

ADDING MEASUREMENTS (SHORTCUT)

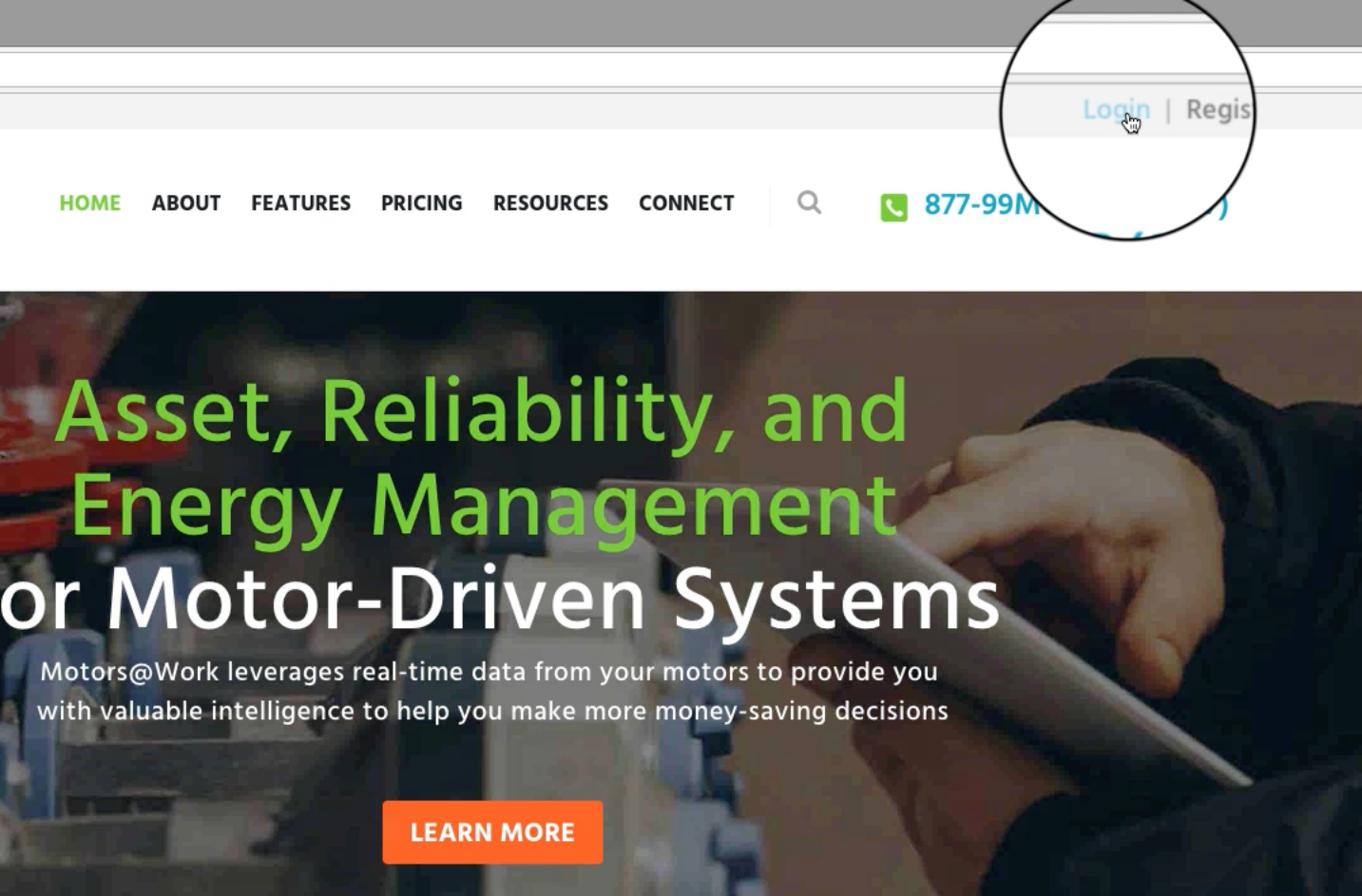
A QUICK-START GUIDE



MOTORS@WORK



LOG INTO MOTORS@WORK



1. Open your browser & go to www.motorsatwork.com
2. Select [Login](#) in the upper right corner of the website

ASSET, RELIABILITY AND ENERGY MANAGEMENT FOR MOTOR-DRIVEN SYSTEMS

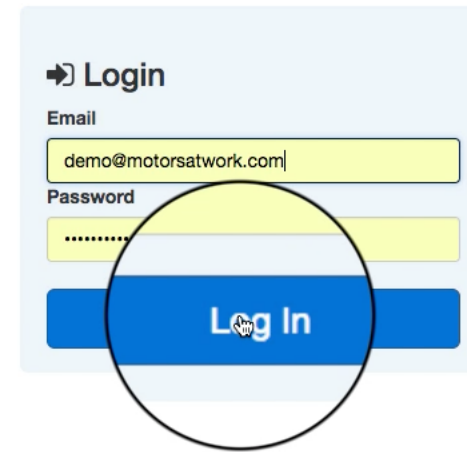


Reliability Management



Energy Management

3. Enter your **Email** and **Password** in the appropriate fields
4. Click the **Log In** button

A screenshot of a web application's login interface. It features a light blue background with the heading "Login" and a right-pointing arrow. Below the heading are two input fields: "Email" containing "demo@motorsatwork.com" and "Password" containing a masked password ".....". A blue "Log In" button is positioned below the fields, with a mouse cursor hovering over it. A black circle highlights the "Log In" button.



ADD MEASUREMENT (SHORTCUT)

Motors@Work - Efficiency for ...

Secure https://app.motorsatwork.com/dashboard

Search criteria

Mayberry Waterworks Overview

Asset Management Reliability Management Energy Management

Asset Performance

Energy Opportunities Total, all facilities

