

1. Datasheet

NB8 -40J

Miniature Circuit Breaker



NB8 -40J

1. GENERAL

1.1 Function

protection of circuits against short-circuit currents,
protection of circuits against overload currents,
switch, isolation.

NB8 -40J circuit-breakers are used in domestic installation,
as well as in commercial and industry electrical
distribution systems.

1.2 Selection

Technical data of the network at the point considered:
short-circuit current at the circuit-breaker installation point,
which must always be less than the breaking capacity of
this device, network normal voltage.

Tripping curves:

B curve (3-5In)

protection for people and big length cables in TN and IT
systems.

C curve (5-10In)

protection for resistive and inductive loads with low inrush
current.

D curve(10-16In)

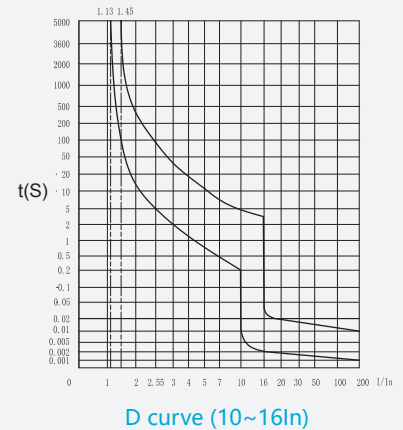
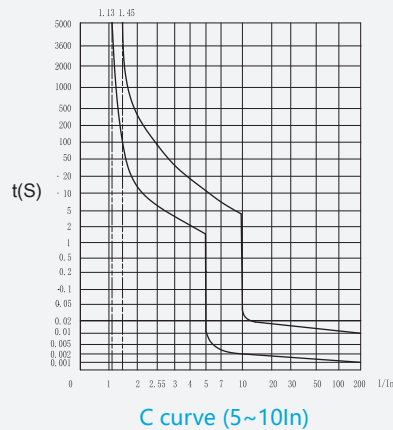
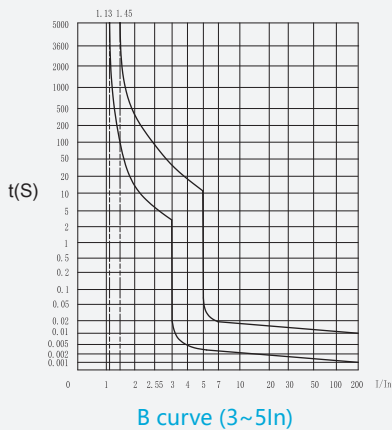
protection for circuits which supply loads with high inrush
current at the circuit closing
(LV/LV transformers, breakdown lamps).

1.3 Certificates

CE, RoHS, REACH

2. TECHNICAL DATA

Standard		IEC 60898-1	
Rated current I_n	A	1, 2, 3, 4, 6, 10, 16, 20, 25, 32, 40	
Rated voltage U_e	V	230 / 400	
Rated frequency	Hz	50	
Poles		1P , 2P , 3P , 4P	
Thermo-magnetic release characteristic		B(3-5In), C(5-10In), D(10-16In),	
Mechanical life		15,000	
Electrical life		10,000	
Rated breaking capacity	A	4500 (D), 6000 (B,C)	
Insulation voltage U_i	V	500	
Rated impulse withstand voltage (1.2/50) U_{imp}	KV	4	
Installation	Terminal connection type		Cable/ Pin-type busbar
	Terminal size top / bottom for busbar	mm ²	25
		AWG	18-4
	Terminal size top / bottom for cable	mm ²	10
		AWG	18-8
	Tightening torque	N·m	2.0
		In-lbs.	22
Mounting		On DIN rail EN 60715 (35mm) by means of fast clip device	
Connection		From top or bottom	
Reference temperature for setting of thermal element	°C	30	
Ambient temperature (with daily average $\leq 35^\circ\text{C}$)	°C	-35...+70	
Storage temperature	°C	-35...+70	
Protection degree		IP20	
Pollution degree		2	
Combination with accessories		S9, V9, XF9, XF9J, OVT-1, OUVT-1	
Weight	(kg)	0.09/per pole	



