

PRODUCT NOTE

Baldor-Reliance® DC Drive

Matched drive promotion



For a **limited time**, ABB is offering a matched DC drive with every fractional Baldor-Reliance DC motor purchased (1/4 - 5Hp). The DC motors that qualify are to be selected from the Baldor-Reliance 501 catalog. By pairing the drive to motor, you will receive an additional 8% discount off your drive selection and accessories.

NEMA 1 enclosed DC controls for PMDC and shunt wound motors

1/100 thru 2 Hp, 115/230 VAC, single phase, 50/60 Hz



**BC138
Enclosed
(NEMA 1)**

Applications: General purpose industrial use with permanent magnet or shunt wound DC motors.

Features: SCR controls have a free-wheeling diode and feature adjustable accel, decel, current limit, IR comp, min. and max speed pots to match applications. The anti-demag feature protects PM motors and helps protect the SCR power bridge against direct shorts.

Rugged all-metal NEMA 1/IP20 enclosure. Unidirectional dives-change motor rotation by switching armature leads or by adding forward/brake/reverse switch kit, if available.



**BC140-FBR
Enclosed
(NEMA 1)**

The controls have US and Canadian UL component recognition.

A plug-in horsepower resistor and armature fuse must be ordered and installed in BC138, BC139, BC140-FBR, BC141 and BC142.

Receive an additional 8% drive discount when ordered with an Baldor-Reliance matched DC motor.

Catalog Number	Hp Range & Input Voltage		Description	Max Input Current (AC Amps)	Max Output Current (DC Amps)	List Price	Mult. Sym.	Apr'x. Shpg. Wgt. (lbs)
	115VAC Input/ 90VDC Armature	230VAC Input/ 90VDC Armature						
BC138	1/100-1/3	—	Enclosed SCR control, single voltage	5	3.5	218	E9	1
BC139	—	1/50-3/4	Enclosed SCR control, single voltage	5	3.5	218	E9	1
BC140	1/100-3/4	1/50-1.5	Enclosed SCR control, optional heatsink, dual voltage	12	6	369	E9	3
	1/100-1(a)	1/50-2(a)		16(a)	12(a)			
BC140-FBR (b)	1/100-3/4	1/50-1.5	BC140 with BC144 Forward/Brake/Reverse switch factory installed	12	6	510	E9	3
	1/100-1(a)	1/50-2(a)		16(a)	12(a)			

Chassis mount DC controls

1/100 through 1.5 Hp, 115 VAC, single phase, 50/60 Hz. 1/50 through 5 Hp, 230 VAC, single phase, 50/60 Hz



BC142

Applications: General purpose industrial use with permanent magnet or shunt wound DC motors.

Features: Chassis-mount SCR controls have a free-wheeling diode and feature adjustable accel, current limit, IR comp, min and max speed pots to match applications. The anti-demag feature protects PM motors and helps protect the SCR power bridge against direct shorts. The controls have US and Canadian UL component recognition.

A plug-in horsepower resistor and armature fuse must be ordered and installed in all versions of BC141 and BC142.

Receive an additional 8% drive discount when ordered with an Baldor-Reliance matched DC motor.

