Data Sheet: Miniature Circuit Breaker C16/1+N, 1MW, 6kA

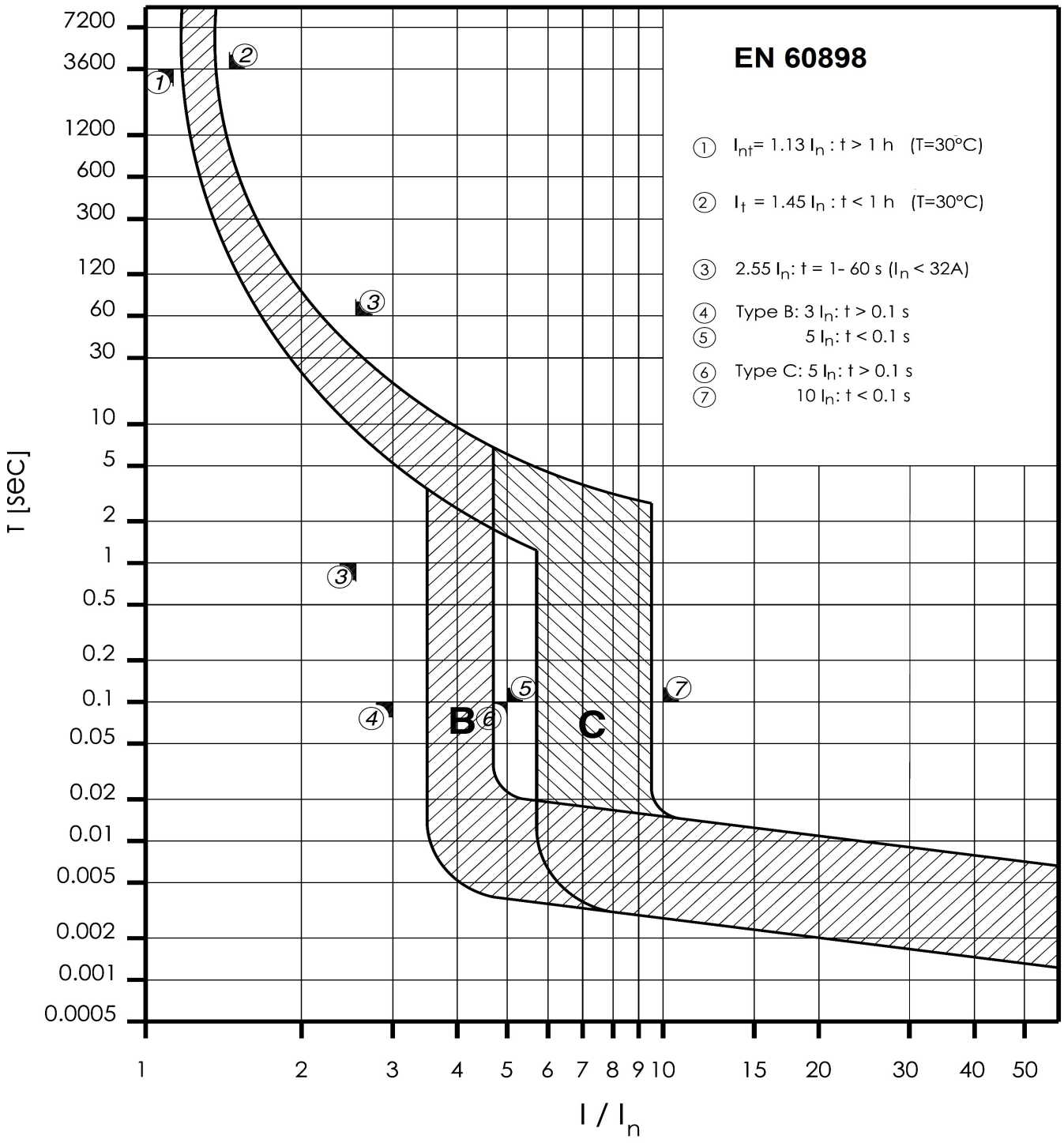
SCHRACK-INFO

- Single pole with switchable N-Conductor on 17.5mm (1MW)
- Glazed panel with contact position indicator

