

Indication Screens Cause and Response

⚠ DANGER

HAZARD OF ELECTRIC SHOCK, EXPLOSION, OR ARC FLASH

- If the trip unit displays a Stop screen replace the Micrologic trip unit immediately.
- If trip unit displays a fault screen, do not close the circuit breaker again without inspecting and, if necessary, repairing the downstream electrical equipment.
- Apply appropriate personal protective equipment (PPE) and follow safe electrical work practices. See NFPA 70E.
- This equipment must be installed and serviced only by qualified electrical personnel.
- Turn off all power supplying this equipment before working on or inside equipment.
- Always use a properly rated voltage sensing device to confirm power is off.
- Replace all devices, doors, and covers before turning on power to this equipment.

Failure to follow these instructions will result in death or serious injury.

⚠ CAUTION

HAZARD OF INCORRECT INFORMATION

If the trip unit displays an Err screen, replace the Micrologic trip unit at the next regular maintenance.

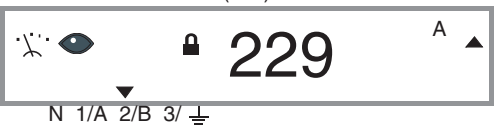








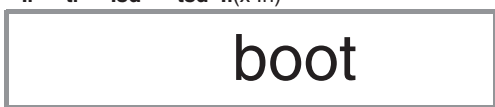
Failure to follow this instruction can result in injury or equipment damage.

The fact that a protection has tripped does not remedy the cause of the fault on the downstream electrical equipment.

1. Isolate the feed before inspecting the downstream electrical equipment.
2. Look for the cause of the fault.
3. Inspect and, if necessary, repair the downstream equipment.
4. Inspect the equipment in the event of a short-circuit trip.
5. Close the circuit breaker again.

For more information about troubleshooting and restarting following a fault, see the manual shipped with the circuit breaker.

Table 38 – Indication Screens

| Indication | Cause | Response | Screen |
|--|---|---|---|
| Indication of Correct Installation Operation | The main screen displays the current value of the most heavily loaded phase. | — | <p>I phase 2 Ir tr lsd tsd li(x ln)</p>  <p>N 1/A 2/B 3/ ⚡</p> |
| Indication of an Internal Fault of the Micrologic Trip Unit | <p>A serious internal fault has occurred in the Micrologic trip unit. This fault trips the circuit breaker.</p> <ul style="list-style-type: none"> It is no longer possible to close the circuit breaker The Mode key cannot access the measurements and settings The StOP screen becomes the main screen | <p>The StOP screen cannot be acknowledged with the  key.</p> <p>Replace the trip unit immediately.</p> | <p>Stop</p> <p>Ir tr lsd tsd li(x ln)</p>  <p>N 1/A 2/B 3/ ⚡</p> |
| Indication of an Internal Failure of the Micrologic Trip Unit | <p>An internal failure on the Micrologic trip unit, whether temporary or permanent, has occurred without the circuit breaker tripping.</p> <ul style="list-style-type: none"> The failure does not affect the trip unit protections. The Mode key can access the measurements and settings The Err screen becomes the main screen if the failure is permanent | <p>Press the OK key twice:</p> <ul style="list-style-type: none">  Validation  Confirmation <p>The main screen is displayed.</p> <ul style="list-style-type: none"> If the main screen display is the current value, the trip unit failure was temporary. If the main screen display is the Err screen, the trip unit failure is permanent <p>Replace the trip unit at the next maintenance interval.</p> | <p>Err</p> <p>Ir tr lsd tsd li(x ln)</p>  <p>N 1/A 2/B 3/ ⚡</p> |
| Alarm Indication Circuit breaker with SDx Module option | <ul style="list-style-type: none"> An alarm configured on the SDx Module in permanent latching mode has not been acknowledged (see “Acknowledgment of Latching Mode” on page 76) or the acknowledgment request is made when the alarm is still active. | <p>Check the cause of the alarm.</p> <p>Press the OK key twice:</p> <ul style="list-style-type: none">  Validation  Confirmation <p>The main screen (current value of the most heavily loaded phase) is displayed.</p> | <p>Outx</p> <p>Ir tr lsd tsd li(x ln)</p>  <p>N 1/A 2/B 3/ ⚡</p> |
| Indication of Downloading the Screen Firmware | <p>The Micrologic trip unit is waiting for or is downloading the firmware using the RSU software (duration: 3 minutes approx).</p> <ul style="list-style-type: none"> The trip unit protections are still operational. Access to measurements and settings (using the Micrologic trip unit dials or keypad, or using the communication option) is interrupted. <p>If the boot message persists after several download attempts, replace the Micrologic trip unit.</p> | <p>For more details on delivery of and downloading the firmware, see Function Setting Using the RSU Software and the <i>RSU Software Online Help</i>.</p> | <p>Outx</p> <p>Ir tr lsd tsd li(x ln)</p>  <p>N 1/A 2/B 3/ ⚡</p> |

