

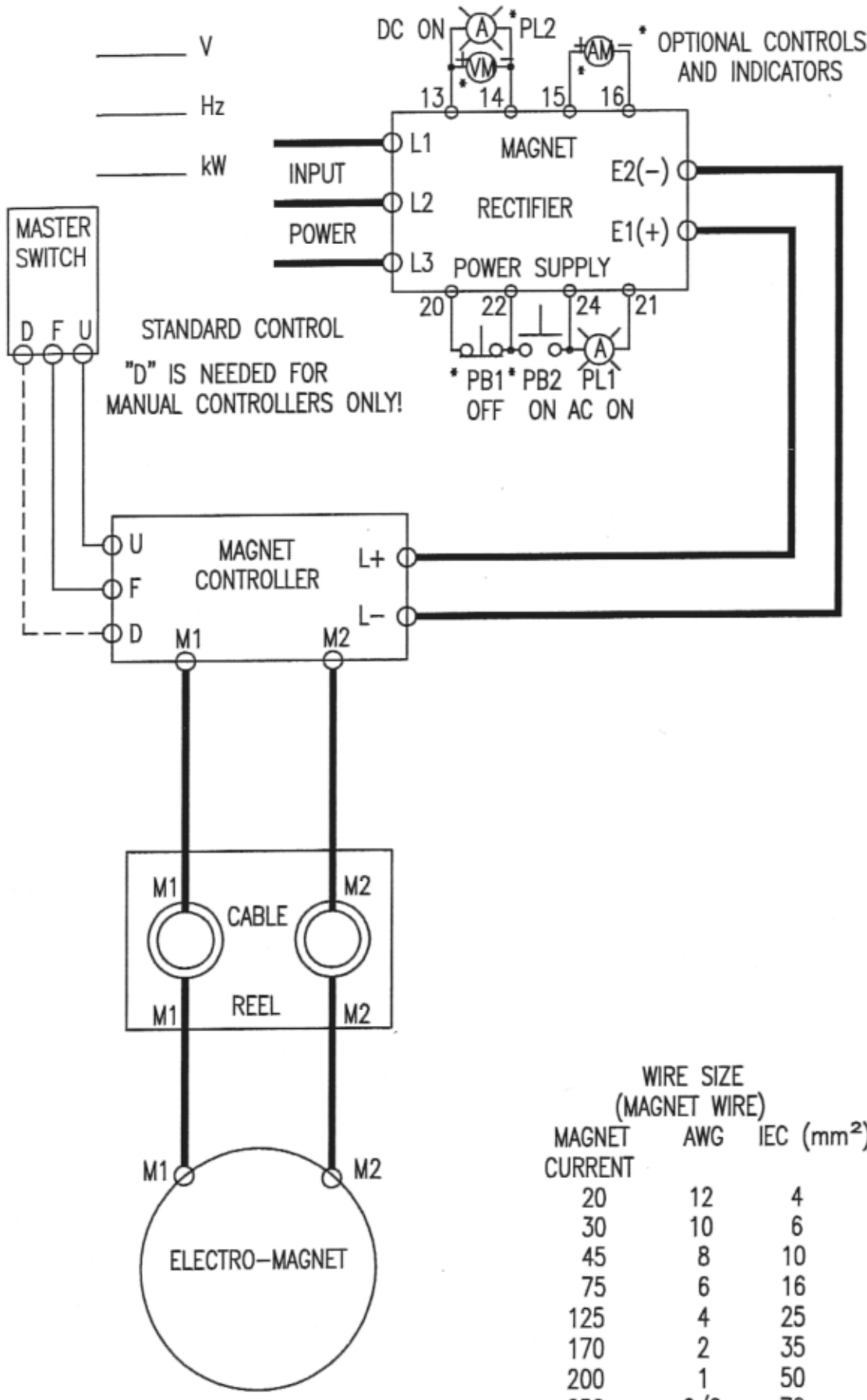


SECTION 2

SYSTEM CONNECTIONS & DETAILS

OHIO MAGNETICS, INC.

