

## Circuit Breaker Selection Guide, continued



**WMZ UL 489**  
Miniature Circuit Breakers



**WMZS UL 1077**  
Miniature Circuit Breakers—  
Supplementary Protectors

## Description

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## General Applications

Used to provide branch circuit protection in cable-in/out DIN-Rail mount applications.

Used to provide overcurrent protection where branch protection (for example UL 489 MCCB) is already provided or not required. Replacement for fuses used as supplementary protectors.

## Technical Data

Maximum current rating	40A	63A
Maximum voltage—AC	480/277 Vac (240/415 Vac IEC)	480/277 Vac
Maximum voltage—DC	48 Vdc	65 Vac Single-pole 130 Vac Two-pole
Poles	1, 2, 3	1, 2, 3
Max. interrupting capacities	10 kA UL/CSA; 15 kA IEC/EN 60947-2	IEC 240/415V 10 kA UL/CSA 120V 10 kA 240V 10 kA 277V 6 kA 480V 6 kA
See individual catalogs for limitations and back-up protection requirements.		

## Approvals

UL 489  
CE; IEC/EN 60947-2  
CSA 22.2

UL 1077  
CE; IEC/EN 60947-2; IEC/EN 60898  
CSA 22.2 235

## Environmental Data

Humidity	Acc. IEC 60068-2 (25° to 55°C/ 77° to 131°F, 90–95% RH)	—
Shock	Acc. IEC 60068-2-27 (40g half sine wave for 10 ms—3 axes) (15g half sine wave for 20 ms—3 axes)	—
Vibration	Acc. to IEC 60068-2-6 5–100 Hz/1.0 mm/0.7g (3 axes)	—
Operating temperature	30°C (86°F)	—
Dielectric strength	1960 Vac (acc. to UL 489)	—
Insulation resistance	100M ohms at 500 Vdc	—
Endurance/life	>20,000 operations	—
Approximate weight	Single-pole—0.27 lbs (121.0g) Two-pole—0.53 lbs (242.0g) Three-pole—0.80 lbs (363.0g)	Single-pole—0.26 lbs (120.0g) Two-pole—0.54 lbs (244.9g) Three-pole—0.83 lbs (376.5g)
Mounting contribution	35 mm DIN rail mountable	35 mm DIN rail mountable

For our complete product offering, see Volume 4—Circuit Protection, CA08100005E.

WMZ UL 489 Miniature Circuit Breakers



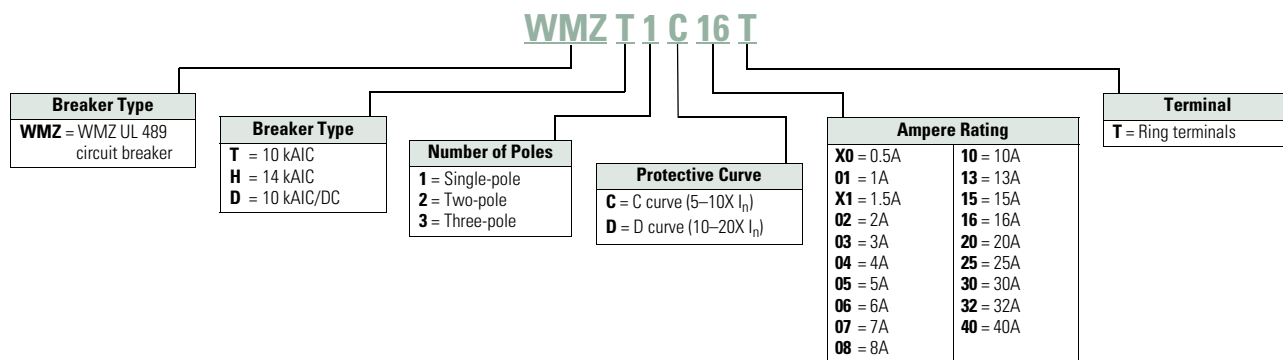
Features

- UL 489 listed DIN-rail mounted miniature circuit breakers up to 40A current rating
- Current limiting design provides fast short circuit interruption that reduces let-through energy
- Thermal-magnetic overcurrent protection available with C and D curve level of protection
  - C curve—5–10X  $I_n$ —for medium inrush startup currents
  - D curve—10–20X  $I_n$ —provides a magnetic range to allow for high inrush levels
- Ring-tongue terminals available
- Complete line of accessories

