

Installation

Electrical requirements

Incoming power

It is the responsibility of the customer to insure that the correct electrical power is available for the machine. AutoBrakes requires 230 vac, three phase electrical power with a ground. The voltage can vary - 5% vac, + 8% vac, 220 - 248 volts.

Prior to delivery and set up, the customer needs to insure that they have the correct electrical power requirements, foundation requirements and that the machine is set in place and bolted to the floor.

1. ☐ Check and record the voltage at the main electrical circuit breaker panel.

L1 to L2	_____	L1 to ground	_____
L1 to L3	_____	L2 to ground	_____
L2 to L3	_____	L3 to ground	_____

Note; these readings must be taken with an A/C volt meter. Using a voltage checker only indicates power, it doesn't give you a correct voltage reading. If you don't have a calibrated volt meter you'll need to have an electrician come in and measure your voltage or you.

If you have a 208 volt system then a set of buck boost transformers will have to be installed to boost the voltage up to 230 vac. See page 1-3 for buck boost requirements

If you have a single phase 220 volt system then a phase converter must be installed. See page 1-4 for phase converter requirements.

Signature of person performing electrical check. _____

Please fax this information to Roper Whitney at (815)962-227 Attn: Service Department.

Please note that having the correct electrical power is the customers responsibility. However, we will assist with any technical information we can.

Electrical requirements continued:

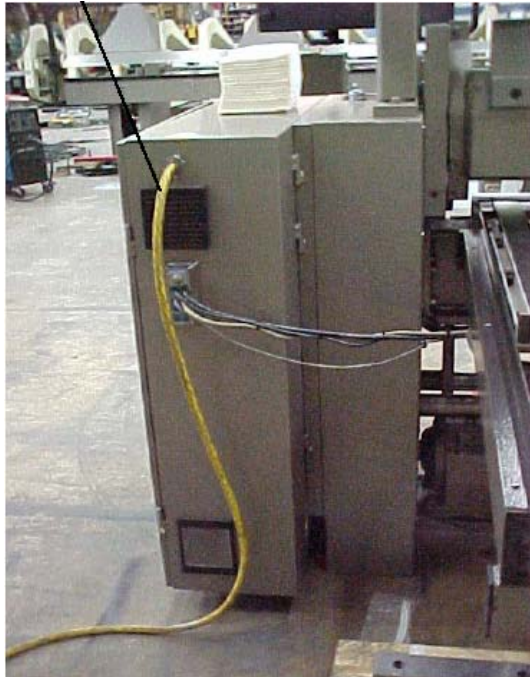
Current requirements:

model	required service	minimum wire size
AB1016 series	15 amp	14 ga
AB1014 series	20 amp	14 ga.
AB1216 series	20 amp	14 ga.
AB1009 series	30 amp	10 ga.
AB1211 series	30 amp	10 ga.

Please note, the wire size will vary depending on the total run from the circuit breaker panel to the machine. The above mentioned wire sizes only apply if the run is 25 feet or less. Please consult the NEC manual for proper wire size on runs greater than 25 feet.

An electrical disconnect must be installed within 10 feet of the machine for maintenance and OSHA requirements.

Electrical power is routed through the back side of the main electrical cabinet. This connection must be flexible to allow opening and closing of the cabinet.



Electrical requirements continued:

Buck/Boost Transformers

During installation there are a couple of conditions that can effect the control system. In some parts of the United States the incoming voltage is 208 vac. If you have a 208 system then a set of Buck/Boost transformer must be installed. Buck/Boost transformer automatically increase or decrease incoming voltage by 10% These voltage limitations are critical due to internal step down transformers. Additionally, low voltage can also have an adverse effect on the power output of the Clamping, Bending and Kombi Beam motors.

Note; if these transformer must be installed they are the responsibility of the customer.

There are several manufactures of these transformers and are readily available across the country.

Recommended manufactures:

Heavi-duty Electric Model HS19F500A	2 required
Acme Electric Corporation Model T-1-81051	2 required
Square "D" Model 500/V46F 6.5 KVA, 15% tolerance	2 required

Electrical requirements continued:

Phase converters:

Phase converters are used when in the incoming electrical power is single phase 220 vac.

Phase converters create an artificial third leg that is synchronized with the other two incoming phases to operate three phase equipment. There are two basic types of phase converters, the rotary converter and the static converter.

The static converter can be used to operate solid state devices such as computers. The rotatory converter is used primary to operate three phase motors. **Under no circumstances ever use a static converter with an inductive motor. Because of inductance feed back the inductive motor will destroy the static converter. The AutoBrake uses inductive motors only.**

Only use rotary converters with the AutoBrake!

We recommend:

Phase-A-Matic
39917 18th Street west
Palmdale, Ca. 93551
(800)962-6976

or

ARCO Electric Products
2325 E. Michigan Rd.
Shelbyville, In.
(800)428-4370

Note; these are not the only manufactures but the customer needs to ascertain that they are compatible with there unit.

Foundation requirements

Model	Weight
AB813K	8,000
AB806K	18,500
AB1014S	7,800
AB1014K	8,200
AB1016	6,500
AB1009K	22,000
AB1210K	23,300
AB1216	9,600
AB1216K	12,000
AB1211K	22,500
AB1311K	24,400

AutoBrakes weighing less than 10,000 pounds can safely be placed on existing concrete floors with a minimum thickness of 4 inches. AutoBrakes over 10,000 pounds should be on floors with a minimum thickness of 8 inches.

An alternative is to install independent pads on undisturbed ground or 80% compacted, using number 6 re-bar with a 6 X 6 grid. The pads should be a minimum size of two feet by four feet. Using independent pads AutoBrakes under 10,000 pounds can be placed on 4 inch thick pads. AutoBrakes over 10,000 pounds can be placed on 6 inch thick pads.

The backgauge support legs do not require any special support or foundation.

Note; these guidelines are minimum recommendations only. Always check and insure that all local codes are being complied with.

Shop air

Note, as of January 2001 all backgauge assemblies have air operated backgauge fingers. The backgauge assembly requires 80 to 100 psi at 10 cubic feet per hour.

We highly recommend that customer in humid areas install water separators and lubricators to prevent internal corrosion of the pneumatic actuators.

Pressure regulator

