

## UMBW-UL489 and UL1077 Listed

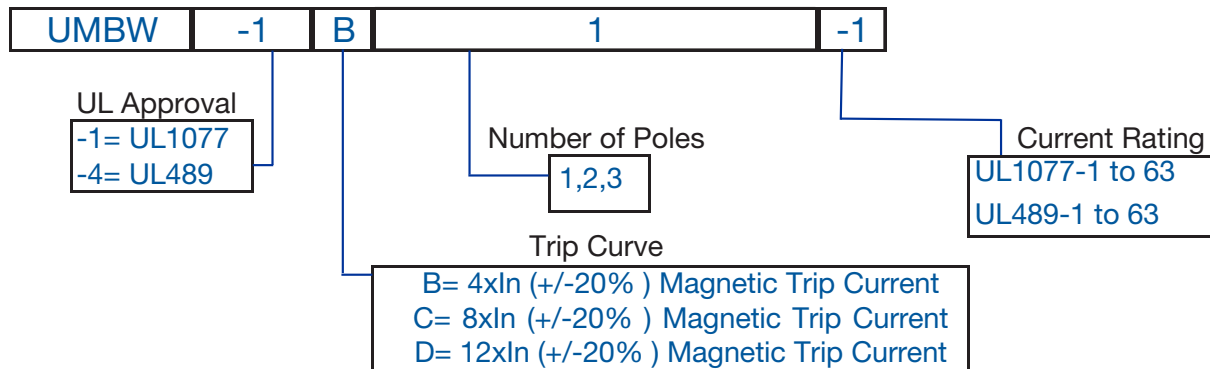
Introducing the New WEG UMBW Series Thermal-Magnetic Miniature Circuit Breakers. This new offering includes both UL489 and UL1077 approvals to provide a solution for circuit & equipment protection in Industrial Electrical equipment. The UMBW has a range from 1 to 63Amps, available in 1,2, 3 poles, and B, C, D trip curves.



### Standard Features

- AC & DC voltages available in one Series
- UL489 Branch Circuit protective device
- UL1077 Equipment protection
- 17.5mm width per pole
- Visual status indication
- Positive trip-free snap action mechanism to ensure reliable switching
- Cuttable Bus Bar connecting system



