

Application Software Change Note

Product: Vacon NXP
Application: ABFIFF01
Application name: Brake Chopper Unit (BCU)
Manual: DPD01565A

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.

ABFIFF01V125

Replaced application: ABFIFF01V124

Used Firmware version: NXP4.90

System software requirement: NXPV197

Released to field: -

Used in production: -

Changes in new application:

- OPT-BH was giving short circuit warning before reading from option board has stabilized on 24 Vdc power up, fixed.
- Added support for Long Data Logger.
 - Activated with P3.2 LDL License ID1994

ABFIFF01V124

Replaced application: ABFIFF01V122

Used Firmware version: NXP4.90

System software requirement: NXPV197

Released to field: 10.6.2021

Used in production:

Changes in new application:

- Added Quick Stop Digital input F63
 - Will not stop the drive when warning is selected.
 - Added P2.3.1.7 Quick Stop ID1213
 - Added P2.5.1.3 QuickStopRespon. ID1758
- Added External Fault 2 F81
 - Added P2.3.1.8 External Fault 2 406
 - Added P2.5.1.4 External Fault 2 1504
- Added Run Enable indication F62
 - Added P2.8.1.16 RunEnableIndicat 1177
- Added Klixon Input 2 F60
 - P2.3.1.9 Klixon In 2 781
 - P2.5.1.7 Klixon Response 782
- Added Input Switch F55
 - P2.3.1.10 Input Switch 1453
 - P2.5.1.9 InputSwitchRespon 785
- Added Ambient Temp monitor F88
 - P2.3.1.11 Ambient Temp 783
 - P2.5.1.8 Ambient TempRespon 784
- Added P2.5.1.6 FaultWarnIndication 1940
- Added OPT-BH Support F56 & F65
 - V1.19 PT100 Temp 4 ID69
 - V1.20 PT100 Temp 5 ID70
 - V1.21 PT100 Temp 6 ID71
 - P 2.5.2.5 Board2 Channels ID743
 - P 2.5.2.6 Board2 Response ID766
 - P 2.5.2.7 Board2 Warn.Lim ID745
 - P 2.5.2.8 Board2 Fault.Lim ID746
 - P 2.5.2.9.1 Channel 1B Warn ID764
 - P 2.5.2.9.2 Channel 1B Fault ID765
 - P 2.5.2.9.3 Channel 1C Warn ID768
 - P 2.5.2.9.4 Channel 1C Fault ID769
 - P 2.5.2.9.5 Channel 2B Warn ID770
 - P 2.5.2.9.6 Channel 2B Fault ID771
 - P 2.5.2.9.7 Channel 2C Warn ID772
 - P 2.5.2.9.8 Channel 2C Fault ID773
- Added V1.15 PT100 Temperature ID42
 - Maximum temperature of PT100 1 - 3
 - Show temperature when analogue inputs are used for PT100

ABFIFF01V123

Replaced application: ABFIFF01V122

Used Firmware version: NXP4.90

System software requirement: NXPV197

Released to field: 22.3.2019

Used in production:

Changes in new application:

- Firmware interface updated to 4.90
- Automatic parameter backup to keypad disabled.
- StartUp Wizard disabled.

ABFIFF01V122

Replaced application: ABFIFF01V121

Used Firmware version: NXP4.78

System software requirement: NXPV193

Released to field: 22.3.2019

Used in production:

Changes in new application:

- Added digital output for charge ready

ABFIFF01V121

Replaced application: ABFIFF01V120

Used Firmware version: NXP4.78

System software requirement: NXPV193

Released to field: 12.4.2018

Used in production:

Changes in new application:

- Added FB digital inputs to FB main controlword ID 1160.
Connected FB digital inputs to digital outputs

ABFIFF01V120

Replaced application: ABFIFF01V119

Used Firmware version: NXP4.78

System software requirement: NXPV193

Released to field: 6.4.2018

Used in production:

Changes in new application:

- Changed relay control parameters from TTF to FTT
- Removed parameters Ext Relay Control ID 445 and Ext Relay Control inv. ID 446

ABFIFF01V119

Replaced application: ABFIFF01V118

Used Firmware version: NXP4.78

System software requirement: NXPV193

Released to field: 20.12.2017

Used in production: 20.12.2017

Changes in new application:

- Added monitor value AuxControlWord ID 1161
 - Added B7 relay open command
- Added parameters Ext Relay Control ID 445 and Ext Relay Control inv. ID 446

ABFIFF01V118

Replaced application:	ABFIFF01V117
Used Firmware version:	NXP4.78
System software requirement:	NXPV193
Released to field:	27.6.2017
Used in production:	27.6.2017
Changes in new application:	

- Higher system software requirement.
 - Recommended to use V193 or newer.

