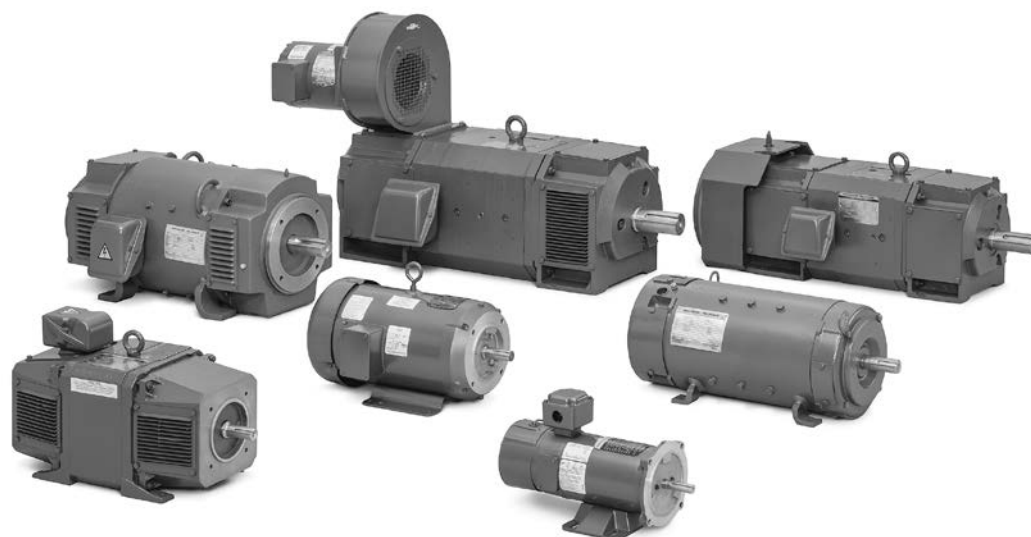


DC motors and controls

Available in round frame and unique laminated square frames, Baldor-Reliance® DC motors offer performance and reliability in tough applications. Round frame DC motors utilize permanent magnet technology optimizing the commutator, brushes, and inertia to assure the best performance possible. Wound field motors are designed with superior commutation through the speed range to ensure trouble-free operation and the insulation system is designed with extra margin of safety to eliminate performance-limiting hot spots.



Key features:

- Designed specifically for rectified DC power operation

1/4 - 500 Horsepower

Product line – DPG-FV, TEFC, TENV, XP, SPG enclosures	Fractional Shunt DC	DC PM	SCR Round	RPM III
Frame sizes	56C - 1810ATC	56C - 1810ATC	L186ATC - 5011AT	DC189ATY - C4414ATZ
Electrical features				
High performance molded commutator construction	-	-	-	S
Reduced VOC emission resins and paints for a green environment	S	S	S	S
Extensive full load testing to ensure delivered reliability/performance	S	S	S	S
Low rotating assembly inertia for high dynamic performance	S	S	S	S
Explosion proof products for hazardous duty environments	S	S	-	S
Motors suitable for IEEE 45 shipboard applications	S	S	S	S
Wide voltage ranges – 12 volts DC to 600 volts DC	S	S	S	S
Mechanical features				
Laminated frame construction for superior commutation performance	-	-	-	S
Skewed armature construction with no cogging at low speeds	-	-	-	S
NEMA or IEC mounting for ease interchangeability	-	-	-	S
Washdown products for food industry applications	S	S	-	-
Permanent magnet DC products with built in feedback devices	-	S	-	-
Versatile foot mounting for retrofitting non Baldor-Reliance® products	S	S	S	-

S = Standard

SCR drive fractional permanent magnet motor, TENV and TEFC, C-Face with base 1/4 thru 5 Hp



Features:

- NEMA C-Face with removable base
- Tachometer adaptable
- Class F insulation
- Double sealed bearings
- 20:1 constant torque speed range
- UL and CSA recognized

Applications:

- Conveyors
- Mixers
- Packaging machinery

Hp	Base Speed	NEMA Frame	Voltage D.C. Arm.	Full Load Amperage Arm.	Enclosure	Catalog Number	List Price	Disc. Sym.	Ap'x. Shpg. Wgt.	Reliance M/N	Notes (a)
1/4	1750	56C	90	2.5	TENV	CDP3310	716	PMS	24	TK3300	20,60
			180	1.25	TENV	CDP3306	716	PMS	23	TK3300	20,60
1/3	1750	56C	90	3.2	TENV	CDP3320	845	PMS	27	TK3300	20,60
			180	1.6	TENV	CDP3316	755	PMS	27	TK3300	20,60
1/2	1750	56C	90	4.8	TENV	CDP3330	845	PMS	32	TK3300	20,60
			180	2.5	TENV	CDP3326	845	PMS	31	TK3300	20,60
	2500	56C	90	5	TENV	CDP3335	755	PMS	26	TK3300	20,60
			90	7.6	TEFC	CDP3440	1,026	PMS	38	TK3400	20
3/4	1750	56C	180	3.7	TEFC	CDP3436	1,026	PMS	38	TK3400	20
			90	7.5	TEFC	CDP3443	908	PMS	36	TK3400	20
	1750	56C	90	10	TEFC	CDP3445	1,248	PMS	44	TK3400	20
			180	5	TEFC	CDP3455	1,248	PMS	44	TK3400	20
1	2500	56C	90	9.7	TEFC	CDP3450	1,026	PMS	38	TK3400	20
			180	4.85	TEFC	CDP3460	1,026	PMS	38	TK3400	20
1 1/2	1750	145TC	180	7.7	TEFC	CDP3575	2,298	PMS	65	TK3500	20
			180	7	TEFC	CDP3580	2,000	PMS	53	TK3500	20
2	1750	145TC	180	9.6	TEFC	CDP3585	2,742	PMS	74	TK3500	20
			180	10	TEFC	CDP3590	2,298	PMS	66	TK3500	8
3	1750	182TC	180	14	TEFC	CDP3603	3,377	PMS	112	TK3600PM	20
			180	14	TEFC	CDP3604	3,358	PMS	112	TK3600PM	20
5	1750	1810ATC	180	21.6	TEFC	CDP3605	5,731	PMS	161	TK3600PM	20

Note: See Tach Generators and Mounting Kits.

(a) See notes on inside back flap.

Integral DC tach permanent magnet SCR drive motor – TENV and TEFC, C-Face with base

1/4 thru 5 Hp



Features:

- Precise speed regulation
- 50 VDC per 1,000 RPM precision tachometer
- Class F insulation
- 20:1 constant torque speed range with NEMA Type K control

Applications:

- Conveyors
- Metering pumps

Hp	Base Speed	NEMA Frame	Voltage D.C.		Enclosure	Catalog Number	List Price	Disc. Sym.	Ap'x. Shpg. Wgt.	Notes (a)
			Arm.	Full Load Amperage Arm.						
1/4	1750	56C	90	2.5	TENV	CDPT3310	2,044	PMS	27	20,60
			180	1.25	TENV	CDPT3306	2,044	PMS	27	20,60
1/3	1750	56C	90	3.2	TENV	CDPT3320	2,085	PMS	30	20,60
			180	1.6	TENV	CDPT3316	2,085	PMS	30	20,60
1/2	1750	56C	90	4.8	TENV	CDPT3330	2,085	PMS	35	20,60
			180	2.5	TENV	CDPT3326	2,216	PMS	36	20,60
3/4	1750	56C	90	7.6	TEFC	CDPT3440	2,344	PMS	44	20
			180	3.7	TEFC	CDPT3436	2,344	PMS	45	20
1	1750	56C	90	10	TEFC	CDPT3445	2,615	PMS	50	20
			180	5	TEFC	CDPT3455	2,615	PMS	50	20
1 1/2	1750	143TC	180	7.7	TEFC	CDPT3575	3,629	PMS	71	20
2	1750	143TC	180	9.6	TEFC	CDPT3585	4,072	PMS	79	20
3	1750	182ATC	180	14	TEFC	CDPT3603	4,736	PMS	122	20
5	1750	1810ATC	180	24.5	TEFC	CDPT3605	7,085	PMS	164	20

(a) See notes on inside back flap.

Explosion proof permanent magnet SCR drive motor – TEFC, C-Face with base

1/4 thru 1 1/2 Hp



Features:

- NEMA C-Face with welded base
- 20:1 constant torque speed range
- UL and CSA
- Division 1, Class I, Group D; Class II, Group F&G, T3C
- Thermostat and explosion proof conduit box included
- Adjustable speed and constant torque for hazardous locations

Applications:

- Conveyors
- Feeders
- Pumps

Hp	Base Speed	NEMA Frame	Voltage D.C.		Catalog Number	XP Cls/Grp	Temp Code	List Price	Disc. Sym.	Ap'x. Shpg. Wgt.	Notes (a)
			Arm.	Full Load Amperage Arm.							
1/4	1750	56C	90	2.7	CDPX3410	②	T3C	1,965	PMS	38	20
			180	1.3	CDPX3406	②	T3C	1,965	PMS	38	20
1/3	1750	56C	90	3.6	CDPX3420	②	T3C	2,468	PMS	43	20
			180	1.7	CDPX3416	②	T3C	2,468	PMS	44	20
1/2	1750	56C	90	5.2	CDPX3430	②	T3C	2,787	PMS	46	20
			180	2.5	CDPX3426	②	T3C	2,787	PMS	46	20
3/4	1750	56C	90	7	CDPX3440	②	T3C	3,445	PMS	51	20
			180	3.5	CDPX3436	②	T3C	3,445	PMS	51	20
1	1750	56C	90	9.6	CDPX3545	②	T3C	4,588	PMS	73	20
			180	4.9	CDPX3555	②	T3C	4,588	PMS	71	20
1 1/2	1750	145TC	180	7.1	CDPX3575	②	T3C	4,904	PMS	81	20

Notes: ② Class I, Group D; Class II, Group F&G (a) See notes on inside back flap

CAUTION: Explosion-proof motors have a tight fit between mating parts to ensure the integrity of the explosion-proof enclosure. This can lead to an accumulation of moisture inside the motors due to condensation. Care should be used when selecting an explosion-proof motor, especially when installed outdoors and on intermittent duty.

For more information visit baldor.com or new.abb.com/motors-generators

Washdown duty permanent magnet SCR drive motor – TENV and TEFC, C-Face with base

1/4 thru 5 Hp



Features:

- Moisture sealant on bolt heads between frame and endplates
- Neoprene gasketed conduit box
- Double sealed bearings
- Forsheda® running contact V-Ring slinger
- Stainless steel shaft
- Class F Insulation
- Tachometer adaptable
- Suitable for high pressure washdown

Applications:

- Food processing conveyors
- Feeders

Hp	Base Speed	NEMA Frame	Voltage D.C. Arm.	Full Load Amperage Arm.	Enclosure	Catalog Number	List Price	Disc. Sym.	Ap'x. Shpg. Wgt.	Notes (a)
1/4	1750	56C	90	2.5	TENV	CDPWD3310	927	PMS	25	20,60
			180	1.25	TENV	CDPWD3306	927	PMS	24	20,60
1/3	1750	56C	90	3.2	TENV	CDPWD3320	979	PMS	27	20,60
			180	1.6	TENV	CDPWD3316	979	PMS	27	20,60
1/2	1750	56C	90	4.8	TENV	CDPWD3330	1,101	PMS	32	20,60
			180	2.5	TENV	CDPWD3326	1,101	PMS	32	20,60
3/4	1750	56C	90	7.6	TEFC	CDPWD3440	1,328	PMS	38	20
			180	3.7	TEFC	CDPWD3436	1,328	PMS	38	20
1	1750	56C	90	10	TEFC	CDPWD3445	1,620	PMS	44	20
			180	5	TEFC	CDPWD3455	1,620	PMS	44	20
1 1/2	1750	145TC	180	7.7	TEFC	CDPWD3575	3,099	PMS	66	20
2	1750	145TC	180	9.6	TEFC	CDPWD3585	2,698	PMS	75	20
3	1750	182TC	180	14	TEFC	CDPWD3603	4,733	PMS	116	20
5	1750	1810ATC	180	24.5	TEFC	CDPWD3605	8,017	PMS	157	20

Note: See Tach Generators and Mounting kits.

(a) See notes on inside back flap.

