



## MOLDED CASE CIRCUIT BREAKERS UTS600N

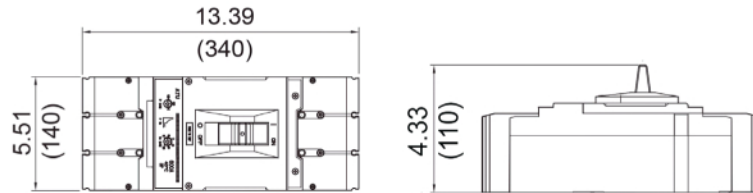
### Features & Accessories

- Thermal-Magnetic 500 A through 600 A
- Suitable for Branch Circuit Protection
- Rated Current of 500 to 600 A, Max. 600 Vac, 600 Vdc
- UL489 Listed for use on UL508 Control Panels
- Shunt Trip, Undervoltage Release and Other Accessories available.
- Line and Load Lug Terminals included on All MCCBs
- Toggle Handle provides Three Positions (On/Off and Tripped)
- HACR (Heating, Air Conditioning and Refrigeration Rated)
- Auxiliary Switch, Alarm Switch, Shunt Trip and Undervoltage Release can be installed in the field.
- Door-Mounted or Flange-Mounted, Flex Shaft Operating Handles available.
- All Frame Sizes Suitable For Reverse-Feed Applications
- All Breakers include Mounting Hardware



### UL Listings

- UL489 MCCB, File E231289
- UL489 Circuit-Breaker Accessories, File E223241



### General Specifications

| Rated Current (A)  | Type                     | Number of Poles | UL489 Rated Voltage (Vac) | UL489 Interrupting Capacity (kA rms) AC(50/60Hz) 480 Vac | Wire Size (AWG) (CU) | Torque (Lb-In) | Approx. Weight (Lbs.) |
|--|--------------------------|-----------------|---------------------------|--|----------------------|----------------|-----------------------|
| <b>UTS600 Frame</b>  |                          |                 |                           |  |                      |                |                       |
| 500  | UTS600N-FTU-500-3P-LL-UL | 3               | 600 (600 Vdc)             | 35   | 2/0-350MCM           | 358.5          | 15.79                 |
| 600  | UTS600N-FTU-600-3P-LL-UL |                 |                           |  |                      |                |                       |
| <b>Trip Unit:</b> Fixed Thermal/Fixed Magnetic; <b>Terminals:</b> Lugs on Line and Load Sides; <b>Compact Wire Only</b> (400-500 MCM);<br><b>Frame (Width x Height x Depth mm/in):</b> 140/5.51 x 340/13.39 x 110/4.33 |                          |                 |                           |  |                      |                |                       |

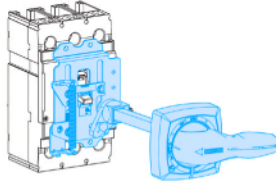


## MOLDED CASE CIRCUIT BREAKERS UTS600N

### Handles

#### UL489 Extended Disconnect Handles

- Mechanism for mounting on outside of enclosure
- Padlockable provision for safety lockout
- Shafts can be cut to length to fit your enclosure
- Choose from UL Type 1, 12 or UL Type 3, 4, 4X

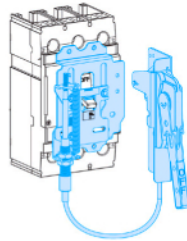


| Type 1, 12  | Type 3, 3R, 4 | Type 3, 4, 4x | Used with MCCB:    |
|-------------|---------------|---------------|--------------------|
| EHUOC-12    | EHVOC-12      | EHXOC-12      | UTE100             |
| EHUOC-16/24 | EHVOC-16/24   | EHXOC-16/24   |                    |
| EHU2-12     | EHV2-12       | EHX2-12       | UTS150,<br>UTS250  |
| EHU2-16/24  | EHV2-16/24    | EHX2-16/24    |                    |
| EHU3-12     | EHV3-12       | EHX3-12       | UTS400,<br>UTS600  |
| EHU3-16/24  | EHV3-16/24    | EHX3-16/24    |                    |
| EHU5-12     | EHV5-12       | EHX5-12       | UTS800,<br>UTS1200 |
| EHU5-16/24  | EHV5-16/24    | EHX5-16/24    |                    |

