

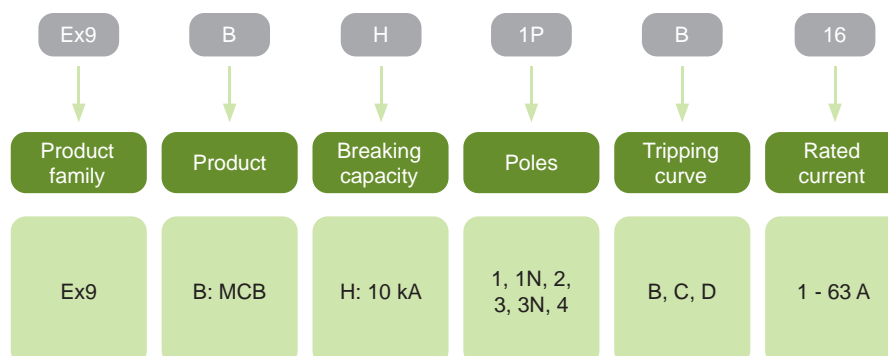
# Miniature Circuit Breakers Ex9BH, 10 kA



- Miniature Circuit Breakers according to IEC/EN 60898-1 and IEC/EN 60947-2 (partially)
- Rated short circuit breaking capacity 10 kA
- 1 up to 4-pole versions
- Tripping characteristics B, C, D
- Rated current up to 63 A
- Rated operational voltage 240/415 V AC
- 72 V DC per pole (1P, 2P)  
48 V DC per pole (3P, 4P)
- Wide range of accessories
- Toggle colour according to rated current

Ex9BH miniature circuit breakers are suitable for domestic as well as industrial applications. They can be combined with wide range of accessories including auxiliary and signal contacts, shunt trip release, undervoltage and overvoltage release or RCD add-on block. It is possible to create diversified combination of accessories. These combinations are only limited by total number, not by the type of accessories - all components fit together. It can be used up to three units of auxiliary or alarm contacts plus up to two units for release units.

## Type Key



## Certification marks



# Miniature Circuit Breakers Ex9BH, 10 kA

## Accessories



Auxiliary or signal contacts  
**AX, AL, AXL**  
Up to 3 units

Voltage or trip releases  
**SHT, UVT, OVT**  
Up to 2 units

MCB  
**Ex9B**  
1, 1+N, 2, 3, 3+N, 4-pole

RCD add-on block  
**Ex9LE**  
1+N, 2, 3, 3+N, 4-pole

Auxiliary contacts AX3111, AX3122

Alarm contact AL3111

Auxiliary and alarm contact AXL31

Shunt trip releases SHT31, SHT3111

Undervoltage releases UVT31, UVT3101, UVT3110

Overvoltage release OVT31

RCD add-on blocks Ex9LE

RCD add-on blocks are mounted to the MCBs Ex9B from the right, the other accessories from the left and are identical for devices of the line Ex9B, Ex9PN and Ex9IP.

# Miniature Circuit Breakers Ex9BH, 10 kA

## B-Characteristic, 1-pole



Rated current	Poles	Char.	Article No.	Type	Packing
1 A	1	B	100270	Ex9BH 1P B1	1/12/144
2 A	1	B	100271	Ex9BH 1P B2	1/12/144
3 A	1	B	100272	Ex9BH 1P B3	1/12/144
4 A	1	B	100273	Ex9BH 1P B4	1/12/144
6 A	1	B	100274	Ex9BH 1P B6	1/12/144
8 A	1	B	100275	Ex9BH 1P B8	1/12/144
10 A	1	B	100276	Ex9BH 1P B10	1/12/144
13 A	1	B	100277	Ex9BH 1P B13	1/12/144
16 A	1	B	100278	Ex9BH 1P B16	1/12/144
20 A	1	B	100279	Ex9BH 1P B20	1/12/144
25 A	1	B	100280	Ex9BH 1P B25	1/12/144
32 A	1	B	100281	Ex9BH 1P B32	1/12/144
40 A	1	B	100282	Ex9BH 1P B40	1/12/144
50 A	1	B	100283	Ex9BH 1P B50	1/12/144
63 A	1	B	100284	Ex9BH 1P B63	1/12/144

