = brown; S2 = blue). Other lengths of the connection cables are possible on request.
The secondary 5A – version will be delivered with 0.5m connection cable 2x1.5 mm².
- Operating temperature: -5°C < T < +50°C
- Storage temperature: -25°C < T < +70°C

KBR 32

Split-core current transformer



Round conductor 32,5 mm
Transformer width 59,2 mm
Height 96,4 mm
Depth 90 mm



Primary current [A]	Burden [VA]	Secondary current [A] / Class			
		5 A Cl. 3 Art.-no.	5 A Cl. 1 Art.-no.	1 A Cl. 3 Art.-no.	1 A Cl. 1 Art.-no.
100	1,5	32-5011			
	2,5			32-0011	
125	2,5	32-5016			
	3			32-0016	
150	3	32-5021		32-0021	
	3	32-5026			
200	3	32-5031			
	5			32-0026	
250	3				
	5			32-0031	
300	2,5		32-5035		
	5				32-0035
400	5		32-5037		32-0037
500	5		32-5039		32-0039
600	5		32-5041		32-0041

Primary current [A]	Output signal		Cl. 1 Art.-no.
	[mV] AV	[mA] DC	
100	0...333	–	32-1011
	–	4...20	32-2011
125	0...333	–	32-1016
	–	4...20	32-2016
150	0...333	–	32-1021
	–	4...20	32-2021
200	0...333	–	32-1026
	–	4...20	32-2026
250	0...333	–	32-1031
	–	4...20	32-2031
300	0...333	–	32-1034
	–	4...20	32-2034
400	0...333	–	32-1036
	–	4...20	32-2036
500	0...333	–	32-1038
	–	4...20	32-2038
600	0...333	–	32-1040
	–	4...20	32-2040

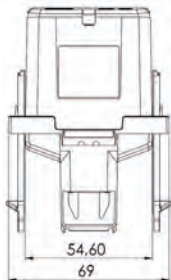
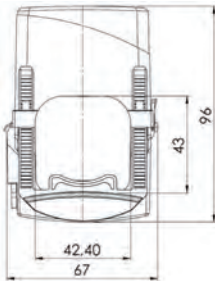
- Split-core current transformers are mainly used for an easy fitment and subsequent assembly into an already existing installation, without separating the primary conductor.
- The compact split-core current transformer KBR 32 has been developed to have easy access in already existing installations.
- Due to the „click“-system and the fixing-clasps even a one-hand mounting is possible.
- The KBR 32 with secondary 1A will be delivered with 2.5 m connection cable 2 x 0.75 mm² (color coded; S1 = brown; S2 = blue). Other lengths of the connection cables are possible on request.
The secondary 5A – version will be delivered with 0.5m connection cable 2 x 1.5 mm².
- For the use as a current sensor the KBR 32 is optionally deliverable with a voltage output of 0 – 333 mV (min. burden resistance ≥ 1 kΩ).
Moreover the KBR 32 is deliverable as a measuring transducer with a measuring output of 4...20 mA DC, connection scheme see page 113.
- Operating temperature: -5°C < T < +50°C
- Storage temperature: -25°C < T < +70°C

KBR 42

Split-core current transformer



Round conductor 42,4 mm
Transformer width 67,0 mm
Height 96,0 mm
Depth 69 mm

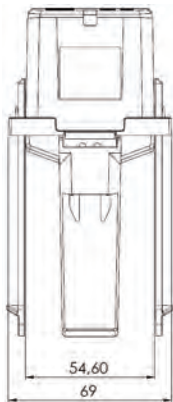
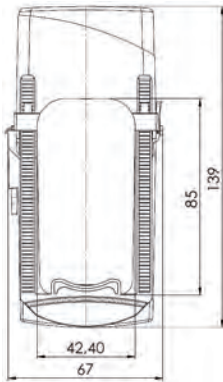


