

Electromotive Systems Dynamic Braking Resistors

Motor Control

Instruction Manual



Material Handling

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***WARNING, CAUTION, and NOTE* Statements**

WARNING, CAUTION, and Note statements are used throughout this manual to emphasize important and critical information. You must read these statements to help ensure safety and to prevent product damage. The statements are defined below.



WARNING indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury



CAUTION indicates a potentially hazardous situation which, if not avoided, could result in minor or moderate injury. It may also be used to alert against unsafe practices.

NOTE: *A note statement is used to notify people of installation, operation, programming, or maintenance information that is important, but not hazard-related.*



WARNING

- This manual instructs you how to use Electromotive Systems Dynamic Braking Resistors. If you disregard the instructions, information, and/or warranty in the manual, you could be assuming responsibility for damages, costs, or injury incurred by such disregard.
- Do not touch any circuit components on the circuit board while the main AC or DC power is on.

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Introduction

Welcome to the Electromotive Systems Dynamic Braking Resistors instruction manual. Our Dynamic Braking Resistors consist of smoothwound, wirewound or edgewound type resistor coils mounted in ventilated enclosures. Our resistors can be used in any type AC or DC power circuit/application. They are designed for many types of applications: continuous duty applications where high resistance and low current are required, continuous duty applications where low resistance and high current are required and low current applications. Units are most commonly used for variable frequency drives, motor control, neutral grounding applications, load testing and load banks.

Magnetek offers a large selection of standard size coils to meet most requirements, however if you have a specialized application or requirement, consult the factory.

WARNING

These instructions should be read thoroughly before installation. All warnings and precautions should be observed for both personal safety and for proper equipment performance and longevity.

Construction: Magnetek's Electromotive Systems Dynamic Braking Resistors consist of smoothwound, wirewound or edgewound type resistor coils mounted in ventilated enclosures. All current carrying components used to manufacture our resistor coils including the elements, terminals and terminal hardware are stainless steel for maximum corrosion resistance. Standard enclosures will be mill galvanized with terminals factory wired to a terminal block. Braking resistors are available with a variety of options such as special enclosure finishes, outdoor ratings and thermal sensing switches.

Inspection: Upon receipt of your Electromotive Dynamic Braking Resistor, be sure to inspect the unit carefully for any shipping damage. After unpacking, check the unit for loose, broken, bent or otherwise damaged parts due to shipping. Report any shipping damage immediately to the freight carrier. Be sure to verify that the part number and ratings listed on the nameplate conform to the order specification. The ohm rating listed on the nameplate is critical (too low of an ohm value may cause damage to the drive).

INSTALLATION

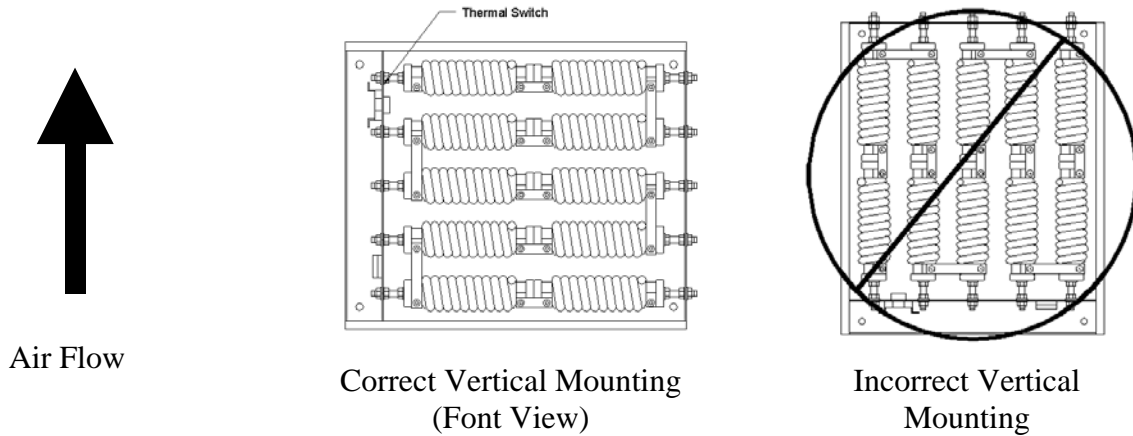
CAUTION

The National Electric Code (NEC) and local regulations govern the installation and wiring of electrical equipment such as braking resistors. DC power wiring, AC power wiring, control wiring and conduit must be installed in accordance with these codes.

