T-solution Leader in Electrics & Automation

MOLDED CASE CIRCUIT BREAKERS

UL listed MCCBs

Electric Equipment

LG Industrial Systems

www.lgis.com

Contents

UL489 listed Molded Case Circuit Breakers···Series AB

UL508 listed MMC / IEC MCCBs···Series GB

LG MCCB offers more accessories for varied applications and allows easy access to install them, especially for the electrical auxiliaries.

UL489 listed Molded Case Circuit Breakers

Series AB

100AF / 225AF

15 to 100A

225AF

125 to 225A

Compact Design saves the Space

Inches(mm)

	Width	Height	Depth
100AF	4.13 (105)	7.28 (185)	3.39 (86)
225AF			
400AF	5.51 (140)	11.02 (280)	4.33 (110)
600AF	8.27 (210)	11.02 (280)	4.33 (110)

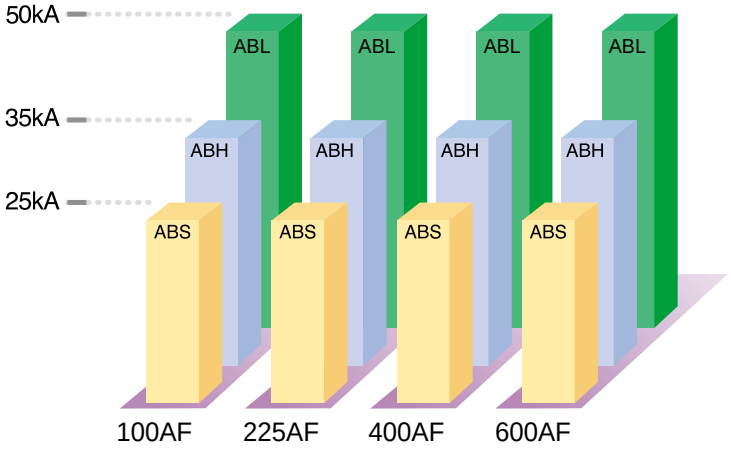
400AF

250 to 400A

600AF

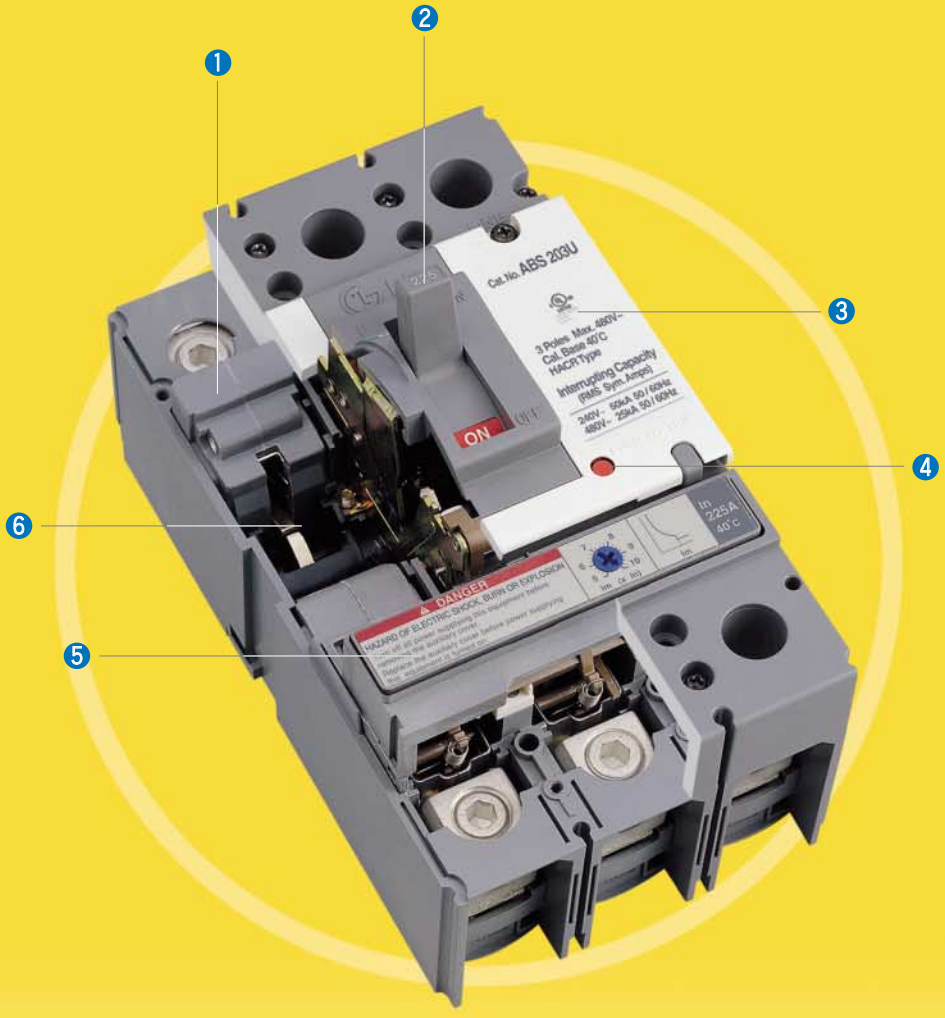
500 to 600A

Interrupting capacity at 480V AC



Structure

Series AB



❶ Arc Extinguishers

Arc extinguishers dissipate arcs that result when the circuit breaker interrupts current flow.

❷ Handle

The handle position clearly indicates the contact status: closed, open or tripped.
The handle indicates "ON" for safety when the contacts are closed.

❸ Auxiliary Cover

Auxiliary cover provides convenience when accessories are installed and replaced.

❹ Trip Button

Trip button provides a manual means of exercising the mechanism by manually tripping the circuit breaker.

❺ Trip Units

The function of the trip unit is to trip the operating mechanism in the event of a prolonged overload or short-circuit current.
To accomplish this, thermal magnetic trip units are provided.
Protection is provided by combining a temperature sensitive device with a current sensitive electromagnetic device.

❻ Operating Mechanism

Operating mechanism is to provide a means of opening and closing the circuit breaker.
This mechanism is the quick-make, quick-break type and it is constructed so that all poles will make and break simultaneously when operated manually or automatically.
This mechanism is also trip-free.

Catalog Numbering System

Breaker Type	
ABN	MCS
ABS	25kA
ABH	35kA
ABL	50kA

* by UL489 interrupting rating at 480Vac

Poles	
2	2Poles
3	3Poles

Rated Current			
100AF	15A	225AF	125A
	20A		150A
	30A		175A
	40A		200A
	50A		225A
	60A	400AF	250A
	80A		300A
	100A		350A
			400A
		600AF	500A
			600A

Accessories	
AX	Auxiliary switch
AL	Alarm switch
SHT	Shunt trip
UVT	Under voltage trip
MI	Mech. Interlock

* See page 12~13

Ampere Frame	
10	100AF
20	225AF
40	400AF
60	600AF

UL Listed	
-	-
U	Listed

Note) - Position omitted if not used.