Paint free washdown duty permanent magnet SCR drive motor, TEFC, C-Face with base

1/4 thru 1 Hp



Features:

- Class F insulation
- 20:1 constant torque speed range
- Moisture resistant 200°C magnet wire
- Sealed ball bearings with moisture resistant grease
- Contact lip seals on shaft extensions
- Neoprene gaskets
- 300 series stainless steel motor frame, base, shaft and hardware

Applications:

- Food processing
- Packaging

Hp	Base Speed	NEMA Frame	Voltage D.C. Arm.	Full Load Amperage Arm.	Catalog Number	List Price	Disc. Sym.	Ap'x. Shpg. Wgt.	Notes (a)
1/4	1750	56C	90	2.7	CDPSWD3410	1,110	PMS	29	20
			180	1.3	CDPSWD3406	1,110	PMS	28	20
1/2	1750	56C	90	5.2	CDPSWD3430	1,315	PMS	37	20
			180	2.5	CDPSWD3426	1,315	PMS	38	20
1	1750	56C	90	9.6	CDPSWD3545	1,943	PMS	63	20
			180	4.9	CDPSWD3555	1,943	PMS	63	20

(a) See notes on inside back flap.

Metric flange permanent magnet SCR drive motor, TENV and TEFC, Flange and face mount

0.15 thru 5 kW, 0.2 thru 3.7 Hp



Features:

- Metric flange or C-Face per IEC 60072-1 standards
- Bolt on non-metric base
- Class F insulation
- Tachometer adaptable (except 0.15 kW)
- 20:1 constant torque speed range
- Conforms to IEC 30034-1

Applications:

- Metric SCR drive motor replacement

kW/HP	Base Speed	NEMA Frame	Voltage	Full Load	Enclosure	Catalog Number	List Price	Disc. Sym.	Ap'x. Shpg. Wgt.	Notes (a)
			D.C. Arm	Amperage Arm						
B5 flange										
.15/.20	1800	D63D	180	1.1	TENV	VP7424D	500	PMS	10	60
.18/.25	1750	D71D	180	1.25	TENV	VP3311D	716	PMS	23	20,60
.25/.33	1750	D71D	180	1.6	TENV	VP3316D	755	PMS	27	20,60
	1750	D71D	180	2.5	TENV	VP3326D	845	PMS	31	20,60
.37/.5	3000	D71D	180	2.5	TEFC	VP3428D	876	PMS	33	20
	1750	D80D	180	3.7	TEFC	VP3436D	1,026	PMS	40	20
.57/.75	3000	D80D	180	3.6	TEFC	VP3439D	908	PMS	37	20
	1750	D80D	180	5	TEFC	VP3455D	1,248	PMS	46	20
.75/1	3000	D80D	180	5.1	TEFC	VP3458D	1,026	PMS	41	20
	3000	D90D	180	7.7	TEFC	VP3468D	1,144	PMS	47	20
1.1/1.5	1750	D90D	180	7.7	TEFC	VP3575D	2,312	PMS	71	20
	1750	D90D	180	9.6	TEFC	VP3585D	2,758	PMS	78	20
1.5/2	3000	D90D	180	10	TEFC	VP3588D	2,312	PMS	69	20
	1750	D112D	180	14	TEFC	VP3603D	3,393	PMS	121	20
3.7/5	1750	D112D	180	24.5	TEFC	VP3605D	5,592	PMS	166	20
B14 face										
.15/.20	1800	D63D	180	1.1	TENV	VP7424-14	500	PMS	10	60
.18/.25	1750	D71C	180	1.4	TEFC	VP3411-14	805	PMS	30	20
.25/.33	1750	D71C	180	1.7	TEFC	VP3416-14	857	PMS	31	20
	3000	D71C	180	2.5	TEFC	VP3428-14	876	PMS	31	20
1.37/.50	1750	D71C	180	2.5	TEFC	VP3426-14	876	PMS	37	20
	3000	D80C	180	3.6	TEFC	VP3439-14	908	PMS	35	20
.56/.75	1750	D80C	180	3.7	TEFC	VP3436-14	1,026	PMS	40	20
	3000	D80C	180	5.1	TEFC	VP3458-14	1,026	PMS	38	20
.75/1	1750	D80C	180	5	TEFC	VP3455-14	1,248	PMS	45	20
	3000	D80C	180	7.7	TEFC	VP3468-14	1,114	PMS	43	20
1.1/1.5	1750	D90C	180	7.7	TEFC	VP3575-14	2,312	PMS	73	20
	3000	D90C	180	10.0	TEFC	VP3588-14	2,312	PMS	70	20
1.5/2	1750	D90C	180	9.6	TEFC	VP3585-14	2,758	PMS	80	20

Notes: (a) See notes on inside back flap.

Above motors D71 and larger with B5 flange, fitted with oil seal. Catalog numbers VP7424D and VP7424-14 are not tach adaptable.

See Tach Generators and Tach Mounting Kits.

Low voltage permanent magnet motor – TENV and TEFC

1/4 thru 1 Hp



Features:

- NEMA C-Face
- Class F insulation
- Double sealed ball bearings
- Top-mounted terminal studs for power connection on ratings 40-amps and up

Applications:

- Battery operation for portable pumps
- Fans
- Augers
- Winches
- Lifts

Hp	Base Speed	NEMA Frame	Voltage D.C.	Full Load Amperage	Enclosure	Catalog Number	List Price	Disc. Sym.	Ap'x. Shpg. Wgt.	Notes (a)
1/4	1800	56C	12	22.5	TENV	CDP3410-V12	770	PMS	23	20,60
			24	10.6	TENV	CDP3410-V24	730	PMS	23	20,60
1/3	1800	56C	12	28.6	TENV	CDP3420-V12	845	PMS	31	20,60
			24	13.6	TENV	CDP3420-V24	806	PMS	31	20,60
1/2	1800	56C	12	40	TENV	CDP3430-V12	876	PMS	37	20,60
			24	19.6	TENV	CDP3430-V24	835	PMS	35	20,60
3/4	1800	56C	12	66	TEFC	CDP3440-V12	1,257	PMS	42	20
		56C	24	29.4	TEFC	CDP3440-V24	1,250	PMS	41	20
1	1800	56C	12	85.6	TEFC	CDP3445-V12	1,818	PMS	45	20
			24	40.9	TEFC	CDP3445-V24	1,810	PMS	46	20

(a) See notes on inside back flap.

1/4 - 1/2 Hp are TENV. 3/4 - 1 Hp are TEFC.

DC power motor – TEFC – right base

1/3 thru 1 1/2 Hp



Features:

- 20% compound wound
- Weather proof, VPI insulation meets IEEE 45 specifications
- Suitable for mounting in any position
- Continuous duty
- Easy access brushes
- Powered from generators or batteries

Applications:

- Cranes and hoists
- Conveyors
- Augers
- Marine duty application

Hp	Speed	NEMA Frame	Rated Current	Catalog Number	List Price	Disc. Sym.	Ap'x. Shpg. Wgt.	Notes (a)
115 VDC								
1/3	1750	56	3.2	D1151	1,708	WFS	23	20
1/2	1750	56	4.8	D1152	1,755	WFS	29	20
3/4	1750	56	6.6	D1153	2,066	WFS	34	20
1	1750	56	8	D1154	2,375	WFS	62	20
230 VDC								
1/3	1750	56	1.7	D2301	1,708	WFS	41	20
1/2	1750	56	2.1	D2302	1,808	WFS	29	20
3/4	1750	56	3.3	D2303	2,066	WFS	34	20
1	1750	56	4	D2304	2,375	WFS	62	20
1 1/2	1750	184	6.1	D2305	4,039	WFS	84	20

Notes: (a) See notes on inside back flap.

Not for SCR control applications. Base welded on 3513D type only. Not tach adaptable.

Shunt wound SCR drive motors, TEFC, C-Face with base

1/4 thru 3 Hp



Features:

- Designed for use with NEMA type K SCR control
- 20:1 constant torque speed range
- NEMA C-Face and removable base
- NEMA 182 frame and larger – normally closed thermostat on field winding
- Class F insulation
- 1.0 SF

Applications:

- Conveyors
- Printing and textile equipment
- Machine tools

Hp	Base Speed	NEMA Frame	Voltage D.C.		Full Load Amperage		Catalog Number	List Price	Disc. Sym.	Ap'x. Shpg. Wgt.	Notes (a)
			Arm.	Field	Arm.	Field					
1/4	1750	56C	90	100/50	3	.3/.6	CD3425	720	WFS	23	20
			90	100/50	3.4	.4/.8	CD3433	787	WFS	24	20
1/3	1750	56C	180	200/100	1.9	.21/.42	CD3434	787	WFS	24	20
			90	100/50	3.7	.5/1	CD5333 (b)	1,135	WFS	31	20
			90	100/50	5.2	.5/1	CD3450	895	WFS	29	20
1/2	1750	56C	180	200/100	2.6	.25/.5	CD3451	895	WFS	29	20
			90	100/50	5	.44/.88	CD5350 (b)	1,253	WFS	38	20
			90	100/50	7.8	.6/1.2	CD3475	1,113	WFS	34	20
3/4	1750	56C	180	200/100	3.9	.3/.6	CD3476	1,113	WFS	34	20
			90	100/50	8	.6/1.2	CD5375 (b)	1,475	WFS	45	20
		56C	180	200/100	5	.3/.6	CD5318 (b)	1,571	WFS	54	20
			90	100/50	10	.6/1.2	CD5319 (b)	1,571	WFS	53	20
1	1750	182C	180	200/100	5	.25/.5	CD6218	2,099	WFS	65	20
			90	100/50	9.6	.55/1.1	CD6219	2,099	WFS	66	20
1 1/2	1750	182C	180	200/100	7.5	.25/.5	CD6215	2,350	WFS	84	20
2	1750	182C	180	200/100	9.5	.4/.8	CD6202	2,779	WFS	98	20
		213C	180	200/100	9.5	.4/.8	CD7502	4,877	WFS	105	20
3	1750	184TC	180	200/100	14.7	.6/1.2	CD6203	3,156	WFS	135	8, 73
		215C	180	200/100	14.7	.6/1.2	CD7503	5,187	WFS	137	20

Notes: See Tach Generators and Mounting Kits

(a) See notes on inside back flap

(b) No dual mounting base holes on 35D, 75D or 91D type.

Shunt wound SCR drive motors, explosion proof, TEFC, C-Face with base

1/2 thru 2 Hp



Features:

- Designed for use with NEMA type K SCR control
- 20:1 constant torque speed range
- NEMA C-Face and removable base
- Normally closed thermostat on field winding
- Class F insulation
- 1.0 SF
- UL and CSA Division 1, Class I, Group D, Class II, Group F&G

Applications:

- Conveyors
- Printing and textile equipment

Hp	Base Speed	NEMA Frame	Voltage D.C.		Full Load Amperage		Catalog Number	XP Cls/Grp	Temp Code	List Price	Disc. Sym.	Ap'x. Shpg. Wgt.	Notes (a)
			Arm.	Field	Arm.	Field							
Explosion-proof - continuous duty - Division 1, Class I, Group D & Class II, Group F & G - 1.0 S.F.													
1/2	1750	182CZ	90	100/50	4.9	.55/1.1	CDX1850 (b)	②	T3B	2,852	WFS	100	2
3/4	1750	182CZ	90	100/50	7	.55/1.1	CDX1875 (b)	②	T3B	3,776	WFS	100	2
1	1750	182CZ	180	200/100	5	.25/5	CDX2001 (b)	②	T3B	4,697	WFS	102	2
		182C	180	200/100	5	.25/5	CDX7100	②	T3B	3,899	WFS	102	2
1 1/2	1750	182C	180	200/100	7.5	.25/5	CDX7150	②	T3B	5,163	WFS	121	2
2	1750	182C	180	200/100	9.5	.4/8	CDX7200 (b)	②	T3B	5,798	WFS	135	2

Notes: (a) See notes on inside back flap

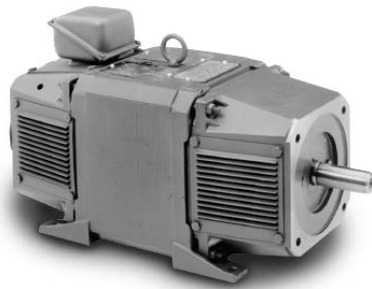
(b) Refers to shaft and/or face mounting dimensions only. Base mounting dimensions and shaft height differ from NEMA frames shown.

Go to www.baldor.com for details.

② Class I, Group D; Class II, Group F&G

Caution: Explosion-proof motors have a tight fit between mating parts to ensure the integrity of the explosion-proof enclosure. This can lead to an accumulation of moisture inside the motors due to condensation. Care should be used when selecting an explosion-proof motor, especially when installed outdoors and on intermittent duty.

