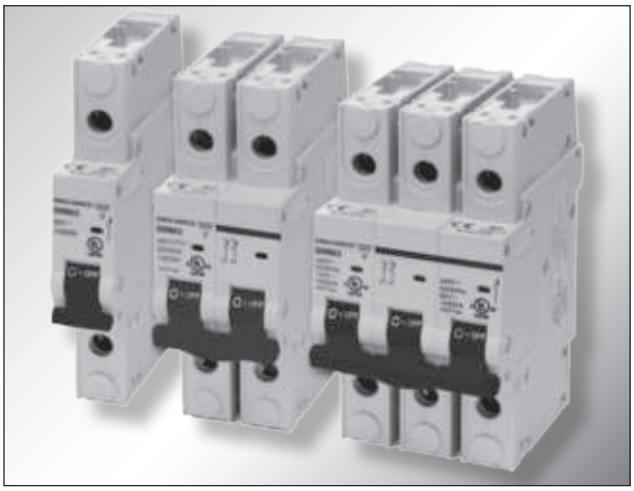
Miniature Circuit Breakers
Type GMB63



- Protection of circuits against short circuit and overload conditions
- UL489 branch circuit protection
- 1, 2, 3 pole arrangements
- 22 amperage sizes up to 63Amps
- Icn of 10kA
- Bimetallic element for small overloads
- Magnetic element for short circuit protection
- 240VAC and 480 Y / 277VAC versions
- Lug or screw terminals
- Line of accessories

Product Description

Competitive line of UL 489 miniature circuit breakers for 240VAC and 480Y/277VAC application where supplementary or branch circuit protection is required. GMB circuit breakers are available in 1, 2 and 3 pole configurations, with amperage rating up to 63A.

Ordering Key

GMB63 H 1P C 20 R

- **Miniature Circuit**
- **Voltage**
- **Number of Poles**
- **Tripping Characteristics**
- **Overload Range**
- **Terminal Type**

Selection Guide (Refer to page 2 for list of valid part numbers)

MCB	Voltage	Number of Poles	Tripping Characteristics	Overload Range	Terminal Type
GMB63 Family	**Blank- 240V** **H - 480Y/277V**	**1P - 1 pole** **2P - 2 pole** **3P - 3 pole**	**B - B curve** **C - C curve** **D - D curve**	**0.5A, 1A, 1.6A, 2A 3A, 4A, 5A, 6A, 8A 10A, 13A, 15A, 16A, 20A, 25A, 30A, 32A, 35A, 40A, 50A, 60A, 63A**	**Blank - lug (standard)** **R - ring**

Part numbers in bold font indicate stock item

CARLO GAVAZZI

Selection Guide

240VAC; 60/125VDC 10kA, B Curve

	Lug Terminal			Ring Terminal		
Amperage	1 Pole	2 Pole	3 Pole	1 Pole	2 Pole	3 Pole
0.5	GMB631PB0.5	GMB632PB0.5	GMB633PB0.5	GMB631PB0.5R	GMB632PB0.5R	GMB633PB0.5R
1	GMB631PB1	GMB632PB1	GMB633PB1	GMB631PB1R	GMB632PB1R	GMB633PB1R
1.6	GMB631PB1.6	GMB632PB1.6	GMB633PB1.6	GMB631PB1.6R	GMB632PB1.6R	GMB633PB1.6R
2	GMB631PB2	GMB632PB2	GMB633PB2	GMB631PB2R	GMB632PB2R	GMB633PB2R
3	GMB631PB3	GMB632PB3	GMB633PB3	GMB631PB3R	GMB632PB3R	GMB633PB3R
4	GMB631PB4	GMB632PB4	GMB633PB4	GMB631PB4R	GMB632PB4R	GMB633PB4R
5	GMB631PB5	GMB632PB5	GMB633PB5	GMB631PB5R	GMB632PB5R	GMB633PB5R
6	GMB631PB6	GMB632PB6	GMB633PB6	GMB631PB6R	GMB632PB6R	GMB633PB6R
8	GMB631PB8	GMB632PB8	GMB633PB8	GMB631PB8R	GMB632PB8R	GMB633PB8R
10	GMB631PB10	GMB632PB10	GMB633PB10	GMB631PB10R	GMB632PB10R	GMB633PB10R
13	GMB631PB13	GMB632PB13	GMB633PB13	GMB631PB13R	GMB632PB13R	GMB633PB13R
15	GMB631PB15	GMB632PB15	GMB633PB15	GMB631PB15R	GMB632PB15R	GMB633PB15R
16	GMB631PB16	GMB632PB16	GMB633PB16	GMB631PB16R	GMB632PB16R	GMB633PB16R
20	GMB631PB20	GMB632PB20	GMB633PB20	GMB631PB20R	GMB632PB20R	GMB633PB20R
25	GMB631PB25	GMB632PB25	GMB633PB25	GMB631PB25R	GMB632PB25R	GMB633PB25R
30	GMB631PB30	GMB632PB30	GMB633PB30	GMB631PB30R	GMB632PB30R	GMB633PB30R
32	GMB631PB32	GMB632PB32	GMB633PB32	GMB631PB32R	GMB632PB32R	GMB633PB32R
35	GMB631PB35	GMB632PB35	GMB633PB35	GMB631PB35R	GMB632PB35R	GMB633PB35R
40	GMB631PB40	GMB632PB40	GMB633PB40	GMB631PB40R	GMB632PB40R	GMB633PB40R
50	GMB631PB50	GMB632PB50	GMB633PB50	-	-	-
60	GMB631PB60	GMB632PB60	GMB633PB60	-	-	-
63	GMB631PB63	GMB632PB63	GMB633PB63	-	-	-

