



SOLUTIONS FOR FERROUS SCRAP AND STEEL HANDLING



MADE IN U.S.A.



www.ohiomagnetics.com

CUSTOM STEEL HANDLING MAGNETS

FABRICATED RECTANGULAR MAGNETS	3
FABRICATED BI-POLAR MAGNETS	4
RECTANGULAR SCRAP MAGNETS	5
COIL HANDLING MAGNETS	6
VERS-A-LIFT™ MAGNETS	7
HOT WORK MAGNETS	8

SCRAP HANDLING MAGNETS

LOADSTAR™ & SUPER LOADSTAR™ SERIES	9
FABRICATED CIRCULAR MAGNET SERIES	10
POW-R-LITE™	12
CUSTOM FABRICATED SCRAP MAGNETS	12

CONTROLLERS, POWER SUPPLIES AND AUXILIARY EQUIPMENT HANDLING

MAGNET CONTROLLERS	13
DC POWER SUPPLIES – RECTIFIERS	14
AUXILIARY EQUIPMENT	15
EMERGENCY POWER SUPPLIES (BATTERY BACK-UPS)	16

WARNING

Failure to observe the following warnings could create a risk of death or serious injury.

NEVER STAND UNDER OR NEAR A LOAD. Any load can potentially drop unexpectedly due to power loss or other system failure.

NEVER LIFT LOADS ABOVE PEOPLE OR IN CLOSE PROXIMITY TO PEOPLE OR EQUIPMENT.

NEVER PERFORM MAINTENANCE ON ANY PORTION OF THE MAGNET SYSTEM WITHOUT ENSURING THAT POWER HAS BEEN COMPLETELY TURNED OFF AND THE MAGNET HAS BEEN PROPERLY DISCHARGED.

DO NOT LEAVE THE POWER ON WHEN THE MAGNET IS NOT IN USE.

CAUTION

Failure to observe the following warnings could create a risk of serious injury.

- Pacemakers can be severely affected by the strong magnetic fields produced by industrial magnets. Contact your doctor and device manufacturer to understand the specific risks and precautions.
- Do not use the magnet as battering ram.
- Do not use the magnet as a drop ball.
- Do not grease the chain.
- Monitor the magnet temperature.
- Do not exceed intended rated Duty Cycle
- Review condition of leads, chains, and fasteners all other hardware before and after use - replace if necessary.



High Heat Caution



Magnetic Properties Caution

Follow all NEC, CSA, and IEEE standards when installing and repairing any complete system. If you are repairing or modifying the system components without Ohio Magnetix input, this will void warranty.

All personnel must be technically qualified to work on any section of the magnet system.

Anytime in proximity of the magnet system crane wear proper PPE, Personal Protective Equipment.

FABRICATED RECTANGULAR MAGNETS

Fabricated Rectangular Magnets are custom engineered for specific applications in the handling of sheets, plates, billets and bars in steel service centers.

Features

- Heavy duty fabricated case design
- Aluminum or copper coil designs based on application requirements
- Efficient power consumption
- Hot Work Magnets option available (see page 8)
- Class 220°C insulated coils
- Coil contains tension spacers and mica disks
- Added lifting capacity available
- 230 VDC standard, special voltages available
- Custom designed for specific applications



