



B-FRAME SERIES CIRCUIT BREAKERS



Applications

- Lighting Equipment
- Power Supplies
- Computer Terminals
- Small Generators
- Entertainment Systems
- Vending Machines
- Office Machines
- Telecom Power Distribution
- Railway Signaling Systems
- Automatic Control Systems

Features

- Hydraulic-Magnetic Technology
- One and Two Poles
- UL1077, CSA, VDE, and TUV Approved
- Wide Range of Standard Time Delays, Operating Currents and Circuit Configurations
- Snap-In, Clip-In or Threaded Mounting Systems

Technical Data

• Approvals	UL1077/CSA	VDE (EN 60934)	TUV (IEC 60947-2)
• Number of Poles	1 and 2	1 and 2	1 and 2
• Maximum Voltage	240 VAC/65 VDC	240 VAC/65 VDC	240 VAC/50 VDC
• Current Rating	0.02 A to 25 A		
• Time Delays	Instantaneous, Short, Medium, Long		
• Interrupting Capacity	500 A @ 65 VDC 1 kA @ 240 VAC		
• Dielectric Strength	1500 VAC		
• Insulation Resistance	100 Megohms @ 500 VDC		
• Operating Temp. Range	-40°C to +85°C		

Time Delay Data

Std. Curve Codes	Limits	Percentage of Rated Current Trip Time in Seconds										
		125%	150%	200%	300%	400%	500%	600%	800%	1000%	1200%	
AS	Min (s)	90	32	12	3.5	0.6	0.012	<0.01	<0.01	<0.01	<0.01	
	Max (s)	1200	400	100	37	17	10	4	0.18	0.058	<0.01	
BS	Min (s)	15	7.3	2.6	0.47	0.06	0.012	0.006	0.0042	0.0037	0.0036	
	Max (s)	300	90	30	8	3.2	1.4	0.7	0.08	0.05	0.04	
CS	Min (s)	1.3	0.65	0.28	0.09	0.04	0.015	0.006	0.0043	0.004	0.004	
	Max (s)	40	7	2.5	0.8	0.49	0.36	0.28	0.075	0.048	0.03	

Contact Customer Service for availability of additional Current Ratings and Time Delay Curves. Curves are available online at www.CBIBreakers.com

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Number Coding

Example Code: **BA-C-1-PA-B-1-3-X-AS-1000-X**

Group Number: 1 2 3 4 & 5 6 7 8 9 10 11 12

Group 1: Frame and Handle	
Code	Description
BA	Black Body, Square Handle
BB	Black Body, Paddle Handle
BC	Black Body, Baton Handle
BD	Black Body, Rocker Handle
BE	Black Body, Illum Rocker Handle
BF	Black Body, Push-to-Reset Handle
BG	Black Body, Push-Pull Handle

Group 2: Mounting System	
Code	Description
A	Metric (M12) – center lock
C	Imperial (1/2"-32) – center lock
G	Snap-In Vertical Mounting Without Rocker Guard
H	Snap-In Vertical Mounting With Rocker Guard
M	Snap-In Horizontal Mounting Without Rocker Guard
N	Snap-In Horizontal Mounting With Rocker Guard
P	Metric (M10) – center lock
Q	Imperial (3/8"-32) – center lock
R	Clip-In

Group 3: Number Of Poles	
Code	Description
1	Single-Pole Unit with Quick Connect (11 x 6.35)
2	Double-Pole Unit with Quick Connect (11 x 6.35)
A	Single-Pole Unit with 90° Bend Quick Connect (11 x 6.35)
B	Double-Pole Unit with 90° Bend Quick Connect (11 x 6.35)
5	Single-Pole Unit with Screw Terminals (8-32)
6	Double-Pole Unit with Screw Terminals (8-32)

Group 4: Rated Voltages	
Code	Description
E	65V
M	65 VDC/240 VAC
P	240V
ZZ	Special (Specify)

Group 5: Voltage Type	
Code	Description
A	AC
D	DC
M	AC/DC

Group 6: Circuit Configuration	
Code	Description
A	Switch
B	Series Trip
C	Relay Trip (Current Sensing)
D	Relay Trip (Voltage Sensing)
E	Shunt Trip (Current Sensing)
F	Shunt Trip (Voltage Sensing)
Z	Special (Specify)