Selection Data

Series AB

Molded Case Circuit Breakers

Frame Size(AF)		100AF		
Catalog number	2-pole	ABS102U	ABH102U	ABL102U
	3-pole	ABS103U	ABH103U	ABL103U
Maximum continuous ampere rating at 40℃		15, 20, 30, 40, 50, 60, 80, 100A		
UL489 Listed Interrupting ratings (RMS Symmetrical amperes)	240V AC	50kA	65kA	100kA
	480V AC	25kA	35kA	50kA
	600V AC	-	-	-
Type of overcurrent device		Fixed thermal and magnetic		
Catalog number of wire connector		LGCA1		
Dimensions Inches(mm)	Width	4.13(105)		
	Height	7.28(185)		
	Depth	3.39(86)		
Shipping weight	Lbs.(kg)	4.2(1.9)		

- **Applicable Standard**
  Molded case circuit breakers are designed and tested in accordance with Underwriters Laboratories, Inc., Standard UL489.(UL file No. : E231289)

- **Wire connectors**
  Circuit breakers are supplied with line & load side connectors.

- **Calibration**
  Circuit breakers are calibrated for 40℃ maximum ambient application.
  Unless marked otherwise, circuit breakers are 80% duty rated.

- **HACR rated**
  Circuit breakers are HACR rated.

- **Wire**
  Circuit breakers are to be connected with 60 or 75℃ wire for circuit breakers having a rated current of 125 amperes or less. Circuit breakers having a rated current greater than 125 amperes shall only be cabled with 75℃ cable.

225AF			400AF			600AF		
ABS202U	ABH202U	ABL202U	ABS402U	ABH402U	ABL402U	ABS602U	ABH602U	ABL602U
ABS203U	ABH203U	ABL203U	ABS403U	ABH403U	ABL403U	ABS603U	ABH603U	ABL603U
125, 150, 175, 200, 225A			250, 300, 350, 400A			500, 600A		
50kA	65kA	100kA	50kA	65kA	100kA	50kA	65kA	100kA
25kA	35kA	50kA	25kA	35kA	50kA	25kA	35kA	50kA
-	-	-	14kA	18kA	18kA	14kA	18kA	22kA
Fixed thermal and adjustable magnetic			Fixed thermal and magnetic			Fixed thermal and magnetic		
LGCA2			LGCA4			LGCA6		
4.13(105)			5.51(140)			8.27(210)		
7.28(185)			11.02(280)			11.02(280)		
3.39(86)			4.33(110)			4.33(110)		
4.4(2.0)			12.3(5.6)			19.4(8.8)		

Magnetic trip settings

Frame Size(AF)	Ampere rating(In)	Magnetic trip settings
100AF	15A	500A
	20A	500A
	30A	500A
	40A	500A
	50A	500A
	60A	600A
	80A	800A
	100A	1000A
225AF	125A	5,6,7,8,9,10 x In(Adjustable)
	150A	5,6,7,8,9,10 x In(Adjustable)
	175A	5,6,7,8,9,10 x In(Adjustable)
	200A	5,6,7,8,9,10 x In(Adjustable)
	225A	5,6,7,8,9,10 x In(Adjustable)
400AF	250A	2500A
	300A	3000A
	350A	3500A
	400A	4000A
600AF	500A	5000A
	600A	6000A

* UL magnetic trip setting tolerances are -20% and +30% from the nominal values shown.

Selection Data

Series AB

Molded Case Switches

Frame Size(AF)		100AF	225AF	400AF	600AF
Catalog number		ABN103U	ABN203U	ABN403U	ABN603U
Poles		3	3	3	3
Maximum voltage ratings		480V AC	480V AC	600V AC	600V AC
Switch ampere ratings		30,60,100A	225A	400A	600A
Short circuit withstand ratings	**240V AC**	100kA	100kA	100kA	100kA
	480V AC	50kA	50kA	50kA	50kA
	600V AC	-	-	18kA	22kA
Catalog number of wire connector		LGCA1	LGCA2	LGCA4	LGCA6
Dimensions		Same as MCCB			
Shipping weight		Same as MCCB			

- Molded Case Switches are listed in accordance with Underwriters Laboratories, Inc., Standard UL489. (UL file No. : E223516)
- Molded Case Switches are calibrated to protect only the Molded Case Switch itself, when it is subjected to high fault currents.
- Molded Case Switches open instantaneously at a factory preset magnetic trip point and provide no overload or low level fault protection.
- The short circuit withstand rating is the fault current at rated voltage that the molded case switch will withstand without damage when protected by a circuit breaker with an equal continuous current rating.
- Molded case switches are used as compact switches in applications requiring high current switching capabilities.
- All molded case switches will accept the same lugs and accessories as equivalent circuit breakers.
- Molded case switches open when the handle is switched to the OFF position or in response to auxiliary tripping device such as a shunt trip.

Trip Point of MCS

Frame Size(AF)	Ampere rating	Trip point
100AF	30A	500A
	60A	600A
	100A	1000A
225AF	225A	2250A
400AF	400A	4000A
600AF	600A	6000A

* UL magnetic trip setting tolerances are -20% and +30% from the nominal values shown.

Lug information

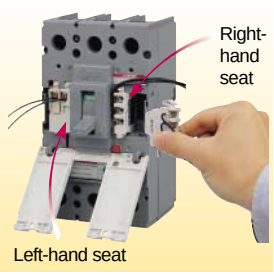
Catalog No.	Shape	Terminal Material	Wire range		Tightening Torque lb-in(kgf.cm)	Binding screw	
			AWG,kcmil	Number of conductors		Head Style	Size (inches)
LGCA1		Aluminum alloy	14 ~ 8	1	60(69)	Slotted Head	7/16-20 UNF 2A
			6 ~ 1/0	1	80(92)		
LGCA2		Aluminum alloy	1	1	150(173)	Hex. Head	9/16-18 UNF 2A
			1/0 ~ 2/0	1	180(207)		
			3/0 ~ 4/0	1	250(288)		
			250 ~ 300	1	325(374)		
LGCA4		Aluminum alloy	250 ~ 400	1	325(374)	Hex. Head	1-12 UNF 2A
			500	1	375(432)		
			3/0	2	250(288)		
LGCA6		Aluminum alloy	250 ~ 400	2	325(374)	Hex. Head	5/8-18 UNF 2A
			500	2	375(432)		

- Lug terminals are listed in accordance with Underwriters Laboratories, Inc., Standard UL486A.
- Lug terminals are suitable for compact wires that CSA Standard (C22.2 No.65) require.
- Wire connectors intended for use with copper conductors only.
- Lug terminals are suitable for 60/75℃ wire.

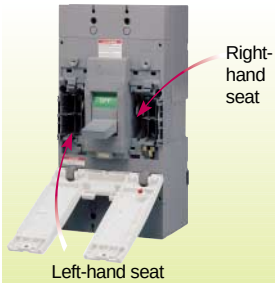
Electrical auxiliaries

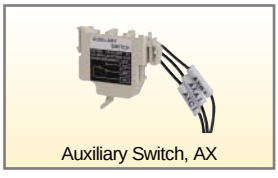
- Compartments are accessible from the front by opening auxiliary cover.
- Not necessary to take off the breaker cover.

