

LDD Controller Hardware

1 General Terms

This document summarizes all LDD Controller hardware changes. For additional information, please contact Meerstetter Engineering GmbH

Notations:

- All Dates have the Format "Day.Month.Year".
- **DS** means Datasheet
- **Release Date** is the first date where this version has been or will be delivered.

	LDD Controller Hardware	LDD-Family	15.06.07 ML 20.05.19 ML	Seite 1 (5) 5212D
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2 Hardware Changes Overview

2.1 Changes March 2018 – April 2019

Change	LDD-1124-SV HW Version Release Date Corresponding DS	LDD-1121-SV HW Version Release Date Corresponding DS	LDD-1125-HV HW Version Release Date Corresponding DS	Detail
Power supply for 1.2V: Inductor replaced by an equivalent successor <u>Problem:</u> The original part is discontinued <u>Solution:</u> Compatible alternative used. <u>Impact for the Customer:</u> None	HW v1.60 2019 5169G	HW v1.60 2019 5142L	HW v1.70 2019 5146J	

2.2 Changes June 2017 – March 2018

Change	LDD-1124-SV HW Version Release Date Corresponding DS	LDD-1121-SV HW Version Release Date Corresponding DS	LDD-1125-HV HW Version Release Date Corresponding DS	Detail
<p>Main coil alternative added.</p> <p><u>Problem:</u> The 3 phase coils are currently not available.</p> <p><u>Solution:</u> Compatible alternative used.</p> <p><u>Impact for the Customer:</u> None</p>	<p>HW v1.60 2017 5169G</p>	<p>Not affected</p>	<p>Not affected</p>	
<p>Flash memory replaced</p> <p><u>Problem:</u> The current flash memory has been discontinued</p> <p><u>Solution:</u> Replaced by a compatible successor.</p> <p><u>Impact for the Customer:</u> None</p>	<p>HW v1.60 2017 5169G</p>	<p>HW v1.50 First quarter 2018 5142K</p>	<p>HW v1.50 First quarter 2018 5146J</p>	
<p>Digital signal isolator changed</p> <p><u>Problem:</u> A digital signal isolator IC which was used for the current measurement is not available anymore and the successor is not directly working.</p> <p><u>Cause:</u> The successor has a much smaller propagation delay.</p> <p><u>Solution:</u> Modifying the FPGA code to handle both propagation delays, depending on the hardware version.</p> <p><u>Impact for the Customer:</u> None, if the firmware v2.32 and FPGA v1.90 is used. Older firmware and FPGA versions are not compatible anymore!</p>	<p>HW v1.50 16.06.17 5169G</p>	<p>HW v1.50 First quarter 2018 5142K</p>	<p>HW v1.50 First quarter 2018 5146J</p>	

<p>Phase shunt alternative added.</p> <p><u>Problem:</u> The 3 shunts used to measure 3 phase currents have long delivery times.</p> <p><u>Solution:</u> Alternative added: One smaller shunt and two 00hm resistors</p> <p><u>Impact for the Customer:</u> None, because these shunts are only used for symmetry corrections and not for the effective output current measurement.</p>	<p>HW v1.50 16.06.17 5169G</p>	<p>HW v1.60 First quarter 2018 5142K</p>	<p>Not affected</p>	
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3 Additional Detailed Descriptions

 The logo for Meerstetter Engineering, featuring the text "meerstetter engineering" in a sans-serif font next to a stylized blue and black "em" symbol.	LDD Controller Hardware	LDD-Family	15.06.07 ML 20.05.19 ML	Seite 5 (5) 5212D
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