## B-Characteristic, 1+N-pole



Rated current	Poles	Char.	Article No.	Type	Packing
1 A	1+N	B	100285	Ex9BH 1PN B1	1/6/72
2 A	1+N	B	100286	Ex9BH 1PN B2	1/6/72
3 A	1+N	B	100287	Ex9BH 1PN B3	1/6/72
4 A	1+N	B	100288	Ex9BH 1PN B4	1/6/72
6 A	1+N	B	100289	Ex9BH 1PN B6	1/6/72
8 A	1+N	B	100290	Ex9BH 1PN B8	1/6/72
10 A	1+N	B	100291	Ex9BH 1PN B10	1/6/72
13 A	1+N	B	100292	Ex9BH 1PN B13	1/6/72
16 A	1+N	B	100293	Ex9BH 1PN B16	1/6/72
20 A	1+N	B	100294	Ex9BH 1PN B20	1/6/72
25 A	1+N	B	100295	Ex9BH 1PN B25	1/6/72
32 A	1+N	B	100296	Ex9BH 1PN B32	1/6/72
40 A	1+N	B	100297	Ex9BH 1PN B40	1/6/72
50 A	1+N	B	100298	Ex9BH 1PN B50	1/6/72
63 A	1+N	B	100299	Ex9BH 1PN B63	1/6/72

## B-Characteristic, 2-pole



Rated current	Poles	Char.	Article No.	Type	Packing
1 A	2	B	100300	Ex9BH 2P B1	1/6/72
2 A	2	B	100301	Ex9BH 2P B2	1/6/72
3 A	2	B	100302	Ex9BH 2P B3	1/6/72
4 A	2	B	100303	Ex9BH 2P B4	1/6/72
6 A	2	B	100304	Ex9BH 2P B6	1/6/72
8 A	2	B	100305	Ex9BH 2P B8	1/6/72
10 A	2	B	100306	Ex9BH 2P B10	1/6/72
13 A	2	B	100307	Ex9BH 2P B13	1/6/72
16 A	2	B	100308	Ex9BH 2P B16	1/6/72
20 A	2	B	100309	Ex9BH 2P B20	1/6/72
25 A	2	B	100310	Ex9BH 2P B25	1/6/72
32 A	2	B	100311	Ex9BH 2P B32	1/6/72
40 A	2	B	100312	Ex9BH 2P B40	1/6/72
50 A	2	B	100313	Ex9BH 2P B50	1/6/72
63 A	2	B	100314	Ex9BH 2P B63	1/6/72

# Miniature Circuit Breakers Ex9BH, 10 kA

## B-Characteristic, 3-pole



Rated current	Poles	Char.	Article No.	Type	Packing
1 A	3	B	100315	Ex9BH 3P B1	1/4/48
2 A	3	B	100316	Ex9BH 3P B2	1/4/48
3 A	3	B	100317	Ex9BH 3P B3	1/4/48
4 A	3	B	100318	Ex9BH 3P B4	1/4/48
6 A	3	B	100319	Ex9BH 3P B6	1/4/48
8 A	3	B	100320	Ex9BH 3P B8	1/4/48
10 A	3	B	100321	Ex9BH 3P B10	1/4/48
13 A	3	B	100322	Ex9BH 3P B13	1/4/48
16 A	3	B	100323	Ex9BH 3P B16	1/4/48
20 A	3	B	100324	Ex9BH 3P B20	1/4/48
25 A	3	B	100325	Ex9BH 3P B25	1/4/48
32 A	3	B	100326	Ex9BH 3P B32	1/4/48
40 A	3	B	100327	Ex9BH 3P B40	1/4/48
50 A	3	B	100328	Ex9BH 3P B50	1/4/48
63 A	3	B	100329	Ex9BH 3P B63	1/4/48

## B-Characteristic, 3+N-pole



Rated current	Poles	Char.	Article No.	Type	Packing
1 A	3+N	B	100330	Ex9BH 3PN B1	1/3/36
2 A	3+N	B	100331	Ex9BH 3PN B2	1/3/36
3 A	3+N	B	100332	Ex9BH 3PN B3	1/3/36
4 A	3+N	B	100333	Ex9BH 3PN B4	1/3/36
6 A	3+N	B	100334	Ex9BH 3PN B6	1/3/36
8 A	3+N	B	100335	Ex9BH 3PN B8	1/3/36
10 A	3+N	B	100336	Ex9BH 3PN B10	1/3/36
13 A	3+N	B	100337	Ex9BH 3PN B13	1/3/36
16 A	3+N	B	100338	Ex9BH 3PN B16	1/3/36
20 A	3+N	B	100339	Ex9BH 3PN B20	1/3/36
25 A	3+N	B	100340	Ex9BH 3PN B25	1/3/36
32 A	3+N	B	100341	Ex9BH 3PN B32	1/3/36
40 A	3+N	B	100342	Ex9BH 3PN B40	1/3/36
50 A	3+N	B	100343	Ex9BH 3PN B50	1/3/36
63 A	3+N	B	100344	Ex9BH 3PN B63	1/3/36