Mounting:

Magnetek braking assemblies cool by natural convection causing hot air to rise vertically from the enclosure. Braking resistors should be mounted in a well-ventilated location free of any combustible materials or equipment affected by heat. Units should be installed with at least 24 inches of free space above the enclosure top and 6 inches of free space surrounding the enclosure sides. If necessary, units can be mounted on spacers or channels to limit heat from conducting from the resistor enclosure to its mounting surface.

Type S braking resistor enclosures can be mounted vertically or horizontally. If the unit is mounted vertically, it is important that the resistor coils remain in a horizontal position. Also, if a thermal switch is included with the unit, the switch should be positioned near the top of the enclosure. See below for vertical mounting details.



Installation:

1. Remove the ventilated cover.
 - a. Type S enclosures require a 5/16" wrench to remove the cover.
 - b. Type A enclosures require a 7/16" wrench to remove the cover.
2. Fasten the unit securely in place. Mounting holes can be found on the inside of the braking resistor enclosure. The enclosure styles are listed in the tables on the following pages, and the mounting dimensions for each enclosure style are listed on the pages 16 and 17.
 - a. Type S enclosures have 7/16" diameter mounting holes designed for 3/8" hardware.
 - b. Type A enclosures have 5/8" diameter mounting holes designed for 1/2" hardware.
3. Remove the proper knockout after determining a suitable entry point. It is preferable to route conduit near the bottom of the resistor enclosure.
 - a. Type S enclosures have convenient conduit knockouts for easy connection.
 - b. Type A enclosures require field punching for conduit entry.
4. After attaching conduit, pull wiring into the enclosure for connection to resistor. Braking amps are listed on the drawing for correct wire sizing. Be sure to properly ground the resistor enclosure to prevent electrical shock.
 - a. If connecting directly to the terminals on the resistor elements, it is necessary to use high temperature silicon or teflon wire rated 200°C.
 - b. Try to route wiring along the bottom of the enclosure and avoid running the wiring near the resistor elements.
 - c. Refer to the drawing to determine the size of the resistor hardware – (#10, 1/4, 5/16, 3/8 or 1/2 inch terminal hardware).
 - d. If your braking resistor contains an optional factory wired terminal block, then you may connect to the unit with standard 90°C rated wire.
5. If an optional thermal switch is included with the unit, then connect control wiring directly to the #8 terminals.

- a. Type A enclosures with the thermal switch option are pre-wired to a terminal block with #10 hardware, located in the bottom of the resistor enclosure.
 - b. Thermal sensing switches are available with either normally closed or normally open contacts.
6. After installing and wiring to your Electromotive Dynamic Braking Resistor, return the ventilated cover to its proper position. Securely tighten cover hardware (do not exceed 20 inch-pounds of torque).

Maintenance:

Periodically check the unit for loose connections and an accumulation of dust or dirt on the inside and outside of the resistor enclosure. Be sure to allow the unit to cool before servicing (contact may result in burn injury). Remove all power before servicing unit to avoid electrical shock. Allow at least one minute after input power has been removed for the bus voltage to discharge. Electric shock can cause injury or death.

Resistor elements should not glow red under normal operating conditions. If the resistor elements glow red you may need a higher rated braking resistor.

Technical Support:

If you have any questions about your braking resistor, contact Magnetek for assistance at (800) 288-8178.