### UMBW Catalog Number Sequence




# Poles	Ampacity	Catalog Number			Max Voltage	Multiplier
		B CURVE	C CURVE	D CURVE		
<b>1 POLE</b> 	1	UMBW-1B1-1	UMBW-1C1-1	UMBW-1D1-1	277 VAC	Z12
	1.5	UMBW-1B1-1.5 <sup>1</sup>	UMBW-1C1-1.5 <sup>1</sup>	UMBW-1D1-1.5 <sup>1</sup>		
	2	UMBW-1B1-2	UMBW-1C1-2	UMBW-1D1-2		
	3	UMBW-1B1-3	UMBW-1C1-3	UMBW-1D1-3		
	4	UMBW-1B1-4	UMBW-1C1-4	UMBW-1D1-4		
	5	UMBW-1B1-5	UMBW-1C1-5	UMBW-1D1-5		
	6	UMBW-1B1-6	UMBW-1C1-6	UMBW-1D1-6		
	7	UMBW-1B1-7 <sup>1</sup>	UMBW-1C1-7 <sup>1</sup>	UMBW-1D1-7 <sup>1</sup>		
	8	UMBW-1B1-8 <sup>1</sup>	UMBW-1C1-8 <sup>1</sup>	UMBW-1D1-8 <sup>1</sup>		
	10	UMBW-1B1-10	UMBW-1C1-10	UMBW-1D1-10		
	12	UMBW-1B1-12	UMBW-1C1-12	UMBW-1D1-12		
	13	UMBW-1B1-13 <sup>1</sup>	UMBW-1C1-13 <sup>1</sup>	UMBW-1D1-13 <sup>1</sup>		
	15	UMBW-1B1-15	UMBW-1C1-15	UMBW-1D1-15		
	16	UMBW-1B1-16	UMBW-1C1-16	UMBW-1D1-16		
	20	UMBW-1B1-20	UMBW-1C1-20	UMBW-1D1-20		
	25	UMBW-1B1-25	UMBW-1C1-25	UMBW-1D1-25		
	30	UMBW-1B1-30 <sup>1</sup>	UMBW-1C1-30 <sup>1</sup>	UMBW-1D1-30 <sup>1</sup>		
	32	UMBW-1B1-32	UMBW-1C1-32	UMBW-1D1-32		
	35	UMBW-1B1-35 <sup>1</sup>	UMBW-1C1-35 <sup>1</sup>	UMBW-1D1-35 <sup>1</sup>		
	40	UMBW-1B1-40	UMBW-1C1-40	UMBW-1D1-40		
50	UMBW-1B1-50	UMBW-1C1-50	UMBW-1D1-50			
60	UMBW-1B1-60 <sup>1</sup>	UMBW-1C1-60 <sup>1</sup>	UMBW-1D1-60 <sup>1</sup>			
63	UMBW-1B1-63	UMBW-1C1-63	UMBW-1D1-63			
<b>2 POLE</b> 	1	UMBW-1B2-1	UMBW-1C2-1	UMBW-1D2-1	277/480 VAC	Z12
	1.5	UMBW-1B2-1.5 <sup>1</sup>	UMBW-1C2-1.5 <sup>1</sup>	UMBW-1D2-1.5 <sup>1</sup>		
	2	UMBW-1B2-2	UMBW-1C2-2	UMBW-1D2-2		
	3	UMBW-1B2-3	UMBW-1C2-3	UMBW-1D2-3		
	4	UMBW-1B2-4	UMBW-1C2-4	UMBW-1D2-4		
	5	UMBW-1B2-5	UMBW-1C2-5	UMBW-1D2-5		
	6	UMBW-1B2-6	UMBW-1C2-6	UMBW-1D2-6		
	7	UMBW-1B2-7 <sup>1</sup>	UMBW-1C2-7 <sup>1</sup>	UMBW-1D2-7 <sup>1</sup>		
	8	UMBW-1B2-8 <sup>1</sup>	UMBW-1C2-8 <sup>1</sup>	UMBW-1D2-8 <sup>1</sup>		
	10	UMBW-1B2-10	UMBW-1C2-10	UMBW-1D2-10		
	12	UMBW-1B2-12	UMBW-1C2-12	UMBW-1D2-12		
	13	UMBW-1B2-13 <sup>1</sup>	UMBW-1C2-13 <sup>1</sup>	UMBW-1D2-13 <sup>1</sup>		
	15	UMBW-1B2-15 <sup>1</sup>	UMBW-1C2-15 <sup>1</sup>	UMBW-1D2-15 <sup>1</sup>		
	16	UMBW-1B2-16	UMBW-1C2-16	UMBW-1D2-16		
	20	UMBW-1B2-20	UMBW-1C2-20	UMBW-1D2-20		
	25	UMBW-1B2-25	UMBW-1C2-25	UMBW-1D2-25		
	30	UMBW-1B2-30 <sup>1</sup>	UMBW-1C2-30 <sup>1</sup>	UMBW-1D2-30 <sup>1</sup>		
	32	UMBW-1B2-32	UMBW-1C2-32	UMBW-1D2-32		
	35	UMBW-1B2-35 <sup>1</sup>	UMBW-1C2-35 <sup>1</sup>	UMBW-1D2-35 <sup>1</sup>		
	40	UMBW-1B2-40	UMBW-1C2-40	UMBW-1D2-40		
50	UMBW-1B2-50	UMBW-1C2-50	UMBW-1D2-50			
60	UMBW-1B2-60 <sup>1</sup>	UMBW-1C2-60 <sup>1</sup>	UMBW-1D2-60 <sup>1</sup>			
63	UMBW-1B2-63	UMBW-1C2-63	UMBW-1D2-63			

1) Non-stocked. Contact WEG for availability.



