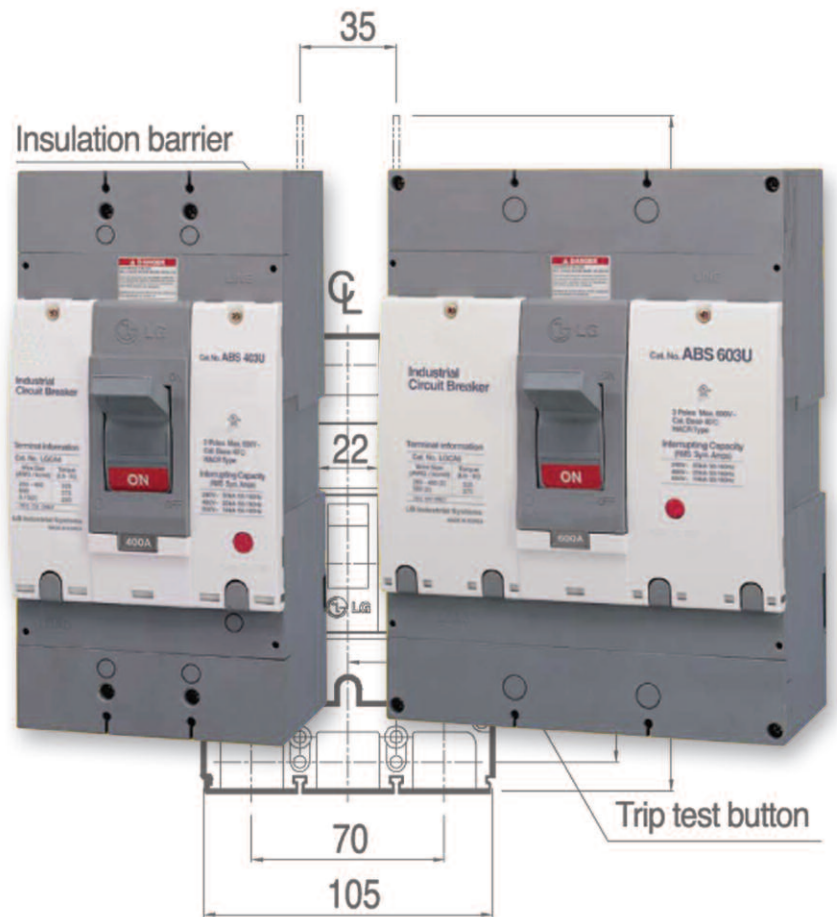


AB-Series Molded Case Circuit Breakers UL489 Listed



Molded Case Circuit Breaker

- Compact Design
- Thermal Magnetic
- 240, 480, 600VAC
- Up to 100kA Short Circuit interrupting capacity
- Circuit breakers are supplied with line and load terminal
- HACR rated



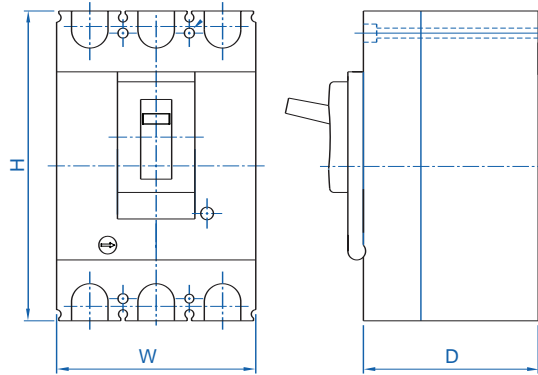
| | |
|--------------------------------|---|
| Current Rating | 15-600A |
| Wire Rating | up to 125A 60°-75°C wire, above 125A 75°C wire only |
| Calibration Temperature | 40°C (104°F) |

INTERRUPTING CAPACITY

| Model | (RMS Symmetrical Amperes) | | | | | |
|--------|---------------------------|---------|---------|---------|---------|---------|
| | ABS103U | ABH103U | ABL103U | ABS403U | ABH403U | ABL403U |
| Volts | ABS203U | ABH203U | ABL203U | ABS603U | ABH603U | ABL603U |
| 240VAC | 50kA | 65kA | 100kA | 50kA | 65kA | 100kA |
| 480VAC | 25kA | 35kA | 50kA | 25kA | 35kA | 50kA |
| 600VAC | - | - | - | 14kA | 18kA | 22kA |

TERMINAL SIZE ACCEPTABILITY & TERMINAL TORQUE

| ABS/ABH/ABL | AWG; kcmil | No. of Connectors | Torque (lb.-in.) |
|-------------|------------|-------------------|------------------|
| -103U | 14-8 | 1 | 60 |
| | 6-1/0 | 1 | 90 |
| -203U | 1 | 1 | 150 |
| | 1/0-2/0 | 1 | 180 |
| | 3/0-4/0 | 1 | 250 |
| -403U | 250-300 | 1 | 325 |
| | 250-400 | 1 | 325 |
| | 500 | 1 | 375 |
| | 3/0 | 2 | 250 |
| -603U | 250-400 | 2 | 375 |
| | 500 | 2 | 375 |



Dimensions

| ABS/ABH/ABL | Height (mm) | Width (mm) | Depth (mm) |
|-------------|-----------------|----------------|----------------|
| -103U | 185 (7.28 in.) | 105 (4.13 in.) | 86 (3.39 in.) |
| -203U | 185 (7.28 in.) | 105 (4.13 in.) | 86 (3.39 in.) |
| -403U | 280 (11.02 in.) | 140 (5.51 in.) | 110 (4.33 in.) |
| -603U | 280 (11.02 in.) | 210 (8.27 in.) | 110 (4.33 in.) |

