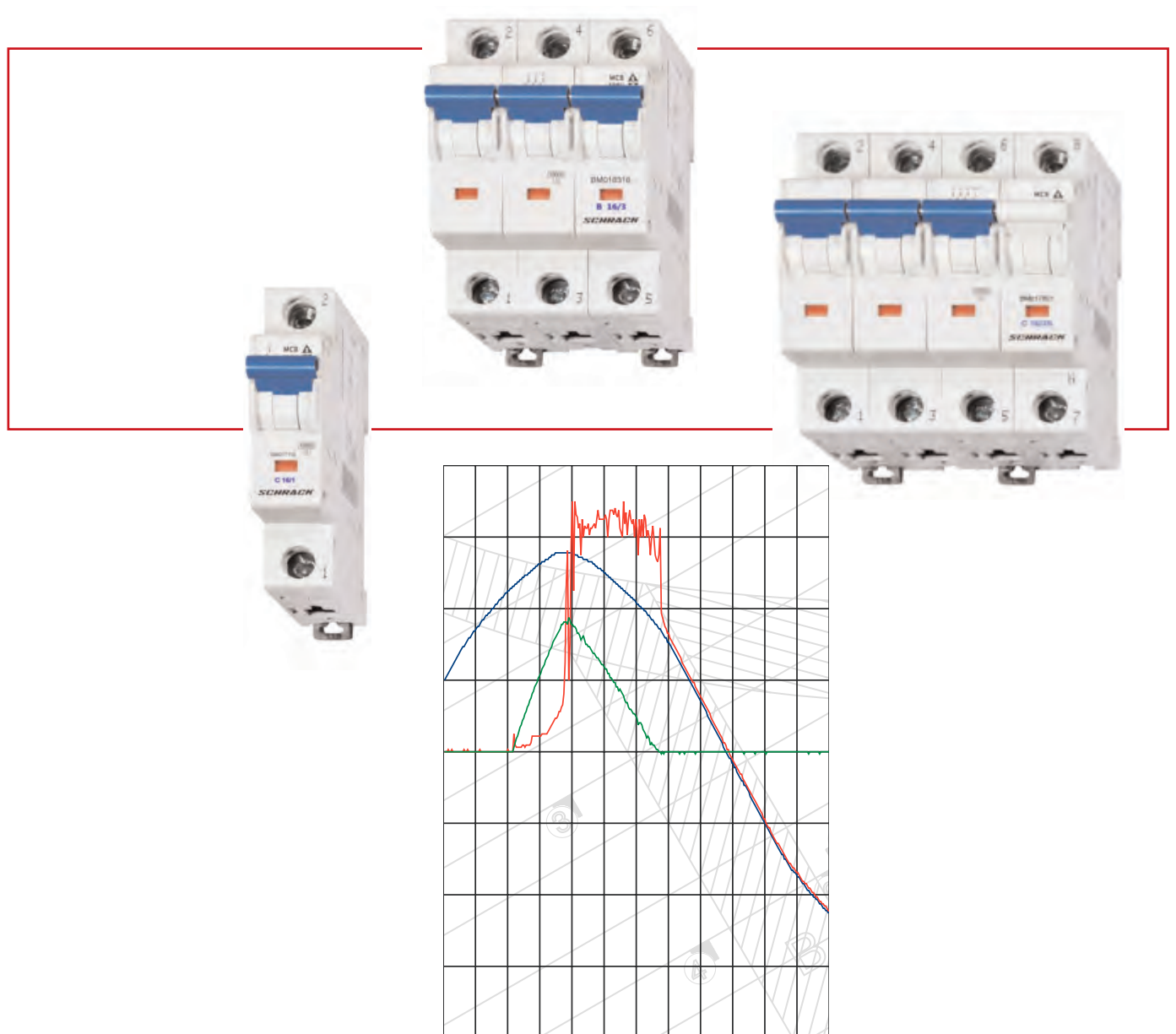


DATA SHEET:
MCB, SERIES BMS



■ MCB, SERIES BMS

■ INHALT

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MCB, SERIES BMS



BM018110



BM018210



BM018310



BM017410

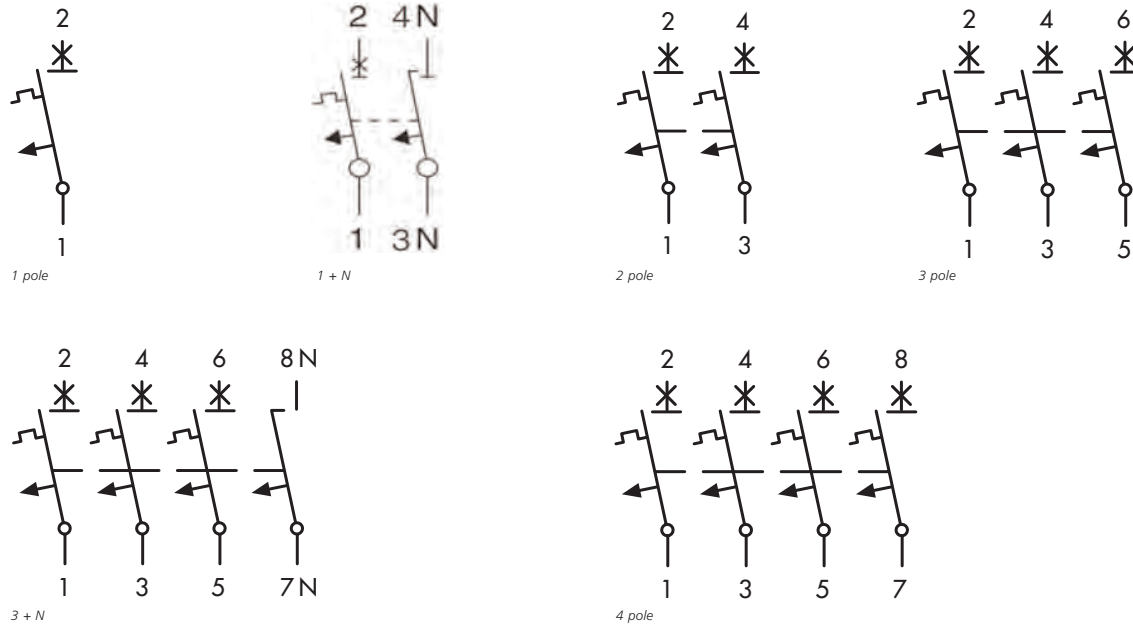
SCHRACK-INFO

- Guide for secure terminal connection
- Twin-purpose terminal (lift/open mouthed) above and below
- High selectivity by low let through energy
- Contact position indicator at all poles
- Terminal capacity: 1 mm² up to 25 mm²
- Fullfill the requirements of insulation co-ordination, contact distance of 4mm
- Supply on both sides possible (top/bottom)
- Installation in any positions
- Special-Rast-snap-fixing for DIN-rail in according to EN 50 022