## B-Characteristic, 4-pole



Rated current	Poles	Char.	Article No.	Type	Packing
1 A	4	B	100345	Ex9BH 4P B1	1/3/36
2 A	4	B	100346	Ex9BH 4P B2	1/3/36
3 A	4	B	100347	Ex9BH 4P B3	1/3/36
4 A	4	B	100348	Ex9BH 4P B4	1/3/36
6 A	4	B	100349	Ex9BH 4P B6	1/3/36
8 A	4	B	100350	Ex9BH 4P B8	1/3/36
10 A	4	B	100351	Ex9BH 4P B10	1/3/36
13 A	4	B	100352	Ex9BH 4P B13	1/3/36
16 A	4	B	100353	Ex9BH 4P B16	1/3/36
20 A	4	B	100354	Ex9BH 4P B20	1/3/36
25 A	4	B	100355	Ex9BH 4P B25	1/3/36
32 A	4	B	100356	Ex9BH 4P B32	1/3/36
40 A	4	B	100357	Ex9BH 4P B40	1/3/36
50 A	4	B	100358	Ex9BH 4P B50	1/3/36
63 A	4	B	100359	Ex9BH 4P B63	1/3/36

# Miniature Circuit Breakers Ex9BH, 10 kA

## C-Characteristic, 1-pole



Rated current	Poles	Char.	Article No.	Type	Packing
1 A	1	C	100360	Ex9BH 1P C1	1/12/144
2 A	1	C	100361	Ex9BH 1P C2	1/12/144
3 A	1	C	100362	Ex9BH 1P C3	1/12/144
4 A	1	C	100363	Ex9BH 1P C4	1/12/144
6 A	1	C	100364	Ex9BH 1P C6	1/12/144
8 A	1	C	100365	Ex9BH 1P C8	1/12/144
10 A	1	C	100366	Ex9BH 1P C10	1/12/144
13 A	1	C	100367	Ex9BH 1P C13	1/12/144
16 A	1	C	100368	Ex9BH 1P C16	1/12/144
20 A	1	C	100369	Ex9BH 1P C20	1/12/144
25 A	1	C	100370	Ex9BH 1P C25	1/12/144
32 A	1	C	100371	Ex9BH 1P C32	1/12/144
40 A	1	C	100372	Ex9BH 1P C40	1/12/144
50 A	1	C	100373	Ex9BH 1P C50	1/12/144
63 A	1	C	100374	Ex9BH 1P C63	1/12/144

## C-Characteristic, 1+N-pole



Rated current	Poles	Char.	Article No.	Type	Packing
1 A	1+N	C	100375	Ex9BH 1PN C1	1/6/72
2 A	1+N	C	100376	Ex9BH 1PN C2	1/6/72
3 A	1+N	C	100377	Ex9BH 1PN C3	1/6/72
4 A	1+N	C	100378	Ex9BH 1PN C4	1/6/72
6 A	1+N	C	100379	Ex9BH 1PN C6	1/6/72
8 A	1+N	C	100380	Ex9BH 1PN C8	1/6/72
10 A	1+N	C	100381	Ex9BH 1PN C10	1/6/72
13 A	1+N	C	100382	Ex9BH 1PN C13	1/6/72
16 A	1+N	C	100383	Ex9BH 1PN C16	1/6/72
20 A	1+N	C	100384	Ex9BH 1PN C20	1/6/72
25 A	1+N	C	100385	Ex9BH 1PN C25	1/6/72
32 A	1+N	C	100386	Ex9BH 1PN C32	1/6/72
40 A	1+N	C	100387	Ex9BH 1PN C40	1/6/72
50 A	1+N	C	100388	Ex9BH 1PN C50	1/6/72
63 A	1+N	C	100389	Ex9BH 1PN C63	1/6/72

## C-Characteristic, 2-pole



Rated current	Poles	Char.	Article No.	Type	Packing
1 A	2	C	100390	Ex9BH 2P C1	1/6/72
2 A	2	C	100391	Ex9BH 2P C2	1/6/72
3 A	2	C	100392	Ex9BH 2P C3	1/6/72
4 A	2	C	100393	Ex9BH 2P C4	1/6/72
6 A	2	C	100394	Ex9BH 2P C6	1/6/72
8 A	2	C	100395	Ex9BH 2P C8	1/6/72
10 A	2	C	100396	Ex9BH 2P C10	1/6/72
13 A	2	C	100397	Ex9BH 2P C13	1/6/72
16 A	2	C	100398	Ex9BH 2P C16	1/6/72
20 A	2	C	100399	Ex9BH 2P C20	1/6/72
25 A	2	C	100400	Ex9BH 2P C25	1/6/72
32 A	2	C	100401	Ex9BH 2P C32	1/6/72
40 A	2	C	100402	Ex9BH 2P C40	1/6/72
50 A	2	C	100403	Ex9BH 2P C50	1/6/72
63 A	2	C	100404	Ex9BH 2P C63	1/6/72

