ASTRALPOOL ®

Liquid Pool Blanket
Auto Doser
Models RC1 TC & RC5 TC

INSTALLATION AND

OPERATING INSTRUCTIONS

A division of

FLUIDRA

INDEX

1.0 INTRODUCTION

Congratulations on your purchase of an Astral Pool RolaChem Liquid Pool Blanket Auto Dosing System. The Auto Dosing System is designed to accurately meter and dose your liquid pool blanket at as close as possible to the correct level each day and maintain your liquid pool blanket level in your pool to minimise evaporation. By minimising your evaporation, you pool will use substantially less water, save chemical costs and reduce heating costs.
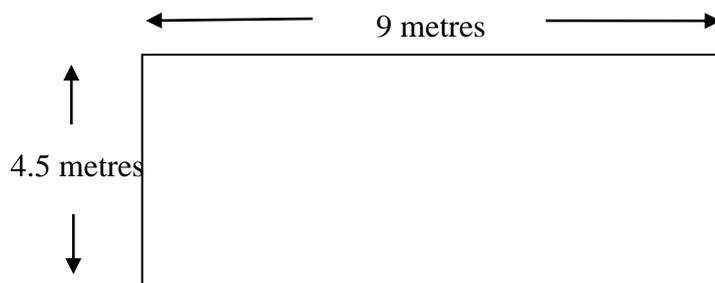
The RC 1 TC is designed for swimming pool with a surface area up to 105 square metres and the RC 5 TC is designed for commercial swimming pools with a surface area of up to 1250 Square Metres. Special models can be designed and manufactured for swimming pools outside of these dimensions.

Note: The RolaChem dosing unit is not intended for use by young children or infirm persons without supervision. Please ensure that young children are supervised to ensure that they do not play with the Chlorinator.
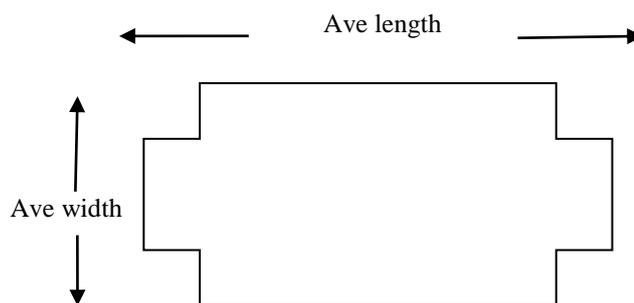
2.0 SURFACE AREA CALCULATION

To calculate the surface area use the following formulas:

Square or Rectangular Pools

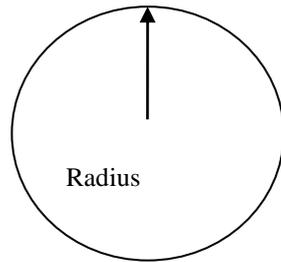Pool size is calculated by multiplying the length by width. 9 x 4.5 = 40.5 m2.

Free Form Pools

Pool size calculated by multiplying the length by the average width. If the narrow end was 3 meters wide and the large end was 5 meters assume an average width of 4 meters.
Assuming a length of 8 meters the equation would be 8 x 4 = 32m2.

Round Pools

The surface of round pools is calculated using formula PiR2. Pi equals 3.14 and the radius is half the diameter of the pool. Therefore, a round pool with a diameter of 6 meters would have the following equation
3m (radius) x 3m x 3.14 = 28.26m2.