**230/460 Volt Motions
(Used with P3 Series Drives)**

Part# EDB-	Encl. Style	Approx. Weight (lb)
2004 DTP	S1	7
2005 DTP	S1	7
2006 DTP	S1	7
2011 DTP	S1	7
2015 DTP	S2	9
2017 DTP	S2	9
4002 DTP	S1	6
4004 DTP	S1	7
4005 DTP	S1	7
4008 DTP	S2	9

230 Volt Traverse Motions

Class C			Class D			Class E			Class F		
Part# EDB-	Encl. Style	Approx. Weight (lb)	Part# EDB-	Encl. Style	Approx. Weight (lb)	Part# EDB-	Encl. Style	Approx. Weight (lb)	Part# EDB-	Encl. Style	Approx. Weight (lb)
2003 CT	S1	7	2003 DT	S1	7	2003 ET	S1	7	2003 FT	S1	7
2006 CT	S1	7	2006 DT	S1	7	2006 ET	S1	7	2006 FT	S2	9
2009 CT	S1	7	2009 DT	S1	7	2009 ET	S2	9	2009 FT	S2	9
2015 CT	S1	7	2015 DT	S2	9	2015 ET	S2	9	2015 FT	S3	13
2022 CT	S1	7	2022 DT	S2	9	2022 ET	S3	13	2022 FT	S4	16
2028 CT	S2	9	2028 DT	S3	13	2028 ET	S4	16	2028 FT	S5	18
2042 CT	S2	9	2042 DT	S4	16	2042 ET	S6	16	2042 FT	S6	19
2054 CT	S3	13	2054 DT	S6	17	2054 ET	S6	18	2054 FT	S8	25
2068 CT	S6	15	2068 DT	S6	19	2068 ET	S6	21	2068 FT	S8	24
2080 CT	S6	15	2080 DT	S6	20	2080 ET	S8	23	2080 FT	S12	29
2104 CT	S6	16	2104 DT	S9	21	2104 ET	S12	27	2104 FT	S18	43
2130 CT	S6	18	2130 DT	S9	29	2130 ET	S12	30	2130 FT	S18	39
2154 CT	S8	20	2154 DT	S12	29	2154 ET	S12	35	2154 FT	S30	61
2192 CT	S6	21	2192 DT*	2x S8	44	2192 ET*	2x S8	56	2192 FT*	2x S18	84
2248 CT*	2x S6	36	2248 DT*	2x S8	54	2248 ET*	2x S12	62	2248 FT*	2x S18	80
2312 CT*	2x S6	40	2312 DT*	2x S12	58	2312 ET*	2x S18	76	2312 FT*	2x A2	140

**Note that these parts consist of multiple quantities of the enclosure style. The approximate weight already takes into account any multiple quantities.*

230 Volt Hoist Motions

Class C			Class D			Class E			Class F		
Part# EDB-	Encl. Style	Approx. Weight (lb)	Part# EDB-	Encl. Style	Approx. Weight (lb)	Part# EDB-	Encl. Style	Approx. Weight (lb)	Part# EDB-	Encl. Style	Approx. Weight (lb)
2003 CH	S1	7	2003 DH	S1	7	2003 EH	S2	9	2003 FH	S2	9
2006 CH	S2	9	2006 DH	S2	9	2006 EH	S2	9	2006 FH	S4	16
2009 CH	S2	9	2009 DH	S3	13	2009 EH	S3	13	2009 FH	S5	18
2015 CH	S3	13	2015 DH	S4	16	2015 EH	S5	18	2015 FH	S6	18
2022 CH	S4	16	2022 DH	S6	18	2022 EH	S6	19	2022 FH	S12	28
2028 CH	S5	18	2028 DH	S8	22	2028 EH	S6	18	2028 FH	S12	31
2042 CH	S6	18	2042 DH	S12	28	2042 EH	S12	30	2042 FH	S12	29
2054 CH	S8	22	2054 DH	S12	27	2054 EH	S12	27	2054 FH	S18	40
2068 CH	S8	27	2068 DH	S18	39	2068 EH	S18	38	2068 FH	S24	56
2080 CH	S12	26	2080 DH	S18	45	2080 EH	S18	44	2080 FH	S30	57
2104 CH	S18	39	2104 DH	S30	54	2104 EH	S30	54	2104 FH	A3	114
2130 CH	S18	45	2130 DH	S30	61	2130 EH	A2	81	2130 FH	A3	131
2154 CH	S18	46	2154 DH	A2	85	2154 EH	A3	118	2154 FH	A3	154
2192 CH	A2	77	2192 DH*	2x S18	94	2192 EH*	2x S30	110	2192 FH*	2x A2	178
2248 CH*	2x S24	96	2248 DH*	2x A2	154	2248 EH*	2x A2	166	2248 FH*	2x A3	250
2312 CH*	2x S30	108	2312 DH*	2x A2	170	2312 EH*	2x A3	236	2312 FH*	2x A3	294

