

KB Electronics

EOL Products Crossover Transition Guide



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Crossover Guide

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This reference material provides crossover suggestions based on hp/Amp ratings. Application specifics should be reviewed by a KB Electronics Application Engineer. For additional assistance, call 1-800-893-2321.

KBPB SCR Drive Relay Reversing DC Drive

KBPB Relay Reversing SCR Drive (Chassis)							Crossover Suggestion KBMG & KBRG Regen Reversing SCR Drive (Chassis)					
Maximum HP		AC Line Voltage	Model Number	Item Number	Heatsink Item#	Dimensions H x W x D (in)	Maximum HP		AC Line Voltage	Model Number	Item Number	Dimensions H x W x D (in)
HP	Amps						HP	Amps				
0.75	8	115	KBPB-125	8900		4.3 x 4.9 x 5.0	0.75	8	115	KBMG-212D	8831	4.3 x 3.6 x 1.8
1.5	16	115	KBPB-125	8900	9861	7.0 x 6.3 x 6.5	1.5	16	208/230	KBRG-225D	8800	10 x 7.7 x 3.4
1.5	8	208/230	KBPB-225	8901		4.3 x 4.9 x 5.0	1	8	115	KBMG-212D	8831	7.0 x 6.3 x 3.2
3	16	208/230	KBPB-225	8901	9861	7.0 x 6.3 x 6.5	3	16	208/230	KBRG-225D	8800	10 x 7.7 x 3.4



Differences to Note:

- The KBPB-125 is a KBMM-125 drive combined with an APRM-3 (Anti-Plug Reversing Module) in a stacked configuration and cannot be replicated using standard components.
- The KBPB-225 is a KBMM-225 drive combined with an APRM-3 (Anti-Plug Reversing Module) in a stacked configuration and cannot be replicated using standard components.
- KBPB models have a maximum limit of 10 stops/reversals per minute, based on a brake time of 1 second.
- The KBRG-225D and the KBMG-212D drives include dual voltage input power control, reversing, regenerative braking and no limitations when operating in reverse mode.
- KBMG-212D drive is rated to 10 Amps when mounted to an additional 7" Auxiliary heatsink (Item# 9861).
- For higher current applications, the KBRG-225D model is rated to handle up to 16A.
- The KBMG-212D provides the options to Coast to Stop (CTS) or to use Regenerative braking to Stop (RTS).



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KBCC-240D SCR DC Drive with Barrier Terminal Block & AC Line Fuse

KBCC Non-Reversing SCR Drive (Chassis)						Crossover Suggestion KBPC-240D SCR Drive (NEMA 4X)					
Maximum HP		AC Line Voltage	Model Number	Item Number	Dimensions H x W x D (in)	Maximum HP		AC Line Voltage	Model Number	Item Number	Dimensions H x W x D (in)
HP	Amps					HP	Amps				
1	10.2	115	KBCC-240D	9947	7.0 x 6.3 x 3.0	1	10.2	115	KBPC-240D	9338	9.5 x 6.0 x 5.0 (Nema 4X)
2		208/230				2		208/230			



Differences to Note:

- The KBCC-240D is a chassis-mount version of the KBPC-240D, and it is mounted on a 7-inch heatsink.
- The KBPC-240D has a NEMA 4X aluminum enclosure.

KBCC-125 & KBCC-225 SCR DC Drive with Barrier Terminal Block & AC Line Fuse

KBCC Non-Reversing SCR Drive (Chassis)						Crossover Suggestion KBMM SCR Drives (Chassis)					
Maximum HP		AC Line Voltage	Model Number	Item Number	Dimensions H x W x D (in)	Maximum HP		AC Line Voltage	Model Number	Item Number	Dimensions H x W x D (in)
HP	Amps					HP	Amps				
1.5	16	115	KBCC-125	9936	6.3 x 7.0 x 4.0	1.5	16	115	KBMM-225D on a 7" heatsink	9451 & 9861	7.0 x 6.3 x 2.6
						3.0		208/230			
3	16	208/230	KBCC-225	9938	6.3 x 7.0 x 4.0	1.5	16	115	KBMM-225D on a 7" heatsink	9451 & 9861	7.0 x 6.3 x 2.6
						3.0		208/230			