Asset	Score	Payback period	Cost to replace
CALVANDER PS PU	96.57 ✔	0.04 years	\$1,474.85
Yemassee Test M	N/A	0.2 years	\$3,082.30
BLOWER BLD #1 A	N/A	0.21 years	\$6,148.35
-NA-	N/A	0.21 years	\$3,082.30
#2	N/A	0.35 years	\$2,573.35
...		< 2 years	

Total, payback under 2.00 years **\$ 331439.55**

Reliability Opportunities Total, all facilities

Asset	Score	Life remaining	Cost to replace
Yemassee Test M	N/A	0 years	\$3,082.30
2 Water Pump Mo	2.6 ⦿	0 years	\$9,285.90
CALVANDER PS PU	2.6 ⦿	0 years	\$1,474.85
BLOWER BLD #1 A	2.6 ⦿	0 years	\$6,148.35
CALVANDER PS PU	2.6 ⦿	0 years	\$1,526.20
...			

Total, less than 5 years remaining life **\$21517.6**

Notifications

New, asset only

- ⦿ New measurement shows, BLOWER BLD #1 AIR COMPRESSOR MOTOR: Operating Temperature Exceeds Maximum Measured: 70.00. over the maximum.
[Review BLOWER BLD #1 AIR COMPRESSOR MOTOR Measurements](#)
- ⦿ New measurement shows, BLOWER BLD #1 AIR COMPRESSOR MOTOR: Ambient Temperature High Measured: 0.00. under the maximum.
[Review BLOWER BLD #1 AIR COMPRESSOR MOTOR Measurements](#)
- ⦿ New measurement shows, BLOWER BLD #1 AIR COMPRESSOR MOTOR: [HIGH] Motor Load exceeds service factor: 159.46
[Review BLOWER BLD #1 AIR COMPRESSOR MOTOR Measurements](#)