480Y/277VAB 10kA, B Curve

	Lug Terminal			Ring Terminal		
Amperage	1 Pole	2 Pole	3 Pole	1 Pole	2 Pole	3 Pole
0.5	GMB63H1PB0.5	GMB63H2PB0.5	GMB63H3PB0.5	GMB63H1PB0.5R	GMB63H2PB0.5R	GMB63H3PB0.5R
1	GMB63H1PB1	GMB63H2PB1	GMB63H3PB1	GMB63H1PB1R	GMB63H2PB1R	GMB63H3PB1R
1.6	GMB63H1PB1.6	GMB63H2PB1.6	GMB63H3PB1.6	GMB63H1PB1.6R	GMB63H2PB1.6R	GMB63H3PB1.6R
2	GMB63H1PB2	GMB63H2PB2	GMB63H3PB2	GMB63H1PB2R	GMB63H2PB2R	GMB63H3PB2R
3	GMB63H1PB3	GMB63H2PB3	GMB63H3PB3	GMB63H1PB3R	GMB63H2PB3R	GMB63H3PB3R
4	GMB63H1PB4	GMB63H2PB4	GMB63H3PB4	GMB63H1PB4R	GMB63H2PB4R	GMB63H3PB4R
5	GMB63H1PB5	GMB63H2PB5	GMB63H3PB5	GMB63H1PB5R	GMB63H2PB5R	GMB63H3PB5R
6	GMB63H1PB6	GMB63H2PB6	GMB63H3PB6	GMB63H1PB6R	GMB63H2PB6R	GMB63H3PB6R
8	GMB63H1PB8	GMB63H2PB8	GMB63H3PB8	GMB63H1PB8R	GMB63H2PB8R	GMB63H3PB8R
10	GMB63H1PB10	GMB63H2PB10	GMB63H3PB10	GMB63H1PB10R	GMB63H2PB10R	GMB63H3PB10R
13	GMB63H1PB13	GMB63H2PB13	GMB63H3PB13	GMB63H1PB13R	GMB63H2PB13R	GMB63H3PB13R
15	GMB63H1PB15	GMB63H2PB15	GMB63H3PB15	GMB63H1PB15R	GMB63H2PB15R	GMB63H3PB15R
16	GMB63H1PB16	GMB63H2PB16	GMB63H3PB16	GMB63H1PB16R	GMB63H2PB16R	GMB63H3PB16R
20	GMB63H1PB20	GMB63H2PB20	GMB63H3PB20	GMB63H1PB20R	GMB63H2PB20R	GMB63H3PB20R
25	GMB63H1PB25	GMB63H2PB25	GMB63H3PB25	GMB63H1PB25R	GMB63H2PB25R	GMB63H3PB25R
30	GMB63H1PB30	GMB63H2PB30	GMB63H3PB30	GMB63H1PB30R	GMB63H2PB30R	GMB63H3PB30R
32	GMB63H1PB32	GMB63H2PB32	GMB63H3PB32	GMB63H1PB32R	GMB63H2PB32R	GMB63H3PB32R

Part numbers in bold font indicate stock code A items.

All other part numbers are stock code D.

CARLO GAVAZZI

Selection Guide

240VAC; 60/125VDC 10kA, C curve

	Lug Terminal			Ring Terminal		
Amperage	1 Pole	2 Pole	3 Pole	1 Pole	2 Pole	3 Pole
0.5	**GMB631PC0.5**	**GMB632PC0.5**	**GMB633PC0.5**	GMB631PC0.5R	GMB632PC0.5R	GMB633PC0.5R
1	**GMB631PC1**	**GMB632PC1**	**GMB633PC1**	GMB631PC1R	GMB632PC1R	GMB633PC1R
1.6	**GMB631PC1.6**	**GMB632PC1.6**	**GMB633PC1.6**	GMB631PC1.6R	GMB632PC1.6R	GMB633PC1.6R
2	**GMB631PC2**	**GMB632PC2**	**GMB633PC2**	GMB631PC2R	GMB632PC2R	GMB633PC2R
3	**GMB631PC3**	**GMB632PC3**	**GMB633PC3**	GMB631PC3R	GMB632PC3R	GMB633PC3R
4	**GMB631PC4**	**GMB632PC4**	**GMB633PC4**	GMB631PC4R	GMB632PC4R	GMB633PC4R
5	**GMB631PC5**	**GMB632PC5**	**GMB633PC5**	GMB631PC5R	GMB632PC5R	GMB633PC5R
6	**GMB631PC6**	**GMB632PC6**	**GMB633PC6**	GMB631PC6R	GMB632PC6R	GMB633PC6R
8	**GMB631PC8**	**GMB632PC8**	**GMB633PC8**	GMB631PC8R	GMB632PC8R	GMB633PC8R
10	**GMB631PC10**	**GMB632PC10**	**GMB633PC10**	GMB631PC10R	GMB632PC10R	GMB633PC10R
13	**GMB631PC13**	**GMB632PC13**	**GMB633PC13**	GMB631PC13R	GMB632PC13R	GMB633PC13R
15	**GMB631PC15**	**GMB632PC15**	**GMB633PC15**	GMB631PC15R	GMB632PC15R	GMB633PC15R
16	**GMB631PC16**	**GMB632PC16**	**GMB633PC16**	GMB631PC16R	GMB632PC16R	GMB633PC16R
20	**GMB631PC20**	**GMB632PC20**	**GMB633PC20**	GMB631PC20R	GMB632PC20R	GMB633PC20R
25	**GMB631PC25**	**GMB632PC25**	**GMB633PC25**	GMB631PC25R	GMB632PC25R	GMB633PC25R
30	**GMB631PC30**	**GMB632PC30**	**GMB633PC30**	GMB631PC30R	GMB632PC30R	GMB633PC30R
32	**GMB631PC32**	**GMB632PC32**	**GMB633PC32**	GMB631PC32R	GMB632PC32R	GMB633PC32R
35	**GMB631PC35**	**GMB632PC35**	**GMB633PC35**	GMB631PC35R	GMB632PC35R	GMB633PC35R
40	**GMB631PC40**	**GMB632PC40**	**GMB633PC40**	GMB631PC40R	GMB632PC40R	GMB633PC40R
50	**GMB631PC50**	**GMB632PC50**	**GMB633PC50**	-	-	-
60	**GMB631PC60**	**GMB632PC60**	**GMB633PC60**	-	-	-
63	**GMB631PC63**	**GMB632PC63**	**GMB633PC63**	-	-	-

