

MAC

AUTOMATION CONCEPTS

Owners Information Manual

Retro-Reflective Photo -Eye



FUNCTIONS CAREFULLY

Failure to install and operate MAC products according to our specified instructions could result in equipment malfunction or serious injury. In addition, your warranty may be void if our instructions have not been followed.

Questions? Call Toll-Free 1-800-435-6979

MAC Automation Concepts, Inc., 1760 Kilkeny Ct., Woodstock, IL 60098

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Woodstock, IL 60098
Phone: 815-337-3000
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Dear Valued Customer,

Congratulations on your purchase of one of MAC's many quality engineered products. We're glad that you have chosen us as your exclusive parts handling equipment supplier.

The first step in getting your machine up and running quickly and easily is to read this instruction manual. In it you will find detailed drawings illustrating the parts and components along with information explaining how to properly use your machine. Please read these instructions carefully before attempting to run your machine.

Your machine is covered by our Limited Warranty. Be sure to read our maintenance schedule for proper care of your machine. If you do experience a problem, please call us toll free at 1-800-435-6979.

Remember to call us for all your replacement part needs! MAC Automation sells all of the products and supplies required to maintain your machine!

Thanks again for choosing MAC Automation Concepts!

Sincerely,

Frank Eltvedt

Frank Eltvedt
President and CEO
MAC Automation Concepts, Inc.

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Control System Description

A momentary pulse initiates conveyor motion. An adjustable time delay relay determines the duration of the time the conveyor will run. After the timer completes its cycle, it then stops and awaits the next signal.

System Specification

Input Voltage: 115 VAC 60 HZ Single Phase

Input Current: 5 Amp Fused Main

Component Descriptions

System Control Enclosure (Figure 1.0)

Contains all control wiring and interfaces for the system.

On/Off Selector Switch

The ON/OFF selector switch turns all the power OFF in the control box. This does not mean that incoming line is also turned OFF. To guarantee that there is no power in the control box you must unplug the unit.

Intermittent / Continuous Selector Switch

The INT/CONT selector switch enables the conveyor to run wither continuously or intermittently from the photo eye located at discharge end of conveyor.

Power Cord

This cord brings power into the unit, it is typically 110 VAC.

Control Signal Bulkhead (IF APPLICABLE)

This cord interfaces the conveyor to the production system. The signal tells the control package when to reverse.

Motor Power Cord

This cord brings power to the motor.

Conveyor Speed Pot (Figure 1.1)

Only available on variable speed conveyors. Controls the belt speed.

Figure 1.0

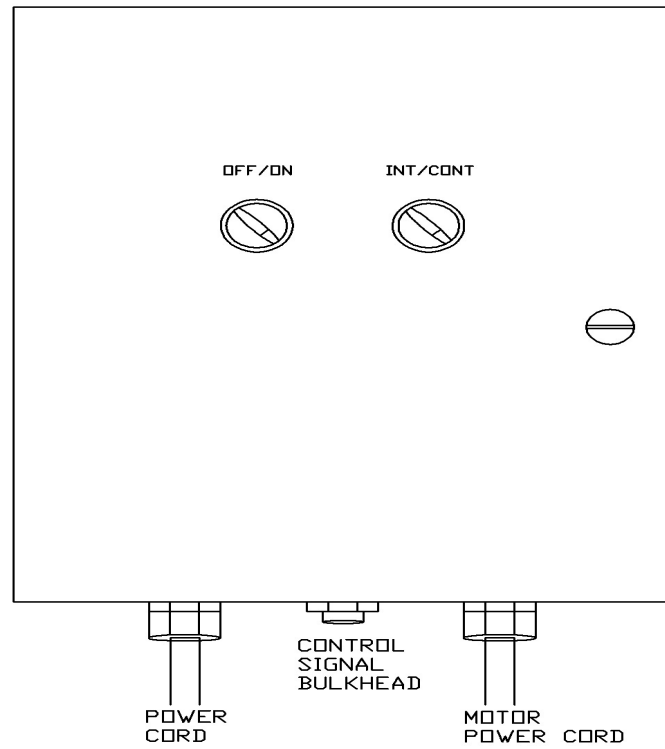
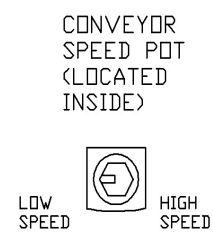