Technical Data

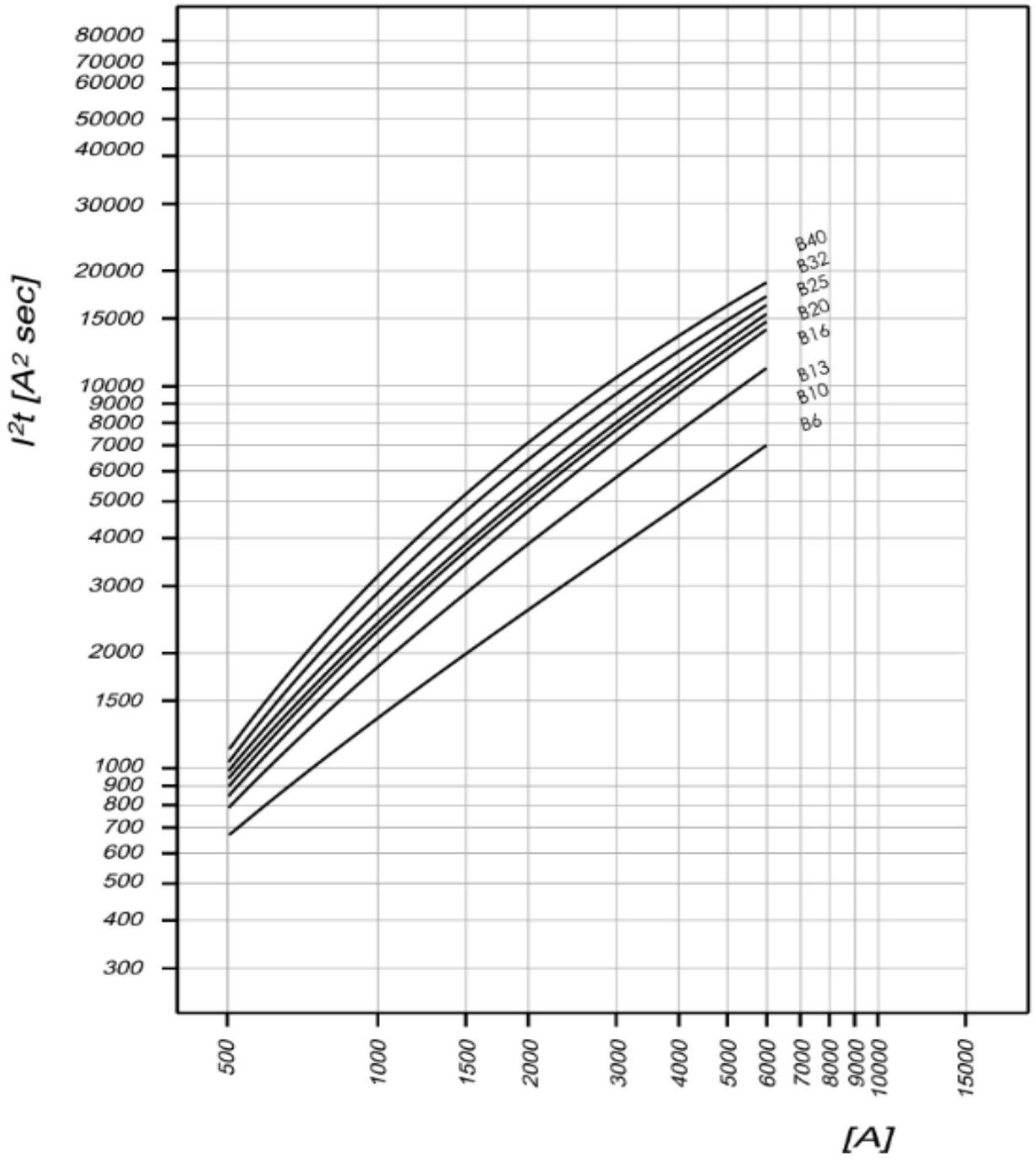
Rated voltage:	230V / 400V-AC
Frequency:	50/60Hz
Rated current:	2 - 32A
Tripping characteristic :	B, C
Rated breaking capacity Icn:	6kA acc. to EN/IEC 60898
Selectivity class:	3
Back-up fuse max.:	max. 100A gG/gL
Surge voltage protection Uimp:	4000 V
Standard release:	-5 °C to +40 °C
Ambient temperature range:	-40 °C to +75 °C
Ambient temperature reference calibration:	+30°C
Degree of protection:	IP 20 (mounting IP40)
Mounting:	In any positions
Electrical endurance:	≥ 8000 operating cycles (mechanical ≥ 20.000)
Finger / Hand touch safe:	acc. VBG 4 / ÖVE EN 6
Terminals:	lift terminal
Connection cross-section:	1 - 16mm²
Terminal width 1 TE:	17,5mm
Mounting system:	Special snap-on mounting for DIN rail EN 50 022

