

CDA3000 Inverter system

Software Update Service for PLC-Firmware

Stand: 4th August 2006

File: cda_plc_700_20_en_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.

Table of contents:

1	Version 700.15	3
1.1	New functions	3
1.2	Changes	3
1.3	Improvements	4
2	Version 700.20	5
Note Fehler! Textmarke nicht definiert.	
2.1	New functions	5
2.2	Changes	5
2.3	Improvements	6

1 Version 700.15

Changes compared with version:	Stand: V700.10	CS (XOR): 0C79
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1.1 New functions

No.:	Function																																								
1	<p>Input filter for interference isolation Digital inputs ISD00 up to ISD03 have been extended by the function of the input filter.</p> <table border="1"> <thead> <tr> <th>Parameter</th> <th>Function</th> <th>Value range</th> <th>WE</th> </tr> </thead> <tbody> <tr> <td>224-DFILO</td> <td>Filter for digital input ISD00</td> <td>0 to 6</td> <td>0</td> </tr> <tr> <td></td> <td> <table border="1"> <thead> <tr> <th>Value</th> <th>Filter time [ms]</th> </tr> </thead> <tbody> <tr> <td>0</td> <td>OFF</td> </tr> <tr> <td>1</td> <td>2</td> </tr> <tr> <td>2</td> <td>4</td> </tr> <tr> <td>3</td> <td>8</td> </tr> <tr> <td>4</td> <td>16</td> </tr> <tr> <td>5</td> <td>32</td> </tr> <tr> <td>6</td> <td>64</td> </tr> </tbody> </table> </td> <td></td> <td></td> </tr> <tr> <td>225-DFIL1</td> <td>Filter for digital input ISD01</td> <td>0 to 6</td> <td>0</td> </tr> <tr> <td>226-DFIL2</td> <td>Filter for digital input ISD02</td> <td>0 to 6</td> <td>0</td> </tr> <tr> <td>227-DFIL3</td> <td>Filter for digital input ISD03</td> <td>0 to 6</td> <td>0</td> </tr> </tbody> </table>	Parameter	Function	Value range	WE	224-DFILO	Filter for digital input ISD00	0 to 6	0		<table border="1"> <thead> <tr> <th>Value</th> <th>Filter time [ms]</th> </tr> </thead> <tbody> <tr> <td>0</td> <td>OFF</td> </tr> <tr> <td>1</td> <td>2</td> </tr> <tr> <td>2</td> <td>4</td> </tr> <tr> <td>3</td> <td>8</td> </tr> <tr> <td>4</td> <td>16</td> </tr> <tr> <td>5</td> <td>32</td> </tr> <tr> <td>6</td> <td>64</td> </tr> </tbody> </table>	Value	Filter time [ms]	0	OFF	1	2	2	4	3	8	4	16	5	32	6	64			225-DFIL1	Filter for digital input ISD01	0 to 6	0	226-DFIL2	Filter for digital input ISD02	0 to 6	0	227-DFIL3	Filter for digital input ISD03	0 to 6	0
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2	<p>_33MO_Motor protection In subject area „_33MO_motor protection“ the range has been extended by the parameter „330-MOPTC“ by the function PTC1(4) . Function PTC1: Evaluation of threshold value PTC without short-circuit recognition</p>																																								
3	<p>Speed limitation at position control via PLC A limitation of the position controller output (speed) has been included. Limit corresponds to the value FFIX1 (fixed frequency of characteristic data set 1) or FFIX2 (fixed frequency of characteristic data set 2).</p>																																								

1.2 Changes

No.:	Change
1	PWM-calculation frequency has been reduced from 16 kHz to 8kHz. Allowed power stage clock frequency is 4,8 kHz and 16 kHz.

1.3 Improvements

No.:	Improvement
1	Recognition of communication module CM-CAN1 and CM-CAN2 has been improved. Detection of CM-CAN1-module with CANopen-protocol.
2	Rounding function of negative float values is improved (-2,8 rounded = -3)

2 Version 700.20

Changes compared with version:	Stand: V700.15	CS (XOR): 0C79
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2.1 New functions

No.:	Function						
1	<p>The function „current injection“ has been extended upon customers request. Via parameter 759 CISEL (function selector current injection) different function processes can be selected.</p> <p>New parameter: 759 CISEL Factory setting: CIAD (0) Value range: CIAD, CIACC, CISTA</p> <p>759 CISEL = CIAD (0) „Active at acceleration, delay and stationary operation“</p> <p>Standard current injection and switching-over active, no changing compared with firmware < V3.60-01.</p> <p>759 CISEL = CIACC (1) „Active at acceleration and stationary operation“</p> <p>Current injection and switching-over are active during acceleration and stationary operation. Current injection is during delay not active.</p> <p>759 CISEL = CISTA (2) „One-time active after transit stop to start“.</p> <p>Current injection and switching-over will be not be active if leaving after transit “Stop to Start” the range only one time.</p>						
2	<p>Function of the digital inputs has been extended by the function /HALT(36) „Frequency reference=0Hz“. Mostly this function is used for selecting the standstill torque for motor control mode FOR.</p> <table border="1"> <thead> <tr> <th>State ISDxx</th> <th>Function</th> </tr> </thead> <tbody> <tr> <td>Low</td> <td>Frequency reference 0Hz (FOR: Standstill torque)</td> </tr> <tr> <td>High</td> <td>Frequency reference released (moves to the actual reference)</td> </tr> </tbody> </table>	State ISDxx	Function	Low	Frequency reference 0Hz (FOR: Standstill torque)	High	Frequency reference released (moves to the actual reference)
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Low	Frequency reference 0Hz (FOR: Standstill torque)						
High	Frequency reference released (moves to the actual reference)						
3	<p>Function of digital outputs has been extended by the message MPTF(38) „Magnetization completed“.</p>						

2.2 Changes

none

2.3 Improvements

No.:	Improvement
1	BRK2 in motor control mode FOR Control function "motor holding brake BRK2" is extended by setting the hysteresis (315-SSHYS) 0Hz.
2	66MS-Master/Slave operation Factory setting of parameter 838-MSECT (Error triggering time in case of failure of reference master) is increased by 10s.
3	DC-link voltage Calculation of DC-link voltage is improved.
4	Speed controller in motor control mode FOR Setting of gain of the speed controller at frequency zero (818-SCGF0) is active again from version 700.20-00.



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We reserve the right to make technical changes.