



"The Right Control
for your Application"

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**SUBJECT: MODIFICATION OF KBMD-240D DC DRIVE
THRU HOLE VERSION P/N 9860**

The dual voltage switch allows the KBMD-240D DC Drive to power a 90 VDC motor from 115 VAC or a 180 VDC motor from 230 VAC. There are two modifications to the dual voltage switch that can make the control more versatile.

The first modification will allow a standard KBMD-240D DC Drive to operate a 90 VDC PM motor from with either 115 or 230 VAC, 50/60 Hz input. This allows the reduction of motor inventory.

A word of caution: Please check with the KB's sales department before using the step down mode for motor's smaller than 1/15 HP. The application will need to be evaluated for duty cycle and load current.

To modify the KBMD-240D DC Drive for step down operation, first remove the front cover and locate the dual voltage switch. You should see three terminals, with black wires connected to two of them. The modification consists of soldering a jumper between the black wires. Once the modification is complete, set the dual voltage switch to the desired line voltage. The output will always vary between 0–90 VDC.

The second modification allows the KBMD-240D DC Drive to be used only on a 230 VAC 50/60Hz line, with either 180 or 90 VDC PM motors. To perform this modification first remove the front cover and locate the dual voltage switch. On the **inside** of this switch there is a 10K resistor. Simply remove the resistor and set the dual voltage switch for 230 VAC for 180 VDC PM motors or 115 VAC for 90/115 VDC PM motors. The same caution regarding sub-fractional motors still applies.

If your input is 230 VAC and you are using 115 VDC Shunt Wound motor instead of 90 VDC PM motors, the following procedure must be used when connecting the field windings. The field windings must be connected to either L1 or L2 of the AC line and either F+ or F- of the Field terminals.

Sincerely,

Richard Fritts
National Sales Manager