

### Harness the power of a river thyour swimming pools

The RIVERFLOW<sup>™</sup>, by Current Systems Inc. produces the ideal current for swimming, and aquatic exercise. The powerful RIVERFLOW system is silent and efficient, with no jets, bubbles or high pressured turbulence. Adaptable to virtually any swimming pool or swim spa, the RIVERFLOW<sup>™</sup> propeller system generates a broad smooth river-like current challenging all levels of swimmers to an unparalleled aquatic experience.

Our innovative, user-friendly remote control enables the swimmer to select the precise resistance desired for swimming in place, aqua jogging, rehab therapy or a myriad of aquatic exercises.

Experience the fun and excitement that comes with owning a RIVERFLOW™ system.









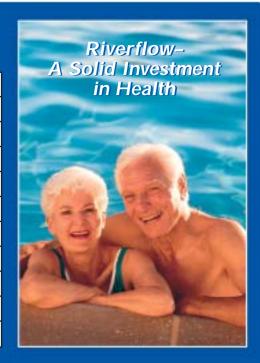
Featured Pool (above): opposite side design pump located 40 feet away.

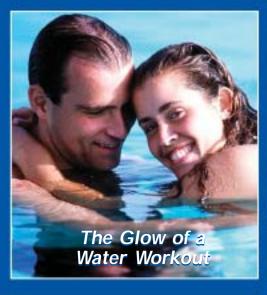
### Swimming pools are lifeless without True Current from Riverflow™

With the cutting edge lifestyle technology of Riverflow<sup>TM</sup>, you can now turn your new or existing pool into a fast moving river with the controls at your fingertips. Now Riverflow<sup>TM</sup> is available for mid and full sized pools enhancing the value of your home, and creating new, fun and fitness experiences for the whole family well after the children grow up.

### How do the others compare against The Value Added Benefits of the Riverflow™

	Riverflow	Swim Jets	Vinyl Liner Micro Pools	Swim Spas
SWIMABILITY INDEX	10	3	8	7
LAMINAR FLOW CURRENT	Yes	No	Yes	Yes
NOISE LEVEL (EXTERNAL)	Very Quiet	Very Noisy	Extremely Noisy	Extremely Noisy
NOISE LEVEL (UNDER WATER)	Very Quiet	Mild	Extremely Noisy	Extremely Noisy
VARIABLE FLOW CONTROL	Fully adjustable pool side remote	Adjust jet manually in pool	Adjust manually outside the pool	Adjust manually outside the pool
TURBULENCE	Low	Extreme	Low	Low
EFFICIENCY	Excellent	Very Poor	Fair	Fair
ADAPTABLE TO MOST SIZED POOLS	Yes	Yes	No	No
TYPE OF POOL	Unlimited	Unlimited	vinyl liner kit	fiberglass kit
COSTS	\$\$	\$	\$\$\$	\$\$\$\$
FUN & FITNESS RATING	10	3	5	6









#### **Real Current Delivers**

Counter-current swimming requires the dynamic opposite of what jetted systems deliver. Swimming in place requires a broad, non-turbulent flow of water, similar in velocity to a swimmers progress in still water.

### Swim Jets Don't Compare

Aeration is essential in swim jets. Air and bubbles cause turbulence and reduce the swimmer's buoyancy. Although jets are stimulating, delightful and a viable hydrotherapy tool, the notion that they have swimability is a myth.



### Benefits of Aquatic Exercise and Swimming

- Aerobic exercise done in water dramatically increases cardio vascular function while decreasing strain on the heart.
- An individual's weight while in the water is only about 10% of normal weight. Water buoyancy reduces stress on joints, and enhances any low-impact exercise.
- Water provides total body resistance, which improves muscle strength more efficiently.
- Aquatic exercise enhances balance and agility and improves confidence and comfort in and around water.



### **Riverflow™ System Factoids**

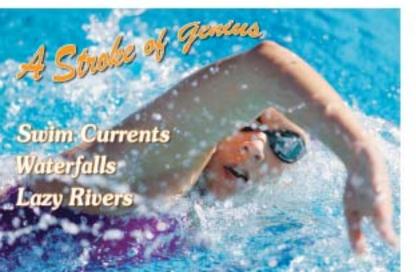
- Riverflow<sup>™</sup> pump can be located up to 60 feet from the pool.
- Pools longer than 25 feet may have the supply and return feeds installed on the same side of the pool wall. Pools less than 25 feet in length should have the supply and return located at opposite ends of the pool. Riverflow™ will help design your system.
- True Flow Technology tames your pool's current for maximum swimability.
- The Riverflow<sup>™</sup> pump is nearly silent, far less noisy than your own pool's filtration pump.
- The current speed can be fully adjusted with our remote control keypad.
- The Riverflow<sup>™</sup> System is inexpensive to operate with our variable frequency drive (VFD).
- The VFD has many programming features to create any workout event. You can even program your Riverflow pool to come alive as you entertain your friends.