RPM III DC shunt wound SCR drive motors, 180V armature, power code K 1.5 thru 5 Hp



Features:

- Unique laminated square frame for improved commutation
- Square configuration allows for increased rating per frame size
- Class F insulation system
- Service line brushes with convenient wear indicating reference lines
- PLS™ for longer bearing and motor life
- F3 mounting
- Tachometer adaptable with thermostat

Applications:

- Metals
- Paper
- Web processes
- Extruders and packaging
- Machine tools

Hp	Base Speed	NEMA Frame	Voltage D.C.		Full Load Amperage		Enclosure	Catalog Number	List Price	Disc. Sym.	Ap'x. Shpg. Wgt.	Reliance M/N	Field Type	XPY Tach Kit
			Arm.	Field	Arm.	Field (a)(b)								
1 1/2	1750	DC189ATY (c)	180	100/200	7.2	0.72	TENV	D1815R	10,019	R3B	169	T18R1119	STR	413336-1R
2	1750	DC189ATY (c)	180	100/200	9.5	0.72	TENV	D1802R	10,356	R3B	86	T18R1117	STR	413336-1R
3	1750	DC1811ATCZ (d)	180	100/200	14.1	1.17	TENV	CD1803R	11,162	R3B	212	T18R1102	STR	413336-1R
		DC189ATY (c)(e)	180	100/200	14.8	0.95	DPG	D1803R	11,284	R3B	165	T18R1118	STR	413336-1R
5	1750	DC189ATCZ (d)(e)	180	100/200	14.8	0.95	DPG	CDD1803R	11,484	R3B	160	T18R1120	STR	413336-1R
		DC1810ATCZ (d)(e)	180	100/200	24	1.68	DPG	CD1805R	12,495	R3B	175	T18R1105	STR	413336-1R
		DC2112ATCZ (d)	180	100/200	23	1.34	TENV	CD2105R	15,856	R3B	355	T21S1101	STR	413336-1R

Notes: Encoder and tachometer kits available

(a) Field amps at 25°C

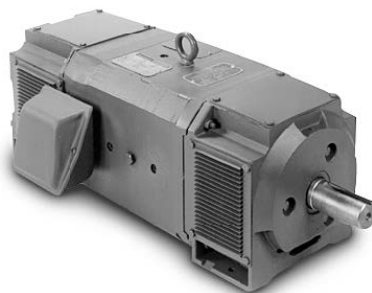
(b) Field amps for high voltage connection

(c) 140TC C-Face

(d) 180TC C-Face

(e) Top mounted conduit box, if blower added, blower must be mounted F-1 or F-2.

RPM III DC shunt wound SCR drive motors, 240V armature, 240V field, power code C 3 thru 10 Hp



Features:

- Superior speed regulation
- Operation down to 25% of base speed at 67% load current
- Excellent load sharing characteristics on common drive
- Tachometer adaptable

Applications:

- Textile equipment
- Metals
- Paper
- Web Processes
- Extruders and packaging
- Machine tools

Hp	Base Speed	NEMA Frame	Voltage D.C.		Full Load Amperage		Enclosure *	Catalog Number	List Price	Disc. Sym.	Ap'x. Shpg. Wgt.	Reliance M/N	Field Type	XPY Tach Kit
			Arm.	Field	Arm.	Field (a)								
3	1750/2300	C1811ATCZ (b)	240	240	11	0.99	SPG	CD2003R-2	13,225	R3B	198	T18R1009	STAB	413336-1R
5	1750/2300	C1811ATCZ (b)	240	240	18.1	1.11	SPG	CD2005R-2	13,366	R3B	209	T18R1010	STAB	413336-1R
7 1/2	1750/2300	C1812ATCZ (b)	240	240	27	1.4	SPG	CD2007R-2	13,500	R3B	235	T18R1011	STAB	413336-1R
10	1750/2300	SC2113ATCZ (c)	240	240	37	2.20	SPG	D2010R-2	16,661	R3B	346	T21S1001	STAB	417708-21

Notes: Encoder and tachometer kits available.

(a) Field amps at 25°C

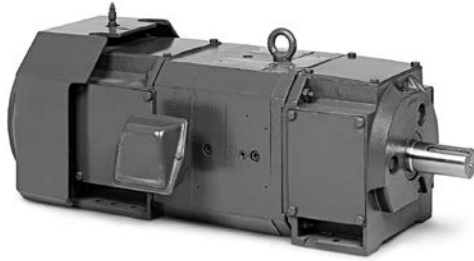
(b) 180TC C-Face

(c) 210TC C-Face

* Splash-proof Guarded (SPG) is an open machine in which the ventilating openings are so constructed that successful operation is not interfered with when drops of liquid or solid particles strike or enter the enclosure at any angle not greater than 60 degrees downward from vertical

RPM III DC shunt wound SCR drive TEFC motors, 240V and 500V armature, power code C

5 thru 50 Hp



Features:

- Laminated square frame for improved commutation
- Class F insulation system
- Service line brushes with convenient wear indicating reference lines
- PLS™ bearing lubrication system for longer bearing and motor life
- Tachometer adaptable with thermostat

Applications:

- Textile range drives
- Roofing machines
- Tube mills

Hp	Base/Max Speed	NEMA Frame	Voltage D.C.		Full Load Amperage		Catalog Number	List Price	Disc. Sym.	Ap'x. Shpg. Wgt.	Notes	Reliance M/N	Field Type	XPY Tach Kit
			Arm.	Field	Arm.	Field (a)(b)								
5	1750/2300	C1812ATZ	240	150	18.5	1.80	D2505R	13,981	R3B	251	87	T18R1005 (d)	STAB	417709-17
	1750/2300	SC2113ATZ	500	150/300	9	1.06	D5505R	15,529	R3B	340	87	T21S201 (c)	STAB	417708-21
7 1/2	1750/2300	SC2113ATZ	240	150	27	3.25	D5507R	16,737	R3B	359	87	T21S301	STAB	417709-65
	1750/2300	SC2113ATZ	500	150/300	13.5	1.41	D5507R	16,737	R3B	360	87	T21S302 (d)	STAB	417709-65
10	1750/2300	MC2113ATZ	240	150	35.5	3.13	D2510R	18,820	R3B	379	87	T21S303	STAB	417709-65
	1750/2300	MC2113ATZ	500	150/300	17.5	1.55	D5510R	18,820	R3B	405	87	T21S304	STAB	417709-65
15	1750/2300	SC2512ATZ	240	150	53.5	2.18	D2515R	22,702	R3B	560	6,87	T25S301	STAB	417709-66
	1750/2300	SC2512ATZ	500	150/300	25.6	1.71	D5515R	22,702	R3B	547	87	T25S302	STAB	417709-66
20	1750/2300	LC2512ATZ	240	150	71	4.14	D2520R	23,660	R3B	640	87	T25S303	STAB	417709-66
	1750/2300	LC2512ATZ	500	150/300	33	2.06	D5520R	23,660	R3B	640	87	T25S304	STAB	417709-66
25	1750/2300	MC2812ATZ	240	150	87	4.05	D2525R	27,502	R3B	805	87	T28S301	STAB	417709-67
	1750/2300	MC2812ATZ	500	150/300	41	2.23	D5525R	27,502	R3B	815	87	T28S302	STAB	417709-67
30	1750/2300	LC2812ATZ	500	150/300	50	1.74	D5530R	28,831	R3B	895	87	T28S303	STAB	417709-67
40	1750/2300	MC3212ATZ	500	150/300	65	1.82	D5540R	33,786	R3B	1120	87	T32S301	STAB	417709-68
50	1750/2300	LC3212ATZ	500	150/300	84	1.98	D5550R	35,751	R3B	1270	87	T32S302	STAB	417709-68

Notes: Encoder and tachometer available.

(a) Field amps at 25°C

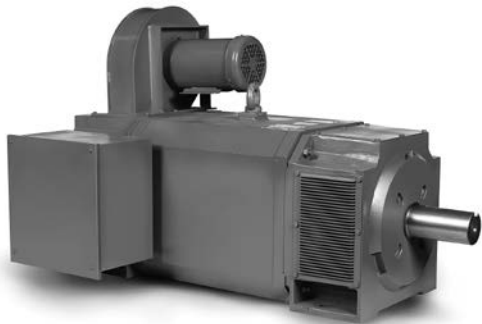
(b) Field amps for high voltage connection

(c) TENV enclosure

(d) Power Code D

RPM III wound field SCR drive DPG-FV motors, 240V and 500V armature, power code C

10 thru 500 Hp



Features:

- Laminated square frame for improved commutation
- Class F insulation system
- Service line brushes with convenient wear indicating reference lines
- PLS™ bearing lubrication system for longer bearing and motor life
- Tachometer adaptable with thermostat

Applications:

- Metals
- Paper
- Web processes
- Extruders and packaging
- Machine tools

Hp	Base/Max Speed	NEMA Frame	Voltage D.C.		Full Load Amperage		Catalog Number	List Price	Disc. Sym.	Ap'x. Shpg. Wgt.	Notes	Reliance M/N	Field Type	XPY Tach Kit
			Arm.	Field	Arm.	Field (a)(b)								
10	1750/2300	SC2113ATZ	500	300	18	1.11	D5010RS-BV	20,017	R3B	345 (c)	101,102	T21T1342	STAB	417708-21
	1750/2300	SC2113ATZ	240	150	56	4.73	D2015R-BV	17,952	R3B	345 (d)	103	T21T1359	STR	417708-21
15	1750/2300	SC2113ATCZ	240	150	56	4.73	CD2015R-BV	18,632	R3B	345 (b)	103	T21T1384	STR	417708-21
	1750/2300	SC2113ATZ	500	300	27	2.22	D5015R-BV	17,952	R3B	375	103	T21T1364	STR	417708-21
20	1750/2300	SC2113ATZ	500	300	27	3.03	D5015RS-BV	22,829	R3B	345 (c)	101,102	T21T1346	STAB	417708-21
	1750/2300	SC2113ATZ	240	150	76.5	7.12	D2020R-BV	18,381	R3B	345 (d)	103	T21T1363	STR	417708-21
	1750/2300	SC2113ATZ	500	300	37	3.03	D5020R-BV	18,381	R3B	390	103	T21T1350	STR	417708-21
	1750/2300	MC2113ATZ	500	300	37	2.24	D5020RS-BV	23,363	R3B	370 (c)	101,102	T21T1344	STAB	417708-21
25	1750/2300	MC2113ATZ	240	150	96	8.43	D2025R-BV	21,658	R3B	370 (d)	103	T21T1371	STR	417708-21
	1750/2300	MC2113ATZ	500	300	46	3.32	D5025R-BV	21,658	R3B	410	6,104	T21T1351	STR	417708-21
	1750/2300	LC2113ATZ	500	300	43	3.07	D5025RS-BV	24,227	R3B	472 (c)	101,102	T21T1345	STAB	417708-21
30	1750/2300	LC2113ATZ	240	150	109	10	D2030R-BV	22,138	R3B	400	103	T21T1375	STR	417708-21
	1750/2300	LC2113ATZ	500	300	52	3.3	D5030R-BV	22,138	R3B	445	103	T21T1352	STR	417708-21
	1750/2300	SC2512ATZ	500	300	51	2.84	D5030RS-BV	25,964	R3B	535 (c)	101,102	T25T1342	STAB	417708-21
	1150/1800	LC2115ATZ	500	300	54	3.95	D5130R-BV	24,150	R3B	480	104	T21T1378	STR	417708-21
40	1750/2300	LC2115ATZ	240	150	146	5.63	D2040R-BV	22,151	R3B	480	6,103	T21T1380	STR	417708-21
	1750/2100	MC2115ATZ	500	300	69	4.49	D5040R-BV	23,750	R3B	501	103	T21T2353	STR	417708-21
	1750/2100	MC2512ATZ	500	300	68.5	2.88	D5040RS-BV	28,162	R3B	570 (c)	6,101,102	T25T1344	STAB	417708-21
	1150/2000	LC2512ATZ	500	300	72	5.27	D5140R-BV	29,512	R3B	640	104	T25T1355	STR	417708-21
50	1750/2100	LC2115ATZ	500	300	87	3.95	D5050R-BV	25,680	R3B	520	103	T21T2354	STR	417708-21
	1750/2100	LC2512ATZ	500	300	84	3.38	D5050RS-BV	29,831	R3B	660 (c)	6,101,102	T25T1339	STAB	417708-21
	1150/1900	C2514ATZ	500	300	87	4.06	D5150R-BV	30,188	R3B	695	6,104	T25T1359	STR	417708-21
60	1750/2300	LC2512ATZ	500	300	102	4.61	D5060R-BV	27,703	R3B	610	103	T25T2348	STR	417708-21
	1750/2100	MC2812ATZ	500	300	100	3.43	D5060RS-BV	31,505	R3B	860 (c)	6,101,102	T28T1330	STAB	417708-26
	1150/1900	C2515ATZ	500	300	102	5.18	D5160R-BV	32,454	R3B	805	6,103	T25T1364	STR	417708-21
75	1750/2100	C2514ATZ	500	300	124	6.21	D5075R-BV	32,454	R3B	767	103	T25T2349	STR	417708-21
	1750/2100	MC3212ATZ	500	300	124	3.63	D5075RS-1BV	35,374	R3B	1210 (c)	6,101,102	T28T1327	STAB	417708-26
	1150/2000	MC3212ATZ	500	300	125	4.15	D5175R-1BV	33,006	R3B	1125	6,103	T28T1342	STR	417708-26
100	1750/2000	C2515ATZ	500	300	167	6.7	D50100R-BV	33,006	R3B	890	103	T25T2350	STR	417708-21
	1750/2000	MC3212ATZ	500	300	162	3.34	D50100RS-BV	36,449	R3B	1210 (c)	6,101,102	T32T1314	STAB	417708-26
	1150/1850	C3214ATZ	500	300	168	4.15	D51100RB-1BV	37,982	R3B	1475	6,104	T28T1344	STR	417708-26
	1750/2000	C2813ATZ	500	300	204	6.93	D50125R-BV	33,006	R3B	997	6,103	T28T1333	STR	417708-26
125	1750/2000	UC2813ATZ	500	300	204	6.93	D50125UR-BV	33,006	R3B	945	5,6,103	T28T1349	STR	417708-26
	1750/2000	LC3212ATZ	500	300	203	4.4	D50125RS-BV	37,556	R3B	1290 (c)	6,101,102	T32T1318	STAB	417708-26
	1150/2000	UC3214ATZ	500	300	204	8.37	D51125RR-BV	39,583	R3B	1475	5,6,103	T32T1327	STR	417708-26
150	1750/2000	C2815ATZ	500	300	250	10.64	D50150RE-BV	34,334	R3B	1197	6, 103	T28T1352	STR	417708-26
	1750/2000	UC2815ATZ	500	300	250	10.64	D50150URE-BV	34,875	R3B	1197	5,6,103	T28T1351	STR	417708-26
	1750/2000	MC3612ATZ	500	300	240	4.81	D50150RS-BV	47,174	R3B	1630 (c)	6,105	T36S1313	STAB	417708-26
200	1750/2100	UC3214ATZ	500	300	322	8.37	D50200RR-BV	38,429	R3B	1475	5,6,103	T32T1322	STR	417708-26
	1750/2000	LC3612ATZ	500	300	321	5.41	D50200RS-BV	49,935	R3B	1905 (c)	6,105	T36S1314	STAB	417708-26
	1150/2000	MC4013ATZ	500	300	323	10.7	D51200R-1BV	69,329	R3B	1850	6,104	T36S1325	STR	417708-26

