# Yaskawa Electric America, Inc. DSD Dept.
# Inverter Custom Software Description

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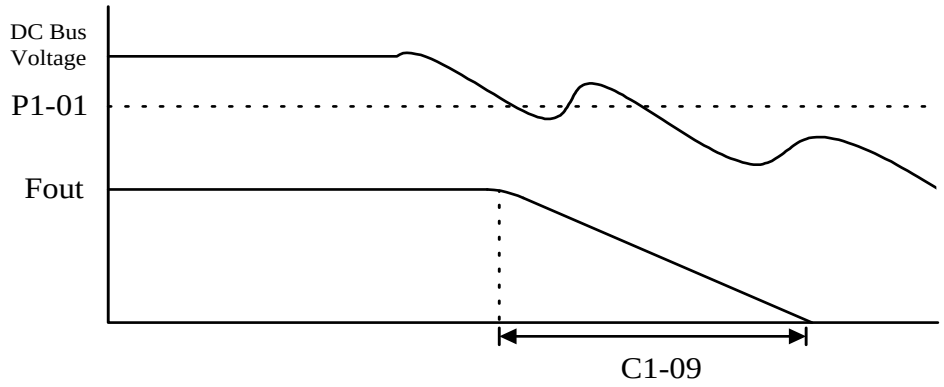
|---|---|---|
| Software Number: VSG111190 | Revision: | Based On: VSG101113 |
| Part Number: CIMR-G5MXXXXXF-007 | OEM Customer: N/A | |
| Overview: Power Loss Braking feature. Designed to automatically perform a Fast Stop during a power loss condition. | | |
| Original Release Date: 11/8/99 | Author: Ty Phillips | Status: |

**Additional Parameters:**

| No. | Digital Operator Display | Parameter Description | Unit | Setting Range | Default | V/f | V/f w/ PG | Open Loop Vector | Flux Vector |
|---|---|---|---|---|---|---|---|---|---|
| P1-01 | PLB Start Level | Power Loss Braking Start Level | VDC | 0~1000 | 0 | A | A | A | A |

**Description of Functionality:**

- If the inverter is running and the DC bus voltage level is at or below the P1-01 level the inverter will decelerate to a stop using C1-09 (Fast Stop Time).
- The fast decel will continue even if the DC bus voltage increases to a level greater than P1-01.
- In 2-wire control the run command must be cycled to begin running after a Power Loss Braking fast decel.
- The feature is disabled when P1-01 = 0 (factory default setting).




**Notes:**

- This feature was developed for a textiles application. During a power loss, it was crucial that the machine come to a rapid controlled stop before the inverter lost power. The power loss braking feature allows this to occur automatically, and does not require a coil/contactor combination to signal the inverter that power has been lost.
- Depending of the rate of discharge of the DC bus, it may be necessary to decrease C2-03 (S-Curve Decel @ Start) so the G5 can quickly enter into a regenerative state.
- Caution must be exercised to assure that P1-01 is not set too high or nuisance fast stops can occur. Verify that there is enough headroom between the P1-01 setting and the nominal DC bus level to allow for normal line voltage fluctuations. It may also be necessary to reduce L2-05 (UV Detection Level).