ULTRAVIOLET WATER STERILIZER

OWNERS MANUAL

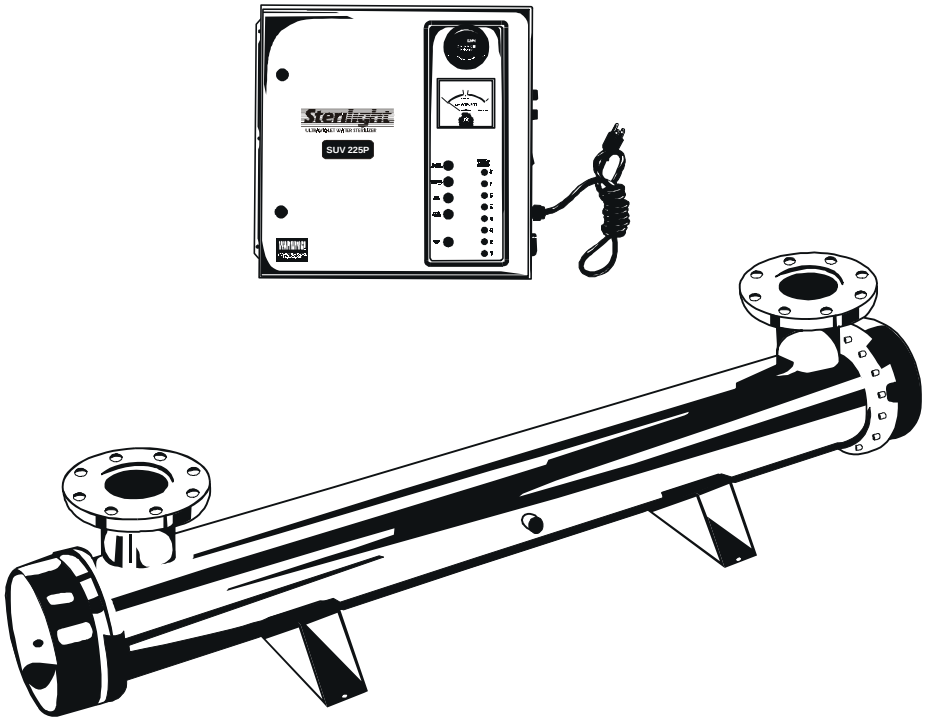
SUV 24P

SUV 40P

SUV 65P

SUV 100P

SUV 225P



Manufactured in Canada by:

R-can ENVIRONMENTAL INC
425 Clair Road West., P.O. Box 1719
Guelph, Ontario, Canada, N1H 7X4
Phone (519) 763-1032
Fax (519) 763-5069
http://www.r-can.com
e-mail: water@r-can.com

CE P/N 520023

TABLE OF CONTENTS

Warning Statement 2
Safety Instructions 3
Standard Electronics ..... 4 - 5
Product Application ..... 6 - 7
Installation ..... 7 - 8
Maintenance 8
Quartz Sleeve/Lamp Replacement ..... 8 - 9
Replacement Parts List ..... 9 - 10
Warranty 10
Technical Specifications 11
Wiring Diagram 12
SUV 24P/SUV 24PM Installation Drawing 13
SUV 40P/SUV 40PM Installation Drawing 14
SUV 65P/SUV 65PM Installation Drawing 15
SUV 100P/SUV 100PM Installation Drawing 16
SUV 225P Installation Drawing 17

WARNING

AS ULTRAVIOLET LIGHT CAN CAUSE SERIOUS BURNS TO UNPROTECTED EYES AND SKIN, PROPER PRECAUTIONS MUST BE TAKEN WHILE WORKING ON THIS EQUIPMENT. NEVER LOOK DIRECTLY AT A BURNING UV LAMP, WEAR PROTECTIVE EYEWEAR AND PROTECT THE SKIN FROM EXPOSURE. ALWAYS DISCONNECT POWER SOURCE BEFORE WORKING ON THE STERILIZER TO PREVENT INJURY OR DAMAGE TO THE EQUIPMENT.

SAFETY INSTRUCTIONS

WARNING - to guard against injury, basic safety precautions should be observed, including the following:

1. READ AND FOLLOW ALL SAFETY INSTRUCTIONS.
2. DANGER - To avoid possible electric shock, special care should be taken since water is present near electrical equipment. Unless a situation is encountered that is explicitly addressed by the provided maintenance and troubleshooting sections, do not attempt repairs yourself, refer to an authorized service facility.
3. Carefully examine the water sterilizer after installation. It should not be plugged in if there is water on parts not intended to be wet.
4. Do not operate the water sterilizer if it has a damaged cord or plug, if it is malfunctioning or if it is dropped or damaged in any manner.
5. Always disconnect water flow and unplug a water sterilizer before performing cleaning or maintenance activities. Never yank the cord to remove from an outlet grasp the wall plug and pull to disconnect.
6. Do not use this water sterilizer for other than intended use (potable water applications). The use of attachments not approved, recommended or sold by the manufacturer / distributor may cause an unsafe condition.
7. Intended for indoor use only. Do not install this water sterilizer where it will be exposed to the weather or to temperatures below freezing. Do not store this water sterilizer where it will be exposed to the weather. Do not store this water sterilizer where it will be exposed to temperatures below freezing unless all water has been drained from it and the water supply has been disconnected.
8. Read and observe all the important notices and warnings on the water sterilizer.
9. If an extension cord is necessary, a cord with a proper rating should be used. A cord rated for less Amperes or Watts than the water sterilizer rating may overheat. Care should be taken to arrange the cord so that it will not be tripped over or pulled.
10. SAVE THESE INSTRUCTIONS.

Congratulations on choosing the SUV series of ultraviolet equipment from R-Can. Each unit is designed to provide safe, reliable disinfection performance year after year with minimal maintenance.

OVERVIEW

Each UV system is designed to treat water at specified flow rates as are outlined in the specification sheet on page eleven. All SUV series units are provided with two main component parts, namely the ultraviolet reactor chamber and the main control panel.

Reactor Chamber

The reactor chamber is manufactured from 12 gauge 316L stainless steel and houses the ultraviolet lamps and quartz sleeves. The reactor chamber comes standard with removable flanged end-plate connections to allow for easy internal access and cleaning. A drain port is supplied with each unit to aid in cleaning or servicing the unit. A visual sight port is provided for visual inspection of the UV lamps (not available on "PM" models with the ultraviolet monitor) (standard on SUV 225P). The chamber is designed to mount horizontally and should be secured to a suitable base via the integral mounting brackets. The chamber is electropolished and passivated. Optional connections such as 150 lb. Flanges, sanitary fittings, and pharmaceutical grade polishing (RA 15) are available at an additional charge.

Control Panel

The main control panel is Nema 4X rated and modified and is manufactured from 16 gauge 304 stainless steel. A single panel is used for all SUV units and due to the use of electronic ballasts is compactly sized at 43cm X 43cm X 15cm (17" X 17" X 6"). The panel is connected to the chamber via 3 metres (10 feet) of cable to allow for maximum application flexibility. The panel is mounted vertically on the wall and incorporates built-in cross-flow louvres to facilitate ventilation. The panel is also designed with a 1/2" space between the panel and the mounting wall to allow for better cooling.

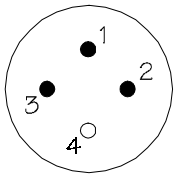
Standard Electronics

1. ON/OFF Switch controls the main power entering the control panel. A separate 5 amp (10 amp on SUV 225P) fuse is also provided as protection for the electronics.