Notes: Encoder and tachometer kits available.
 (a) Field amps at 25°C
 (b) 210TC C-Frame

Red catalog number indicates NEW product.
 (c) Extruder duty enclosed commutator design
 (d) Power Code D

Definite purpose

Unit Handling

Brake

IEC Frame

50 Hertz

Variable Speed AC

DC

Accessories

Service

Grinders

RPM III wound field SCR drive DPG-FV motors, 240V and 500V armature, power code C

Hp	Base/Max Speed	NEMA Frame	Voltage D.C.		Full Load Amperage		Catalog Number	List Price	Disc. Sym.	Ap'x. Shpg. Wgt.	Notes	Reliance M/N	Field Type	XPY Tach Kit
			Arm.	Field	Arm.	Field (a)(b)								
250	1750/2000	ULC3612ATZ	500	300	405	8.87	D50250RR-BV	46,389	R3B	1891	5,6,104	T36S1318	STR	417708-26
	1750/2000	C4011ATZ	500	300	400	6.63	D50250RS-BV	71,462	R3B	2310 (c)	6,105	T40S1306	STAB	417708-26
	1150/2000	MC4013ATZ	500	300	406	10.7	D51250R-BV	81,353	R3B	2735	6,104	T40S1317	STR	417708-26
300	1750/2000	LC3613ATZ	500	300	478	12.5	D50300R-BV	48,326	R3B	2190	6,104	T36S1319	STR	417708-26
	1750/2100	MC4013ATZ	500	300	478	6.5	D50300RS-BV	83,159	R3B	2815 (c)	6,105	T40S1309	STAB	417708-26
	1150/2000	LC4013ATZ	500	300	485	13.2	D51300R-BV	84,181	R3B	3015	6,104	T40S1320	STR	417708-26
400	1750/2000	MC4013ATZ	500	300	640	11.9	D50400R-BV	83,159	R3B	3040	6,104	T40S1314	STR	417708-26
	1750/2000	LC4013ATZ	500	300	635	7.97	D50400RS-BV	85,172	R3B	3040 (c)	6,105	T40S1311	STAB	417708-26
	1150/1600	C4413ATZ	500	300	644	13	D51400R-BV	105,589	R3B	3830	6,101,104	T44T1304	STR	417708-156
500	1750/2050	C4412ATZ	500	300	797	10.8	D50500R-BV	105,971	R3B	3480	6,101,104	T44T1305	STR	417708-156
	1150/1450	C4414ATZ	500	300	805	12.3	D51500R-BV	119,919	R3B	4560	6,101,104	T44T1306	STR	417708-156

Notes: Encoder and tachometer kits available.

(a) Field amps at 25°C

(b) 210TC C-Face

(c) Extruder duty enclosed commutator design

(d) Power Code D

RPM III wound field SCR drive DPG motors, 240V and 500V armature, power code C

3 thru 60 Hp



Features:

- Laminated square frame for improved commutation
- High limit thermostat
- Tachometer adaptable
- Class F insulation system
- Service line brushes with convenient wear indicating reference lines
- PLS™ bearing lubrication system for longer bearing and motor life

Applications:

- Metals
- Paper
- Web processes
- Extruders and packaging
- Machine tools

Hp	Base/Max Speed	NEMA Frame	Voltage D.C.		Full Load Amperage		Catalog Number	List Price	Disc. Sym.	Ap'x. Shpg. Wgt.	Notes	Reliance M/N	Field Type	XPY Tach Kit
			Arm.	Field	Arm.	Field (a)(b)								
3	1750/2300	DC189ATCZ (c)(e)	240	150	11	1.52	D2003R	11,719	R3B	161	80,83	T18R1127	STAB	413336-1R
	1750/2300	C1811ATZ	500	300	5.2	0.72	D5003R	12,713	R3B	197	80	T18R1333 (d)	STR	413336-1R
5	1750/2300	C1811ATZ	240	150	19.2	1.77	D2005R	12,484	R3B	194	80,83	T18R1318 (d)	STAB	413336-1R
	1750/2300	C1811ATZ	500	300	9	1	D5005R	12,713	R3B	194	80	T18R1334 (d)	STR	413336-1R
7 1/2	1750/2300	C1811ATZ	240	150	28	1.95	D2007R	12,546	R3B	210	80,83	T18R1301 (d)	STAB	413336-1R
	1750/2300	C1811ATZ	500	300	13.5	1.29	D5007R	12,807	R3B	197	80	T18R1335 (d)	STR	413336-1R
10	1750/2300	C1812ATZ	240	150	37	2.13	D2010R	13,926	R3B	233	80,84	T18R1302 (d)	STAB	413336-1R
	1750/2300	C1812ATZ	500	300	17.4	1.09	D5010R	13,000	R3B	227	80,85	T18R1307 (d)	STAB	413336-1R
15	1750/2300	SC2113ATZ	240	150	56	4.12	D2015R	15,494	R3B	315	87	T21S1330	STAB	417708-21
	1750/2300	SC2113ATZ	500	150/300	27	1.76	D5015R	15,628	R3B	320	87	T21S1322	STAB	417708-21
20	1750/2300	LC2113ATZ	240	150	74	4.23	D2020R	16,353	R3B	403	87	T21S1331	STAB	417708-21
	1750/2300	MC2113ATZ	500	150/300	35	1.98	D5020R	17,721	R3B	372	87	T21S1323	STAB	417708-21
25	1750/2300	LC2113ATZ	240	150	91.5	5.84	D2025R	17,979	R3B	415	87	T21S1332	STAB	417708-21
	1750/2300	LC2113ATZ	500	150/300	43	2.63	D5025R	16,930	R3B	394	87	T21S1324	STAB	417708-21
30	1750/2300	SC2512ATZ	240	150	111	3.45	D2030R	17,531	R3B	515	87	T25S1330	STAB	417708-21
	1750/2300	SC2512ATZ	500	150/300	52	1.71	D5030R	17,832	R3B	520	87	T25S1322	STAB	417708-21
40	1750/2300	LC2512ATZ	500	150/300	68	2.4	D5040R	19,577	R3B	605	6,87	T25S1323	STAB	417708-21
50	1750/2300	MC2812ATZ	500	150/300	85	2.02	D5050R	22,710	R3B	766	6,87	T28S1313	STAB	417708-26
60	1750/2100	LC2812ATZ	500	300	100	2.78	D5060R	23,856	R3B	860	6,87	T28S1314	STAB	417708-26

Notes: Encoder and tachometer kits available.

(a) Field amps at 25°C

(b) Field amps for high voltage connection

(c) 180 TC C-Face

(d) Power Code D

(e) Top mounted conduit box, if blower added, blower must be mounted F-1 or F-2

RPM III DC motor encoder and tachometer kits

Applications: Encoder and tachometer kits for field installation

Features: Kits include the encoder or tachometer and all mounting hardware required for installation on RPM III DC motors.

Device Type	Output	Catalog Number	Frames	Enclosure	List Price	Disc. Sym.	Ap'x. Shpg. Wgt.
RD120-1	1 x 120 ppr	417708-30	DC180, C180, DC2112	DPG, DPFV	3,164	SVC	5
		417708-32	C210-C250	DPG, DPFV, TENV	3,164	SVC	5
		417708-33	C280-C400	DPG, DPFV, TENV	3,164	SVC	5
RD120-2	2 x 120 ppr	417708-34	DC180, C180, DC2112	DPG, DPFV	3,764	SVC	5
		417708-36	C210-C250	DPG, DPFV, TENV	3,764	SVC	5
		417708-37	C280-C400	DPG, DPFV, TENV	3,764	SVC	5
		417708-133	DC180, C180, DC2112	DPG, DPFV, TENV	4,036	SVC	5
H20	1024 ppr	417708-134	C210-C250	DPG, DPFV, TENV	4,036	SVC	5
		417708-135	C280-C400	DPG, DPFV, TENV	4,036	SVC	5
		417708-151	C440	DPG, DPFV, TENV	4,036	SVC	5
RL67	1024z ppr	417708-126	DC180, C180, DC2112	DPG, DPFV, TENV	5,128	SVC	4
		417708-136	C210-C250	DPG, DPFV, TENV	5,128	SVC	6
		417708-137	C280-C400	DPG, DPFV, TENV	5,128	SVC	6

Encoder and tachometer mounting kits (less tach)

Applications: Encoder and tachometer kits for field installation

Features: Kits include all mounting hardware required for installation on RPM III DC motors. Feedback device not included.