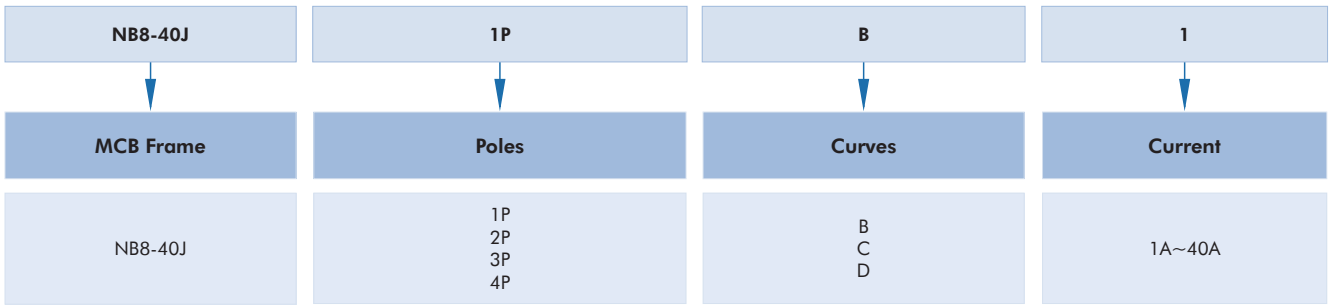


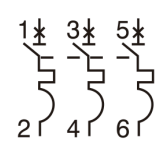
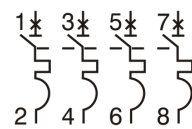


Diagram	Curve	Poles	In(A)	Icu(kA)	Ue(V)	Description	Code
	B	1P	1	6	AC230/400	NB8-40J 1P B1	320639
	B	1P	2	6	AC230/400	NB8-40J 1P B2	320640
	B	1P	3	6	AC230/400	NB8-40J 1P B3	320641
	B	1P	4	6	AC230/400	NB8-40J 1P B4	320642
	B	1P	6	6	AC230/400	NB8-40J 1P B6	320643
	B	1P	10	6	AC230/400	NB8-40J 1P B10	320644
	B	1P	16	6	AC230/400	NB8-40J 1P B16	320645
	B	1P	20	6	AC230/400	NB8-40J 1P B20	320646
	B	1P	25	6	AC230/400	NB8-40J 1P B25	320647
	B	1P	32	6	AC230/400	NB8-40J 1P B32	320648
	B	1P	40	6	AC230/400	NB8-40J 1P B40	320649
	B	2P	1	6	AC400	NB8-40J 2P B1	320672
	B	2P	2	6	AC400	NB8-40J 2P B2	320673
	B	2P	3	6	AC400	NB8-40J 2P B3	320674
	B	2P	4	6	AC400	NB8-40J 2P B4	320675
	B	2P	6	6	AC400	NB8-40J 2P B6	320676
	B	2P	10	6	AC400	NB8-40J 2P B10	320677
	B	2P	16	6	AC400	NB8-40J 2P B16	320678
	B	2P	20	6	AC400	NB8-40J 2P B20	320679
	B	2P	25	6	AC400	NB8-40J 2P B25	320680
	B	2P	32	6	AC400	NB8-40J 2P B32	320681
		B	2P	40	6	AC400	NB8-40J 2P B40
B		3P	1	6	AC400	NB8-40J 3P B1	320705
B		3P	2	6	AC400	NB8-40J 3P B2	320706
B		3P	3	6	AC400	NB8-40J 3P B3	320707
B		3P	4	6	AC400	NB8-40J 3P B4	320708
B		3P	6	6	AC400	NB8-40J 3P B6	320709
B		3P	10	6	AC400	NB8-40J 3P B10	320710
B		3P	16	6	AC400	NB8-40J 3P B16	320711
B		3P	20	6	AC400	NB8-40J 3P B20	320712
B		3P	25	6	AC400	NB8-40J 3P B25	320713
B		3P	32	6	AC400	NB8-40J 3P B32	320714
B		3P	40	6	AC400	NB8-40J 3P B40	320715