**Note that these parts consist of multiple quantities of the enclosure style. The approximate weight already takes into account any multiple quantities.*

460 Volt Traverse Motions

Class C			Class D			Class E			Class F		
Part# EDB-	Encl. Style	Approx. Weight (lb)	Part# EDB-	Encl. Style	Approx. Weight (lb)	Part# EDB-	Encl. Style	Approx. Weight (lb)	Part# EDB-	Encl. Style	Approx. Weight (lb)
4001 CT	S1	6	4001 DT	S1	6	4001 ET	S1	7	4001 FT	S1	7
4003 CT	S1	7	4003 DT	S1	7	4003 ET	S1	7	4003 FT	S2	9
4004 CT	S1	7	4004 DT	S1	7	4004 ET	S2	9	4004 FT	S2	9
4007 CT	S1	7	4007 DT	S2	9	4007 ET	S2	9	4007 FT	S3	13
4011 CT	S1	7	4011 DT	S2	9	4011 ET	S3	13	4011 FT	S4	16
4014 CT	S2	9	4014 DT	S3	13	4014 ET	S4	16	4014 FT	S5	18
4021 CT	S2	9	4021 DT	S4	16	4021 ET	S6	20	4021 FT	S8	25
4027 CT	S3	13	4027 DT	S5	18	4027 ET	S8	24	4027 FT	S8	23
4034 CT	S3	13	4034 DT	S6	20	4034 ET	S8	24	4034 FT	S9	23
4040 CT	S4	16	4040 DT	S6	18	4040 ET	S9	22	4040 FT	S12	29
4052 CT	S5	18	4052 DT	S6	19	4052 ET	S12	27	4052 FT	S18	42
4065 CT	S6	17	4065 DT	S9	23	4065 ET	S15	36	4065 FT	S18	38
4077 CT	S6	18	4077 DT	S10	30	4077 ET	S18	40	4077 FT	S30	55
4096 CT	S8	23	4096 DT	S12	28	4096 ET	S18	47	4096 FT	S30	62
4124 CT	S8	25	4124 DT	S24	49	4124 ET	S24	53	4124 FT	A2	78
4155 CT	S12	28	4155 DT	S24	50	4155 ET	A2	73	4155 FT	A3	118
4175 CT	S12	34	4175 DT	S24	54	4175 ET	A3	85	4175 FT*	2x S24	96
4240 CT*	2x S8	50	4240 DT*	2x S15	80	4240 ET*	2x S30	122	4240 FT*	2x A2	158
4300 CT*	2x S12	52	4300 DT*	2x S24	102	4300 ET*	2x A2	148	4300 FT*	2x A3	208
4340 CT*	2x S12	58	4340 DT*	2x S24	110	4340 ET*	2x A2	174	4340 FT*	3x S30	198
4460 CT*	2x S18	80	4460 DT*	3x S24	150	4460 ET*	3x A2	219	4460 FT*	3x A3	354
4515 CT*	3x S12	87	4515 DT*	3x S24	162	4515 ET*	3x A2	261	4515 FT*	4x A2	308
4590 CT*	3x S18	120	4590 DT*	4x S24	204	4590 ET*	4x A2	296	4590 FT*	4x A3	416
4605 CT*	3x S18	120	4605 DT*	4x S24	204	4605 ET*	4x A2	292	4605 FT*	4x A3	416

**Note that these parts consist of multiple quantities of the enclosure style. The approximate weight already takes into account any multiple quantities.*

