

PowerXL
DB1 Firmware
Firmware Release Note



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Subject to alteration.

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1 V2.01 Change Notification - 22.02.2019

Existing Version 2.00 (DB1)
New Version 2.01 (DB1)

Management Summary

We updated the firmware of DB1 for your convenience. The use of existing parameter sets can generally be continued. The following updates will improve handling and functionality of the drive.

1. Functionality

1.1. Add new Modbus comms parity parameter P-56

A new parameter P-56 (SWD index 3224) has been added in this software release. This parameter is used to select Modbus communication data parity format.

There are 4 options available:

0: No Parity, 1 Stop Bit (N-1), this is default option

1 : No Parity, 2 Stop Bits (N-2)

2: Odd Parity, 1 Stop Bit (O-1)

3: Even Parity, 1 Stop Bit (E-1)

1.2. Modbus command 0x10 functional changes for Ethernet module

Modbus write multiple registers command 16 (0x10) has been modified to adapt Ethernet module operation.

1.3. P-51 default value changed

Thermal overload retention in P-51 is enabled by default.

1.4. 0.75kW voltage doubler drive rated current reduced

Drive rated and maximum current of 115V 0.75KW voltage doubler drive have been reduced from 4.3A down to 3.2A.

Minimum current reduced from 1.0A down to 0.8A.

1.5. (PS) Drive trips overload quicker when speed is less than 10% of rated speed

Follow UL requirement, drive will trip overload about 5% quicker when motor speed is less than 10% of rated speed.

1.6. (PS) B O-I trip reset delay added

Same as O-I and overload, a reset delay is added for brake O-I trip.

2 V2.02 Change Notification - 15.03.2021

Existing Version 2.01 (DB1)
New Version 2.02 (DB1)

Management Summary

We updated the firmware of DB1 for your convenience. The use of existing parameter sets can generally be continued. The following updates will improve handling and functionality of the drive.

1. P-15 add option 18 for terminal control mode (P-12=0)

A new terminal control function configuration option 18 has been added to P-15.

When drive operates in terminal control mode (P-12 = 0), terminal function setup as:

P-15	Digital Input 1	Digital Input 2	Digital Input 3	Analog input
18	Normally Open (NO) Momentary close to run	Normally Closed (NC) Momentary open to stop	Open: reverse Stop Closed: reverse Run	Analog input 1

For other operation mode, this new option 18 has the same functionality as option 0.

3 V2.03 Change Notification - 14.02.2024

Existing Version 2.02 (DB1)
New Version 2.03 (DB1)

Management Summary

We updated the firmware of DB1 for your convenience. The use of existing parameter sets can generally be continued. The following updates will improve handling and functionality of the drive.

- 1. (PS) Disables PFC controller during Mains Loss event to protect PFC hardware.**
The Power Stage will disable the PFC controller as soon as the input voltage drops below 160Vac, and it will wait for 1.0s after the voltage is above 180Vac to enable the PFC controller again.
- 2. (PS) Change the O-I trip level based on input voltage level for 115V 0.75kW unit**
When the input voltage is less than 115Vac, the O-I trip level will be reduced to 10.4A peak and the output power is limited to 1.35kW

When the input voltage is less than 200Vac, the O-I trip level will be reduced to 10.4A peak and the output power is limited to 1.5kW

When the input voltage is higher than 200Vac, the O-I trip level will be reduced to 12A peak and the output power is limited to 1.75kW
- 3. (PS) Add support for new power rating 230Vac 0.75kW PFC**
Add the support of new power rating 230Vac 0.75kW for DB1-PFC unit.

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Eaton addresses worldwide:
[Eaton.com/contacts](https://www.eaton.com/contacts)

Eaton Industries GmbH
Hein-Moeller-Str. 7- 11
D-53115 Bonn/Germany