3.0   INSTALLATION

The Rola Chem Dosing Control Box must be mounted on a fixed wall out of direct sunshine or rain.
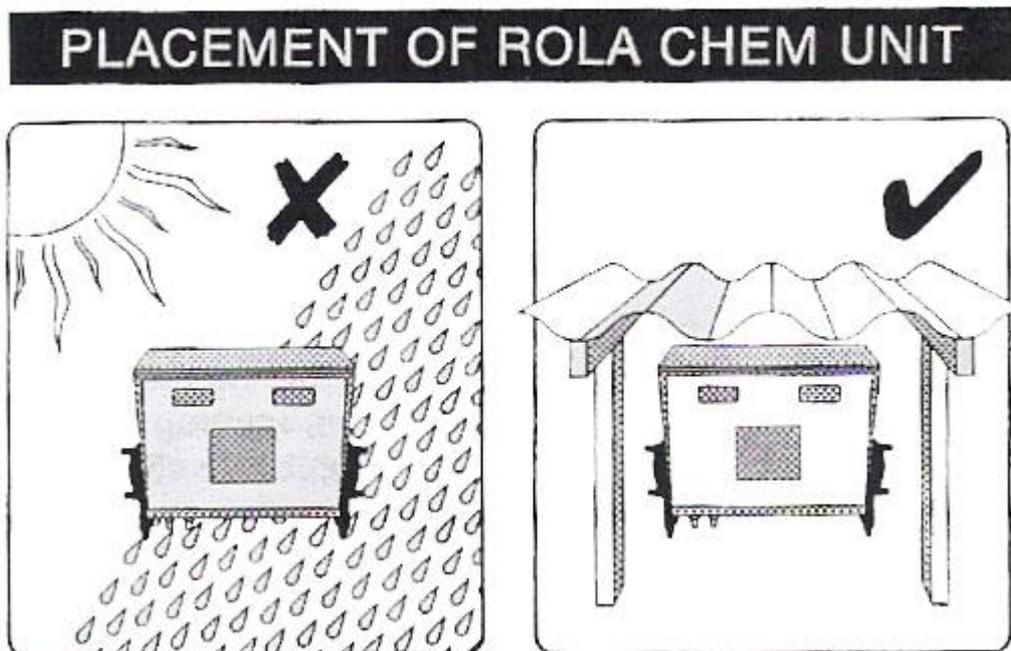Mount 1.0 m above ground level to prevent splash back from rain and sprinkler systems
Mount a minimum of 3.5 metres from pool water's edge
If installed outdoors, ensure control box is mounted under eaves or suitable enclosure protecting it from rain, water, or direct sunshine
If installed outdoors ensure unit is plugged into a weather proof 240 Volt 10 amp power point.
The dosing unit and the bottle of liquid blanket must be installed a minimum of 1500mm from any source of ignition or gas appliance
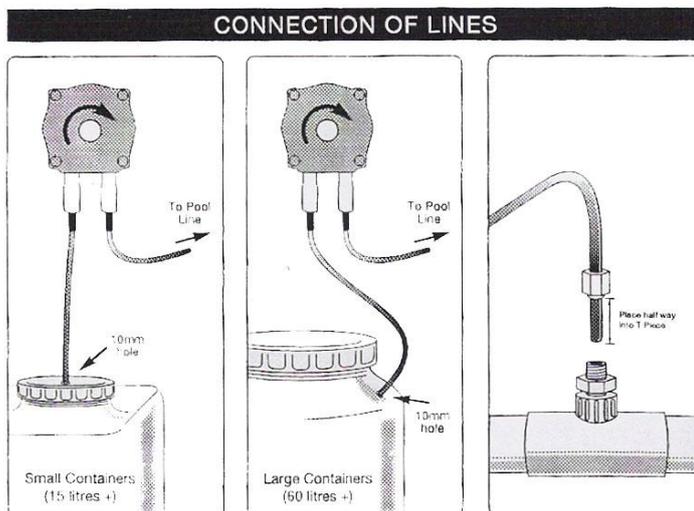

Before installing the unit in position on the wall or post, the length of dosing tube provided should be measured and taken into consideration.   To avoid loss of water from the system, close all stop valves before cutting any lines.

Connection of Lines:
Install the "T" pieces into the "return" line. Cut an appropriate piece out of this line and glue the "T" piece in position, using a PVC adhesive. Thread the dosing tube through the hole in the cap or shoulder of the chemical container and fit the non return of check valve and the weight. Ensure that the non-return or check valve is fitted correctly (arrow indicates the direction of flow). Drop the weight, with the non-return valve into the bottom of the container.
Tip: Soaking the ends of the dosing tube in hot water or gentle heating with a lighter makes it easier to push onto the barb.