2. Individual L.E.D. Lamp-Out Indicators contained in the control panel are illuminated when the lamp is lit and not illuminated when the individual lamps are not operating. In the event of an individual lamp failure, the respective L.E.D. on the control panel would not be illuminated and an audible alarm emanating from the control panel would be triggered. This alarm can also be wired to a remote location with the addition of our remote alarm package model S-ROM/SUV.

3. Remote Alarm Output is provided on all SUV systems which allows for remote monitoring of all visual and audible functions of the sterilizer. Order separately under part number S-ROM/SUV.

4. DRY CONTACTS are provided to allow for the installation of a variety of options including solenoid valves, alarms, horns, etc. This output is provided with three leads which allow for both the normally open or normally closed positions. The wiring diagram for this plug is shown on the following page.



DRY CONTACTS
Pin 1, GREEN, Common
Pin 2, RED, Normally Open
Pin 3, BLACK, Normally Closed
Pin 4, not used

5. High Panel Temperature Alarm which is built into the control panel indicates if the ambient air inside the panel rises above a pre-set maximum. This acts as protection for the electronics if installed in geographical areas of extremely high ambient temperatures or in installations in areas of extreme heat or lack of proper ventilation. An alarm is supplied in the control panel for both audio & visual recognition.

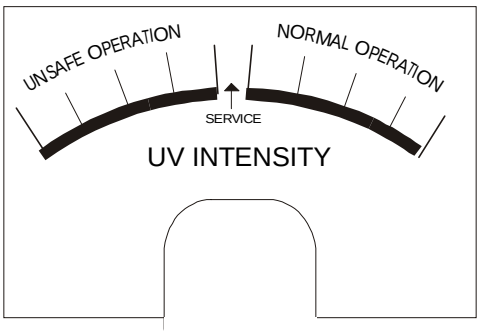
6. High Chamber Temperature Alarm is built into the UV reactor chamber and indicates when the temperature of the liquid inside the chamber rises above a pre-set maximum. This is extremely important in those areas where the ambient water temperature is extremely high or in applications which may incorporate blended feedwater since the effectiveness of ultraviolet irradiation is severely affected at high ambient temperatures. An alarm is supplied in the control panel for both audio & visual recognition.

7. Elapsed Time Meter measures the total running time of the equipment. This non-resettable meter has a registered capacity of 99,999 hours and is housed in the main control panel.

Standard Electronics on "PM" models and SUV 225P

UV Intensity Monitor measures the actual UV intensity inside of the reactor chamber. The monitor detects the 254nm wavelength of UV and is displayed via a high quality meter mounted in the main control panel as well as having the ability to be remotely transmitted via a 4-20 ma signal. The meter is marked for UNSAFE OPERATION, SERVICE AND NORMAL OPERATION as is indicated below. In addition to the visual display a low UV intensity alarm is incorporated to give both a visual and audible signal to the operator.

OPTIONAL EQUIPMENT



Remote Audio Alarm contains a built-in audio alarm as well as a visual L.E.D. indicator. This compact remote package is provided with 65 feet of cable and can be connected to the main control panel through the provided plug. This feature is designated as the S-ROM/SUV option. Please note that this item is optional on both the

PRODUCT APPLICATION

Ultraviolet disinfection provides a simple, inexpensive way of destroying bacteria, mold, virus, algae and fungi without the use of heat or chemicals. Each SUV system is designed to achieve a specific energy dose to properly destroy microorganisms.

The dosage which applies to ultraviolet disinfection is proportional to energy, time, and area. The total UV energy is attributed to the amount of energy emitted from all sides of a UV lamp and is expressed in micro watts. The exposure is expressed in seconds and represents the total time it takes for the water to flow through the UV chamber. The final factor in determining the dosage relates to the total area and is expressed in centimetre squared. To summarize, the total dosage is expressed in :wsec/cm^2 or micro watt second per centimetre squared

UV Disinfection is affected by many factors and the following should be looked at prior to the installation of the UV system:

● UV Transmission (transmittance) deals with the effectiveness in which the 2537 Angstrom units (254 nanometres) wavelength of ultraviolet light is transmitted through the water. The higher the transparency of the water, the more effective the UV system becomes. This optical clarity is evaluated by performing a test which passes incident light through a 1 cm depth of water and recording this against the same test using distilled water as a reference. Distilled water will pass 100% of the incident light through a 1 cm depth.

The basic design of the units have taken into account a typical transmission at the desired wavelength. In practical terms this means that a system designed to flow at 24 gallons per minute, model SUV 24P, at a typical transmissibility could actually have a higher flow rate in liquids with a higher transmissibility and a lower flow rate in liquids with a lower transmissibility. As a general guideline, the following are some typical UV transmission rates:

"typical" city water supplies (North America)	80 - 90%
deionized or reverse osmosis water	90 - 98%
lakes, wells, or other private sources	70 - 90%
other liquids (constituent dependant)	0 - 95%

***** WARNING -- DO NOT UNDERSIZE UNITS *****

If exact transmission quality needs to be determined, have samples tested at a suitable lab using a proper spectrophotometer.

● Suspended Solids will act against a UV system by effectively shielding microorganisms from the ultraviolet light. Dirt, rust, turbidity, etc. all have the ability to block out the UV light. It is absolutely necessary to properly control the level of suspended solids by properly prefiltering the liquid prior to disinfection (prefiltration down to 5 micron is considered the minimum).

● Total Dissolved Solids of around 500 ppm can drastically reduce the rated flow rate of the unit by absorbing UV energy. Proper pretreatment of high TDS levels must be taken into account.

INSTALLATION

Pick a suitable location for the sterilizer and the control panel. Install the reactor chamber with an allowance for 1 metre (3 feet) of clear space at the connection end of the chamber to facilitate servicing. In an effort to adequately protect the electrical components inside the sterilizer, the unit must be connected to an electrical outlet which is protected by a GFI (ground fault interrupter) as well as a surge suppressor.

For shipping purposes the UV lamps are packed separately. Assemble the UV lamps in the following order :

Lamp Installation

A) Remove aluminum cover plate at the connection end of the sterilizer. Remove the UV lamps from their respective packing and set aside. Be careful not to touch the UV lamp "glass" with your fingers as oils may be deposited on the lamp. Wipe off any oils with alcohol and a soft cloth.

B) Remove the rubber moulded lamp connectors from the aluminum gland nuts.

D) Carefully slide the UV lamp into the chamber making sure the lamp pins are located at the connection end.

E) Secure each lamp connector to the lamp pins and press fit into the aluminum gland nut. Make sure that each lamp connector is installed in the corresponding chamber in order to accurately monitor the individual L.E.D. indicators.

Secure the control panel to the appropriate wall making sure the panel is mounted within 2.1 metres (7 feet) of the connection end of the reactor chamber. Plug the sterilizer into the appropriate outlet (either 115V or 230V as specified on the data plate) and check to see if all the UV lamps are illuminated. **DO NOT LOOK DIRECTLY AT THE BURNING UV LAMP WITHOUT THE USE OF PROTECTIVE EYEWEAR**. Once it is determined that the UV lamps are illuminated and that the individual lamp-on L.E.D.'s are illuminated, disconnect panel from power source until all plumbing connections are made.

Once the sterilizer is securely mounted, remove the plastic thread protectors on the inlet and outlet ports. Plumb the inlet and outlet ports to the supply and delivery lines with the appropriate connections. Make sure Teflon tape or pipe dope is used on the threads to ensure an adequate seal. When making connections, be sure not to drop anything into the reactor chamber that may damage the quartz sleeves/lamps or contaminate the reactor chamber.

