



W23/W31 series

Toggle or Push/Pull Actuator Thermal P&B Circuit Breaker



Features

- 0.5 amp to 50 amp ratings may be used as on/off switch.
- · Cannot be reset against overload.
- W23 has visible trip indicator band.
- Screw termination.
- Trip-free operation.

Agency Approvals

W23 and W31 are UL 1077 Recognized as Supplementary Protectors. File E69543, and CSA Accepted as Supplementary Protectors (Appliance Component Protectors), File LR15734.

Users should thoroughly review the technical data before selecting a product part number. It is recommended that users also seek out the pertinent approvals files of the agencies/laboratories and review them to ensure the product meets the requirements for a given application.

Mechanical/Environmental Data

Current

Rating

in Amps

5 10

15

20

30

40

50

Endurance Cycling: More than 6,000 cycles at 100% of rating, or 10,000

mechanical cycles.

Maximum Resistance vs. Current Rating @ +25°C

Maximum

Resistance

in Ohms ± 30%

.61

.03

.01

.006

004

.003

002

002

Humidity: Will meet requirements of MIL-STD-202, Method 106 Salt Spray: Will meet requirements of MIL-STD-202, Method 101, Test

Condition B

Termination: Two #8-32 screw terminals.

Mounting: W23 — Threaded bushing, 3/8" (9.53mm) diameter.
W31 — Threaded bushing, 15/32" (11.91mm) diameter, with or

without anti-rotation flats.

Weight: Less than 2 oz. (57g).

Electrical Data @ +25°C

Calibration: Will continuously carry 100% of rating, may trip between 101% and 134% of rating at 25°C. Must trip at 135% in

Maximum Operating Voltages: 50VDC or 240VAC (to 400 Hz).

Interrupting Capacity:

With 4X Max. Series Fuse Protection

0.5-50 amp models - 1000 amps at 240VAC. 30-50 amp models - 1000 amps at 50VDC.

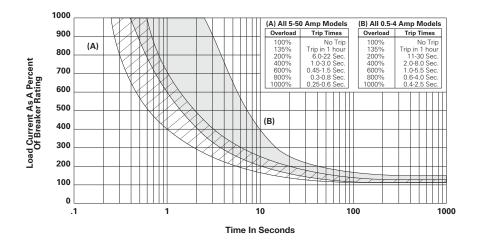
Without 4X Max. Series Fuse Protection

0.5-25 amp models - 2000 amps at 50VDC. 10-20 amp models — 2000 amps at 120VAC

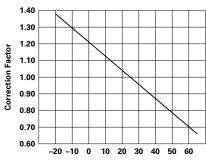
Resettable Overload Capacity: Ten times rated current.

Dielectric Strength: Over 1,500 volts RMS.

Time Vs. Current Trip Curve @ +25°C



Ambient Compensation Chart

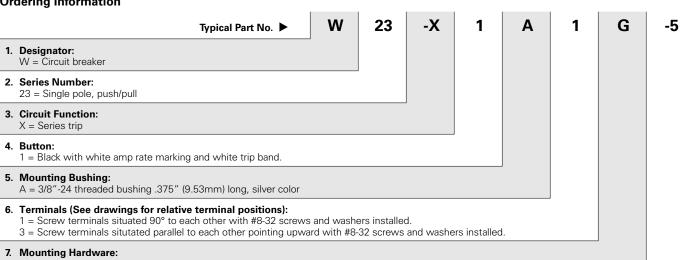


Ambient Temperature In Degrees Centigrade (°C)

To use this chart: Read up from the ambient temperature to the curve, and across to find a correction factor. Multiply the breaker rating by the correction factor to determine the compensated rating. Calculate the overloads in terms of the compensated rating to use the published trip curve.