Important: Rola Chem pumps dose against a maximum pressure of 150 kPa, avoid excessive pressure situations such as In floor cleaning systems operating from the same return line. In this case, install the Dosing "T" piece in front of Pool Pump.

4.0   OPERATION

The Rola Chem Liquid Pool Blanket Dosing system is simple to operate.

Starting for the first time

1. Turn power supply on.
2. Set Time Clock to current time.
3. ENSURE Rola Chem Time clock and Filter Pump Time clock are exactly synchronised.
4. Put time clock on manual until Liquid Pool Blanket is pumped through the clear dosing tube to the injection "T".
5 **Switch time clock back through to OFF POSITION (Pump should now be off) now switch to Auto Position.**

Failing to cycle the time clock through to the OFF POSITION before switching to AUTO will leave the PUMP RUNNING and will empty the ACID Drum in a very short period of time.

Setting Operating times.

In order to gain the most benefit from your Liquid Pool Blanket it is important to dose into the pool at the end of the last filtration cycle each day This allows the maintenance dose to be fed into the pool and then settle on top of the pool water without ongoing disturbance by pumps or other activities.

The following tables indicates how many minutes each day the Rola Chem Dosing system should operate for your size pool.

Domestic Pools

Length	Width	Surface Area	Required Daily Dose (ml)	Operation period in minutes per day
RC 1 TC				
4	4	16	12	4
6	4	24	18	5
7	3.5	24.5	19	6
8	4	32	24	7
9	4.5	40.5	31	9
10	5	50	38	11
12	6	72	55	16
15	7	105	80	24

Commercial Pools

Length	Width	Surface Area	Required Daily Dose (ml)	Operation period in minutes per day
Commercial Pools				
RC 5 TC				
20	10	200	152	10
25	10	250	190	13
25	12	300	228	15
50	25	1250	950	63

Setting timer on period:
1. Establish when your filter pump turns off at the end of each day.   Most domestic swimming pools are set to have two filtration periods each day eg: (8am to 12 midday and 4pm to 8pm)
2. Establish the number of minutes your Rola Chem needs to operate each day from the above tables. (Eg: A 40.5 Square Metre pool requires the RC 1 TC to operate for nine minutes each day.
3. Set the timer on the Rola Chem to come on 9 minutes before the filter pump turns off at the end of the day (eg: 7.51pm)
4. Set the timer on the Rola Chem to turn off the same time as the filter pump turns off (eg: 8pm)
5. **Once you have finished programming the timers, it is essential that you cycle the time-clock through to the OFF POSITION (ensure pump is OFF) before going to the Auto position. The dosing motor should now be off. (unless unit is in a timer cycle)**

Failing to cycle the time clock through to the OFF POSITION before switching to AUTO will leave the PUMP RUNNING and will empty the ACID Drum in a very short period of time.

Your Rola Chem will now automatically dose the correct level of Liquid Pool Blanket each day at the most effective time.

5.0   MAINTENANCE

On going maintenance will ensure the best performance and a high degree of reliability from your Rola Chem Liquid Pool Blanket Dosing System.

1. Keep Rola Chem control box free of debris, leaves and insects. It is a good idea to spray surface insect repellent around the wall, box and box of the Rola Chem every three months to reduce the chance of ingress by insects.
2. Check your Liquid Pool Blanket container level each week to ensure there is sufficient liquid to last another week.
3. Once every 12 months, grease the Rollers and Tubes in the Rola Chem pump with Silcone based grease to reduce wear on the dosing tube.
4. A greased and well maintained tube should last 3 to 5 years but will then need to be replaced. Periodically, check dosing tube for cracks or leaks.