480Y/277VAC 10kA, C curve

	Lug Terminal			Ring Terminal		
Amperage	1 Pole	2 Pole	3 Pole	1 Pole	2 Pole	3 Pole
0.5	**GMB63H1PC0.5**	**GMB63H2PC0.5**	**GMB63H3PC0.5**	GMB63H1PC0.5R	GMB63H2PC0.5R	GMB63H3PC0.5R
1	**GMB63H1PC1**	**GMB63H2PC1**	**GMB63H3PC1**	GMB63H1PC1R	GMB63H2PC1R	GMB63H3PC1R
1.6	**GMB63H1PC1.6**	**GMB63H2PC1.6**	**GMB63H3PC1.6**	GMB63H1PC1.6R	GMB63H2PC1.6R	GMB63H3PC1.6R
2	**GMB63H1PC2**	**GMB63H2PC2**	**GMB63H3PC2**	GMB63H1PC2R	GMB63H2PC2R	GMB63H3PC2R
3	**GMB63H1PC3**	**GMB63H2PC3**	**GMB63H3PC3**	GMB63H1PC3R	GMB63H2PC3R	GMB63H3PC3R
4	**GMB63H1PC4**	**GMB63H2PC4**	**GMB63H3PC4**	GMB63H1PC4R	GMB63H2PC4R	GMB63H3PC4R
5	**GMB63H1PC5**	**GMB63H2PC5**	**GMB63H3PC5**	GMB63H1PC5R	GMB63H2PC5R	GMB63H3PC5R
6	**GMB63H1PC6**	**GMB63H2PC6**	**GMB63H3PC6**	GMB63H1PC6R	GMB63H2PC6R	GMB63H3PC6R
8	**GMB63H1PC8**	**GMB63H2PC8**	**GMB63H3PC8**	GMB63H1PC8R	GMB63H2PC8R	GMB63H3PC8R
10	**GMB63H1PC10**	**GMB63H2PC10**	**GMB63H3PC10**	GMB63H1PC10R	GMB63H2PC10R	GMB63H3PC10R
13	**GMB63H1PC13**	**GMB63H2PC13**	**GMB63H3PC13**	GMB63H1PC13R	GMB63H2PC13R	GMB63H3PC13R
15	**GMB63H1PC15**	**GMB63H2PC15**	**GMB63H3PC15**	GMB63H1PC15R	GMB63H2PC15R	GMB63H3PC15R
16	**GMB63H1PC16**	**GMB63H2PC16**	**GMB63H3PC16**	GMB63H1PC16R	GMB63H2PC16R	GMB63H3PC16R
20	**GMB63H1PC20**	**GMB63H2PC20**	**GMB63H3PC20**	GMB63H1PC20R	GMB63H2PC20R	GMB63H3PC20R
25	**GMB63H1PC25**	**GMB63H2PC25**	**GMB63H3PC25**	GMB63H1PC25R	GMB63H2PC25R	GMB63H3PC25R
30	**GMB63H1PC30**	**GMB63H2PC30**	**GMB63H3PC30**	GMB63H1PC30R	GMB63H2PC30R	GMB63H3PC30R
32	**GMB63H1PC32**	**GMB63H2PC32**	**GMB63H3PC32**	GMB63H1PC32R	GMB63H2PC32R	GMB63H3PC32R

Part numbers in bold font indicate stock code A items.
All other part numbers are stock code D.

CARLO GAVAZZI

Selection Guide

240VAC; 60/125VDC 10kA, D Curve

	Lug Terminal			Ring Terminal		
Amperage	1 Pole	2 Pole	3 Pole	1 Pole	2 Pole	3 Pole
0.5	GMB631PD0.5	GMB632PD0.5	GMB633PD0.5	GMB631PD0.5R	GMB632PD0.5R	GMB633PD0.5R
1	GMB631PD1	GMB632PD1	GMB633PD1	GMB631PD1R	GMB632PD1R	GMB633PD1R
1.6	GMB631PD1.6	GMB632PD1.6	GMB633PD1.6	GMB631PD1.6R	GMB632PD1.6R	GMB633PD1.6R
2	GMB631PD2	GMB632PD2	GMB633PD2	GMB631PD2R	GMB632PD2R	GMB633PD2R
3	GMB631PD3	GMB632PD3	GMB633PD3	GMB631PD3R	GMB632PD3R	GMB633PD3R
4	GMB631PD4	GMB632PD4	GMB633PD4	GMB631PD4R	GMB632PD4R	GMB633PD4R
5	GMB631PD5	GMB632PD5	GMB633PD5	GMB631PD5R	GMB632PD5R	GMB633PD5R
6	GMB631PD6	GMB632PD6	GMB633PD6	GMB631PD6R	GMB632PD6R	GMB633PD6R
8	GMB631PD8	GMB632PD8	GMB633PD8	GMB631PD8R	GMB632PD8R	GMB633PD8R
10	GMB631PD10	GMB632PD10	GMB633PD10	GMB631PD10R	GMB632PD10R	GMB633PD10R
13	GMB631PD13	GMB632PD13	GMB633PD13	GMB631PD13R	GMB632PD13R	GMB633PD13R
15	GMB631PD15	GMB632PD15	GMB633PD15	GMB631PD15R	GMB632PD15R	GMB633PD15R
16	GMB631PD16	GMB632PD16	GMB633PD16	GMB631PD16R	GMB632PD16R	GMB633PD16R
20	GMB631PD20	GMB632PD20	GMB633PD20	GMB631PD20R	GMB632PD20R	GMB633PD20R
25	GMB631PD25	GMB632PD25	GMB633PD25	GMB631PD25R	GMB632PD25R	GMB633PD25R
30	GMB631PD30	GMB632PD30	GMB633PD30	GMB631PD30R	GMB632PD30R	GMB633PD30R
32	GMB631PD32	GMB632PD32	GMB633PD32	GMB631PD32R	GMB632PD32R	GMB633PD32R
35	GMB631PD35	GMB632PD35	GMB633PD35	GMB631PD35R	GMB632PD35R	GMB633PD35R
40	GMB631PD40	GMB632PD40	GMB633PD40	GMB631PD40R	GMB632PD40R	GMB633PD40R
50	GMB631PD50	GMB632PD50	GMB633PD50	-	-	-
60	GMB631PD60	GMB632PD60	GMB633PD60	-	-	-
63	GMB631PD63	GMB632PD63	GMB633PD63	-	-	-

