

Line Synchronization II

Software Change Note

APFIFF44

Application: APFIFF44
Application Name: LineSynch-II application
Manual: UD1319

Update Note 1: This application parameters are not kept backwards compatible if new features or improvements would be difficult to implement by doing so. Read this change note and chapter "Compatibility issues in parameters between versions" from manual before updating the application.

Update Note 2: It's recommended to use compare function for parameter changes when updating application, especially in cases when version number change is considerably high. Application is constantly developed; this includes changing parameter default values, and if parameters are directly downloaded to drive improved default values may be lost.

There is APFIQ184 Double Line Synch-II base on APFIFF44V114, configured as a 2nd application in drive memory.

APFIFF44V119

Replaced Application: APFIFF44V118

Used Firmware version: NXP4.90

System Software requirement: NXPV190

Released to field:

Used in production:

Changes in new application:

- Parameter lock was missing from several parameters, added.
- Software interlock to prevent FC Contactor closing when DOL breaker was closed was not removed from other than motor 1 for Back Synch.
 - This prevented correct timing other than motor 1.

APFIFF44V118

Replaced Application: APFIFF44V117

Used Firmware version: NXP4.90

System Software requirement: NXPV190

Released to field:

Used in production:

Changes in new application:

- Delayed Output functions 27, 28 and 29 had wrong text, fixed.
- Firmware updated to FW4.90
- Startup Wizard disabled.
- Automatic parameter backup to keypad disabled.

APFIFF44V117

Replaced Application: APFIFF44V115

Used Firmware version: NXP4.76

System Software requirement: NXPV188

Released to field:

Used in production:

Changes in new application:

- Possible to select how Fault and Warning indication to fieldbus and DO behaves. P2.12.1.10 FaultWarnindicat
 - Static signal, as long as warning or fault is active
 - New fault or warning toggles signal for one second.
 - Signal toggles in new fault or warning and status needs to be reset to get signal down.
- Added G2.11 Master Follower
 - Added MF Mode
 - DS Master
 - DS Follower
 - Added DS Follower Fault (F75)

APFIFF44V115

Replaced Application: APFIFF44V114

Used Firmware version: NXP4.76

System Software requirement: NXPV188

Released to field:

Used in production:

Changes in new application:

- Parameter name changes, alignment with manual.
 - Mostly manual updates.

APFIFF44V114

Replaced Application: APFIFF44V112

Used Firmware version: NXP4.76

System Software requirement: NXPV188

Released to field:

Used in production:

Changes in new application:

- Added parallel running possibility.
- Added two additional frequency supervision limits.

APFIFF44V112

Replaced Application: APFIFF44V111

Used Firmware version: NXP4.76

System Software requirement: NXPV188

Released to field:

Used in production:

Changes in new application:

- Standard U/f Mid-Point (U/f Ratio Select = 2) was not updated during identification, fixed.

APFIFF44V111

Replaced Application: APFIFF44V110

Used Firmware version: NXP4.76

System Software requirement: NXPV188

Released to field:

Used in production:

Changes in new application:

- Added Fault Simulation parameter.
- Added option to use two more U/f points.

APFIFF44V110

Replaced Application: APFIFF44V109

Used Firmware version: NXP4.76

System Software requirement: NXPV187

Released to field:

Used in production:

Changes in new application:

- Fix to datalogger settings.
- Run status stayed HIGH while emergency stop or OPT-AF was active, fixed.

APFIFF44V109

Replaced Application: APFIFF44V108

Used Firmware version: NXP4.76

System Software requirement: NXPV187

Released to field:

Used in production:

Changes in new application:

- Datalogger signals are set in application to get better diagnostic information.

APFIFF44V108

Replaced Application: APFIFF44V102

Used Firmware version: NXP4.76

System Software requirement: NXPV187

Released to field:

Used in production:

Changes in new application:

- Line Voltage OK status monitored against U/f curve, not to motor nominal voltage.
- Possible to synchronize above 75 Hz.
- Fault function if synchronization is not reached at certain time.
- OPT-BH support added.
- Added ON operation timers for motor 1 FC and DL contactors also counters.
- Possibility active acceleration time 2 based on synchronization status and frequency limit.