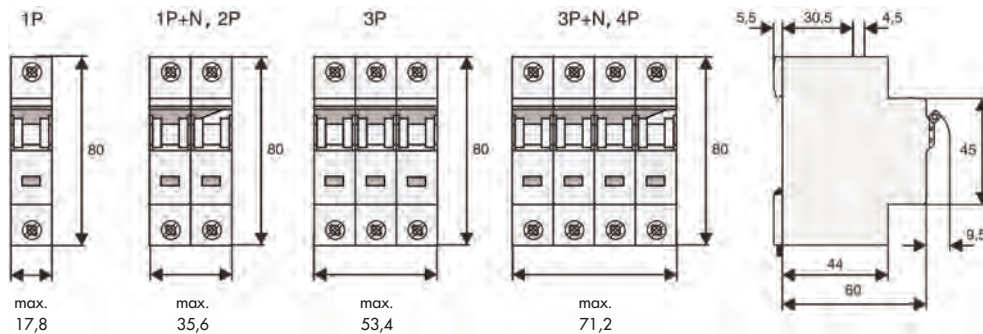
TECHNICAL DATA

Rated voltage/frequency:		230 V/400 V AC, 50/60 Hz
Rated breaking capacity DC:		max. 48 V one pole
Rated tripping temperature:		-5 °C bis +40 °C
Back up fuse:	Type BMS0	max. 125 AgL, >10 kA
	Type BMS6	100 A gG max (>10 kA)
	Type BMS4	80 A gG max (>45 kA)
Selectivity class:		3
Rated breaking capacity:	Type BMS0	10 kA according to IEC/EN 60 898, 15 kA according to IEC/EN 60 947-2
	Type BMS6	6 kA according to IEC/EN 60 898, 10 kA according to IEC/EN 60 947-2
	Type BMS4	4.5 kA according to IEC/EN 60 898
Rated impulse withstand voltage:		U _{imp} = 6kV
Tripping characteristics:		B, C, D according to EN 60 898
Endurance:		> 8000 Operating cycles electrical (> 20000 Operating cycles mechanical)
Degree of protection:		IP20
Finger and hand touch safe according to :		BVG A3 / VBG 4 / ÖVE EN 6
Terminal:		Twin-purpose terminal, (lift/open mouthed) above and below
Terminal capacity:		1 - 25 mm ²
Rated terminal-torque:		2 - 2,4 Nm
Space unit:		1 SU: 17,8 mm
Mouniting:		DIN rail mounting (EN 50 022)

WIRING DIAGRAMS



DIMENSIONS



/// TOTAL POWER LOSS AT I_n
C CHARACTERISTIC CURVE

	1p	1pN	2p	3p	3pN*
I_n [A]	P [W]	P [W]	P [W]	P [W]	P [W]
0.16	2.2	2.4	4.4	6.7	6.9
0.25	2.0	2.2	4.0	6.1	6.3
0.5	1.2	1.3	2.4	3.5	3.7
0.75	1.3	1.4	2.6	3.9	4.1
1	1.6	1.7	3.1	4.7	4.8
1.5	1.5	1.6	2.9	4.4	4.6
1.6	1.6	1.7	3.1	4.7	4.9
2	1.4	1.5	2.8	4.1	4.3
2.5	1.5	1.7	3.1	4.6	4.7
3	1.2	1.3	2.4	3.6	3.7
3.5	1.3	1.4	2.6	3.9	4.0
4	1.4	1.6	2.9	4.4	4.5
5	1.9	2.1	3.8	5.8	6.0
6	1.5	1.6	2.9	4.4	4.6
8	2.1	2.3	4.1	6.3	6.5
10	1.5	1.7	3.0	4.6	4.7
12	2.1	2.4	4.4	6.5	6.8
13	2.5	2.9	5.3	7.8	8.1
15	2.1	2.4	4.4	6.5	6.7
16	2.2	2.6	4.7	6.9	7.2
20	3.2	3.6	6.6	9.8	10.1
25	3.0	3.5	6.4	9.4	9.7
32	3.7	4.4	8.1	12.1	12.5
40	3.4	4.1	7.5	11.2	11.5
50	4.5	5.4	9.9	14.9	15.3
63	5.2	6.3	11.5	17.2	17.7