MAGNETIC TRIP SETTINGS

| ABS/ABH/ABL | Ampere Rating (In) | Magnetic trip Settings |
|-------------|--------------------|--------------------------------|
| -103U | 15A | 500A |
| | 20A | 500A |
| | 30A | 500A |
| | 40A | 500A |
| | 50A | 500A |
| | 60A | 600A |
| | 80A | 800A |
| | 100A | 1000A |
| -203U | 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) |
| -403U | 250A | 2500A |
| | 300A | 3000A |
| | 350A | 3500A |
| | 400A | 4000A |
| -603U | 500A | 5000A |
| | 600A | 6000A |

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

AB Series Circuit Breakers

Application Examples:
Power distribution, power generation, motors, etc. Relatively short thermal trip delay and medium magnetic trip point.



LISTED
E231289



ABS
50kA @240VAC
25kA @480VAC
*14kA @600VAC

| Rated Current | Type/ Cat. No. |
|---------------|-------------------|
| 15A | ABS103U15A |
| 20A | ABS103U20A |
| 30A | ABS103U30A |
| 40A | ABS103U40A |
| 50A | ABS103U50A |
| 60A | ABS103U60A |
| 80A | ABS103U80A |
| 100A | ABS103U100A |
| 125A | ABS203U125A |
| 150A | ABS203U150A |
| 175A | ABS203U175A |
| 200A | ABS203U200A |
| 225A | ABS203U225A |
| 250A | ABS403U250A* |
| 300A | ABS403U300A* |
| 350A | ABS403U350A* |
| 400A | ABS403U400A* |
| 500A | ABS603U500A* |
| 600A | ABS603U600A* |

Standard Pack: 1

Weight:

15-100A 1.9kg (4.2lb.)
125-225A 2.0kg (4.4lb.)
250-400A 5.6kg (12.3lb.)
500-600A 8.8kg (19.4lb.)



ABH
65kA @240VAC
35kA @480VAC
*18kA @600VAC

| Rated Current | Type/ Cat. No. |
|---------------|-------------------|
| 15A | ABH103U15A |
| 20A | ABH103U20A |
| 30A | ABH103U30A |
| 40A | ABH103U40A |
| 50A | ABH103U50A |
| 60A | ABH103U60A |
| 80A | ABH103U80A |
| 100A | ABH103U100A |
| 125A | ABH203U125A |
| 150A | ABH203U150A |
| 175A | ABH203U175A |
| 200A | ABH203U200A |
| 225A | ABH203U225A |
| 250A | ABH403U250A* |
| 300A | ABH403U300A* |
| 350A | ABH403U350A* |
| 400A | ABH403U400A* |
| 500A | ABH603U500A* |
| 600A | ABH603U600A* |

Standard Pack: 1

Weight:

15-100A 1.9kg (4.2lb.)
125-225A 2.0kg (4.4lb.)
250-400A 5.6kg (12.3lb.)
500-600A 8.8kg (19.4lb.)



ABL
100kA @240VAC
50kA @480VAC
*22kA @600VAC

| Rated Current | Type/ Cat. No. |
|---------------|-------------------|
| 15A | ABL103U15A |
| 20A | ABL103U20A |
| 30A | ABL103U30A |
| 40A | ABL103U40A |
| 50A | ABL103U50A |
| 60A | ABL103U60A |
| 80A | ABL103U80A |
| 100A | ABL103U100A |
| 125A | ABL203U125A |
| 150A | ABL203U150A |
| 175A | ABL203U175A |
| 200A | ABL203U200A |
| 225A | ABL203U225A |
| 250A | ABL403U250A* |
| 300A | ABL403U300A* |
| 350A | ABL403U350A* |
| 400A | ABL403U400A* |
| 500A | ABL603U500A* |
| 600A | ABL603U600A* |