Catalog Number Selection

WMZ UL 489 Miniature Circuit Breakers

WMZ UL 489



## Product Selection

## WMZT UL 489 Circuit Breakers

Ampere Rating	C Curve (5–10X I <sub>n</sub> Current Rating)			D Curve (10–20X I <sub>n</sub> Current Rating)		
	Single-Pole <sup>①</sup> Catalog Number	Two-Pole <sup>①</sup> Catalog Number	Three-Pole <sup>①</sup> Catalog Number	Single-Pole <sup>①</sup> Catalog Number	Two-Pole <sup>①</sup> Catalog Number	Three-Pole <sup>①</sup> Catalog Number
0.5	WMZT1CX0	WMZT2CX0	WMZT3CX0	WMZT1DX0	WMZT2DX0	WMZT3DX0
1	WMZT1C01	WMZT2C01	WMZT3C01	WMZT1D01	WMZT2D01	WMZT3D01
1.5	WMZT1CX1	WMZT2CX1	WMZT3CX1	WMZT1DX1	WMZT2DX1	WMZT3DX1
2	WMZT1C02	WMZT2C02	WMZT3C02	WMZT1D02	WMZT2D02	WMZT3D02
3	WMZT1C03	WMZT2C03	WMZT3C03	WMZT1D03	WMZT2D03	WMZT3D03
4	WMZT1C04	WMZT2C04	WMZT3C04	WMZT1D04	WMZT2D04	WMZT3D04
5	WMZT1C05	WMZT2C05	WMZT3C05	WMZT1D05	WMZT2D05	WMZT3D05
6	WMZT1C06	WMZT2C06	WMZT3C06	WMZT1D06	WMZT2D06	WMZT3D06
7	WMZT1C07	WMZT2C07	WMZT3C07	WMZT1D07	WMZT2D07	WMZT3D07
8	WMZT1C08	WMZT2C08	WMZT3C08	WMZT1D08	WMZT2D08	WMZT3D08
10	WMZT1C10	WMZT2C10	WMZT3C10	WMZT1D10	WMZT2D10	WMZT3D10
13	WMZT1C13	WMZT2C13	WMZT3C13	WMZT1D13	WMZT2D13	WMZT3D13
15	WMZT1C15	WMZT2C15	WMZT3C15	WMZT1D15	WMZT2D15	WMZT3D15
16	WMZT1C16	WMZT2C16	WMZT3C16	WMZT1D16	WMZT2D16	WMZT3D16
20	WMZT1C20	WMZT2C20	WMZT3C20	WMZT1D20	WMZT2D20	WMZT3D20
25	WMZT1C25	WMZT2C25	WMZT3C25	WMZT1D25	WMZT2D25	WMZT3D25
30	WMZT1C30	WMZT2C30	WMZT3C30	WMZT1D30	WMZT2D30	WMZT3D30
32	WMZT1C32	WMZT2C32	WMZT3C32	WMZT1D32	WMZT2D32	WMZT3D32
40	WMZT1C40	WMZT2C40	WMZT3C40	WMZT1D40	WMZT2D40	WMZT3D40

## WMZH UL 489 Circuit Breakers—14 kAIC

Amperes	Single-Pole Catalog Number	Two-Pole Catalog Number	Three-Pole Catalog Number
<b>C Curve (5–10X I<sub>n</sub> Current Rating)</b>			
15	WMZH1C15	WMZH2C15	WMZH3C15
16	WMZH1C16	WMZH2C16	WMZH3C16
20	WMZH1C20	WMZH2C20	WMZH3C20
25	WMZH1C25	WMZH2C25	WMZH3C25
<b>D Curve (10–20X I<sub>n</sub> Current Rating)</b>			
13	WMZH1D13	WMZH2D13	WMZH3D13
15	WMZH1D15	WMZH2D15	WMZH3D15
16	WMZH1D16	WMZH2D16	WMZH3D16
20	WMZH1D20	WMZH2D20	WMZH3D20

## WMZH UL 489 Circuit Breakers with Ring-Tongue Terminals

Amperes	Single-Pole Catalog Number	Two-Pole Catalog Number	Three-Pole Catalog Number
<b>C Curve (5–10X I<sub>n</sub> Current Rating)</b>			
15	WMZH1C15T	WMZH2C15T	WMZH3C15T
16	WMZH1C16T	WMZH2C16T	WMZH3C16T
20	WMZH1C20T	WMZH2C20T	WMZH3C20T
25	WMZH1C25T	WMZH2C25T	WMZH3C25T
<b>D Curve (10–20X I<sub>n</sub> Current Rating)</b>			
13	WMZH1D13T	WMZH2D13T	WMZH3D13T
15	WMZH1D15T	WMZH2D15T	WMZH3D15T
16	WMZH1D16T	WMZH2D16T	WMZH3D16T
20	WMZH1D20T	WMZH2D20T	WMZH3D20T

## WMZD UL 489 Circuit Breakers—10 kAIC at 125 Vdc per Pole

Amperes	Single-Pole Catalog Number	Two-Pole Catalog Number
<b>C Curve (5–10X I<sub>n</sub> Current Rating)</b>		
2	WMZD1C02	WMZD2C02
3	WMZD1C03	WMZD2C03
4	WMZD1C04	WMZD2C04
5	WMZD1C05	WMZD2C05
6	WMZD1C06	WMZD2C06
7	WMZD1C07	WMZD2C07
8	WMZD1C08	WMZD2C08
10	WMZD1C10	WMZD2C10
13	WMZD1C13	WMZD2C13
15	WMZD1C15	WMZD2C15
16	WMZD1C16	WMZD2C16
20	WMZD1C20	WMZD2C20
25	WMZD1C25	WMZD2C25
30	WMZD1C30	WMZD2C30
32	WMZD1C32	WMZD2C32
40	WMZD1C40	WMZD2C40

**Note**

① For ring-tongue terminals, ADD suffix “T” to above catalog number.