



Pool Pump Energy Saver

Installation and Operating Manual for Model: EPIC-PP22



Important!
**Read before commencing any Installation or Operation of your new
*Pool Pump Energy Saver***

Manufactured and Supplied by
Electronic Power Solutions Pty Ltd
Specialists in AC Motor Control and Power Quality
Epic Pump Series *Pool Pump Energy Saver*



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Congratulations – You are about to start making substantial savings on your electricity bill!

Introduction

As the owner of your new **Epic Pump Series Pool Pump Energy Saver** it is important that you read and fully understand the content of this manual before starting any installation or before you operate this unit. This will ensure trouble free operation and ongoing savings on the running cost of your home pool pump - and because incorrect installation or operation will void your warranty, it is worth taking a few minutes to ensure that you understand exactly what to do.

Installation, connection and set-up videos are also available for viewing on our website at www.epicpumpseries.com.au however the videos are not designed to replace this installation and operating manual.

The Epic Pump Series Pool Pump Energy Saver – Some basics

- The Epic Pump Series *Pool Pump Energy Saver* is based on simple and well proven principles to save energy and hence running cost on a standard pump as already successfully applied in industrial installations for many years.
- Developed using the extensive experience in AC motor control and innovative approach of Electronic Power Solutions Pty Ltd, the Epic Pump Series *Pool Pump Energy Saver* has been designed for domestic (home) pool pumps fitted with a single phase 240V AC motor.
- The Epic Pump Series *Pool Pump Energy Saver* is not suitable for three phase pump motors, although Electronic Power Solutions do have a full range of options for these – please contact us for further information on three phase motor control solutions.
- Significant power savings are achieved in your home by electronically reducing the speed of your pool pump motor to below full speed. Even a small reduction in speed will reduce the amount of work done by the pump, which in turn reduces the power the pump motor needs to drive the pump.
- Reduced speed reduces the pump flow proportionally however, as most pool pumps are oversized and work much harder than they need in trying to 'squeeze' more water through the pipe work than the pipes can actually handle, significant energy is wasted in producing normal flow. A small speed reduction provides immediate benefit.
- The reduced pump flow can in almost all cases continue to provide the required amount of filtration within the standard/generally accepted filtration time of usually 2x 4 hrs per day but with much less effort by the pump – resulting in a reduction in power used. We have provided a number of calculators on our website at www.epicpumpseries.com.au to help you to confirm if reduced operating times will still provide the required filtration at your set Energy Savings mode. You may find that you can even reduce the amount of filtration time, saving you further on energy costs.
- There are three (3) Power Save Mode settings on the Epic Pump Series *Pool Pump Energy Saver*, as well as a **Power Save = OFF** setting which can be selected to run the system at full speed for specific (short time) tasks such as back-wash or waste.
- Each **Power Save Mode** selection runs the pump at a different speed – lowest speed occurs at the highest power save mode.



Suitable Pump Motors

Epic Pump Series *Pool Pump Energy Saver* has been designed for control of domestic (home) pool pumps fitted with a single phase 240VAC motor up to 1.8kW (1800 Watts), **not exceeding** 8.1 Amps rated full load current **and** one that is of the Permanent Split Capacitor type. These type of motors are supplied typically on almost all single phase AC operated pool pumps.

Only one motor can be connected to the Epic Pump Series *Pool Pump Energy Saver* at any one time.

Epic is not suitable for:

- Single phase AC motors with a switched winding (centrifugal switch)
- Motors that exceed 1.8kW or 8.1 Amps full load nameplate rating
- Series Motors (eg as used in Ceiling Fans)
- DC Motors
- **ANY OTHER APPLIANCE or MOTOR**

If in any doubt then please contact us before proceeding any further



Receipt of your Epic Pump Series *Pool Pump Energy Saver*

When you receive your new Epic Pump Series *Pool Pump Energy Saver*, you should check for any transport damage on the Unit. If there is transport damage, do not install the Unit and contact us for further advice. Also please refer to the terms and conditions re transport damage and returns.



Installation of the Epic Pump Series *Pool Pump Energy Saver*

(Please also refer to the installation video on our website at www.epicpumpseries.com.au)

Your Epic Pump Series *Pool Pump Energy Saver* can be installed indoors or outdoors, however there are a few basics that must be followed:

1. Select a suitable position on a wall or post as close as possible to the existing chlorinator or timer and ensure that the lead of the Epic Pump Series *Pool Pump Energy Saver* will reach the outlet on the chlorinator or the timer.
Do not use extension leads – these will pose a danger particularly in the vicinity of a swimming pool

Do not mount the Unit in direct sunlight.