Standard Pack: 1

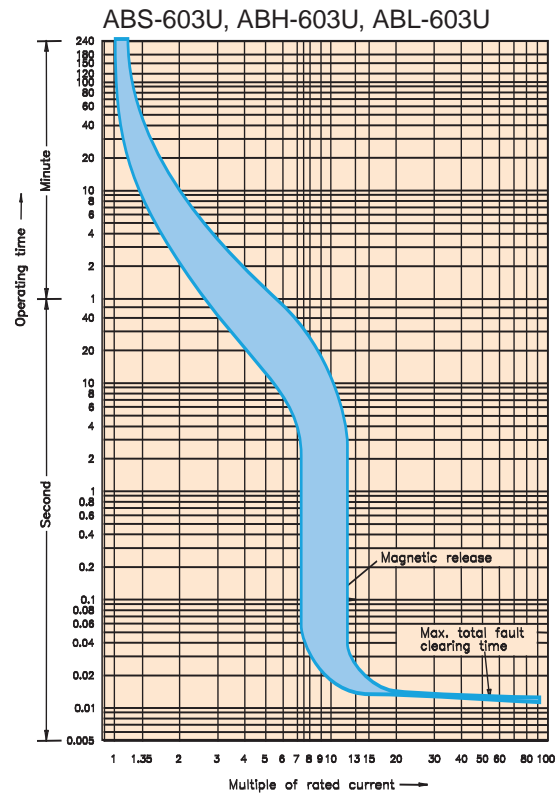
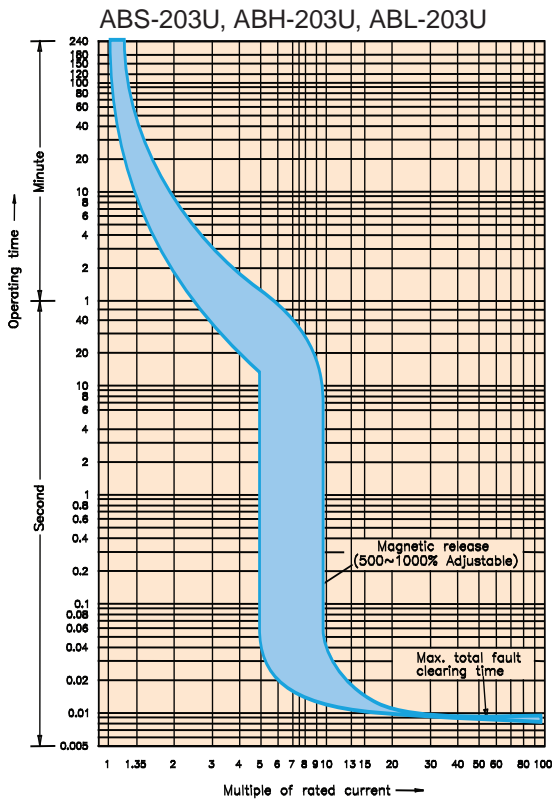
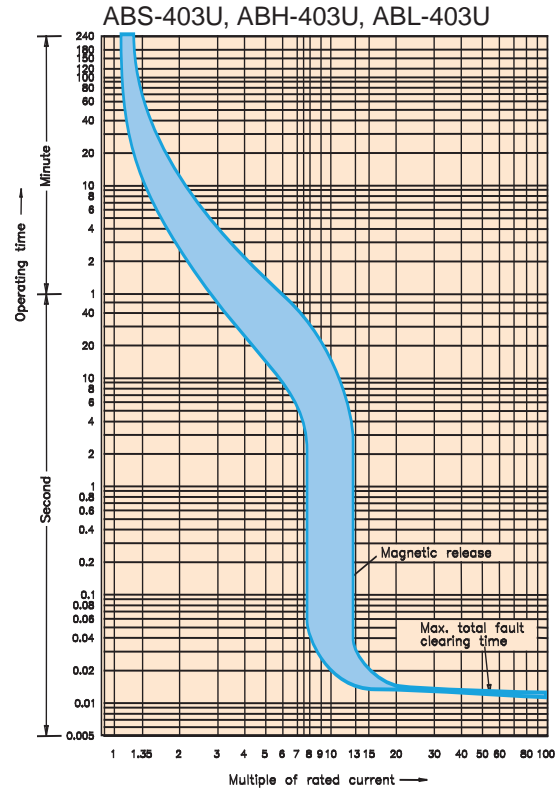
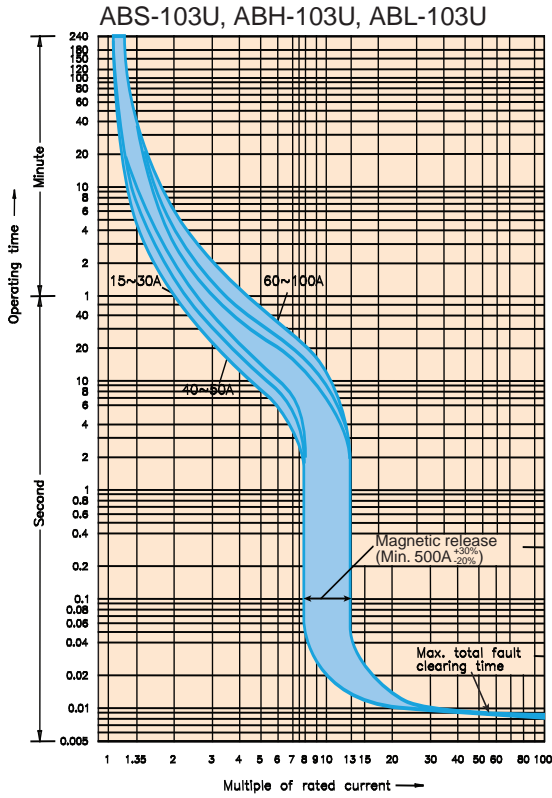
Weight:

15-100A 1.9kg (4.2lb.)
125-225A 2.0kg (4.4lb.)
250-400A 5.6kg (12.3lb.)
500-600A 8.8kg (19.4lb.)

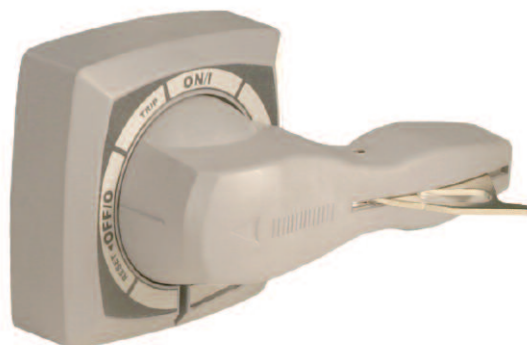
Accessories (see page 54-57)

| Description | Type |
|--------------------|------|
| Auxiliary Switch | AX |
| Alarm Switch | AL |
| Shunt Trip | SHT |
| Undervoltage Trip | UVT |
| Mech. Interlock | MI |
| Insulation Barrier | IB |