After all connections are made, SLOWLY turn on the inlet valve and SLOWLY fill the reactor chamber with water. Once the chamber is full, check for leaks at fittings. If a leak is evident, drain system and reconnect the fittings.

Once all connections are made water-tight, the system should be thoroughly flushed to clean out any particulate matter that may have entered the reactor chamber during installation as well as flushing out any air that may have accumulated during the "filling" process.

SUDDEN OPENING OF THE INLET FLOW MAY SERIOUSLY DAMAGE UV LAMPS OR QUARTZ SLEEVES.

Plug the control panel into the electrical outlet and the unit is now operational.

MAINTENANCE

The basic unit is designed to operate with minimal maintenance requirements providing the minimum water characteristics are met as are outlined in the section marked Application Guidelines. Regular maintenance on the SUV series units are as follows:

1) Regularly inspect the individual UV lamp-on indicators to see that they are still illuminated. The built-in lamp failure alarm package will help in this process by providing an additional audio/visual reference.

2) Periodic cleaning of the quartz sleeves may be required on marginal quality water to remove scale and/or other build-up. Clean sleeves with a mild acid solution such as 10% Citric Acid or household cleaners such as Lime Away or Vinegar.

3) Ultraviolet lamps are rated for approximately 8000 hours of continuous use (approximately one year). Replace all lamps after this time frame. The optional elapsed time meter aids in this task by continually monitoring the running time of the unit.

Lamp Replacement

follow those steps as outlined on page 7 of the Installation Section.

Quartz Sleeve Replacement

1) Disconnect power source from main control panel.

2) Depressurize reactor chamber and fully drain chamber of all liquid.

3) Remove aluminum covers from end of reactor chamber.

4) Remove the lamp connectors from the aluminum gland nut.

5) Carefully disconnect UV lamp from lamp connector and remove lamp from sleeve.

6) Remove both aluminum gland nuts and o-rings.

7) Carefully slide sleeve out of chamber making sure not to let the sleeve fall inside the chamber after the sleeve end passes the flanged end (sliding your fingers into both ends of the sleeve and gently lowering one end of the sleeve into the reactor chamber will aid in this process).

8) Insert a new sleeve using the identical sleeve available from R-Can (part #QS-012 for SUV 24P - SUV 100P or QS-064 for SUV 225P). Prior to inserting a new sleeve, clean sleeve with alcohol and a soft cloth.

9) Upon inserting new sleeve, make sure sleeve is inserted into corresponding hole on opposite end of flanged connection (use your fingers to aid in getting the sleeves through the flanged connection).

10) Make sure sleeve protrudes an equal distance at both ends of the threaded nipple and place O-ring on quartz sleeve (one on each end).

11) Hand tighten gland nuts and ensure a water tight seal.

12) Repeat steps D through F in the Lamp Installation Section.

Replacement Parts List

UV lamp for SUV 24P - SUV 100P (4 pin proprietary base)	S36RL
UV lamp for SUV 225P (4 pin proprietary base)	S64RL
Quartz sleeve for SUV 24P - SUV 100P units	QS-012
Quartz sleeve for SUV 225P units	QS-064
Main circuit board for SUV units (100-130V./50-60Hz.)	CB-SUV/M2B
Main circuit board for SUV units (200-250V./50-60Hz.)	CB-SUV/M2B2
L.E.D. Indicator circuit board for SUV units	CB-SUV/L2B
Electronic ballast for SUV 24P - SUV 100P (100-130V./50-60Hz.)	BA-E3612
Electronic ballast for SUV 24P - SUV 100P (200-250V./50-60 Hz.)	BA-E3622
Electronic ballast for SUV 225P (100-130V./50-60Hz.)	BA-E6412
Electronic ballast for SUV 225P (200-250V./50-60 Hz.)	BA-E6422
O-ring for quartz sleeve, SUV 24P - SUV 100P	OR-212
O-ring for quartz sleeve, SUV 225P	OR-COM

UV monitor assembly for SUV 24P	254NM-04
UV monitor assembly for SUV 40P, 65P, 100P & 225P	254NM-05
Aluminum gland nut and washer assembly for SUV 24P - SUV 100P	RN-001
Stainless steel gland nut for SUV 225P	RN-SS
Flange gasket for SUV 24P	GK-24
Flange gasket for SUV 40P	GK-40
Flange gasket for SUV 65P, 100P & 225P	GK-100
5 amp fuse (5mm X 20mm "fast blow")	CP-FUSE
10 amp fuse (5mm X 20mm "fast blow")	CP-F2

MANUFACTURER'S WARRANTY

Manufacturer warrants the ultraviolet water sterilizers hardware and electrical systems to be free from defects in material and workmanship for a period of **five (5)** years from the date of purchase by the original owner (consumer) on a pro-rated basis. Manufacturer warrants the ultraviolet lamps and sensor probes to be free from defects in material and workmanship for a period of **one (1)** year and the reactor chamber for a period of **seven (7)** years. The warrantor will at its option and expense, either repair or replace such units subject to the following conditions, exceptions, and exclusions. No other warranties with respect to the units other than those expressly included in this one year warranty, have been made by the Warrantor.

CONDITIONS, EXCEPTIONS, AND EXCLUSIONS

The foregoing limited Warranty is subject to the following terms and conditions:

1. Water passed through the unit must not contain:
a/ sulphur b/ filterable solids c/ greater than 0.3 ppm iron
d/ excessive hardness ** where total hardness is less than 7 gpg, the UV unit should operate efficiently provided the lamp/quartz sleeve is cleaned periodically. If total hardness is over 7 gpg, the water should be softened. (Please Note that TDS levels over 500 ppm will seriously reduce flow rate of units.) Warranty will be void, if the proper steps are not taken to ensure that these impurities are not present.

2. This limited Warranty shall not apply to any unit which has been repaired or altered by anyone other than the Warrantor or by a person authorized by the Warrantor, nor to any units which have been subject to misuse, neglect, or accident.