ABFIFF01V117

Replaced application: ABFIFF01V115

Used Firmware version: NXP4.78

System software requirement: NXPV188

Released to field: 13.5.2016

Used in production: 13.5.2016

Changes in new application:

- Parameter grouping improvements.
- Resistor cooling control added. Fan start when actual braking has happened.
- Status Word B10: Braking Active.
- Added DIN Run Request.
- Analogue Output ID fix ID1120 -> ID1112
- Datalogger signals changed to suit BCU use.
- Average phase current monitoring signals added.

ABFIFF01V115

Replaced application:	ABFIFF01V114
Used Firmware version:	NXP4.69
System software requirement:	NXP00002V188
Released to field:	2.4.2014
Used in production:	2.4.2014
Changes in new application:	

- Added Fan Control function to digital outputs with an off delay parameter.

ABFIFF01V114

Replaced application: ABFIFF01V113
System software requirement: NXP00002V188
Used in production: March, 2014
Changes in new application:

- Few parameters did not go to drive when parameters were downloaded from NCDriver, fixed.

ABFIFF01V113

Replaced application: ABFIFF01V111
System software requirement: NXP00002V188
Used in production: March, 2014
Changes in new application:

- New parameter order, same as with premium applications.
- Switching frequency set to 3,6 kHz
- Uses NXP3 FW 4.69 processor load reduction function.
- PT100 to fault and warning word.
- PT100 fault number 58 -> 56
- Cooling monitoring function added for heat exchange unit.
- Klixon status to fault word
- NCDrive Comments updated
- Monitoring signals order updated.
- Added AI1-4 monitoring and selection.
- Added DIN 1 and DIN 2 Status Words.
- Added application status word.
- Added Unfiltered Current and DC Voltage.

ABFIFF01V111

Replaced application: ABFIFF01V110
System software requirement: NXP00002V177
Used in production: June, 2012
Changes in new application:

- Added Fault Simulation feature

ABFIFF01V110

Replaced application: ANFIFF01V109
System software requirement: NXP00002V177
Used in production: June, 2012
Changes in new application:

- Added Fault Words 1 & 2 and Warning Word to Monitoring Values

ABFIFF01V109

Replaced application: ANFIFF01V107
System software requirement: NXP00002V177
Used in production: January, 2012
Changes in new application:

- Added support for OPT-CQ, Ethernet/IP.
- Added support for OPT-CI, Modbus/TCP.
- Added support for OPT-CP, Profinet.

ABFIFF01V107

Replaced application: ANFIFF01V105
System software requirement: NXP00002V177
Used in production: October, 2011
Changes in new application:

- Fixed a bug in the Fieldbus watchdog functionality.

ABFIFF01V105

Replaced application: ANFIFF01V102
System software requirement: NXP00002V177
Used in production: October, 2011
Changes in new application:

- Power was actually [kW] but unit was [%] on keypad, fixed.
- Added application text translations for languages: Deutsch, Espanol and Francais.
- Added watchdog pulse function for Fieldbus.

ABFIFF01V102

Replaced application: ANFIFF01V101
System software requirement: NXP00002V177
Used in production: July, 2009
Changes in new application:

- Fixed problem with last active fault to FB (ID37)

ABFIFF01V101

Replaced application: ANFIEN01
System software requirement: NXP00002V170
Used in production: April, 2009
Changes in new application:

- Response parameter to External fault added.
- Digital output logic reprogrammed like it is in System Interface application.
- Fieldbus feature added (process datas, control word and status word).
- Manual ID Run for brake resistor connection identification added.
- Parameter menu structure modified.
- OPTB8 support added
- M/F Mode parameter removed.
- Brake chopper nominal current parameter removed.
- Parameter lock added.