Catalog Number	Hp Range & Input Voltage		Description	Max Input Current (AC Amps)	Max Output Current (DC Amps)	List Price	Mult. Sym.	Apr'x. Shpg. Wgt. (lbs)
	115VAC Input/ 90VDC Armature	115VAC Input/ 90VDC Armature(c)						
Chassis mount - SCR controls								
BC141	1/100-0.75	—	Chassis SCR control, optional heatsink, single voltage	12.0	8.0	202	E9	1
	1/100-1.5(a)	—		24.0(a)	16.0(a)			
BC141-SIH	1/100-0.75	—	BC141 with BC152 Signal Isolator and C143 Heatsink factory installed	12.0	8.0	477	E9	2
	1/100-1.5(a)	—		24.0(a)	16.0(a)			
BC142	—	1/100-1.5	Chassis SCR control, optional heatsink, single voltage	12.0	8.0	202	E9	2
	—	1/100-3.0(a)		24.0(a)	16.0(a)			
BC142-SIH	—	1/100-1.5	BC142 with BC152 Signal Isolator and BC143 Heatsink factory installed	12.0	8.0	499	E9	2
	—	1/100-3.0(a)		24.0(a)	16.0(a)			
BC142-5	1/100-0.75	1/100-1.5	Chassis SCR Control, optional heatsink, dual voltage, supplied without fuses and fuse holders	12.0	8.0	225	E9	1
	1/100-1.5(a)	1/100-3.0(a)		24.0(a)	16.0(a)			
BC142-6	1/100-0.75	1/100-1.5	Chassis SCR control, optional heatsink, single voltage	12.0	8.0	224	E9	1
	1/100-1.5(a)	1/100-3.0(a)		24.0(a)	16.0(a)			
BC142+6+SIH	1/100-0.75	1/100-1.5	BC142-6 with BC152 signal isolator board and BC143 Heatsink factory installed	12.0	8.0	499	E9	1
	1/100-1.5(a)	1/100-3.0(a)		24.0(a)	16.0(a)			
BC155	—	5.0	Chassis SCR control, optional heatsink, single voltage	38.0	26.0	660	E9	5
Chassis mount - line regenerative SCR controls								
BC204	1/6-0.75	1/3-1.0	Chassis regen SCR control, optional heatsink, single voltage	12.0	8.0	377	E9	3
	1/6-1.5(a)	1/3-2.0(a)		16.0(a)	11.0(a)			
BC204-BPPSI	1/6-0.75	1/3-1.0	BC204 with BC215 Bi-polar Signal Isolator factory installed	12.0	8.0	487	E9	3
	1/6-1.5(a)	1/3-2.0(a)		16.0(a)	11.0(a)			
BC200	1/8-1.0	1/4-2.0	Chassis regen SCR control, optional heatsink, dual voltage	16.0	11.0	704	E9	4
BC201	1/8-1.5	1/4-2.0	Chassis regen SCR control, optional heatsink, dual voltage	16.0	16.0	836	E9	1
BC203	—	5.0	Chassis regen SCR control, with heatsink, dual voltage	38.0	25.0	1,052	E9	10

NEMA 4X DC control and accessories

1/4 through 2 Hp, 115/230 VAC, single phase, 50/60 Hz. 3 Hp, 230 VAC, single phase, 50/60 Hz



BC154
BC160
BCWD140
BC354

Applications: Constant torque, new or replacement.

Features: NEMA 4/IP65 sealed enclosure with built-in heatsink for wet/dirty environments. BC154, BCWD140 and BC160 are unidirectional controls. Change motor direction by switching armature leads or by adding Forward/Brake/Reverse switch kit, if available. BC254 is a line regenerative SCR control for reversing applications and can drive the motor to a timed stop. BC354 is a PWM control that provides low-ripple DC power to the motor allowing more HP when used with a 130 or 260 VDC motor. BC154, BC160, BC254 and BC354 are painted light gray and come with a start-stop switch. BCWD140 has a white epoxy coating (ideal for food processing applications) with forward/brake/reverse and run-jog switches installed. All offer a choice of armature or tachometer feedback and a speed or torque mode.

No Hp resistors are needed for these controls and current is jumper selectable.

Receive an additional 8% drive discount when ordered with an Baldor-Reliance matched DC motor.