460 Volt Hoist Motions

Class C			Class D			Class E			Class F		
Part# EDB-	Encl. Style	Approx. Weight (lb)	Part# EDB-	Encl. Style	Approx. Weight (lb)	Part# EDB-	Encl. Style	Approx. Weight (lb)	Part# EDB-	Encl. Style	Approx. Weight (lb)
4001 CH	S1	7	4001 DH	S1	7	4001 EH	S2	9	4001 FH	S3	13
4003 CH	S2	9	4003 DH	S2	9	4003 EH	S3	13	4003 FH	S4	16
4004 CH	S2	9	4004 DH	S3	13	4004 EH	S4	16	4004 FH	S5	18
4007 CH	S3	13	4007 DH	S5	18	4007 EH	S5	18	4007 FH	S8	24
4011 CH	S4	16	4011 DH	S6	20	4011 EH	S8	24	4011 FH	S12	33
4014 CH	S5	18	4014 DH	S8	25	4014 EH	S10	30	4014 FH	S15	30
4021 CH	S8	24	4021 DH	S12	33	4021 EH	S15	31	4021 FH	S15	31
4027 CH	S10	30	4027 DH	S15	30	4027 EH	S15	31	4027 FH	S24	47
4034 CH	S12	33	4034 DH	S15	31	4034 EH	S24	51	4034 FH	S24	56
4040 CH	S12	26	4040 DH	S24	49	4040 EH	S24	48	4040 FH	S30	55
4052 CH	S15	33	4052 DH	S24	46	4052 EH	S24	47	4052 FH	A2	80
4065 CH	S24	50	4065 DH	S30	68	4065 EH	A2	75	4065 FH	A3	122
4077 CH	S24	49	4077 DH	S30	58	4077 EH	A2	86	4077 FH	A3	117
4096 CH	S30	58	4096 DH	A2	92	4096 EH	A3	109	4096 FH	A4	173
4124 CH	A2	78	4124 DH	A3	123	4124 EH	A4	156	4124 FH	A5	227
4155 CH	A3	100	4155 DH	A4	162	4155 EH	A5	211	4155 FH	A6	293
4175 CH	A3	115	4175 DH	A5	204	4175 EH	A5	212	4175 FH*	2x A4	308
4240 CH*	2x A2	158	4240 DH*	2x A3	206	4240 EH*	2x A4	288	4240 FH*	2x A6	494
4300 CH*	2x A3	206	4300 DH*	2x A4	328	4300 EH*	2x A5	430	4300 FH*	2x A6	600
4340 CH*	2x A3	234	4340 DH*	2x A5	416	4340 EH*	2x A5	432	4340 FH*	3x A5	582
4460 CH*	2x A4	310	4460 DH*	3x A4	486	4460 EH*	3x A5	633	4460 FH*	3x A6	879
4515 CH*	3x A3	351	4515 DH*	3x A5	612	4515 EH*	3x A5	648	4515 FH*	4x A6	1036
4590 CH*	3x A3	381	4590 DH*	4x A4	656	4590 EH*	4x A5	860	4590 FH*	4x A6	1224
4605 CH*	3x A4	471	4605 DH*	4x A4	656	4605 EH*	4x A5	844	4605 FH*	4x A6	1224

**Note that these parts consist of multiple quantities of the enclosure style. The approximate weight already takes into account any multiple quantities.*

575 Volt Traverse Motions

Class C			Class D			Class E			Class F		
Part# EDB-	Encl. Style	Approx. Weight (lb)	Part# EDB-	Encl. Style	Approx. Weight (lb)	Part# EDB-	Encl. Style	Approx. Weight (lb)	Part# EDB-	Encl. Style	Approx. Weight (lb)
5003 CT	S1	6	5003 DT	S1	7	5003 ET	S2	9	5003 FT	S2	9
5004 CT	S1	7	5004 DT	S2	9	5004 ET	S2	9	5004 FT	S2	9
5006 CT	S1	7	5006 DT	S2	9	5006 ET	S2	9	5006 FT	S3	13
5009 CT	S1	7	5009 DT	S3	13	5009 ET	S3	13	5009 FT	S4	16
5011 CT	S2	9	5011 DT	S3	13	5011 ET	S4	16	5011 FT	S5	18
5017 CT	S2	9	5017 DT	S4	16	5017 ET	S5	18	5017 FT	S8	25
5022 CT	S3	13	5022 DT	S5	18	5022 ET	S8	24	5022 FT	S10	30
5027 CT	S3	13	5027 DT	S6	20	5027 ET*	2x S5	36	5027 FT*	2x S6	40
5032 CT	S4	16	5032 DT*	2x S4	32	5032 ET*	2x S5	36	5032 FT*	2x S8	48
5041 CT*	2x S3	26	5041 DT*	2x S5	36	5041 ET*	2x S8	48	5041 FT*	2x S10	60
5052 CT*	2x S3	26	5052 DT*	2x S6	40	5052 ET*	3x S6	60	5052 FT*	3x S8	75
5062 CT*	2x S4	32	5062 DT*	3x S5	54	5062 ET*	3x S8	72	5062 FT*	3x S10	90
5077 CT*	3x S3	39	5077 DT*	3x S6	60	5077 ET*	3x S8	75	5077 FT*	4x S9	108
5099 CT*	3x S4	48	5099 DT*	4x S6	80	5099 ET*	4x S8	100	5099 FT*	5x S10	150
5125 CT*	4x S4	64	5125 DT*	5x S6	100	5125 ET*	5x S8	125	5125 FT*	6x S10	180
5144 CT*	5x S3	65	5144 DT*	6x S6	120	5144 ET*	6x S8	150	5144 FT*	7x S10	210
5192 CT*	6x S4	96	5192 DT*	7x S6	140	5192 ET*	8x S8	200	5192 FT*	9x S10	270