3. This limited Warranty runs exclusively to the original User and with respect to the original installation only.

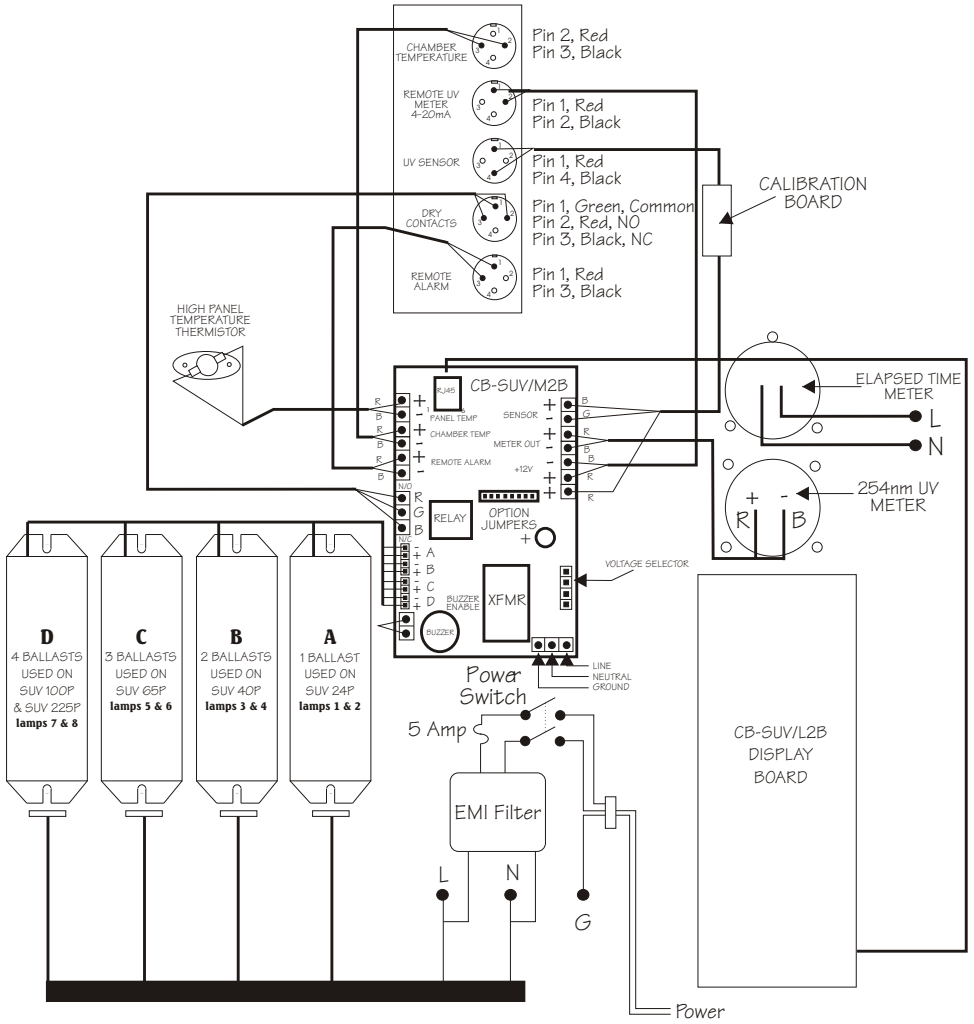
4. WARRANTOR SHALL NOT BE LIABLE FOR ANY INCIDENTAL OR CONSEQUENTIAL DAMAGES.

5. This limited Warranty excludes the cost of labour in removing any defective unit or installing any replacement unit. This limited Warranty applies only to a unit when returned to the Warrantor at the owners expense and in accordance with shipping instructions received from the Warrantor.

SPECIFICATIONS		SUV 24P	SUV 40P	SUV 65P	SUV 100P	SUV 225P
Flow Rate in Clear Fresh Water		90 lpm (24 gpm) (5. 5 m^3/Hr.)	150 lpm (40 gpm) (9.1 m^3/Hr.)	244 lpm (65 gpm) (14.8 m^3/Hr.)	375 lpm (100 gpm) (22.7 m^3/Hr.)	844 lpm (225 gpm) (51.1 m^3/Hr.)
Flow Rate in High Purity Distilled, DI or RO Water		113 lpm (30 gpm) (6.8 m^3/Hr.)	188 lpm (50 gpm) (11.4 m^3/Hr.)	300 lpm (80 gpm) (18.0 m^3/Hr.)	437 lpm (115 gpm) (26.1 m^3/Hr.)	974 lpm (260 gpm) (59.1 m^3/Hr.)
Dimensions	Length	97 cm (38")	97 cm (38")	97 cm (38")	97 cm (38")	173 cm (68 1/4")
	Width	15 cm (6")	20cm (8")	25 cm (10")	25 cm (10")	25 cm (10")
	Height	23 cm (9")	28 cm (11")	33 cm (13")	33 cm (13")	42 cm (16 1/2")
	Cell Diameter	10.2 cm (4")	15 cm (6")	20 cm (8")	20 cm (8")	20 cm (8")
	Control Panel	43 x 43 x 15 cm (17" x 17" x 6")	43 x 43 x 15 cm (17" x 17" x 6")	43 x 43 x 15 cm (17" x 17" x 6")	43 x 43 x 15 cm (17" x 17" x 6")	43 x 43 x 15 cm (17" x 17" x 6")
Shipping Weight		23.6 kg (52 lbs.)	36.3 kg (80 lbs.)	55.8 kg (123 lbs.)	56.2 kg (121 lbs.)	77.1 kg (170 lbs.)
Electrical	Volts	100-130V./50-60Hz. [1]	100-130V./50-60Hz. [1]	100-130V./50-60Hz. [1]	100-130V./50-60Hz. [1]	100-130V./50-60Hz. [1]
	Power Consumption	100	195	285	375	685
	Lamp Watts	78	156	234	312	520
Maximum Operating Pressure		8.62 bar (125 psi)	8.62 bar (125 psi)	8.62 bar (125 psi)	8.62 bar (125 psi)	8.62 bar (125 psi)
Ambient Temperature		2 - 40°C (36 - 104°F)	2 - 40°C (36 - 104°F)	2 - 40°C (36 - 104°F)	2 - 40°C (36 - 104°F)	2 - 40°C (36 - 104°F)
Quartz Sleeve		YES (2)	YES (4)	YES (6)	YES (8)	YES (8)
Inlet/Outlet Port Size		1" MNPT	1.5" MNPT	2" MNPT	2" MNPT	4" FLANGE
Lamp Failure System	Visual	YES	YES	YES	YES	YES
	Audible	YES	YES	YES	YES	YES
254nm UV Monitor		ORDER SUV 24PM	ORDER SUV 40PM	ORDER SUV 65PM	ORDER SUV 100PM	YES
Remote Alarm Output		YES	YES	YES	YES	YES
Dry Contacts (NO and NC)		YES	YES	YES	YES	YES
Drain Plug		1/8"	3/8"	1/2"	1/2"	3/4"
Hour Meter		YES	YES	YES	YES	YES
Panel Temperature Alarm		YES	YES	YES	YES	YES
Chamber Temperature Alarm		YES	YES	YES	YES	YES
Reactor Chamber Material		316L S.S	316L S.S	316L S.S	316L S.S	316L S.S
Control Panel		304 S.S	304 S.S	304 S.S	304 S.S	304 S.S