TECHNICAL SPECIFICATIONS

Steel Plate Lifting Data

					PLATE AREA IN SQUARE FEET														A- SINGLE PLATE LIFT B- MULTIPLE PLATE LIFT							
PLATE THICKNESS (IN.)	LONGEST PLATE IN FEET FOR ONE MAGNET		MAXIMUM NO. OF PLATES PER LIFT		MAGNET SIZE (IN.)																					
	MAGNET SERIES (IN.)				9 x 20		9 x 40		9 x 60		9 x 80		9 x 100		16 x 20		16 x 40		16 x 60		16 x 80		16 x 100			
	9	16	9	16	A	B	A	B	A	B	A	B	A	B	A	B	A	B	A	B	A	B	A	B		
0.015	2.4	3.9	27	60	7	4	13	9	20	13	26	18	33	22	13	12	26	24	38	36	51	48	64	61		
0.031	3.3	5.5	13	30	9	6	19	13	28	19	37	26	47	32	19	16	36	31	54	47	72	62	91	78		
0.062	4.5	8.0	7	16	13	9	26	19	39	28	52	38	66	47	26	20	51	39	77	59	102	79	128	99		
0.125	6.5	10.8	4	9	19	14	37	28	56	41	74	55	93	69	36	25	72	50	109	75	145	100	181	125		
0.187	7.0	13.0	3	7	23	18	45	35	68	53	91	70	114	88	45	28	90	56	135	84	180	112	225	140		
0.250	9.0	15.5	3	5	26	20	53	40	79	61	105	81	131	101	52	29	104	58	156	88	208	117	260	146		
0.375	11.0	19.0	2	4	32	26	64	52	97	78	129	104	161	130	63	32	126	64	189	96	252	128	315	160		
0.500	13.0	22.0	1	3	32		74		112		149		186		73	33	146	66	219	100	292	133	365	166		
0.750	16.0	27.0	1	2	46		91		137		182		228		89	36	178	71	267	107	356	143	449	178		
1.000	18.0	31.0	1	1	53		105		158		210		263		103		206		308		410		513			

Maximum Slab Lift Safety Factor 2:1 Ratio

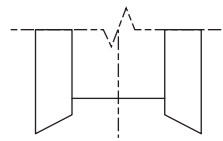
Calculations Examples: 9 inch width series: 375 lbs. times magnet length in inches | 16 inch width series: 450 lbs. times magnet length in inches

FABRICATED BI-POLAR MAGNETS

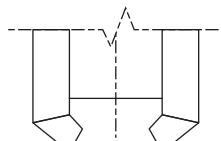
The Bi-Polar Lifting Magnets are custom engineered for higher temperature environments and more challenging material lifts. They are a versatile choice for various mill, structural and rebar handling applications.

Features

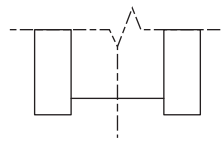
- Deeper magnetic field penetrates larger air gaps for superior performance
- Custom designed pole shoes for optimum material contact for radial or irregular shapes
- Efficient power consumption
- Hot Work Magnets option available (see page 8)
- Handle finished and semi-finished steel and structural products
- Handle without slinging, blocking and hooking operations
- Feature efficient, low amp draw designs to cut energy costs
- Provides a wide spectrum of standard and special bi-polar magnet designs
- Specifically designed internal construction with the right balance of wire to steel
 - Develops maximum flux density for heavy-duty lifting with minimum power consumption
- 100% lifting area with a virtual uniform field across the entire length of the magnet
- Heavy-duty magnet construction
- Custom designed pole shoes for optimum material contact for radial or irregular shapes
- Available in special widths to meet any application
- 230 VDC standard with special voltages available on request
- Magnet design is per ASME BTH-1-2017 below the Hook Standards



**Tapered poles
for bundles, coils
and structurals**



**Removable
poles and angles
and tubes**



**Flat poles
for sheet
and tubes**

TECHNICAL SPECIFICATIONS

MAGNETIC LIFT DATA		
WIDTH (IN.)	PLATE SIZE (IN.)	LENGTH (LBS./IN.)
8	1.50	320
12	2.50	450
13	3.00	515
19	3.75	940
22	5.00	1,010



Industrial Applications

Versatile magnet design for various mill applications

- Plates
- Billets (hot and cold)
- Coils (eye vertical and horizontal)
- Structural
- Bundles
- Rebar
- Rails
- Tubes and pipes
- Blooms

Example:

- A 22 inch wide by 54 inch long Bi-Polar magnet will have an estimated slab lift of 54,540 lbf on a 5 inch thick plate, S.F. 2:1 True lift capacity is dependent on load type and size.

RECTANGULAR SCRAP MAGNETS

Rectangular Scrap Magnets provide optimum scrap charging capabilities, ideal for the loading and unloading of rail cars.

Features

- Heavy duty construction
- Dual voltage and special voltages available
- Dual coil design allows for quick energizing and de-energizing times
- Deep field dual coil design for lower inductance which decreases charging and discharging times
- Sizes manufactured to suit application constraints
- Ideal for the loading and unloading of rail cars
- Designed for ease of maintenance
- Design allows for continued operation even in the event of a single coil failure
- Surge suppressor optional
- 230 volts standard

Consult Ohio Magnetics with application and crane specification for proper size selection.