Ensure the Unit is installed at least 400mm off the ground to prevent water entry by splashing into the bottom of the enclosure. Also ensure that the Pump Series *Pool Pump Energy Saver* is mounted level.

The unit must be installed vertically with the socket and lead facing the ground.

2. Mark out the four mounting holes on the mounting surface.
3. After marking, check that the mounting feet attached to the Epic Pump Series *Pool Pump Energy Saver* line up with all four marks.
4. If all OK, then drill 4 holes and fix all four feet to the mounting surface, taking some care to check that the unit is level.



Use the 4x stainless steel fixing screws and washers supplied. Also use the masonry plugs supplied for Masonry walls.



IMPORTANT NOTE:

If the supply cord is damaged, it shall only be replaced by the manufacturer in order to avoid a hazard!!! Do not proceed to the next step

Connection of the Epic Pump Series *Pool Pump Energy Saver*

1. **STOP** your Pool Pump if this is running
2. Turn power to your existing Timer or Chlorinator to **OFF**
3. **UNPLUG** the pool pump from your Timer or Chlorinator



4. **PLUG** the pool pump into the three-pin socket at the base of your Epic Pump Series *Pool Pump Energy Saver*

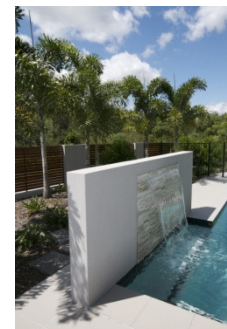
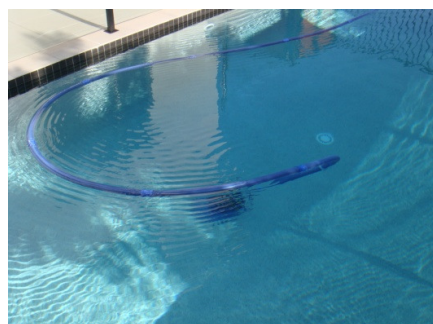


5. **PLUG** the lead of your new Epic Pump Series *Pool Pump Energy Saver* into your Timer or Chlorinator (where your pump was originally plugged into)



5. Turn Power to Timer or Chlorinator back on
6. Turn your existing Timer or Chlorinator to **MANUAL**

A video demonstrating the above steps is available to view at www.epicpumpseries.com.au)





Setting up Epic Pump Series Pool Pump Energy Saver

Now that your Epic Pump Series *Pool Pump Energy Saver* has been fixed to the wall and it is connected to your Chlorinator or Timer, it is time to start saving money on your power bill. There are a few simple set-up steps as follows – you can also watch the video on our website www.epicpumpseries.com.au).

1. When you switch the Timer or Chlorinator to Manual, your Epic Pump Series *Pool Pump Energy Saver* should start your pool pump and run this up to full speed and then run through its Priming sequence.

The digital display will indicate
for approximately 2 minutes

Pump Prime Cycle

2. Once the Prime Cycle is completed
the digital display will then indicate

Power Save= OFF

Your Epic Pump Series *Pool Pump Energy Saver* is now running the Pool Pump Motor at full speed. At this point you will not be saving any power so you should **now select the desired Power Savings Mode** most suitable for your pool.

3. To select the required **Power Save Mode**, push the Mode Select Button once on the front panel of your Epic Pump Series *Pool Pump Energy Saver*.



- 4.






The digital display will now show:

Power Save= LOW



5. Each time you push to select (step 3, above) you will **change the Power Save Mode**

| | | |
|---|-----------------------------|---------------------------|
|  | MEDIUM, | Power Save= MEDIUM |
|  | HIGH | Power Save= HIGH |
|  | To go back to OFF | Power Save= OFF |

6. Once the required Power Save mode has been selected, switch your existing Timer or Chlorinator to **Auto Operation**.

The Epic Pump Series *Pool Pump Energy Saver* will run at the last selected mode every time the Epic Unit is started and after the Pump Prime Cycle has been completed.

For example if you have selected **Power Save = High** the Epic Unit will go through the Pump Prime Cycle for approximately 2 minutes and will then run at this Power Save Mode each time the Epic Unit is started up by the Timer or Chlorinator.

You can change the Power Save Mode at any time whenever the system is running.

7. Please take note that if your pool uses a salt water chlorinator that the chlorinator cell is fully immersed at the selected Power Savings Mode. If the cell is not covered during normal operation you must select a lower Power Savings Mode setting (higher flow rate) - This will increase the pump flow to ensure the electrode is fully covered.