# We Sell Rivers



"Pool builders have waterfalls and lights and decking, but nothing has really revolutionized the physical body of water itself. Here we've got something that can take a very still, non-moving body of water and turn it into the feel of a river. Swimming pools have been in people's yards for years, but they're really not swimmable. People just float around. Now they have an opportunity to swim in place."

> The Miami Herald January 30, 2005





Real Swim Current, Lazy Rivers & Waterfalls

400 South Dixie Highway, Suite 7 • Hallandale Beach, FL 33009

1-888-443-4113 • Fax: 954-962-9594

Info: riverflowpools@bellsouth.net

Visit us at: www.riverflowpools.com

Riverflow<sup>™</sup> manufactured by Current Systems, Inc.



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### The Riverflow™ System

The Riverflow™ system is composed of six elements.

**The Riverflow™ Pump** is an ultra high volume, axial flow, propeller pump. All wetted components are chlorine impervious. The external components are corrosion proof aluminum alloy, thermoplastic and stainless steel to insure long life in any environment. The Riverflow pump is silent, energy efficient and includes a 5 year warranty.

The High Efficiency Motor is three phase 230 volts, designed for continuous industrial operation. Our motors are totally enclosed and fan cooled. The copper windings are IRIS™ insulated for variable frequency operation. The motor is weatherproof and will deliver many years of flawless performance.

The Variable Frequency Drive is the brain of the system which allows the user full adjustability of the swim current generated by the pump. Our "VFD" is working behind the scenes to provide system protection and control. This feature rich unit provides full time ground fault protection (GFCI), a Line Reactor, for input voltage anomalies, an internal cooling fan and an array of sophisticated power transmission and diagnostic components. The VFD converts single phase residential power to three phase industrial power.

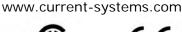
**The Remote Controls** by Riverflow offer infinite current speed adjustment for the swimmer and are available in wired and wireless models.

The Current Supply Boxes and Grates are NSF tested and certified for structural and hydraulic safety. These attractive grates are mounted flush in a vertical wall with no intrusion into the swimming pool. These fiber reinforced "sump" boxes are bonded to PVC pipe couplings for ease of installation.

**The Trueflow** return assembly is computer designed to provide optimum flow from the pump. This component delivers the current into the pool with flow characteristics best suited for countercurrent swimming and aquatic exercise. The Trueflow assembly also mounts flush with the pool wall without intrusion into the swimming pool.

The Riverflow is completely independent of the pool's circulation, heating and filtration system. The Riverflow pump requires a flooded suction and develops a maximum operating pressure of less than 2 PSI. If pressure testing is required, refer to the hydrostatic test protocol in our installation manual.





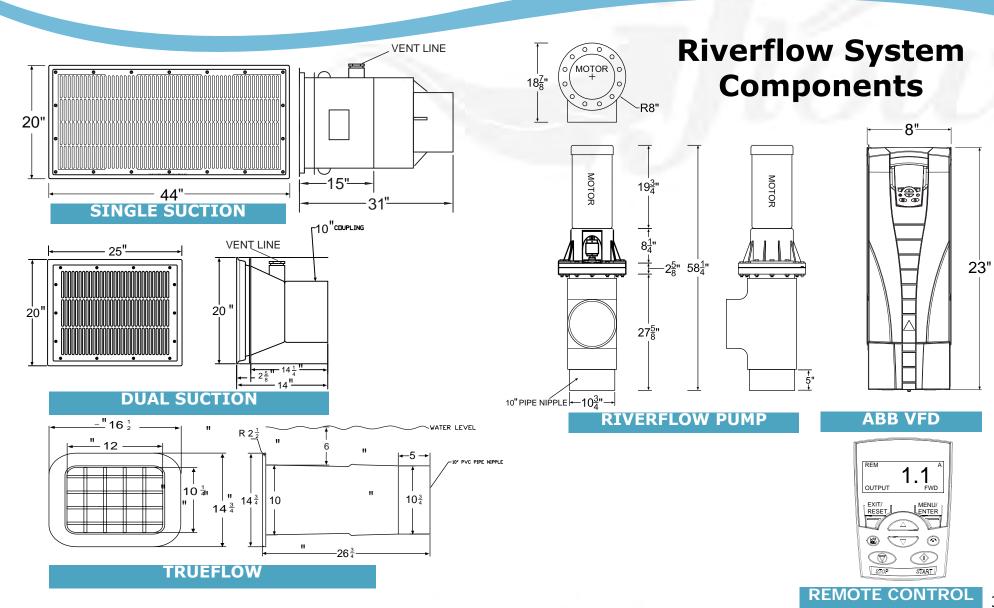






















### INSTALLATION GUIDE

**NOTE:** ALL WALL PENETRATIONS EDGES SHOULD BE "BACK CUT" WHILE CEMENT IS WET. "DRY PACK" WITH HYDRAULIC CEMENT OR SIMILLAR INDUSTRY APPROVED MATERIAL BEFORE THE APPLICATION OF FINISH PLASTER.