Ordering Information



A = Knurled nut/hex nut installed

G = Two hex nuts/lockwasher installed

Z = No mounting hardware supplied

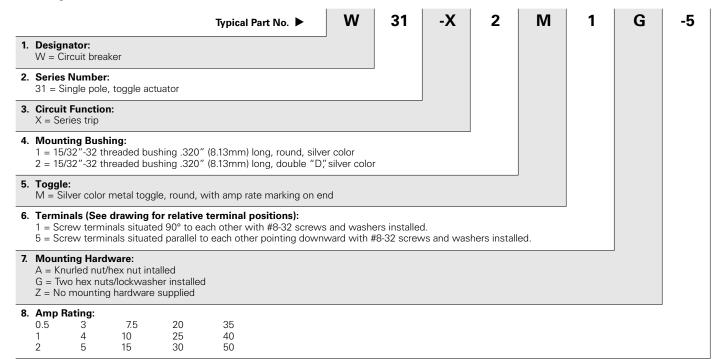
8. Amp Rating:

0.5	3	7.5	20	35
1	4	10	25	40
2	5	15	30	50

Stock Items - Authorized distributors are more likely to stock the following items.

W23-X1A1G-1	W23-X1A1G-7.50	W23-X1A1G-25	W23-X1A1G-50
W23-X1A1G-2	W23-X1A1G-10	W23-X1A1G-30	
W23-X1A1G-3	W23-X1A1G-15	W23-X1A1G-35	
W23-X1A1G-5	W23-X1A1G-20	W23-X1A1G-40	

Ordering Information



Stock Items - Authorized distributors are more likely to stock the following items.

W31-X2M1G-1	W31-X2M1G-10	W31-X2M1G-35
W31-X2M1G-2	W31-X2M1G-15	W31-X2M1G-40
W31-X2M1G-3	W31-X2M1G-20	W31-X2M1G-50
W31-X2M1G-5	W31-X2M1G-25	
W31-X2M1G-7.50	W31-X2M1G-30	

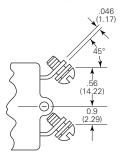


W23 Outline Dimensions

Terminal Style 1

#8-32 SCREWS WITH WASHERS RESET BUTTON IN "ON" POSITION WHITE INDICATOR NOT VISIBLE _.690 <u>_</u> (17.53) 3/8-24 THREADED BUSHING AMP RATING .250 (6.35).56 1.384 (35.15) .315 Dia. 5 (8.00) .46 (11.7) .03 MAX. 388 (.76)(9.86) 0 570 1.600 → (14.48) (40.64)1.890 046 (48.01)2.035 (51.69)

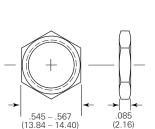
Terminal Style 3



All dimensions are given as inches (mm)

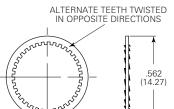
Mounting Hardware

Hex Nut (55-001D - Silver Color)





(88-006B - Silver Color)

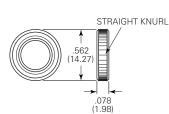


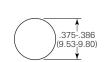
.018

(.46)

Knurled Nut

(55-008A - Silver Color)

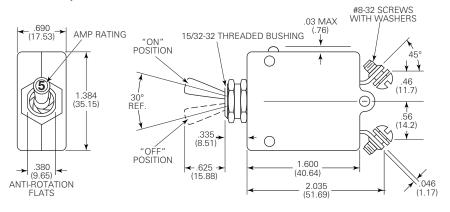




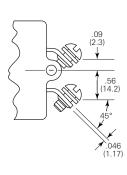
Suggested Mounting Holes

W31 Outline Dimensions

Terminal Style 1



Terminal Style 5



Mounting Hardware

Hex Nut

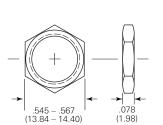
(55-001B - Silver Color)

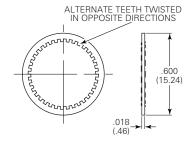
Lockwasher

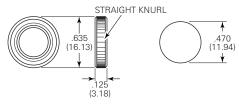
(88-002B - Silver Color)

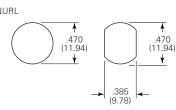
Knurled Nut

(55-010B - Silver Color)









Suggested Mounting Holes