

INSTALLATION INSTRUCTIONS

Item #654193 - 7.5 HP 230v #654848 - 10 HP 230v





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IMPORTANT INFORMATION:

Please read these instructions thoroughly before use. Failure to follow instructions may result in equipment damage or failure, losses, injury or death.

Electrical connections to the control panel and proper grounding (properly sized copper conductor from the grounding terminal to the service panel or grounding rod) are to be completed by a licensed electrician and in accordance with the National Electric Code, local codes or ordinances.

A WARNING: A

To reduce the risk of electric shock or injury:

- Install only on a circuit protected by a Ground Fault Circuit Interrupter (GFCI). ALWAYS install an acceptable safety shut-off switch between the main power source and control panel.
- DO NOT operate the control panel if electrical cords are broken or spliced.
- ALWAYS turn off electrical power before installing, removing or servicing the control panel components.
- Control panels must be installed a minimum of 300 mm (12 in.) above the electrical datum plane.
- This control panel is NOT intended for use in swimming areas, or other situations where bodily contact is made with the water. Although the control panel is designed for outdoor use, it should never be submerged in water.

A CAUTION: **A**

To reduce the risk of equipment damage or failure:

- The control panel is NOT submersible; do not place the timer where it might contact or fall into the water.
- DO NOT operate the control panel with a unit that exceeds the maximum voltage indicated by the control panel specifications. Operating with a unit larger than recommended can cause damage to the control panel and will NOT be covered under warranty.

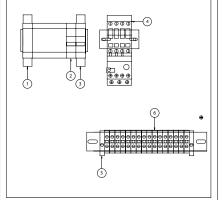
IMPORTANT: Airmax is not responsible for equipment damage or failure, losses, injury or death resulting from failure to follow safety precautions, misuse or abuse of equipment.

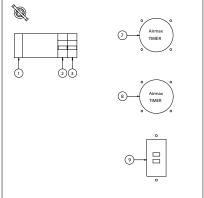
TECHNICAL SPECIFICATIONS:

ITEM NUMBER	VOLTAGE	PANEL DIMENSIONS	MOUNTING DIMENSIONS
654193	7.5 HP 230v	16″w x 17 ¾″h x 8 ½″d	12″w x 18 ½″h
654848	10 HP 230v	16″w x 17 ¾″h x 8 ½″d	12"w x 18 ½"h

7.5 HP 230v PRODUCT CONTENTS:



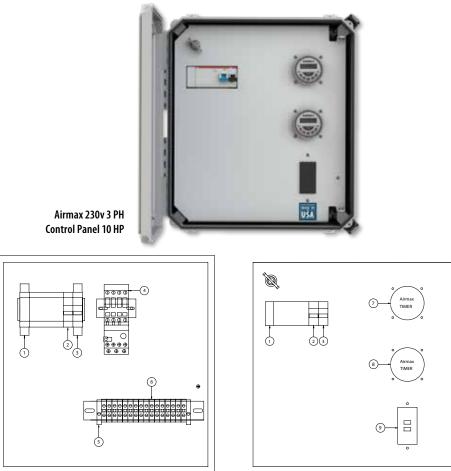




7.5 HP 230v REPLACEMENT PARTS:

ITEM	DESCRIPTION	PART #	ITEM	DESCRIPTION	PART #
1	False Single-Pole Breaker	652049	5 Screw Clamp End Barrier		651942
2	Motor GFCI Breaker 230v	652048	6	Screw Clamp Feed Through 14-3 Gray	652546
	3 Pole (40 Amp)			Screw Clamp Feed Through 8-2 Green	652547
3	Control Breaker 115v Single Pole (5 Amp)	652047	7	Motor Timer	651112
4	7.5 HP Contactor & Overload Assembly, 230v 3 PH	654194	8 Light Timer		651112
			9	Light GFCI	651952

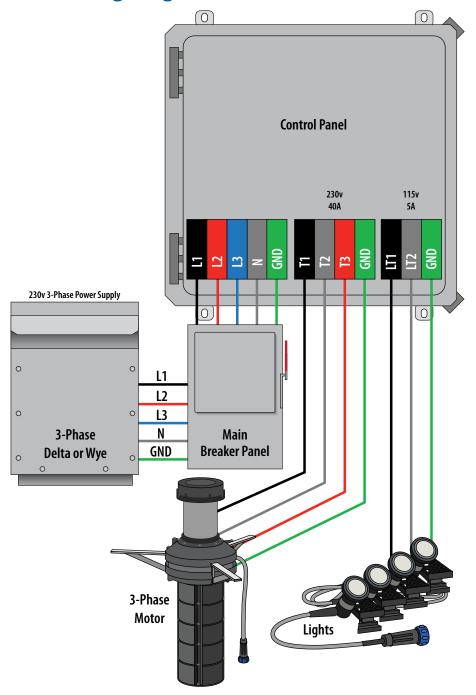
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4	10 HP Contactor & Overload Assembly, 230v 3 PH	654186	8	8 Light Timer	
			9	Light GFCI	651952