Diagram	Busbar	Curve	Poles	In(A)	Icu(kA)	Description	Code
	B	4P	1	6	AC400	NB8-40J 4P B1	320738
	B	4P	2	6	AC400	NB8-40J 4P B2	320739
	B	4P	3	6	AC400	NB8-40J 4P B3	320740
	B	4P	4	6	AC400	NB8-40J 4P B4	320741
	B	4P	6	6	AC400	NB8-40J 4P B6	320742
	B	4P	10	6	AC400	NB8-40J 4P B10	320743
	B	4P	16	6	AC400	NB8-40J 4P B16	320744
	B	4P	20	6	AC400	NB8-40J 4P B20	320745
	B	4P	25	6	AC400	NB8-40J 4P B25	320746
	B	4P	32	6	AC400	NB8-40J 4P B32	320747
	B	4P	40	6	AC400	NB8-40J 4P B40	320748
	C	1P	1	6	AC230/400	NB8-40J 1P C1	320650
	C	1P	2	6	AC230/400	NB8-40J 1P C2	320651
	C	1P	3	6	AC230/400	NB8-40J 1P C3	320652
	C	1P	4	6	AC230/400	NB8-40J 1P C4	320653
	C	1P	6	6	AC230/400	NB8-40J 1P C6	320654
	C	1P	10	6	AC230/400	NB8-40J 1P C10	320655
	C	1P	16	6	AC230/400	NB8-40J 1P C16	320656
	C	1P	20	6	AC230/400	NB8-40J 1P C20	320657
	C	1P	25	6	AC230/400	NB8-40J 1P C25	320658
	C	1P	32	6	AC230/400	NB8-40J 1P C32	320659
	C	1P	40	6	AC230/400	NB8-40J 1P C40	320660
	C	2P	1	6	AC400	NB8-40J 2P C1	320683
	C	2P	2	6	AC400	NB8-40J 2P C2	320684
	C	2P	3	6	AC400	NB8-40J 2P C3	320685
	C	2P	4	6	AC400	NB8-40J 2P C4	320686
	C	2P	6	6	AC400	NB8-40J 2P C6	320687
	C	2P	10	6	AC400	NB8-40J 2P C10	320688
	C	2P	16	6	AC400	NB8-40J 2P C16	320689
	C	2P	20	6	AC400	NB8-40J 2P C20	320690
	C	2P	25	6	AC400	NB8-40J 2P C25	320691
	C	2P	32	6	AC400	NB8-40J 2P C32	320692
	C	2P	40	6	AC400	NB8-40J 2P C40	320693
	C	3P	1	6	AC400	NB8-40J 3P C1	320716
	C	3P	2	6	AC400	NB8-40J 3P C2	320717
	C	3P	3	6	AC400	NB8-40J 3P C3	320718
	C	3P	4	6	AC400	NB8-40J 3P C4	320719
	C	3P	6	6	AC400	NB8-40J 3P C6	320720
	C	3P	10	6	AC400	NB8-40J 3P C10	320721
	C	3P	16	6	AC400	NB8-40J 3P C16	320722
	C	3P	20	6	AC400	NB8-40J 3P C20	320723
	C	3P	25	6	AC400	NB8-40J 3P C25	320724
	C	3P	32	6	AC400	NB8-40J 3P C32	320725
	C	3P	40	6	AC400	NB8-40J 3P C40	320726
	C	4P	1	6	AC400	NB8-40J 4P C1	320749
	C	4P	2	6	AC400	NB8-40J 4P C2	320750
	C	4P	3	6	AC400	NB8-40J 4P C3	320751
	C	3P	25	6	AC400	NB8-40J 3P C25	320724
	C	3P	32	6	AC400	NB8-40J 3P C32	320725
	C	3P	40	6	AC400	NB8-40J 3P C40	320726
	C	4P	1	6	AC400	NB8-40J 4P C1	320749
	C	4P	2	6	AC400	NB8-40J 4P C2	320750
	C	4P	3	6	AC400	NB8-40J 4P C3	320751
	C	4P	2	6	AC400	NB8-40J 4P C2	320750
	C	4P	3	6	AC400	NB8-40J 4P C3	320751