#### **RIVERFLOW PLUMBING**

- All elevation measurements should be referenced from the pool's normal water line.
- We recommend that ALL Riverflow components, pipe and fittings be present at the job site before plumbing begins. Complete plumbing layout prior to gunite to verify angles and elevations.
- Large diameter PVC fittings vary in size and dimension. Measure fittings for 'actual' dimensions.
- Use only primer and solvent cement rated for 10" diameter or larger PVC pipe.
- To insure sound glue joints, all pipe ends should be beveled and fully seated in fittings.
- The top of the Trueflow return fitting should be 5" below WATER LINE. A level run from that point to the pump discharge outlet is recommended.
- The Riverflow Suction run(s) are normally level from pool to pump. However, Riverflow suction fittings can be installed up to a minimum of 12" below WATER LEVEL.
- Keep all plumbing runs from pump to pool as straight as possible. Always use 45's rather than 90's when possible. If the return run exceeds three 45's, contact Riverflow support at 866.372.8886.
- All trenching and excavations must be backfilled to meet industry standards to support the Riverflow pump, fittings and pipe.
- Upon completion of plumbing and prior to motor installation, a 24" x 24" x 3" concrete stabilizing collar should be poured around the pump housing, leaving 1" clearance below the pump head nuts. Keep dirt, standing water, and shrubs off the pump head.











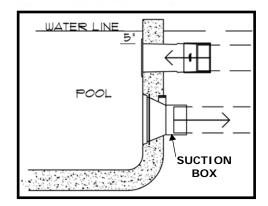


#### **Suction Box Installation**

Riverflow suction assemblies are designed for installation in vertical walls of poured concrete, Gunite or Shot Crete swimming pools. Always cover the finish edge of the box and the grate to protect the parts from damage and overspray during installation.

The top of the suction box should be 12" **or more** below water level and separated by at least 12". (3' on center)

The boxes are designed to finish flush with the interior surface of the pool wall. Suction grates are secured to the suction box with factory installed stainless steel fasteners. If these grates are removed they must be replaced using all of the original fasteners.

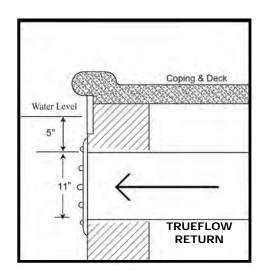


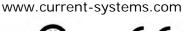
#### Trueflow Return Installation

The Trueflow return fitting is designed for installation in a vertical wall of a poured concrete, Gunite, or Shot Crete swimming pool. Always cover the Trueflow assembly for protection from damage or overspray during installation. The top of the Trueflow opening should be 5" below water level. The Trueflow should be supplied by at least 4' of straight 10" pipe after any bends.

The Trueflow assembly should be "aimed" carefully along the length of the swimming pool to ensure a balanced current.

The internal vanes may be inserted in the Trueflow before gunite. Prior to filling the pool the vanes should be set in place with silicon or epoxy.





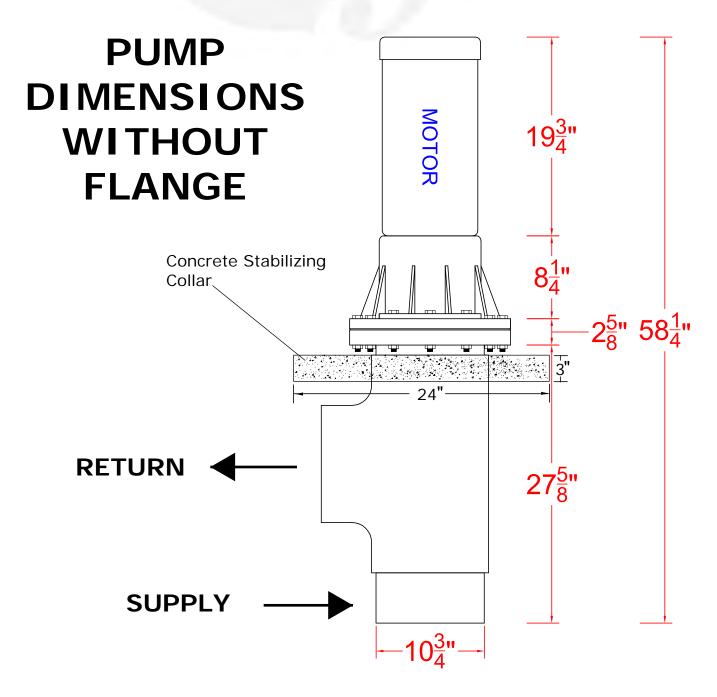












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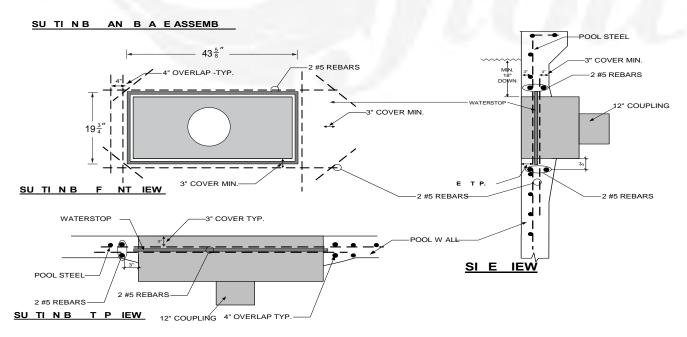