#### Flange-Mounted Cable Operating Handles

- Cable-operated disconnect handle for flange mount
- Flexible cable allows for easy installation
- Padlockable for safety lockout
- Cable lengths available: 36, 48, 60, 72, 84, & 128"
- Cable sold separately
- Choose from UL Type 1, 12, 3R, 4, 12 or UL Type 4, 4X

| Type 1, 3, 3R, 4, 12 | TYPE 4, 4X | Used with MCCB:    |
|----------------------|------------|--------------------|
| COM0/FHU-S           | COM0/FHX-S | UTE 100            |
| COM2/FHU-S           | COM2/FHX-S | UTS150,<br>UTS250  |
| COM3/FHU-L           | COM3/FHX-L | UTS400,<br>UTS600  |
| COM5/FHU-L           | COM5/FHX-L | UTS800,<br>UTS1200 |



### Locking Devices

#### Removable Locking Device

- Easily attaches to the MCCB
- Allows handle to be locked in "OFF" position which guarantees isolation according to UL489
- 3 padlocks may be used with shackle diameters ranging from 0.2" - 0.3" (not supplied)

#### Mechanical Interlock Device

- Device locks two breakers together and provides 3 positions: Left Off - Right On, Left On - Right Off, and Left Off - Right Off
- Front interlocking plate allows installation of a padlock (not supplied) in order to fix the position. Two padlocks may be used to fix Left Off - Right Off

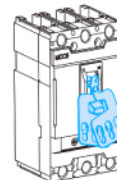
#### Fixed Plate Locking Device

- Easily attaches to the MCCB
- Allows handle to be padlocked in "ON" or "OFF" position. Locking in "OFF" position guarantees isolation according to IEC 60947-2

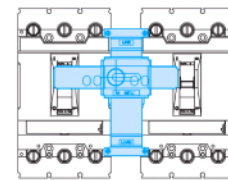
| Part Number:                | Used with MCCB: |
|-----------------------------|-----------------|
| <b>Pad Lock</b>             |                 |
| PL0                         | UTE100          |
| PL2                         | UTS150, UTS250  |
| PL3                         | UTS400, UTS600  |
| PL5                         | UTS800, UTS1200 |
| <b>Pad Handle Lock</b>      |                 |
| PHL0                        | UTE100          |
| PHL2                        | UTS150, UTS250  |
| PHL3                        | UTS400, UTS600  |
| PHL5                        | UTS800, UTS1200 |
| <b>Mechanical Interlock</b> |                 |
| MIT03                       | UTE100          |
| MIT23                       | UTS150, UTS250  |
| MIT33                       | UTS400, UTS600  |
| MIT53                       | UTS800, UTS1200 |

### Flange Cables

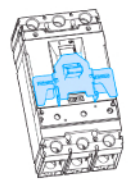
| Part #: | Cable Length (Inch): | Used with MCCB:              |
|---------|----------------------|------------------------------|
| FH2-36  | 36                   | UTE100,<br>UTS150,<br>UTS250 |
| FH2-48  | 48                   |                              |
| FH2-60  | 60                   |                              |
| FH4-36  | 36                   | UTS400,<br>UTS600            |
| FH4-48  | 48                   |                              |
| FH4-60  | 60                   |                              |
| FH4-72  | 72                   | UTS800,<br>UTS1200           |
| FH5-60  | 60                   |                              |
| FH5-84  | 84                   |                              |
| FH5-128 | 128                  |                              |



**Removable Locking Device**



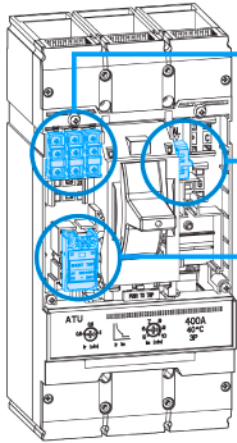
**Mechanical Interlock Device**



**Fixed Plate Locking Device**



## Internal Modules



### Module Options

#### Auxiliary Switch (AX)

- Provides remote "On" and "Off" indication

#### Alarm Switch (AL)

- Provides immediate indication of a breaker trip.

#### Shunt and Undervoltage Trips (SHT) & (UVT)

- (SHT) - Opens breaker in response to externally applied voltage signal.
- (UVT) - Automatically trips when control voltage drops. Breaker cannot be closed again until voltage returns to 85% of control voltage.