1. 200-250V./50-60Hz. available on request

REV	REVISION DESCRIPTION	LOG NO.	REV BY	CHK BY	APPROVAL AND DATE
A	DWG RELEASED.	----	---		**04/01/99**



ITEM	QTY	ITEM DESCRIPTION	PART NUMBER	DOCUMENT NUMBER
1	1	----	---	---

UNLESS OTHERWISE SPECIFIED:
DIMENSIONS ARE IN INCHES
TOLERANCES: 2 PL DEC ±0.05
3 PL DEC ±0.010
ANGLE ±0.5

REMOVE ALL BURRS
ALL CORNERS R 0.010 OR BREAK
▽=MIN RECEIVING INSPECTION PT

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DESCRIPTION
STERILIGHT SUV WIRING DIAGRAM

THIRD ANGLE PROJECTION

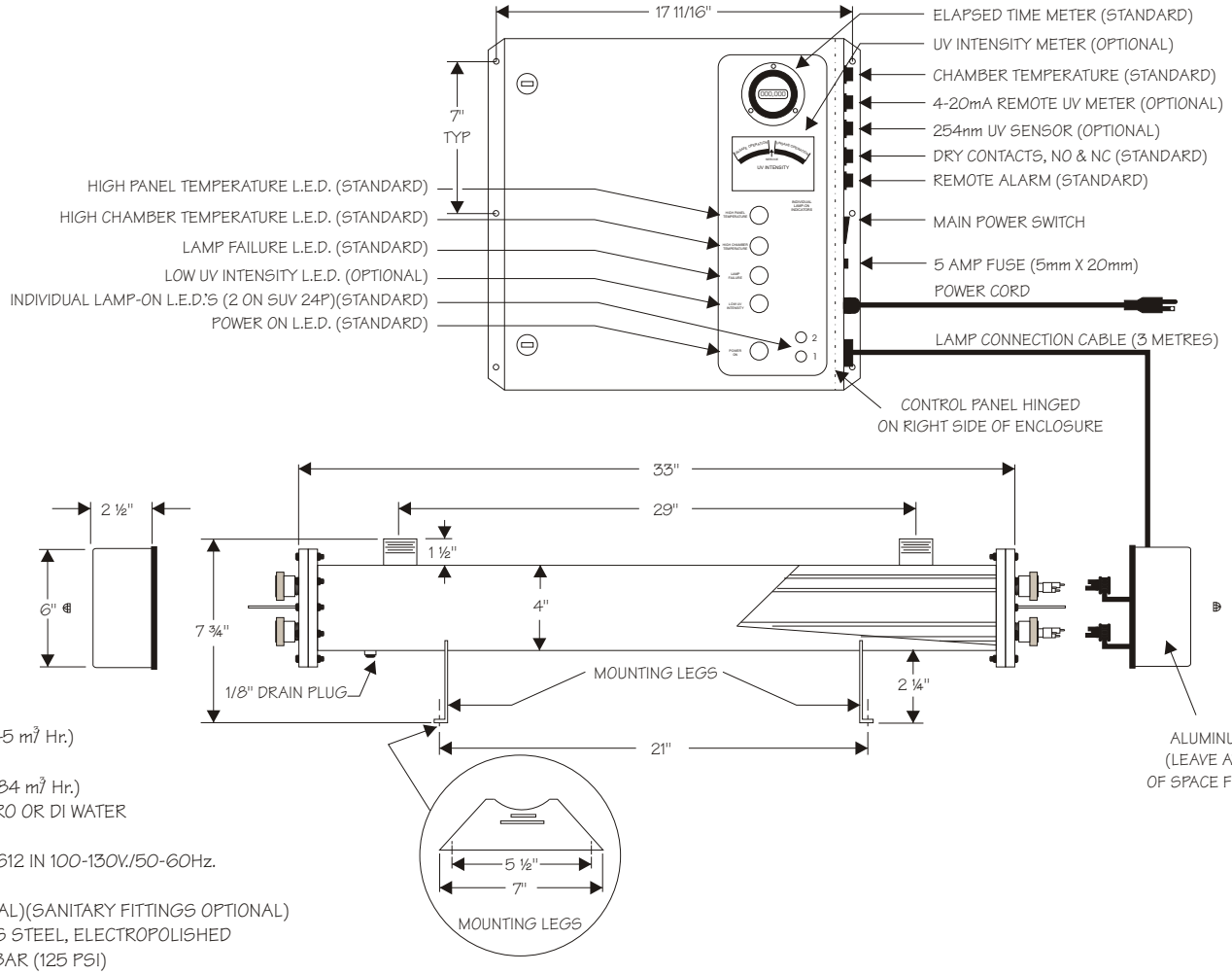
0 0.5 1.0
1.0" ON ORIGINAL DWG
SCALE: NTS

PART NO. **CB-SUV/M2B**
REV A
SHEET 1 OF 1
SIZE B

DWG NO. cbsuvm2b-revb.cdr

REV	REVISION DESCRIPTION	LOG NO.	REV BY	CHK BY	APPROVAL AND DATE
A	DWG RELEASED.	----	ML		11/16/00

For unit with 254nm UV Intensity Monitor, order SUV 24PM



SUV 24P SPECIFICATIONS

FLOW RATE: 24 U.S. GPM (90 L/MIN) (5.45 m^3 Hr.)
IN CLEAR FRESH WATER
30 U.S. GPM (113 L/MIN) (6.84 m^3 Hr.)
IN HIGH PURITY DISTILLED, RO OR DI WATER
NUMBER OF LAMPS: 2, MODEL S36RL
NUMBER OF BALLASTS: 1, MODEL BA-E3612 IN 100-130V./50-60Hz.
OR BA-E3622 IN 200-250V./50-60Hz.
CONNECTIONS: 1" MNPT (FLANGE OPTIONAL)(SANITARY FITTINGS OPTIONAL)
UV CHAMBER MATERIAL: 316L STAINLESS STEEL, ELECTROPOLISHED
MAXIMUM OPERATING PRESSURE: 8.62 BAR (125 PSI)
AMBIENT TEMPERATURE RANGE: 2-40°C (36-104°F)
ELECTRICAL: 100-130VAC/50-60HZ, SINGLE PHASE OR 200-250V/50-60HZ
CONTROL PANEL: 43CM X 43CM X 15CM (17" X 17" X 6"), 304 STAINLESS STEEL

ITEM	QTY	ITEM DESCRIPTION	PART NUMBER	DOCUMENT NUMBER
1	1	----	---	---

UNLESS OTHERWISE SPECIFIED:
DIMENSIONS ARE IN INCHES
TOLERANCES: 2_PL_DEC ±0.05
3_PL_DEC ±0.010
ANGLE ±0.5
REMOVE ALL BURRS
ALL CORNERS R 0.010 OR BREAK
▽=MIN RECEIVING INSPECTION PT

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DESCRIPTION
SUV 24P (Sterilight, 24 gpm UV unit)

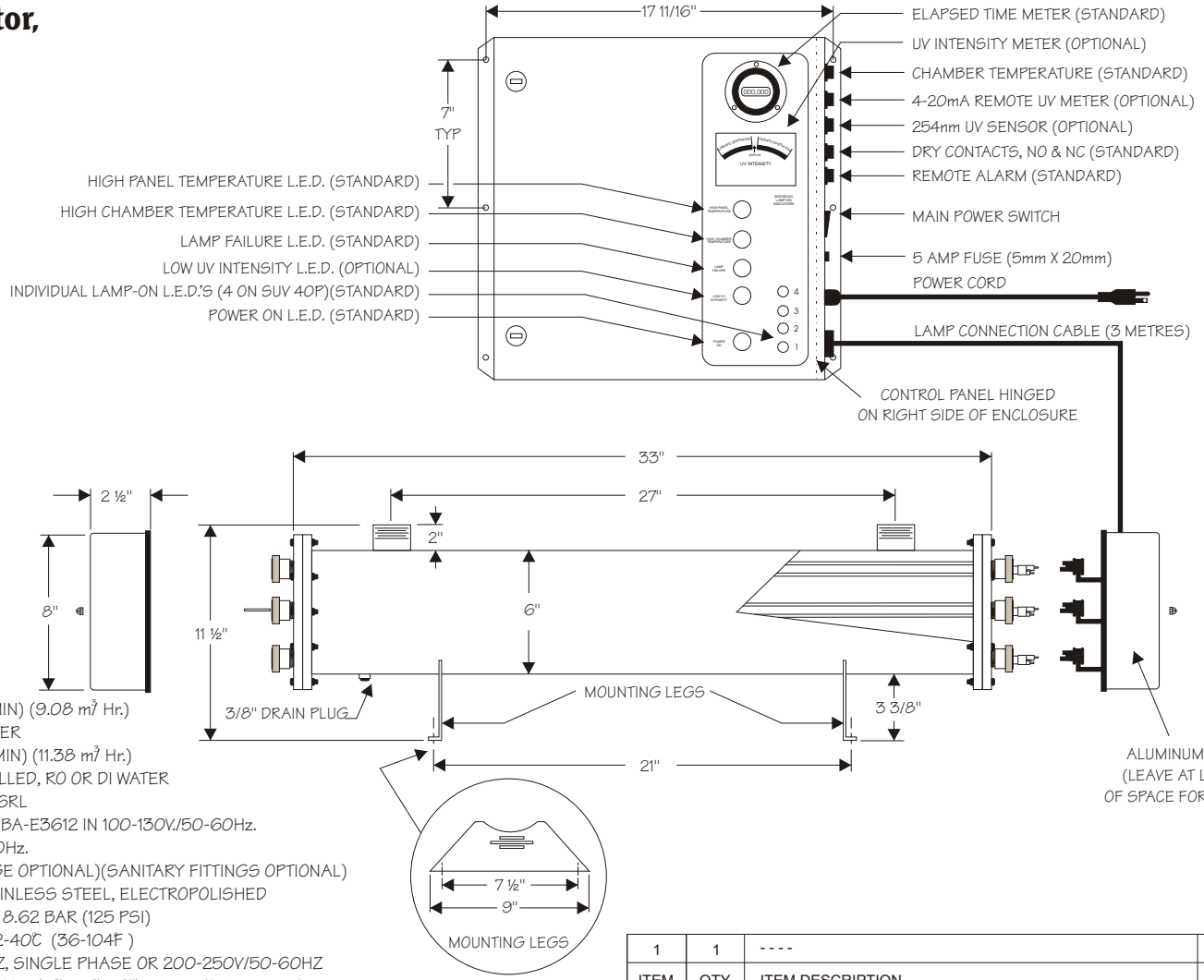
THIRD ANGLE PROJECTION
0 0.5 1.0
1.0" ON ORIGINAL DWG
SCALE: NTS