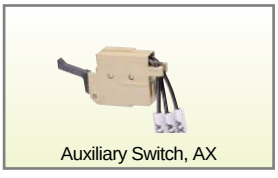
● 100, 225AF breakers

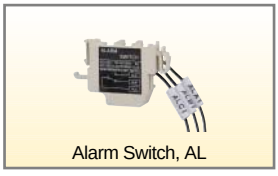


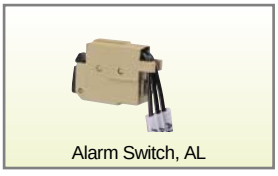
● 400, 600AF breakers

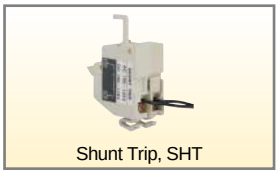


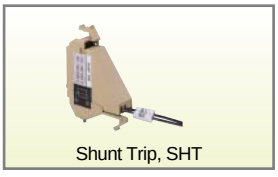

Auxiliary Switch, AX


Auxiliary Switch, AX

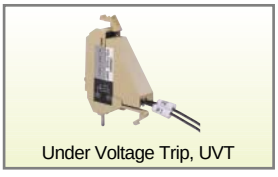

Alarm Switch, AL


Alarm Switch, AL


Shunt Trip, SHT


Shunt Trip, SHT


Under Voltage Trip, UVT


Under Voltage Trip, UVT

Auxiliary Switch, AX

Signals the status of the breaker - opening or closing
Consists of one changeover switch per unit

Alarm Switch, AL

Signals when a breaker is tripped
Consists of one changeover switch

Ratings of the AX & AL

AC			DC		
Operational voltage(V)	Max. switching current(A)		Operational voltage(V)	Max. switching current(A)	
	Resistive load	Inductive load		Resistive load	Inductive load
125	5	3	30	4	3
250	3	2	125	0.4	0.4

Shunt trip, SHT

Trips a breaker remotely

	100AF	225AF	400AF	600AF
AC/DC common	12/24/48/60/250V		24~48V AC200~240/DC200~220V AC100~125/DC100~110V	
AC	100~125/200~240 380~450/440~480 500~550V		380~460/480~550V	
DC	100~110/125/200~220 240/250V		-	
Operational voltage	75~110% of rated volts		75~110% of rated volts	

Under voltage trip, UVT

Trips a breaker when control voltage disappears or falls below the set value

	100AF	225AF	400AF	600AF
AC/DC common	24/48/100~110/200~220V			
AC	380~440V, 440~480V			
Operational voltage	35~70% of rated volts			
Re-close voltage of CB	85~110% of rated volts			

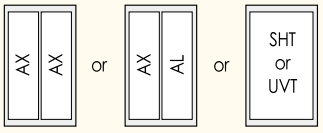
Maximum possibilities for auxiliaries

● 100, 225AF breakers

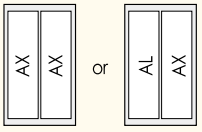
Left-hand seat

Right-hand seat

Left-hand seat
Option of connecting
2AX or AX+AL or SHT or UVT



Right-hand seat
Option of connecting
2AX or AL+AX

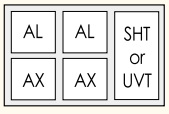


● 400, 600AF breakers

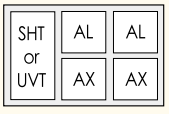
Left-hand seat

Right-hand seat

Left-hand seat
Option of connecting
2AX , 2AL and SHT or UVT

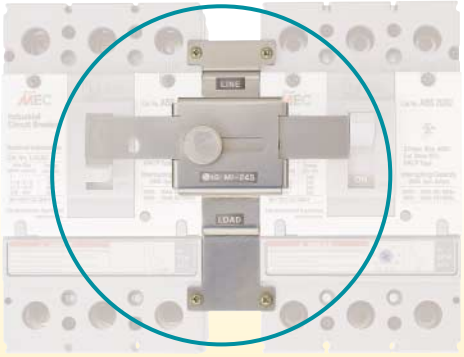


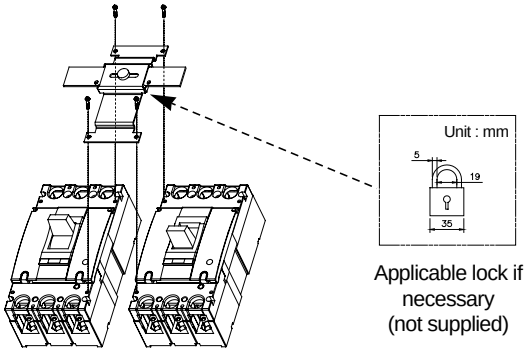
Right-hand seat
Option of connecting
2AX , 2AL and SHT or UVT



External accessories

Mechanical Interlock

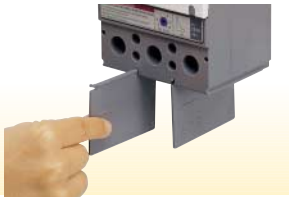




Applicable lock if necessary (not supplied)

Catalog No.	Applied MCCB
MI-23S	2 & 3 poles 100AF(15 to 100A) 2 & 3 poles 225AF(125 to 225A)
MI-43S	2 & 3 poles 400AF(250 to 400A)
MI-83S	2 & 3 poles 600AF(500 to 600A)