Catalog Number	Hp Range & Input Voltage		Description	Max Input	Max Output	List Price	Mult. Sym.	Apr'x. Shpg. Wgt. (lbs)
	115VAC Input/ 90VDC Armature	230VAC Input/ 180VDC Armature(c)		Current (AC Amps)	Current (DC Amps)			
NEMA 4X/IP65 Washdown duty SCR controls								
BC154	1/50-1	1/25-2	Enclosed SCR control, dual voltage	15.0	10.2	467	E9	5
BC154-P	1/50-1	1/25-2	BC154 with Power switch instead of Start/Stop switch	15.0	10.2	467	E9	5
BC154-R	1/50-1	1/25-2	BC154 with BC156 - Fwd/Brake/Rev Switch factory installed	15.0	10.2	616	E9	5
154-SI	1/50-1	1/25-2	BC154 with BC145 Signal Isolator Board and BC158 Auto/Man Switch Kit factory installed	15.0	10.2	751	E9	5
BC160	1.5	3	Enclosed SCR control, dual voltage	22.0	15.0	537	E9	5
NEMA 4X / IP65 Washdown duty SCR control with white epoxy coating								
BCWD140	1/50-1	1/25-2	Enclosed SCR control, dual voltage, white epoxy coating	15.0	10.2	625	E9	5
NEMA 4X / IP65 Washdown duty line regenerative SCR control								
BC254	1/10-1	1/5-2	Enclosed regen SCR control, dual voltage (a)	15.0	11.0	673	E9	5
BC254-FBR	1/10-1	1/5-2	BC254 with Power On/Off switch instead of Start/Stop switch and BC253 Fwd-Brake-Rev Switch factory installed	15.0	11.0	706	E9	5
NEMA 4X / IP65 Washdown duty PWM control								
BC345	1/50-0.75	1/25-1.5	Enclosed PWM control, dual voltage, with SCR rated motor	11.5	7.5	723	E9	5
	1/30-1(b)	1/20-2(b)	Enclosed PWM control, dual voltage, with PWM rated motor					

Line regenerative DC control and accessories

1/4 through 3 Hp, 115/230 VAC, single phase, 50/60 Hz. 5 Hp, 230 VAC, single phase, 50/60 Hz



BC254-FBR

Applications: Frequent start/stop/reverse applications or where controlled braking is required.

Features: Single phase line regenerative open chassis control to operate permanent magnet or wound field DC motors. These line regen controls are ideal for applications with overhauling loads. In torque mode, it can be used for tensioning applications. Several accessory boards are available to further customize the control.

Includes 5k speed potentiometer. Jumper selectable current settings.



**BC200/
BC201**

Receive an additional 8% drive discount when ordered with an Baldor-Reliance matched DC motor.



BC204

Catalog Number	Hp Range & Input Voltage		Description	Max Input	Max Output	List Price	Mult. Sym.	Apr'x. Shpg. Wgt. (lbs)
	115VAC Input/ 90VDC Armature	230VAC Input/ 180VDC Armature(c)		Current (AC Amps)	Current (DC Amps)			
Chassis mount - line regenerative SCR								
BC204	1/6-0.75	1/3-1.0	Chassis regen SCR control, optional heatsink, dual voltage	12.0	8.0	377	E9	3
	1/6-1.5(a)	1/3-2.0(a)		16.0(a)	11.0(a)			
BC204-BPSI	1/6-0.75	1/3-1.0	BC204 with BC215 Bi-polar Signal Isolator factory installed	12.0	8.0	487	E9	3
	1/6-1.5(a)	1/3-2.0(a)		16.0(a)	11.0(a)			
BC200	1/8-1.0	1/4-2.0	Chassis regen SCR control, optional heatsink, dual voltage	16.0	11.0	704	E9	4
BC201	1/8-1.5	1/4-3.0	Chassis regen SCR control, optional heatsink, dual voltage	16.0	16.0	836	E9	1
BC203	—	5.0	Chassis regen SCR control, with heatsink, single voltage	38.0	25.0	1,052	E9	10
NEMA 4X/IP65 Washington duty - line regenerative SCR								
BC254	1/10-1	1/5-2	Enclosed regen SCR control, dual voltage	15.0	11.0	673	E9	5
BC254-FBR	1/10-1	1/5-2	BC254 with Power On/Off switch instead of Start/Stop switch and BC253 Fwd-Brake-Rev Switch factory installed	15.0	11.0	706	E9	5

See the ABB, Baldor-Reliance 501 catalog for a complete list of drives and accessories. If you need any help please contact your ABB representative for assistance.