ONE YEAR LIMITED WARRANTY

GENERAL CONDITIONS

Astral Pool covers your Rola Chem Liquid Pool Blanket Doser with a limited 1 year warranty against defective materials and workmanship from the date of purchase (plus 30 days to allow for installation).   Proof of purchase date must be provided in order to substantiate warranty claim.

The warranty includes 12 months in field labour costs where the Rola Chem is installed in a capital city metropolitan area.   Labour charges apply to units installed outside of these areas.   Any costs for transport of faulty or replacement parts, removal or reinstallation are the owner's responsibility.

Astral Pool assumes no liability for consequential damages of any kind.

Like your motor vehicle, your new Rola Chem requires periodic service and maintenance to keep it operating in top condition and at maximum efficiency. An annual service by one of our qualified service technicians is highly recommended. Replacement of maintenance items are not covered by this warranty.

LIMITATIONS

All warranties only apply if the Rola Chem is installed and operated in complete compliance with the installation and operating instructions. The warranty shall not apply to any Rola Chem unit or parts that have been subject to accident, negligence, alteration, abuse or misuse.

No person is authorised to make any warranties on Hurlcon's behalf.   To place a service call, contact your nearest Astral Pool office.
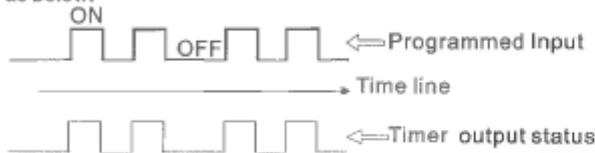
GENERAL INFORMATION

This Panel-Mount Digital Timer series can be operated in 4 separate power supplies, ranges from 240 Vac to 12 Vdc. Output format can be produced to be Volt-free or voltaic-ouput.

Batteries of Lithium CR2032 or rechargeable V80H available for option which is for retaining the programing during Timer's operating power disconnected.

TM-619-series

This Digital Timer is accurate to the minute, designed with either 6 or 8 ON/OFF(event) per day Graphic description, as below:
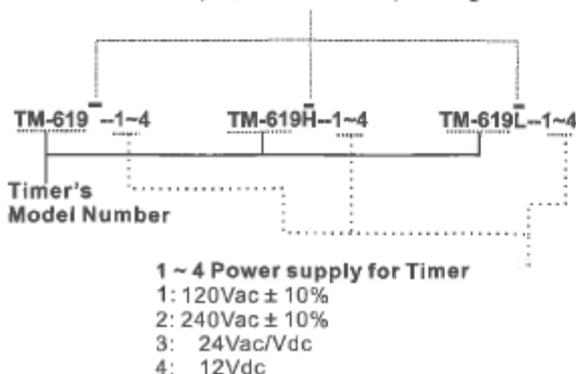

Also, it provides 15-combination of Daily-Programs which can lead great convenience to users upon choosing the required days in a week for operating the timer.

1. MO	TU	WE	TH	FR	SA	SU
2. MO						
3.	TU					
4.		WE				
5.			TH			
6.				FR		
7.					SA	
8.						SU
9. MO	TU	WE	TH	FR		
10.					SA	SU
11. MO	TU	WE	TH	FR	SA	
12. MO	TU	WE				
13.			TH	FR	SA	
14. MO		WE		FR		
15.	TU		TH		SA	

DESCRIPTIONS TO MODEL CODE

1.12H or 24H clock format 2. 6 or 8 on/off per day
3.Lithium CR2032 or rechargeable V80H batteries above 3 items are prefixed at production.