Tripping characteristic curves BS , Characteristic B and C

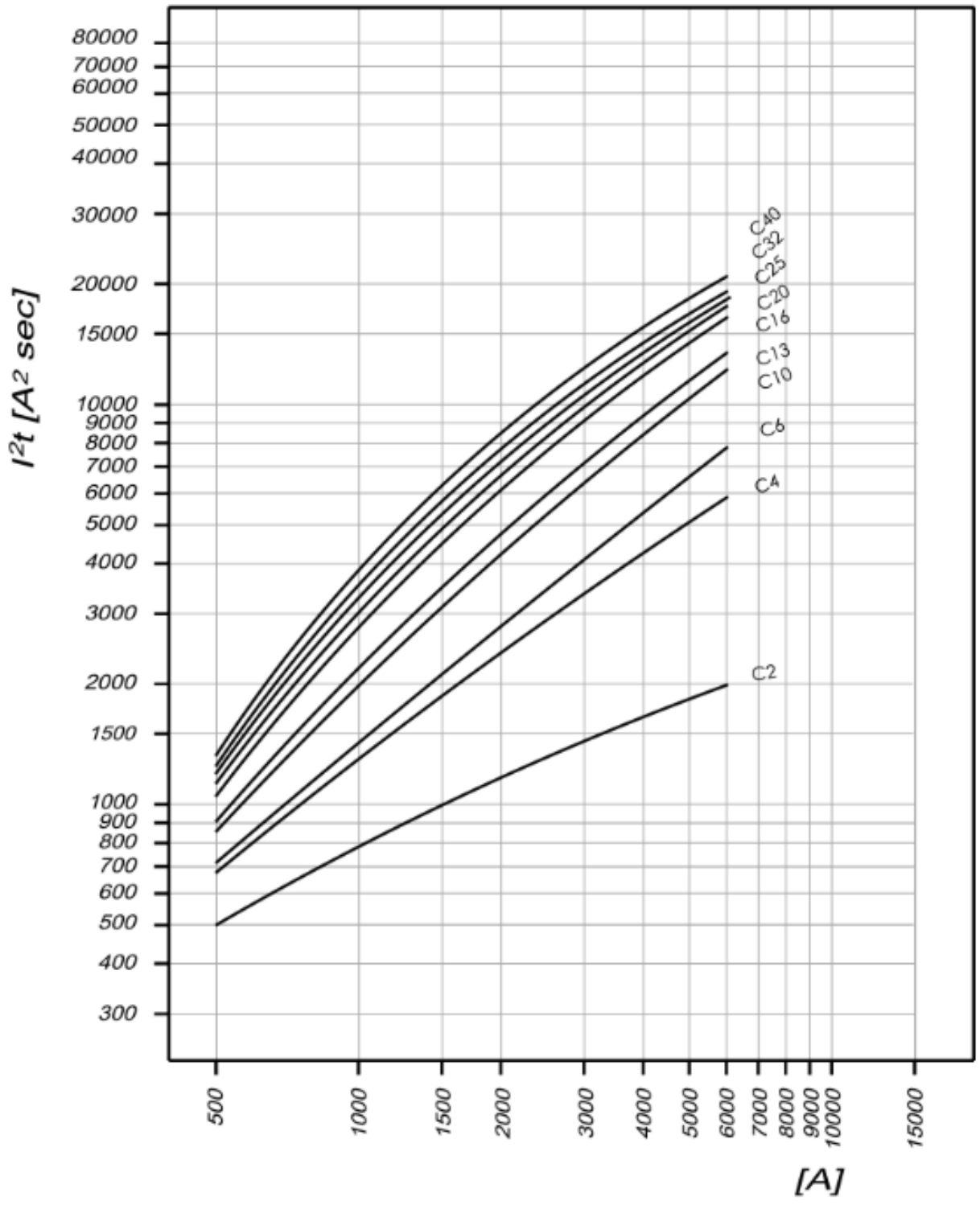


Maximum Let-Through Energy

Let-Through Energy Diagram , series BS0185xx

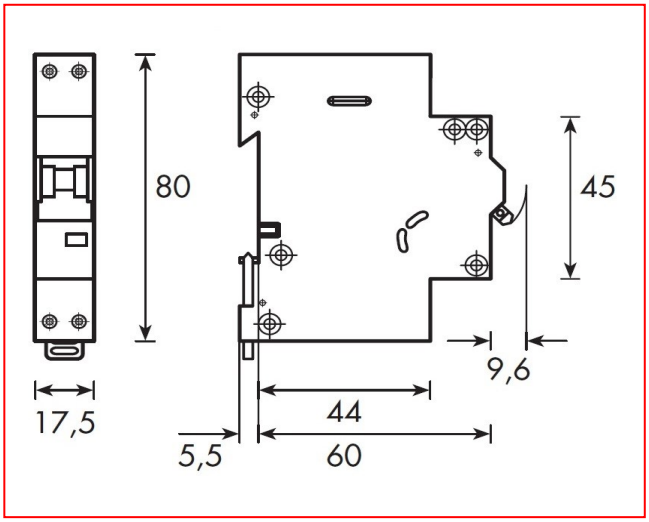


Let-Through Energy Diagram , series BS0175xxxx

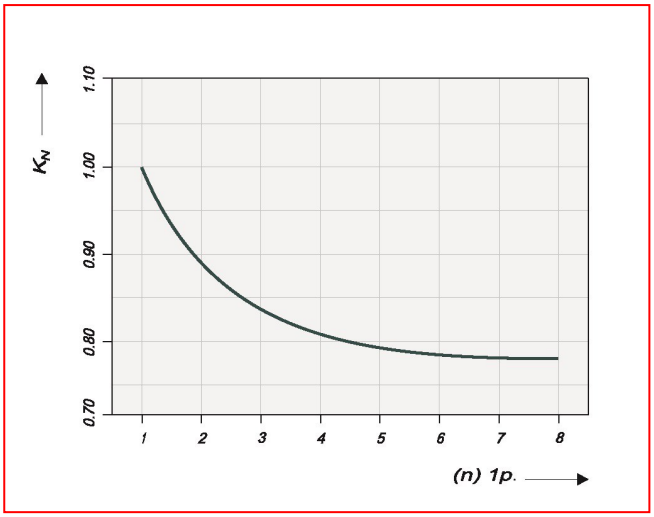


Miniature Circuit Breaker series BS, 1 +N up to 1TE

Dimension



Load Capacity of High-Current MCB



Influence of Ambient Temperature to the rated current

	Ambient temperature T (°C)												
I_n [A]	-25	-20	-10	0	10	20	30	35	40	45	50	55	60
2	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
4	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
6	7.3	7.2	7.0	66.7	6.5	6.3	**6.0**	5.9	5.8	5.7	5.6	5.4	5.3
10	12	12	12	11	11	10	**10**	9.9	9.7	9.5	9.3	9.0	8.9
13	16	16	15	15	14	14	**13**	13	13	12	12	12	12
16	20	19	19	18	17	17	**16**	16	15	15	15	14	14
20	24	24	23	22	22	21	**20**	20	19	19	19	18	18
25	31	30	29	28	27	26	**25**	25	24	24	23	23	22
32	39	38	37	36	35	33	**32**	32	31	30	30	29	28

	Mains frequency f [Hz]						
	16 ⅔	**50**	60	100	200	300	400
I_{MA} (f)/I_{MA} (50 Hz) [%]	91	**100**	101	106	115	134	141