## UMBW

### UL1077

# Poles	Ampacity	Catalog Number			Max Voltage		Multiplier
		B CURVE	C CURVE	D CURVE			
 <b>3 POLE</b>	1	UMBW-1B3-1	UMBW-1C3-1	UMBW-1D3-1	277/480 VAC	Z12	
	1.5	UMBW-1B3-1.5 <sup>1</sup>	UMBW-1C3-1.5 <sup>1</sup>	UMBW-1D3-1.5 <sup>1</sup>			
	2	UMBW-1B3-2	UMBW-1C3-2	UMBW-1D3-2			
	3	UMBW-1B3-3 <sup>1</sup>	UMBW-1C3-3 <sup>1</sup>	UMBW-1D3-3 <sup>1</sup>			
	4	UMBW-1B3-4	UMBW-1C3-4	UMBW-1D3-4			
	5	UMBW-1B3-5 <sup>1</sup>	UMBW-1C3-5 <sup>1</sup>	UMBW-1D3-5 <sup>1</sup>			
	6	UMBW-1B3-6	UMBW-1C3-6	UMBW-1D3-6			
	7	UMBW-1B3-7 <sup>1</sup>	UMBW-1C3-7 <sup>1</sup>	UMBW-1D3-7 <sup>1</sup>			
	8	UMBW-1B3-8 <sup>1</sup>	UMBW-1C3-8 <sup>1</sup>	UMBW-1D3-8 <sup>1</sup>			
	10	UMBW-1B3-10	UMBW-1C3-10	UMBW-1D3-10			
	12	UMBW-1B3-12 <sup>1</sup>	UMBW-1C3-12 <sup>1</sup>	UMBW-1D3-12 <sup>1</sup>			
	13	UMBW-1B3-13 <sup>1</sup>	UMBW-1C3-13 <sup>1</sup>	UMBW-1D3-13 <sup>1</sup>			
	15	UMBW-1B3-15 <sup>1</sup>	UMBW-1C3-15 <sup>1</sup>	UMBW-1D3-15 <sup>1</sup>			
	16	UMBW-1B3-16	UMBW-1C3-16	UMBW-1D3-16			
	20	UMBW-1B3-20	UMBW-1C3-20	UMBW-1D3-20			
	25	UMBW-1B3-25	UMBW-1C3-25	UMBW-1D3-25			
	30	UMBW-1B3-30 <sup>1</sup>	UMBW-1C3-30 <sup>1</sup>	UMBW-1D3-30 <sup>1</sup>			
	32	UMBW-1B3-32	UMBW-1C3-32	UMBW-1D3-32			
	35	UMBW-1B3-35 <sup>1</sup>	UMBW-1C3-35 <sup>1</sup>	UMBW-1D3-35 <sup>1</sup>			
	40	UMBW-1B3-40	UMBW-1C3-40	UMBW-1D3-40			
50	UMBW-1B3-50	UMBW-1C3-50	UMBW-1D3-50				
60	UMBW-1B3-60 <sup>1</sup>	UMBW-1C3-60 <sup>1</sup>	UMBW-1D3-60 <sup>1</sup>				
63	UMBW-1B3-63	UMBW-1C3-63	UMBW-1D3-63				


1) Non-stocked. Contact WEG for availability.