480Y/277VAC 10kA D Curve

	Lug Terminal			Ring Terminal		
Amperage	1 Pole	2 Pole	3 Pole	1 Pole	2 Pole	3 Pole
0.5	GMB63H1PD0.5	GMB63H2PD0.5	GMB63H3PD0.5	GMB63H1PD0.5R	GMB63H2PD0.5R	GMB63H3PD0.5R
1	GMB63H1PD1	GMB63H2PD1	GMB63H3PD1	GMB63H1PD1R	GMB63H2PD1R	GMB63H3PD1R
1.6	GMB63H1PD1.6	GMB63H2PD1.6	GMB63H3PD1.6	GMB63H1PD1.6R	GMB63H2PD1.6R	GMB63H3PD1.6R
2	GMB63H1PD2	GMB63H2PD2	GMB63H3PD2	GMB63H1PD2R	GMB63H2PD2R	GMB63H3PD2R
3	GMB63H1PD3	GMB63H2PD3	GMB63H3PD3	GMB63H1PD3R	GMB63H2PD3R	GMB63H3PD3R
4	GMB63H1PD4	GMB63H2PD4	GMB63H3PD4	GMB63H1PD4R	GMB63H2PD4R	GMB63H3PD4R
5	GMB63H1PD5	GMB63H2PD5	GMB63H3PD5	GMB63H1PD5R	GMB63H2PD5R	GMB63H3PD5R
6	GMB63H1PD6	GMB63H2PD6	GMB63H3PD6	GMB63H1PD6R	GMB63H2PD6R	GMB63H3PD6R
8	GMB63H1PD8	GMB63H2PD8	GMB63H3PD8	GMB63H1PD8R	GMB63H2PD8R	GMB63H3PD8R
10	GMB63H1PD10	GMB63H2PD10	GMB63H3PD10	GMB63H1PD10R	GMB63H2PD10R	GMB63H3PD10R
13	GMB63H1PD13	GMB63H2PD13	GMB63H3PD13	GMB63H1PD13R	GMB63H2PD13R	GMB63H3PD13R
15	GMB63H1PD15	GMB63H2PD15	GMB63H3PD15	GMB63H1PD15R	GMB63H2PD15R	GMB63H3PD15R
16	GMB63H1PD16	GMB63H2PD16	GMB63H3PD16	GMB63H1PD16R	GMB63H2PD16R	GMB63H3PD16R
20	GMB63H1PD20	GMB63H2PD20	GMB63H3PD20	GMB63H1PD20R	GMB63H2PD20R	GMB63H3PD20R
25	GMB63H1PD25	GMB63H2PD25	GMB63H3PD25	GMB63H1PD25R	GMB63H2PD25R	GMB63H3PD25R
30	GMB63H1PD30	GMB63H2PD30	GMB63H3PD30	GMB63H1PD30R	GMB63H2PD30R	GMB63H3PD30R
32	GMB63H1PD32	GMB63H2PD32	GMB63H3PD32	GMB63H1PD32R	GMB63H2PD32R	GMB63H3PD32R

Part numbers in bold font indicate stock Code A items.

All other part numbers are stock Code D.

Electrical Specifications

		GMB63_			GMB63H		
		1 Pole	2 Pole	3 Pole	1 Pole	2 Pole	3 Pole
Standards		UL489 / CSA C22.2 No. 5 / IEC 60947-2					
Rated Voltage (see Interruptions Ratings (kA) for details):		240VAC, (60VDC 1 Pole, 125VDC 2 Pole)			480Y/277VAC		
Rated Frequency		50/60 HZ					
Rated Current	with lug terminal	0.5 ~ 63A			0.5 ~ 32A		
with ring terminal		0.5 ~ 40A			0.5 ~ 32A		
Rated Insulation Voltage (V)		500					
Rated Impulse Withstand Voltage (kV)		6					
Instantaneous Tripping Type		B, C (standard) and D					
Interruption Rating (kA)	120 Vac	10	-	-	10	-	-
	240 Vac	10	10	10	10	10	10
	277 Vac	-	-	-	10	-	-
	480Y/277Vac	-	-	-	-	10	10
	60 Vdc	10	10	-	-	-	-
	125 Vdc	-	10	-	-	-	-

Mechanical Specifications

		GMB63_			GMB63H		
		1 Pole	2 Pole	3 Pole	1 Pole	2 Pole	3 Pole
Inverse Time-Delay Over Current Release Type		Thermal-magnetic					
Service Life	Electrical	6,000 cycles					
	Mechanical	10,000 cycles					
Protection Degree		IP20					
Wire	Single wire	14~4 AWG					
	Two wires	First wire 14~6 AWG, second wire 14~10 AWG					
Torque		31 lb-in (3.5 N-m)					

Environmemtal Specifications

		GMB63_			GMB63H		
		1 Pole	2 Pole	3 Pole	1 Pole	2 Pole	3 Pole
Temperature Range	Tested	23F to 104F (-5C to +40C)					
	Working	-13F to 131F (-25C to +55C)					
Relative Humidity	At +20C	<90%					
	At +40C	<50%					
Pollution Degree		Class 3					
Over Voltage Category / Mounting		Class III / 35mm DIN rail					
Altitude		<2000m					

CARLO GAVAZZI

Temperature Derating

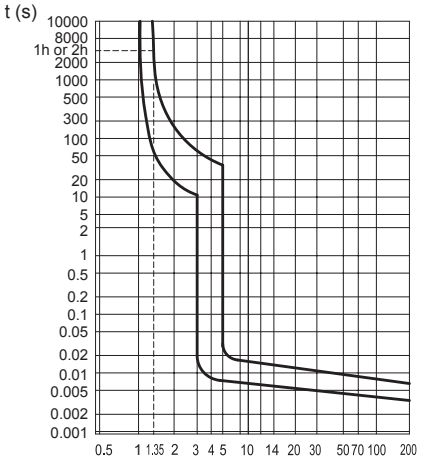
The maximum permissible current in a GMB circuit breaker depends on the ambient temperature and spacing between devices. Ambient temperature is the temperature inside the enclosure or switch board in which the circuit breaker is installed. The reference nominal current rating is +25 ~ +40C.