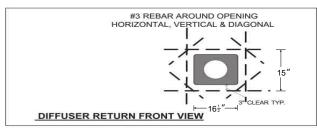


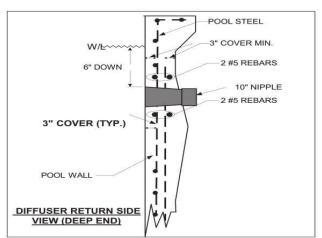


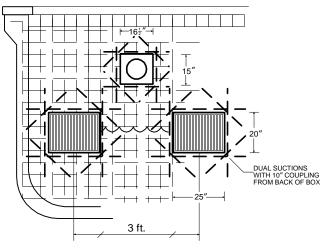
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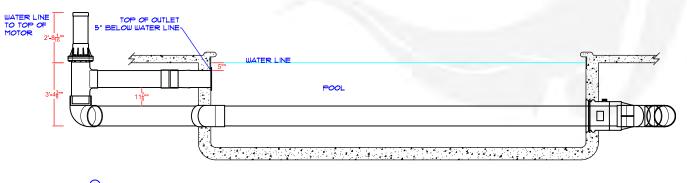






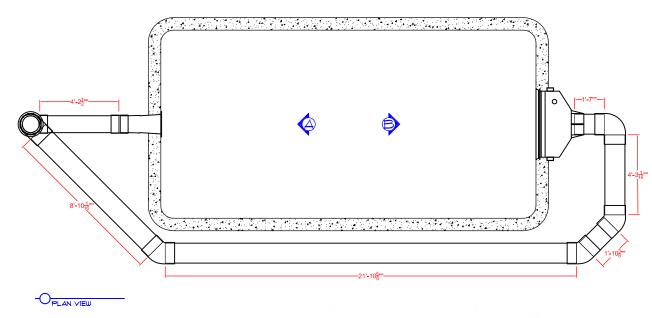


### PLUMBING EXAMPLE





EXAMPLE PLUMBING FOR A "LAP POOL"





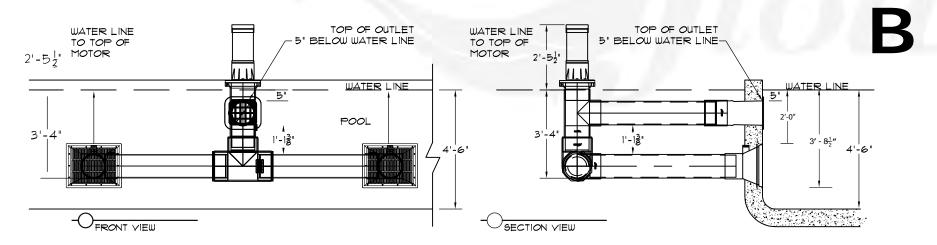




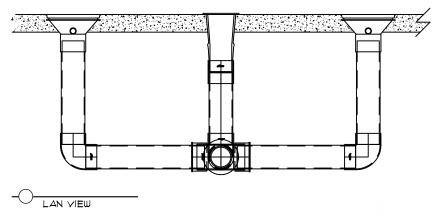




### PLUMBING EXAMPLE



### EXAMPLE PLUMBING FOR SWIMMING POOL



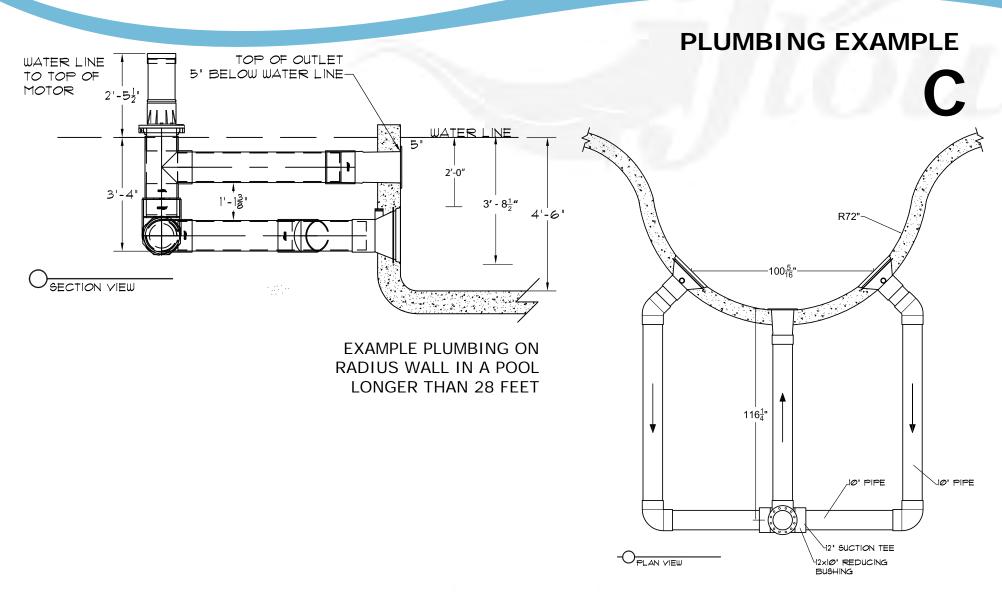




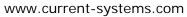








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#### RIVERFLOW ELECTRICAL NOTES

The VFD converts single phase to three phase power – The Riverflow Pump is driven by a three phase industrial duty motor.