### UL489

# Poles	Ampacity	Catalog Number			Max Voltage	List Price	Multiplier
		B CURVE	C CURVE	D CURVE			
<b>1 POLE</b> 	1	UMBW-4B1-1	UMBW-4C1-1	UMBW-4D1-1	277 VAC /60 VDC		Z12
	1.5	UMBW-4B1-1.5 <sup>1</sup>	UMBW-4C1-1.5 <sup>1</sup>	UMBW-4D1-1.5 <sup>1</sup>			
	2	UMBW-4B1-2	UMBW-4C1-2	UMBW-4D1-2			
	3	UMBW-4B1-3 <sup>1</sup>	UMBW-4C1-3 <sup>1</sup>	UMBW-4D1-3 <sup>1</sup>			
	4	UMBW-4B1-4	UMBW-4C1-4	UMBW-4D1-4			
	5	UMBW-4B1-5 <sup>1</sup>	UMBW-4C1-5 <sup>1</sup>	UMBW-4D1-5 <sup>1</sup>			
	6	UMBW-4B1-6	UMBW-4C1-6	UMBW-4D1-6			
	7	UMBW-4B1-7 <sup>1</sup>	UMBW-4C1-7 <sup>1</sup>	UMBW-4D1-7 <sup>1</sup>			
	8	UMBW-4B1-8 <sup>1</sup>	UMBW-4C1-8 <sup>1</sup>	UMBW-4D1-8 <sup>1</sup>			
	10	UMBW-4B1-10	UMBW-4C1-10	UMBW-4D1-10			
	12	UMBW-4B1-12 <sup>1</sup>	UMBW-4C1-12 <sup>1</sup>	UMBW-4D1-12 <sup>1</sup>			
	13	UMBW-4B1-13 <sup>1</sup>	UMBW-4C1-13 <sup>1</sup>	UMBW-4D1-13 <sup>1</sup>			
	15	UMBW-4B1-15	UMBW-4C1-15	UMBW-4D1-15			
	16	UMBW-4B1-16	UMBW-4C1-16	UMBW-4D1-16			
	20	UMBW-4B1-20	UMBW-4C1-20	UMBW-4D1-20			
	25	UMBW-4B1-25	UMBW-4C1-25	UMBW-4D1-25			
	30	UMBW-4B1-30 <sup>1</sup>	UMBW-4C1-30 <sup>1</sup>	UMBW-4D1-30 <sup>1</sup>			
	32	UMBW-4B1-32	UMBW-4C1-32	UMBW-4D1-32			
	35	UMBW-4B1-35 <sup>1</sup>	UMBW-4C1-35 <sup>1</sup>	UMBW-4D1-35 <sup>1</sup>			
	40	UMBW-4B1-40 <sup>1</sup>	UMBW-4C1-40 <sup>1</sup>	UMBW-4D1-40 <sup>1</sup>			
50	UMBW-4B1-50 <sup>1</sup>	UMBW-4C1-50 <sup>1</sup>	UMBW-4D1-50 <sup>1</sup>				
60	UMBW-4B1-60 <sup>1</sup>	UMBW-4C1-60 <sup>1</sup>	UMBW-4D1-60 <sup>1</sup>				
63	UMBW-4B1-63 <sup>1</sup>	UMBW-4C1-63 <sup>1</sup>	UMBW-4D1-63 <sup>1</sup>				
<b>2 POLE</b> 	1	UMBW-4B2-1	UMBW-4C2-1	UMBW-4D2-1	277/480 VAC 125 VDC		Z12
	1.5	UMBW-4B2-1.5 <sup>1</sup>	UMBW-4C2-1.5 <sup>1</sup>	UMBW-4D2-1.5 <sup>1</sup>			
	2	UMBW-4B2-2	UMBW-4C2-2	UMBW-4D2-2			
	3	UMBW-4B2-3 <sup>1</sup>	UMBW-4C2-3 <sup>1</sup>	UMBW-4D2-3 <sup>1</sup>			
	4	UMBW-4B2-4	UMBW-4C2-4	UMBW-4D2-4			
	5	UMBW-4B2-5	UMBW-4C2-5	UMBW-4D2-5			
	6	UMBW-4B2-6	UMBW-4C2-6	UMBW-4D2-6			
	7	UMBW-4B2-7 <sup>1</sup>	UMBW-4C2-7 <sup>1</sup>	UMBW-4D2-7 <sup>1</sup>			
	8	UMBW-4B2-8 <sup>1</sup>	UMBW-4C2-8 <sup>1</sup>	UMBW-4D2-8 <sup>1</sup>			
	10	UMBW-4B2-10	UMBW-4C2-10	UMBW-4D2-10			
	12	UMBW-4B2-12	UMBW-4C2-12	UMBW-4D2-12			
	13	UMBW-4B2-13 <sup>1</sup>	UMBW-4C2-13 <sup>1</sup>	UMBW-4D2-13 <sup>1</sup>			
	15	UMBW-4B2-15 <sup>1</sup>	UMBW-4C2-15 <sup>1</sup>	UMBW-4D2-15 <sup>1</sup>			
	16	UMBW-4B2-16	UMBW-4C2-16	UMBW-4D2-16			
	20	UMBW-4B2-20	UMBW-4C2-20	UMBW-4D2-20			
	25	UMBW-4B2-25	UMBW-4C2-25	UMBW-4D2-25			
	30	UMBW-4B2-30 <sup>1</sup>	UMBW-4C2-30 <sup>1</sup>	UMBW-4D2-30 <sup>1</sup>			
	32	UMBW-4B2-32	UMBW-4C2-32	UMBW-4D2-32			
	35	UMBW-4B2-35 <sup>1</sup>	UMBW-4C2-35 <sup>1</sup>	UMBW-4D2-35 <sup>1</sup>			
	40	UMBW-4B2-40 <sup>1</sup>	UMBW-4C2-40 <sup>1</sup>	UMBW-4D2-40 <sup>1</sup>			
50	UMBW-4B2-50 <sup>1</sup>	UMBW-4C2-50 <sup>1</sup>	UMBW-4D2-50 <sup>1</sup>				
60	UMBW-4B2-60 <sup>1</sup>	UMBW-4C2-60 <sup>1</sup>	UMBW-4D2-60 <sup>1</sup>				
63	UMBW-4B2-63 <sup>1</sup>	UMBW-4C2-63 <sup>1</sup>	UMBW-4D2-63 <sup>1</sup>				

