

TYPE D_n M REVERSING LINESTARTER, SIZE NO. 2

Class 11-210-M. 2 and MS 2

3 PHASE

Complete Linestarter Style Number Listed below Consists of Mechanical Parts Plus Operating Coil		OPERATING COIL		
11-210-M.2 Without Cabinet	11-210-MS2 With Sheet Steel Cabinet	Volts	Cycles	Style Number
1 265 823	1 265 812	110	60	1 227 764
1 265 824	1 265 813	110/208/220	25/60/60	1 227 765
1 265 825	1 265 814	220/380/440/480	25/50/60/60	1 227 766
1 265 826	1 265 815	550	60	1 227 767
1 265 827	1 265 816	600	60	1 227 768
1 265 828	1 265 817	110	50	1 227 769
1 265 829	1 265 818	220	50	1 227 770
1 265 830	1 265 819	400/440	50	1 227 771
1 265 831	1 265 820	550	50	1 227 772
1 265 832	1 265 821	440/600	25/40	1 227 773
1 265 833	1 265 822	550	25	1 227 774
Mechanical Parts Style Number				
1265519	1265520			

Instruction Leaflet for above Starter is I.L. 4002.

The following is a list of the Renewal Parts and the quantities of each that we recommend should be stocked by the user of this apparatus to minimize service interruptions caused by breakdowns. The parts recommended are those most subject to wear in normal operation, or to damage or breakage due to possible abnormal conditions.

The following list of Renewal Parts is given only as a guide. When continuous operation is a primary consideration, additional insurance against shutdowns is desirable. Under such conditions more renewal parts stock should be carried, considering the severity of the service and the time required to secure replacements.

Ordering Instructions

Name the part and give its style number. Give the complete nameplate reading. State whether shipment is desired by express, freight or parcel post. Send all orders or correspondence to nearest Sales Office of the Company. Small orders should be combined so as to amount to a value of at least \$1.00 net. Where the total of the sale is less than this, the material will be invoiced at \$1.00.

