

# EntelliGuard® TU Rating Plugs

## For Power Break®, Power Break® II, AKR, WavePro®, EntelliGuard® G / microEntelliGuard™ Circuit Breakers and Trip Unit Conversion Kits

### Function

EntelliGuard TU Trip Units are designed with UL-Listed interchangeable rating plugs. These rating plugs change the per-unit (1X) continuous current rating of the breaker. A circuit breaker frame equipped with a suitable rating plug has a long-time trip value equal to the ampere rating marked on the rating plug. For example, a breaker frame with a 1600 A sensor and an 800 A rating plug has an 800 A continuous current (long-time) rating.

The available rating plugs for the AKR, Power Break, WavePro and EntelliGuard families are listed in Table 1. Not all sensors listed in Table 2 are available in all circuit breakers.

|                 |               |
|-----------------|---------------|
| GTP0060U0101    | GTP1100U1225  |
| GTP0080U0101    | GTP1200U1232  |
| GTP0100U0103    | GTP1500U1640  |
| GTP0125U0103    | GTP1600U1640  |
| GTP0150U0104    | GTP1900U2050  |
| GTP0200U0204    | GTP2000U2050  |
| GTP0225U0306    | GTP2200U2550  |
| GTP0250U0407    | GTP2400U2564  |
| GTP0300U0408    | GTP2500U2564  |
| GTP0350U0408    | GTP3000U3064  |
| GTP0400U0410    | GTP3200U3264  |
| GTP0450U0612    | GTP3600U4064  |
| GTP0500U0613    | GTP4000U4064  |
| GTP0600U0616    | GTP5000U5064  |
| GTP0700U0816    | GTP6000U6064  |
| GTP0750U0820    | GTP1600K4040* |
| GTP0800U0820    | GTP2000K4040* |
| GTP0900U1020    | GTP3000K4040* |
| GTP1000U1025    | GTP4000K4040* |
| GTPUNIVUXXXX ** |               |

\* For use with ITE 4000A conversion kits ONLY

Table 1. Rating plug catalog numbers

### Front Label



Figure 1. Front of rating plug, showing label

The front label, shown in Figure 1, is visible when the rating plug is installed. The items listed are:

**Rating Plug Amps (X)** The rating plug continuous current in amperes

**Catalog Number** GTP1100U1225

#### In this example:

**GTP** = EntelliGuard TU trip unit rating plug

**1100** = The rating plug continuous current in amperes

**U** = Basic Trip Plug (Use K for ITE 400A sensor conversion kit)

**12** = Smallest sensor that accepts this plug (1200A)

**25** = Largest sensor that accepts this plug (2500A)

| Sensor Designation | Sensor Rating |
|--------------------|---------------|
| 00*                | User selected |
| 01                 | 150A          |
| 02                 | 200A          |
| 03                 | 225A          |
| 04                 | 400A          |
| 06                 | 600A          |
| 07                 | 630A          |
| 08                 | 800A          |
| 10                 | 1000A         |
| 12                 | 1200A         |
| 13                 | 1250A         |
| 16                 | 1600A         |
| 20                 | 2000A         |
| 25                 | 2500A         |
| 30                 | 3000A         |
| 32                 | 3200A         |
| 40                 | 4000A         |
| 50                 | 5000A         |
| 60                 | 6000A         |
| 64                 | 6400A         |

\* Not applicable for NEMA

Table 2. Catalog number sensor rating designations

## UL Label

The UL label is mounted on the side of the rating plug and is not visible when the rating plug is installed. The label lists the circuit breaker frames that will accept that rating plug.

## Installation

Before installing a rating plug into an EntelliGuard TU trip unit, inspect the plug for damage, then follow these steps:

1. Verify that the rating plug catalog number matches the desired continuous current rating and is suitable for the circuit breaker's sensor based on the minimum and maximum sensor rating defined on the rating plug's catalog number. Only insert GTPUNIVUXXXX rating plugs into Universal trip units.
2. Hold the rating plug between the thumb and forefinger, then push it into the trip unit. Proper engagement is verified by an audible and tactile click.

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**CAUTION:** Do not attempt to push the rating plug into the trip unit if there is resistance.

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## Removal

The rating plug is seated firmly in the trip unit. As illustrated in Figure 1, there are tabs at the sides of the rating plug for removal. A rating plug removal tool, catalog number TRTOOL, also known as an integrated circuit (DIP) extractor, is required to remove the rating plug.

Grasp the tabs of the rating plug with the tool, as illustrated in Figure 2. Be careful to hold the tabs and not the front cover, as the rating plug could be damaged otherwise. Gently pry the rating plug out by pulling away from the trip unit. A left-right wriggling motion assists the removal. Insure that the tabs are held securely until the Rating Plug is completely removed.



Figure 2. Rating plug removal

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**NOTE:** Protection to the breaker is maintained at the minimum rating plug value for a particular sensor when the rating plug is removed.

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These instructions do not cover all details or variations in equipment nor do they provide for every possible contingency that may be met in connection with installation, operation, or maintenance. Should further information be desired or should particular problems arise that are not covered sufficiently for the purchaser's purposes, the matter should be referred to the ABB Inc.