- The electronic variable frequency drive (VFD) is rated for "indoor" installation, ventilated closet, garage, equipment room etc. If an outdoor installation is required, the VFD should be mounted in an outdoor protective cover for the VFD.
- Control wiring requires shielded, 6 conductors, #18 gauge cable.
- The Riverflow wired remote control box is weatherproof but should not be submerged in water.
- See separate wiring diagrams for Riverflow VFD & Remote Controls.

### IMPORTANT START UP INFORMATION

Riverflow warranty activation requirements:

- 1. Current Systems Inc. must have digital photos clearly showing the Riverflow pump installation with:
  - A. A close up photo of the shaft coupling.
  - B. Photograph of motor wiring inside motor junction box.
  - C. Photograph of line and load wiring of VFD
  - D. Photo of dedicated circuit breaker
- 2. Licensed electrician must call Current Systems Inc. (805)339-9292 or (888)443-4113 prior to applying power to the Riverflow pump motor for start up. A factory authorized technician will instruct the electrician in programming the VFD.











### Riverflow VFD & Motor Wiring

Motor direction counter clockwise.



MAIN, OR Refer to the wiring diagrams and technical manual for complete 50 AMP Breaker 10 HP Riverflow SUB PANEL wiring and operation instructions. SINGLE PHASE 40 AMP Breaker 7.5 HP Riverflow If the motor is covered, allow adequate ventilation. 230 VOLT TO VFD (Variable Frequency Drive) With internal GFI (IF REQUIRED) U2 230 VAC U1 3 PHASE MOTOR V2 230 VAC W1 **VFD** W2 GROUND NON FUSED THREE PHASE

**OUTPUT TO MOTOR** 

These drawings, concepts, and details contained herein are the original proprietary designs of Current Systems, Inc., developed over many yearsof experience in the pool and spa industry and as such are protected by the copyright laws of the United States Government. Reproduction of any of the above without written permission to do so by Current Systems, Inc. is illegal.

DISCONNECT

Dedicated Non GFI breakers only

Riverflow® Elite 40 AMP Breaker /230 VAC

Riverflow® Competition 50 AMP Breaker / 230 VAC

www.current-systems.com

Western Time Zone Current Systems Inc. Ph (866) 372 - 8886







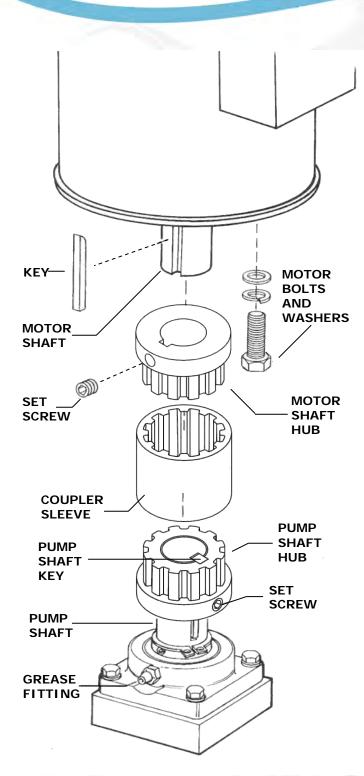


Eastern Time Zone Current Systems of Florida Ph (888) 443 - 4113

E2



### MOTOR INSTALLATION



- 1. Before wiring or setting motor on motor mount:
- 2. Slide coupler hub onto motor shaft so the end of the hub and the shaft key are even (flush) with the end of the motor shaft.
- 3. Slide the coupler sleeve completely on to the hub and tighten the set screw on the hub.
- 4. Slide the other hub on to the pump shaft until the end of the hub and the shaft key are even (flush) with the end of the pump shaft and tighten set screw.
- 5. Carefully set the motor into position allowing the hubs to mesh with the coupler sleeve.
- 6. Rotate the motor body to verify that it has seated properly in the motor mount recess.
- 7. Rotate the shaft assembly to verify that the pump and motor turn freely.
- 8. Install and tighten the 4 motor mount bolts and washers.
- 9. Loosen the set screw on the pump shaft hub. Push the hub into the sleeve completely and re tighten the coupler set screw.
- 10. Again rotate the shaft assembly. If the shafts rotate freely, the motor installation is complete. If the shafts do not turn freely, call Riverflow support at 866.372.8886.
- 11. Grease every 500 hours.

www.current-systems.com



Western Time Zone Current Systems Inc. Ph (866) 372 - 8886











### **Current Systems Inc. Statement of Warranty**

Warranty Registration is required for the following coverage limits to take place. Please fill out the enclosed registration form and mail to:

Current Systems Inc 1645 Donlon Unit 104 Ventura CA 93003

Current Systems Inc guarantees the following:

**All Pump Components** to be free from defects in workmanship and material when operated under normal conditions and in compliance with manufacturers guidelines. This warranty shall be in effect for a period of **5 years** from the date of installation, but in no event for more than **5 years** from the date of manufacturer, except those pumps that are so registered with an extended warranty.