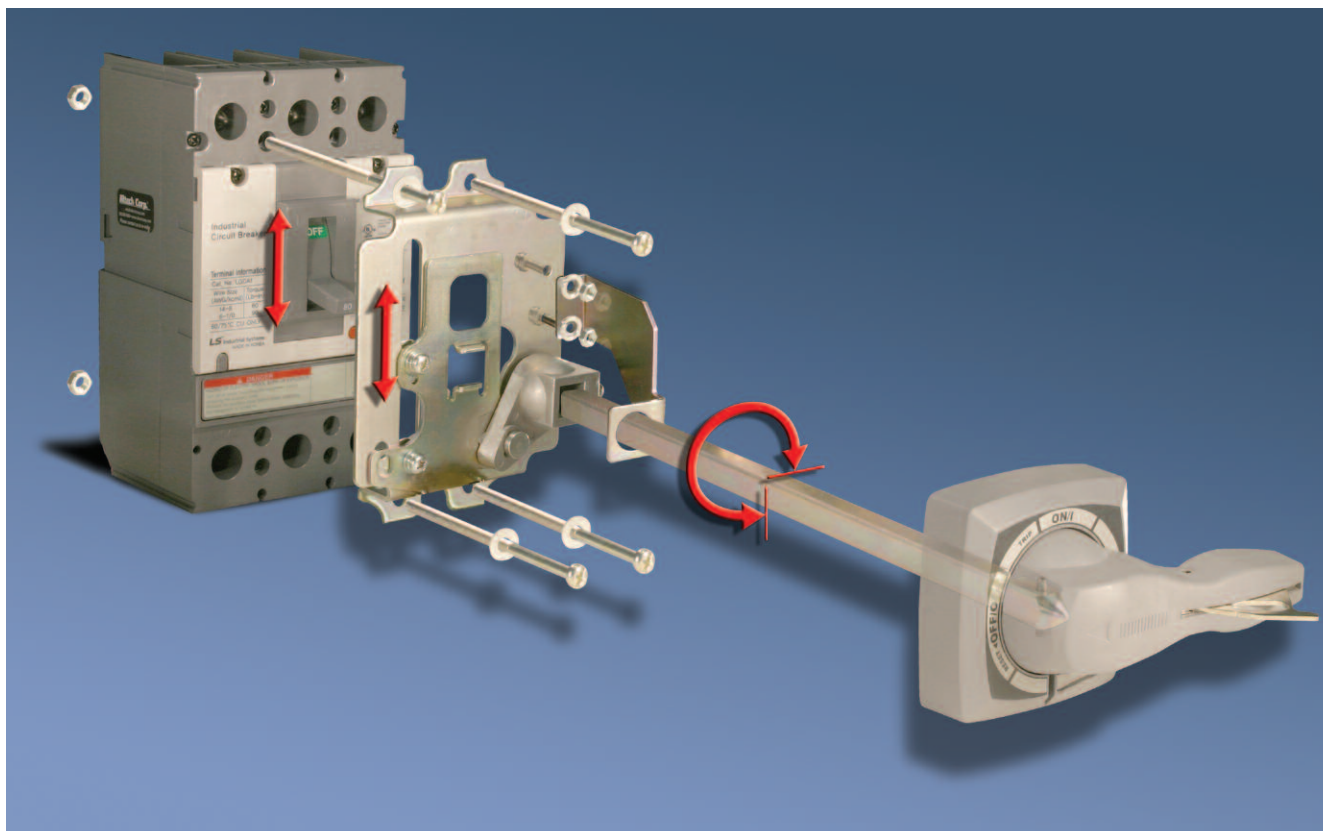
AB-Series Trip Curves



AB Series Door Handle Interlock Mechanism

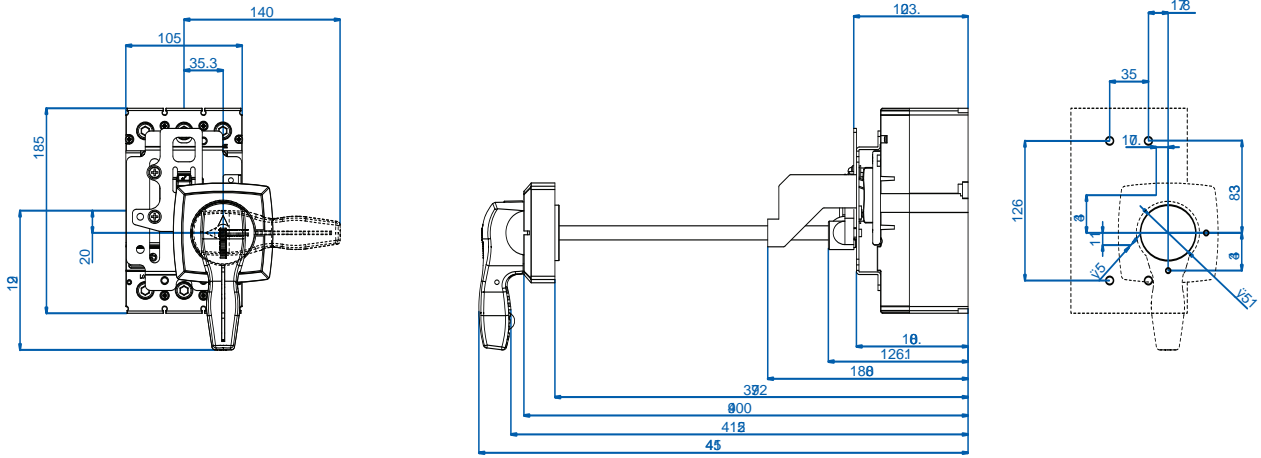


| Description | Type/ Cat. No. |
|--|-------------------|
| Operator Handle Mechanism, grey, for ABS-, ABH-, ABL-103U/203U | HM-100/225AF-G |
| Operator Handle Mechanism, grey, for ABS-, ABH-, ABL-403U | HM-400AF-G |
| Operator Handle Mechanism, grey, for ABS-, ABH-, ABL-603U | HM-600AF-G |