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## C-Characteristic, 3-pole



Rated current	Poles	Char.	Article No.	Type	Packing
1 A	3	C	100405	Ex9BH 3P C1	1/4/48
2 A	3	C	100406	Ex9BH 3P C2	1/4/48
3 A	3	C	100407	Ex9BH 3P C3	1/4/48
4 A	3	C	100408	Ex9BH 3P C4	1/4/48
6 A	3	C	100409	Ex9BH 3P C6	1/4/48
8 A	3	C	100410	Ex9BH 3P C8	1/4/48
10 A	3	C	100411	Ex9BH 3P C10	1/4/48
13 A	3	C	100412	Ex9BH 3P C13	1/4/48
16 A	3	C	100413	Ex9BH 3P C16	1/4/48
20 A	3	C	100414	Ex9BH 3P C20	1/4/48
25 A	3	C	100415	Ex9BH 3P C25	1/4/48
32 A	3	C	100416	Ex9BH 3P C32	1/4/48
40 A	3	C	100417	Ex9BH 3P C40	1/4/48
50 A	3	C	100418	Ex9BH 3P C50	1/4/48
63 A	3	C	100419	Ex9BH 3P C63	1/4/48

## C-Characteristic, 3+N-pole



Rated current	Poles	Char.	Article No.	Type	Packing
1 A	3+N	C	100420	Ex9BH 3PN C1	1/3/36
2 A	3+N	C	100421	Ex9BH 3PN C2	1/3/36
3 A	3+N	C	100422	Ex9BH 3PN C3	1/3/36
4 A	3+N	C	100423	Ex9BH 3PN C4	1/3/36
6 A	3+N	C	100424	Ex9BH 3PN C6	1/3/36
8 A	3+N	C	100425	Ex9BH 3PN C8	1/3/36
10 A	3+N	C	100426	Ex9BH 3PN C10	1/3/36
13 A	3+N	C	100427	Ex9BH 3PN C13	1/3/36
16 A	3+N	C	100428	Ex9BH 3PN C16	1/3/36
20 A	3+N	C	100429	Ex9BH 3PN C20	1/3/36
25 A	3+N	C	100430	Ex9BH 3PN C25	1/3/36
32 A	3+N	C	100431	Ex9BH 3PN C32	1/3/36
40 A	3+N	C	100432	Ex9BH 3PN C40	1/3/36
50 A	3+N	C	100433	Ex9BH 3PN C50	1/3/36
63 A	3+N	C	100434	Ex9BH 3PN C63	1/3/36

## C-Characteristic, 4-pole



Rated current	Poles	Char.	Article No.	Type	Packing
1 A	4	C	100435	Ex9BH 4P C1	1/3/36
2 A	4	C	100436	Ex9BH 4P C2	1/3/36
3 A	4	C	100437	Ex9BH 4P C3	1/3/36
4 A	4	C	100438	Ex9BH 4P C4	1/3/36
6 A	4	C	100439	Ex9BH 4P C6	1/3/36
8 A	4	C	100440	Ex9BH 4P C8	1/3/36
10 A	4	C	100441	Ex9BH 4P C10	1/3/36
13 A	4	C	100442	Ex9BH 4P C13	1/3/36
16 A	4	C	100443	Ex9BH 4P C16	1/3/36
20 A	4	C	100444	Ex9BH 4P C20	1/3/36
25 A	4	C	100445	Ex9BH 4P C25	1/3/36
32 A	4	C	100446	Ex9BH 4P C32	1/3/36
40 A	4	C	100447	Ex9BH 4P C40	1/3/36
50 A	4	C	100448	Ex9BH 4P C50	1/3/36
63 A	4	C	100449	Ex9BH 4P C63	1/3/36

# Miniature Circuit Breakers Ex9BH, 10 kA

## D-Characteristic, 1-pole



Rated current	Poles	Char.	Article No.	Type	Packing
1 A	1	D	100450	Ex9BH 1P D1	1/12/144
2 A	1	D	100451	Ex9BH 1P D2	1/12/144
3 A	1	D	100452	Ex9BH 1P D3	1/12/144
4 A	1	D	100453	Ex9BH 1P D4	1/12/144
6 A	1	D	100454	Ex9BH 1P D6	1/12/144
8 A	1	D	100455	Ex9BH 1P D8	1/12/144
10 A	1	D	100456	Ex9BH 1P D10	1/12/144
13 A	1	D	100457	Ex9BH 1P D13	1/12/144
16 A	1	D	100458	Ex9BH 1P D16	1/12/144
20 A	1	D	100459	Ex9BH 1P D20	1/12/144
25 A	1	D	100460	Ex9BH 1P D25	1/12/144
32 A	1	D	100461	Ex9BH 1P D32	1/12/144
40 A	1	D	100462	Ex9BH 1P D40	1/12/144
50 A	1	D	100463	Ex9BH 1P D50	1/12/144
63 A	1	D	100464	Ex9BH 1P D63	1/12/144