TECHNICAL SPECIFICATIONS

MAGNET					CONTROLLER	MIN. CABLE SIZE	MAGNET DIMENSIONS (IN.)								AVERAGE SCRAP LIFT (LBS.)		
SIZE & TYPE	APPROX. WT. (LBS.)	COLD AMPS	COLD KW	DUTY %			TYPE	L	W	H	HR	BOW	BOH	BD	PLATE PUNCHINGS*	HMS 1	HMS 2
63 X 126 DAWXRM	18,300	185	42.6	50	RD-3A	2- #1/0	126	63	21.00	100.0	9.00	16.00	2.75	14,660	12,540	8,410	
68 X 136 DAWXRM	20,725	236	54.3	50	(2) MC-2A	4- #2	136	68	24.25	109.5	9.00	16.00	2.75	18,125	15,500	10,400	
73 X 146 DAWXRM	29,820	238	54.7	50	(2) MC-2A	4-#2	146	73	25.25	117.0	9.00	16.00	2.75	21,900	18,590	11,990	
83 X 166 DAWXRM	33,000	242	55.7	65	(2) MC-2A	4- #2	166	83	22.50	119.0	9.00	16.00	2.75	26,135	22,090	14,240	
84 X 140	33,500	242	55.7	60	(2) MC-2A	4-#2	140	84	18.75	119	9.00	16	2.75	28,000	25,500	17,100	

*Lifting capacities are approximations based on calculated estimates or factory test results for a new magnet at 25° C and may not be representative of actual results under varying field conditions. Material description based on specifications for iron and steel scrap published by the Institute of Scrap Recycling Industries.

COIL HANDLING MAGNETS

Coil Handling Magnets are custom designed to handle specific sized coils in the vertical or horizontal eye position.

Features

- Able to lift coils up to 80 tons
- Designed to lift coils with minimal stress
- CL type magnets reduce damage to coils, handle coils more expeditiously and require less stocking area
- Broad array of magnet designs and accessories
- Special multiple coil and pole shoe design to maximize lifting power
- 230 VDC standard; special voltages available by request

Industrial Applications

- Hot work construction available for coil annealing process
- Handling specifically sized coils (eye vertical)



DATA REQUIRED FOR DESIGN SPECIFICATION AND PROPOSAL

1. Coil O.D. and I.D.
2. Coil length(maximum and minimum)
3. Maximum coil weight
4. Maximum edge stagger
5. Banding specification
6. Crane capacity
7. Coating and covering (if applicable)
8. Duty Cycle
9. Coil Orientation
 - Eye up (vertical)
 - Eye Sideways (horizontal)



VERS-A-LIFT™ MAGNETS

Powerful and easily portable VERS-A-LIFT™ magnets are ideal for cranes to efficiently lift, hold and place steel materials.

Features

- Available in standard 115 VDC voltage or with built-in rectifiers for 115 VAC
- Models with built in rectifiers can be plugged directly into 115 VAC wall outlets
- Separate rectifiers are also offered for DC rated magnets
- Attaches quickly and easily with 1 inch I.D. lifting ring
- Efficient lift, hold and place material handlers
- Lifting capacities range from 350 to 6,320 lbs. (150 to 2,900 kg)
- Available in diameters of 4", 7", 10", 12", & 15" (100 to 380 mm)
- Used in multiples with spreader beams for transporting thin long sheet steel (flex or bow)
- Adaptable to your power source

TECHNICAL SPECIFICATIONS

MODELS WITH BUILT-IN RECTIFIERS (115 V.A.C. SINGLE PHASE, 60HZ)

DIAMETER SIZE (IN.)	DIMENSIONS (IN.)						APPROX. NET WEIGHT (LBS.)
	B	C	D	E	F	G	
7	8.69	4.44	2.25	1.50	1.25	0.375	38
10	9.63	4.63	2.88	1.75	1.50	0.500	87
12	10.13	4.75	2.88	1.75	1.50	0.500	120
15	10.00	5.25	3.75	1.75	1.50	0.500	235

MODELS OPERATING ON STANDARD D.C. VOLTAGE [115V.D.C. EXCEPT 4" (12 V.D.C.)]