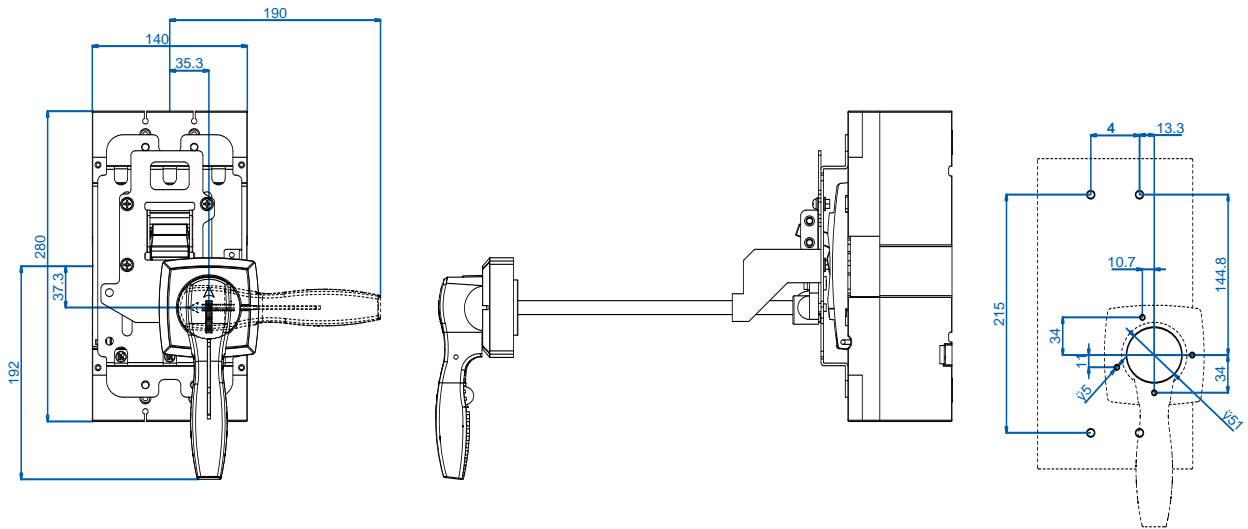


Note: MCCB is not included.

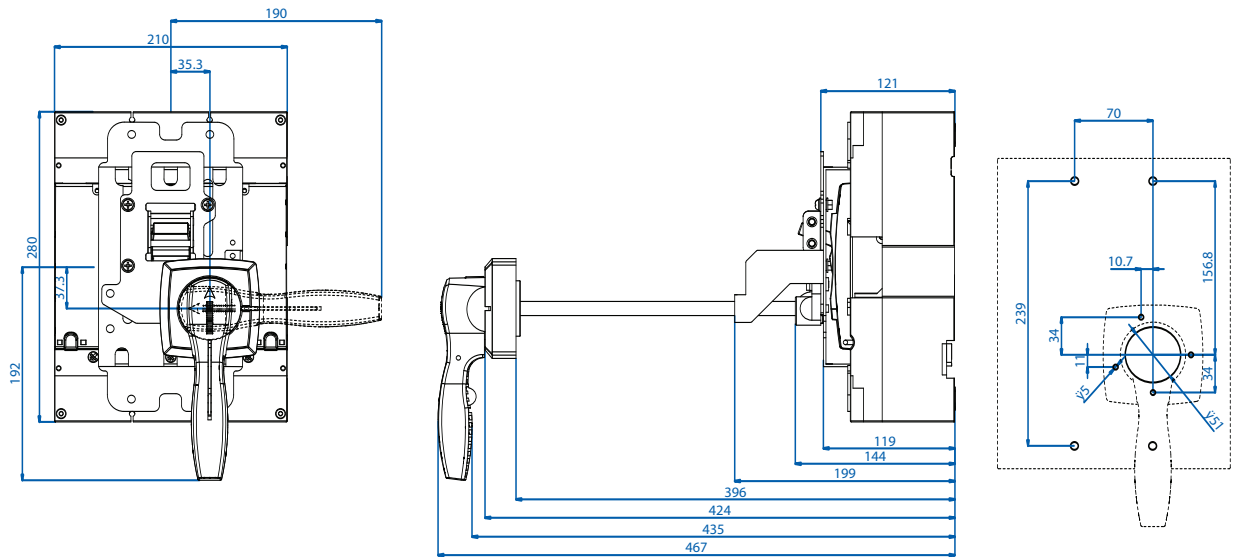
ABS-,ABH-,ABL-103U/203U handle



ABS-,ABH-,ABL-403U handle



ABS-,ABH-,ABL-603U handle



Accessories for

AB Series Circuit Breakers



Auxiliary Switch (AX)

| Voltage | Aux. for AB...103U/203U | Aux. for AB...403U/603U | Switch Type | Switching Current(A) | |
|---------|----------------------------|----------------------------|----------------|----------------------|----------------|
| | | | | Resistive Load | Inductive Load |
| 125VAC | AXS125AC | AXL125AC | 1xCO | 5 | 3 |
| 250VAC | AXS250AC | AXL250AC | 1xCO | 3 | 2 |
| 30VDC | AXS30DC | AXL30DC | 1xCO | 4 | 3 |
| 125VDC | AXS125DC | AXL125DC | 1xCO | 0.4 | 0.4 |
| 250VDC | AXS250DC | AXL250DC | 1xCO | 0.2 | 0.2 |

Standard Pack: 1

Weight: 9.0g (0.317oz.)



