

KBPC SCR Drive – NEMA 4X / IP 65



The KBPC Series of DC Drives consist of four models and is rated for 1/100th to 3 horsepower motors. These drives are housed in heavy duty NEMA 4X / IP 65 die-cast aluminum washdown/watertight enclosures for indoor or outdoor use. The exclusive Short Circuit and Timed Current Limit (TCL) circuitry prevents motor burnout and demagnetization of PM motors. Features, such as a selectable motor current, eliminates unnecessary calibration of IR and CL trimpots. Other selectable features are: Input Voltage, Output Voltage, Current Range, Input Signal, Armature or Tachometer Feedback, and Tachometer Voltage. Trimpot adjustments include: MIN, MAX, ACCEL, DECEL, IR, CL and TCL. Standard features include an Armature fuse, Electronic Start-Stop, and diagnostic LED Indicator Array for “power on”, “stop” and “overload.” This drive also contains Auto Inhibit® which provides a smooth, safe start during rapid switching of the AC line.

The KBPC-225D contains all of the features of the KBPC-240D except it does not contain an Armature fuse.

Options: Signal Isolator (P/N 9431), ON/OFF AC Line Switch (P/N 9341), Run-Stop-Jog Switch (P/N 9340), Auto/Manual Switch (P/N 9377), Forward-Brake-Reverse Switch (P/N 9339), Anti-Plug Reversing Module (P/N 9379).

Maximum HP		AC Line Voltage (50/60 Hz)	Model Number	Part No.		Max. AC Line Current (Amps AC)	Voltage Range (Volts DC)	Max. Load Current (Amps DC)	Net Weight		Dim. Ref. Code ¹
HP	kW			Black	White*				Lbs.	kg	
1	0.75	115	KBPC-240D	9338	9342	15	0 – 90	10.2	4.6	2.1	W
2	1.5	208/230					0 – 90, 180				
1½	1.13	115	KBPC-225D	9391	9392	22	0 – 90	15			
3	2.25	208/230					0 – 90, 180				

KBPW PWM Drive – NEMA 4X / IP 65



The KBPW-240D DC Drive is a Pulse-Width Modulated (PWM) control in a NEMA 4X / IP 65 washdown/watertight enclosure for indoor or outdoor use. It is designed to operate Permanent Magnet and Shunt Wound motors from 1/100 to 2 horsepower. This provides high motor efficiency, whisper quiet operation along with less motor heating. This allows for a smaller, less costly motor to be used in most applications. A unique feature of the KBPW-240D is its active bridge, which substantially reduces the AC line surge current during cycling of the AC line. This allows the control to be turned on and off rapidly without damage to critical components. The active bridge is coupled with a failsafe circuit that will shut down the control if the main power transistor shorts, preventing a dangerous high-speed runaway condition. Motor burnout is prevented with the Timed Current Limit circuit (TCL). This drive also contains Auto Inhibit® which provides a smooth, safe start during rapid switching of the AC line.

Options: Signal Isolator (P/N 9431), ON/OFF AC Line Switch (P/N 9341), Run-Stop-Jog Switch (P/N 9340), Forward-Brake-Reverse Switch (P/N 9339), Anti-Plug Reversing Module (P/N 9379).

Maximum HP**		AC Line Voltage (50/60 Hz)	Model Number	Part No.		Max. AC Line Current (Amps AC)	Voltage Range (Volts DC)	Max. Load Current (Amps DC)	Net Weight		Dim. Ref. Code¹
HP	kW			Black	White*				Lbs.	kg	
1	0.75	115	KBPW-240D	8401	8402	11.5	0 – 90, 130	7.5	4.6	2.1	W
2	1.5	208/230					0 – 90, 130				
							0 – 180, 260				

KBRC SCR Drive “Regen Reversing” – NEMA 4X / IP 65



The KBRC-240D DC Drive is a Full-Wave Regenerative Drive in a NEMA 4X / IP 65 washdown/watertight enclosure for indoor or outdoor use. It is designed to operate Permanent Magnet and Shunt Wound DC motors from 1/100 to 2 horsepower, in a bidirectional mode. It provides 4-quadrant operation, which provides forward and reverse torque in both speed directions and Timed Current Limit (TCL) which provides motor burnout protection. The KBRC-240D can be operated from a two or three wire start/stop circuit or can be started from the AC line. A set of dedicated normally open or normally closed relay contacts are provided, which are activated via the start/stop circuit. Main features of the KBRC-240D include speed or dual torque control modes. In addition, Regenerate-to-Stop (RTS) or Coast-to-Stop (CTS) modes can be selected. This drive also contains Auto Inhibit® which provides a smooth, safe start during rapid switching of the AC line.

Options: SIRC Bipolar Signal Isolator (P/N 8842), KBRC Forward-Stop-Reverse Switch (P/N 9485), On/Off AC Line Switch (P/N 9486), KBRC Auto/Manual Switch (P/N 9487).

Maximum HP		AC Line Voltage (50/60 Hz)	Model Number	Part No.		Max. AC Line Current (Amps AC)	Voltage Range (Volts DC)	Max. Load Current (Amps DC)	Net Weight		Dim. Ref. Code ¹
HP	kW			Black	White*				Lbs.	kg	
1	0.75	115	KBRC-240D	8840	8841	15	0 – 90	11	4.6	2.1	W
2	1.5	208/230					0 – 90, 180				

*FDA approved (white cases only). **Horsepower ratings are for PWM rated motors. For SCR rated motors, the maximum horsepower rating is reduced by 20%.

1. See Page 8.