

# CDFLight3000 Positioning Controller System

**External Update Service for Basic Firmware** 



Stand:14<sup>th</sup> January 2011File:CDFLight\_Basis\_DE\_Homepage.doc

# Introduction

As part of our product maintenance process, we are continuously extending the firmware of the drive system. This software update service is intended to provide you with information on new releases and improvements of the various software versions.

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3.1	New Functions
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# 1 CDFLight survey

#### 1.1 The little one with the genes of its big brother

Admittedly, the idea of implementing a cost-optimized servo system based on 24V DC supply is not exactly new, but just take a look at the functionality the new little member of our family has inherited from its big brothers, the CDF, CDE and CDB, and you will realize that we have completely reinterpreted the whole concept.

#### 1.2 Technical data

Performance data:

- Power Supply: DC 18-28V
- Rated current: 2 A<sub>eff</sub>
- Impulse current: 8 A<sub>DC</sub> für 3 s (5,6 A<sub>eff</sub>)
- Switching frequency: 16 kHz
- Braking chopper: integrated

Motors & Encoders:

- Synchronous servo motor with SSI-encoder
- DC-Motor with TTL- and SSI-encoder<sup>\*</sup>
- EC-Motor (BLDC) with Hall-Sensor and TTL- or SSI-encoder

<sup>\*</sup>encoder as additional position encoder as option





I/O-terminals:

- ENPO (Enable Power)
- 2 digital inputs free-programmable
- 1 analog input 0 ... 5 V, resolution 10 Bit
- 1 digital output, max. 50 mA
- 24 V-supply of control electronics

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- DS301
- DS402 fully non-conform like CDF3000
- 2 RJ45-connector
- Device profile DSP402

CDFLight3000 – Software functionality like CDF3000

- Compatible with C-Line Drives
- · Positioning relative, absolute or endless
- Integrated PLC
- Online-position profile generator
- Commissioning and diagnosis via DriveManager

# 2 Version 171.00-00

First released version:	V 171.00-00	CS (XOR): 3B72
First released version:	V 171.00-00	CS (XOR): 3B72

# 2.1 New Functions

First released version.

# 2.2 Changes, Improvements

No.	Changes / Improvements	
1	Homing Attained-Status deleted	
	Homing Attained will not be deleted if DispableOP/EnableOp is set in Homing Mode.	

# 3 Version 171.00-02

Changes to version:

V 171.00-00

CS (XOR): 3B72

#### 3.1 New Functions

none

# 3.2 Changes, Improvements

No.:	Changes / Improvements	
1	Operation of DC-machine	
	Activation of DC-machine	
2	Error during in point calculation	
	In case a certain parameter combination is set an error during floating point calculation (E-FLT) at starting the device can be caused. The result is that a communication with the device is not possible via KP300 resp. DriveManager. The error during floating point calculation (E-FLT) is cleared.	
3	Increased position or speed contouring error switch-off	
	Improvement of the initializing at activated reversion of rotation via FGPOL avoids accumulation of a position or speed contouring error after any error.	
4	Error message E-PAR-0	
	In case a certain parameter combintaion is set this can cause error E-PAR-0. The reason are problems at initializing of voltage controller. Instead of collected error messages E-PAR-0 error message 112 is indicated.	

# 4 Version 171.05-00

Changes to version:	V 171.00-02	CS (XOR):	3041B	
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# 4.1 New functions

No new functions.

# 4.2 Changes/Improvements

No.:	Changes / Improvements	
1	Implementation of derivative term for the technology controller	
	Update of technology controller to the actual version, contains a derivative term.	

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We should nevertheless point out that this document cannot always be updated in line with ongoing technical developments in our products.

Information and specifications may be subject to change at any time. Please visit www.lt-i.com for details of the latest versions.