Differences to Note:

- KBCC-125 is a KBMM-125 mounted on a 7-inch heatsink (Item #9861) with an additional Barrier Terminal Kit (Item #9883).
- KBCC-225 is a KBMM-225 mounted to a 7" heatsink (Item# 9861) with an additional Barrier Terminal Kit (Item# 9883).
- The KBMM-225D features a jumper-selectable dual input voltage option and can be used as a replacement drive for the KBCC-125 or KBCC-225.
- Field wiring can be connected directly to KBMM drives. Alternatively, a Barrier Terminal Kit (Item #9883) or a Barrier Terminal Board (Item #9897) can be used.



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KBCC-255 SCR DC Drive with Barrier Terminal Block & AC Line Fuse

KBCC Non-Reversing SCR Drive (Chassis)						Crossover Suggestion KBRG Regen Reversing SCR Drive (Chassis)					
Maximum HP		AC Line Voltage	Model Number	Item Number	Dimensions H x W x D (in)	Maximum HP		AC Line Voltage	Model Number	Item Number	Dimensions H x W x D (in)
HP	Amps					HP	Amps				
5	26	230	KBCC-255	9940	10.0 x 6.3 x 3.5	5	25	1	KBRG-255	8821	12 x 7.7 x 3.4



Differences to Note:

- KBCC-255 is a 5 HP unidirectional drive.
- The KBRG-255 is a 5 HP regenerative drive that supports regenerative braking and reversing functions.

KBCC SCR Reversing DC Drive with Barrier Terminal Block & AC Line Fuse

KBCC Reversing SCR Drive (Chassis)						Crossover Suggestion KBRG Regen SCR Drive (Chassis)					
Maximum HP		AC Line Voltage	Model Number	Item Number	Dimensions H x W x D (in)	Maximum HP		AC Line Voltage	Model Number	Item Number	Dimensions H x W x D (in)
HP	Amps					HP	Amps				
1.5	16	115	KBCC-125R	9937	6.3 x 9.0 x 4.0	1	16	115	KBRG-225D	8800	10 x 7.7 x 3.4
						3		208/230			
3	16	208/230	KBCC-225R	9924	6.3 x 9.0 x 4.0	1	16	115	KBRG-225D	8800	10 x 7.7 x 3.4
						3		208/230			



Differences to Note:

- KBCC-125R and KBCC-225R have a maximum stop/reversing rate of 30 times per minute, based on a 1-second stop time.
- The KBRG-225D and KBMG-212D drives feature dual voltage input power control, reversing capability, regenerative braking, and have no limitations when operating in reverse mode.
- The KBMG-212D provides the options to Coast to Stop (CTS) or to use Regenerative braking to Stop (RTS).



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- KBMG-212D drive is rated to 10 Amps when mounted to an additional 7" Auxiliary heatsink (Item# 9861).

KBRG-212D SCR Regen Reversing DC Drive

KBRG-212D Regen SCR Drive (Chassis)						Crossover Suggestion KBMG-212D Regen SCR Drive (Chassis)					
Maximum HP		AC Line Voltage	Model Number	Item Number	Dimensions H x W x D (in)	Maximum HP		AC Line Voltage	Model Number	Item Number	Dimensions H x W x D (in)
HP	Amps					HP	Amps				
0.75	7.5	115	KBRG-212D	8819	7.0 x 4.8 x 1.7	0.75	8	115	KBMG-212D	8831	4.3 x 3.6 x 1.8
1.5		208/230				1.5		230			



Differences to Note:

- The KBRG-212D includes signal isolation and the KBMG series requires the SIMG isolation board (Item #8832) for signal isolation.
- The KBMG features a compact footprint.

KBPI SCR Indexing DC Drive

KBPI SCR Drive (Chassis)						Crossover Suggestion					
Maximum HP		AC Line Voltage	Model Number	Item Number	Dimensions H x W x D (in)	Maximum HP		AC Line Voltage	Model Number	Item Number	Dimensions H x W x D (in)
HP	Amps					HP	Amps				
1	10.2	115	KBPI-240D	8500	9.5 x 6.0 x 5.0	No Direct Crossover Replacement					
2		208/230									
1	10.2	115	KBPI-240DR	8501	9.5 x 6.0 x 5.0						
2		208/230									



Differences to Note:

- The KBPI-240D and KBPI-240DR are designed for indexing applications.
- The KBRC-240D functions as a regenerative drive and does not include the operational capabilities of the KBPI indexer.



