

Westinghouse



Dc Generators and Exciters Standard Industrial

$\frac{1}{4}$ to 800 Kw, Life-Line H
Drip-proof

Application

Life-Line H dc generators should be used in conjunction with Life-Line H motors for industrial drives requiring wide speed range, fast reversing or speed changes, automatic control of speed or torque, or close regula-

tion of these variables. They should also be used wherever a source of dc power is required — for dc distribution systems, for control circuits, for battery charging and for excitation of other electrical machines.

Ratings and Specifications

Following are the principal rating and specification items and the standards in each case:

	Type SK-H
Enclosure	Drip-proof
Kilowatts	$\frac{1}{4}$ to 800
Rpm	850-3450
Armature Voltage	125, 250 and 500 Volts
Shunt Field Voltage	Approx 80% of Armature
Maximum Temperature — Continuous Duty	60°C Rise
Winding	Shunt — Flat Compound
Type and Frame Size	SK-H 186A to BL848AY and 256AS to BL848ASY (Short Shaft)
Bearings	Ball
Mounting	Foot

Ordering Information

To insure prompt and correct filling of orders for Life-Line H dc generators specify the following:

1. Quantity.
2. Style number or "similar to style number, except " if known.
3. All items listed under ratings and specifications above.
4. All accessories and non-standard features.
5. Other pertinent specifications.
6. Application and, if possible, user.
7. Project identification and reference if any.
8. Required delivery.
9. Shipping instructions.
10. Billing instructions.

All required apparatus not mounted on the dc generators should be ordered separately.

Slide bases covered in the generator price list should be entered as separate sub items with reference in each case to the associated generator item. Refer to General Control Division for rheostats.

Further Information

Dc Generators

Modifications: Price List 4521

Description: Descriptive Bulletin 3500

Dimensions: Dimension Sheets 3540

Application: Application Data 4560

Westinghouse

**¾ to 25 Kw, 250 or 125 Volts, Shunt or Compound Wound^①**

Kilowatts (Contin- uous 60°C Rise)	Speed Rpm	Frame Size ^②		Basic List Price ^①		Slide Base		Discount Symbol
		125 Volts	250 Volts	125 Volts	250 Volts	Style Number	List Price Addition ^①	
¾	1750	187A	187A	\$ 497	\$ 497	556D093G02	\$ 27	W-40
	1450	187A	187A	540	540	556D093G02	27	W-40
	1150	187A	187A	587	587	556D093G02	27	W-40
	850	216A	216A	662	662	556D093G03	27	W-40
1	3450	187A	187A	482	482	556D093G02	27	W-40
	1750	187A	187A	557	557	556D093G02	27	W-40
	1450	187A	187A	596	596	556D093G02	27	W-40
	1150	216A	216A	662	662	556D093G03	36	W-40
	850	216A ^①	216A ^①	1077	1077	556D093G03 ^①	36	W-40
1½	3450	187A	187A	569	569	556D093G02	27	W-40
	1750	187A ^①	187A ^①	662	662	556D093G02	27	W-40
	1450	216A	216A	717	717	556D093G03	36	W-40
	1150	216A ^①	216A ^①	1086	1086	556D093G03	36	W-40
	850	218A ^①	218A ^①	1193	1193	556D093G12 ^①	72	W-40
2	3450	187A	187A	639	639	556D093G02	27	W-40
	1750	216A	216A	767	767	556D093G03	36	W-40
	1450	216A	218A	1118	1118	556D093G12	72	W-40
	1150	218A	218A	1193	1193	556D093G12	72	W-40
	850	256A	256A	1344	1344	1780 006	72	W-40
3	3450	187A	187A	894	894	566D093G02	27	W-40
	1750	218A	218A	1193	1193	566D093G12	72	W-40
	1450	218A ^①	218A	1317	1317	556D093G12	72	W-40
	1150	256A	256A	1407	1407	1780 006	72	W-40
	850	284A	284A	1596	1596	1780 007	72	W-40
4½	3450	216A	216A	1254	1254	566D093G03	36	W-40
	1750	256A	256A	1421	1421	1780 006	72	W-40
	1450	256A	256A	1533	1533	1780 006	72	W-40
	1150	284A	284A	1692	1692	1780 007	72	W-40
	850	286A	286A	1938	1938	1780 008	72	W-40
6½	3450	218A ^①	218A ^①	1590	1590	566D093G12 ^①	72	W-40
	1750	256A	256A	1674	1674	1780 006	72	W-40
	1450	284A	284A	1802	1802	1780 007	72	W-40
	1150	286A	286A	2015	2015	1780 008	72	W-40
	850	324A ^①	324A ^①	2330	2330	1780 009 ^①	84	W-40
9	3450	218A	218A	1847	1847	556D093G12	72	W-40
	1750	284A	284A	1944	1944	1780 007	72	W-40
	1450	286A	286A	2103	2103	1780 008	72	W-40
	1150	324A	324A	2372	2372	1780 009	84	W-40
	850	365A	365A	2780	2780	556D093G04	84	W-40
13	3450	256A	256A	2213	2213	1780 006	72	W-40
	1750	286A	324A	2330	2330	1780 009	84	W-40
	1450	324A	324A	2546	2546	1780 009	84	W-40
	1150	365A ^①	365A	2876	2876	556D093G04	84	W-40
	850	366A	366A	3401	3401	556D093G05 ^①	123	W-40
17	3450	256A	256A	2564	2564	1780 006	72	W-40
	1750	324A	324A	2699	2699	1780 009	84	W-40
	1450	326A ^①	326A	2919	2919	1780 010	84	W-40
	1150	366A ^①	366A ^①	3338	3338	556D093G05 ^①	123	W-40
	850	404A	404A	3959	3959	556D093G06	123	W-40
21	3450	324A ^①	284A	2855	2855	1780 009 ^①	84	W-40
	1750	326A	326A	3006	3006	1780 010	84	W-40
	1450	365A	365A	3276	3276	556D093G04	123	W-40
	1150	404A	404A	3726	3726	556D093G06	123	W-40
	850	444A ^①	444A ^①	4472	4472	556D093G08 ^①	123	W-40
25	3450	324A ^①	286A	3137	3137	1780 009 ^①	84	W-40
	1750	365A ^①	365A ^①	3300	3300	556D093G04 ^①	123	W-40
	1450	366A	366A	3594	3594	556D093G05	123	W-40
	1150	404A	404A	4122	4122	556D093G06	123	W-40
	850	445A	445A	4931	4931	556D093G09	123	W-40