Other accessory



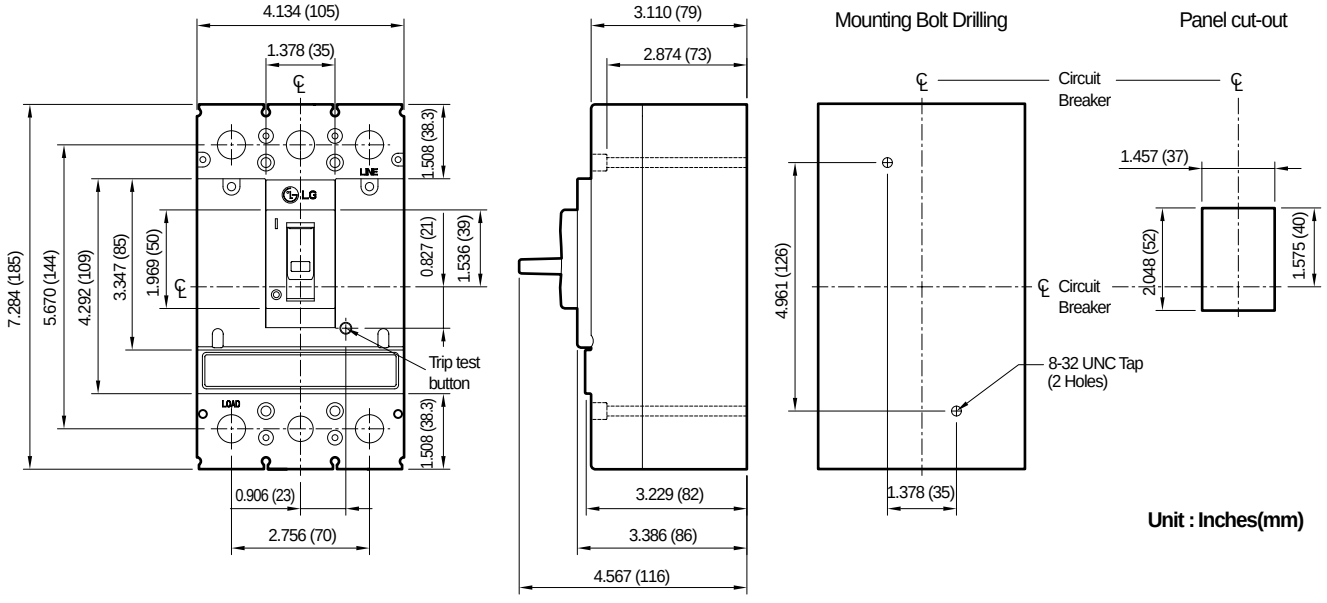
Insulation barrier

* UL file No. of accessories : E223241

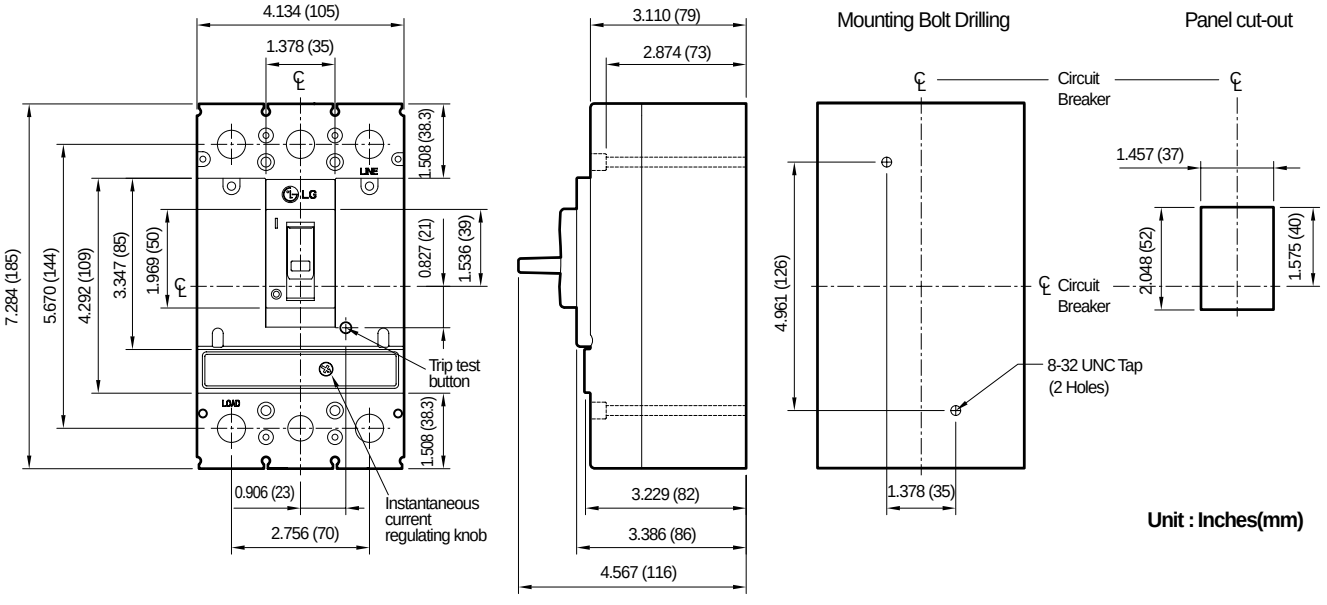
Dimensions

Series AB

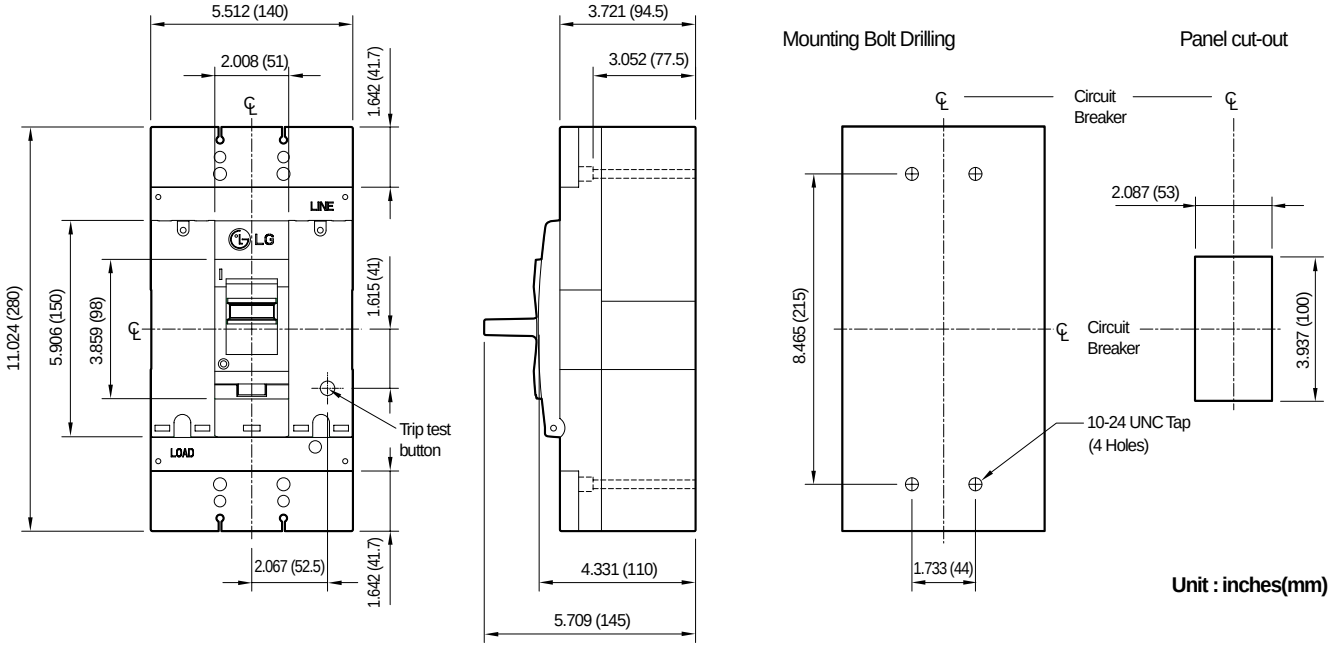
ABS/ABH/ABL 102U, 103U, ABN 103U



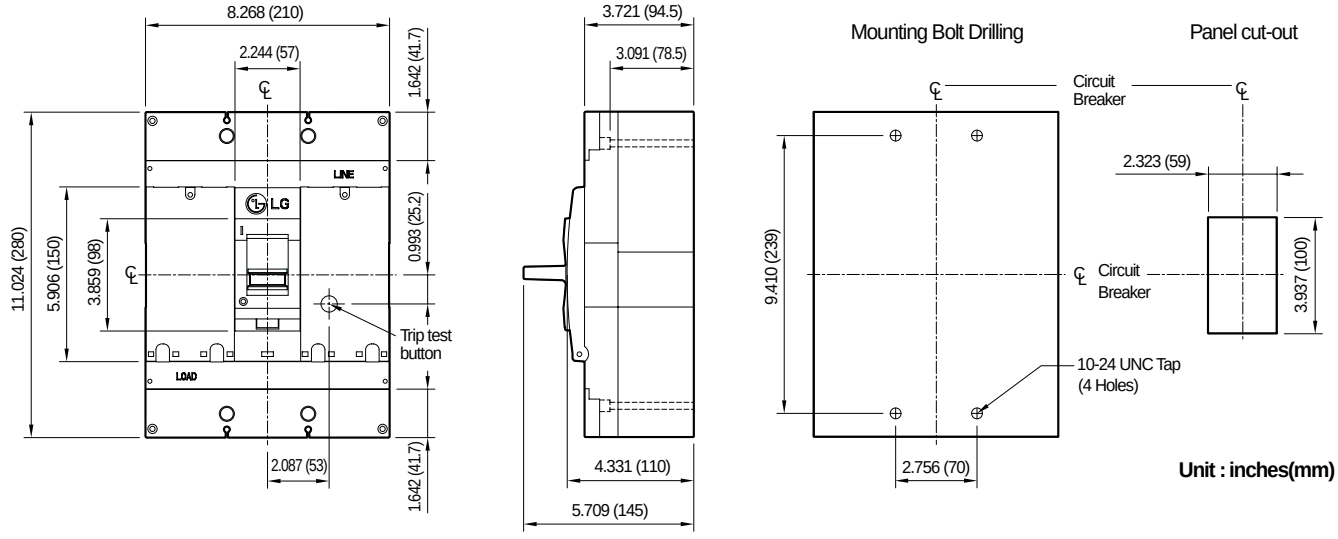
ABS/ABH/ABL 202U, 203U, ABN 203U



ABS/ABH/ABL 402U, 403U, ABN 403U



ABS/ABH/ABL 602U, 603U, ABN 603U



UL508 listed MMC / IEC MCCB

Series GB

UL508 Rated Uses

- MMC(Manual Motor Controller)
- Manual Starter / Motor Disconnector

IEC60947-2 Rated Uses

- Molded Case Circuit Breaker

100AF

GBH103, GBN103

250AF

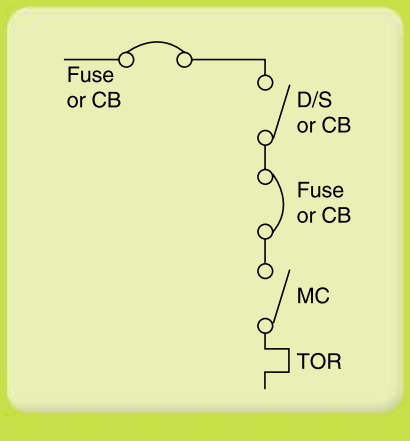
GBL103,
GBH203, GBL203, GBN203

- **UL508 ratings**
  - 3 pole
  - In=16~100amp
  - Interrupting capacity .. 30 and 42kA
- **IEC60947-2 ratings**
  - 2, 3 and 4 pole
  - In=16~100amp
  - Interrupting capacity .. 35 and 50kA
- **Trip unit**
  - Adjustable thermal & fixed magnetic trip
  - CE, KEMA certificate according to IEC60947-2
  - UL508 listed as a manual motor controller

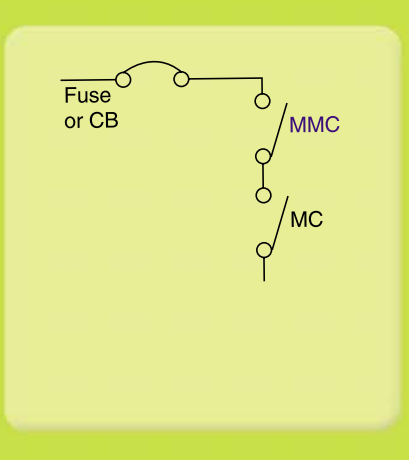
- **UL508 ratings**
  - 3 pole
  - In=16~250amp
  - Interrupting capacity .. 30, 42 and 65kA
- **IEC60947-2 ratings**
  - 2, 3 and 4 pole
  - In=16~250amp
  - Interrupting capacity .. 35, 50 and 85kA
- **Trip unit**
  - Adjustable thermal & adjustable magnetic trip
  - CE, KEMA certificate according to IEC60947-2
  - UL508 listed as a manual motor controller

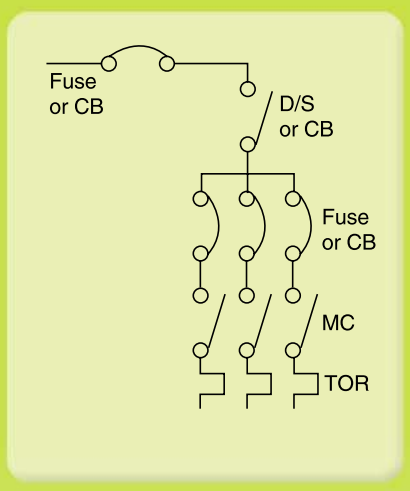
Note) GBL103 is the same size with 250AF MMC.

Application according to UL508

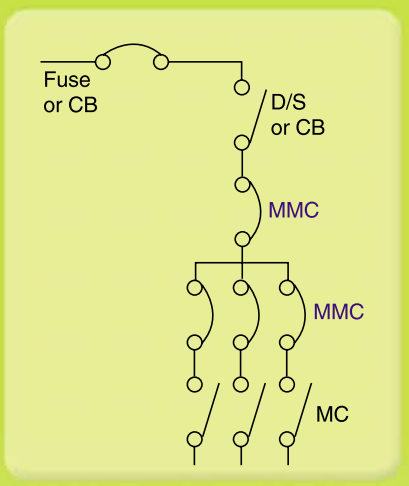