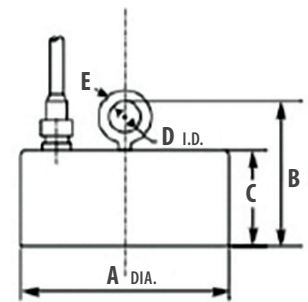
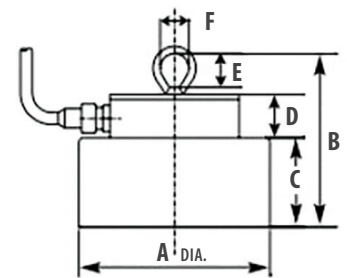
DIAMETER SIZE (IN.)	DIMENSIONS (IN.)					WATTS INTERMITTENT	APPROX. NET WEIGHT (LBS.)
	A	B	C	D	E		
4	4	5.03	3.63	1.19	0.44	40	11
7	7	5.84	4.44	1.19	0.44	114	34
10	10	6.44	4.63	1.50	0.66	201	78
12	12	6.44	4.75	1.50	0.66	261	112
15	15	7.06	5.25	1.50	0.66	392	212

PULL DATA

O.D SIZE (IN.)	4	7	10	12	15
MAX. FORCE (COLD) LB. THEORETICAL	612	2,380	5,675	6,950	11,150
MAX. FORCE HOT 75% THEORETICAL	344	1,740	3,290	3,900	6,290
MIN. PLATE THICKNESS (ZERO AIR GAP DIRECT CONTACT MAX. FORCE) (IN.)	0.75	1	1.25	1.5	1.75

Industrial Applications

- Machined steel parts
- Machine workpiece loading and unloading
- Sheets, plates, castings and scrap/burnouts



HOT WORK MAGNETS

Hot Work Magnets are engineered for applications greater than 300°F (150°C) and below Curie Temperature.

Features

- Designs available for Rectangular, Bi-Polar and Circular magnets
- Handle higher temperature material
- Fewer square inches of magnet pole area for contact with hot material
- Strap copper conductor and premium insulation
- Higher duty cycle
- Non-magnetic heat shield to insulate the coil
- Additional options available to provide optimum magnet cooling

Fabricated magnets are designed to your dimensional, electrical and capacity specifications. Additional custom sizes available upon requests.



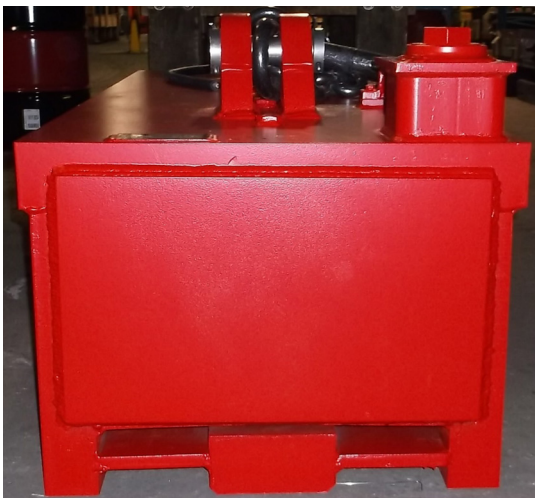
Circular



Rectangular



Bi-polar



Rectangular

LOADSTAR™ & SUPER LOADSTAR™ SERIES

The LOADSTAR™ series of lifting magnets feature a heavy-duty cast case construction designed for production scrap handling.

Features

- Sizes ranging from 48 to 67 inches (1220 to 1829 mm) in diameter
 - Sizes are cast case except for 72" fabricated
- Continuous duty cycle ratings
- Deep field (LOADSTAR) or extra deep field (SUPER LOADSTAR) coil design
- Magnet options matched to excavator mechanical and hydraulic capacity
- Chain suspension standard
- Standard hard face weld on SUPER LOADSTAR Series for high abrasion applications
- Superior strength and rugged steel case construction
- Increased production, long service life and easy serviceability
- Low-cost, high-performance magnets ideal for scrap handling value
- Lifting Capability Range
 - LOADSTAR: 1,800 to 4,200 lbs.
 - SUPER LOADSTAR: 2,200 to 5,600 lbs.
- 230 VDC standard; special voltages available by request