Total Power Dissipation for I_N BS

B- Characteristic

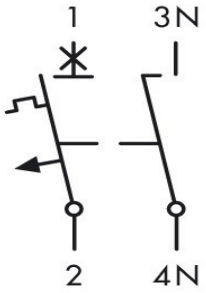
In [A]	P [W]
6	7,4
10	2,2
13	3,4
16	2,8

C- Characteristic

In [A]	P [W]
2	1,4
4	1,3
6	1,7
10	2,2
13	3,4
16	2,8
20	3,7
25	3,2
32	6,5

Circuit Diagram

1+N



Numbers of possible wires with cross-section 16mm² terminal in MCB series BS

Cross-section	Number of rigid single conductors (H07V-U)					
[mm²]	1	2	3	4	5	6
1	+	+	+	+	+	+
1,5	+	+	+	+	-	-
2,5	+	+	+	-	-	-
4	+	+	-	-	-	-
6	+	-	-	-	-	-
10	+	-	-	-	-	-

Cross-section	Number of stranded conductor (H07V-R)					
[mm²]	1	2	3	4	5	6
2,5	+	+	+	+	-	-
4	+	+	+	-	-	-
6	+	+	-	-	-	-
10	+	-	-	-	-	-
16	+	-	-	-	-	-

Cross-section	Number of flexible conductor (H07V-K)					
[mm²]	1	2	3	4	5	6
1	+	+	+	+	+	+
1,5	+	+	+	+	+	+
2,5	+	+	+	+	-	-
4	+	+	+	-	-	-
6	+	+	-	-	-	-
10	+	-	-	-	-	-
16	+	-	-	-	-	-

Miniature Circuit Breaker , series BS, 6kA, 1+N up to 1TE

Description	Order NO.
Characteristic B	
6 A	BS018506
10 A	BS018510
13 A	BS018513
16 A	BS018516
Characteristic C	
2 A	BS017502
4 A	BS017504
6 A	BS017506
10 A	BS017510
13 A	BS017513
16 A	BS017516
20 A	BS017520
25 A	BS017525
32 A	BS017532