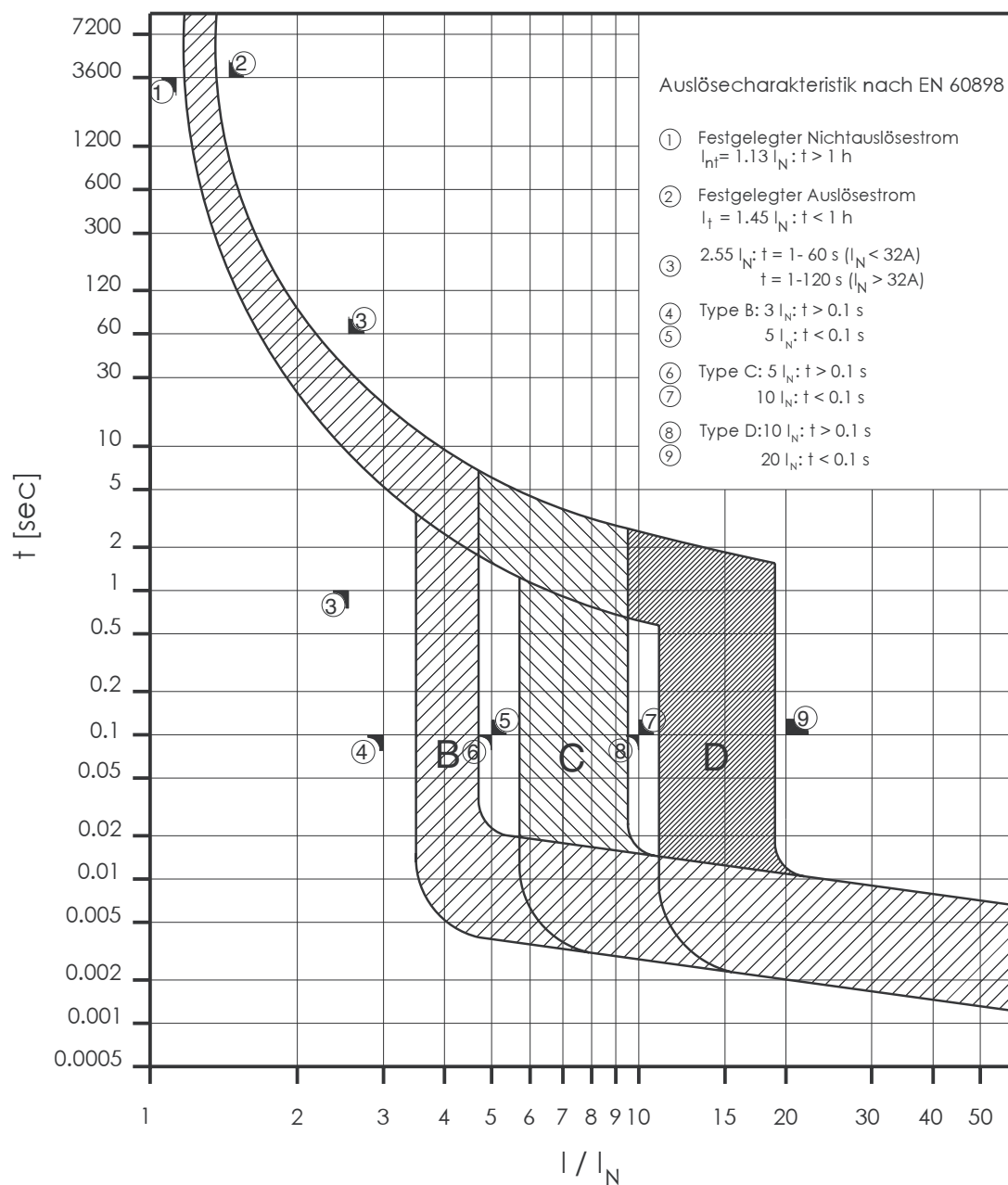
*symmetrische Last

INTERNAL RESISTANCE (AT RT)
C CHARACTERISTIC CURVE

I_n [A]	Z^* [mΩ]	R [mΩ]
0.16	68500	68300
0.25	27500	27400
0.5	4680	4670
0.75	2280	2250
1	1120	1100
1.5	589	587
1.6	589	587
2	335	333
2.5	234	230
3	131	130
3.5	143	141
4	87.7	87.2
5	73.5	72.8
6	39.3	39.1
8	30.5	30.4
10	14.1	14.0
12	13.5	13.4
13	13.4	13.3
15	8.0	7.9
16	8.0	7.9
20	7.2	7.1
25	5.0	4.9
32	3.7	3.7
40	2.6	2.5
50	2.1	2.1
63	2.0	2.0