     : Volt-Free contact, 250Vac/16Amp Rating
H : Volt Output, 250Vac/20Amp Rating
L : Volt Output, 250Vac/16Amp Rating

TM-619 --1~4   TM-619H--1~4   TM-619L--1~4

Timer's Model Number

1 ~ 4 Power supply for Timer
1: 120Vac ± 10%
2: 240Vac ± 10%
3: 24Vac/Vdc
4: 12Vdc

PROGRAMMING THE TIMER #1

A. Functional description to buttons on panel
  1. **TIMER** : Programs review & setting programs
  2. **MANUAL** : To select "ON,AUTO or OFF"
  3. **CLOCK** : To adjust current DAY and TIME
  4. **Day** : To adjust day of week
  5. **HOUR** : To adjust Hour
  6. **MIN** : To adjust minute
  7. ® : Reset Timer's setting
  8. **LED** : To indicate ON/OFF status

Press ® button to reset Timer before programming

B.Adjusting CLOCK

Press and hold **CLOCK** and then press **DAY** key, **HOUR** key, **MIN** key respectively to adjust clock of Timer to accurate **DATE**, **HOUR, MINUTE**. In 12-Hour-Format, **PM & AM** shall appear on LCD screen. In 24-Hour-Format LCD screen shall indicate 0:00 ~23:59

C. Start to programming the TIMER
1. Press **TIMER** key. LCD screen shall show

        1^{ON} -- : -- --

2. Press **DAY** key to select any of 15-combination of Daily-Programs to your application demand. Continuing to press **DAY** key, LCD shall alternating indicate among 15-combinations.

3. Press **HOUR** , **MIN** respectively to set desired Hour and Minute for 1^{ON}

4. After finished setting of 1^{ON}, Press **TIMER** key again, 1^{OFF} -- : -- -- shall appear on LCD screen.

5. Press **DAY** key to select any of 15-combination of Daily-Programs to your application demand. Continuing to press **DAY** key, LCD shall alternating indicate among 15-combinations.

  Day-combination chosen in each of ON/OFF program-period must be consistent.

6. Repeat Programming procedure "**3** " to set desired Hour & Minute for 1^{OFF}

7. When finished setting 1^{ON} & 1^{OFF}, Press **TIMER**, 2^{ON} -- : -- -- shall appear on LCD screen.

8. **Repeat programming procedure above** to complete rest of ON/OFF program-period(event)

  1^{ON}-- : -- ⇒ 2^{OFF}-- : -- ⇒ ● ● ● ● ● 8^{OFF}-- : -- --

or just to the desired number of ON/OFF(event) setting for demand of practicable application.

  1^{ON}-- : -- ⇒ 1^{OFF}-- : -- ⇒ 2^{ON}-- : -- ● ● ● ● ● 5^{OFF}-- : --

9. When finished program-setting(event), press **CLOCK** , Timer shall start to execute programs.

D. To review programs
Keep to press **TIMER** , display on LCD screen shall alternating display among each of **6 or 8 ON/OFF**

PROGRAMMING THE TIMER #2

E. How to use OVERRIDE functions
619-programming-modeTimer is designed with **2** Override function, so as to widen its usage upon practicable application. Override function **is effective only** when Timer is running **under AUTO mode.**

Temporary-Override --- Follow procedure below:

Condition-1 When Timer's output status is **"ON"** Pressing **MANUAL** key, to move indicator from "AUTO " to "OFF", Timer output shall turn to "OFF" status, programs overrided. Pressing **MANUAL** again to switch Timer status to "AUTO ", Timer's output shall continue maintaining "OFF ". Timer shall resume its automatic operation when next program(event) calls for "ON". (With next opposite set point).

Condition-2 When Timer's output status is **"OFF"** Pressing **MANUAL** key, to move indicator from "AUTO " to "ON", timer output shall turn to "ON" status, programs overrided. Pressing **MANUAL** again to switch Timer status to "AUTO ", Timer's output shall continue maintaining "ON ". Timer shall resume its automatic operation when next program(event) calls for "OF ". (Until next opposite set point)

Random-Start-Up Override – Press and hold **DAY** key and then press **MIN** key. There shall be a symbol ⊓⊓ shows on left corner of LCD screen, to indicate this Override in executing.

When this Override is being executed, the original programs will be stopped, and once every 10 to 120 minutes Timers shall automatically turn its output to "ON" status.