## D-Characteristic, 1+N-pole



Rated current	Poles	Char.	Article No.	Type	Packing
1 A	1+N	D	100465	Ex9BH 1PN D1	1/6/72
2 A	1+N	D	100466	Ex9BH 1PN D2	1/6/72
3 A	1+N	D	100467	Ex9BH 1PN D3	1/6/72
4 A	1+N	D	100468	Ex9BH 1PN D4	1/6/72
6 A	1+N	D	100469	Ex9BH 1PN D6	1/6/72
8 A	1+N	D	100470	Ex9BH 1PN D8	1/6/72
10 A	1+N	D	100471	Ex9BH 1PN D10	1/6/72
13 A	1+N	D	100472	Ex9BH 1PN D13	1/6/72
16 A	1+N	D	100473	Ex9BH 1PN D16	1/6/72
20 A	1+N	D	100474	Ex9BH 1PN D20	1/6/72
25 A	1+N	D	100475	Ex9BH 1PN D25	1/6/72
32 A	1+N	D	100476	Ex9BH 1PN D32	1/6/72
40 A	1+N	D	100477	Ex9BH 1PN D40	1/6/72
50 A	1+N	D	100478	Ex9BH 1PN D50	1/6/72
63 A	1+N	D	100479	Ex9BH 1PN D63	1/6/72

## D-Characteristic, 2-pole



Rated current	Poles	Char.	Article No.	Type	Packing
1 A	2	D	100480	Ex9BH 2P D1	1/6/72
2 A	2	D	100481	Ex9BH 2P D2	1/6/72
3 A	2	D	100482	Ex9BH 2P D3	1/6/72
4 A	2	D	100483	Ex9BH 2P D4	1/6/72
6 A	2	D	100484	Ex9BH 2P D6	1/6/72
8 A	2	D	100485	Ex9BH 2P D8	1/6/72
10 A	2	D	100486	Ex9BH 2P D10	1/6/72
13 A	2	D	100487	Ex9BH 2P D13	1/6/72
16 A	2	D	100488	Ex9BH 2P D16	1/6/72
20 A	2	D	100489	Ex9BH 2P D20	1/6/72
25 A	2	D	100490	Ex9BH 2P D25	1/6/72
32 A	2	D	100491	Ex9BH 2P D32	1/6/72
40 A	2	D	100492	Ex9BH 2P D40	1/6/72
50 A	2	D	100493	Ex9BH 2P D50	1/6/72
63 A	2	D	100494	Ex9BH 2P D63	1/6/72

# Miniature Circuit Breakers Ex9BH, 10 kA

## D-Characteristic, 3-pole



Rated current	Poles	Char.	Article No.	Type	Packing
1 A	3	D	100495	Ex9BH 3P D1	1/4/48
2 A	3	D	100496	Ex9BH 3P D2	1/4/48
3 A	3	D	100497	Ex9BH 3P D3	1/4/48
4 A	3	D	100498	Ex9BH 3P D4	1/4/48
6 A	3	D	100499	Ex9BH 3P D6	1/4/48
8 A	3	D	100500	Ex9BH 3P D8	1/4/48
10 A	3	D	100501	Ex9BH 3P D10	1/4/48
13 A	3	D	100502	Ex9BH 3P D13	1/4/48
16 A	3	D	100503	Ex9BH 3P D16	1/4/48
20 A	3	D	100504	Ex9BH 3P D20	1/4/48
25 A	3	D	100505	Ex9BH 3P D25	1/4/48
32 A	3	D	100506	Ex9BH 3P D32	1/4/48
40 A	3	D	100507	Ex9BH 3P D40	1/4/48
50 A	3	D	100508	Ex9BH 3P D50	1/4/48
63 A	3	D	100509	Ex9BH 3P D63	1/4/48

## D-Characteristic, 3+N-pole



Rated current	Poles	Char.	Article No.	Type	Packing
1 A	3+N	D	100510	Ex9BH 3PN D1	1/3/36
2 A	3+N	D	100511	Ex9BH 3PN D2	1/3/36
3 A	3+N	D	100512	Ex9BH 3PN D3	1/3/36
4 A	3+N	D	100513	Ex9BH 3PN D4	1/3/36
6 A	3+N	D	100514	Ex9BH 3PN D6	1/3/36
8 A	3+N	D	100515	Ex9BH 3PN D8	1/3/36
10 A	3+N	D	100516	Ex9BH 3PN D10	1/3/36
13 A	3+N	D	100517	Ex9BH 3PN D13	1/3/36
16 A	3+N	D	100518	Ex9BH 3PN D16	1/3/36
20 A	3+N	D	100519	Ex9BH 3PN D20	1/3/36
25 A	3+N	D	100520	Ex9BH 3PN D25	1/3/36
32 A	3+N	D	100521	Ex9BH 3PN D32	1/3/36
40 A	3+N	D	100522	Ex9BH 3PN D40	1/3/36
50 A	3+N	D	100523	Ex9BH 3PN D50	1/3/36
63 A	3+N	D	100524	Ex9BH 3PN D63	1/3/36