Field Wiring Diagram: NOTE: Incoming wire colors will vary by site



7.5 – 10 HP 230v INSTALLATION INSTRUCTIONS:

Airmax Control Panels are designed for outdoor use but should be mounted above any high water levels. Holes should be drilled into the bottom of the control panel for electrical access. We recommend using grommets to protect and seal the electrical access points and to help keep the control panel clean.

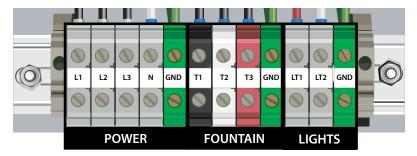
It is recommended that you have 230–253 combined volts on any two of your incoming terminals (L1-L2, L1-L3, or L2-L3). Individually, the incoming power should consist of TWO 120v legs and ONE 208v leg. Excessively high or excessively low voltage could cause potential harm to the control panel or motor components.

CONNECTING ELECTRICAL WIRING:

CONNECT UNIT TO CONTROL PANEL

🛦 WARNING: 🛦

Turn off electrical power before connecting units to the control panel.



Connect to a Fountain:

- Black lead to the T1 feed through
- White lead to the T2 feed through
- Red lead to the T3 feed through
- Green lead to the GND feed through

Connect to Fountain Lights (optional):

- Black lead to the LT1 feed through
- White lead to the LT2 feed through
- Green lead to the GND feed through

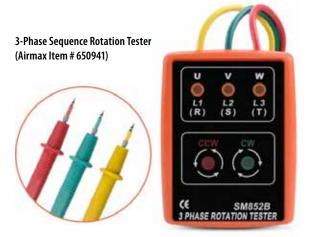
CONNECT CONTROL PANEL TO POWER SOURCE

Connect the following:

- Line 1 (120v) to the L1 feed through
- Line 2 (208v) to the L2 feed through
- Line 3 (120v) to the L3 feed through
- Neutral to the N feed through
- Green to the GND feed through

Checking Incoming Control Panel Wiring for Correct Motor Rotation:

Once all incoming power has been provided for the Airmax 3-phase control panel, one final check for proper motor rotation is key to a successful installation. Using a 3-Phase Sequence Rotation Tester will save time on site. Follow the steps below to check 3-phase wiring.



Step 1: Leave all breakers and timers inside the control panel in the OFF position. There is no need to send power to the motor at this time.

Step 2: Turn the power ON at the main power source (external shut-off switch or main breaker panel).

Step 3: Hold each lead (L1, L2 & L3) from the sequence rotation tester to the corresponding incoming feed throughs on the Airmax control panel.

Step 4: Check the indicator light on the meter.

- a) If the CCW (counterclockwise) indicator is lit, your incoming wiring sequence should be correct.
- b) If the CW (clockwise) indicator is lit, turn the MAIN POWER to the OFF position. This is an indication that the incoming wiring sequence must be adjusted.
 -Adjust incoming wiring so that voltage reads: L1 = 120v, L2 = 208v, L3 = 120v.

NOTE: Airmax 230v 3-phase control panels must register CCW (counterclockwise) on the

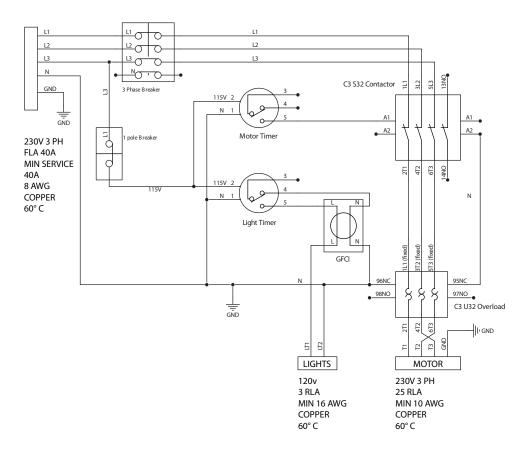
rotation tester AND T1, T2, T3 must be wired according to the color sequence specified on page 5.

For more information and technical specs, visit our Airmax LakeSeries Fountain web page. Please contact Airmax Technical Support at 866-424-7629 or feel free to email us at contactus@airmaxeco.com should you have any questions regarding incoming wiring for Airmax 230v 3-phase fountains.