UMBW

UL489

# Poles	Ampacity	Catalog Number			Max Voltage	List Price	Multiplier
		B CURVE	C CURVE	D CURVE			
<b>3 POLE</b> 	1	UMBW-4B3-1	UMBW-4C3-1	UMBW-4D3-1	277/480 VAC 125 VDC		Z12
	1.5	UMBW-4B3-1.5 <sup>1</sup>	UMBW-4C3-1.5 <sup>1</sup>	UMBW-4D3-1.5 <sup>1</sup>			
	2	UMBW-4B3-2	UMBW-4C3-2	UMBW-4D3-2			
	3	UMBW-4B3-3 <sup>1</sup>	UMBW-4C3-3 <sup>1</sup>	UMBW-4D3-3 <sup>1</sup>			
	4	UMBW-4B3-4	UMBW-4C3-4	UMBW-4D3-4			
	5	UMBW-4B3-5	UMBW-4C3-5	UMBW-4D3-5			
	6	UMBW-4B3-6	UMBW-4C3-6	UMBW-4D3-6			
	7	UMBW-4B3-7 <sup>1</sup>	UMBW-4C3-7 <sup>1</sup>	UMBW-4D3-7 <sup>1</sup>			
	8	UMBW-4B3-8 <sup>1</sup>	UMBW-4C3-8	UMBW-4D3-8			
	10	UMBW-4B3-10	UMBW-4C3-10	UMBW-4D3-10			
	12	UMBW-4B3-12 <sup>1</sup>	UMBW-4C3-12 <sup>1</sup>	UMBW-4D3-12 <sup>1</sup>			
	13	UMBW-4B3-13 <sup>1</sup>	UMBW-4C3-13 <sup>1</sup>	UMBW-4D3-13 <sup>1</sup>			
	15	UMBW-4B3-15	UMBW-4C3-15	UMBW-4D3-15			
	16	UMBW-4B3-16	UMBW-4C3-16	UMBW-4D3-16			
	20	UMBW-4B3-20	UMBW-4C3-20	UMBW-4D3-20			
	25	UMBW-4B3-25	UMBW-4C3-25	UMBW-4D3-25			
	30	UMBW-4B3-30 <sup>1</sup>	UMBW-4C3-30 <sup>1</sup>	UMBW-4D3-30 <sup>1</sup>			
32	UMBW-4B3-32	UMBW-4C3-32	UMBW-4D3-32				
35	UMBW-4B3-35 <sup>1</sup>	UMBW-4C3-35 <sup>1</sup>	UMBW-4D3-35 <sup>1</sup>				
40	UMBW-4B3-40 <sup>1</sup>	UMBW-4C3-40 <sup>1</sup>	UMBW-4D3-40 <sup>1</sup>				
50	UMBW-4B3-50 <sup>1</sup>	UMBW-4C3-50 <sup>1</sup>	UMBW-4D3-50 <sup>1</sup>				
60	UMBW-4B3-60 <sup>1</sup>	UMBW-4C3-60 <sup>1</sup>	UMBW-4D3-60 <sup>1</sup>				
63	UMBW-4B3-63 <sup>1</sup>	UMBW-4C3-63 <sup>1</sup>	UMBW-4D3-63 <sup>1</sup>				

1) Non-stocked. Contact WEG for availability.