Ambient Temp >	-22°F	-13°F	-4°F	5°°F	14°F	23°F	32°F	41°F	50°F	59°F	68°F	77°F	86°F	95°F	104°F	113°F	122°F	131°F	140°F	149°F	158°F	167°F
	-30°C	-25°C	-20°C	-15°C	-10°C	-5°C	0°C	5°C	10°C	15°C	20°C	25°C	30°C	35°C	40°C	45°C	50°C	55°C	60°C	65°C	70°C	75°C
Rated Current																						
0.5	0.63	0.62	0.61	0.60	0.59	0.58	0.57	0.55	0.54	0.53	0.52	0.50	0.50	0.50	0.50	0.45	0.43	0.42	0.40	0.38	0.36	0.33
1	1.21	1.19	1.18	1.16	1.14	1.12	1.10	1.08	1.06	1.04	1.02	1.00	1.00	1.00	1.00	0.91	0.89	0.87	0.84	0.80	0.77	0.73
1.6	2.11	2.06	2.05	1.98	1.94	1.90	1.86	1.81	1.76	1.73	1.65	1.60	1.60	1.60	1.60	1.36	1.30	1.23	1.17	1.09	1.01	0.93
2	2.42	2.38	2.36	2.32	2.28	2.24	2.20	2.16	2.12	2.08	2.04	2.00	2.00	2.00	2.00	1.82	1.78	1.74	1.68	1.60	1.48	1.36
3	3.81	3.75	3.66	3.60	3.54	3.45	3.39	3.33	3.24	3.15	3.09	3.00	3.00	3.00	3.00	2.64	2.55	2.46	2.34	2.25	2.13	2.01
4	5.00	4.92	4.84	4.76	4.68	4.60	4.48	4.40	4.28	4.20	4.12	4.00	4.00	4.00	4.00	3.56	3.44	3.32	3.20	3.08	2.92	2.7
5	6.30	6.20	6.10	5.95	5.85	5.75	5.65	5.50	5.40	5.25	5.15	5.00	5.00	5.00	5.00	4.45	4.30	4.15	3.95	3.75	3.50	3.25
6	7.38	7.26	7.14	7.02	6.90	6.78	6.66	6.54	6.42	6.30	6.12	6.00	6.00	6.00	6.00	5.40	5.22	5.10	4.92	4.62	4.32	4.08
8	10.32	10.08	9.92	9.76	9.52	9.36	9.12	8.88	8.72	8.48	8.24	8.00	8.00	8.00	8.00	7.04	6.72	6.40	6.08	5.76	5.12	4.48
10	12.80	12.50	12.30	12.10	11.80	11.60	11.30	11.10	10.80	10.60	10.30	10.00	10.00	10.00	10.00	8.80	8.50	8.20	7.80	7.30	6.80	6.20
13	15.60	15.34	15.08	14.95	14.69	14.43	14.17	14.04	13.78	13.52	13.26	13.00	13.00	13.00	13.00	11.96	11.70	11.44	11.05	10.40	9.75	8.84
15	19.20	18.75	18.45	18.15	17.70	17.40	16.95	16.65	16.20	15.90	15.45	15.00	15.00	15.00	15.00	13.20	12.75	12.30	11.70	10.80	9.75	8.70
16	19.84	19.52	19.20	18.88	18.56	18.24	17.76	17.44	17.12	16.80	16.32	16.00	16.00	16.00	16.00	14.40	13.92	13.44	12.96	12.00	11.20	10.24
20	24.60	24.20	23.80	23.40	23.00	22.60	22.20	21.80	21.40	21.00	20.40	20.00	20.00	20.00	20.00	18.00	17.40	16.80	16.20	15.20	14.20	13.20
25	31.00	30.50	30.00	29.50	29.00	28.50	27.75	27.25	26.75	26.25	25.50	25.00	25.00	25.00	25.00	22.50	21.75	21.25	20.50	19.25	18.00	16.75
30	39.00	38.10	37.50	36.60	36.00	35.10	34.50	33.60	32.70	31.80	30.90	30.00	30.00	30.00	30.00	26.10	24.90	23.70	22.50	20.70	19.20	17.40
32	39.36	38.72	38.08	37.44	36.80	36.16	35.52	34.88	34.24	33.28	32.64	32.00	32.00	32.00	32.00	29.12	28.16	27.20	24.96	23.36	21.76	19.84
35	45.85	45.15	44.10	43.05	42.35	41.30	40.25	39.20	38.15	37.10	36.05	35.00	35.00	35.00	35.00	30.10	28.70	27.30	25.90	24.15	22.40	20.30
40	49.20	48.40	47.60	46.80	46.00	45.20	44.40	43.60	42.80	42.00	40.80	40.00	40.00	40.00	40.00	36.40	35.20	34.00	32.80	29.60	26.40	22.40
45	55.35	54.45	53.55	52.65	51.75	50.85	49.95	49.05	48.15	47.25	45.90	45.00	45.00	45.00	45.00	40.95	39.60	38.25	36.90	33.30	29.70	36.00
50	61.50	60.50	59.50	58.50	57.50	56.50	55.50	54.50	53.50	52.50	51.00	50.00	50.00	50.00	50.00	45.50	44.00	42.50	41.00	37.50	34.00	30.00
60	77.40	76.20	74.40	73.20	71.40	70.20	68.40	66.60	65.40	63.60	61.80	60.00	60.00	60.00	60.00	52.20	50.40	48.00	45.60	42.00	37.80	33.00
63	80.01	78.75	76.86	75.60	74.34	72.45	71.19	69.93	68.04	66.15	54.81	63.00	63.00	63.00	63.00	55.44	53.55	51.66	49.14	45.36	40.95	35.91

