



W28 series is UL 1077 Recognized as Supplementary Protectors, File E69543, and CSA Accepted as Supplementary Protectors (Appliance Component Protectors), File LR15734. W28 breakers are VDE approved for use in office equipment (AC loads only) and provides 8mm isolation. 16 amp and 20 amp models do not have VDE approvals at present. CCC mark compliant, certificate

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 confirm the product meets the

# W28 series

## Push to Reset Fuseholder-Type Thermal P&B Circuit Breaker



Note: VDE not available on 16A and 20A W28 only.

#### Features

- Push to reset.
- · Approved to many international standards.
- Replaces slow blow glass cartridge fuse.
- · Labor-saving snap-in mounting.

Agency Approvals

2004010307135992.

• Button extends for visual trip indication.

## 2 amp models. Ten times rated current for 3 through 20 amp models. Reset Time: 180 seconds max. for 0.25 through 2 amp models. 5 to 30 seconds for 3 through 20 amp models.

Resettable Overload Capacity: Six times rated current for 0.25 through

### Typical Resistance vs. Current Rating @ +25°C

Current Rating in Amps	Typical Resistance in Ohms	Current Rating in Amps	Typical Resistance in Ohms
0.25	14.0	8.0	0.016
0.50	3.55	9.0	0.014
0.75	2.0	10.0	0.011
1.0	0.89	11.0	0.01
2.0	0.17	12.0	0.009
3.0	0.069	13.0	0.009
4.0	0.043	14.0	0.007
5.0	0.030	15.0	0.007
6.0	0.026	16.0	0.007
7.0	0.017	20.0	0.006

## Electrical Data @ 25°C

requirements for a given application.

Calibration: Will continuously carry 100% of rating.

- 3-20 amp models may trip between 101% and 134%, but must trip at 135% of rating within one hour at +25°C. 0.25-2 amp models - may trip between 101% and 174%, but
- must trip at 175% of rating within one hour at +25°C. Dielectric Strength: Over 1,500 volts RMS.

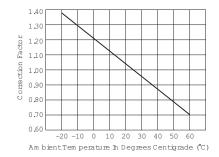
Maximum Operating Voltages: 32VDC; 250VAC, 50/60 Hz.

Interrupt Capacity: 1,000 amps at 250VAC, 50/60 Hz. and 32VDC in accordance with UL standard 1077.

## Mechanical/Environmental Data

Termination: .250" (6.35mm) quick connects. Soldering to terminals is not recommended. Mounting: Snaps into panel from front. See Recommended Panel Cutouts. Approximate Weight: 0.35 oz. (10g).

### **Ambient Compensation Chart**



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. Do not use these devices outside their specified

operating temperature ranges.

(A) All 3-20 Amp Models (B) All 0.25-2 Amp Models 900 Overload Trip Times Overload Trip Times 100% No Trip 100% No Trip Trip in 1 hour 4.5-28.0 Sec. 1.0-6.5 Sec. 0.4-4.0 Sec. Trip in 1 hour 2.2-15.0 Sec. 135% 175% 200% 800 200% Load Current As A Percent Of Breaker Rating 0.55-1.8 Sec. 0.27-0.7 Sec. 0.17-0.45 Sec. 0.12-0.3 Sec. 100% 400% 400% 600% 800% 1000% 700 (A) 600 500 400 (B) 300 200 135 100 0

10

**Time In Seconds** 

.1

Dimensions are in inches over (millimeters) unless otherwise specified

1

Dimensions are shown for reference purposes only. Specifications and avail-ability subject to change.

100

USA: 1-800-522-675 Canada: 1-905-470-4425 Mexico: 01-800-733-8926 C. America: 52-55-1106-0803

1000

South America: 55-11-2103-6000 Hong Kong: 852-2735-1628 Japan: 81-44-844-8013 UK: 44-8706-080208

## Time vs. Current Trip Curve @ +25°C 1000

Catalog 13 Catalog 13 Issued 3-03 (PDF		Potter & Brumfield
Ordering Information	W 28 -X Q 1	A -5
Typical Part Number > 1. Designator: W = Circuit breaker		A -3
2. Series Number: 28 = Single Pole Fuseholder Type		
3. Circuit Function: X = Series Trip, Push-to-Reset Button		
<ul> <li>4. Terminal Type and Mounting: Q = .250" (6.35mm) Quick Connect will mount in .032"062" (.813mm – 1.574mm) T = .250" (6.35mm) Quick Connect will mount in .075"105" (1.905mm – 2.667mm) For panel thicknesses other than above, order "Q" type and 55-025B Internal Tooth 5. Bezel Color:</li> </ul>	) thick panel.	
1 = Black with White Rate Marking       11 = Black with No F         2 = Red with Black Rate Marking       21 = Red with No Rate Marking         B = Black with White "Reset" Marked On Bezel (No Rate Marking)	Rate Marking Consult factory for other bezel colors.	
6. Button Color: A = Black B = Red Consult factory for other button colors.		
7. Amp Rating: 0.25 0.75 2 4 6 8 10 12 14 20 0.50 1 3 5 7 9 11 13 16		
Note: All standard part numbers in this series are RoHS compliant.		
Stock Items – Authorized distributors are more likely to stock the followir           W28-XQ1A-0.25         W28-XQ1A-1         W28-XQ1A-4         W28-XQ1A-7           W28-XQ1A-0.50         W28-XQ1A-2         W28-XQ1A-5         W28-XQ1A-8           W28-XQ1A-0.50         W28-XQ1A-3         W28-XQ1A-6         W28-XQ1A-10	W28-XQ1A-12 W28-XT1A-10 W28-XQ1A-15 W28-XT1A-12	
Outline Dimensions Push-to-Reset Type		
<b>i</b> the set of the	Optional Internal Tooth Push-On Lockwasher         For panels greater than .105 (2.67) thickness       55-0258         INTERNAL TOO       STERNAL TOO         PUSH-ON LOCKW       PUSH-ON LOCKW         For panels greater than .105       Stermer         Disclaimer       Sterment the second push of the s	OTH /ASHER " (2.67) thickness uracy of the infor- or-free, nor does at the information is ation contained mplied warranties
	regarding the information contained herein, including, but n implied warranties of merchantability or fitness for a particula The dimensions in this catalog are for reference purposes on to change without notice. Specifications are subject to change Consult TE for the latest dimensions and design specification	ar purpose. Iy and are subject ge without notice.

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# **Mouser Electronics**

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

TE Connectivity: W28-XT1A-5