Alarm Switch (AL)

| Voltage | Alarm. for AB...103U/203U | Alarm. for AB...403U/603U | Switch Type | Switching Current(A) | |
|---------|------------------------------|------------------------------|----------------|----------------------|----------------|
| | | | | Resistive Load | Inductive Load |
| 125VAC | ALS125AC | ALL125AC | 1xCO | 5 | 3 |
| 250VAC | ALS250AC | ALL250AC | 1xCO | 3 | 2 |
| 30VDC | ALS30DC | ALL30DC | 1xCO | 4 | 3 |
| 125VDC | ALS125DC | ALL125DC | 1xCO | 0.4 | 0.4 |
| 250VDC | ALS250DC | ALL250DC | 1xCO | 0.2 | 0.2 |

Standard Pack: 1

Weight: 9.0g (0.317oz.)



Shunt Trip (SHT) (75-110% of rated voltage)

| Voltage | Shunt Trip for | |
|-----------------------|----------------|----------------|
| | AB...103U/203U | AB...403U/603U |
| AC/DC | | |
| 12V | SHTS12VU | - |
| 24V | SHTS24VU | - |
| 48V | SHTS48VU | - |
| 60V | SHTS60VU | - |
| 250V | SHTS250VU | - |
| 24-48V | - | SHTL24VU |
| 100-125VAC/100-120VDC | - | SHTL100VU |
| 200-240VAC/200-220VDC | - | SHTL200VU |
| AC | | |
| 100-125V | SHTS100AC | - |
| 200-240V | SHTS200AC | - |
| 380-450V | SHTS380AC | - |
| 440-480V | SHTS440AC | - |
| 500-550V | SHTS500AC | - |
| 380-460V | - | SHTL380AC |
| 480-550V | - | SHTL480AC |
| DC | | |
| 100-110V | SHTS100DC | - |
| 125V | SHTS125DC | - |
| 200-220V | SHTS200DC | - |
| 240V | SHTS240DC | - |
| 250V | SHTS250DC | - |

Standard Pack: 1

Weight: 9.0g (0.317oz.)

Accessories for AB Series Circuit Breakers



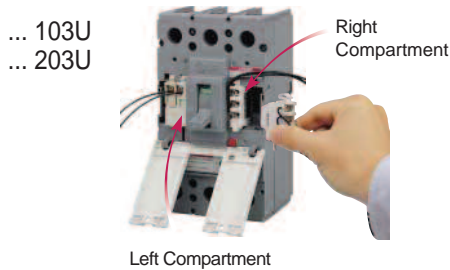
Undervoltage (tripping @ 35-70% of rated voltage)
Trip (UVT) (resetting @ 85-100% of rated voltage)



| Voltage | Undervoltage Trip for AB..103U/203U | Undervoltage Trip for AB..4103U/603U |
|--------------|-------------------------------------|--------------------------------------|
| AC/DC | | |
| 24V | UVTS24VU | UVTL24VU |
| 48V | UVTS48VU | UVTL48VU |
| 100-110V | UVTS100VU | UVTL100VU |
| 200-220V | UVTS200VU | UVTL200VU |
| AC | | |
| 380-450V | UVTS380AC | UVTL380AC |
| 440-480V | UVTS440AC | UVTL440AC |

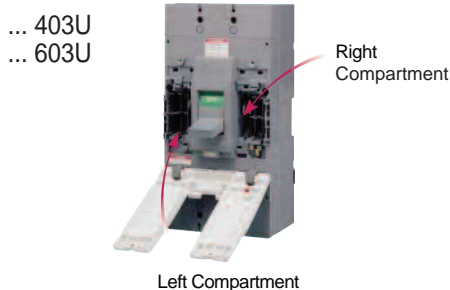
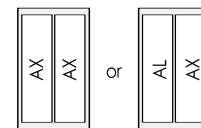
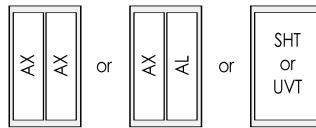
Standard Pack: 1
Weight: 9.0g (0.317oz.)

Various Options for Using Accessories



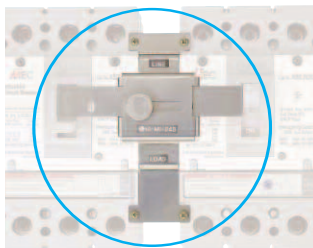
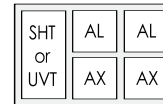
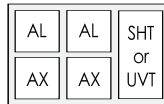
Left Compartment
Option of connecting
2xAX or AX+AL or SHT or UVT

Right Compartment
Option of connecting
2xAX or AL+AX



Left Compartment
Option of connecting
2xAX , 2xAL and SHT or UVT

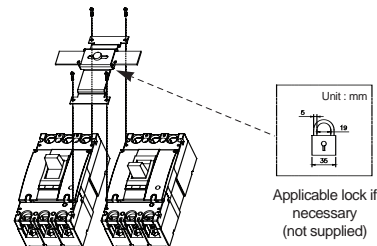
Right Compartment
Option of connecting
2xAX , 2xAL and SHT or UVT



Mechanical Interlock (MI)

| Cat. No. | For Use With |
|----------|--------------------------------|
| MI-23S | AB..103U/ AB..203U; 15 to 225A |
| MI-43S | AB..403U; 250 to 400A |
| MI-83S | AB..603U; 500 to 600A |

Standard Pack: 1
Weight: 0.25kg (0.55 lb.)