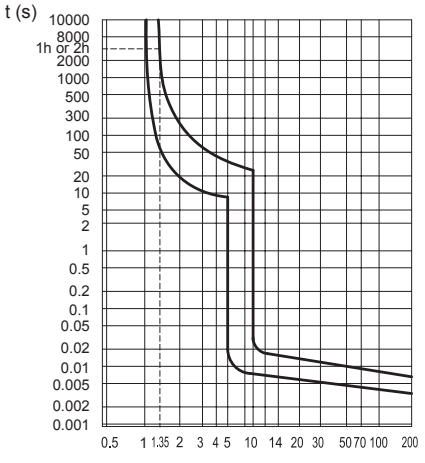
Curve Profile

C Curve
(5 ~ 10 In)

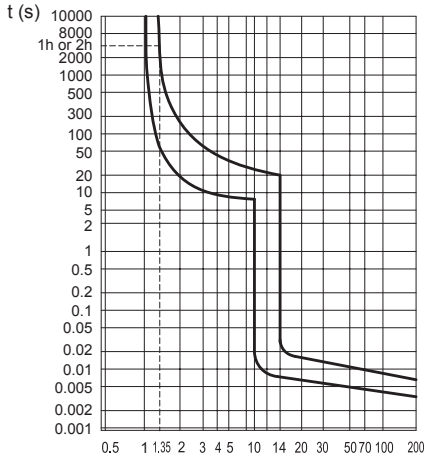
B Curve
(In=3/5)



C Curve
(In=5/10)



D Curve
(In=10/14)



Accessories

Accessory	Poles	Part Number	Description	Ratings		Aux Contact Configuration	Approvals
Auxiliary Contact	all	**GMBAX**	Indication of the position of the device's contacts. To be mounted on the left side of the UL489 circuit breaker.	VAC / AAC	480V / 3A, 277 / 3A 240V/6A	1NO / 1NC	CE only
				VDC / ADC	24V / 6A		
Alarm Switch		**GMBAL**	Indication of the position of the device's contacts only after the automatic release of the UL489 MCB, due to an overload or a short-circuit. To be mounted on the left side of the device.	VAC / AAC	480V / 3A, 277 / 3A 240V/6A	1NO / 1NC	CE only
				VDC / ADC	24V / 6A		
Shunt Release		**GMBSHT311NC**	Release of the MCB with application of control voltage	VDC	12-24V	n/a	CE only
Padlock		**GMKLK**	Lock off for the MCB	n/a	n/a	n/a	n/a

Busbar

General

- The first cuttable UL489 Busbar.
- Allows maximum flexibility for wiring of UL489 Miniature Circuit Breakers.
- For Connection of UL489 Miniature Circuit Breakers
- 1P, 2P and 3P Configurations with and without Auxilary Switch

Ordering key: GMBB---

- Voltage Ratings: 1P 1000 V AC / DC 2+3P 600 V AC / DC
- Feeder Terminal Options allow for Top or Bottom Feed Standard
- Cuttable Design allows for maximum flexibility and less waste
- Finger Safe Design with Available Protective Caps for unused terminals

Technical data

Applicable Standard	**UL489/UL489A**	
Voltage Ratings	Single Phase	1000 VAC/VDC
	2 and 3 Phase	600 VAC/VDC
Current Rating Cross Section	End Feed	80 Amps
	Center Feed	160 Amps*
Protection Class	IP20	
KA Rating (J Fuse)	14KA	

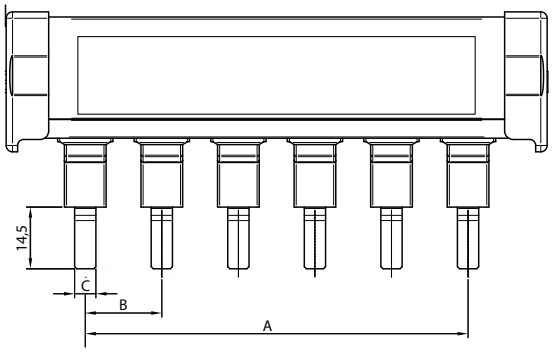
* Note: Two GMBBCENFEED required per phase.