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KBWD PWM DC Drive

KBWD PWM Drive (Chassis)						Crossover Suggestion KBMM SCR Drive (Chassis)					
Maximum HP		AC Line Voltage	Model Number	Item Number	Dimensions H x W x D (in)	Maximum HP		AC Line Voltage	Model Number	Item Number	Dimensions H x W x D (in)
HP	Amps					HP	Amps				
0.33	3	115	KBWD-13	8609	3.6 x 4.3 x 2.5	1.5	16	115	KBMM-125	9449	4.3 x 3.6 x 1.3
0.5	5	115	KBWD-16	8607	3.6 x 4.3 x 2.5						



Differences to Note:

- The KBWD is designed to provide optimal performance for DC PWM motors with an output voltage of 0-130VDC, while the KBMM-125 is designed to operate PM motors with an output voltage of 0-90VDC.
- Using an SCR drive to operate a DC motor designed for PWM drives can result in increased motor audible noise.

KBWS PWM Drive with Signal Isolation

KBWS PWM Drive (Chassis)						Crossover Suggestion KBMM SCR Drive (Chassis)					
Maximum HP		AC Line Voltage	Model Number	Item Number	Dimensions H x W x D (in)	Maximum HP		AC Line Voltage	Model Number	Item Number	Dimensions H x W x D (in)
HP	Amps					HP	Amps				
0.33	2.5	115	KBWS-22D	9492	3.6 x 4.3 x 2.2	0.75	8	115	KBMM-225D with SI-6	9451 & 9444	4.3 x 3.6 x 1.3
0.75		208/230				1.5		208/230			
0.75	5	115	KBWS-25D	9493	3.6 x 4.3 x 3.2	0.75		115			
1.5		208/230				1.5		208/230			



Differences to Note:

- The KBWS is designed to provide optimal performance to DC PWM motors and includes built in isolation. A signal isolation SI-6 card (Item #9444) is required when replacing a drive with a KBMM SCR drive.
- Using an SCR drive to operate a DC motor designed for PWM drives can result in increased motor audible noise.



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KBWT PWM Drive

KBWT PWM Drive (Chassis)						Crossover Suggestion KBMM SCR Drive (Chassis)					
Maximum HP		AC Line Voltage	Model Number	Item Number	Dimensions H x W x D (in)	Maximum HP		AC Line Voltage	Model Number	Item Number	Dimensions H x W x D (in)
HP	Amps					HP	Amps				
0.75	10	115	KBWT-16	8614	7.0 x 6.75 x 1.43	0.75	16	115	KBMM-125 with HS	9449 & 9861	7.0 x 6.3 x 2.6
1.5	10	230	KBWT-26	8615	7.0 x 6.75 x 1.43	1.5	8	208/230	KBMM-225 with HS	9450 & 9861	



Differences to Note:

- The KBWT-16 and KBWT-26 are designed to provide optimal performance for DC PWM motors with an output voltage range of 0-130VDC, while the KBMM drive series is designed to operate PM motors with output voltage options of 0-90VDC and 0-180VDC.
- Using an SCR drive to operate a DC motor designed for DC PWM drives can result in increased motor audible noise.

KBPW PWM Drive

KBPW PWM Drive (NEMA 4X)						Crossover Suggestion KBPC SCR Drive (NEMA 4X)					
Maximum HP		AC Line Voltage	Model Number	Item Number	Dimensions H x W x D (in)	Maximum HP		AC Line Voltage	Model Number	Item Number	Dimensions H x W x D (in)
HP	Amps					HP	Amps				
1	7.5	115	KBPW-240D	8401	9.5 x 6.0 x 5.0	1	10.2	115	KBPC-240D	9338	9.5 x 6.0 x 5.0
2		208/230				2		208/230			
1	7.5	115	KBPW-240D (WHT)	8402	9.5 x 6.0 x 5.0	1	10.2	115	KBPC-240D (WHT)	9342	9.5 x 6.0 x 5.0
2		208/230				2		208/230			



Differences to Note:

- The KBPW-240D drive provides optimal performance for DC PWM motors with output voltage options of 0-130VDC, 0-180VDC, and 0-260VDC.
- Using an SCR drive to operate a DC motor designed for PWM drives can result in increased motor audible noise.