**Note that these parts consist of multiple quantities of the enclosure style. The approximate weight already takes into account any multiple quantities.*

575 Volt Hoist Motions

Class C			Class D			Class E			Class F		
Part# EDB-	Encl. Style	Approx. Weight (lb)	Part# EDB-	Encl. Style	Approx. Weight (lb)	Part# EDB-	Encl. Style	Approx. Weight (lb)	Part# EDB-	Encl. Style	Approx. Weight (lb)
5003 CH	S2	9	5003 DH	S3	13	5003 EH	S3	13	5003 FH	S4	16
5004 CH	S2	9	5004 DH	S3	13	5004 EH	S4	16	5004 FH	S5	18
5006 CH	S3	13	5006 DH	S5	18	5006 EH	S5	18	5006 FH	S8	25
5009 CH	S4	16	5009 DH	S6	20	5009 EH	S8	24	5009 FH	S12	33
5011 CH	S5	18	5011 DH	S8	25	5011 EH	S8	25	5011 FH	S15	38
5017 CH	S8	25	5017 DH	S12	33	5017 EH	S15	31	5017 FH	S24	43
5022 CH	S10	30	5022 DH	S15	31	5022 EH	S18	37	5022 FH	S30	57
5027 CH	S12	33	5027 DH	S15	31	5027 EH*	2x S12	66	5027 FH*	2x S18	74
5032 CH	S12	26	5032 DH*	2x S12	66	5032 EH*	2x S15	76	5032 FH*	2x S24	88
5041 CH*	2x S10	60	5041 DH*	2x S15	60	5041 EH*	2x S15	62	5041 FH*	2x S18	76
5052 CH*	2x S12	66	5052 DH*	2x S15	62	5052 EH*	3x S15	93	5052 FH*	3x S24	129
5062 CH*	2x S12	52	5062 DH*	3x S15	90	5062 EH*	3x S15	93	5062 FH*	3x S18	114
5077 CH*	3x S10	90	5077 DH*	3x S15	96	5077 EH*	3x S18	108	5077 FH*	4x S24	172
5099 CH*	3x S15	93	5099 DH*	4x S15	128	5099 EH*	4x S18	148	5099 FH*	5x S24	215
5125 CH*	4x S12	104	5125 DH*	5x S15	160	5125 EH*	5x S18	185	5125 FH*	6x S18	228
5144 CH*	5x S12	135	5144 DH*	6x S18	216	5144 EH*	6x S15	192	5144 FH*	7x S18	266
5192 CH*	6x S12	156	5192 DH*	7x S15	217	5192 EH*	7x S15	224	5192 FH*	9x S24	423