PART NO. **SUV 24P**
REV A
SHEET 1 OF 1
SIZE B
DWG NO. suv24p.cdr

6	5	4	3	2	1

REV	REVISION DESCRIPTION	LOG NO.	REV BY	CHK BY	APPROVAL AND DATE
A	DWG RELEASED.	----	---		11/16/00

For unit with 254nm UV Intensity Monitor, order SUV 40PM



SUV 40P SPECIFICATIONS

FLOW RATE: 40 U.S. GPM (150 L/MIN) (9.08 m³ Hr.)
IN CLEAR FRESH WATER
50 U.S. GPM (188 L/MIN) (11.38 m³ Hr.)
IN HIGH PURITY DISTILLED, RO OR DI WATER
NUMBER OF LAMPS: 4, MODEL S36RL
NUMBER OF BALLASTS: 2, MODEL BA-E3612 IN 100-130V./50-60Hz.
OR BA-E3622 IN 200-250V./50-60Hz.
CONNECTIONS: 1 1/2" MNPT (FLANGE OPTIONAL)(SANITARY FITTINGS OPTIONAL)
UV CHAMBER MATERIAL: 316L STAINLESS STEEL, ELECTROPOLISHED
MAXIMUM OPERATING PRESSURE: 8.62 BAR (125 PSI)
AMBIENT TEMPERATURE RANGE: 2-40°C (36-104°F)
ELECTRICAL: 100-130VAC/50-60HZ, SINGLE PHASE OR 200-250V/50-60HZ
CONTROL PANEL: 43CM X 43CM X 15CM (17" X 17" X 6"), 304 STAINLESS STEEL

ITEM	QTY	ITEM DESCRIPTION	PART NUMBER	DOCUMENT NUMBER
1	1	----	---	---

UNLESS OTHERWISE SPECIFIED:
DIMENSIONS ARE IN INCHES
TOLERANCES: 2_PL_DEC ±0.05
3_PL_DEC ±0.010
ANGLE ±0.5
REMOVE ALL BURRS
ALL CORNERS R 0.010 OR BREAK
▽=MIN RECEIVING INSPECTION PT

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DESCRIPTION
SUV 40P (Sterilight, 40 gpm UV unit)

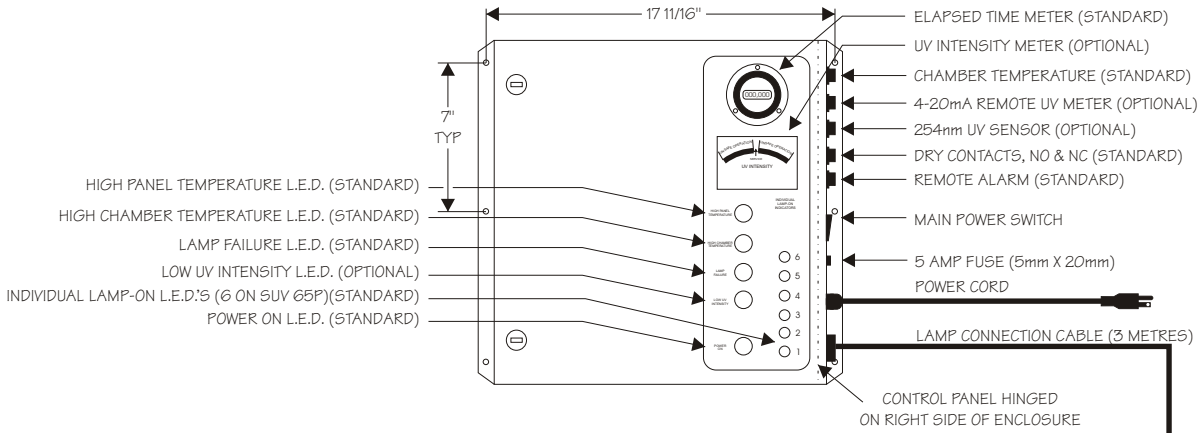
THIRD ANGLE PROJECTION
0 0.5 1.0
1.0" ON ORIGINAL DWG
SCALE: NTS

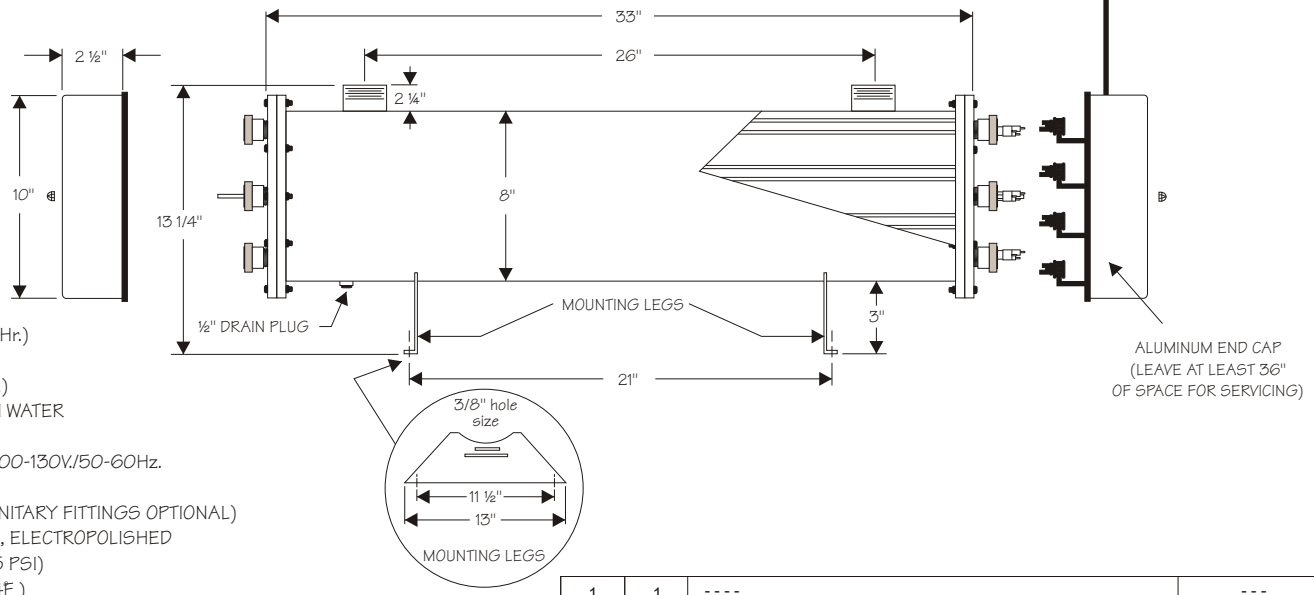
PART NO. **SUV 40P**
REV A
SHEET 1 OF 1
SIZE B
DWG NO. suv40p.cdr