* 50Hz

TRIPPING CHARACTERISTIC CURVE
TYPES B, C AND D



INFLUENCE OF AMBIENT TEMPERATURE ON CAPACITIES

	Umgebungstemperatur T [°C]																	
In [A]	-40	-30	-25	-20	-10	0	10	20	30	35	40	45	50	55	60	65	70	75
0.16	0.20	0.20	0.20	0.19	0.19	0.18	0.17	0.17	0.16	0.16	0.15	0.15	0.15	0.14	0.14	0.14	0.14	0.13
0.25	0.32	0.31	0.31	0.30	0.29	0.28	0.27	0.26	0.25	0.25	0.24	0.24	0.23	0.23	0.22	0.22	0.21	0.21
0.5	0.64	0.62	0.61	0.60	0.58	0.56	0.54	0.52	0.50	0.49	0.48	0.47	0.46	0.45	0.44	0.43	0.42	0.41
0.75	0.96	0.93	0.92	0.90	0.87	0.84	0.81	0.78	0.75	0.74	0.73	0.71	0.69	0.68	0.66	0.65	0.64	0.62
1	1.3	1.2	1.2	1.2	1.2	1.1	1.1	1.0	1.0	0.99	0.97	0.95	0.93	0.90	0.89	0.87	0.85	0.83
1.5	1.9	1.9	1.8	1.8	1.7	1.7	1.6	1.6	1.5	1.5	1.5	1.4	1.4	1.4	1.3	1.3	1.3	1.2
1.6	2.0	2.0	2.0	1.9	1.9	1.8	1.7	1.7	1.6	1.6	1.5	1.5	1.5	1.4	1.4	1.4	1.4	1.3
2	2.6	2.5	2.4	2.4	2.3	2.2	2.2	2.1	2.0	2.0	1.9	1.9	1.9	1.8	1.8	1.7	1.7	1.7
2.5	3.2	3.1	3.1	3.0	2.9	2.8	2.7	2.6	2.5	2.5	2.4	2.4	2.3	2.3	2.2	2.2	2.1	2.1
3	3.8	3.7	3.7	3.6	3.5	3.4	3.3	3.1	3.0	3.0	2.9	2.8	2.8	2.7	2.7	2.6	2.5	2.5
3.5	4.5	4.4	4.3	4.2	4.1	3.9	3.8	3.7	3.5	3.4	3.4	3.3	3.2	3.2	3.1	3.0	3.0	2.9
4	5.1	5.0	4.9	4.8	4.7	4.5	4.3	4.2	4.0	3.9	3.9	3.8	3.7	3.6	3.5	3.5	3.4	3.3
5	6.4	6.2	6.1	6.0	5.8	5.6	5.4	5.2	5.0	4.9	4.8	4.7	4.6	4.5	4.4	4.3	4.2	4.1
6	7.7	7.5	7.3	7.2	7.0	6.7	6.5	6.3	6.0	5.9	5.8	5.7	5.6	5.4	5.3	5.2	5.1	5.0
8	10.2	9.9	9.8	9.6	9.3	9.0	8.7	8.4	8.0	7.9	7.7	7.6	7.4	7.2	7.1	6.9	6.8	6.6
10	13	12	12	12	12	11	11	10	10	9.9	9.7	9.5	9.3	9.0	8.9	8.7	8.5	8.3
12	15	15	15	14	14	13	13	13	12	12	12	11	11	11	11	10	10	10
13	17	16	16	16	15	15	14	14	13	13	13	12	12	12	12	11	11	11
15	19	19	18	18	17	17	16	16	15	15	15	14	14	14	13	13	13	12
16	20	20	20	19	19	18	17	17	16	16	15	15	15	14	14	14	14	13
20	26	25	24	24	23	22	22	21	20	20	19	19	19	18	18	17	17	17
25	32	31	31	30	29	28	27	26	25	25	24	24	23	23	22	22	21	21
32	41	40	39	38	37	36	35	33	32	32	31	30	30	29	28	28	27	26
40	51	50	49	48	47	45	43	42	40	39	39	38	37	36	35	35	34	33
50	64	62	61	60	58	56	54	52	50	49	48	47	46	45	44	43	42	41
63	81	78	77	76	73	71	68	66	63	62	61	60	58	57	56	55	53	52

/// INFLUENCE OF MAINS FREQUENCY ON TRIPPING BEHAVIOUR

	Netzfrequenz f [Hz]						
	16 ² / ₃	50	60	100	200	300	400
I _{MA} (f)/I _{MA} (50 Hz) [%]	91	100	101	106	115	134	141