Diagram	Busbar	Curve	Poles	In(A)	Icu(kA)	Description	Code
	D	1P	1	4.5	AC230/400	NB8-40J 1P D1	320661
	D	1P	2	4.5	AC230/400	NB8-40J 1P D2	320662
	D	1P	3	4.5	AC230/400	NB8-40J 1P D3	320663
	D	1P	4	4.5	AC230/400	NB8-40J 1P D4	320664
	D	1P	6	4.5	AC230/400	NB8-40J 1P D6	320665
	D	1P	10	4.5	AC230/400	NB8-40J 1P D10	320666
	D	1P	16	4.5	AC230/400	NB8-40J 1P D16	320667
	D	1P	20	4.5	AC230/400	NB8-40J 1P D20	320668
	D	1P	25	4.5	AC230/400	NB8-40J 1P D25	320669
	D	1P	32	4.5	AC230/400	NB8-40J 1P D32	320670
	D	1P	40	4.5	AC230/400	NB8-40J 1P D40	320671
	D	2P	1	4.5	AC400	NB8-40J 2P D1	320694
	D	2P	2	4.5	AC400	NB8-40J 2P D2	320695
	D	2P	3	4.5	AC400	NB8-40J 2P D3	320696
	D	2P	4	4.5	AC400	NB8-40J 2P D4	320697
	D	2P	6	4.5	AC400	NB8-40J 2P D6	320698
	D	2P	10	4.5	AC400	NB8-40J 2P D10	320699
	D	2P	16	4.5	AC400	NB8-40J 2P D16	320700
	D	2P	20	4.5	AC400	NB8-40J 2P D20	320701
	D	2P	25	4.5	AC400	NB8-40J 2P D25	320702
	D	2P	32	4.5	AC400	NB8-40J 2P D32	320703
	D	2P	40	4.5	AC400	NB8-40J 2P D40	320704
	D	3P	1	4.5	AC400	NB8-40J 3P D1	320727
	D	3P	2	4.5	AC400	NB8-40J 3P D2	320728
	D	3P	3	4.5	AC400	NB8-40J 3P D3	320729
	D	3P	4	4.5	AC400	NB8-40J 3P D4	320730
	D	3P	6	4.5	AC400	NB8-40J 3P D6	320731
	D	3P	10	4.5	AC400	NB8-40J 3P D10	320732
	D	3P	16	4.5	AC400	NB8-40J 3P D16	320733
	D	3P	20	4.5	AC400	NB8-40J 3P D20	320734
	D	3P	25	4.5	AC400	NB8-40J 3P D25	320735
	D	3P	32	4.5	AC400	NB8-40J 3P D32	320736
	D	3P	40	4.5	AC400	NB8-40J 3P D40	320737
	D	4P	1	4.5	AC400	NB8-40J 4P D1	320760
	D	4P	2	4.5	AC400	NB8-40J 4P D2	320761
	D	4P	3	4.5	AC400	NB8-40J 4P D3	320762
	D	4P	4	4.5	AC400	NB8-40J 4P D4	320763
	D	4P	6	4.5	AC400	NB8-40J 4P D6	320764
	D	4P	10	4.5	AC400	NB8-40J 4P D10	320765
	D	4P	16	4.5	AC400	NB8-40J 4P D16	320766
	D	4P	20	4.5	AC400	NB8-40J 4P D20	320767
	D	4P	25	4.5	AC400	NB8-40J 4P D25	320768
	D	4P	32	4.5	AC400	NB8-40J 4P D32	320769
	D	4P	40	4.5	AC400	NB8-40J 4P D40	320770