In practicable application which is applied to home-use, this Override function also called Anti-Burglar Override.
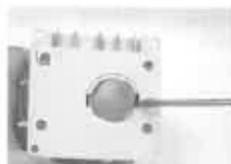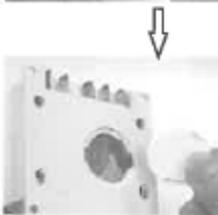
Once again to press and hold **DAY** key, and then press **MIN** key shall terminate this Override.

HOW TO REPLACE BATTERIES

For Model with Lithium CR2032

← To replace Battery

PROPOSED APPLICATION

⚠ **DANGER** ⚠

Electric Shock Or Fire Hazard

READ ALL PRECISION & VOLTAGE REQUIREMENT AND SAFETY DATA AVOID PROPERTY DAMAGE AND PERSONAL INJURY

Output terminal of Timer is produced with Flat-head Jack-Type socket to provide convenient electrical wiring upon mounting Timer on equipments.
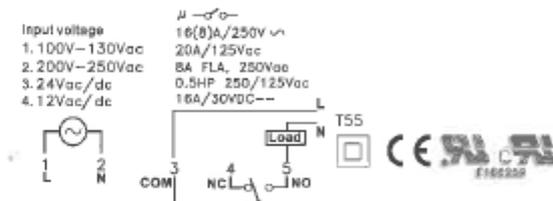
Subject to output formats and formats of Contact Rating, there are 3 different styles in TM-619-series.
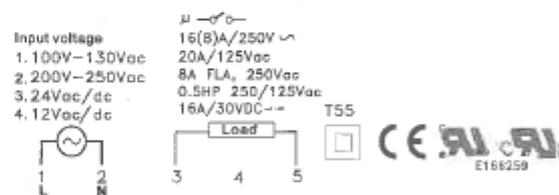
Remark:
1. For voltage and electrical RATING information, please refer to the markings on the back of timer.
2. See the back of timer for proper wire connections.
3. Timer may need to be connected to power source in order to set the program.

Follow graphic description below & Refer to section of **Descriptions to Model Code** on this instruction-sheet upon proceeding electrical wiring.
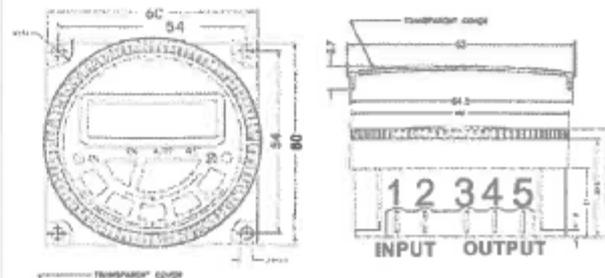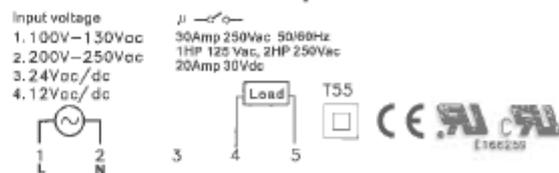
1. TH-619 - 1~4   Volt Free output

Input voltage
1. 100V–130Vac
2. 200V–250Vac
3. 24Vac/dc
4. 12Vac/dc

16(8)A/250V
20A/125Vac
8A FLA, 250Vac
0.5HP 250/125Vac
16A/30VDC––

2. TH-619L - 1~4   Volt output

Input voltage
1. 100V–130Vac
2. 200V–250Vac
3. 24Vac/dc
4. 12Vac/dc

16(8)A/250V
20A/125Vac
8A FLA, 250Vac
0.5HP 250/125Vac
16A/30VDC––

3. TH-619H - 1~4   Volt output

Input voltage
1. 100V–130Vac
2. 200V–250Vac
3. 24Vac/dc
4. 12Vac/dc

30Amp 250Vac 50/60Hz
1HP 125 Vac, 2HP 250Vac
20Amp 30Vdc

B1-61900-003B0
VER:20091112

INST233

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Sydney Moorebank
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Moorebank NSW 2170
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13 William Street
Mile End South SA 5031
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