Group 7: Auxiliary Switches	
Code	Description
0	None
1	1 x Change-Over (3 A, 125 VAC)
2	2 x Change-Over (3 A, 125 VAC)*
3	1 x Change-Over (0.1 A, 125 VAC)
4	2 x Change-Over (0.1 A, 125 VAC)*

*Applicable to Double-Pole Units Only

Group 8: Handle Color and Rocker Handle Marking Details	
Code	Description
N	White (On-Off)
P	Black (On-Off)
2	White (No Markings)
3	Black (No Markings)
Z	Special (Specify)

Group 9: Voltages for Illuminated Rocker Units			
Terminal Connections		Lead Connections	
Code	Description	Code	Description
X	Not Applicable	X	Not Applicable
A	100 – 125 VAC	1	100 – 125 VAC
B	220 – 240 VAC	2	220 – 240 VAC
C	8 – 16 VDC	3	8 – 16 VDC
D	16 – 24 VDC	4	16 – 24 VDC
E	24 – 32 VDC	5	24 – 32 VDC
F	32 – 50 VDC	6	32 – 50 VDC
Z	Special (Specify)	Z	Special (Specify)

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Group 10: Time Delay and Instantaneous Trip Point (Silicon Oil)				
Code	Time Delay Details	System	Pulse Tolerance	Comments
AS	Long Time Delay	AC & DC	8 x In	
BS	Medium Time Delay	AC & DC	8 x In	
CS	Short Time Delay	AC & DC	8 x In	
AD	Long Time Delay	AC/DC	8 x In	Dual Rated
BD	Medium Time Delay	AC/DC	8 x In	Dual Rated
CD	Short Time Delay	AC/DC	8 x In	Dual Rated
AI	Long Time Delay	AC & DC	12 x In	AS + Inertial Delay
BI	Medium Time Delay	AC & DC	12 x In	BS + Inertial Delay
CI	Short Time Delay	AC & DC	12 x In	CS + Inertial Delay
AW	Long Time Delay	AC/DC	12 x In	AD + Inertial Delay
BW	Medium Time Delay	AC/DC	12 x In	BD + Inertial Delay
CW	Short Time Delay	AC/DC	12 x In	CD + Inertial Delay
OX	Switch	AC & DC		
OP	Instantaneous	AC & DC		

Group 11: Main Circuit Current Ratings	
Code	Description
020M	20 mA
0500	5 A
1000	10 A
2000	20 A
2500	25 A
X	No Rating

Group 12: Relay Trip Coils			
Ratings for Voltage Coils		Ratings for Current Coils	
Code	Description	Code	Description
X	Not Applicable	X	Not Applicable
D005	5 - 12 VDC	020M	20 mA
D024	24 VDC	500M	500 mA
D032	32 - 65 VDC	0100	1 A
D110	110 - 125 VDC	0250	2.5 A
A005	5 - 12 VAC	500	5 A
A024	24 VAC		
A032	32 - 65 VAC		
A110	110 - 125 VAC		
A220	220 - 240 VAC		

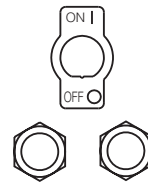
Mounting Kits[†]

A



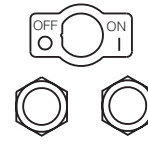
2 x Hex nuts

B



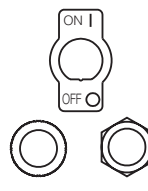
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1 x Vertical legend plate*

C



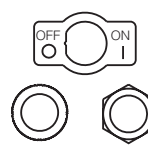
*2 x Hex nuts
1 x Horizontal legend plate*

F



*1 x Hex nut
1 x Knurled nut
1 x Vertical legend plate*

G



*1 x Hex nut
1 x Knurled nut
1 x Horizontal legend plate*

[†]Mounting hardware must be ordered separately.