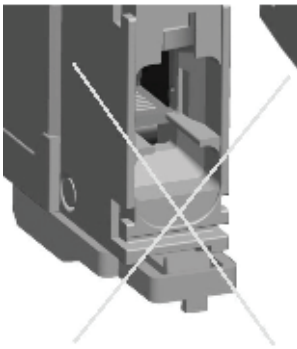
CARLO GAVAZZI

Selection Guide

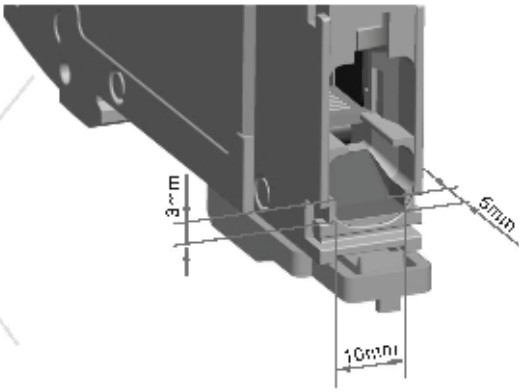
Accessory	Poles	Pins	Part Number	Description	Amperage Rating	Rated Voltage	Dimmentions [mm / in]			
					end / center feed		A	B	C	Total Height
Busbar	1	6	**GMBB1P06H**	1P 06 pins busbar for GMB	100A / 200A (*)	1000 VAC/VDC	90 / 3.5	18 / 0.71	5 / 0.20	60 / 2.36
		12	**GMBB1P12H**	1P 12 pins busbar for GMB	100A / 200A (*)		198 / 7.8	18 / 0.71	5 / 0.20	60 / 2.36
		18	**GMBB1P18H**	1P 18 pins busbar for GMB	100A / 200A (*)		306 / 12	18 / 0.71	5 / 0.20	60 / 2.36
		57	**GMBB1P57H**	cuttable 1P 57 pins busbar for GMB	100A / 200A (*)		1008 / 39.7	18 / 0.71	5 / 0.20	60 / 2.36
		37	**GMBB1P37HS**	1P 37 pins busbar for GMB+aux	100A / 200A (*)		1008 / 39.7	18 / 0.71	5 / 0.20	60 / 2.36
	2	6	**GMBB2P06H**	2P 06 pins busbar for GMB	100A / 200A (*)	600 VAC/VDC	90 / 3.5	18 / 0.71	5 / 0.20	60 / 2.36
		12	**GMBB2P12H**	2P 12 pins busbar for GMB	100A / 200A (*)		198 / 7.8	18 / 0.71	5 / 0.20	60 / 2.36
		18	**GMBB2P18H**	2P 18 pins busbar for GMB	100A / 200A (*)		306 / 12	18 / 0.71	5 / 0.20	60 / 2.36
		56	**GMBB2P56H**	2P 56 pins busbar for GMB	100A / 200A (*)		1008 / 39.7	18 / 0.71	5 / 0.20	60 / 2.36
		46	**GMBB2P46HS**	2P 46 pins busbar for GMB+aux	100A / 200A (*)		1008 / 39.7	18 / 0.71	5 / 0.20	60 / 2.36
	3	6	**GMBB3P06H**	3P 06 pins busbar for GMB	100A / 200A (*)		90 / 3.5	18 / 0.71	5 / 0.20	60 / 2.36
		12	**GMBB3P12H**	3P 12 pins busbar for GMB	100A / 200A (*)		198 / 7.8	18 / 0.71	5 / 0.20	60 / 2.36
		18	**GMBB3P18H**	3P 18 pins busbar for GMB	100A / 200A (*)		306 / 12	18 / 0.71	5 / 0.20	60 / 2.36
		57	**GMBB3P57H**	3P 57 pins busbar for GMB	100A / 200A (*)		1008 / 39.7	18 / 0.71	5 / 0.20	60 / 2.36
		37	**GMBB3P48HS**	3P 48 pins busbar for GMB+aux	100A / 200A (*)		1008 / 39.7	18 / 0.71	5 / 0.20	60 / 2.36
Feeder	all	n / a	**GMBBFEED123P**	Feeder term all GMB busbars (**)	115A	1000 VAC/VDC	(*) note that two 115A feeder terminal per phase when using center feed for 200A amperage rating			
Center feeder			**GMBBCENFEED**	Center feeder term GMB busbars	115A					
End cap			**GMBBENDCAP**	End cap all GMB busbars	n/a	n/a				
Pin cap			**GMBBPINCAP**	Pin cap all GMB busbars						

(**) GMBBFEED123P will NOT fit on GMB circuit breakers produced prior to August 2015





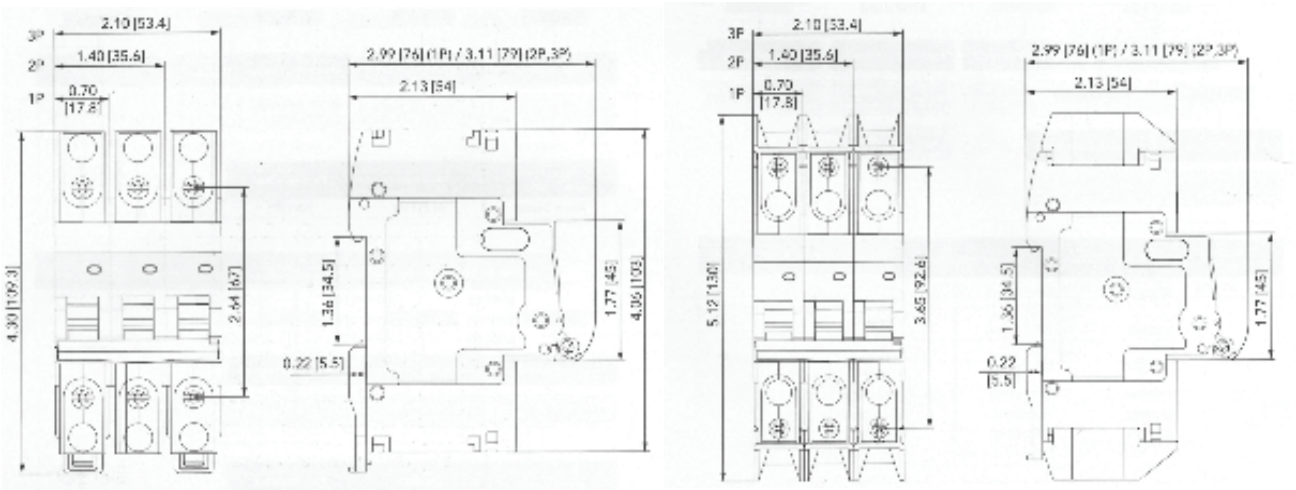
Construction prior to August 2015
Datecode 2015H or older