Primary current [A]	Burden [VA]	Secondary current [A] / Class			
		5 A Cl. 1 Art.-no.	5 A Cl. 0,5 Art.-no.	1 A Cl. 1 Art.-no.	1 A Cl. 0,5 Art.-no.
250	2,5			42-0001	
300	2,5	42-5001		42-0002	
400	2,5				42-0003
	5	42-5002		42-0004	
500	2,5				42-0005
	5	42-5003		42-0006	
600	2,5		42-5004		42-0007
	5	42-5005		42-0008	
750	2,5		42-5006		42-0009
	5	42-5007		42-0010	
800	2,5		42-5008		42-0011
	5	42-5009		42-0012	
1000	2,5		42-5010		42-0013
	5	42-5011		42-0014	

- Split-core current transformers are mainly used for an easy fitment and subsequent assembly into an already existing installation, without separating the primary conductor.
- The compact split-core current transformer KBR 42 has been developed to have easy access in already existing installations.
- Due to the „click“-system and the fixing-clasps even a one-hand mounting is possible.
- The KBR 42 with secondary 1A will be delivered with 2.5 m connection cable 2 x 0.5 mm² (color coded; S1 = brown; S2 = blue). Other lengths of the connection cables are possible on request.
- The secondary 5A – version will be delivered with 0.5m connection cable 2 x 1.5 mm².
- Operating temperature: -5°C < T < +50°C
- Storage temperature: -25°C < T < +70°C



Round conductor 2x 42,4 mm
Transformer width 67,0 mm
Height 139,0 mm
Depth 69 mm



KBR 42L

Split-core current transformer

Primary current [A]	Burden [VA]	Secondary current [A] / Class			
		5 A Cl. 1 Art.-no.	5 A Cl. 0,5 Art.-no.	1 A Cl. 1 Art.-no.	1 A Cl. 0,5 Art.-no.
250	2,5			42L-0001	
300	2,5	42L-5001		42L-0002	
400	2,5				42L-0003
	5	42L-5002		42L-0004	
500	2,5				42L-0005
	5	42L-5003		42L-0006	
600	2,5		42L-5004		42L-0007
	5	42L-5005		42L-0008	
750	2,5		42L-5006		42L-0009
	5	42L-5007		42L-0010	
800	2,5		42L-5008		42L-0011
	5	42L-5009		42L-0012	
1000	2,5		42L-5010		42L-0013
	5	42L-5011		42L-0014	

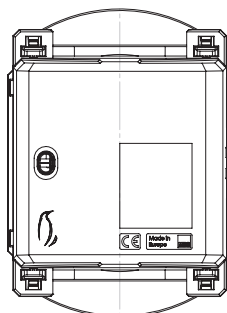
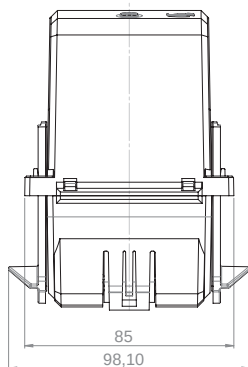
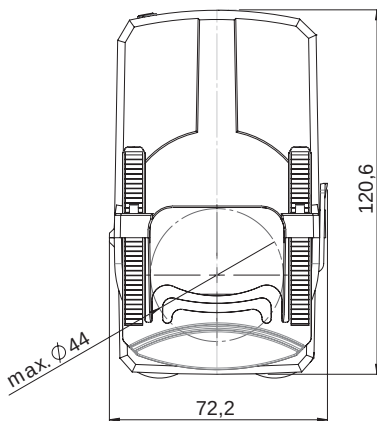
- Split-core current transformers are mainly used for an easy fitment and subsequent assembly into an already existing installation, without separating the primary conductor.
- The compact split-core current transformer KBR 42L has been developed to have easy access in already existing installations.
- Due to the „click“-system and the fixing-clasps even a one-hand mounting is possible.
- The KBR 42L with secondary 1A will be delivered with 2.5 m connection cable 2 x 0.5 mm² (color coded; S1 = brown; S2 = blue). Other lengths of the connection cables are possible on request.
- The secondary 5A – version will be delivered with 0.5m connection cable 2 x 1.5 mm².
- Operating temperature: -5°C < T < +50°C
- Storage temperature: -25°C < T < +70°C