Please ask about our extended warranty purchase plans.

Current Systems Inc guarantees the following:

The Electric Motor & VFD, to be free from defects in workmanship and material when operated under normal conditions and in accordance with nameplate characteristic limits and installation instructions. This warranty shall be in effect for a period of 24 months from the date of installation, but in no effect for more than 24 months from the date of manufacture, except those electric motor & VFD that are so registered with an extended warranty. Please ask about our extended warranty purchase plans.

Current systems Inc. will repair or replace, at its option, any product which has been found to defective and is within the warranty period, provided that the product is shipped, with previous factory authorization, freight prepaid, to the nearest Current System Inc. manufacturer, or to the nearest authorized Service Center. Current System Inc. is not responsible for the removal, installation, or any other incidental expense incurred in shipping the product to, an authorized service center.

This warranty applies to products used in swimming pool, spa, & aquaculture applications only and does not apply to any product which has been subjected to negligence, alteration, accident, abuse misuse, improper installation, vandalism, civil disturbances, or acts of God (including but not limited to freeze damage, lightening strikes, and other damage caused by catastrophic events). The only warranties authorized by Current Systems Inc. are those set forth herein. Current Systems Inc. does not authorize other persons to extend any warranties made in connection with the sale of the products.

Current Systems Inc. liability under this warranty shall be solely limited to repair or replacement of the product within the warranty period, and Current Systems Inc. shall not be liable under any circumstances, for consequential or incidental damages, including, but not limited to, personal injury or labor costs.

Under no circumstances will Current Systems Inc. Corporation be responsible for any expense in connection with any repairs made by anyone other than the manufacturer or an Authorized Service Center, unless such repairs have been specifically authorized in writing.





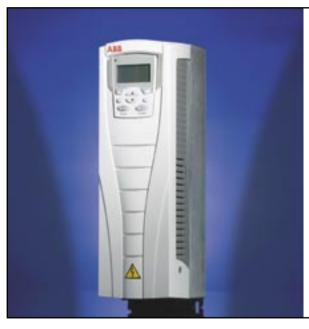






### **ACS 550 Adjustable Speed AC Drive**





The NEW ACS 550 Sensorless Vector AC Drive from ABB! For advanced speed control of 1 to 500 HP AC induction motors.

#### ACS 550 Adjustable Speed AC Drives

The ABB ACS 550 AC drive combines a sophisticated microprocessor with an advanced IGBT power switching technology to deliver V/Hz, Closed Loop Flux Vector, and Sensorless Vector control of AC motors. Its Intuitive Control Panel offers numerous benefits making it the most user-friendly panel in the drives industry.

The extensive library of pre-programmed application macros maximizes convenience and minimizes start-up time.

This drive can handle the most demanding industrial applications in an efficient, dependable and economic manner.

A new Control Panel, included as standard, provides a real-time clock and full graphic display as well as a dedicated help button.

#### **Features Include:**

- Control Panel with
  - Start-Up, Maintenance and Diagnostic Assistants
  - Support for 15 Languages
  - Full Graphic Display
  - "Help" Button
- Numerous internally mountable fieldbus adapters for serial communications
- Patent Pending Swinging Choke for Superior Harmonic Mitigation
- Internal Option Slots for additional I/O
- RS-485 Modbus Included as Standard
- Extensive Library of Pre-Programmed Application Macros
- Integral EMC Filter for 1st Environment, Restricted Distribution (30 m motor cable)
- UL, cUL and CE Approved
- Integral Braking Chopper up to 15 HP (480 VAC)

#### **Easily Integrated:**

- Sinking or Sourcing Input Device Logic
- Galvanically Isolated Digital I/O





Product Notes

#### **ACS 550 Technical Data**

#### **Input Connection**

3-Phase Voltage:

200 to 480 VAC

+/- 10% permitted

tolerance

Frequency: 48 ... 63 Hz

+/-2 Hz

#### **Output Connection**

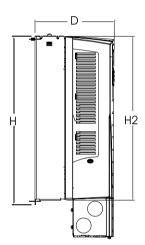
Voltage: 0 to max 0 to 500 Hz Frequency:

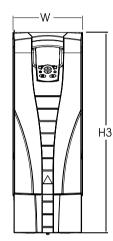
#### **Environmental Limits**

0° to 40° C Ambient Operating Temperature:

#### **Enclosure**

Type: NEMA 1, NEMA 12





#### **Standard Control Connection**

- 2 Programmable Analog Inputs (voltage or cur-
- 6 Programmable Digital Inputs
- 2 Programmable Analog Inputs
- 3 Programmable Relay Outputs

- External Braking Units (R3 R8)
- DriveWindow Light Programing and Diagnostic Software
- · Fieldbus Adapter Modules: DeviceNet, Profibus, ControlNet, CANopen

#### Protection

- Overcurrent
- Ground Fault
- Overtemperature
- Auxiliary Voltage Short Circuit Protection
- Electronic Motor Overload (UL508C I2t)
- Overvoltage
- Undervoltage
- Microprocessor Fault
- Motor Stall
- Underload

Frame		NEMA 1 Enclosure														
	R	11	R	2	R	.3	R	14	R	:5	R	.6	F	27	F	18
	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in
W	125	4.9	125	4.9	203	8.0	203	8.0	265	10.4	300	11.8	609	23.9	800	31.5
Н	330	13.0	430	16.9	490	19.3	596	23.4	N/A	N/A	N/A	N/A	1503	59.2	2130	83.9
H2	315	12.4	415	16.3	478	18.8	583	23.0	602	23.7	700	27.6	N/A	N/A	N/A	N/A
H3	369	14.5	469	18.5	583	23.0	689	27.1	739	29.1	880	34.6	N/A	N/A	N/A	N/A
D	212	8.3	222	8.7	231	9.1	262	10.3	286	11.3	400	15.8	495	19.5	585	23.0
Weight	6.17 kg	13.6 lb	8.85 kg	19.5 lb	19.2kg	42.4 lb	22.5kg	49.5 lb	29.9kg	66 lb	59.9kg	132 lb	195kg	430 lb	375kg	827 lb
230V HP	1 -	- 5	7.5	- 10	15 -	- 20	25	- 40	5	0	60 -	100		-		-
480V HP	1.5	- 7.5	10 -	- 15	20 -	- 25	30	- 50	60 -	- 75	100 -	- 150	150	- 250	300	- 550

N/A = Information not available at time of printing Drawing is not for engineering purposes.



ABB Inc.

**Automation Technologies Drives and Motors** 16250 W. Glendale Drive New Berlin, WI 53151

Tel: (800) HELP-365 Fax: (262) 785-0397 www.abb.com/motors&drives www.abb-drives.com

ACS550-US-00 @2003 ABB Inc. Specifications subject to change without notice.



#### **NSF Product and Service Listings**

These NSF Official Listings are current as of Thursday, March 24, 2011 at 12:15 a.m. Eastern Time. Please contact NSF International to confirm the status of any Listing, report errors, or make suggestions.

Alert: NSF is concerned about fraudulent downloading and manipulation of website text. Always confirm this information by clicking on the below link for the most accurate information: <a href="http://www.nsf.org/Certified/Pools/Listings.asp?Company=3R150&Standard=ASME1908&">http://www.nsf.org/Certified/Pools/Listings.asp?Company=3R150&Standard=ASME1908&</a>

# ASME/ANSI Standard A112.19.8 Suction Fittings for Use in Swimming Pools, Wading Pools, Spas, Hot Tubs and Whirlpool Bathtub Appliances

### Current Systems, Inc.

1645 Donlon Street Suite 104 Ventura, CA 93003 United States 866-372-8886 805-482-1091 Visit this company's website

Facility: Ventura, CA

<b>Suction Fitting Model</b>	Test Sump Model or Field Type	Orientation (Wall and/or Floor)	Design Flow Rate (GPM)	

18" x 23" Suction Outlet Cover[1] [2] [3]

CSI 1823 RF 125 Floor 160

- [1] Certified to ASME All2.19.8a-2008 and NSF/ANSI Standard 50
- [2] NSF Listed unit is white.
- [3] This cover is approved for use over a field fabricated main drain sump that meets the requirements of figure 2 in the ASME A112.19.8a-2008 Standard for Suction Fittings, providing the sump is qualified by a Registered Design Professional and installed per the manufacturer's instructions.

#### 20" x 44" Suction Outlet Cover[1] [2] [3]

CSI 2044	RF 127	Floor	2032
CSI 2044	RF 127	Wall	2032

- [1] Certified to ASME A112.19.8a-2008 and NSF/ANSI Standard 50
- [2] NSF Listed unit is white.
- [3] This cover is approved for use over a field fabricated main drain sump that meets the requirements of figure 2 in the ASME A112.19.8a-2008 Standard for Suction Fittings, providing the sump is qualified by a Registered Design Professional and installed per the manufacturer's instructions.

#### Riverflow System[1] [2] [4]

RFS 200	RFS 125	Floor	<b>244</b> 0
RFS 200	RFS 125	Wall	<b>244</b> 0

- [1] Certified to ASME A112.19.8a-2008 and NSF/ANSI Standard 50
- [2] NSF Listed unit is white.
- [4] Certified for use with Riverflow Axial Flow Pump CF104.