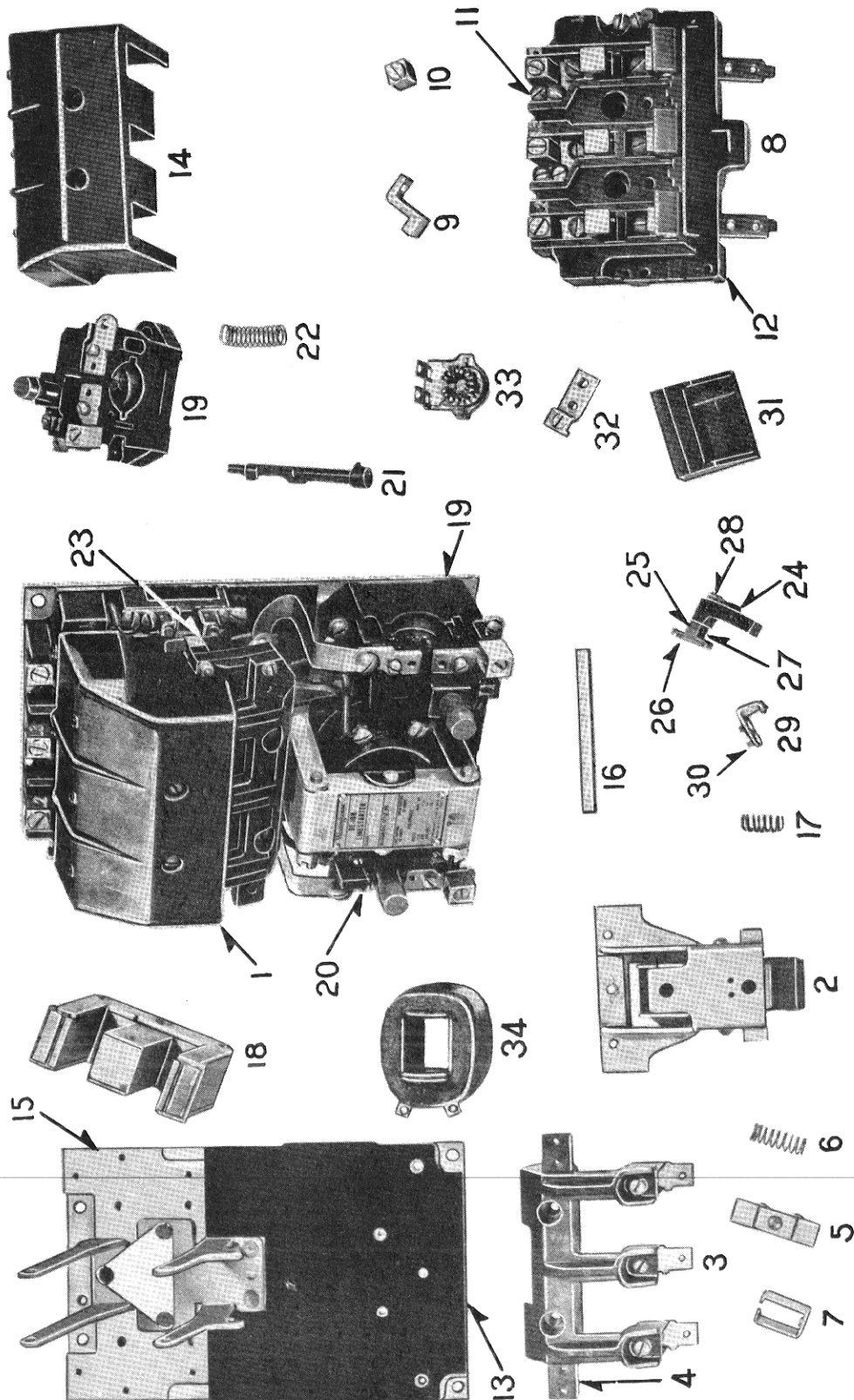
Westinghouse Electric Corporation

Beaver Plant

Standard Control Division

Beaver, Pa.

TYPE D_n M REVERSING LINESTARTER, SIZE NO. 2
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Ref No.	Ø DESCRIPTION OF PART	Style Number of Part	Number Per Linestarter	Linestarters in Use	
				1	5
				Recommended For Stock	
*	Mechanical Parts	See Page 1	1	0	0
1	Type DnM-230 Contactor . . .	1 265 949	2	0	0
2	Armature Core	1 221 401	2	0	0
3	Cross Bar Complete	1 221 400	2	0	1
4	Cross Bar	1 221 480	2	0	1
5	Moving Contact	1 224 773	6	6	12
6	Contact Spring	1 221 426	6	1	2
7	Moving Contact Support . . .	1 221 463	6	0	1
8	Stationary Contact Base Complete	1 221 402	2	0	1
9	Stationary Contact	1 224 774	12	12	24
10	Terminal	1 224 759	6	0	0
11	Washer Head Screw	1 242 844	8	4	8
12	Base	1 302 935	2	0	0
13	Base Insulation	1 221 459	2	0	0
14	Arc Box Complete	1 221 399	2	0	1
15	Base Plate Complete	1 265 950	2	0	0
16	Bearing Bar	1 221 447	2	0	0
17	Kickout Spring	1 221 427	2	0	1
18	Stationary Core	1 221 420	2	0	0
19	Type MW Overload Relay - RH.	1 314 642	1	1	1
20	Type MW Overload Relay - LH.	1 314 643	1	1	1
21	Push Rod	1 221 498	2	0	1
22	Spring	889 855	2	0	1
23	Type L-45 Electric Interlock - Make	1 221 422	2	0	0
24	Moving Contact Arm	1 221 484	2	0	0
25	Moving Contact Support . . .	1 221 475	2	0	0
26	Moving Contact	1 221 469	2	2	4
27	Contact Spring	1 221 428	2	0	1
28	Moving Contact Screw	1 221 490	2	0	0
29	Stationary Contact	1 221 470	4	4	8
30	Washer Head Screw	1 242 844	8	2	4
*	Terminal Block	1 221 397	1	0	0
31	Block	1 221 485	1	0	0
32	Terminal	1 224 768	1	0	0
33	Heater for Relay	++	2	2	4
34	Coil for Contactor	##	2	1	1