Industrial Applications

- Production scrap handling



Ohio Magnetics - 67LS



TECHNICAL SPECIFICATIONS – LOADSTAR™

DIAMETER SIZE (IN.)	COLD AMPS AT 230 VDC	REQUIRED KW	APPROX. MAGNET SHIPPING WEIGHT (LBS.)	WIRE SIZE	CONTROLLER SIZE	AVERAGE LIFTING CAPACITY (LBS.)		
						#1 H. M.	#2 H. M.	STEEL TURNINGS
48	43	9.9	3,100	#8	MC-1A	1,800	625-1,200	650
58	56	12.9	4,300	#6	MC-1A	2,780	800-1,800	850
67	80	18.4	5,800	#4	MC-1A	4,200	1,350-2,700	1,350

TECHNICAL SPECIFICATIONS – SUPER LOADSTAR™

DIAMETER SIZE (IN.)	COLD AMPS AT 230 VDC	REQUIRED KW	APPROX. MAGNET SHIPPING WEIGHT (LBS.)	WIRE SIZE	CONTROLLER SIZE	AVERAGE LIFTING CAPACITY (LBS.)		
						#1 H. M.	#2 H. M.	STEEL TURNINGS
48	40	9.2	3,500	#6	MC-1A	2,200	750-1,470	765
58	56	12.9	5,100	#6	MC-1A	3,240	950-2,170	1,150
67	81	18.6	6,300	#4	MC-1A	4,585	1,470-3,250	1,475
72	96	22.1	7,700	#4	MC-1A	5,640	3,550-4,300	1,750

*Lifting capacities are approximations based on calculated estimates or factory test results for a new magnet at 25° C and may not be representative of actual results under varying field conditions. Material description based on specifications for iron and steel scrap published by the Institute of Scrap Recycling Industries.

FABRICATED CIRCULAR MAGNET SERIES

Fabricated Magnets are heavy duty magnets designed for production scrap handling.

Features

- Sizes range from 48 to 93 inches (1220 to 2362 mm) diameter
- Continuous duty cycle ratings
- Magnet options matched to excavator mechanical and hydraulic capacity
- Chain suspension standard, optional quick disconnect interface
- Optional abrasion resistant surfaces for pole shoe wear protection

WF Magnets

WF Fabricated Series of lifting magnets are designed for severe-duty, tough scrap handling applications. The fabricated magnets feature deep field designs for productive and long-life solutions.

- Copper or aluminum wound magnets for tough scrap handling applications
- Heavy Duty fabricated construction
- Deep field design providing even more powerful gripping force
- 230 VDC standard; special voltages available by request

Industrial Applications

- Production Scrap Handling for Severe Duty Applications



TECHNICAL SPECIFICATIONS

MODEL	SIZE (IN.)	APPROX. WEIGHT (LBS.)	REQUIRED DC POWER (KW)	VOLTS	AMPS	CONTINUOUS DUTY CYCLE	DIMENSIONS (IN.)			CONTROLLER
							SLAB	H.M. #1	H.M. #2	
LSF	48	3,100	9.7	230 VDC	42	50%	23,000	1,800	1,200	MC-1A
LSF	58	4,100	12.4	230 VDC	54	50%	25,000	2,950	1,940	MC-1A
LSF	67	5,400	17.3	230 VDC	75	50%	32,600	4,200	2,700	MC-1A
SLSF	58	4,920	12.9	230 VDC	56	60%	25,000	3,260	2,180	MC-1A
SLSF	67	6,690	18.0	230 VDC	78	60%	32,000	4,640	3,280	MC-1A
SLSF	72	8,500	22.1	230 VDC	96	60%	41,130	5,650	3,535	MC-1A
DAWF	45	3,100	6.9	230 VDC	30	50%	39,000	2,500	1,150	MC-1A
DAWF	55	5400	10.0	230 VDC	42	60%	42,000	2,800	2,000	MC-1A
DAWF	66	7500	20.0	230 VDC	87	50%	53,000	4,400	3,100	MC-1A
DAWF	83	17,000	31.0	230 VDC	135	50%	68,900	9,660	6,500	MC-2A
DAWF	93	19,000	40.0	230 VDC	173	50%	90,000	11,000	7,400	RD-3A

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FABRICATED MAGNET SERIES

SRF Series Magnets

SRF series of steel mill-type lifting magnets are designed specifically for severe mill service applications, such as heavy drop ball handling, hot crop handling (hot-work construction), slab handling, and slag reclamation. The extra heavy fabricated steel magnet case, alloy steel lifting chains and quick-disconnect lead assemblies ensure that these magnets remain productive over a long life.