## D-Characteristic, 4-pole



Rated current	Poles	Char.	Article No.	Type	Packing
1 A	4	D	100525	Ex9BH 4P D1	1/3/36
2 A	4	D	100526	Ex9BH 4P D2	1/3/36
3 A	4	D	100527	Ex9BH 4P D3	1/3/36
4 A	4	D	100528	Ex9BH 4P D4	1/3/36
6 A	4	D	100529	Ex9BH 4P D6	1/3/36
8 A	4	D	100530	Ex9BH 4P D8	1/3/36
10 A	4	D	100531	Ex9BH 4P D10	1/3/36
13 A	4	D	100532	Ex9BH 4P D13	1/3/36
16 A	4	D	100533	Ex9BH 4P D16	1/3/36
20 A	4	D	100534	Ex9BH 4P D20	1/3/36
25 A	4	D	100535	Ex9BH 4P D25	1/3/36
32 A	4	D	100536	Ex9BH 4P D32	1/3/36
40 A	4	D	100537	Ex9BH 4P D40	1/3/36
50 A	4	D	100538	Ex9BH 4P D50	1/3/36
63 A	4	D	100539	Ex9BH 4P D63	1/3/36



# Technical Data Ex9BH

## Miniature Circuit Breakers, 10 kA

### General parameters

Very high limiting of short circuit current

Suitable for household as well as industrial applications

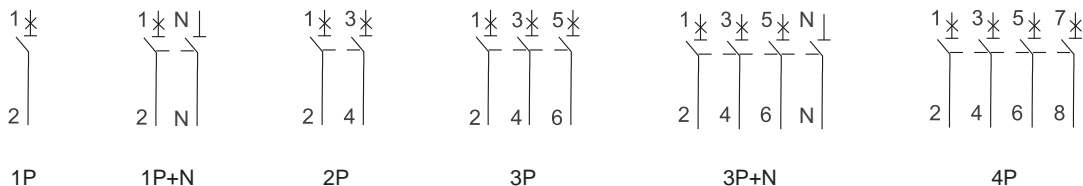
Accessories

Auxiliary contacts	AX3111, AX3122	100540, 100542
Alarm contact	AL3111	100541
Auxiliary and alarm contact	AXL31	100543
Shunt trip releases	SHT31, SHT3111	100544-100546, 100547-100549
Undervoltage releases	UVT31, UVT3101, UVT3110	100550-100551, 100552-100553, 100554-100555
Oversvoltage release	OVT31 280V AC±5%	100556
Max. number of installed accessories is 3 pcs of one contact units (AX3111, AL3111) or 2 pcs of two contact units (AX3122, AXL31) and 2 pcs of releases (SHT31, UVT31, OVT31)		
RCD add-on blocks	Ex9LE	

### Electrical parameters

Tested according to	IEC/EN 60898-1, IEC/EN 60947-2 (partially)
Rated op. voltage $U_e$	240/415 V AC
	72 V DC per pole (1P, 2P), 48 V DC per pole (3P, 4P)
Minimum voltage	12 V AC/DC
Rated impulse withstand voltage $U_{imp}$ according IEC 60898-1	6 kV
Rated impulse withstand voltage $U_{imp}$ according IEC 60947-2	6 kV
Rated insulation voltage $U_i$	690 V AC
Rated frequency	50/60 Hz
Rated breaking capacity $I_{cn}$ according IEC 60898-1	10 kA
Rated breaking capacity $I_{cn}$ according IEC 60947-2	15 kA (1 — 32 A) 10kA (40 — 63 A)
Rated current	1 — 63 A
Tripping characteristics	B, C, D
Mechanical service life	20 000 operation cycles
Electrical service life	10 000 operation cycles
Selectivity class	3
Utilization category	A
Max. back-up fuse	max. 125 A gG
Line voltage connection	arbitrary above or below