Number of matching Manufacturers is 1 Number of matching Products is 5 Processing time was 0 seconds

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#### OFFICIAL LISTING

NSF International Certifies that the products appearing on this Listing conform to the requirements of ASME/ANSI Standard All2.19.8 - Suction Fittings for Use in Swimming Pools, Wading Pools, Spas, and Hot Tubs

This is the Official Listing recorded on December 1, 2009.

Current Systems, Inc. 1645 Donlon Street Suite 104 Ventura, CA 93003 866-372-8886 805-482-1091

Facility: Ventura, CA

Suction Fitting Model	Sump Model or Field Type	Orientation (Wall and/or Floor)	Design Flow Rate (GPM)
18" x 23" Suction Outlet Cover [1] [2] [3]			
CSI 1823	RF 125	Floor	175
20" x 44" Suction Outlet Cover [1] [2] [3]			
CSI 2044	RF 127	Floor	2032
CSI 2044	RF 127	Wall	2032
Riverflow System [1] [2] [4]			
RFS 200	RFS 125	Floor	2440
RFS 200	RFS 125	Wall	2440

- [1] Certified to ASME All2.19.8a-2008 and NSF/ANSI Standard 50  $\,$
- [2] NSF Listed unit is white.
- [3] This cover is approved for use over a field fabricated main drain sump that meets the requirements of figure 2 in the ASME A112.19.8a-2008 Standard for Suction Fittings, providing the sump is qualified by a Registered Design Professional and installed per the manufacturer's instructions.
- [4] Certified for use with Riverflow Axial Flow Pump CF104.

Note: Additions shall not be made to this document without prior evaluation and acceptance by NSF International. 1 of 1



### PROGRAMMING THE ABB DRIVE

#### **IMPORTANT**

- Pool must be filled before running the Riverflow® Pump
- "Bump" start to verify counter clockwise motor rotation
- Select "NO" when prompted to run startup assistant
- Set time and date
- Use the attached check list to edit and confirm parameter values
- Backup parameter settings
- To activate warranty fax or e-mail completed start-up form

#### **Parameters Mode**

- 1. Select PARAMETERS in the Main Menu.
- 2. Press UP/DOWN to highlight the appropriate parameter group, then press SEL.
- 3. Press UP/DOWN to highlight the appropriate parameter in a group.

**NOTE!** The current parameter value appears below the highlighted parameter.

- 4. Press EDIT.
- 5. Press UP/DOWN to step to the desired parameter value.

**NOTE!** To view the parameter default value: In the set mode, press UP/DOWN simultaneously.

- 6. Press SAVE to store the modified value or press CANCEL to leave the set mode. Any modifications not saved are cancelled.
- 7. Press EXIT to return to the listing of parameter groups, and again to return to the main menu. Use the Parameters mode to view and edit parameter values:

ABB TECH SUPPORT (800) 435-7365 Press 4 and then 3 and have your model number. 24 Hour 7 Day support





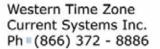


















### PROGRAMMING THE ABB DRIVE

MOTOR ROTATION COUNTER CLOCKWISE

Fax completed form to: (954) 962-9694

Parameter must be set prior to operating system

for warranty activation

Code Parameter Description		Selected	Check When Completed	
Group 99				
9901	Language	English American (AM)		
9902	Applic Macro	ABB Standard		
9905	Motor Nom Volt	230 voltage		
9906	Motor Nom Current	Motor FLA	22.4	
9907	Motor Nom Freq	60 Hertz		
9908	Motor nom Speed	Motor RPM	1765	
9909	Motor Nom Power	Motor HP	7.5	
Group 10	Command Inputs			
1001	ext1 commands	DI1		
1003	direction	forward		
Group 11	Reference Select			
1103	ext Ref1 select	DI 3U, 4D		
Group 12	Constant speeds			
1201	constant speed sel	not selected		
Group 20	Limits			
2003	max current	Motor FLA	22.4	
2007	minimum freq	15 Hz		
2008	maximum freq	60 Hz		

Komick Fine Home Builders Job name **Startup Date** -4-3-14 Factory test date Model Elite Competition CF104 Serial Number 210456

Code	Parameter Description	n	Selected	Check When Completed
Group 21	Start/Stop			
2102	Ramps		Ramp	
Group 22	Accel/Decel			
2202	Acceleration time 1		10 Sec	
2203	Deceleration time 1		10 Sec	
2205	Acceleration time 2		10 Sec	
2206	Deceleration time 2		10 Sec	
Group 26	Motor Control			
2606	Frequency		8HZ	
2607	Frequency Switch		On	
Group 30	Fault Protection			
3005	mot therm prot		fault	
Group 34	Display			
3401	RPM's		speed	
- Op	otional Optio	onal	-	- Optional –
Group 16	System Controls			
1603	Pass Code 358	Un	locked	
1602	Parameter Locked	loc	ked	
1604	fault reset sel st		rt/stop	