6	5	4	3	2	1

REV	REVISION DESCRIPTION	LOG NO.	REV BY	CHK BY	APPROVAL AND DATE
A	DWG RELEASED.	- - - -	- - -		11/16/00

For unit with 254nm UV Intensity Monitor, order SUV 65PM





SUV 65P SPECIFICATIONS

FLOW RATE: 65 U.S. GPM (246 L/MIN) (14.76 m³ Hr.)
IN CLEAR FRESH WATER
80 U.S. GPM (300 L/MIN) (18 m³ Hr.)
IN HIGH PURITY DISTILLED, RO OR DI WATER
NUMBER OF LAMPS: 6, MODEL S36RL
NUMBER OF BALLASTS: 3, MODEL BA-E3612 IN 100-130V./50-60Hz.
OR BA-E3622 IN 200-250V./50-60Hz.
CONNECTIONS: 2" MNPT (FLANGE OPTIONAL)(SANITARY FITTINGS OPTIONAL)
UV CHAMBER MATERIAL: 316L STAINLESS STEEL, ELECTROPOLISHED
MAXIMUM OPERATING PRESSURE: 8.62 BAR (125 PSI)
AMBIENT TEMPERATURE RANGE: 2-40C (36-104F)
ELECTRICAL: 100-130VAC/50-60HZ, SINGLE PHASE OR 200-250V/50-60HZ
CONTROL PANEL: 43CM X 43CM X 15CM (17" X 17" X 6"), 304 STAINLESS STEEL

ITEM	QTY	ITEM DESCRIPTION	PART NUMBER	DOCUMENT NUMBER
1	1	- - - -	- - -	- - -

UNLESS OTHERWISE SPECIFIED:
DIMENSIONS ARE IN INCHES
TOLERANCES: 2_PL_DEC ±0.05
3_PL_DEC ±0.010
ANGLE ±0.5
REMOVE ALL BURRS
ALL CORNERS R 0.010 OR BREAK
▽=MIN RECEIVING INSPECTION PT

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DESCRIPTION
SUV 65P (Sterilight, 65 gpm UV unit)

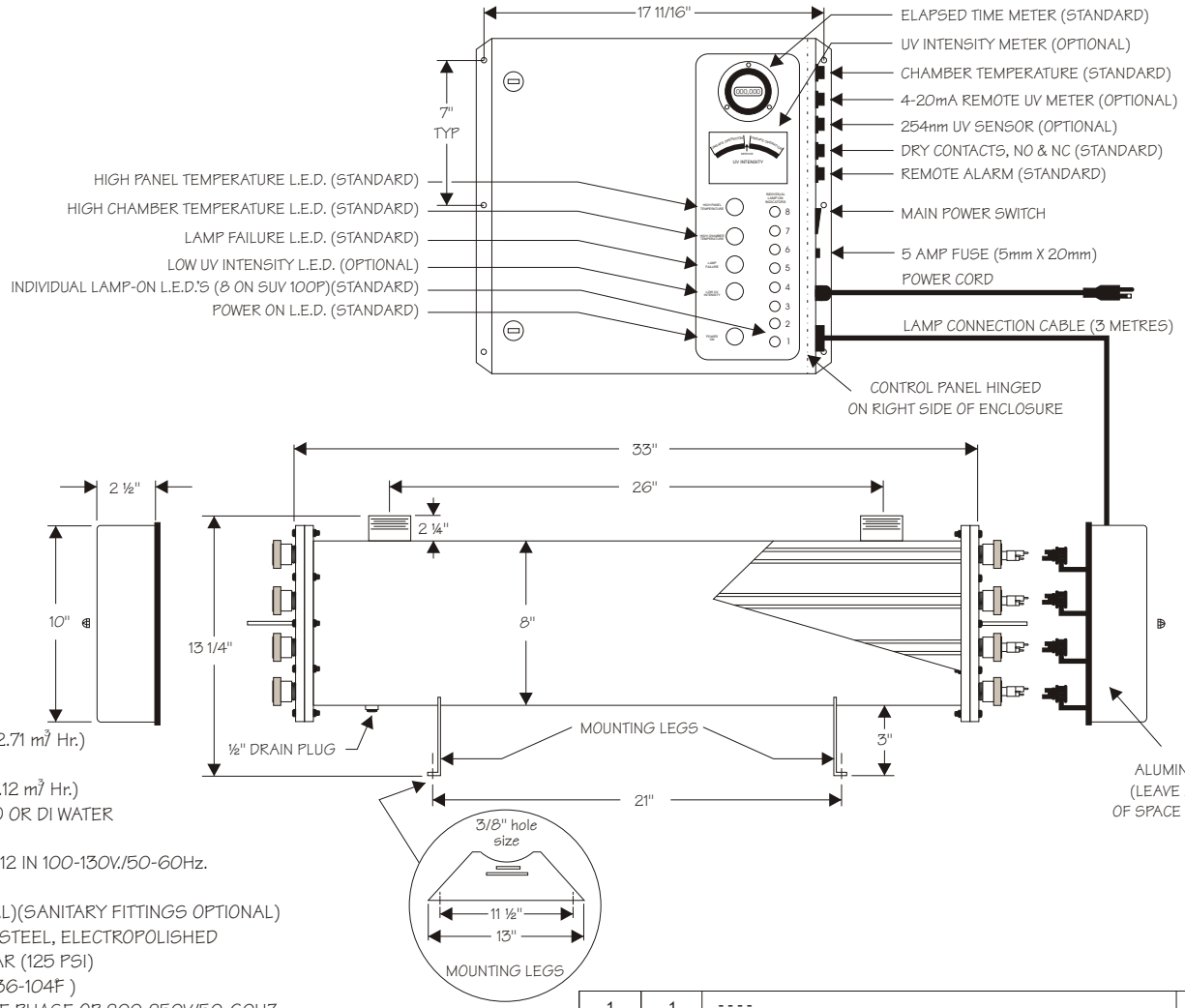
THIRD ANGLE PROJECTION
0 0.5 1.0
1.0" ON ORIGINAL DWG
SCALE: NTS