Individual Installation





Group Installation



Regend

- **CB :** Circuit Breaker
- **D/S :** Disconnect Switch
- **MC :** Magnetic Contactor
- **TOR :** Thermal Overload Relay
- **MMC :** Manual Motor Controller

Selection Data

Series GB

Manual Motor Controllers

Frame Size(AF)		100AF			250AF		
Catalog number	3-pole	GBN103	GBH103	GBL103	GBN203	GBH203	GBL203
Maximum continuous ampere rating at 40℃, In		16, 20, 25, 32, 40, 50, 63, 80, 100A Adjustable 0.8/0.9/1.0xIn			125, 160, 200, 250A Adjustable 0.8/0.9/1.0xIn		
UL508 Listed Interrupting ratings (RMS Symmetrical amperes)	240V AC						
	480V AC	30kA	42kA	65kA	30kA	42kA	65kA
	600V AC						
IEC60947-2 Rated ultimate breaking capacity (RMS Symmetrical amperes)	240V AC	50kA	85kA	125kA	50kA	85kA	125kA
	415V AC	35kA	50kA	85kA	35kA	50kA	85kA
	600V AC	18kA	25kA	35kA	18kA	25kA	35kA
Type of overcurrent device		Adjustable thermal and fixed magnetic			Adjustable thermal and magnetic		
Dimensions Inches(mm)	Width	3.5(90)		4.1(105)	4.1(105)		
	Height	5.5(140)		6.5(165)	6.5(165)		
	Depth	3.4(86)		3.4(86)	3.4(86)		
Shipping weight	Lbs.(kg)	2.6(1.2)		3.7(1.7)	3.7(1.7)		

Catalog Numbering System

GBN 10 3 / 100

Breaker Type	
GBN	30kA
GBH	42kA
GBL	65kA

* by UL508 interrupting rating at 480Vac

Ampere Frame	
10	100AF
20	250AF

Poles	
2	2Poles
3	3Poles

Rated Current			
100AF	16A	250AF	125A
	20A		160A
	25A		200A
	32A		250A
	40A		
	50A		
	63A		
	80A		
	100A		

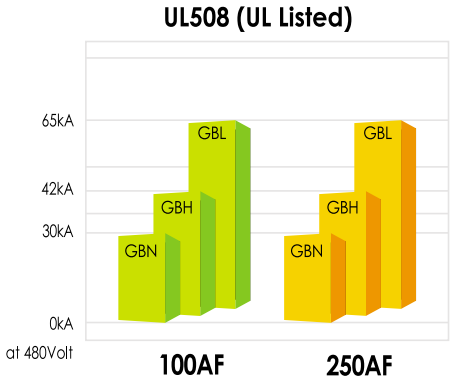
Accessories

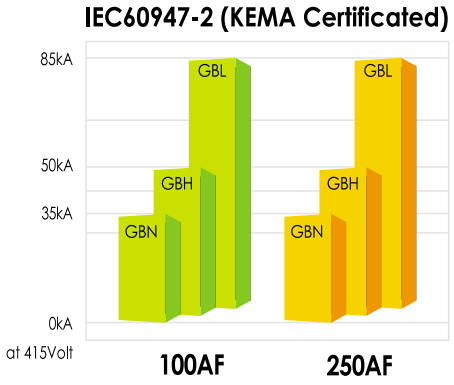
Auxiliary switch, AX
Alarm switch, AL
Shunt trip unit, SHT
Undervoltage Trip, UVT
- See page 12~13