* Not Illustrated

++ See Page 4 for Heater Style Number

See Page 1 for Operating Coil Style Number

Ø Parts indented are included in the Part under which they are indented

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HEATER APPLICATION TABLE				
Heater Style Number	Heater Code Marking	Full Load Current of Motor		
		Table No. 6 Class 11-210 M.2 Without Cabinet	Table No. 7 Class 11-210 MS2 With Cabinet	
1 129 372	X .49	0.44 to 0.49	0.39 to 0.43	
1 129 373	Y .55	0.55 to 0.54	0.44 to 0.49	
1 129 374	Z .63	0.55 to 0.62	0.50 to 0.54	
966 465-B	AA .71	0.63 to 0.71	0.55 to 0.62	
966 466-B	AB .82	0.72 to 0.79	0.63 to 0.71	
966 467-B	AC .93	0.80 to 0.89	0.72 to 0.79	
966 468-B	AD 1.0	0.90 to 0.99	0.80 to 0.89	
966 469-B	AE 1.1	1.00 to 1.04	0.90 to 0.99	
966 470-B	AF 1.2	1.05 to 1.18	1.00 to 1.04	
966 471-B	AG 1.4	1.19 to 1.32	1.05 to 1.18	
966 472-B	AH 1.5	1.33 to 1.49	1.19 to 1.32	
966 473-B	AI 1.7	1.50 to 1.71	1.33 to 1.49	
966 474-B	AK 1.9	1.72 to 1.89	1.50 to 1.71	
966 475-B	AL 2.1	1.90 to 2.09	1.72 to 1.89	
966 476-B	AM 2.5	2.10 to 2.35	1.90 to 2.09	
966 477-B	AN 2.7	2.36 to 2.65	2.10 to 2.35	
966 478-C	AO 3.0	2.66 to 2.98	2.36 to 2.65	
966 479-C	AP 3.4	2.99 to 3.35	2.66 to 2.98	
966 480-C	AR 3.8	3.36 to 3.75	2.99 to 3.35	
966 481-B	AS 4.3	3.76 to 4.21	3.36 to 3.75	
966 482-C	AT 4.8	4.22 to 4.71	3.76 to 4.21	
966 483-C	AU 5.4	4.72 to 5.33	4.22 to 4.71	
966 484-C	AW 6.1	5.34 to 5.94	4.72 to 5.33	
966 485-C	AX 6.8	5.95 to 6.63	5.34 to 5.94	
966 486-C	AY 7.7	6.64 to 7.52	5.95 to 6.63	
966 487-B	AZ 8.5	7.53 to 8.51	6.64 to 7.52	
966 488-C	BA 9.6	8.52 to 9.31	7.53 to 8.51	
966 489-B	BB 11	9.32 to 10.5	8.52 to 9.31	
966 490-B	BC 12	10.6 to 11.5	9.32 to 10.5	
966 491-B	BD 13	11.6 to 12.4	10.6 to 11.5	
966 492-C	BE 14	12.5 to 13.4	11.6 to 12.4	
966 493-D	BF 16	13.5 to 14.9	12.5 to 13.4	
966 494-C	BG 18	15.0 to 17.5	13.5 to 14.9	
966 495-C	BH 19	17.6 to 18.2	15.0 to 17.5	
966 496-C	BI 21	18.3 to 19.0	17.6 to 18.2	
966 497-D	BK 23	19.1 to 20.5	18.3 to 19.0	
966 498-D	BL 25	20.6 to 22.6	19.1 to 20.5	
966 499-C	BM 27	22.7 to 24.9	20.6 to 22.6	
1 040 588	BN 29	25.0 to 28.4	22.7 to 25.0	
974 084-A	BO 31	28.5 to 32.2	25.0 to 28.4	
1 040 589	BR 36	32.3 to 35.0	28.5 to 32.2	
1 040 590	BS 40	35.1 to 40.9	32.3 to 35	
1 265 536	BT 47	41.0 to 46.9	35.1 to 40.9	
1 265 537	BU 54	47.0 to 52.0	41.0 to 46.9	
1 265 538	BX 61	52.1 to 56.5	47.0 to 52.0	
1 265 539	BY 65	56.6 to 59.9	52.1 to 56.5	
1 265 540	BZ 71	60.0 to 65.0	56.6 to 59.9	

HEATERS

Each heater is identified by a code marking stamped on one terminal near the mounting hole. The number in the code marking is the approximate heater trip current. The Heater Application Table indicates the range of full load motor current to which a given heater may be applied. This range is so selected that the current to produce ultimate tripping of the relay will be approximately 110% to 125% of the rated motor current.

The current rating of the relay is based on an ambient temperature of 40°C. Standard motor ratings are also based on an ambient temperature of 40°C. For protection of the motor when it and the relay are operated in a common ambient temperature, heaters should be applied according to Heater Table No. 6.

Confining the relay in a small space, such as a starter cabinet, with other apparatus which dissipates heat will raise its ambient temperature, affecting thereby its tripping value, thus heaters for enclosed starters should be applied according to Heater Table No. 7.