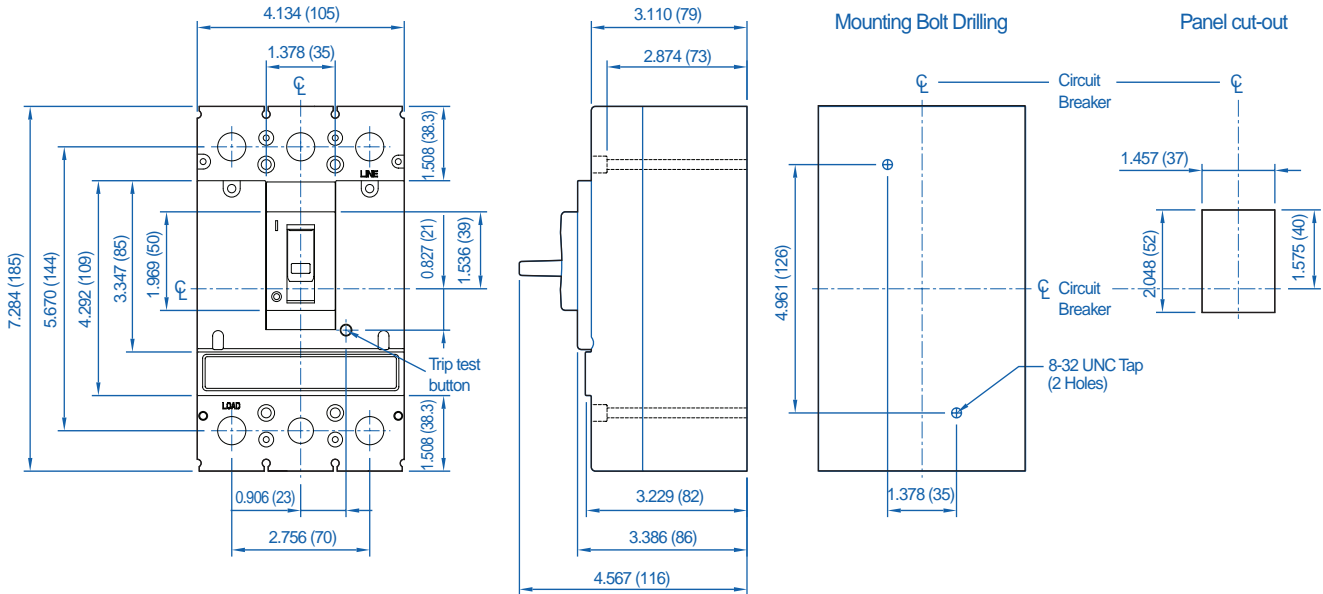
Insulation Barrier (IB)

| Cat. No. | For Use With |
|-----------|---------------------------------|
| TB-23T | AB..103U/ AB..203U; 15 to 225A |
| IB-400600 | AB..403U/ AB..603U; 250 to 600A |

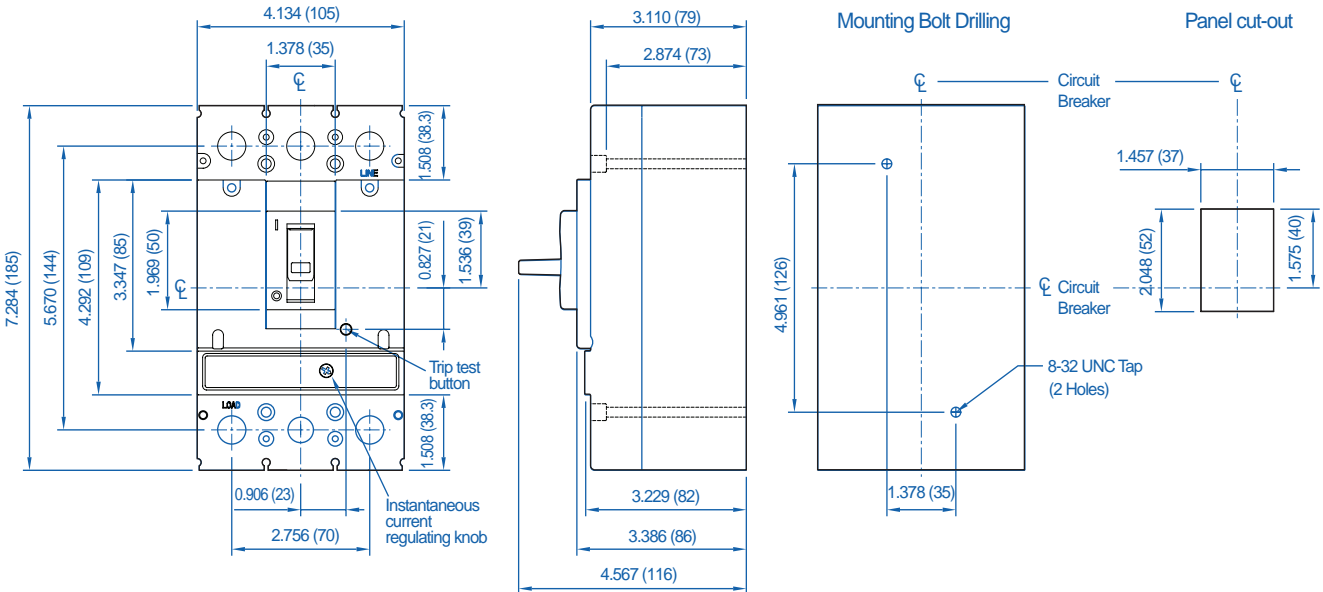
Standard Pack: 1
Weight: 0.25kg (0.55 lb.)