① Changed or added since previous issue.

② On 256A and larger sizes short shaft frames (256AS, etc.) are also standard.

③ Refer to Application Data 4560.

Dc Generators and Exciters Standard Industrial

¼ to 800 Kw, Life-Line H
Drip-proof

33 to 170 Kw, 250 or 125 Volts, Shunt or Compound Wound^③

Kilowatts (Con- tinuous 60°C Rise)	Speed Rpm	Frame Size ^②		Basic List Price ^①		Slide Base		Discount Symbol
		125 Volts	250 Volts	125 Volts	250 Volts	Style Number	List Price Addition ①	
33	3450	365A ^①	324A	\$3842	\$ 3657	556D093G04 ^①	\$ 84	W-40
	1750	404A ^①	404A ^①	4043	3851	556D093G06 ^①	123	W-40
	1450	404A	404A	4451	4239	556D093G06	123	W-40
	1150	444A ^①	444A ^①	5136	4890	556D093G08 ^①	123	W-40
	850	504A	504A	6089	5799	556D093G10	186	W-40
40	3450	....	324A	4304	4097	1780 009	84	W-40
	1750	404A	404A	4530	4313	556D093G06	123	W-40
	1450	405A ^①	405A	4994	4754	556D093G07	123	W-40
	1150	445A	445A	5753	5481	556D093G09	123	W-40
	850	504A	504A	6870	6546	556D093G10	186	W-40
50	3450	....	326A	5237	4694	1780 010	84	W-40
	1750	J405A ^①	405A	5511	4940	556D093G07	123	W-40
	1450	445A	445A	6105	5546	556D093G09	123	W-40
	1150	504A	504A	7002	6378	556D093G10	186	W-40
	850	505A	505A	8396	7640	556D093G11	186	W-40
65	1750	445A	445A	6746	6132	556D093G09	123	W-40
	1450	504A	504A	7275	6614	556D093G10	186	W-40
	1150	505A	505A	8163	7421	556D093G11	186	W-40
	850	507A	507A	....	8772	556D093G13	186	W-40
85	1750	504A ^①	504A	8454	7685	556D093G10	186	W-40
	1450	K505A	505A	8880	8073	556D093G11	186	W-40
	1150	507A	507A	....	8772	556D093G13	186	W-40
	850	K584A	584A	....	10208	634C560G11 ^①	300	W-40
100	1750	N505A	505A	9747	8795	556D093G11	186	W-40
	1450	K507A	507A	....	9150	556D093G13	186	W-40
	1150	K584A	584A	....	9833	634C560G11 ^①	300	W-40
	850	K585A	585A	....	11288	634C560G11 ^①	300	W-40
125	1750	N507A	507A	....	10509	556D093G13	186	W-40
	1450	N584A	584A	....	10889	634C560G11 ^①	300	W-40
	1150	N584A	584A	....	11652	634C560G11 ^①	300	W-40
	850	N587A	587A	....	13007	634C560G11 ^①	300	W-40
170	1750	K584A	K584A	....	13461	634C560G11 ^①	300	W-40
	1450	K585A ^①	K585A ^①	....	13842	634C560G11 ^①	300	W-40
	1150	K587A ^①	K587A ^①	....	14111	634C560G11 ^①	300	W-40
	850	684A	684A	....	16197	634C560G09 ^①	570	W-40