Construction after August 2015
Datecode 2015I and newer

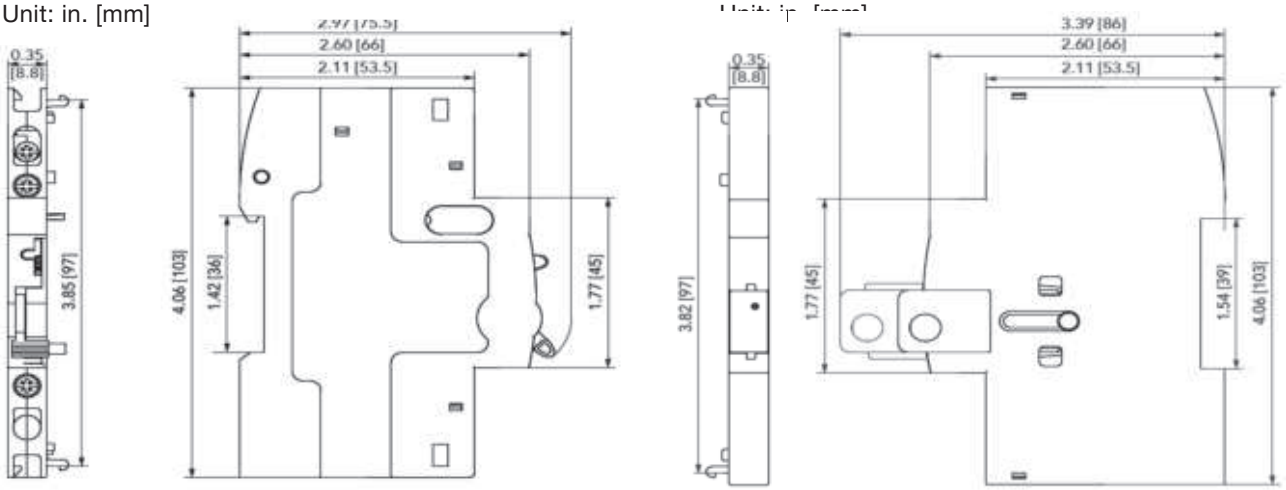
Dimensions – GMB63 IP/2P/3P Lug Terminal

Unit: in. [mm]



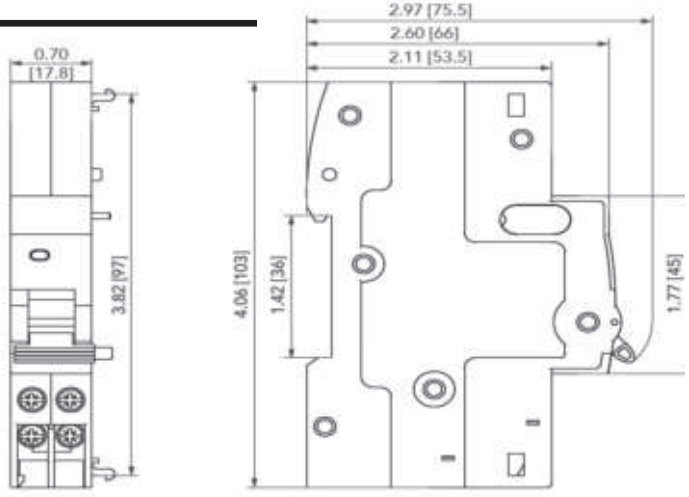
Dimensions – GMBAL BMBAX GMKLK

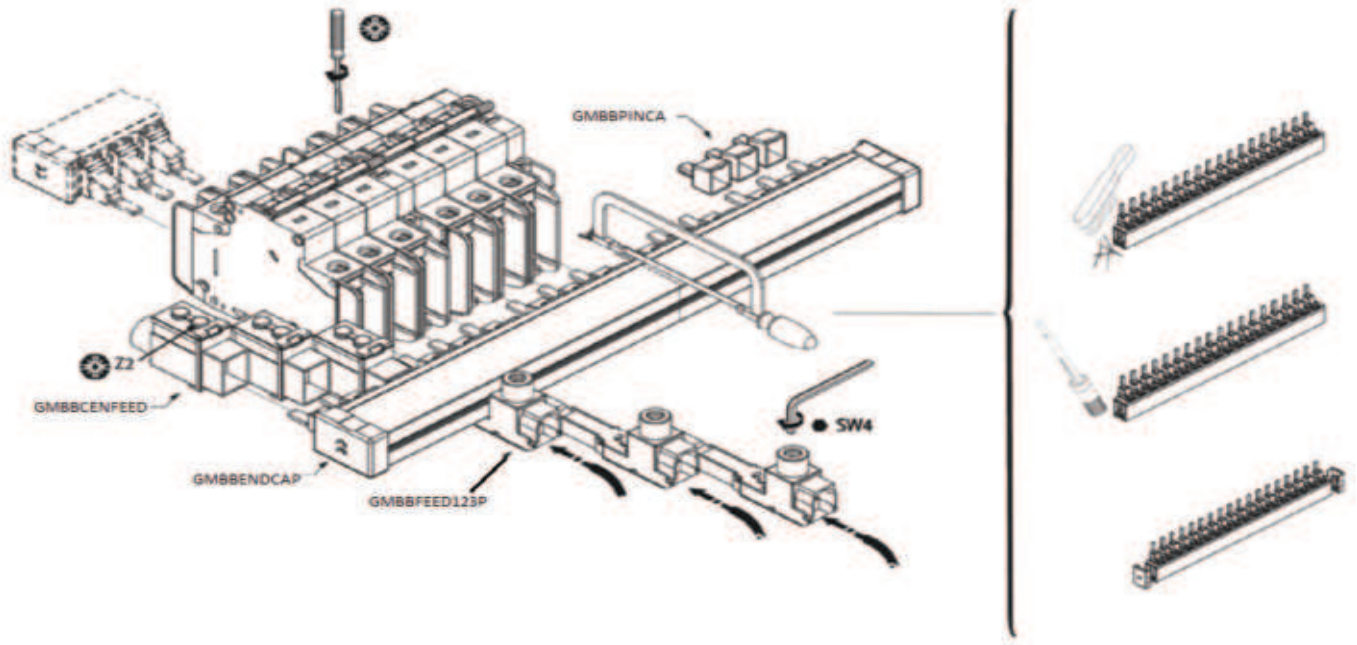
Unit: in. [mm]



Dimensions – GMBSHT311NC

Unit: in. [mm]





Agency Approvals

GMB Supplementary Protectors

E472420

GMBAL, GMBAX, GMKLK, GMBSHT311C Accessories

GMBB Busbars and Busbar Accessories

E483985