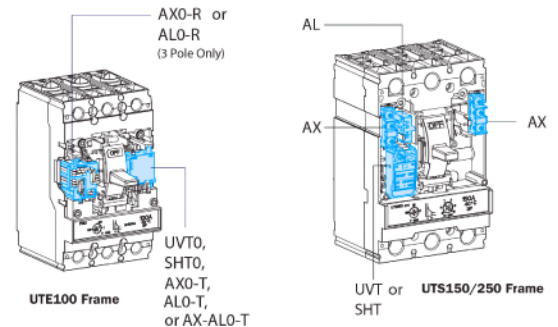
## Auxiliary and Alarm Switch Modules

| Part #:                         | Used on MCCB: | Side: | Contact Rating:  | Configuration:        |
|---------------------------------|---------------|-------|--|-----------------------|
| <b>Auxiliary Switch Modules</b> |               |       |  |                       |
| AX-0-R                          | UTE100        | Left  | 5A @ 125Vac<br>3A @ 250Vac<br>0.4A @ 125Vdc<br>0.2A @ 250Vdc | SPDT<br>(1NO,<br>1NC) |
| AX-0-T                          |               | Right |  |                       |
| AX-AL-0-T                       |               | Right |  |                       |
| AX                              | UTS150-600    | -     |  |                       |
| AX-5                            | UTS800-1200   | -     |  |                       |
| <b>Alarm Switch Modules</b>     |               |       |  |                       |
| AL-0-R                          | UTE100        | Left  | 5A @ 125Vac<br>3A @ 250Vac<br>0.4A @ 125Vdc<br>0.2A @ 250Vdc | SPDT<br>(1NO,<br>1NC) |
| AL-0-T                          |               | Right |  |                       |
| AL                              | UTS150-600    | -     |  |                       |
| AL-5                            | UTS800-1200   | -     |  |                       |

## Shunt Trip Modules

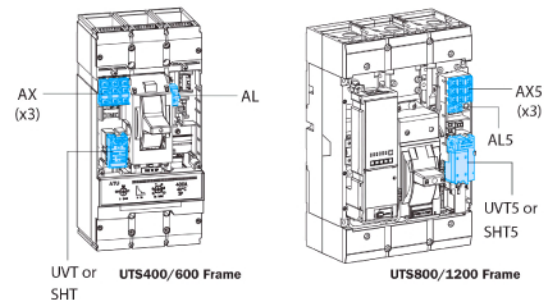
| Part #:   | Control Voltage (Vn)    | Current:  | Operating Voltage:             | Used on MCCB:                        |
|-----------|-------------------------|---|--------------------------------|--------------------------------------|
| SHT-0-12  | 12 Vac/dc               | 30mA  | AC: 0.7-1.1Vn<br>DC: 0.8-1.1Vn | UTE100                               |
| SHT-0-24  | 24 Vac/dc               | 27mA  |                                |                                      |
| SHT-0-100 | 110-130 Vac/dc          | 5.8mA   |                                |                                      |
| SHT-0-200 | 200-250 Vac/dc          | 5.4mA   |                                |                                      |
| SHT-0-440 | 440-500 Vac/dc          | 3.5mA   |                                |                                      |
| SHT-12    | 12 Vdc                  | 30mA  | AC/DC:<br>0.7-1.1Vn            | UTS150<br>UTS250<br>UTS400<br>UTS600 |
| SHT-24    | 24 Vac/dc               | 24mA  |                                |                                      |
| SHT-110   | 110-130 Vac/dc          | 10.5mA  |                                |                                      |
| SHT-220   | 220-240 Vac,<br>250 Vdc | 7.5mA   |                                |                                      |
| SHT-380   | 380-500 Vac/dc          | 2.3mA   |                                |                                      |
| SHT-5-24  | 24-30 Vdc               | Power Consumption<br>200W Inrush<br>5W Steady-State | 0.6-1.1Vn                      | UTS800<br>UTS1200                    |
| SHT-5-100 | 110-130 Vac/dc          |   | 0.56-1.1Vn                     |                                      |
| SHT-5-200 | 200-250 Vac/dc          |   |                                |                                      |
| SHT-5-440 | 380-480 Vac/dc          |   |                                |                                      |