## Breaker Technical Data

### Electrical Ratings

Approval	Poles	Voltage	Ampacity	Interrupting
UL1077 E468808	1 Pole	240VAC	1A - 63A	7.5kA
	1 Pole	277VAC	1A - 63A	5kA
	2,3 Pole	240VAC	1A - 63A	5kA
	2, 3 Pole	277/480Y VAC	1A - 63A	5kA
	1 Pole	60VDC - pending	1A - 63A	7.5kA
	2 Pole	125VDC - pending	1A - 63A	7.5kA
UL489 E468810	1 Pole	120VAC	1A - 63A	10kA
	2, 3 Pole	240VAC	1A - 63A	10kA
	1 Pole	277VAC	1A - 20A	10kA
	2, 3 Pole	277/480Y VAC	1A - 20A	10kA
	1 Pole	60VDC	1A - 63A	10kA
	2 Pole	125VDC	1A - 63A	10kA
IEC 60947-2	1 Pole	230VAC	1A - 63A	10kA
	2, 3 Pole	400VAC	1A - 63A	10kA

### Mechanical Ratings

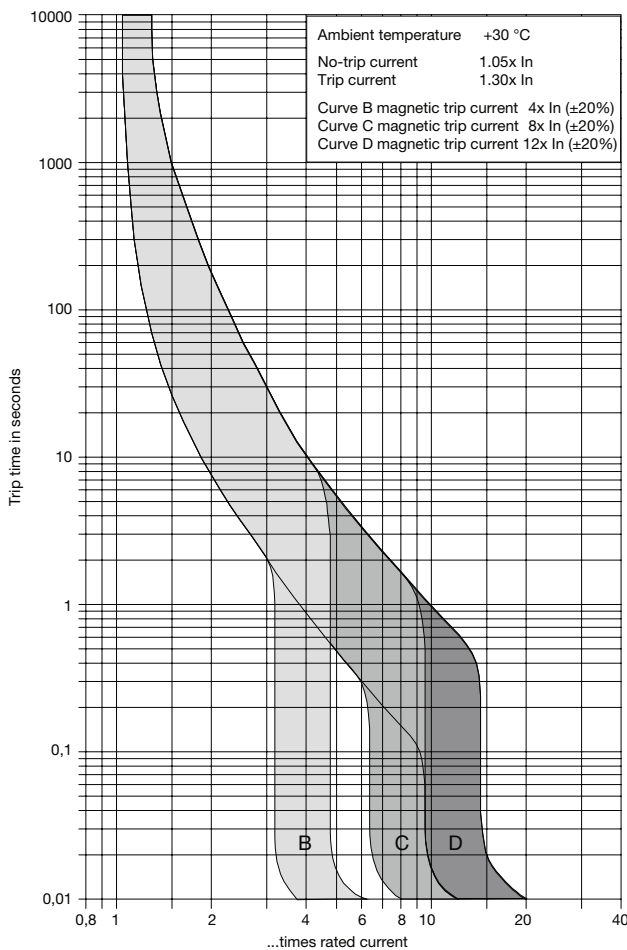
Tripping Curves	B,C,D
Number of Poles	1,2,3
Mounting Position	Vertical, Horizontal
Torque	2 Nm, 1.48 ft lbs Maximum
Cable Cross Section	35mm sq, 2 Awg Maximum
Ambient Temperature	-35 deg C to +70 deg C
Mass	UL1077 - 116 grams per pole UL489 - 131 grams per pole
Protection Class	IP20
Mechanical Operations	10,000
Vibration (sinusoidal)	+ - .38mm (10-57HZ), 5g
Test to IEC 60060-2-6	(57-500HZ)
Test to Fc	10 frequency cycles per axis
Shock Test to IEC60068-2-27, Test Ea	30g (11ms)
Corrosion Test to IEC60068-2-11 Test Ka	96hrs in 5% salt mist
Humidity Test to IEC60068-2-78 Test Cab	48hrs at 95% RH, Temp +40 deg C
Terminals	Screw with Bus Bar Connections