Continued on next page

Table 38 – Indication Screens (continued)

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|---|--|--|---|
| | <p>Tripped by long-time protection</p> <ul style="list-style-type: none"> Up arrow pointing to I_r Breaking value displayed | <p>Press the OK key twice:</p> <p> Validation</p> <p> Confirmation</p> | <p>Breaking current I_r</p> <p>I_r tr I_{sd} tsd $I_i(x I_n)$</p> |
| | <p>Tripped by short-time protection:</p> <ul style="list-style-type: none"> Up arrow pointing to I_{sd} Breaking value displayed | <p>Press the OK key twice:</p> <p> Validation</p> <p> Confirmation</p> | <p>Peak breaking current I_{sd}</p> <p>I_r tr I_{sd} tsd $I_i(x I_n)$</p> |
| <p>Indication of Faults with Micrologic 5 and 6</p> <p>For more information about definitions of the fault protections associated with indications, see “Protection Functions” on page 29.</p> | <p>Tripped by instantaneous protection or reflex protection:</p> <ul style="list-style-type: none"> Up arrow pointing to I_i Breaking value displayed | <p>Press the OK key twice:</p> <p> Validation</p> <p> Confirmation</p> | <p>Peak breaking current I_i</p> <p>I_r tr I_{sd} tsd $I_i(x I_n)$</p> |
| | <p>Tripped by integrated instantaneous protection</p> <ul style="list-style-type: none"> Up arrow pointing to I_i triP displayed | <p>Press the OK key twice:</p> <p> Validation</p> <p> Confirmation</p> | <p>I_r tr I_{sd} tsd $I_i(x I_n)$</p> |
| <p>Micrologic 6</p> | <p>Tripped by ground-fault protection:</p> <ul style="list-style-type: none"> Up arrow pointing to I_g triP displayed | <p>Press the OK key twice:</p> <p> Validation</p> <p> Confirmation</p> | <p>I_r tr I_{sd} tsd I_i I_g t_g</p> |
| | <p>Tripped due to lack of ENCT option. Install the ENCT option or connect a jumper between terminals T1 and T2 on the Micrologic trip unit.</p> | <p>Press the OK key twice:</p> <p> Validation</p> <p> Confirmation</p> | <p>I_r tr I_{sd} tsd $I_i(x I_n)$</p> |

Values According to IEC Convention

The $\cos \phi$ max value corresponds to the minimum value of the load $\cos \phi$, whether leading or lagging. This provides the user information on how the equipment is performing from a cost point of view.

Do not use just the value of $\cos \phi$ to decide whether to install inductances or capacitors to increase its value.

If a critical situation occurs, the alarm on the $\cos \phi$ sends an alert according to IEC convention integrated in the Micrologic trip unit. Use this alarm, associated with an alarm defining the type of load or the operating quadrant, to monitor the two critical situations automatically.