Rotary handle
Terminal cover
Insulation barrier
Rear connection kits

Interrupting ratings

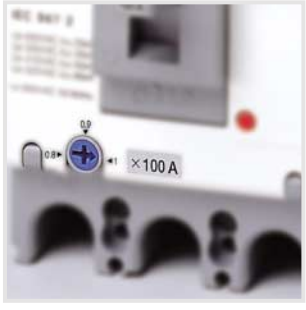
- **According to UL508**
  - GBN → 30kA
  - GBH → 42kA
  - GBL → 65kA at AC480V
- **According to IEC 60947-2**
  - GBN → 35kA
  - GBH → 50kA
  - GBL → 85kA at AC415V



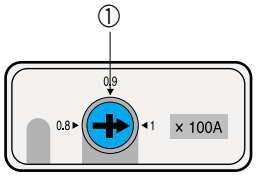


Thermal & Magnetic trip

- TMU type (Thermal-magnetic trip unit)



100 Amp. Frame

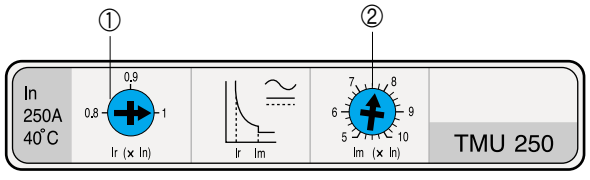


(Adjustable thermal & Fixed magnetic)

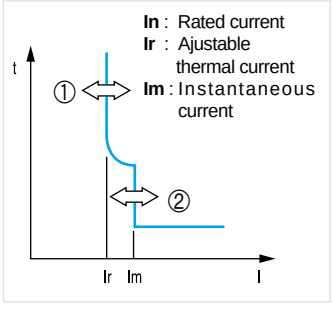
① Rated current regulating knob, Ir
3 steps : 0.8 / 0.9 / 1.0 x In

② Instantaneous current regulating knob, Im
- Fixed instantaneous current type (100AF)
  : 10 x In (Min. 500A)
- Adjustable instantaneous current type (250AF)
  : 5 / 6 / 7 / 8 / 9/ 10 x In (6 steps)

250 Amp. Frame



(Adjustable thermal & Adjustable magnetic)



Frame Size(AF)		100AF									250AF			
Trip unit		TMU16	TMU20	TMU25	TMU32	TMU40	TMU50	TMU63	TMU80	TMU100	TMU125	TMU160	TMU200	TMU250
Ranges of the Ir	0.8 × In	13	16	20	26	32	40	50	64	80	100	128	160	200
	0.9 × In	14	18	23	29	36	45	57	72	90	113	144	180	225
	1.0 × In	16	20	25	32	40	50	63	80	100	125	160	200	250
Ranges of the Im		500A						10 × In			5, 6, 7, 8, 9, 10 × In			

Specifications

Series GB

Rated Current [A]	Thermal Release Adjustable Range [A]	Motor Full Load Current [A]	Maximum Horse Power [HP]					
			1Phase		3Phase			
			120V	240V	120V	240V	460V	575V
16	13 ~ 16	3.9	1/8	1/3	-	3/4	2	3
20	16 ~ 20	6.1	1/4	1/2	1/2	1.5	3	5
25	20 ~ 25	9.0	1/3	1	1	2	5	7.5
32	26 ~ 32	11.0	1/2	1.5	1	3	7.5	10
40	32 ~ 40	17.0	1	3	2	5	10	15
50	40 ~ 50	22.0	1.5	3	3	7.5	15	20
63	50 ~ 63	27.0	2	3	3	7.5	20	25
80	64 ~ 80	32.0	2	5	5	10	20	30
100	80 ~ 100	41.0	3	7.5	5	10	30	40
125	100 ~ 125	52.0	3	10	7.5	15	40	50
150	128 ~ 160	62.0	5	10	10	20	40	60
200	160 ~ 200	77.0	5	15	10	25	60	75
250	200 ~ 250	99.0	7.5	20	15	30	75	100
16	13 ~ 16	3.9	1/8	1/3	-	3/4	2	3
20	16 ~ 20	6.1	1/4	1/2	1/2	1.5	3	5
25	20 ~ 25	9.0	1/3	1	1	2	5	7.5
32	26 ~ 32	11.0	1/2	1.5	1	3	7.5	10
40	32 ~ 40	17.0	1	3	2	5	10	15
50	40 ~ 50	22.0	1.5	3	3	7.5	15	20
63	50 ~ 63	27.0	2	3	3	7.5	20	25
80	64 ~ 80	32.0	2	5	5	10	20	30
100	80 ~ 100	41.0	3	7.5	5	10	30	40
125	100 ~ 125	52.0	3	10	7.5	15	40	50
160	128 ~ 160	62.0	5	10	10	20	40	60
200	160 ~ 200	77.0	5	15	10	25	60	75
250	200 ~ 250	99.0	7.5	20	15	30	75	100
16	13 ~ 16	3.9	1/8	1/3	-	3/4	2	3
20	16 ~ 20	6.1	1/4	1/2	1/2	1.5	3	5
25	20 ~ 25	9.0	1/3	1	1	2	5	7.5
32	26 ~ 32	11.0	1/2	1.5	1	3	7.5	10
40	32 ~ 40	17.0	1	3	2	5	10	15
50	40 ~ 50	22.0	1.5	3	3	7.5	15	20
63	50 ~ 63	27.0	2	3	3	7.5	20	25
80	64 ~ 80	32.0	2	5	5	10	20	30
100	80 ~ 100	41.0	3	7.5	5	10	30	40
125	100 ~ 125	52.0	3	10	7.5	15	40	50
160	128 ~ 160	62.0	5	10	10	20	40	60
200	160 ~ 200	77.0	5	15	10	25	60	75
250	200 ~ 250	99.0	7.5	20	15	30	75	100

* Fuse : 150A (Class T, Current limiting, Non-time Delay type)
  300A (Class J, Current limiting, Non-time Delay type)
  1000A (Class L, Current limiting, Non-time Delay type)
* Circuit Breaker : 800A(Current limiting type)