### Accessories

Auxiliary Contact	1NO/1NC
Shunt Trip	120,240,277AC...12,24,48,125DC
Bell Alarm	1NO/1NC
Bus Bar	1,2,3 Phase...1,2,3 Phase with Auxiliary

## Operating Ampacity Based on Ambient Temperature (Degree C)

Amps	-35	-30	-25	-20	-15	-10	-5	0	+5	+10	+15	+20	+25	+30	+35	+40	+45	+50	+55	+60	+65	+70
1	1.3	1.3	1.2	1.2	1.2	1.2	1.2	1.1	1.1	1.1	1.1	1.1	1.0	1.0	1.0	0.9	0.9	0.9	0.9	0.8	0.8	0.8
2	2.5	2.5	2.5	2.4	2.4	2.3	2.3	2.3	2.2	2.2	2.1	2.1	2.0	2.0	1.9	1.9	1.8	1.8	1.7	1.7	1.6	1.5
4	5.1	5.0	4.9	4.8	4.8	4.7	4.6	4.5	4.4	4.3	4.2	4.2	4.1	4.0	3.9	3.8	3.6	3.6	3.4	3.3	3.2	3.1
6	7.7	7.6	7.5	7.3	7.2	7.1	7.0	6.8	6.7	6.6	6.4	6.3	6.1	6.0	5.8	5.7	5.5	5.4	5.2	5.0	4.8	4.6
10	13.9	13.6	13.4	13.1	12.8	12.5	12.2	11.9	11.6	11.3	11.0	10.7	10.3	10.0	9.6	9.2	8.9	8.5	8.0	7.6	7.1	6.6
16	20.8	20.4	20.1	19.8	19.4	19.1	18.7	18.3	18.0	17.6	17.2	16.8	16.4	16.0	15.6	15.1	14.7	14.2	13.7	13.2	12.7	12.8
20	25.7	25.3	24.9	24.5	24.1	23.6	23.2	22.8	22.3	21.9	21.4	21.0	20.5	20.0	19.5	19.0	18.4	17.9	17.3	16.7	16.1	15.5
25	32.2	31.7	31.2	30.7	30.2	29.7	29.1	28.6	28.0	27.4	26.8	26.2	25.6	25.0	24.3	23.7	23.0	22.3	21.6	20.8	20.0	19.2
32	41.0	40.5	39.8	39.2	38.5	37.8	37.2	36.5	35.8	35.0	34.3	33.5	32.8	32.0	31.2	30.3	29.5	28.7	27.7	26.8	25.8	24.8
40	51.6	50.9	50.0	49.2	48.4	47.5	46.6	45.7	44.8	43.9	43.0	42.0	41.0	40.0	38.9	37.9	36.8	35.6	34.4	33.2	32.0	30.6
50	64.9	64.0	62.9	61.9	60.8	59.7	58.5	57.4	56.2	55.1	53.8	52.6	51.3	50.0	47.8	46.2	44.8	43.3	41.8	40.2	38.6	35.8
63	83.5	82.1	80.6	79.2	77.7	76.2	74.7	73.1	71.5	69.9	68.2	66.5	64.8	63.0	60.1	58.2	56.2	54.2	52.0	49.8	47.5	43.1



**B CURVE- Tripping Characteristics:**  
 Calibrated for resistive or non/low inductive loads.  
 Applications: Lighting, Control Circuits

**C CURVE- Tripping Characteristics:**  
 Calibrated for general purpose inductive loads.  
 Applications: Fluorescent lighting, midrange inductive motors

**D CURVE- Tripping Characteristics:**  
 Calibrated for inductive loads with high inrush currents  
 Applications: Motors, Transformers