Device Type	Catalog Number	Frames	Enclosure	List Price	Disc. Sym.	Ap'x. Shpg. Wgt.
XC42, XC46, BC42, BC46, H56, 800123-R & -S	413336-2R	DC180, C180, DC2112	DPG, DPFV, TENV	1,689	SVC	9
	417708-22	C210-C250	DPG, DPFV, TENV	1,689	SVC	9
	417708-27	C280-C400	DPG, DPFV, TENV	1,689	SVC	9
XPY, XPYII, SPY, RPY444	413336-1R	DC180, C180, DC2112	DPG, DPFV, TENV	1,689	SVC	7
	417708-21	C210-C250	DPG, DPFV, TENV	1,689	SVC	7
	417708-26	C280-C400	DPG, DPFV, TENV	1,689	SVC	7
	417708-156	C440	DPG, DPFV, TENV	1,689	SVC	8
	417709-17	C180	TEFC	4,245	SVC	6
	417709-65	C210	TEFC	4,245	SVC	6
	417709-66	C250	TEFC	4,245	SVC	9
RL67	417709-67	C280	TEFC	4,245	SVC	15
	417708-41	C210 - C250	DPG, DPFV, TENV	1,091	SVC	2
	417708-42	C280 - C400	DPG, DPFV, TENV	1,091	SVC	1

Blower kits for use with RPM III DC motors

Suitable for operation on 230/460V or 240/480V, 3-Phase, 50/60 Hz

Motor Frame	Catalog Number	List Price	Disc. Sym.	Ap'x. Shpg. Wgt. (lb)	Description
C180ATZ, DC180ATZ	417077-51	1,491	SVC	44	Blower Kit Without Filter
C210ATZ	419947-29	1,491	SVC	83	Blower Kit Without Filter
C250ATZ	419947-30	1,491	SVC	39	Blower Kit Without Filter
C280ATZ	419947-32	1,823	SVC	84	Blower Kit Without Filter
C320ATZ	419947-34	2,123	SVC	90	Blower Kit Without Filter
C3612ATZ	417077-74	2,123	SVC	90	Blower Kit Without Filter
C3613ATZ	417077-127	2,123	SVC	110	Blower Kit Without Filter
C400ATZ	417077-75	2,324	SVC	85	Blower Kit Without Filter
C440ATZ	417077-126	4,738	SVC	225	Blower Kit Without Filter

Filter kits for use with DPF-FV, RPM III DC motors

Suitable for operation on 230/460V or 240/480V, 3-Phase, 50/60 Hz

Motor Frame	Catalog Number	List Price	Disc. Sym.	Ap'x. Shpg. Wgt. (lb)	Description
C180ATZ, DC180ATZ	417077-57	911	SVC	2	Washable Wire Mesh Canister Type
C2113ATZ	417077-58	911	SVC	4	Washable Wire Mesh Canister Type
C2115ATZ	417077-59	911	SVC	4	Washable Wire Mesh Canister Type
C2512ATZ	417077-58	911	SVC	4	Washable Wire Mesh Canister Type
C2514ATZ	417077-59	911	SVC	4	Washable Wire Mesh Canister Type
C2515ATZ	417077-59	911	SVC	4	Washable Wire Mesh Canister Type
C2812ATZ	417077-59	911	SVC	4	Washable Wire Mesh Canister Type
C2813ATZ	417077-59	911	SVC	4	Washable Wire Mesh Canister Type
C2815ATZ	417077-59	911	SVC	4	Washable Wire Mesh Canister Type
C3210ATZ	417077-59	911	SVC	4	Washable Wire Mesh Canister Type
C3212ATZ	417077-59	911	SVC	4	Washable Wire Mesh Canister Type
C3214ATZ	417077-59	911	SVC	4	Washable Wire Mesh Canister Type
C3612ATZ	417077-65	1,165	SVC	7	Washable Wire Mesh Canister Type
C3613ATZ	417077-102	1,642	SVC	6	Washable Wire Mesh Canister Type
C400ATZ	417077-102	1,642	SVC	6	Washable Wire Mesh Canister Type
C440ATZ	417077-124	1,893	SVC	22	Square Replaceable Polyester Type

Sliding Bases for RPM III DC motors

Suitable for operation on 230/460V or 240/480V, 3-Phase, 50/60 Hz

Applications: Used for adjusting belt tension on belted applications. Not suitable for wall or ceiling mounting.

Motor Frame	Catalog Number	List Price	Disc. Sym.	Ap'x. Shpg. Wgt. (lb)	Description	Dimension Sheet
DC1810ATZ	42384-26D	340	SVC	14	Standard Duty	609987-501
DC1811ATZ	42384-26BE	340	SVC	17	Heavy Duty	609987-501
C1811ATZ	42384-26BE	319	SVC	17	Heavy Duty	609987-1
C1812ATZ	42384-26BF	319	SVC	17	Heavy Duty	609987-1
DC2112ATZ	42384-26BH	340	SVC	29	Heavy Duty	609958-51
C2113ATZ	419914-1A	340	SVC	50	Heavy Duty	609957-1
C2512ATZ	419914-1B	634	SVC	33	Heavy Duty	609957-1
C2514ATZ	419914-1R	1,223	SVC	59	Heavy Duty	609957-1
C2515ATZ	419914-1S	634	SVC	36	Heavy Duty	609957-1
UC2812ATZ	419914-1C	1,223	SVC	37	Heavy Duty	609957-1
UC2813ATZ	419914-1T	1,223	SVC	26	Heavy Duty	609957-1
UC2815ATZ	419914-1U	1,223	SVC	42	Heavy Duty	609957-1
UC3212ATZ	419914-1D	1,606	SVC	69	Heavy Duty	609977-1
UC3214ATZ	419914-1W	1,606	SVC	76	Heavy Duty	609977-1
UC3612ATZ	419914-1E	2,166	SVC	76	Heavy Duty	609977-1

SCR drive motors, shunt wound – DPF, self ventilated, rigid base

5 thru 250 Hp



Features:

- High dielectric stability
- Low moment of inertia armature for fast response
- Includes thermostat on interpole
- Constant pressure brush springs and longer brushes for reduced maintenance
- Class F insulation system
- Includes grease fittings and reliefs for bearing maintenance
- Tachometer adaptable

Applications:

- Conveyors
- Plastic extruders
- Packaging machinery
- Other constant torque applications

Hp	Base/Max Speed (a)	NEMA Frame	Voltage D.C.		Full Load Amperage		Catalog Number	List Price Motors Only (c)	Disc. Sym.	Ap'x. Shpg. Wgt. (d)	XPY Tach Kit	Blower Catalog Number	Shunt Type	Notes (e)
			Arm.	Field	Arm.	Field (b)								
5	1750/2300	L186AT	240	150/300	17.7	.74	D2005P	9,101	RSV	180	TKP1836XP	FVB3180	Straight	2,20
			500	150/300	8.5	.669	D5005P	9,101	RSV	162	TKP1836XP	FVB3180	Straight	2,20
7 1/2	1750/2300	1810AT	240	150/300	27.8	.92	D2007P	10,603	RSV	218	TKP1836XP	FVB3180	Straight	2,20
		218AT	500	150/300	13.2	.685	D5007P	10,603	RSV	235	TKP1836XP	FVB3210	Straight	2,20
10	1750/2300	219AT	240	150/300	36.6	2.14	D2010P	10,800	RSV	245	TKP1836XP	FVB3210	Straight	2,20
			500	150/300	17.2	1.36	D5010P	10,800	RSV	255	TKP1836XP	FVB3210	Straight	2,20
15	1750/2300	258AT	240	150/300	55	2.60	D2015P	12,088	RSV	375	TKP1836XP	FVB3250	Straight	2,20
			500	150/300	25.2	1.39	D5015P	12,088	RSV	375	TKP1836XP	FVB3250	Straight	2,20
20	1750/2300	259AT	240	150/300	70.5	2.48	D2020P	12,736	RSV	430	TKP1836XP	FVB3250	Straight	2,20
			500	150/300	35.1	1.24	D5020P	12,736	RSV	430	TKP1836XP	FVB3250	Straight	2,20
25	1750/2300	288AT	240	150/300	89.2	2.96	D2025P	15,694	RSV	575	TKP1836XP	FVB4280	Straight	2,20
		287-8AT	500	150/300	43.4	1.64	D5025P	15,694	RSV	490	TKP1836XP	FVB4280	Straight	2,20
30	1750/2300	288AT	240	150/300	106	2.96	D2030P	15,694	RSV	595	TKP1836XP	FVB4280	Straight	2,20
			500	150/300	50	2	D5030P	15,694	RSV	590	TKP1836XP	FVB4280	Straight	2,20
40	1750/2100	328AT	500	150/300	67.9	2.16	D5040P	21,005	RSV	784	TKP1836XP	FVB6320	Straight	2,20
50	1750/2100	328AT	500	150/300	83.7	1.99	D5050P	21,005	RSV	822	TKP1836XP	FVB6320	Straight	2,20
60	1750/2100	365-6AT	500	150/300	98.6	1.74	D5060P	28,164	RSV	790	TKP1836XP	FVB6400	Stab	2,20
75	1750/2100	366AT	500	150/300	123	1.48	D5075P	28,164	RSV	905	TKP1836XP	FVB6400	Stab	2,20
100	1750/2000	368AT	500	150/300	158	3	D50100P	37,985	RSV	1100	TKP1836XP	FVB6400	Straight	2,20
125	1750/2000	407AT	500	150/300	200	3	D50125P	43,687	RSV	1445	TKP400XP	FVB6400	Straight	2,20
150	1750/2000	409AT	500	150/300	237	2.34	D50150P	54,469	RSV	1785	TKP400XP	FVB6400	Straight	2,20
200	1750/1900	504AT	500	150/300	320	3.9	D50200P	65,961	RSV	2095	TKP500XP	FVB8500	Straight	2,20
250	1750/1900	506AT	500	150/300	392	5.01	D50250P	78,440	RSV	2540	TKP500XP	FVB8500	Straight	2,20

Notes:

- (a) DPF enclosure is self-ventilated. Speed can be reduced to approximately 60% of base speed with constant torque. See performance data in CA608 catalog for specific speed-torque curves. Separate blower can be used to increase operating range below 60% of base speed.
- (b) Field amps are for 150V connection on 240VDC motors; 300V connection on 500VDC motors.
- (c) Does not include price of blower.
- (d) Does not include weight of blower.
- (e) See notes on inside back flap.

180 frame motors are supplied without external conduit box, see online layout drawing for details.

SCR drive motor, shunt and stabilized shunt wound DPBV enclosure – rigid base 40 thru 500 Hp



Features:

- High dielectric stability
- Low moment of inertia armature for fast response
- Includes thermostat on interpole
- Constant pressure brush springs and longer brushes for reduced maintenance
- Class F insulation system
- Includes grease fittings and reliefs for bearing maintenance
- Tachometer adaptable
- Blower-ventilated, includes filter

Applications:

- Conveyors
- Plastic extruders
- Packaging machinery
- Other constant torque applications

Hp	Base/Max Speed	NEMA Frame	Voltage D.C.		Full Load Amperage		Catalog Number	List Price w/Blower & Filter	Disc. Sym.	Ap'x. Shpg. Wgt.	XPY Tach Kit	Field Type	Notes (b)
			Arm.	Field	Arm.	Field (a)							
40	1750/2100	328AT	240	150/300	138	2.64	D2040P-BV	24,447	RSV	855	TKP1836XP	STR	2,20
			500	150/300	67.9	2.16	D5040P-BV	24,447	RSV	830	TKP1836XP	STR	2,20
50	1750/2100	328AT	240	150/300	175	2.64	D2050P-BV	25,847	RSV	873	TKP1836XP	STR	2,20
			500	150/300	83.7	1.99	D5050P-BV	25,847	RSV	885	TKP1836XP	STR	2,20
60	1750/2100	366AT	240	150/300	201	5.58	D2060P2-BV	31,637	RSV	980	TKP1836XP	STR (c)	2,20
		365-6AT	500	150/300	98.6	1.74	D5060P-BV	31,637	RSV	880	TKP1836XP	STAB	2,20
75	1750/2100	366AT	240	150/300	256	5.58	D2075P2-BV	33,037	RSV	975	TKP1836XP	STR (c)	2,20
			500	150/300	123	1.48	D5075P-BV	33,037	RSV	960	TKP1836XP	STAB	2,20
100	1750/2000	368AT	500	150/300	158	3	D50100P2-BV	39,958	RSV	1145	TKP1836XP	STR (c)	2,20
125	1750/2000	368AT	500	150/300	197	3	D50125P2-BV	41,458	RSV	1170	TKP1836XP	STR(c)	2,20
150	1750/2000	407-9AT	500	150/300	238	2.69	D50150P2-BV	50,510	RSV	1519	TKP400XP	STR (c)	2,20
200	1750/1900	409AT	500	150/300	311	3.75	D50200P2-BV	59,181	RSV	1830	TKP400XP	STR (c)	2,20
250	1750/1900	504-6AT	500	150/300	405	4.85	D50250P2-BV	69,450	RSV	2175	TKP500XP	STR (c)	2,20
300	1750	506AT	500	150/300	478	6.2	D50300P2-BV	79,928	RSV	2629	TKP500XP	STR (c)	2,20
400	1750/1900	508AT	500	150/300	624	6.07	D50400P2-BV	99,298	RSV	3285	TKP5006XP	STR (c)	2,20
500	1750/1900	5010AT	500	150/300	788	6.03	D50500P2-BV	122,295	RSV	4170	TKP500XP	STR (c)	2,20

Notes: (a) Field amps are for 150V connection on 240VDC motors; 300V connection on 500VDC motors.

(b) See notes on inside back flap.

Red catalog number indicates **NEW** product.

