

DC MCBs Ex9BP-N, 6 kA

K-Characteristic, 1-pole, 250 V DC



Rated current	Width	Char.	Article No.	Type	Packing
10 A	1 MU	K	101654	Ex9BP-N 1P K 10A	1/12/144
13 A	1 MU	K	102360	Ex9BP-N 1P K 13A	1/12/144
16 A	1 MU	K	101655	Ex9BP-N 1P K 16A	1/12/144
20 A	1 MU	K	101656	Ex9BP-N 1P K 20A	1/12/144
25 A	1 MU	K	101657	Ex9BP-N 1P K 25A	1/12/144
32 A	1 MU	K	101658	Ex9BP-N 1P K 32A	1/12/144
40 A	1 MU	K	101659	Ex9BP-N 1P K 40A	1/12/144
50 A	1 MU	K	101660	Ex9BP-N 1P K 50A	1/12/144
63 A	1 MU	K	101661	Ex9BP-N 1P K 63A	1/12/144

K-Characteristic, 2-pole, 500 V DC



Rated current	Width	Char.	Article No.	Type	Packing
10 A	2 MU	K	101662	Ex9BP-N 2P K 10A	1/6/72
13 A	2 MU	K	102361	Ex9BP-N 2P K 13A	1/6/72
16 A	2 MU	K	101663	Ex9BP-N 2P K 16A	1/6/72
20 A	2 MU	K	101664	Ex9BP-N 2P K 20A	1/6/72
25 A	2 MU	K	101665	Ex9BP-N 2P K 25A	1/6/72
32 A	2 MU	K	101666	Ex9BP-N 2P K 32A	1/6/72
40 A	2 MU	K	101667	Ex9BP-N 2P K 40A	1/6/72
50 A	2 MU	K	101668	Ex9BP-N 2P K 50A	1/6/72
63 A	2 MU	K	101669	Ex9BP-N 2P K 63A	1/6/72

K-Characteristic, 3-module, 750 V DC



Rated current	Width	Char.	Article No.	Type	Packing
10 A	3 MU	K	101670	Ex9BP-N 3P K 10A	1/4/48
13 A	3 MU	K	102362	Ex9BP-N 3P K 13A	1/4/48
16 A	3 MU	K	101671	Ex9BP-N 3P K 16A	1/4/48
20 A	3 MU	K	101672	Ex9BP-N 3P K 20A	1/4/48
25 A	3 MU	K	101673	Ex9BP-N 3P K 25A	1/4/48
32 A	3 MU	K	101674	Ex9BP-N 3P K 32A	1/4/48
40 A	3 MU	K	101675	Ex9BP-N 3P K 40A	1/4/48
50 A	3 MU	K	101676	Ex9BP-N 3P K 50A	1/4/48
63 A	3 MU	K	101677	Ex9BP-N 3P K 63A	1/4/48

K-Characteristic, 4-module, 1000 V DC



Rated current	Width	Char.	Article No.	Type	Packing
10 A	4 MU	K	101678	Ex9BP-N 4P K 10A	1/3/36
13 A	4 MU	K	102363	Ex9BP-N 4P K 13A	1/3/36
16 A	4 MU	K	101679	Ex9BP-N 4P K 16A	1/3/36
20 A	4 MU	K	101680	Ex9BP-N 4P K 20A	1/3/36
25 A	4 MU	K	101681	Ex9BP-N 4P K 25A	1/3/36
32 A	4 MU	K	101682	Ex9BP-N 4P K 32A	1/3/36
40 A	4 MU	K	101683	Ex9BP-N 4P K 40A	1/3/36
50 A	4 MU	K	101684	Ex9BP-N 4P K 50A	1/3/36
63 A	4 MU	K	101685	Ex9BP-N 4P K 63A	1/3/36

Technical Data Ex9BP

DC Miniature Circuit Breakers up to 63 A

General parameters

Non-polarized, suitable for general DC as well as Photovoltaic 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
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)		