Features

- Available in 34, 40, 47, 57, 65 and 69 inches design diameters and custom sizes available
- Aluminum wound coils are standard design
- Copper wound coils available for hot-work and high impact applications
- Available in various designs including standard, deep and extra deep field (SRED) to provide maximum gripping force
- Quick-disconnect lead assemblies, to provide speed and ease-of-use
- 230 VDC standard, special voltages available by request
- Hot work designs available on request (see page 8)
- Designed specifically for severe mill service applications
- 230 VDC standard, special voltages available
- Special designs available on request

Industrial Applications

- Severe mill service
- Available for hot work
- Product Applications
 - Slag reclamation
 - Drop ball handling
 - Slab handling
 - Crop end handling
 - Ingots handling
 - Mold handling

TECHNICAL SPECIFICATIONS

DIAMETER SIZE (IN.)	COLD AMPS AT 230 VDC	REQUIRED KW	APPROX. MAGNET SHIPPING WEIGHT (LBS.)	WIRE SIZE	CONTROLLER SIZE	AVERAGE LIFTING CAPACITY (LBS.)		
						#1 H. M.	BILLET OR SLAB	DROP BALL
40 SRDCF	29	6.6	2,550	#8	RD-1W/MC-1A	1,300	27,600	12,000
47 SRDAF	38	8.8	3,600	#8	RD-1W/MC-1A	1,900	33,400	16,000
47 SRDCF	42	9.7	3,900	#8	RD-1W/MC-1A	2,000	33,400	17,000
57 SRDAF	65	14.8	6,800	#6	RD-1W/MC-1A	3,200	56,500	22,000
57 SRDCF	71	16.4	7,200	#6	RD-1W/MC-1A	3,400	56,500	25,000
65 SRDAF	74	17.1	11,400	#4	RD-1W/MC-1A	4,800	71,200	35,000
65 SRDCF	69	15.9	12,800	#4	RD-1W/MC-1A	4,800	71,200	35,000
69 SRDCF	84	19.4	18,000	#4	RD-1W/MC-1A	6,500	84,500	45,000

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POW-R-LITE™

The POW-R-LITE™ Series of magnets are fabricated magnets designed for rail, construction, and material handling – a smart choice for light duty scrap and general steel plate handling.

Features

- Sizes 20 to 45 inches (508 to 1143 mm) diameter
- Powerful, lightweight, portable for smaller equipment and factory overhead cranes
- High duty-cycle, mechanically tough pieces of equipment
- Low initial investment, high productivity and low maintenance costs
- Fabricated case construction
- Aluminum or copper wound coil designs available
- Chain suspension standard, optional quick disconnect interface
- 230VDC standard

Industrial Applications

- Track sweeping/rail maintenance-of-way operations
- Scrap handling
- Plate handling
- Burnout tables



TECHNICAL SPECIFICATIONS

DIAMETER SIZE (IN.)	COLD AMPS AT 230 VDC	REQUIRED KW	APPROX. MAGNET SHIPPING WEIGHT (LBS.)	WIRE SIZE	CONTROLLER SIZE	SINGLE SLAB OR BILLET	AVERAGE LIFTING CAPACITY (LBS.)		
							#1 H. M.	#2 H. M.	STEEL TURNINGS
20	4	1	350	#10	CDS	5,300	150	75	50
25	10	2.3	655	#10	CDS	7,700	300	150	100
30	16	3.7	960	#10	CDS	10,000	550	300	175
34	20	4.6	1,510	#10	CDS	13,000	845	460	270
40	30	6.9	2,030	#8	RD-1W/MC-1A	16,500	1,220	580	330
45	27	6.2	3,220	#8	RD-1W/MC-1A	40,000	2,500	1,150	675

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CUSTOM FABRICATED MAGNETS

Ohio Magnetics engineering team will work with you to design a magnet specific for your needs. Our custom magnets are ideal for use in production scrap, mill duty, slag and drop ball applications.