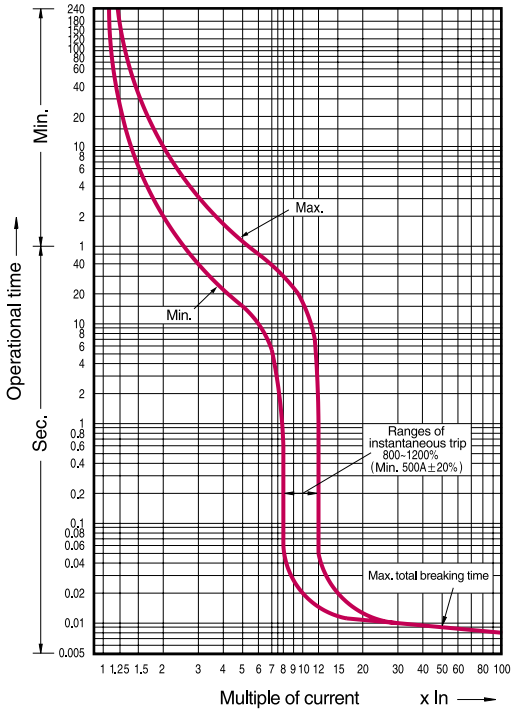
Max. Backup Protection										Catalog No.
Single Motor				Group Motor						
600V Max.		480V Max.		600V Max.			480V Max.			
Fuse [A]	Short Circuit	Fuse [A]	Short Circuit	Fuse [A]	CB [A]	Short Circuit	Fuse [A]	CB [A]	Short Circuit	
150	5kA	150	30kA	1000	800	5kA	1000	800	30kA	GBN103 16A
150	5kA	150	30kA	1000	800	5kA	1000	800	30kA	GBN103 20A
150	5kA	150	30kA	1000	800	5kA	1000	800	30kA	GBN103 25A
150	5kA	150	30kA	1000	800	5kA	1000	800	30kA	GBN103 32A
150	5kA	150	30kA	1000	800	5kA	1000	800	30kA	GBN103 40A
150	5kA	150	30kA	1000	800	5kA	1000	800	30kA	GBN103 50A
150	5kA	150	30kA	1000	800	5kA	1000	800	30kA	GBN103 63A
150	5kA	150	30kA	1000	800	5kA	1000	800	30kA	GBN103 80A
150	5kA	150	30kA	1000	800	5kA	1000	800	30kA	GBN103 100A
300	10kA	300	30kA	1000	800	10kA	1000	800	30kA	GBN203 125A
300	10kA	300	30kA	1000	800	10kA	1000	800	30kA	GBN203 160A
300	10kA	300	30kA	1000	800	10kA	1000	800	30kA	GBN203 200A
300	10kA	300	30kA	1000	800	10kA	1000	800	30kA	GBN203 250A
150	5kA	150	42kA	1000	800	5kA	1000	800	42kA	GBH103 16A
150	5kA	150	42kA	1000	800	5kA	1000	800	42kA	GBH103 20A
150	5kA	150	42kA	1000	800	5kA	1000	800	42kA	GBH103 25A
150	5kA	150	42kA	1000	800	5kA	1000	800	42kA	GBH103 32A
150	5kA	150	42kA	1000	800	5kA	1000	800	42kA	GBH103 40A
150	5kA	150	42kA	1000	800	5kA	1000	800	42kA	GBH103 50A
150	5kA	150	42kA	1000	800	5kA	1000	800	42kA	GBH103 63A
150	5kA	150	42kA	1000	800	5kA	1000	800	42kA	GBH103 80A
150	5kA	150	42kA	1000	800	5kA	1000	800	42kA	GBH103 100A
300	10kA	300	42kA	1000	800	10kA	1000	800	42kA	GBH203 125A
300	10kA	300	42kA	1000	800	10kA	1000	800	42kA	GBH203 160A
300	10kA	300	42kA	1000	800	10kA	1000	800	42kA	GBH203 200A
300	10kA	300	42kA	1000	800	10kA	1000	800	42kA	GBH203 250A
150	5kA	150	65kA	1000	800	5kA	1000	800	65kA	GBL103 16A
150	5kA	150	65kA	1000	800	5kA	1000	800	65kA	GBL103 20A
150	5kA	150	65kA	1000	800	5kA	1000	800	65kA	GBL103 25A
150	5kA	150	65kA	1000	800	5kA	1000	800	65kA	GBL103 32A
150	5kA	150	65kA	1000	800	5kA	1000	800	65kA	GBL103 40A
150	5kA	150	65kA	1000	800	5kA	1000	800	65kA	GBL103 50A
150	5kA	150	65kA	1000	800	5kA	1000	800	65kA	GBL103 63A
150	5kA	150	65kA	1000	800	5kA	1000	800	65kA	GBL103 80A
150	5kA	150	65kA	1000	800	5kA	1000	800	65kA	GBL103 100A
300	10kA	300	65kA	1000	800	10kA	1000	800	65kA	GBL203 125A
300	10kA	300	65kA	1000	800	10kA	1000	800	65kA	GBL203 160A
300	10kA	300	65kA	1000	800	10kA	1000	800	65kA	GBL203 200A
300	10kA	300	65kA	1000	800	10kA	1000	800	65kA	GBL203 250A

* UL File No. : E214031 (UL508/As a Manual Motor Controller)