Electrical parameters

Tested according to	IEC / EN 60947-2
Rated op. voltage U_e	250 (1P), 500 (2P), 750 (3P), 1000 V DC (4P)
Rated breaking capacity I_{cu}	6 kA (Ex9BP-N), 10 kA (Ex9BP-H)
Rated current I_n	10 — 63 A
Tripping characteristics	C, K
Rated impulse withstand voltage U_{imp}	4 kV
Rated insulation voltage U_i	1000 V DC
Mechanical service life	20 000 operation cycles
Electrical service life	10 000 operation cycles
Selectivity class	3
Line voltage connection	arbitrary above or below

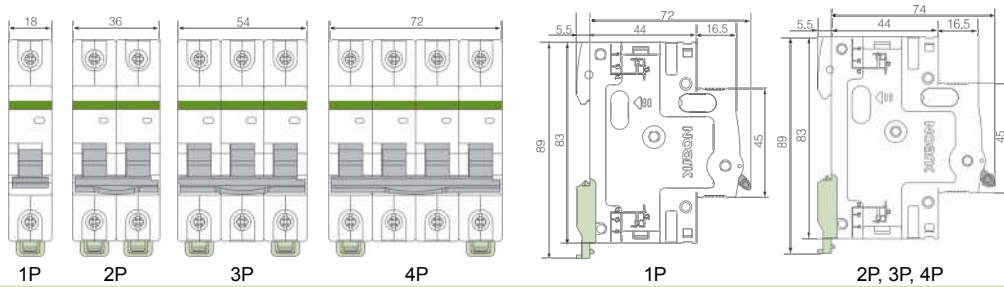
Mechanical parameters

Device width	18 mm (per pole/module)
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	IP40, IP20 terminals
Terminals	combined lift + open mouthed
Terminal capacity	1 — 35 mm ²
Fastening torque of terminals	2 — 3.5 Nm
Busbar thickness	0.8 — 2 mm
Ambient temperature	-20 — +70 °C
Altitude	≤ 5000 m
Relative humidity	≤ 95 %
Resistance to humidity and heat	class 2
Pollution degree	3
Installation class	III
Weight	0.12 kg (per pole/module)