KBR 44

Split-core current transformer



Round conductor	44 mm
Transformer width	72,2 mm
Height	120,6 mm
Depth	98 mm



Primary current [A]	Burden [VA]	Secondary current [A] / Class	
		5 A Cl. 1 Art.-no.	1 A Cl. 1 Art.-no.
250	1,5	44-5001	
	2,5		44-0001
300	2,5	44-5006	44-0006
400	5	44-5011	44-0011
500	5	44-5016	44-0016
600	5	44-5021	44-0021
750	5	44-5026	44-0026
800	5	44-5031	44-0031
1000	5	44-5036	44-0036

Primary current [A]	Output signal		Cl. 1 Art.-no.
	[mV] AV	[mA] DC	
250	0...333	–	44-1001
	–	4...20	44-2001
300	0...333	–	44-1006
	–	4...20	44-2006
400	0...333	–	44-1011
	–	4...20	44-2011
500	0...333	–	44-1016
	–	4...20	44-2016
600	0...333	–	44-1021
	–	4...20	44-2021
750	0...333	–	44-1026
	–	4...20	44-2026
800	0...333	–	44-1031
	–	4...20	44-2031
1000	0...333	–	44-1036
	–	4...20	44-2036

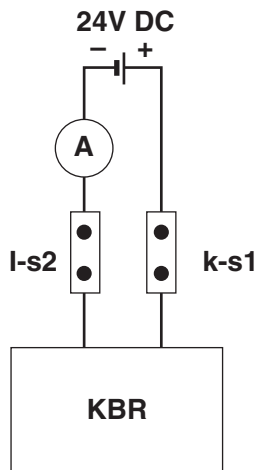
- Split-core current transformers are mainly used for an easy fitment and subsequent assembly into an already existing installation, without separating the primary conductor.
- The compact split-core current transformer KBR 44 has been developed to have easy access in already existing installations.
- Due to the „click“-system and the fixing-clasps even a one-hand mounting is possible.
- The KBR 44 with secondary 1A will be delivered with 2.5 m connection cable 2 x 0.75 mm² (color coded; S1 = brown; S2 = blue). Other lengths of the connection cables are possible on request.
- The secondary 5A – version will be delivered with 0.5m connection cable 2 x 1.5 mm².
- For the use as a current sensor the KBR 32 is optionally deliverable with a voltage output of 0 – 333 mV (min. burden resistance ≥ 1 kΩ).
- Moreover the KBR 32 is deliverable as a measuring transducer with a measuring output of 4...20 mA DC.
- Operating temperature: -5°C < T < +50°C
- Storage temperature: -25°C < T < +70°C

KBR 32 / 44

Technical characteristics for the KBR 32 / 44 with output signal 4...20 mA:

- 2-wire connection, auxiliary power via output circuit
- Auxiliary power: 24 V DC $\pm 15\%$, $P_v = \text{max. } 1 \text{ VA}$
- Load-independent DC current: Live-zero, 4...20 mA
- External resistance: max. 300 Ω
- Current limit under overload: < 30 mA
- Residual ripple of the output current: $\leq 1\%$ p.p.
- Response time: < 300 ms

Wiring diagram of the KBR 32 / 44 (4...20 mA):





Notes

[illegible]



- Current transformers for industry
- Current transformers for tariff
- Accessories for current transformers
- Medium-voltage CTs
- Bus bar insulators / -supports
- Shunts
- Voltage transformers
- All current sensors
- Measuring transducers
- Energy meters with or without MID approval
- Accessories for energy meters
- Panel board heaters, filter fans, roof fans and control units



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