## Possible Configuration of Internal Modules



## Undervoltage Release Modules

| Part #:   | Control Voltage (Vn)    | Current:  | Tripping Voltage: | Used on MCCB:                        |
|-----------|-------------------------|---|-------------------|--------------------------------------|
| UVT-0-24  | 24 Vac/dc               | 27mA  | 0.20-0.70Vn       | UTE100                               |
| UVT-0-100 | 110-110 Vac/dc          | 5.8mA   |                   |                                      |
| UVT-0-200 | 200-220 Vac/dc          | 5.4mA   |                   |                                      |
| UVT-0-440 | 440-480 Vac/dc          | 3.5mA   |                   |                                      |
| UVT-24    | 24 Vac/dc               | 27mA  | 0.35-0.70Vn       | UTS150<br>UTS250<br>UTS400<br>UTS600 |
| UVT-100   | 110-130 Vac/dc          | 5.8mA   |                   |                                      |
| UVT-200   | 220-240 Vac,<br>250 Vdc | 5.4mA   |                   |                                      |
| UVT-440   | 440-480 Vac/dc          | 3.5mA   |                   |                                      |
| UVT-5-24  | 24-30 Vdc               | Power Consumption<br>200W Inrush<br>5W Steady-State | 0.44-0.60Vn       | UTS800<br>UTS1200                    |
| UVT-5-100 | 110-130 Vac/dc          |   |                   |                                      |
| UVT-5-200 | 200-250 Vac/dc          |   |                   |                                      |
| UVT-5-440 | 380-480 Vac/dc          |   |                   |                                      |

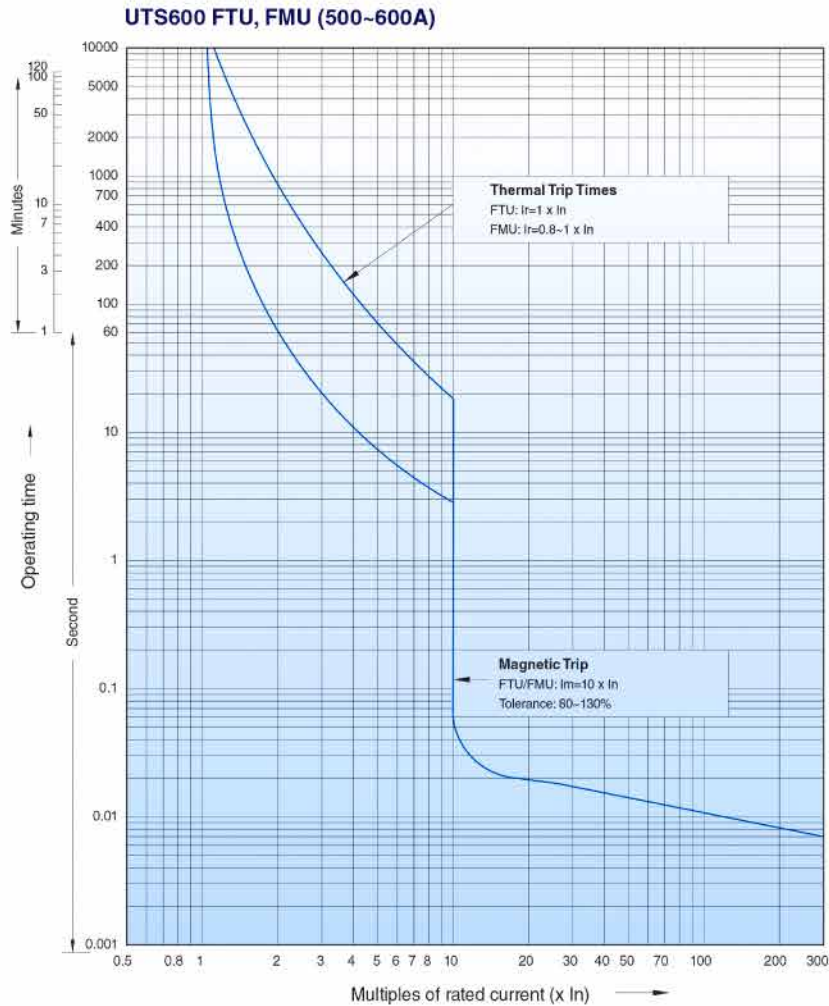




## UTS600N CHARACTERISTIC

This curve is to be used for application and coordination purposes only.

All time/current characteristic curve data is based on 40°C ambient cold start.



| RATING<br>UTS600 | FTU                   |                        |
|------------------|-----------------------|------------------------|
|                  | 2P/3P                 | MAG TRIP<br>(80%-130%) |
| 500              | <input type="radio"/> | 5000A                  |
| 600              | <input type="radio"/> | 6000A                  |

| RATING<br>UTS600 | FMU                   |                            |                        |
|------------------|-----------------------|----------------------------|------------------------|
|                  | 2P/3P                 | RATING RANGE<br>(0.8-1xIn) | MAG TRIP<br>(80%-130%) |
| 500              | <input type="radio"/> | 400-500A                   | 5000A                  |
| 600              | <input type="radio"/> | 480-600A                   | 6000A                  |