SCR drive motor, 240V armature – 240V field shunt wound DPFV – Self-ventilated rigid base and C-Face

3 thru 15 Hp



Features:

- High dielectric stability
- Low moment of inertia armature for fast response
- Includes thermostat on interpole
- Constant pressure brush springs and longer brushes for reduced maintenance
- Class F insulation system
- Includes grease fittings and reliefs for bearing maintenance
- Power Code C or M-G sets
- Maximum RPM by field weakening

Applications:

- Textile equipment
- Conveyors
- Plastic extruders
- Packaging machinery
- Other constant torque applications

Hp	Base/Max Speed	NEMA Frame	Voltage D.C.		Full Load Amperage		Catalog Number	List Price Motor (b)	Disc. Sym.	Ap'x. Shpg. Wgt. (c)	XPY Tach Kit	Blower Catalog Number	Notes (d)
			Arm.	Field	Arm.	Field (a)							
3	1750/2300	L186ATC	240	120/240	10.6	.445	CD2003P-2	9326	RSV	170	TKP1836XP	FVB3180	2
5	1750/2300	L186ATC	240	120/240	17.7	.484	CD2005P-2	9469	RSV	170	TKP1836XP	FVB3180	2
7 1/2	1750/2300	1810ATC	240	120/240	28.1	.458	CD2007P-2	10,821	RSV	222	TKP1836XP	FVB3180	2
10	1750/2300	219ATC	240	120/240	36.6	1.26	CD2010P-2	11,207	RSV	250	TKP1836XP	FVB3210	2
15	1750/2300	258ATC	240	120/240	55	1.25	CD2015P-2	12,720	RSV	408	TKP1836XP	FVB3250	2

Notes: (a) Field amps for 240VDC connection.

(b) Does not include price of blower and filter.

(c) Does not include weight of blower and filter. Tach mounting kits available.

(d) See notes on inside back flap. 180 frame motors are supplied without external conduit box, see online layout drawing for details.

For more information visit baldor.com or new.abb.com/motors-generators

Shunt wound SCR drive motor – TEFC, rigid base

5 thru 25 Hp



Features:

- Includes thermostat on interpole
- Constant pressure brush springs and longer brushes for reduced maintenance
- Class F insulation system
- Includes grease fittings and reliefs for bearing maintenance
- Tachometer adaptable

Applications:

- Conveyors
- Packaging machinery

Hp	Base/Max Speed	NEMA Frame	Voltage D.C.		Full Load Amperage		Catalog Number	List Price Motors Only	Disc. Sym.	Ap'x. Shpg. Wgt.	XPY Tach Kit	Notes (b)
			Arm.	Field	Arm.	Field (a)						
5	1750/2300	1810AT	240	150/300	17.6	0.764	D2505P	10,460	RSV	220	N/A	2
			500	150/300	8.3	0.382	D5505P	10,460	RSV	214	N/A	2
7 1/2	1750/2300	2110AT	240	150/300	26.6	2.10	D2507P	12,308	RSV	300	TKP2136XPT	2
			500	150/300	12.3	1.05	D5507P	12,308	RSV	310	TKP2136XPT	2
10	1750/2300	259AT	240	150/300	34.3	1.72	D2510P	13,875	RSV	250	TKP2136XPT	2
			500	150/300	16.3	0.86	D5510P	13,875	RSV	250	TKP2136XPT	2
15	1750/2300	288AT	240	150/300	51.7	1.96	D2515P	17,896	RSV	630	TKP2136XPT	2
			500	150/300	24.5	0.99	D5515P	17,896	RSV	630	TKP2136XPT	2
20	1750/2300	328AT	240	150/300	68.8	2.22	D2520P	23,569	RSV	850	TKP2136XPT	2
			500	150/300	32.7	1.11	D5520P	23,569	RSV	875	TKP2136XPT	2
25	1750/2300	328AT	240	150/300	84.8	2.22	D2525P	24,969	RSV	872	TKP2136XPT	2
			500	150/300	40.9	1.11	D5525P	24,969	RSV	875	TKP2136XPT	2

Notes: (a) Field amps are for 150V connection on 240VDC motors; 300V connection on 500VDC motors. Tach mounting kits available.

(b) See notes on inside back flap.

180 frame motors are supplied without external conduit box, see online layout drawing for details.

Lifting magnet generators

5 thru 40 kW



Features:

- Class H insulation with Class F temperature rise
- Precision brush holders
- Constant pressure brush springs
- Double sealed bearings
- Compound wound with drooping voltage characteristics
- CDMG generators have C-Face and base mounting

Applications:

- Crane mounted lifting magnets

kW	Base Speed	NEMA Frame	Voltage D.C.		Full Load Amperage		Catalog Number	List Price	Disc. Sym.	Ap'x. Shpg. Wgt.	Field Control Rheostat		Notes (a)
			Arm.	Field	Arm.	Field					Ohms	Amp Max.	
5	2500	1810AT	230	230	21.7	0.62	DMG2305	10,670	RSV	220	300	0.85	2
7 1/2	2500	219AT	230	230	32.6	1.15	DMG2307	10,882	RSV	245	150	1.6	2
		219ATC	230	230	43.5	0.878	DMG2310	11,177	RSV	250	200	1.4	2
10	2500	219ATC	230	230	43.5	0.878	CDMG2310	11,399	RSV	250	200	1.4	2
		259AT	230	230	65	1.33	DMG2315	16,097	RSV	250	200	1.82	2
15	1750	259ATC	230	230	65	1.33	CDMG2315	16,684	RSV	250	200	1.82	2
		288AT	230	230	87	1.8	DMG2320	17,822	RSV	595	125	2.52	2
20	1750	288ATC	230	230	87	1.8	CDMG2320	18,625	RSV	613	125	2.52	2
		328AT	230	230	109	2.13	DMG2325	19,269	RSV	820	100	3.0	2
25	1750	328ATC	230	230	109	2.13	CDMG2325	20,265	RSV	886	100	3.0	2
		328AT	230	230	144	2.13	DMG2333	24,435	RSV	840	100	3.0	2
33	1750	328ATC	230	230	144	2.13	CDMG2333	25,423	RSV	880	100	3.0	2
		329AT	230	230	174	3.7	DMG2340	26,785	RSV	910	50	5.2	2

Notes:

Field control rheostat and meters are not included in price or available from ABB.

(a) See notes on inside back flap.

Tach mounting kits and cooling blowers for DC integral Hp motors



Applications: Allows addition of DC, AC and digital tachometers to large DC motors for closed-loop operation.

Features: Tach mounting kits supply adapter, coupling, accessory shaft and mounting hardware. Allows mounting to 8.5 inch accessory face on most large DC motors.

Tach mounting kits for DC integral Hp motor catalog no. ending with "P"

Tach Type	Motor Frame	Motor Enclosure	Catalog Number	List Price	Disc. Sym.	Ap'x. Shpg. Wgt.
	180/360	DPFG, DPBV	14009-1	1,460	SVC	2
	210/360	TEFC	TKP2136XPT	1,460	SVC	13
	400	DPFG, DPBV	TKP400XP	1,460	SVC	2
	500	DPFG, DPBV	TKP500XP	1,460	SVC	3
XC42 or XC46	210/360	DPFG, DPBV	TKP2136XC	1,689	SVC	16
	500	DPFG, DPBV	TKP500XC	1,689	SVC	7
ENC00NV ENCODER	180/360	DPFG, DPBV	TKP1836ENC	867	SVC	17
	400	DPFG, DPBV	TKP400ENC	867	SVC	16
	500	DPFG, DPBV	TKP500ENC	867	SVC	17
NCS PANCAKE	210/360	DPFG, DPBV	TKP2136NC	65	SVC	3
	400	DPFG, DPBV	TKP400NC	65	SVC	1
	500	DPFG, DPBV	TKP500NC	575	SVC	1
AC PANCAKE	210/360	DPFG, DPBV	TKP2136AC	65	SVC	2
	400	DPFG, DPBV	TKP400AC	65	SVC	1
	500	DPFG, DPBV	TKP500AC	65	SVC	1

Blower and mounting kits for DC integral Hp motor catalog no. ending with "P"

Motor Frame	Catalog Number	Blower Power	Blower Size	List Price	Disc. Sym.	Ap'x. Shpg. Wgt.
Blower and mounting kit						
180	FVB3180	1 PH	LM 3	1,491	SVC	18
210	FVB3210	3 PH	LM 3	1,491	SVC	25
250	FVB3250	3 PH	LM 3	1,491	SVC	19
280	FVB4280	3 PH	LM 4	1,823	SVC	44
320	FVB6320	3 PH	LM 6	2,123	SVC	46
360-400	FVB6400	3 PH	LM 6	2,323	SVC	59
504-506	FVB8500	3 PH	LM 8	2,750	SVC	93
508-5012	FVB95010 (a)	3 PH	LM 9	4,238	SVC	171
Filter and hardware for above blowers						
180, 210, 250	FLT3210-250 (b)	-	LM 3	791	SVC	2
280	FLT4280	-	LM 4	791	SVC	9
320,360,400	FLT6320-400	-	LM 6	791	SVC	14
504-506	FLT8500	-	LM 8	965	SVC	9

Notes:

(a) Includes Blower and Filter.

(b) Also used with FVB3180.

Tachometer generators DC, AC and digital output



Flange Mounted



Foot Mounted

Applications: Speed feedback for controls.

Features: Ball bearing construction, UL/CSA approved, IP55, standard mounting C-Face and foot mounted.

Generator Type	Voltage	Catalog Number	List Price	Disc. Sym.	Ap'x. Shpg. Wgt.
XPY flange mount (DC)					
XPYIV	50VDC	CMTG50XPYIV	3,500	R3B	5.5
XPYIV	100VDC	CMTG100XPYIV	3,500	R3B	5.5
XPY foot mount (DC)					
XPYIV	50VDC	FMTG50XPYIV	3,500	R3B	6.4
XPYIV	100VDC	FMTG100XPYIV	3,500	R3B	6.4
Encoder based digital PY flange mount					
DPY	1024PPR	PTG1024LD (a)	1,895	R3B	1
Electrically isolated encoder					
E-ACC	1024PPR	ENC00NV (a)	1,932	SVC	2

Notes:

Flange mounted tachs require tach adapters.

XPY tachs have UL/CSA listing, file number E351535.

(a) See Feedback Cable Assemblies for cables.

Red catalog number indicates **NEW** product.

Definite purpose

Unit Handling

Brake

IEC Frame

50 Hertz

Variable Speed AC

DC

Accessories

Service

Grinders

Field conversion tach mounting kits

For permanent magnet and shunt wound motors



For PY Flange mounted BTG1000, XPY, XPYII and DPY tachometers.

Complete kits consisting of fan cover (except TK3300), shaft extension coupling and tach adapter bracket with miscellaneous hardware.

If you prefer, the conversion can be made by Motor Mod Express®.

Tach kits will not work with explosion proof motors (CDPX or CDX).

See PY flange mount tachs.

Baldor-Reliance® Motor Type	Kit Catalog Number	List Price	Disc. Sym.	Ap'x. Shpg. Wgt.
3300P	TK3300	202	SVC	1
3400D/P	TK3400	358	SVC	4
3500D/P	TK3500	377	SVC	9
3600D	TK3600	498	SVC	10
3600P	TK3600PM	498	SVC	7

NEMA 1 enclosed DC controls for PMDC and shunt wound motors

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

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 drives - change motor rotation by switching armature leads or by adding Forward/Brake/Reverse switch kit, if available.

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, BC140-FBR, BC141 and BC142.



BC140-FBR
Enclosed
(NEMA 1)



BC138
Enclosed
(NEMA 1)

Catalog Number	Hp Range & Input Voltage		Description	Max Input Current (AC Amps)	Max Output Current (DC Amps)	List Price	Disc. Sym.	Apr'x. Shpg. Wgt. (lbs)
	115VAC Input / 90VDC Armature	230VAC Input / 180VDC Armature (c)						
BC138	1/100 - 1/3	—	Enclosed SCR control, single voltage	5	3.5	218	PMS	1
BC139	—	1/50 - 3/4	Enclosed SCR control, single voltage	5	3.5	218	PMS	1
BC140	1/100 - 3/4	1/50 - 1.5	Enclosed SCR control, optional heatsink, dual voltage	12	6	369	PMS	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	PMS	3
	1/100 - 1 (a)	1/50 - 2 (a)		16 (a)	12 (a)			

Notes:

(a) Max rating of 1 Hp at 115V and 2 Hp at 230V requires BC143 heatsink kit. See specification pages at the end of this section for details.

(b) FBR = Forward/Brake/Reverse switch installed

(c) Drives with 230V input can operate 90V motors at reduced performance levels. Refer to Installation & Operation Manual for details.

A Plug-in Horsepower Resistor® and armature fuse must be ordered and installed in BC138, BC139, BC140 and BC140-FBR.