Spec Tech Industrial 203 Vest Ave. Valley Park, MO 63088 Phone: 888 SPECTECH
Email: sales@spectechind.com www.spectechind.com



PART: ELECTROMAGNET SYSTEM CONNECTION
 REMARKS: BLOCK DIAGRAM
 DRAWN BY: JPS DATE: 06 FEB 1991
 CHECKED BY: PDS SCALE:
 PART NO: 500A004B1

OHIO MAGNETICS, INC.
STEARNS MAGNETICS
 SUBSIDIARY OF PEERLESS WINSMITH, INC.
 MAPLE HEIGHTS, OHIO

05 FEB 2002	JPS	REVISED	ER-3000-172
02 DEC 1994	JPS	REVISED	ER-3000-148
06 FEB 1991	JPS	REVISED	ER-3000-131

CRANE NO. _____
 MAGNET SIZE _____
 MAGNET SR# _____

DATE _____
 MAGNET RESISTANCE _____

MAGNET	CONTROLLER	GENERATOR	CABLE
<input type="checkbox"/> <u>LEADS:</u> <input type="checkbox"/> Lead Shield tight <input type="checkbox"/> Lead in good condition <input type="checkbox"/> Terminals: good condition, clean, tight <input type="checkbox"/> <u>CHAIN & CHAIN PINS:</u> <input type="checkbox"/> Inspect for wear <input type="checkbox"/> Check pin retainers <input type="checkbox"/> <u>CASE:</u> <input type="checkbox"/> Check for cracks <input type="checkbox"/> Check for minimum of 25 mm or 1" wear surface <input type="checkbox"/> <u>CENTER POLE:</u> <input type="checkbox"/> Check C.P. bolts for tightness <input type="checkbox"/> Check shoe wearing surface (min 25 mm or 1") <input type="checkbox"/> Check for cracks <input type="checkbox"/> <u>COIL:</u> <input type="checkbox"/> Resistance 100% cold to 170% hot <input type="checkbox"/> Ground resistance 100 Ω minimum	<input type="checkbox"/> <u>CONDITION:</u> <input type="checkbox"/> Contact tips <input type="checkbox"/> Arc shields <input type="checkbox"/> Coils <input type="checkbox"/> Pivot pins <input type="checkbox"/> <u>RESISTORS:</u> <input type="checkbox"/> Open <input type="checkbox"/> Burned <input type="checkbox"/> <u>CONNECTIONS:</u> <input type="checkbox"/> Tight <input type="checkbox"/> <u>DIRT:</u> <input type="checkbox"/> Remove from Panel <input type="checkbox"/> <u>COVER:</u> <input type="checkbox"/> Replace <input type="checkbox"/> <u>GROUND RESISTANCE:</u> <input type="checkbox"/> Input terminals <input type="checkbox"/> Magnet terminals <input type="checkbox"/> <u>VOLTAGE:</u> <input type="checkbox"/> No load <input type="checkbox"/> Full load	<input type="checkbox"/> <u>BRUSHES:</u> <input type="checkbox"/> Wear <input type="checkbox"/> Tension <input type="checkbox"/> Arcing <input type="checkbox"/> <u>COMMUTATOR:</u> <input type="checkbox"/> Wear <input type="checkbox"/> High bars <input type="checkbox"/> <u>BEARINGS:</u> <input type="checkbox"/> Lubricate <input type="checkbox"/> <u>ACCESS COVERS:</u> <input type="checkbox"/> Replace <input type="checkbox"/> <u>BELTS (PTO):</u> <input type="checkbox"/> Wear <input type="checkbox"/> Tension <input type="checkbox"/> <u>RHEOSTAT:</u> <input type="checkbox"/> Check for wear or damage <input type="checkbox"/> Adjust to develop 220-240 V full load	<input type="checkbox"/> <u>WIRE SIZE:</u> <input type="checkbox"/> Adequate <input type="checkbox"/> <u>CONDITION:</u> <input type="checkbox"/> Tape or splice worn or frayed portions <input type="checkbox"/> <u>FREE REELING:</u> <input type="checkbox"/> To be free of knots and tangles CABLE REELS <input type="checkbox"/> <u>BEARINGS:</u> <input type="checkbox"/> Lubricate <input type="checkbox"/> <u>GEARS:</u> <input type="checkbox"/> Greased <input type="checkbox"/> <u>SPRING:</u> <input type="checkbox"/> Oil <input type="checkbox"/> <u>TENSION:</u> <input type="checkbox"/> Proper tension <input type="checkbox"/> <u>BRUSHES & RINGS:</u> <input type="checkbox"/> Wear <input type="checkbox"/> <u>INSULATION:</u> <input type="checkbox"/> Brush holder <input type="checkbox"/> Slip rings <input type="checkbox"/> <u>COVERS:</u> <input type="checkbox"/> Replace

INSTRUCTIONS:

Be careful when making measurements with portable instruments. To make resistance and ground readings, the power supply must be turned off.

To measure generator output voltage, connect meter leads to line terminals of the controller. Turn engine "on" and bring up to full speed. With the controller off read voltmeter for no-load condition. Now turn controller on the energize magnet and read voltmeter for full-load readings. Turn controller and power supply off before disconnecting meter leads.

Ohio Engineers are available to discuss any particular maintenance problems by calling 216/662-8484 or writing Ohio Magnetics, 5400 Dunham Road, Maple Heights, Ohio 44137-3687.