AB Series Circuit Breakers Dimensions

ABS/ABH/ABL 103U

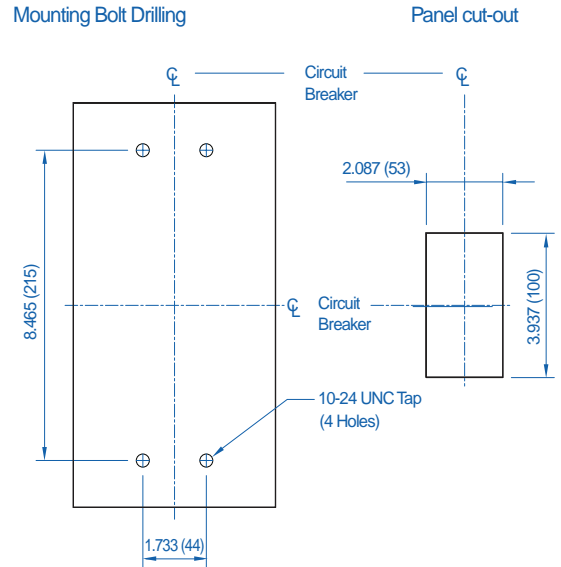
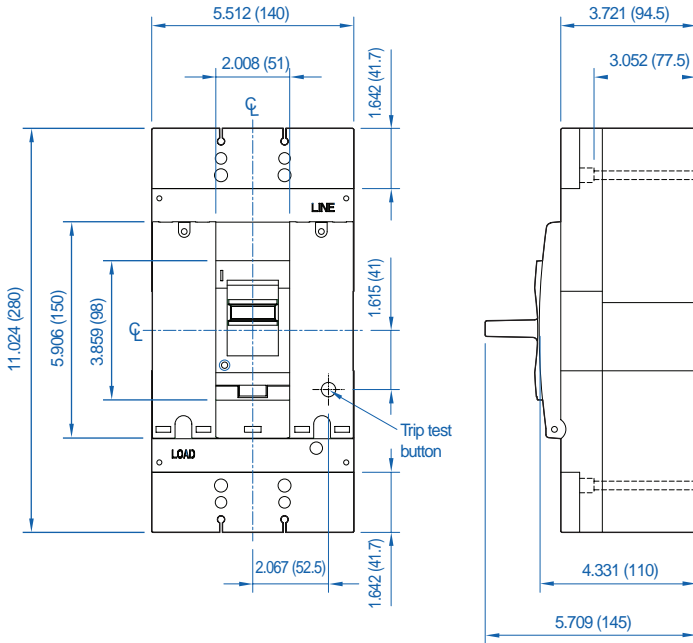


ABS/ABH/ABL 203U

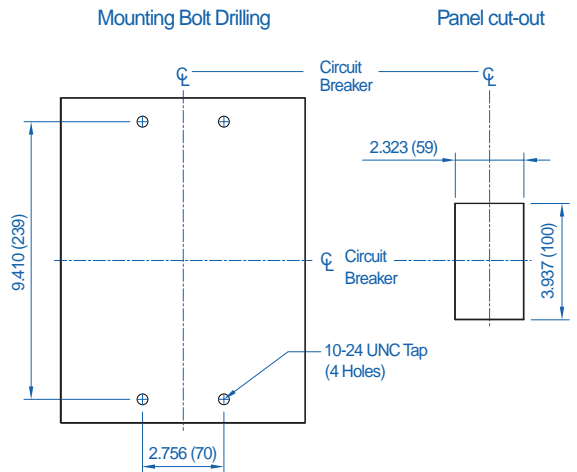
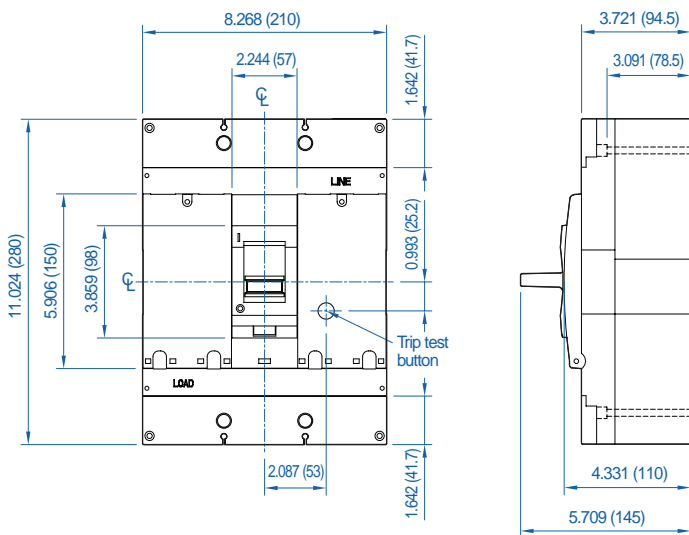


Dimensions shown in inches (mm)

**ABS/ABH/ABL
403U**



**ABS/ABH/ABL
603U**



Dimensions shown in inches (mm)