DC control accessories

Catalog Number	Description	List Price	Disc. Sym.	Apr'x. Shpg. Wgt.
BC24-LF	AC Line Filter for use with CE Applications (24 Amps AC Max.)	75	PMS	1
BC143	External Heatsink Kit (BC140, BC140-FBR, BC141, BC142, BC204)	72	PMS	2
BC144	Forward-Brake-Reverse Switch Kit for BC140	124	PMS	1
BC145	Signal Isolator Board	211	PMS	1
BC147	Barrier Terminal Board (BC141 and BC142)	30	PMS	1
BC148	Replacement Potentiometer Kit (5K ohm)	13	PMS	1
BC149	Knob and Dial Kit	15	PMS	1
BC152	Barrier Terminal Board With Signal Isolator (BC141 and BC142)	193	PMS	1
BC218	DIN-rail mounting kit for BC141, BC142 or BC204	36	PMS	1

Notes:

BC24-LF is an AC line filter required for applications where CE is required if the control is not filtered elsewhere in the application. This filter may be used on most 115 or 230 VAC, single phase applications where CE is required.

Chassis mount DC controls

1/100 thru 1.5 Hp, 115 VAC, single phase, 50/60 Hz

1/50 thru 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, 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 bride 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.

Catalog Number	Hp Range & Input Voltage		Description	Max Input Current (AC Amps)	Max Output Current (DC Amps)	List Price	Disc. Sym.	Apr'x. Shpg. Wgt. (lbs.)
	115VAC Input / 90VDC Armature	230VAC Input / 180VDC Armature (c)						
Chassis mount – SCR controls								
BC141	1/100 - 0.75	—	Chassis SCR control, optional heatsink, single voltage	12.0	8.0	202	PMS	1
	1/100 - 1.5 (a)	—		24.0 (a)	16.0 (a)			
BC141-SIH	1/100 - 0.75	—	BC141 with BC152 Signal Isolator and BC143 Heatsink factory installed	12.0	8.0	477	PMS	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	202	PMS	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	PMS	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	PMS	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, dual voltage	12.0	8.0	224	PMS	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	PMS	1
	1/100 - 1.5 (a)	1/100 - 3.0 (a)		24.0 (a)	16.0 (a)			
BC155	—	5.0	Chassis SCR control with heatsink, single voltage	38.0	26.0	660	PMS	5
Chassis mount – line regenerative SCR controls								
BC204	1/6 - 0.75	1/3 - 1.0	Chassis regen SCR control, optional heatsink, dual voltage	12.0	8.0	377	PMS	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	PMS	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	PMS	4
BC201	1/8 - 1.5	1/4 - 3.0	Chassis regen SCR control, optional heatsink, dual voltage	16.0	16.0	836	PMS	1
BC203	—	5.0	Chassis regen SCR control, with heatsink, single voltage	38.0	25.0	1,052	PMS	10

Notes:

Chassis mount controls include 5k speed potentiometer.

Chassis mount control accessories are shown on the previous page

(a) BC143 Heatsink kit required for higher power ratings. See accessory table at the end of this section for details.

(b) Except for BC203, drives with 230V input can operate 90V motors at reduced performance levels. Refer to Installation & Operation Manual for details.

Plug-in horsepower resistor and fuse kit



Horsepower resistors should be selected based on the motor's rated current. The price of the Hp resistor and fuse is included in the BC138, BC139, BC140, BC140-FBR, BC141 and BC142 list price.

See selection below for catalog number.

Ordered as a separate item and shipped at no charge with a drive.

Spare resistor kits are available for \$11.00 list.

Motor Hp Armature Voltage		Plug-In Hp Resistor Resistance Value (Ohms)	Catalog Number	Disc. Sym.	Ap'x DC Current (Amps)	DC Fuse Rating For Armature
90-130V	180V					
1/100	1/50	1.0	BR1000	PMS	0.20	0.5
1/50	1/25	0.51	BR0510	PMS	0.30	0.5
1/30	1/15	0.35	BR0350	PMS	0.33	0.5
1/20	1/10	0.25	BR0250	PMS	0.5	0.75
1/15	1/8	0.25	BR0251	PMS	0.8	1.0
1/12	1/6	0.18	BR0180	PMS	0.85	1.25
1/8	1/4	0.1	BR0100	PMS	1.3	2.0
1/6	1/3	0.1	BR0101	PMS	2.0	2.5
1/4	1/2	0.05	BR0050	PMS	2.5	4.0
1/3	3/4	0.035	BR0035	PMS	3.3	5.0
1/2	1	0.025	BR0025	PMS	5.0	8.0
3/4	1 1/2	0.015	BR0015SP	PMS	7.5	12.0
1 (a)	2 (a)	0.01	BR0010SP	PMS	10	15.0
1 1/2 (a)	3 (a)	0.006	BR0006	PMS	15	25.0 (b)

Notes:

(a) External heatsink required.

(b) Also used with AC line fuse. For AC line fuse rating see manual.

NEMA 4X DC control and accessories

1/4 thru 2 Hp, 115/230 VAC, single phase, 50/60 Hz

3 Hp, 230 VAC, single phase, 50/60 Hz

Applications: Constant torque, new or replacement.



BC154 / BC160 / BCWD140 / BC354

Features: NEMA 4X / 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.

Catalog Number	Hp Range & Input Voltage		Description	Max Input Current (AC Amps)	Max Output Current (DC Amps)	List Price	Disc. Sym.	Apr'x. Shpg. Wgt. (lbs.)
	115VAC Input / 90VDC Armature	230VAC Input / 180VDC Armature (c)						
NEMA 4X / IP65 Washdown duty SCR controls								
BC154	1/50 - 1	1/25 - 2	Enclosed SCR control, dual voltage	15.0	10.2	467	PMS	5
BC154-P	1/50 - 1	1/25 - 2	BC154 with Power switch instead of Start/Stop switch	15.0	10.2	467	PMS	5
BC154-R	1/50 - 1	1/25 - 2	BC154 with BC156 - Fwd/Brake/Rev Switch factory installed	15.0	10.2	616	PMS	5
BC154-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	PMS	5
BC160	1.5	3	Enclosed SCR control, dual voltage	22.0	15.0	537	PMS	3
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	PMS	6
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	PMS	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	PMS	5
NEMA 4X / IP65 Washdown duty PWM control								
BC354	1/50 - 0.75	1/25 - 1.5	Enclosed PWM control, dual voltage, with SCR rated motor	11.5	7.5	723	PMS	5
	1/30 - 1 (b)	1/20 - 2 (b)	Enclosed PWM control, dual voltage, with PWM rated motor					

Notes:

(a) See the next page for BC254 accessories.

(b) Motors with PWM rated motors designed for 130VDC (115VAC input) or 260VDC (230VAC input) will give best drive performance.

(c) Except for BC354, drives with 230V input can operate 90V motors at reduced performance levels. Refer to Installation & Operation Manual for details.

DC SCR NEMA 4X DC control accessories

Catalog Number	Description	List Price	Disc. Sym.	Ap'x. Shpg. Wgt.
BC153	Electronic Forward-Dynamic Brake-Reverse Kit for BC154, BC354	223	PMS	1
BC156	Mechanical Forward-Dynamic Brake-Reverse Switch for BC154, BC354	145	PMS	1
BC157	Run/Jog switch for BC154 & BC160, BC354	27	PMS	1
BC158	Auto/Manual Installation Kit for BC145 signal isolator for BC154, BC160, BC354	60	PMS	1
BC159	AC Line Switch Kit for BC154, BCWD140, BC354	32	PMS	1
BC145	Signal Isolator Board	211	PMS	1

Note: BC159 AC Line Switch Kit is factory installed on BC154, BCWD140, BC254 and BC354. Listed here as replacement or spare parts.

Line regenerative DC controls and accessories

1/4 thru 3 Hp, 115/230 VAC, single phase, 50/60 Hz

5 Hp, 230 VAC, single phase, 50/60 Hz



BC254-FBR



BC200 / BC201



BC204

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.

Catalog Number	Hp Range & Input Voltage		Description	Max Input Current (AC Amps)	Max Output Current (DC Amps)	List Price	Disc. Sym.	Apr'x. Shpg. Wgt. (lbs.)
	115VAC Input / 90VDC Armature	230VAC Input / 180VDC Armature (c)						
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	PMS	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	PMS	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	PMS	4
BC201	1/8 - 1.5	1/4 - 3.0	Chassis regen SCR control, optional heatsink, dual voltage	16.0	16.0	836	PMS	1
BC203	—	5.0	Chassis regen SCR control, with heatsink, single voltage	38.0	25.0	1,052	PMS	10
NEMA 4X / IP65 Washdown duty - line regenerative SCR								
BC254	1/10 - 1	1/5 - 2	Enclosed regen SCR control, dual voltage	15.0	11.0	673	PMS	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	PMS	5

Notes

Chassis mount controls include 5k speed potentiometer.

(a) BC143 Heatsink kit required for higher power ratings. See accessory table at the end of this section for details.

(c) Except for BC203, drives with 230V input can operate 90V motors at reduced performance levels. Refer to Installation & Operation Manual for details.

Line regenerative DC control accessories

Catalog Number	Description	List Price	Disc. Sym.	Apr'x. Shpg. Wgt.
Accessories for BC200, BC201 and BC203				
BC212 (b)	Bipolar signal isolator board	216	PMS	1
Accessories for BC204				
BC143	External Heatsink Kit	72	PMS	2
BC215 (b)	Bipolar signal isolator board	100	PMS	3
BC216	Multispeed board for BC204	77	PMS	1
BC218	DIN rail mounting kit	36	PMS	1
Accessories for BC254				
BC245 (b)	Bipolar signal isolator for BC254	213	PMS	1
BC253	Forward-Stop-Brake-Reverse Switch for BC254	27	PMS	1
BC258	Auto-manual Switch for BC254	60	PMS	1
BC259	AC Line Switch for BC254	27	PMS	5

Note: (b) Voltage following mode only.