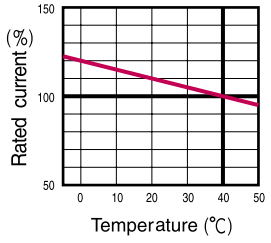
Characteristic Curves

Series GB

GBN/GBH 103

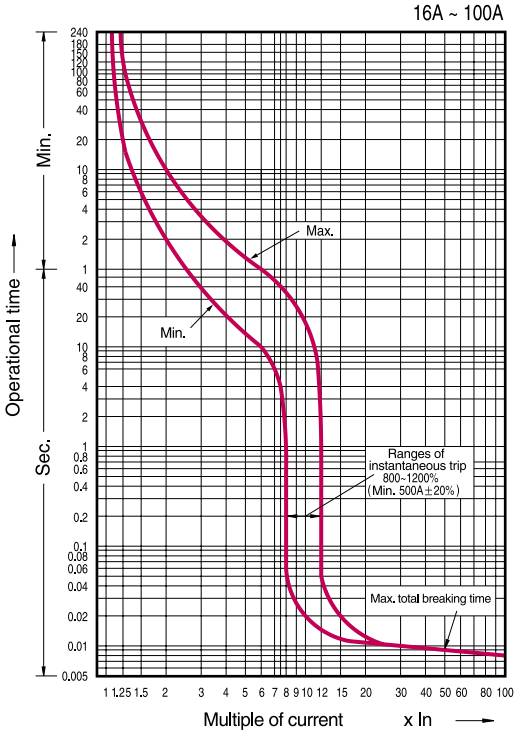


Temperature Compensation Curve

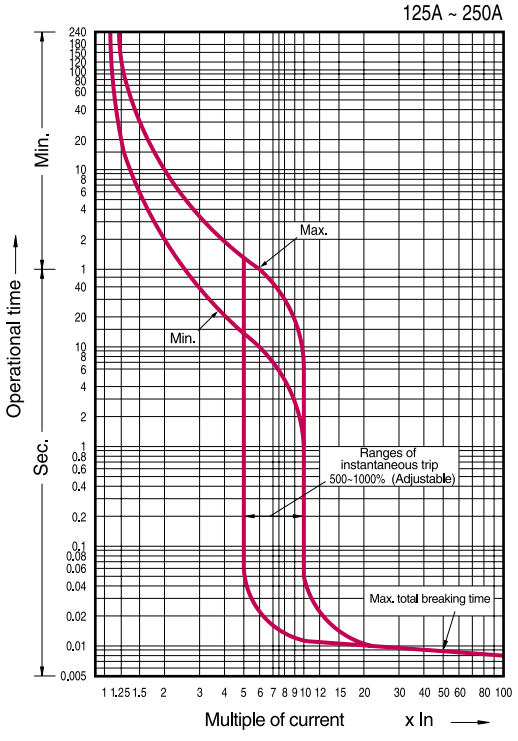


GBL 103, GBN/GBH/GBL 203

16A ~ 100A

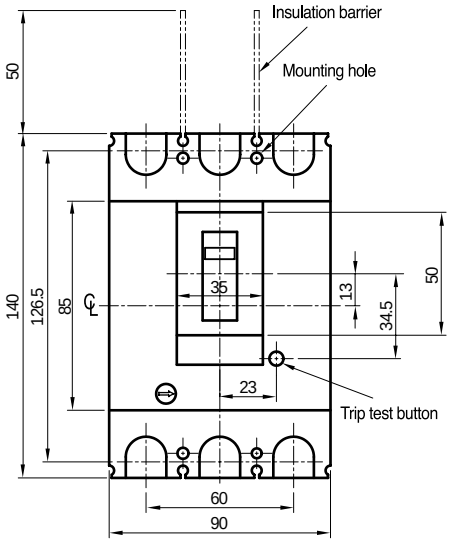


125A ~ 250A

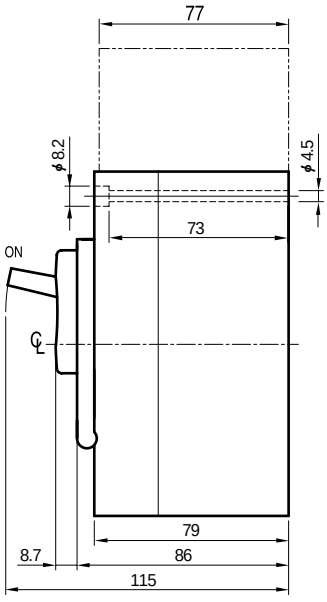


Dimensions

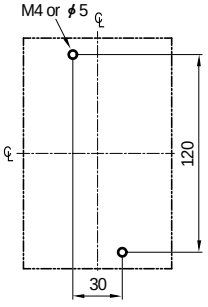
GBN/GBH 103



2, 3 Pole

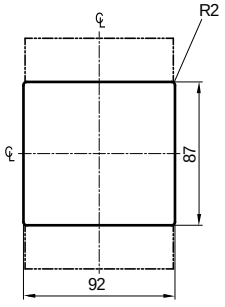


Mounting Bolt Drilling



2,3 Pole

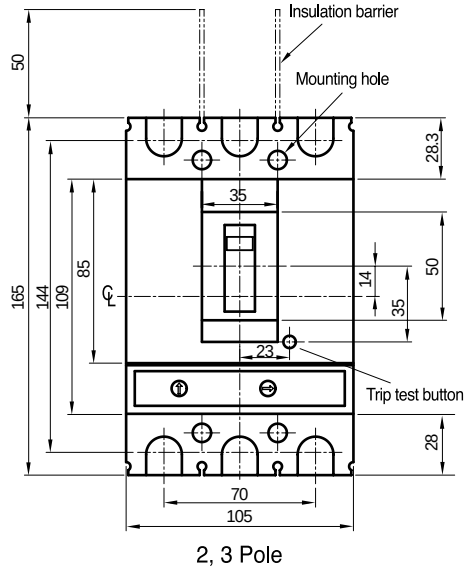
Panel cut-out



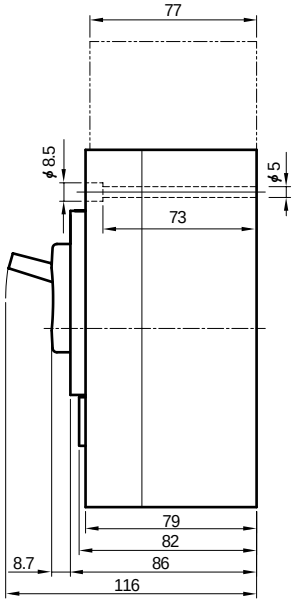
2,3 Pole

Unit : mm

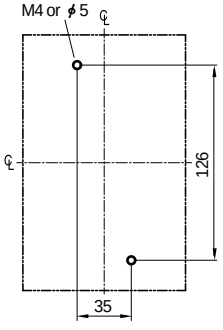
GBL 103, GBN/GBH/GBL 203



2, 3 Pole

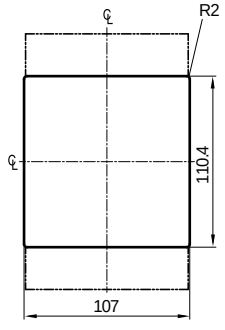


Mounting Bolt Drilling



2,3 Pole

Panel cut-out



2,3 Pole

Unit : mm

Leader in Electrics & Automation

Safety Instructions

- For your safety, please read user's manual thoroughly before operating.
- Contact the nearest authorized service facility for examination, repair, or adjustment.
- Please contact qualified service technician when you need maintenance.
  Do not disassemble or repair by yourself!
- Any maintenance and inspection shall be performed by the personnel having expertise concerned.

LG Industrial Systems www.lgis.com

HEAD OFFICE

LG TWIN TOWERS, 20 Yoido-dong, Youngdungpo-gu,
Seoul, 150-721, Korea
Tel. (82-2)3777-4870, Fax. (82-2)3777-4713
http://www.lgis.com

NEW JERSEY OFFICE

1000 Sylvan Avenue, Englewood Cliffs, New Jersey 07632 USA
Tel: 1-201-816-2985, Fax: 1-201-816-2343
e-mail: younsupl@lgisusa.com

Global Network

- **Dalian LG Industrial Systems Co., Ltd China**
  Address: No. 15 Liaohexi 3 Road, economic and technical development zone, Dalian, China
  Tel: 86-411-731-8210 Fax: 86-411-730-7560 e-mail: youngeel@lgis.com
- **LG-VINA Industrial Systems Co., Ltd Vietnam**
  Address: LGIS VINA Congty che tao may dien Viet-Hung Dong Anh Hanoi, Vietnam
  Tel: 84-4-882-0222 Fax: 84-4-882-0220 e-mail: srjo@hn.vnn.vn
- **LG Industrial Trading (Shanghai) Co., Ltd China**
  Address: Room 1705-1707, 17th Floor Xinda Commerical Building No 318, Xian Xia Road Shanahai, China
  Tel: 86-21-6252-4291 Fax:86-21-6278-4372 e-mail: hgseo@lgis.com
- **LG Industrial Systems Beijing Office China**
  Address: Room 303, 3F North B/D, EAS 21 XIAO YUN ROAD, Dong San Huan Bei Road, Chao Yang District, Beijing, China
  Tel: 86-10-6462-3259/4 Fax: 86-10-6462-3236 e-mail: sclim@mx.cei.gov.cn
- **LG Industrial Systems Shanghai Office China**
  Address: Room 1705-1707, 17th Floor Xinda Commerical Building No 318, Xian Xia Road Shanahai, China
  Tel: 86-21-6278-4370 Fax: 86-21-6278-4301 e-mail: sdhwang@lgis.com
- **LG Industrial Systems Guangzhou Office China**
  Address: Room 303, 3F, Zheng Sheng Building, No 5-6, Tian He Bei Road, Guangzhou, China
  Tel: 86-20-8755-3410 Fax: 86-20-8755-3408
  e-mail: lgisgz@public1.guangzhou.gd.cn
- **LG Industrial Systems Tokyo Office Japan**
  Address: 16F, Higashi-Kan, Akasaka Twin Towers 17-22, 2-chome, Akasaka, Minato-ku Tokyo 107-0052, Japan
  Tel: 81-3-3582-9128 Fax: 81-3-3582-0065 e-mail: snbaek@igis.com

2003. 11 UL listed MCCBs 2002. 1/(03) 2003. 11 Printed in Korea STAFF