

**ENGINEERING PUBLICATION**  
**MOTION CONTROL DIVISION****PRODUCT: SIGMA II****SUBJECT: 24VDC POWER SUPPLY****CATEGORY: PROD. NOTE****ENGINEER: Bill Leang****DISTRIBUTION: MCD, Sales**

**Summary:** 400V Sigma II amplifier requires 24VDC for its control circuit. The specification for this DC power supply is: 24VDC  $\pm$ 15%, 1A. For amplifiers with capacity of 22 kW or higher, the DC power supply requirement is 24VDC  $\pm$ 10%, 40W.

400V Sigma II amplifier requires 24VDC for its control circuit. The user must provide a 24VDC  $\pm$ 15% power supply with a current capacity of at least 1 Ampere. This power supply must also be able to withstand a surge of up to 3A for 50 msec. It should be connected to the terminals marked 24V and 0V on the SGDh-xxDE amplifier. Do not connect AC voltage to these terminals. Doing so may cause permanent damage to the amplifier. For 400V amplifiers with capacity of 22 kW or higher, the DC power supply requirement is 24VDC  $\pm$ 10%, 40W.

For SGDh-60DE and -75DE amplifiers with hardware version lower than 07, and SGDh-1Ade and -1Ede amplifiers with hardware version lower than 08, each of these amplifier should have it's own 24VDC power supply. Since the 0V input is tied to signal ground (CN1-1, -2, -6 and -10) internally in these amplifiers, they are more susceptible to external noises. Do not share this power supply with another amplifier or external control circuits. The version code is located on the front of the Sigma II amplifiers. For information on how to identify the hardware version code of Sigma II amplifiers, please refer to Yaskawa engineering document # eng00.003MCD. This document is included in the **Yaskawa Motion Control Product CD** (YEA-CD-MTN-x)

For more information on the 400V Sigma II amplifiers and motors, please refer to **Sigma II Servo System Product Catalog Supplement** (publication # G-MI#99001x-Sigma II) and **Sigma II Series Servo System User's Manual** (publication # YEA-SIA-S800-32.2x). The above mentioned product CD also contains the product catalog and user's manual.