① Changed or added since previous issue.

② On 250 and larger sizes short shaft frames (250AS, etc.) are also standard.

③ Refer to Application Data 456.

Dc Generators and Exciters Standard Industrial

$\frac{3}{4}$ to 800 Kw, Life-Line H
Drip-proof

200 to 800 Kw, 250 or 500 Volts, Shunt or Compound Wound^{①②}

Kilowatts Con- tinuous 60°C Rise	Speed Rpm	Frame Size ^②		Basic List Price		Slide Base		Discount Symbol
		250 Volts	500 Volts	250 Volts	500 Volts	Style Number	List Price Addition	
200	1750	K585A	585A	\$14,937	\$14,937	634C560G11	\$300	W-41
	1450	K586A	586A	15,120	15,120	634C560G11	300	W-41
	1150	684A	684A	15,729	15,729	634C560G09	570	W-41
	850	685A	685A	16,839	16,839	634C560G09	570	W-41
	720	B687A	B687A	17,789	17,789	634C560G09	570	W-41
240	1750	N586A	684A	17,441	17,441	634C560G09	570	W-41
	1450	684A	684A	17,681	17,681	634C560G09	570	W-41
	1150	684A	685A	17,879	17,879	634C560G09	570	W-41
	850	BK687A	B687A	19,104	19,104	634C560G09	570	W-41
	720	BK844AY	B844AY	20,409	20,409	.....	.....	W-41
320	1750	R684A	685A	21,515	21,515	634C560G09	570	W-41
	1450	R685A	685A	21,515	21,515	634C560G09	570	W-41
	1150	BR687A	B687A	22,989	22,989	634C560G09	570	W-41
	850	BR844AY	BK845AY	25,370	25,370	.....	.....	W-41
	720	BR845AY	BK845AY	27,513	27,513	.....	.....	W-41
400	1750	T686A	686A	.....	.....	634C560G09	570	W-41
	1450	BM844AY	B687A	.....	.....	634C560G09	570	W-41
	1150	BM844AY	BK844AY	26,432	26,432	.....	.....	W-41
	850	BG846AY	BK846AY	27,324	27,324	.....	.....	W-41
	720	BG847AY	BK846AY	30,003	30,003	.....	.....	W-41
480	1750	.....	B687A	.....	.....	634C560G09	570	W-41
	1450	.....	BR844AY	.....	.....	.....	.....	W-41
	1150	.....	BR845AY	.....	29,276	.....	.....	W-41
	850	.....	BR847AY	.....	30,131	.....	.....	W-41
	720	.....	BR848AY	.....	33,448	.....	.....	W-41
560	1450	.....	BR845AY	.....	.....	.....	.....	W-41
	1150	.....	BR846AY	.....	33,465	.....	.....	W-41
	850	.....	BR847AY	.....	33,966	.....	.....	W-41
640	1450	.....	BG846AY	.....	.....	.....	.....	W-41
	1150	.....	BG847AY	.....	37,454	.....	.....	W-41
	850	.....	BG847AY	.....	38,131	.....	.....	W-41
720	1450	.....	BG847AY	.....	.....	.....	.....	W-41
	1150	.....	BG847AY	.....	41,914	.....	.....	W-41
800	1450	.....	BL847AY	.....	.....	.....	.....	W-41
	1150	.....	BL848AY	.....	46,630	.....	.....	W-41

① Changed or added since previous issue.

② On 256 and larger sizes short shaft frames (256AS etc.) are also standard.

③ Refer to Application Data 456.

