KBRG SCR Drive "Regen Reversing" – Chassis

The KBRG Series of DC Drives consist of three models rated for 1/100 to 5 horsepower DC, Permanent Magnet and Shunt motors. These are full-wave regenerative controls, which allows forward and reverse torque in both speed directions. Features include armature and tachometer feedback, built-in horsepower selection, an AC Line fuse, and an Armature fuse. Trimpots adjustments for Fwd CL, Rev CL, IR Comp, Resp, Max Spd, Offset, Deadband, Fwd Accel, Rev Accel, Timed Current Limit (TCL), and two torque modes. LED indicators for power on, current limit, Fwd Enable, and Rev Enable. This drive also contains Auto Inhibit® which provides a smooth, safe start during rapid switching of the AC line.

The KBRG-255 is designed specifically for 5 HP shunt wound and PM DC motors. It is similar to the KBRG-225D (3 HP); however, the SCR ratings and heat sink size have been enhanced.

Option: KBRG SI-4X Bipolar Signal Isolator* (P/N 8801).

**All models except the KBRG-212D.*

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							Lbs.	kg	
3/4	0.56	115	KBRG-212D	8819	12	0 – 90	7.5	1.1	0.5	K
1½	1.13	208/230				0 – 90, 180				
1	0.75	115	KBRG-240D	8802	16	0 – 90	12.2	3.00	1.36	L
2	1.5	208/230				0 – 90, 180				
1½	1.13	115	KBRG-225D	8800	24	0 – 90	16	5.00	2.27	M
3	2.25	208/230				0 – 90, 180				
5	3.75	208/230	KBRG-255	8821	38	0 – 180	25	5.85	2.67	N

KBWD PWM Drive – Chassis

The KBWD Series of DC Drives provide a low cost alternative for pulse-width-modulated (PWM) control applications. Their compact size allows for direct replacement of SCR drives. Standard features include a 5k potentiometer, instantaneous short circuit protection and under voltage protection. This drive requires a Plug-in Horsepower Resistor®*, which eliminates the need for IR Comp and CL calibration. If signal isolation is required, please see models KBWS-22D and -25D. This drive also contains Auto Inhibit® which provides a smooth, safe start during rapid switching of the AC line.

Options: Combination Fuse kit (P/N 9849). AC line and Armature fuse supplied separately.

**Plug-In Horsepower Resistor®. See page 12.*

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							Lbs.	kg	
1/3	0.25	115	KBWD-13	8609	6	0 – 130	3	0.62	0.28	O
1/2	0.37	115	KBWD-16	8607	10	0 – 130	5	0.70	0.32	

KBWS PWM Drive – Chassis

The KBWS PWM Series of DC Drives are designed to operate PWM and SCR rated Permanent Magnet motors. They operate at a high motor efficiency with quiet motor operation. The KBWS uses pulse-by-pulse current sensing, to prevent demagnetization, short and control damage due to commutator arcing. The controls contain an AC line inrush current limiter (ICL) which reduces AC line surge currents during startup. The drives contain built-in isolation for all inputs. This includes: Signal Voltage, Main Speed Potentiometer, Inhibit Circuit and +5VDC Power Supply. This drive requires A Plug-In Horsepower Resistor®* to operate* and contains Auto Inhibit® which provides a smooth, safe start during rapid switching of the AC line.

Options: Combination Fuse kit (P/N 9849). AC line and Armature fuse supplied separately.

**Plug-In Horsepower Resistor®. See page 12.*

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							Lbs.	kg	
1/3	0.25	115	KBWS-22D	9492	4	0 – 90, 130	2.5	0.64	0.29	P
3/4	0.56	208/230				0 – 180, 220				
1/3	0.25					0 – 90, 130				
3/4	0.56	115	KBWS-25D	9493	8	0 – 90, 130	5	0.70	0.32	Q
1½	1.13	208/230				0 – 180, 220				
3/4	0.56					0 – 90, 130				

***Horsepower ratings are for PWM rated motors. For SCR rated motors, the maximum horsepower rating is reduced by 20%.*

1. See Page 8.