PART NO. **SUV 65P**
REV A
SHEET 1 OF 1
SIZE B
DWG NO. Suv65p.cdr

6	5	4	3	2	1

REV	REVISION DESCRIPTION	LOG NO.	REV BY	CHK BY	APPROVAL AND DATE
A	DWG RELEASED.	----	ML		11/16/00

For unit with 254nm UV Intensity Monitor, order SUV 100PM



SUV 100P SPECIFICATIONS

FLOW RATE: 100 U.S. GPM (380 L/MIN) (22.71 m^3 Hr.)
IN CLEAR FRESH WATER
115 U.S. GPM (437 L/MIN) (26.12 m^3 Hr.)
IN HIGH PURITY DISTILLED, RO OR DI WATER
NUMBER OF LAMPS: 8, MODEL S36RL
NUMBER OF BALLASTS: 4, MODEL BA-E3612 IN 100-130V./50-60Hz.
OR BA-E3622 IN 200250V./50-60Hz.
CONNECTIONS: 2" MNPT (FLANGE OPTIONAL)(SANITARY FITTINGS OPTIONAL)
UV CHAMBER MATERIAL: 316L STAINLESS STEEL, ELECTROPOLISHED
MAXIMUM OPERATING PRESSURE: 8.62 BAR (125 PSI)
AMBIENT TEMPERATURE RANGE: 2-40°C (36-104°F)
ELECTRICAL: 100-130VAC/50-60HZ, SINGLE PHASE OR 200-250V/50-60HZ
CONTROL PANEL: 43CM X 43CM X 15CM (17" X 17" X 6"), 304 STAINLESS STEEL

ITEM	QTY	ITEM DESCRIPTION	PART NUMBER	DOCUMENT NUMBER
1	1	----	---	---

UNLESS OTHERWISE SPECIFIED:
DIMENSIONS ARE IN INCHES
TOLERANCES: 2_PL_DEC ±0.05
3_PL_DEC ±0.010
ANGLE ±0.5
REMOVE ALL BURRS
ALL CORNERS R 0.010 OR BREAK
▽–MIN RECEIVING INSPECTION PT

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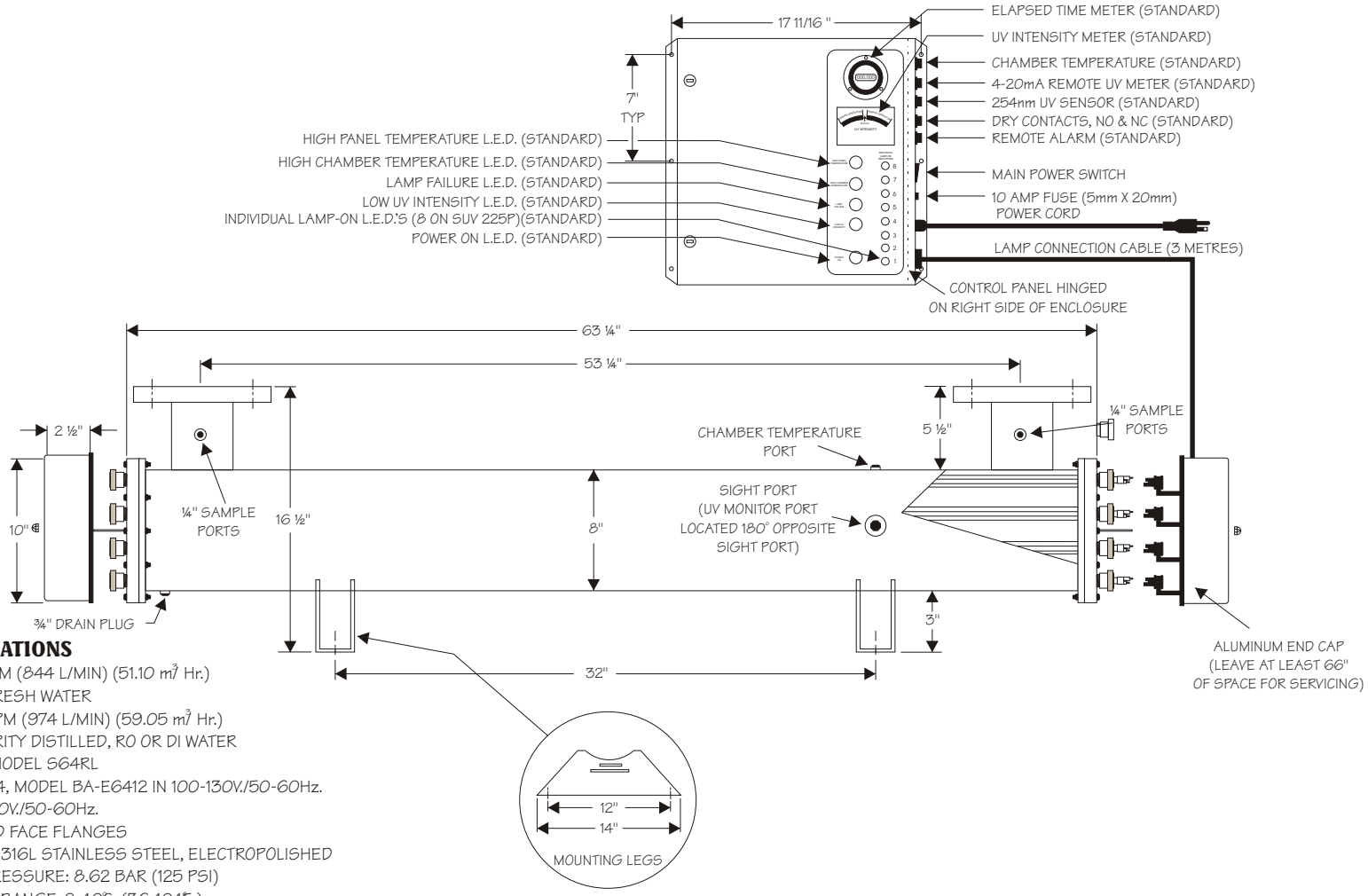
DESCRIPTION
SUV 100P (Sterilight, 100 gpm UV unit)

THIRD ANGLE PROJECTION
0 0.5 1.0
1.0" ON ORIGINAL DWG
SCALE: NTS

PART NO. **SUV 100P**
REV A
SHEET 1 OF 1
SIZE B
DWG NO. suv100p.cdr

REV	REVISION DESCRIPTION	LOG NO.	REV BY	CHK BY	APPROVAL AND DATE
A	DWG RELEASED.	----	---	ML	11/16/00



SUV 225P SPECIFICATIONS

FLOW RATE: 225 U.S. GPM (844 L/MIN) (51.10 m³ Hr.)
IN CLEAR FRESH WATER
260 U.S. GPM (974 L/MIN) (59.05 m³ Hr.)
IN HIGH PURITY DISTILLED, RO OR DI WATER
NUMBER OF LAMPS: 8, MODEL S64RL
NUMBER OF BALLASTS: 4, MODEL BA-E6412 IN 100-130V./50-60Hz.
OR BA-E6422 IN 200-250V./50-60Hz.
CONNECTIONS: 4" RAISED FACE FLANGES
UV CHAMBER MATERIAL: 316L STAINLESS STEEL, ELECTROPOLISHED
MAXIMUM OPERATING PRESSURE: 8.62 BAR (125 PSI)
AMBIENT TEMPERATURE RANGE: 2-40℃ (36-104F)
ELECTRICAL: 100-130VAC/50-60HZ, SINGLE PHASE OR 200-250V/50-60HZ
CONTROL PANEL: 43CM X 43CM X 15CM (17" X 17" X 6"), 304 STAINLESS STEEL

ITEM	QTY	ITEM DESCRIPTION	PART NUMBER	DOCUMENT NUMBER
1	1	----	---	---

UNLESS OTHERWISE SPECIFIED:
DIMENSIONS ARE IN INCHES
TOLERANCES: 2_PL_DEC ±0.05
3_PL_DEC ±0.010
ANGLE ±0.5
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DESCRIPTION
SUV 225P (Sterilight, 225 gpm UV unit)

THIRD ANGLE PROJECTION
0 0.5 1.0
1.0" ON ORIGINAL DWG
SCALE: NTS

PART NO. **SUV 225P**
REV A
SHEET 1 OF 1
SIZE B
DWG NO. suv225p.cdr