### Wiring diagrams



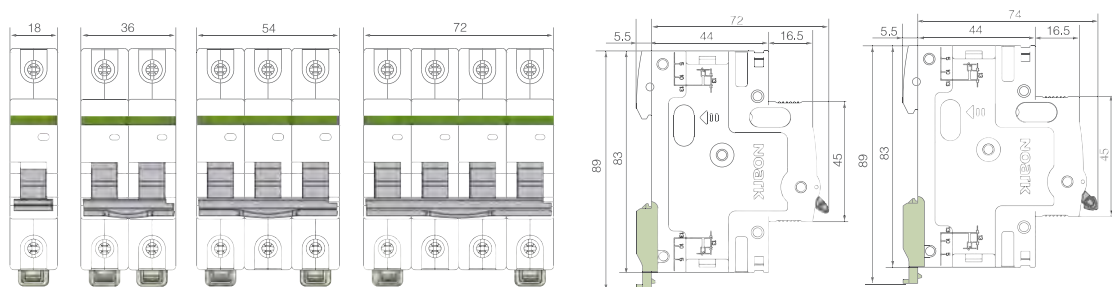
# Technical Data Ex9BH

## Miniature Circuit Breakers, 10 kA

### Mechanical parameters

Device width	18 mm (per pole)
Device height	83 mm (89 mm including rail clip)
Frame size	45 mm
Mounting	easy fastening onto 35 mm device rail (DIN)
Degree of protection	IP20
Terminals	combined lift + open mouthed
Terminal capacity	1 — 35 mm <sup>2</sup>
Fastening torque of terminals	2 — 3.5 Nm
Busbar thickness	0.8 — 2 mm
Ambient temperature	-30 — +70 °C
Altitude	≤ 2000 m
Relative humidity	≤ 95 %
Resistance to humidity and heat	class 2
Pollution degree	3
Installation class	III
Weight	0.12 kg (per pole)