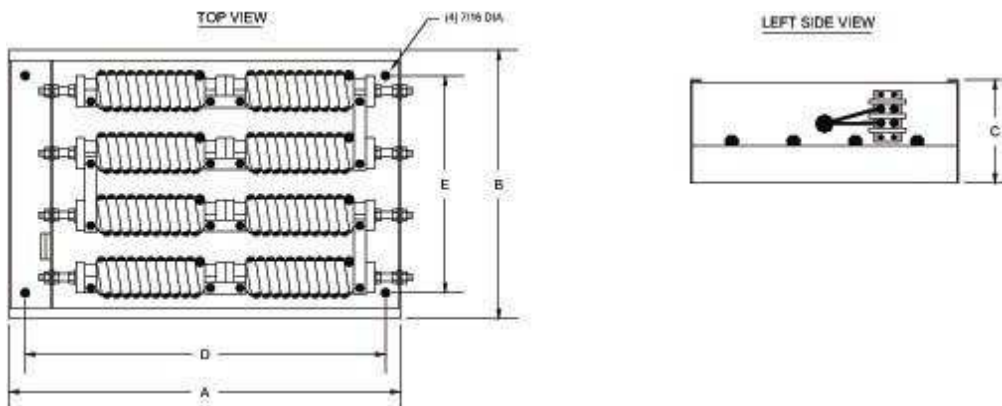
**Note that these parts consist of multiple quantities of the enclosure style. The approximate weight already takes into account any multiple quantities.*

Type S Enclosures

These heavy gage screened enclosures feature a solid bottom and a built-in compartment separated from the resistor assembly. The resistors are factory wired to a terminal block mounted in this compartment using high temperature Teflon or silicone wire. During installation, standard 90°C rated wire is routed into the compartment through the removable ½ inch conduit knockouts and connected to the factory wired terminal block. The terminal compartment wall is pre-punched for an optional thermal switch for sensing a resistor temperature overload.

Our standard unit includes a screened cover which is CNC punched to obtain maximum cooling and professional aesthetics. Mounting holes are located inside the enclosure and can be easily accessed by removing the cover. Resistor coils are interconnected using stainless steel bus bars and all stainless steel hardware, producing a corrosion resistant current path to withstand nearly any harsh industrial environment. The standard enclosure finish is galvanized, but an optional powder coated, yellow zinc, aluminum or stainless steel finish is available upon request.

Type S Enclosure Dimensions					
Enclosure	Dimensions in Inches				
	A	B	C	D	E
S1	12	5	5	10-1/2	—
S2	12	7	5	10-1/2	4-1/2
S3	12	10	5	10-1/2	7-1/2
S4	12	13	5	10-1/2	10-1/2
S5	12	16	5	10-1/2	13-1/2
S6	19	10	5	17-1/2	7-1/2
S8	19	13	5	17-1/2	10-1/2
S9	26-1/2	10	5	25	7-1/2
S10	19	16	5	17-1/2	13-1/2
S12	26-1/2	13	5	25	10-1/2
S15	26-1/2	16	5	25	13-1/2
S18	28	10	10	26-1/2	7-1/2
S24	28	13	10	26-1/2	10-1/2
S30	28	16	10	26-1/2	13-1/2



Type A Enclosures

The Type A enclosure is designed for applications requiring a large number of Type SXR, WR and/or ER resistor coils. In addition to the large capacity, these units are available with several options to simplify installation. We offer optional terminal connections up to 400 amps continuous located on a terminal plate in the bottom of the enclosure. These factory wired connections allow standard 90°C rated wire to be used if routed along the enclosure bottom. If installing without the optional terminal connections, always use 150°C rated silicone or Teflon wire when attaching directly to resistors.

These rigid enclosures include a screened top and removable front and back screened covers. The enclosure slides and bottom are solid and furnished with two lifting eyes. Mounting holes are located inside the enclosure and can be easily accessed by removing the front or back cover. Resistor coils are interconnected using all stainless steel bus bars and hardware, producing a corrosion resistant current path to withstand nearly any harsh industrial environment. The standard finish is galvanized, but an optional powder coated, hot dipped galvanized, aluminum or stainless steel finish is available upon request.

Type A Enclosure Dimensions					
Enclosure	Dimensions in Inches				
	A	B	C	D	E
A1	30	18	8	28	16
A2	30	18	16	28	16
A3	30	18	24	28	16
A4	30	18	32	28	16
A5	30	18	40	28	16
A6	30	18	48	28	16
A7	30	18	56	28	16
A8	30	18	64	28	16
A9	30	18	72	28	16