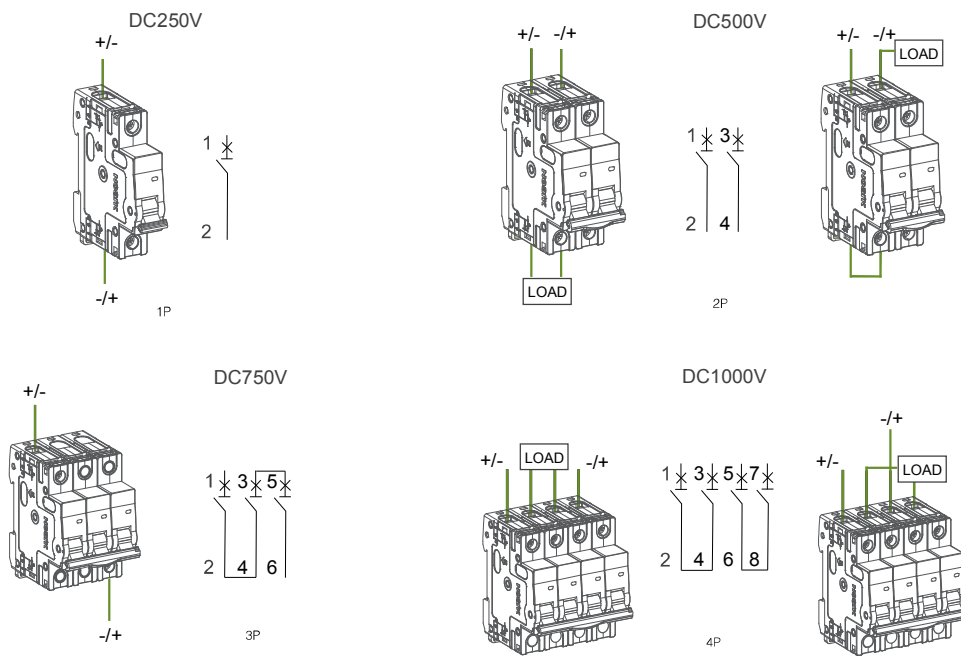
Technical Data Ex9BP

DC Miniature Circuit Breakers up to 63 A

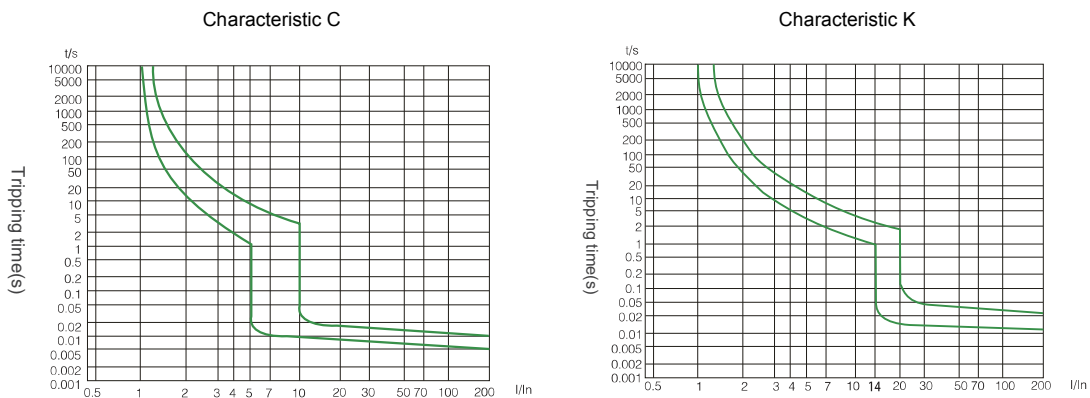
Dimensions



Wiring diagrams



Tripping characteristics



Ordering data p. 7

Technical Data Ex9BP

DC Miniature Circuit Breakers up to 63 A

Dependence of Tripping Characteristics on Ambient Temperature

T [°C]	10 A	13 A	16 A	20 A	25 A	32 A	40 A	50 A	63 A
-20	13.5	17	20	24.5	29.8	39.5	50.5	60	77.5
-15	13.3	16.8	19.8	24.3	29.7	39.3	50.4	59.8	76.3
-10	13	16.5	19.5	24	29.5	39	50.2	59.5	75
-5	12.7	16.1	19.2	23.8	29.3	38.8	50	59.2	73
0	12.5	15.8	19.1	23.7	29.2	38.6	48.8	59	71.8
5	12.3	15.5	18.8	23.5	29	38.4	48.6	58.8	70.6
10	12.1	15.2	18.6	23.3	28.8	38.2	48.4	56.5	69
15	12	14.9	18.5	23.1	28.6	38	48.1	55	67.5
20	11.8	14.7	18.3	22.8	28.4	37.8	47.8	54.5	66.2
25	11.5	14.1	18	22.6	28.2	37.5	47	52.5	64.5
30	10	13	16	20	25	32	40	50	63
35	9.9	12.8	15.7	19.7	24.6	31.5	39.2	48.8	61.5
40	9.8	12.5	15.4	19.3	24.3	31.1	38.8	47	58.7
45	9.8	12.2	15.1	18.8	24	30.8	38.3	45.5	55.8
50	9.6	11.7	14.9	18.5	23.8	30.1	38	44	53.5
55	9.5	11.5	14.7	18.2	23.5	29.5	36.5	42.5	51.7
60	9	11.2	14.5	17.8	23	28.5	35	41.5	49.2
65	8.6	11	14	17.5	22	27.5	34	40.5	47.9
70	8	10.8	13.8	17.3	21.5	27	32.5	38	46.8