- Options for high impact, wear resistance, increased duty cycles and hot work applications
- Underwater operation available



Contact Ohio Magnetics with your specific application needs: sales@ohiomagnetics.com or (216) 662-8484

MAGNET CONTROLLERS

These reliable controllers include automatic drop and manual drop functionality to energize and de-energize the magnet. There are six models available from 5 amps to 200 amps DC with adjustable release controls.

Model CDS

- Operating range 5 – 20 amps DC (automatic drop model)
- Operating range 1 – 20 amps DC (manual drop model)
- 230 VDC standard, 115 VDC available upon request

Model MC-1A

- Operating range of 20 – 100 amps DC
- Adjustable drop potentiometer
- 230 VDC standard, 24 & 115 VDC available upon request
- Various NEMA ratings available
- Isolated resistor bank compartment prevents damage to front wiring and components

Model MC-1.5A

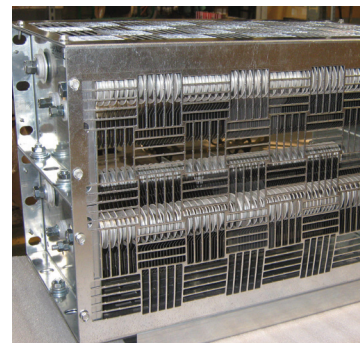
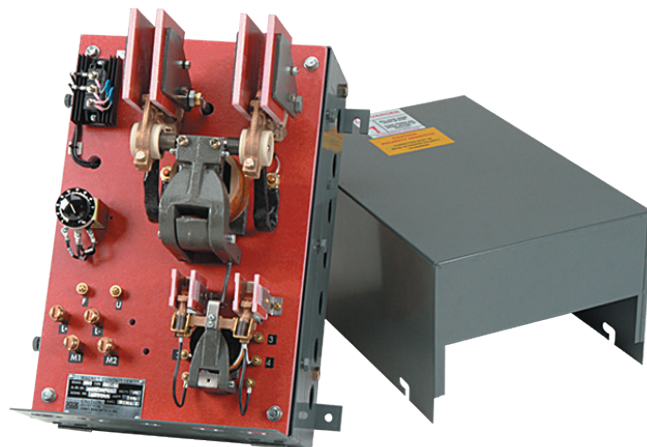
- Wide operating range of 65 – 130 amps DC
- Adjustable drop rheostat
- 230 VDC standard, 24 & 115 VDC available upon request
- Various NEMA ratings available
- Isolated resistor bank compartment prevents damage to front wiring and components

Model MC-2A

- Operating range of 100 – 150 amps DC
- Adjustable drop rheostat
- Various NEMA ratings available
- Isolated resistor bank compartment prevents damage to front wiring and components

Model RD-3A

- Operating range of 100 – 200 amps DC
- Adjustable drop timer relays
- 230 VDC standard, 115 VDC available upon request
- NEMA 12 enclosure
- Separate resistor bank enclosure



DC POWER SUPPLIES – RECTIFIERS

Ohio Magnetics' DC Power Supplies for lifting magnets are available in both a fixed voltage output (usually 230 VDC or 115 VDC) and a variable voltage output (usually 0-230 VDC or 0-300 VDC). Fixed voltage output type DC Power Supplies are used in most general magnet applications. Variable voltage supplies are used in applications of fanning, boost/carry, flux reduction, constant flux regulation, etc.

Features

- North American or international input voltages; 3 phases; 50 or 60 Hz
- Magnetic line starter with 3-phase overload relay protection
- Option: Manual line starter with 3-phase overload protection (may be eliminated if controlled externally)
- Adjustable taps on power transformers to match input line conditions
- Fast acting fuse protection
- Transient surge protection
- AC power on indicator light (neon)
- Wall mounted enclosures up to 10 KW, floor mounted enclosures above 10 KW
- 110/120 V (North America) or 220/240 (international) control voltage for input switching and operation of accessories
- Modular diodes/SCR for easy replacement
- Separate 230 V supply for controllers on all variable voltage supplies
- NEMA 4 or 12 standard enclosure natural convention



Optional Features

- Circuit breakers disconnect (local or remote)
- Variable voltage: 0-230 V system for flux reduction, fanning, current/voltage regulation applications; 0-300 V systems for boost /carry, current/voltage regulation applications
- Power relay for operation of controller lift/drop coil from 110/120 (North America) or 220/240 (international) via pendant control