### Dimensions

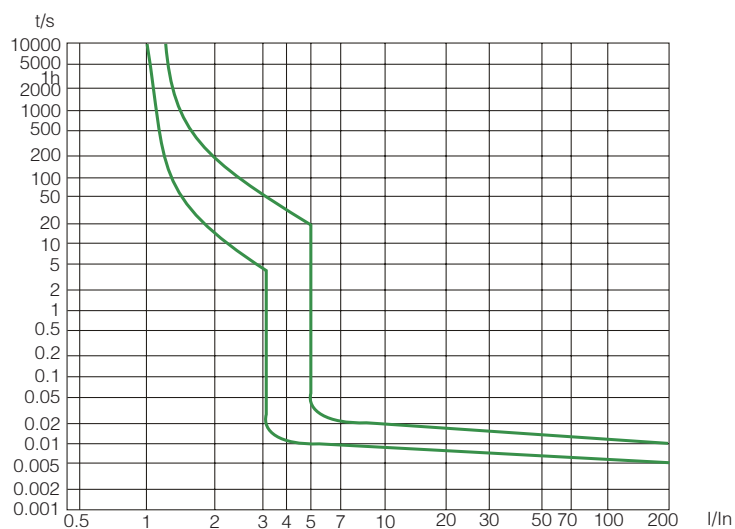


# Technical Data Ex9BH

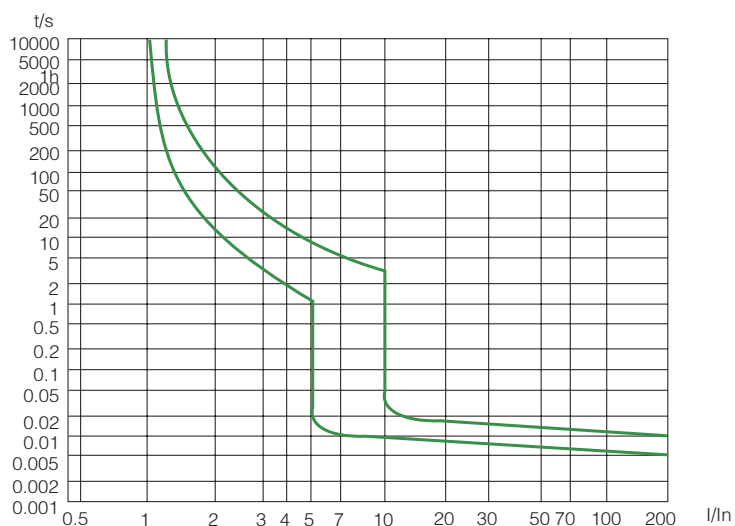
## Miniature Circuit Breakers, 10 kA

### Tripping characteristics

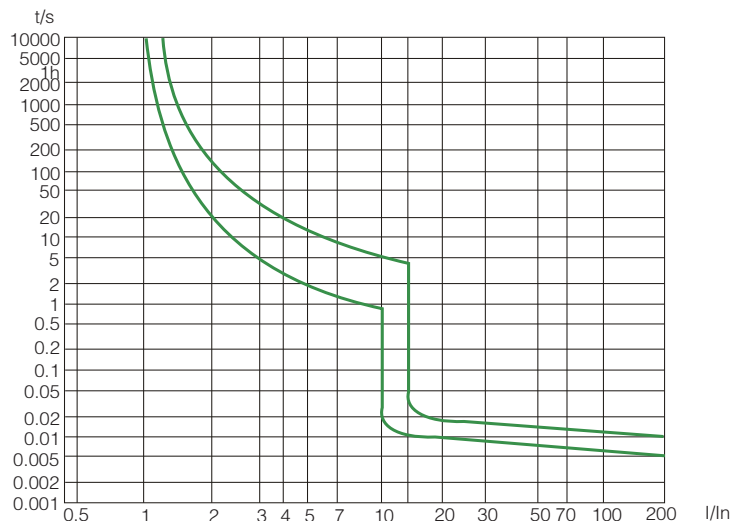
#### Characteristic B



#### Characteristic C



#### Characteristic D



# Technical Data Ex9BH

## Miniature Circuit Breakers, 10 kA

### Dependence of Tripping Characteristics on Ambient Temperature

T [°C]	I <sub>n</sub> (T) [A]														
	1 A	2 A	3 A	4 A	6 A	8 A	10 A	13 A	16 A	20 A	25 A	32 A	40 A	50 A	63 A
-30	1.3	2.5	3.8	5.1	7.6	10.2	13.6	16.8	20.5	25.3	31.1	40.5	51.0	64.0	82.0
-25	1.2	2.4	3.7	4.9	7.4	9.9	13.4	16.5	20.0	25.0	30.5	39.8	50.0	63.0	80.7
-20	1.2	2.4	3.6	4.8	7.3	9.7	13.1	16.3	19.8	24.5	30.0	39.2	49.2	62.0	79.2
-15	1.2	2.4	3.5	4.8	7.2	9.5	12.8	15.9	19.4	24.0	29.5	38.5	48.4	60.8	77.8
-10	1.2	2.3	3.5	4.7	7.1	9.3	12.5	15.7	19.0	23.7	29.0	37.9	47.5	59.8	76.3
-5	1.2	2.3	3.4	4.7	7.0	9.2	12.3	15.4	18.7	23.2	28.5	37.2	46.7	58.6	74.7
0	1.1	2.2	3.4	4.5	6.8	9.0	12.0	15.0	18.4	22.8	28.0	36.5	45.8	57.4	73.2
5	1.1	2.2	3.3	4.4	6.6	8.9	11.7	14.7	18.0	22.4	27.5	35.8	45.0	56.3	71.6
10	1.1	2.1	3.3	4.3	6.5	8.7	11.4	14.3	17.6	21.9	27.0	35.0	44.0	55.0	70.0
15	1.1	2.1	3.2	4.3	6.4	8.5	11.0	14.0	17.2	21.5	26.5	34.3	43.0	53.8	68.3
20	1.0	2.1	3.2	4.2	6.3	8.3	10.7	13.7	16.8	21.0	26.0	33.6	42.0	52.6	66.6
25	1.0	2.0	3.0	4.1	6.2	8.2	10.4	13.4	16.4	20.5	25.5	32.8	41.0	51.3	64.8
30	1	2	3	4	6	8	10	13	16	20	25	32	40	50	63
35	0.99	2.00	3.00	3.9	5.9	7.9	9.9	12.8	16.0	20.0	25.0	32.0	39.0	49.0	62.0
40	0.97	1.90	2.90	3.9	5.8	7.8	9.7	12.5	15.0	19.0	24.0	31.0	39.0	48.0	61.0
45	0.95	1.90	2.80	3.8	5.7	7.7	9.5	12.2	15.0	19.0	24.0	30.0	38.0	47.0	60.0
50	0.93	1.90	2.80	3.7	5.6	7.6	9.3	12.0	15.0	19.0	23.0	30.0	37.0	46.0	58.0
55	0.91	1.80	2.80	3.6	5.5	7.5	9.0	11.7	14.0	18.0	23.0	29.0	36.0	44.0	57.0
60	0.91	1.80	2.70	3.5	5.4	7.2	8.8	11.5	14.0	18.0	22.0	28.0	35.0	42.0	55.0
65	0.91	1.80	2.70	3.5	5.3	7.1	8.6	11.2	13.0	17.0	21.0	28.0	34.0	40.0	52.0
70	0.91	1.80	2.70	3.5	5.3	6.9	8.6	11.0	13.0	17.0	21.0	27.0	33.0	38.0	50.0

### Power loss per pole

I <sub>n</sub> [A]	1 A	2 A	3 A	4 A	6 A	8 A	10 A	13 A	16 A	20 A	25 A	32 A	40 A	50 A	63 A
P [W]	1.8	2.1	1.9	2.0	2.5	1.2	1.8	3.1	2.3	2.4	3.5	3.8	4.7	4.7	6.2

### Toggle colours meaning

I <sub>n</sub> [A]	1 A	2 A	3 A	4 A	6 A	8 A	10 A	13 A	16 A	20 A	25 A	32 A	40 A	50 A	63 A
Colour	