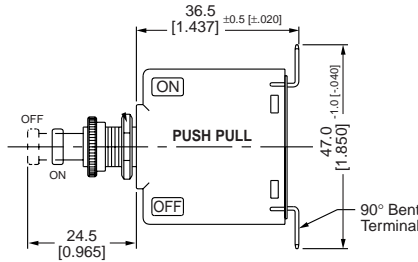
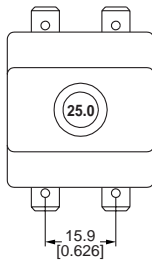
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Double Pole

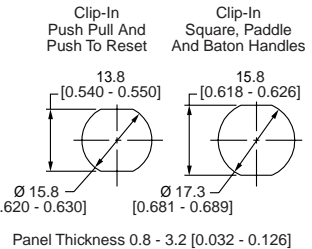
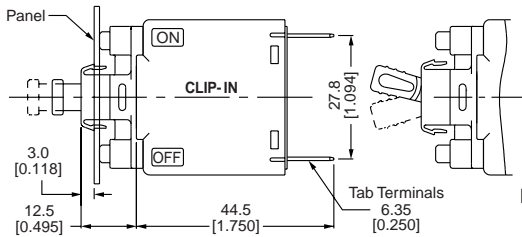
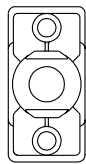
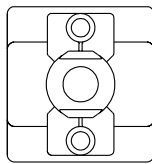
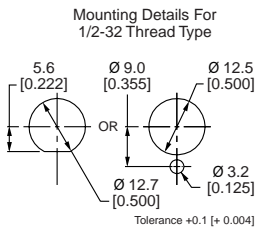
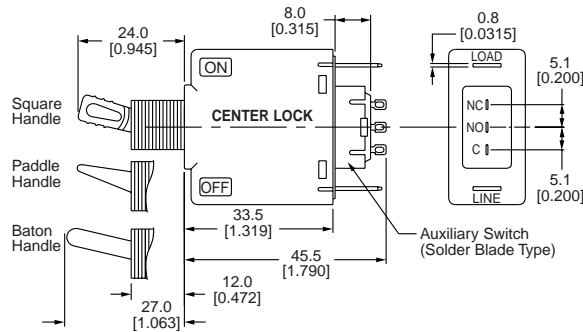
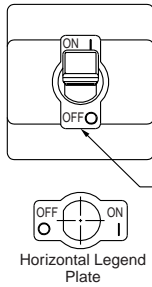
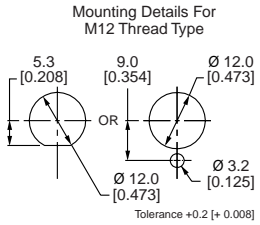
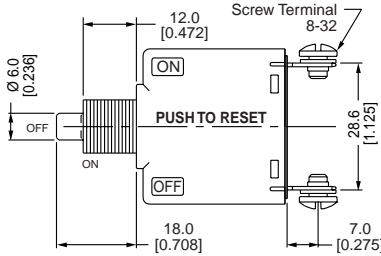
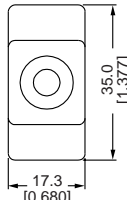
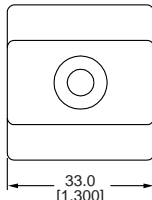
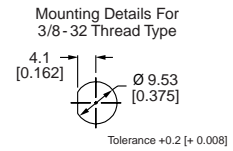
Single Pole

Dimensions

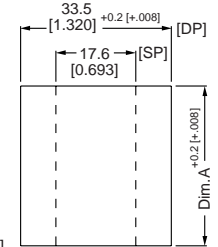
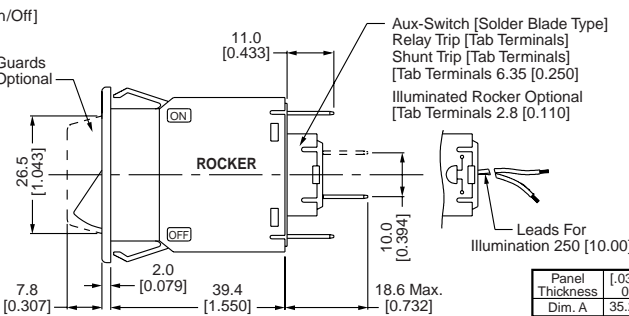
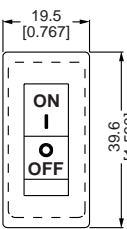
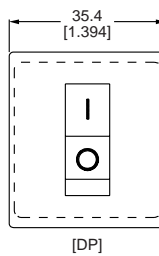
Panel Cut-Out Details



Available with Push Pull and Push To Reset Configurations Only



Rocker Legend Optional [I/O], [On/Off], [I/O], [On/Off]



Panel Thickness	[.032 - .063]	[.066 - .102]	[.106 - .126]
Dim. A	35.2 [1.386]	36.0 [1.417]	36.4 [1.433]

*All Dimensions in Millimeters [Inches]