Application Software Change Note

Product: Vacon NXP

Application: APFIFF33

Application Name: NXP Lift Application

Manual: UD1041f

APFIFF33V111

Replaced application: **APFIFF33V110**

System software requirement: **NXP00002V170**

Used in production: **April 4, 2008**

Changes in new software version APFIFF33V111:

Correction for Permanent magnet motors when incremental encoder is used.

1. Added selection of correct software modulator mode and Angle identification when OPT-AE or OPT-AK Encoder board is used together with PM-motors.

APFIFF33V110

Replaced application: **APFIFF33V108**

System software requirement: **NXP00002V170**

Used in production: **April 20, 2007**

Changes in software version APFIFF33V110:

New parameters for permanent magnet motors

2. P2.5.18.9 AngleIdentMode PM motor angle identification mode selection
3. P2.5.18.10 Rollback Ctrl parameter to activate Rollback controller
4. P2.5.18.11 Rollback Gain parameter to set Rollback Controller gain
5. P2.5.18.12 Rollback WUP parameter to set Rollback Controller wake up level

APFIFF33V108

Replaced application: **APFIFF33V105**

System software requirement: **NXP00002V164**

Used in production: **August 23, 2006**

Changes in software version APFIFF33V105:

6. Blocked start of drive in 3s if PM-motor with Endat encoder is used.
7. Software changed to not change speed parameters during download. In previous version there could be problems with scaling (Hz/Speed in m/s) of uneven values like 0,02 m/s when downloading parameters from NcDrive.
8. Field weakening point (P2.5.4) minimum setting changed to 5 Hz

9. Added Start magnetizing time (P2.3.2.15) and current (P2.3.2.16) for closed loop to speed up start. Then a higher magnetizing current is allowed at start.
10. Initial values for DC brake current I_H*0.7. Start magnetizing current set to motor nominal current when nominal current is set.
11. Rotor Flux ready required (CL) for brake open enable
12. Moved Speed Control Ti Start (P2.5.18.7) and Start delay (P2.5.18.8) to PM motor parameter group and these are only used for PM-motor (Then it is possible to use lower integration time at startup for rollback compensation)
13. Faster response to digital inputs and references.

    NOTE: If a already commissioned lift drive is updated with this software version the stop distance may change due to the faster response time. In that case new calibration is needed.
14. Support added for dial-up modem connected to internal RS-232 and OPT-D3 RS-232.
15. New value V1.23, Motor calculated temperature in percent of motor nominal temperature.

APFIFF33V105

Replaced application: **APFIFF33V104**

System software requirement: **NXP00002V164**

Used in production: **March 31, 2006**

Changes in software version APFIFF33V105 (First official version, based on Standard Lift application ASFIFF08V204)

1. P2.3.2.8 Mechanical brake reaction time added to mechanical brake closed loop group.
2. Motor contactor control added (between FC and motor).
3. Support for permanent magnet synchronous motors added. Minimum settings for P2.1.2, P2.1.3 and P2.5.4 changed to fit PM motors with a low nominal frequency/RPM.
4. FluxCurrent Kp and FluxCurrent Ti moved to PM-motor parameter group G2.5.18
5. Identified parameters by automatic motor identification to new parameter group
6. Added P2.11.12 Speed Control Ti and P2.11.13 Speed Control Start delay to allow different Ti (faster) a certain time from start until the mechanical brake has opened (better rollback compensation for PM-motors)
7. Added separate DCbrake Current and Dc brake time at start in Evacuation. (P2.10.11, P2.10.12)
8. Allows 50% over speed only if control place is I/O and digital control is used. (when P2.2.2 is set to 0,1 or 2)