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KBBC Reversing DC/DC Drive Series

KBBC DC/DC Drive (Chassis)						Crossover Suggestion					
Maximum HP		DC Input Voltage	Model Number	Item Number	Dimensions H x W x D (in)	Maximum HP		DC Input Voltage Voltage	Model Number	Item Number	Dimensions H x W x D (in)
HP	Amps					HP	Amps				
0.5	40	12	KBBC-24M	9500	6.3 x 4.1 x 1.7	No Direct Crossover Replacement					
1		24									
0.5	40	12	KBBC-44M	9501	6.3 x 4.1 x 1.7						
1		24									
1.5		36									
2		48									



KBBW DC/DC Drive Series

KBBC DC/DC Drive (Chassis)						Crossover Suggestion					
Maximum HP		AC Line Voltage	Model Number	Item Number	Dimensions H x W x D (in)	Maximum HP		AC Line Voltage	Model Number	Item Number	Dimensions H x W x D (in)
HP	Amps					HP	Amps				
0.17	14					115	KBBW-12				
0.33	14	115	KBBW-22	9141	3.7 x 4.3 x 1.7	No Direct Crossover Replacement					

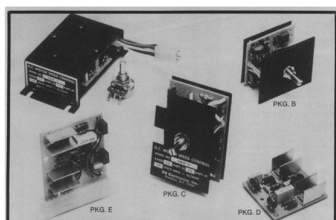


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KBDM SCR DC Drive, 120 to 230 V (OEM Only)

KBDM SCR Drive (Chassis)						Crossover Suggestion KBIC SCR Drive (Chassis)					
Maximum HP		AC Line Voltage	Model Number	Item Number	Dimensions H x W x D (in)	Maximum HP		AC Line Voltage	Model Number	Item Number	Dimensions H x W x D (in)
HP	Amps					HP	Amps				
0.07	0.76	120	KBDM-11	OEM#s Only	Package Dependent	0.5	6	115	KBIC-120	9429	4.3 x 3.6 x 1.3
0.25	3	120	KBDM-14								
0.33	4	120	KBDM-16			1	6	208/230	KBIC-240	9428	
0.13	0.75	240	KBDM-21								
0.5	3	240	KBDM-24								
0.75	4	240	KBDM-26								



Differences to Note:

- The KBIC drive series offers better filtering and enhanced motor protection.
- The KBIC drive series requires selecting the appropriate PHR (Plug-in HP resistor) based on the motor size.



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KBVC SCR DC Drive, 120 to 230 V (OEM Only)

KBVC SCR Drive (Chassis)						Crossover Suggestion KBIC SCR Drive (Chassis)					
Maximum HP		AC Line Voltage	Model Number	Item Number	Dimensions H x W x D (in)	Maximum HP		AC Line Voltage	Model Number	Item Number	Dimensions H x W x D (in)
HP	Amps					HP	Amps				
0.33	3	115	KBVC-14	H9053	2.75 x 2.75 x 1.70	0.5	6	115	KBIC-120	9429	4.3 x 3.6 x 1.3
0.33	3	115	KBVC-14NS	H9044A	2.75 x 2.75 x 1.70						
0.75	3	208 / 230	KBVC-24	H9057	2.75 x 2.75 x 1.70	1	6	208/230	KBIC-240	9428	
0.75	3	208 / 230	KBVC-24NS	H9046A	2.75 x 2.75 x 1.70						



Differences to Note:

- The KBVC is a TRIAC-based control equipped with a diode bridge.
- KBIC is a more advanced product, offering improved filtering and enhanced motor protection.
- KBIC includes a remote potentiometer that can replace the potentiometer mounted on the KBVC.
- Some versions of the KBVC feature an on/off switch integrated with the potentiometer. In such cases, Item #9114 is a potentiometer with an integrated switch that can be used as a replacement.