Basic Trouble Shooting Guide

| Problem | Actions |
|--|--|
| 1. Pump does not Run | <ul style="list-style-type: none"> - Check that the Power is ON. If power is OFF, check: <ul style="list-style-type: none"> a) that power point is switched on b) that the power point is not on a different tariff that may have been switched off by the supply authority control system (eg off peak supply) If the power is off and you are not sure why, then please contact your local electrician. - If the Power is confirmed On, check that all leads are plugged in correctly – ie Pump is plugged properly into Timer or Chlorinator, and Timer/Chlorinator is plugged properly into the supply power point. - If the power is ON and if you have a Timer on your pool system, check if the Timer is set to Auto or Manual. If in Auto, switch the Timer from Auto to Manual. If the pump runs in Manual, then the Timer has stopped the Pump in Auto mode. Switch the Timer back to Auto and wait for Timer to switch the pump on automatically at the set “On” time. <p>If the pump does not run go to Problem step 2, below.</p> <ul style="list-style-type: none"> - If power is ON and you have a Chlorinator that controls your pool, check that the Chlorinator is ON and if in Auto or Manual mode. If in Auto, select Manual. If the pump runs in Manual, then the Chlorinator has stopped the Pump in Auto mode. Switch the Chlorinator back to Auto and wait for pump to switch on automatically at the set “On” time. <p>If the pump does not run go to Problem step 2, below.</p> |
| 2. Pump still does not run | <ul style="list-style-type: none"> - Stop the system by switching the Timer or Chlorinator to OFF - Unplug the Epic Unit – wait two minutes and plug back in. Run the Pump with Timer / Chlorinator on Manual – If the Pump runs OK, switch Timer or Chlorinator back to Auto and wait for system to start automatically at the set start time. |
| 3. Still not fixed | <ul style="list-style-type: none"> - Unplug Epic Unit - Plug Pump directly into Timer or Chlorinator. If the Pump starts and runs OK, there could be a fault with your Epic Unit. Please contact Electronic Power Solutions for further advice and instructions. |
| 4. Pump still does not Run when plugged directly into the Timer or Chlorinator and manually switched to ON. | <ul style="list-style-type: none"> - Problem is external to the Epic Pump Series <i>Pool Pump Energy Saver</i> – Please contact your pool maintenance company for further advice. |

Warranty



Please consult with Electronic Power Solutions Pty Ltd before returning any product for Warranty.

Please also read and understand the Warranty Terms and Conditions in full, which are to be read in conjunction with and as part of the Electronic Power Solutions Pty Ltd Terms and Conditions of Sale.

Main Points of the Warranty Policy:

- The Epic Pump Series *Pool Pump Energy Saver* has a 12 month Warranty.
- The Warranty covers mechanical or electrical failure due to bad workmanship or faulty components.
- After consultation with Electronic Power Solutions Pty Ltd, the complete Epic Unit must be returned to us along with proof of purchase.
- You pay for the cost of freight when sending the Epic Unit back to us. We pay for the return freight to you, provided the warranty claim is valid and approved by Electronic Power Solutions Pty Ltd – otherwise all freight costs will be payable by you.
- Unless agreed otherwise, all warranty work will be carried out at our factory.
- Subject to inspection and determination of the cause of failure upon receipt of the faulty Epic Unit by us, the Epic Unit will be repaired or replaced at the sole discretion of Electronic Power Solutions Pty Ltd.
- Valid Warranty repairs will be done free of charge. No replacements will be provided without the return of the defective Epic Unit and no work will commence without proof of purchase of the Epic Unit.
- The Warranty will not be valid (ie will be voided) if failure of the Epic Unit has occurred due to incorrect installation, incorrect connection, misuse, abuse, negligence, modification or adjustment, accidental damage, normal wear & tear or incorrect operation or operation other than the intended use and within the rating limit as detailed in the Installation and Operational Manual, or if the Epic Unit has been repaired or attempted to be repaired or serviced or attempted to be serviced by anyone other than Electronic Power Solutions Pty Ltd.
- No warranty of accuracy is given concerning the contents of the information contained in this manual. To the extent permitted by law no liability (including liability to any person by reason of negligence) will be accepted by EPS, its subsidiaries or employees for any direct or indirect loss or damage caused by omissions from or inaccuracies in this document.
- EPS reserves the right to change details in this publication without notice.

IMPORTANT NOTE:

If the supply cord is damaged, it shall only be replaced by the manufacturer in order to avoid a hazard!!!



| Revision History Table | | |
|------------------------|----------|--|
| Date | Revision | Revision Comments |
| December 2010 | 1 | Initial Version |
| September 2011 | 2 | Safety note re Cord Damage added |
| October 2011 | 3 | Text Correction in mounting Instructions |
| March 2012 | 4 | Text corrections and new Photo |
| September 2015 | 5 | Revised Warranty |



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