Figure 1.1



Startup Procedure

Hooking the System Up

- 1) If your System Control Enclosure is remote, mount the enclosure in the desired location. Connect the two motor plugs.
- 2) Wire in the Control Signal cable that is provided, into the production equipment according to the schematics. **Warning: Turn off and unplug the power to ensure safety.* Screw on the Control Signal cable into the bulkhead on the System Control Enclosure.
- 3) The main power supplied should be a standard 115 VAC 60 Hz single phase line cord. This should be connected to the appropriate receptacle.

Running the System for the First Time or Restarts

- 1) Turn the selector switch to the On position.
- 2) Adjust the speed on the conveyor with the Conveyor Speed Pot.

System Sequence of Events

With the mode selector switch in INT:

The conveyor will run continuously. The conveyor will stop once the discharge photo eye is cover, once the photo eye is uncover the conveyor will continue to run.

With the mode selector switch in CONT:

The conveyor will run continuously.

Troubleshooting

All systems are functionally checked at the factory prior to shipping. If you should develop a problem with your system, consult the following solutions. If your problem is not listed or persists, please contact Mac's customer service department.

Conveyor does not operate

Step 1

Check the power connections and the main internal and AC motor supply fuses to the conveyor.

Step 2

With a voltmeter check the main power and the AC motor supply. If you have proper voltages, please check the motor. Any further problems, please contact customer service.

Conveyor is running in the wrong direction

Step 1

Make sure that the power is turned off and that the power cord is unplugged.

Step 2

Reverse the black and the white wires off the motor power cord.

Warning: *This is an automatic operating conveyor, great care should be taken when servicing to avoid serious injury, and should only be done by a qualified maintenance technician.*

Before servicing any machine turn off the selector switch to assure there is no electrical power to the system beyond the switch and unplugged the systems power cord assures no power is applied to the system.

Inspect Cords

Visually check for excessive wear, replace as necessary. Following all safety procedures during replacement.

STANDARD CT5 AC FIXED SPEED

PART#	DESCRIPTION	QTY
• 0308	A-B 1492-H6 FUSE TERM BLK	2
• 0628	A-B 1492-M37 FUSE DIVIDER	1
• 39882	CORD, BLACK 12'FT	1
• 42065	HOF ENCLOSURE NEMA 1	1
• 45582	FINDER 95.05SPA 2P RELAY	1
• 45580	FIN 40.52.8.120.000 120V RELAY	1
• 45451	C/H XTMC9A10A SINGLE MS 120AC	1
• 45465	C/H XTOM1P6AC1 1.0-1.6A RELAY	1
• 46634	MOELLER 2-POS LEVER SWITCH	2
• 46638	MOELLER NO CONTACT BLOCK	2
• 46636	MOELLER MOUNTING BASE	2
• 44874	A-B 5M CALBE PE	1
• 45070	A-B PE RETRO-REFLECTIVE PHT	1
• 45589	BAN BRT-THG-3-RRF TAPE	2

CT5 CONTROL VS AC FREQUENCY DRIVE

PART #	DESCRIPTION	QTY
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• 0308	A-B 1492-H6 FUSE TERM BLK	2
• 0628	A-B 1492-M37 FUSE DIVIDER	1
• 39882	CORD, BLACK 12'FT	1
• 42065	HOF ENCLOSURE NEMA 1	1
• 45582	FINDER 95.05SPA 2P RELAY	1
• 45580	FIN 40.52.8.120.000 120V RELAY	1
• 447973	EATON NFXF250A DRIVE 1/4 HP	1
• 46634	MOELLER 2-POS LEVER SWITCH	2
• 46638	MOELLER NO CONTACT BLOCK	2
• 46636	MOELLER MOUNTING BASE	2
• 44874	A-B 5M CALBE PE	1
• 45070	A-B PE RETRO-REFLECTIVE PHT	1
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