NEMA enclosed DC control specifications

Features	Catalog Number															
	BC138		BC139		BC140 or BC140-FBR		BCWD140		BC154		BC160		BC254 or BC254-FBR		BC354	
Enclosure	NEMA 1		NEMA 1		NEMA 1		NEMA 4X		NEMA 4X		NEMA 4X		NEMA 4X		NEMA 4X	
Control Type	Reversible		Reversible		Reversible		Reversible		Reversible		Reversible		Regenerative		Regenerative	
AC Line Input (VAC 50/60Hz)	115	230	115	230	115	230	115	230	115	230	115	230	115	230	115	230
Max. AC Load Current (RMS)	5.0	5.0	12.0	12.0	15.0	15.0	15.0	15.0	22	22	15	15	11.5	11.5	11.5	11.5
Max. AC Load Current (RMS) w/ BC143	—	—	16.0	16.0	—	—	—	—	—	—	—	—	—	—	—	—
DC Armature Voltage Nominal (VDC)	90	180	90-130	180	90	180	90	180	90	180	90	180	90	180	90	180
Max. DC Load Current (ADC)	3.5	3.5	6.0	6.0	10.2	10.2	10.2	10.2	15	15	11	11	7.5	7.5	7.5	7.5
Max. DC Load Current (ADC) w/ BC143	—	—	12.0	12.0	—	—	—	—	—	—	—	—	—	—	—	—
Shunt Field Power Supply (VDC)	50/100	100/200	50/100	100/200	50/100	100/200	50/100	100/200	50/100	100/200	50/100	100/200	50/100	100/200	50/100	100/200
Maximum Field Current (ADC)	1.0	1.0	1.0	1.0	1.13	1.13	1.0	1.0	1.5	1.5	1.0	1.0	1.0	1.0	1.0	1.0
Rated Horsepower Range (SCR motor)	1/100 - 1/3	1/50 - 3/4	1/100 - 3/4	1/50 - 1 1/2	1/50 - 1	1/25 - 2	1/50 - 1	1/25 - 2	1.5	3	1/10 - 1	1/5 - 2	1/50 - 3/4	1/25 - 1.5	1/25 - 1.5	1/25 - 1.5
Rated Horsepower Range (PWM motor)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	1/30 - 1	1/20 - 2	1/20 - 2
Max. Hp with BC143 Ext. Heat Sink	N/A	N/A	1 Hp	2Hp	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Ambient Temp Range (°C)	0 - 40	0 - 40	0 - 40	0 - 40	0 - 40	0 - 40	0 - 40	0 - 40	0 - 45	0 - 45	0 - 40	0 - 40	0 - 40	0 - 40	0 - 40	0 - 40
Ambient Temp Range w/ BC143 (°C)	N/A	N/A	0 - 50	0 - 50	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Speed Range (Motor May Be 20:1 Constant Torque)	50:1	50:1	50:1	50:1	50:1	50:1	50:1	50:1	50:1	50:1	50:1	50:1	50:1	50:1	50:1	50:1
Adjustable Accel / Decel Time (sec)	0.2 - 10	0.2 - 10	0.2 - 10	0.2 - 10	0.1 - 15	0.1 - 15	0.1 - 15	0.1 - 15	0.1 - 15	0.1 - 15	0.1 - 15	0.1 - 15	0.2 - 15	0.2 - 15	0.2 - 15	0.5 - 10
Min. Speed Adjustable Range (% full speed)	0 - 30	0 - 30	0 - 30	0 - 30	0 - 30	0 - 30	0 - 30	0 - 30	0 - 30	0 - 30	0 - 30	0 - 30	N/A	N/A	N/A	N/A
Max. Speed Adjustable Range (% full speed)	50 - 110	50 - 110	50 - 110	50 - 110	60 - 140	60 - 140	60 - 140	60 - 140	60 - 140	60 - 140	50 - 110	50 - 110	40 - 110	40 - 110	40 - 110	50 - 140
Current Limit Adjustable Range (%)	0 - 200	0 - 200	0 - 200	0 - 200	0 - 200	0 - 200	0 - 200	0 - 200	0 - 200	0 - 200	0 - 180	0 - 180	0 - 200	0 - 200	0 - 200	0 - 200
Adjustable Current Limit and Trip Out Type	No	No	No	No	Timed or Non-Timed	Timed or Non-Timed	Timed or Non-Timed	Timed or Non-Timed	Timed or Non-Timed	Timed or Non-Timed	Timed or Non-Timed	Timed or Non-Timed	Timed or Non-Timed	Timed or Non-Timed	Timed or Non-Timed	Timed or Non-Timed
Control Of Speed or Torque	Speed	Speed	Speed	Speed	Speed or Torque	Speed or Torque	Speed or Torque	Speed or Torque	Speed or Torque	Speed or Torque	Speed or Torque	Speed or Torque	Speed or Torque	Speed or Torque	Speed or Torque	Speed or Torque
IR Compensation Adjustable (VDC)	0 - 24	0 - 24	0 - 24	0 - 48	0 - 15	0 - 30	0 - 15	0 - 30	0 - 15	0 - 30	0 - 15	0 - 30	0 - 15	0 - 30	0 - 15	0 - 30
Tachometer Feedback Input	No	No	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Plug-In Horsepower Resistor ®	Required	Required	Required	Required	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
UL & cUL Listing, CE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
AC Line Fuse	Included	Included	Included	Included	External	External	External	External	External	External	External	External	External	External	External	External
DC Armature Fuse	Included with Hp Resistor	Included with Hp Resistor	Included with Hp Resistor	Included with Hp Resistor	Not supplied with control	Not supplied with control	Not supplied with control	Not supplied with control	Not supplied with control	Not supplied with control	External	External	External	External	External	External
Options																
AC Line Switch	Standard	Standard	Standard	Standard	Opt-BC159	Opt-BC159	Opt-BC159	Opt-BC159	Opt-BC159	Opt-BC159	No	Opt-BC159	Opt-BC159	Opt-BC159	Opt-BC159	Opt-BC159
Forward/Brake/Reverse Switch	(BC140)										(BC254)					
Mechanical	No	No	Opt-BC144	Opt-BC144	Standard	Standard	Opt-BC156	Opt-BC156	Opt-BC156	Opt-BC156	No	Opt-BC253	Opt-BC253	Opt-BC253	Opt-BC253	Opt-BC253
Electronic	No	No	No	No	Opt-BC153	Opt-BC153	Opt-BC153	Opt-BC153	Opt-BC153	Opt-BC153	No	No	No	No	No	Opt-BC153
Run/Jog Switch	No	No	No	No	Standard	Standard	Opt-BC157	Opt-BC157	Opt-BC157	Opt-BC157	Opt-BC157	Opt-BC157	No	No	No	Opt-BC157
Input Signal:	No	No	External Mount	External Mount	Internal Mount	Internal Mount	Internal Mount	Internal Mount	Internal Mount	Internal Mount	Internal Mount	Internal Mount	No	No	No	Internal Mount
Current (1-5, 4-20, 20-50mA)	No	No	Opt-BC145	Opt-BC145	Opt-BC145	Opt-BC145	Opt-BC145	Opt-BC145	Opt-BC145	Opt-BC145	Opt-BC145	Opt-BC145	Opt-BC145	Opt-BC145	Opt-BC145	Opt-BC145
Input Signal:	No	No	Opt-BC145	Opt-BC145	0-5, 0-10 VDC	0-5, 0-10 VDC	0-5, 0-10 VDC	0-5, 0-10 VDC	0-5, 0-10 VDC	0-5, 0-10 VDC	0-5, 0-10 VDC	0-5, 0-10 VDC	0-5, 0-10 VDC	0-5, 0-10 VDC	0-5, 0-10 VDC	0-5, 0-10 VDC
Voltage (0-25, 0-120, 0-550 VDC)	No	No	Opt-BC145	Opt-BC145	input standard	input standard	input standard	input standard	input standard	input standard	input standard	input standard	input standard	input standard	input standard	input standard
Electrical Connection to Control Barrier Terminal Block	Standard	Standard	Standard	Standard	Standard	Standard	Standard	Standard	Standard	Standard	Standard	Standard	Standard	Standard	Standard	Standard
Current Sensing Relay/Overload Protector	No	No	No	No	Standard	Standard	Standard	Standard	Standard	Standard	Standard	Standard	Standard	Standard	Standard	Standard
AC Line Filter for CE	Opt-BC24-LF	Opt-BC24-LF	Opt-BC24-LF	Opt-BC24-LF	Opt-BC24-LF	Opt-BC24-LF	Opt-BC24-LF	Opt-BC24-LF	Opt-BC24-LF	Opt-BC24-LF	Opt-BC24-LF	Opt-BC24-LF	Opt-BC24-LF	Opt-BC24-LF	Opt-BC24-LF	Opt-BC24-LF

NEMA enclosed DC control specifications

Features	Catalog Number											
	BC141	BC142	BC142-5 & BC142-6		BC155	BC204		BC200		BC201		BC203
Enclosure	Chassis		Chassis		Chassis	Chassis		Chassis		Chassis		Chassis
Control Type	Reversible	Reversible	Reversible		Reversible	Regenerative		Regenerative		Regenerative		Regenerative
AC Line Input (VAC 50/60Hz)	115	230	115	230	230	115	230	115	230	115	230	230
Max. AC Load Current (RMS)	12.0	12.0	12.0	12.0	38.0	12.0	12.0	16.0	16.0	24.0	24.0	38.0
Max. AC Load Current (RMS) w/ BC143	24.0	24.0	24.0	24.0	N/A	16.0	16.0	N/A	N/A	N/A	N/A	N/A
DC Armature Voltage Nominal (VDC)	90	180	90	180	180	90	180	90	180	90	180	180
Max. DC Load Current (ADC)	8.0	8.0	8.0	8.0	26.0	8.0	8.0	11.0	11.0	16.0	16.0	25.0
Max. DC Load Current (ADC) w/ BC143	16.0	16.0	16.0	16.0	N/A	11.0	11.0	N/A	N/A	N/A	N/A	N/A
Shunt Field Power Supply (VDC)	50/100	100/200	50/100	100/200	100/200	50/100	100/200	50/100	100/200	50/100	100/200	100/200
Maximum Field Current (ADC)	1.13	1.13	1.13	1.13	2.5	1.0	1.0	3.0	3.0	3.0	3.0	3.0
Rated Horsepower Range	1/100 - 0.75	1/100 - 1.5	1/100 - 0.75	1/100 - 1.5	5	1/6 - 0.75	1/3 - 1	1/4 - 1	1/2 - 2	1/8 - 1.5	1/4 - 3	5
Max. Hp with BC143 Ext. Heat Sink	1/100 - 1.5	1/50 - 3	1/100 - 1.5	1/50 - 3	N/A	1/6 - 1.5	1/3 - 2	N/A		N/A		N/A
Ambient Temp Range (°C)	0 - 40	0 - 40	0 - 40		0 - 40	0 - 40	0 - 40	0 - 45 (horiz) 0 - 50 (vert)		0 - 45 (horiz) 0 - 50 (vert)		0 - 40
Ambient Temp Range w/ BC143 (°C)	0 - 40	0 - 40	0 - 40		N/A	0 - 40	0 - 40	N/A		N/A		N/A
Speed Range (Motor may be 20:1 Constant Torque)	50:1	50:1	50:1		50:1	50:1	50:1	50:1	50:1	50:1	50:1	50:1
Adjustable Accel / Decel Time (sec)	0.2 - 10	0.2 - 10	0.2 - 10		1 - 10	0.1 - 15	0.1 - 15	0.1 - 15	0.1 - 15	0.1 - 15	0.1 - 15	0.5 - 10
Min. Speed Adjustable Range (% full speed)	0 - 30	0 - 30	0 - 30		0 - 30	N/A		N/A		N/A		0 - 30
Max. Speed Adjustable Range (% full speed)	50 - 110	50 - 110	50 - 110		50 - 110	50 - 110	50 - 110	70 - 110	70 - 110	70 - 110	70 - 110	50 - 140
Current Limit Adjustable Range (%)	0 - 200	0 - 200	0 - 200		0 - 200	0 - 175	0 - 175	1 - 15	1 - 15	1 - 15	1 - 15	0 - 200
Adjustable Current Limit and Tripout Type	Non Timed	Non Timed	Non Timed		Non Timed	Non Timed	Non Timed	Timed		Timed		Timed
Control of Speed or Torque	Speed	Speed	Speed		Speed or Torque	Speed or Torque	Speed or Torque	Speed or Torque	Speed or Torque	Speed or Torque	Speed or Torque	Speed
IR Compensation Adjustment	Yes	Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Tachometer Feedback Input	Yes	Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Plug-in Horsepower Resistor®	Required	Required	Required		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
UL & cUL Listing, CE	Yes	Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
AC Line Fuse	Included	Included	Included		External	External	External	Included	Included	Included	Included	External
DC Armature Fuse	Included with Hp Resistor	Included with Hp Resistor	Included with Hp Resistor		Included with Hp Resistor	External	External	Included	Included	Included	Included	External
Options												
Input Signal:	Plug on Mount		Plug on Mount		External Mount Opt - BC145	None	None	None	None	None	None	None
Current (4-20mA)	Opt - BC152		Opt - BC152									
Input Signal:	External Mount		External Mount		Opt - BC145	None	None	None	None	None	None	None
Current (1-5, 4-20, 20-50mA)	Opt - BC145		Opt - BC145									
Input Signal:	0-9 VDC		0-9 VDC		0 to 9 VDC	0 to ± 10 VDC	0 to ± 10 VDC	0 to ± 10 VDC	0 to ± 10 VDC	0 to ± 10 VDC	0 to ± 10 VDC	0 to ± 10 VDC
Voltage (must be isolated)	Standard		Standard		Standard	Standard	Standard	Standard	Standard	Standard	Standard	Standard
Input Signal:	Plug on Mount		Plug on Mount		External Mount	±5 to ±25 VDC	±5 to ±250 VDC	±5 to ±250 VDC	±5 to ±250 VDC	±5 to ±250 VDC	±5 to ±250 VDC	±5 to ±250 VDC
Voltage (0-5, 0-10, 1-100, or 0-200 VDC)	Opt - BC152		Opt - BC152									
Input Signal:	External Mount		External Mount		Opt - BC145	Opt - BC215	Opt - BC212	Opt - BC212	Opt - BC212	Opt - BC212	Opt - BC212	Opt - BC212
Voltage (0-25, 0-120, or 0-550 VDC)	Opt - BC145		Opt - BC145		Opt - BC145	Opt - BC215	Opt - BC212	Opt - BC212	Opt - BC212	Opt - BC212	Opt - BC212	Opt - BC212
Push-On Quick Connects	Standard		Standard		None	None	None	None	None	None	None	None
Barrier Terminal Block	Opt - BC147		Opt - BC147									
Regenerative	None		None		None	None	None	Opt - BC211	Opt - BC211	Opt - BC211	Opt - BC211	Opt - BC211
Accel / Decel Board	None		None									
AC Line Filter for CE	Opt - BC24-LF		Opt - BC24-LF		Opt - BC24-LF	Opt - BC24-LF	Opt - BC24-LF	Opt - BC24-LF	Opt - BC24-LF	Opt - BC24-LF	Opt - BC24-LF	Opt - BC24-LF

Definite purpose

Unit Handling

Brake

IEC Frame

50 Hertz

Variable Speed AC

DC

Accessories

Service

Grinders