7.5 HP 230v CONTROL PANEL WIRING SCHEMATIC:

Main Disconnect Supplied and Installed by Licensed Electrician

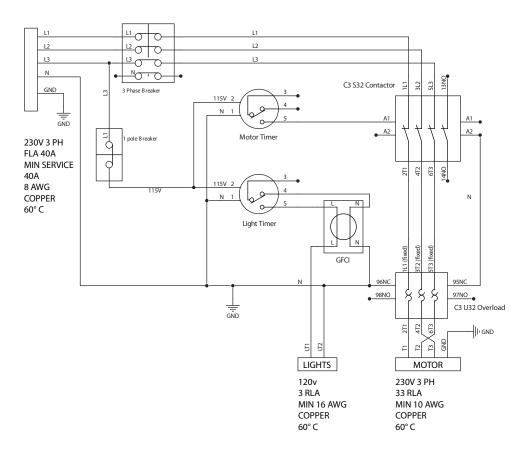
Input Hubs Must Comply With UL 514B
 *Shall Be Provided By Installer



10 HP 230v CONTROL PANEL WIRING SCHEMATIC:

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Maintenance & Operation of the Control Panel Timer:

RUN TIME USING THE MANUAL BYPASS

Press the MANUAL button until the line is above "ON". This mode will bypass all programmed settings. The MANUAL/ON mode can be used if 24/7 operation is desired.

RUN TIME USING A PROGRAM

Setting the Clock

- Step 1: Press the RESET button to clear all history from memory.
- **Step 2:** Press and hold the CLOCK button.
- Step 3: Continue to hold the CLOCK button while pressing the DAY, HOUR or MIN button to set the day and time.
- **Step 4:** Release the CLOCK button.



CREATING A PROGRAM

The Airmax Digital Timer allows up to 16 ON/OFF run times.

Select the days for each run time to occur based on the 15 preset schedule of days shown in the table. (Fig. 1 - on the next page)

Note: Ponds will receive the most benefit from continual water movement. We recommend running fountains at least 8-10 hours daily to maximize benefits, unless a secondary aeration system is in operation.

Step 1: Press the TIMER button once to display "1on --:--"

- **Step 2:** Press the DAY button to scroll through the preset schedule options. *Mode A, MONDAY - SUNDAY, is the default schedule.*
- **Step 3**: When the desired schedule is displayed, press the HOUR or MIN buttons to select the ON time.
- **Step 4:** Press the TIMER button once to switch display to "1off --:--" Programming without inserting an OFF time will also allow the fountain to run 24/7 if desired.

Step 5: Press the DAY button to scroll to the program selected in step 2.

Step 6: Press the HOUR or MIN button to select the OFF time.

Step 7: Repeat steps 1-6 for each additional program desired, up to 16 programs.

- Step 8: When all programs have been created press the CLOCK button to execute the programs.
- Step 9: Press the MANUAL button until the line is above AUTO.

Maintenance & Operation of the Control Panel Timer Cont.:

DAYS FOUNTAIN IS RUNNING									
	a.	MO	ΤU	WE	TH	FR	SA	SU	
	b.	МО							
	c.		TU						
	d.			WE					
	e.				TH				
ES	f.					FR			
00	g.						SA		
PRESET MODES	h.							SU	
	i.	МО	TU	WE	TH	FR			
P	j.						SA	SU	
	k.	МО	TU	WE	TH	FR	SA		
	I.	МО	TU	WE					
	m.				TH	FR	SA		
	n.	МО		WE		FR			
	0.		TU		TH		SA		Fig. 1

EDITING A PROGRAM

Review a Program – To review the list of current programs, press the TIMER button repeatedly to scroll through the programs. When finished press the CLOCK button to return to the time of day.

Change an On/Off Time – To adjust an On/Off time, press the TIMER button to scroll to the program you want to change. Press the DAY, HOUR or MIN buttons to adjust the time. When finished press the CLOCK button to return to the time of day.

Add a Program – If there are not already 16 programs running, you may elect to add an additional program by following the CREATING A PROGRAM procedure.

Remove a Program – In the event that a program needs to be removed, you will need to RESET the timer and program only the desired schedules.

REPLACING THE BATTERY

Note: Timer settings will be retained for approximately 1 minute once the battery is removed. Each timer uses (1) CR2032 Lithium Battery.

Step 1: On the back of the timer, use a small flathead screwdriver or similar tool to pull the battery compartment from the timer. **Step 2:** Install a new battery (print side down) and reinstall the battery compartment.





WARRANTY:

Airmax Control Panels are covered under the system warranty (5 Years – LakeSeries)

THANK YOU FOR CHOOSING: Airmax, Inc.

15425 Chets Way Street, Armada, MI 48005 866-424-7629 | www.airmaxeco.com | contactus@airmaxeco.com

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