Westinghouse



Dc Generators Spare Parts Industrial

1 to 100 Kw, Life-Line H
Drip-proof, Type SK-H

Spare Parts List Prices

The prices below apply to any quantity of spare parts ordered with a generator. But . . . they **do not apply** to spare parts for generators other than those on the same order nor to renewal parts.

Prices do not depend upon quantities ordered and cover parts for any generator of the designated frame size regardless of rating or enclosure.

Spare Parts	Frame Size - List Price Each																Discount Symbol
	187A	216A	218A	256A	284A	286A	324A	326A	365A	366A	404A	405A	444A	445A	504A	505A	
Armature Complete ^②	\$315	\$420	\$657	\$795	\$911	\$1103	\$1287	\$1416	\$1722	\$1889	\$2139	\$2619	\$2816	\$3287	\$3945	\$4576	W-40
Coils/set (less WS).....	...	...	...	128	135	143	473	491	510	534	580	633	677	759	879	1001	
Shaft ^③	...	...	...	83	83	83	83	83	105	120	128	150	225	240	270	285	
Fan.....	12	15	22	30	45	45	45	45	53	53	68	68	105	105	142	142	
Commutator ^④	98	120	143	210	233	272	317	360	422	459	525	614	681	794	960	1082	
Winding Supplies.....	...	...	...	24	30	30	...	...	...	...	...	...	...	...	...	...	
Main Field Coil.....	42	54	60	66	74	86	96	105	124	134	150	172	184	213	248	279	
Comm. Field Coil ^⑤	21	27	30	34	40	44	57	63	74	81	90	108	116	134	164	184	
Front End Parts	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
End Shield (bracket).....	30	38	45	60	82	82	142	142	165	165	255	255	352	352	375	375	
Bearing Cap (not required).....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
Ball Bearing.....	4	4	4	6	9	9	12	12	16	16	21	21	26	26	34	34	
Drive End Parts	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
End Shield (bracket).....	22	30	37	45	75	75	98	98	120	120	150	150	225	225	300	300	
Bearing Cap (not required).....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
Ball Bearing.....	4	6	6	9	12	12	16	16	21	21	26	26	34	34	45	45	
Brush Rigging Parts	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
Yoke.....	8	10	10	15	22	22	27	27	30	30	45	45	68	68	90	90	
Brushholder (incl. spring).....	4	6	6	8	15	15	16	16	18	18	22	22	27	27	30	30	
Brushholder Spring.....	2	3	3	3	3	3	3	3	4	4	4	4	4	4	4	4	
Stud.....	2	3	3	3	4	4	4	4	6	6	6	6	8	8	8	8	
Brushes ^⑥	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
Conduit Box.....	9	10	10	18	22	22	27	27	30	30	28	28	60	60	75	75	

Recommended Quantities

Description	Number of Duplicate Generators in Service					
	1	2-4	5-10	10-20	More than 20	Marine Units

Group I: With or Without Electrical Shop Facilities

Complete Machine.....	...	...	...	1	2	...
Drive End Ball Bearing.....	1	1	1	2	3	1
Front End Ball Bearing.....	1	1	1	2	3	1
Brushes (sets).....	2	4	6	8	10	1
Brushholders (sets).....	...	1/2	1/2	1	1	1 ^⑧
Brushholder Springs (sets).....	1/2	1	1	2	2	3 ^⑧
Main Field Coil.....	...	1	1	2	3	1
Commutating Field Coil and Pole.....	...	1	1	2	3	1
Brushholder Yoke.....	...	...	...	...	...	1
Armature Complete ^⑦	...	1	1	2	2	...

Group II: With Electrical Shop Facilities

Shaft ^③	...	...	1	1	...
Armature Rewinding Supplies.....	...	1	2	3	...

② Armature complete includes shaft, commutator, core, coils, and fan if called for, but not bearings or bearing housing.

③ Shafts not replaceable in diameters 250 and smaller.

④ Complete commutator only. Segments, refer to Westinghouse.

⑤ Complete commutating coil (pole not required, but will be supplied at no price addition when specified).

⑥ When carbon brush prices are required for spare parts only, use 1.4% of basic price for a complete set of brushes.

⑦ When shop facilities are available, the quantity of armatures may be reduced by stocking the armature parts listed under group II.

⑧ Quantity applies to number of individual pieces, not sets.

Prices effective November 8, 1967; subject to change without notice.
For standard terms and conditions of sale, refer to Selling Policy 4500.

November 8, 1967
New Information
E, D, C/1761/PL

**Dc Generators Spare Parts
Industrial**

1 to 100 Kw, Life-Line H
Drip-proof, Type SK-H