Special requests available

- NEMA 3R – IP32
- NEMA 12 – IP55
- NEMA 4 – IP66
- NEMA 4X – IP66

TECHNICAL SPECIFICATIONS

KW	AMPS @ 230 V	AMPS @ 115 V	ENCLOSURE SIZE H x W x D (IN./MM)	APPROX. WEIGHT/MASS	
				LBS.	KG
2.0	8.7	16.6	36 x 30 x 12 915 x 760 x 305	238	110
4.0	17.2	33.3	36 x 30 x 12 915 x 760 x 305	265	120
6.5	28.0	54.2	36 x 30 x 12 915 x 760 x 305	310	140
10.0	43.1	83.3	36 x 30 x 12 915 x 760 x 305	355	160
15.0	64.7	125.0	48 x 36 x 16 1220 x 915 x 405	545	250
20.0	86.2	166.6	48 x 36 x 16 1220 x 915 x 405	595	270
25.0	109.0	208.0	48 x 36 x 16 1220 x 915 x 405	640	290

KW	AMPS @ 230 V	AMPS @ 115 V	ENCLOSURE SIZE H x W x D (IN./MM)	APPROX. WEIGHT/MASS	
				LBS.	KG
35.0	151.0	N/A	60 x 36 x 20 1525 x 915 x 510	800	360
45.0	194.0	N/A	60 x 36 x 20 1525 x 915 x 510	875	400
55.0	237.0	N/A	60 x 36 x 20 1525 x 915 x 510	950	430
65.0	283.0	N/A	60 x 48 x 24 1525 x 1220 x 610	1060	480
75.0	326.0	N/A	60 x 48 x 24 1525 x 1220 x 610	1100	500
87.5	380.0	N/A	60 x 48 x 24 1525 x 1220 x 610	1145	520
100.0	435.0	N/A	60 x 48 x 24 1525 x 1220 x 610	1255	570

DC power supply data for fixed and variable DC power supplies* *Note: 15 kw and larger add 12 inch (305 mm) to height for leg kit on floor mount models.



AUXILIARY EQUIPMENT

We offer a full line of lifting magnet equipment for the safety and reliability of your operation. Turnkey product and service support includes spreader beams, power sources, control panels, disconnect switches, battery back-ups, monitoring systems, alarms and more.

250 VDC Magnet Safety Disconnect Switch

Magnet circuits, which are highly inductive, occasionally require disconnection while the magnet is energized. The switch is polarity sensitive. Input and output power leads must be connected as indicated by markings.

Features

- Manually operated
- Automatic discharge of magnet power
- Mechanical interlock (door must be closed to operate)
- NEMA 3R/12 (IP-55) combination enclosure
- Provides operator safety
- Standard sizes 30, 60, 100 and 200 amp
 - 30 A and 60 A switches do not require power resistor

Spreader Beams

- Heavy duty magnet spreader beams are designed for customer specific applications
- Heavy duty steel beam or channel construction
- Multiple magnets mounted on beam, dependent on requirement
- Completely prewired with main junction box
- Various suspension available- chain, rigid yoke or spring
- Fixed or telescoping beams available
- Designed to meet ASME "Below the Hook" standards

Additional Equipment

- Fanning control
- Under current alarm package
- Reduced voltage relay panel
- Various control switches
- Resistor and meter packages
- Surge suppressors
- Warning and alarm devices



EMERGENCY POWER SUPPLIES (BATTERY BACK-UPS)

Ohio Magnetics' on-line type emergency power supplies provide instantaneous backup power to 230 VDC lifting magnets that will safely hold loads in the event of a power failure for your specified holding time.

Features:

- 5, 10, 15, 20, 30, 45 and 60-minute holding times
- Heavy duty industrial batteries in a separate enclosure
- Batteries charge from main power. Variable volt systems require separate battery charger.
- Instant transfer to-on-line battery power
- Trickle charging
- Battery disconnect switch with fault sensing
- NEMA 12 control enclosures
- Local display with alarm horn and visual operation indicating lamps
- 180 VDC end voltage

Optional Features:

- Boost charging
- Separate battery charger
- 115 VDC system voltage
- Optional battery enclosure heaters
- Nickel-cadmium batteries



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