



communicating through generations

**APPLICATION NOTE**

RFL 9300 - Functionality/Programmable Parameter Changes

Several functionality changes have been implemented in the software of the RFL 9300 since the introduction of the "93A" relay. Some of these may require changes to programmable parameter(s) after installation of the new EPROMs. The "93A" system can be identified by use of the 93A Display Controller with Oscillography, which started shipping September 1996. The changes in functionality are as follows:

1. Addition of Inverse Time Overcurrent
2. Change of function of Alarm I/O TB9-5/6 from "52B" input to "89B" input for Stub Bus
3. Revised Trip Release Algorithm (SW930PC015D)
4. Addition of Programmable Parameter Changes No. 145 (TRIP RLS)

Inverse Time Overcurrent (ITOC):

This feature was introduced in September of 1998 in the form of the following combination of software EPROMs: (Note: only applies for 93A systems. All 93B systems shipped with ITOC)

- SW9300PC013 (Phase Controller)
- SW9300SC012 (Supervisor Controller)
- SW9300DC015 (Display Controller)

Technical information and changes to the programmable parameters can be found in Section 6.7 of the Upgrade Documentation.

Change of Alarm I/O TB9-5/6 from "52B" input to "89B" input for Stub Bus:

This feature was introduced in March of 1999 in the form of the following combination of software EPROMs:

- SW9300PC015 (Phase Controller)
- SW9300SC013 (Supervisor Controller)
- SW9300DC215 (Display Controller - 93A) or SW9300DC017 (Display Controller - 93B)

Technical information can be found in the included Application Note and Section 2.7.7 and 3.13 of the Upgrade Documentation. Parameter #24, "Stub Bus", has been eliminated.

Revised Trip Release Algorithm:

This version of Trip Release Algorithm was introduced in October of 2000 in the form of the following combination of software EPROMs:

- SW9300PC015D (Phase Controller)
- SW9300SC013B (Supervisor Controller)
- SW9300CC015 (Communications Controller)
- SW9300DC215F (Display Controller - 93A) or SW9300DC017E (Display Controller - 93B)

Technical information can be found in the included Application Note and Section 2.10, pages 2-26 through 2-28 of the Upgrade Documentation. No programmable parameter changes are associated with this version of the Trip Release Algorithm.

Addition of Programmable Parameter No. 145 (TRIP RLS):

This version of software was introduced in August of 2000 in the form of the following combination of software EPROMs:

- SW9300PC016 (Phase Controller)
- SW9300SC014 (Supervisor Controller)
- SW9300CC014 (Communication Controller)
- SW9300DC018 (Display Controller)

Technical information can be found in the included Application Note, **Addition of Programmable Parameter No. 145 (TRIP RLS)** and Section 2.10, pages 2-26 through 2-28 and 4.2.34 pages 4-14 of the Upgrade Documentation. Parameter #145 "TRIP RLS" has been added to this software.