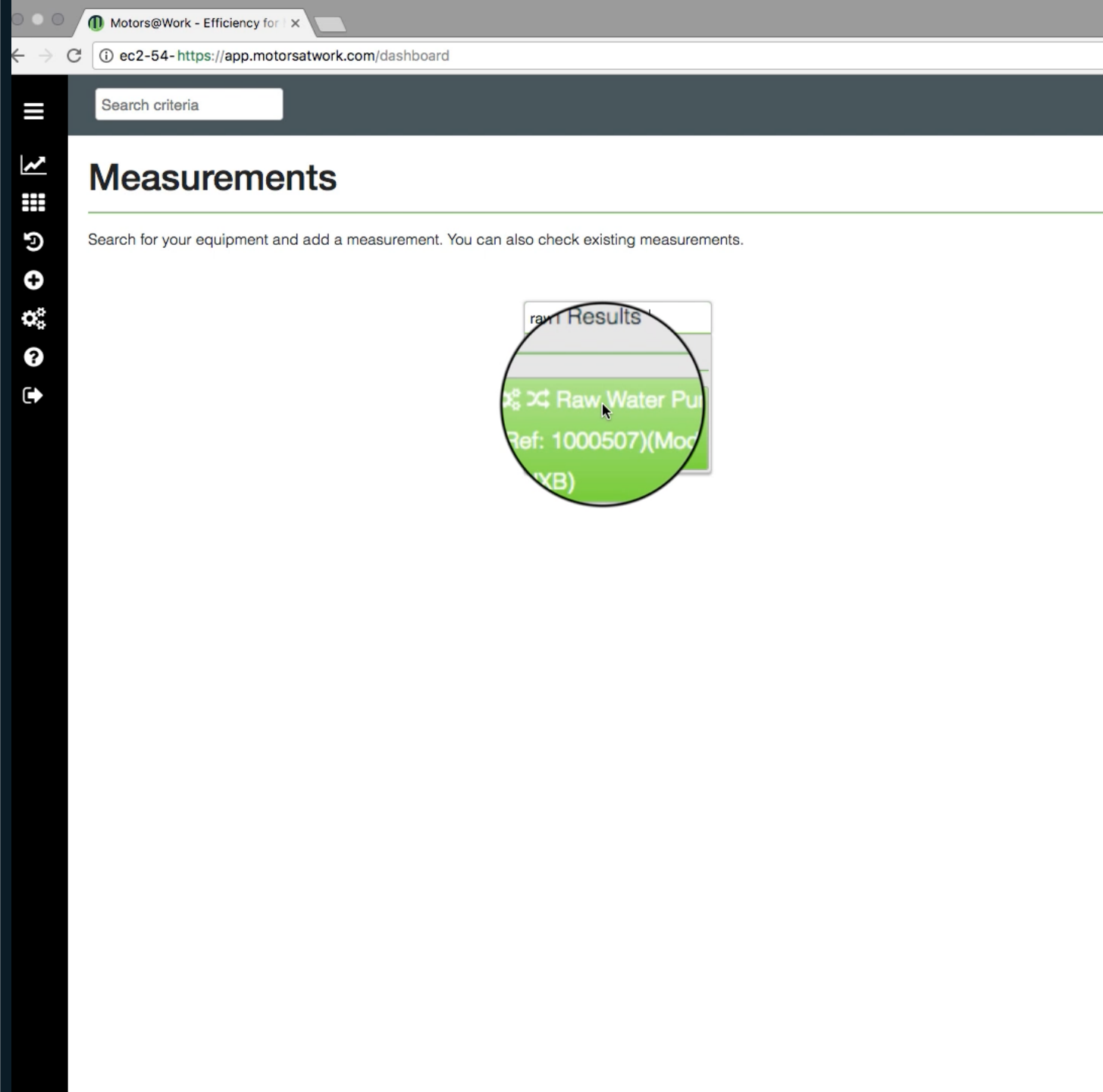
My KPIs

Total, all facilities

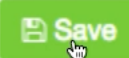

Metric	July 2017	Previous 12 months
Average age of assets	15.26 years	
Depreciation ratio	0 %	
Energy Performance	1523.72 kWh/mg	
Total utility bill	\$ 240439.62	
Equipment effectiveness	0 %	
Replacement needed	\$ 331439.55	

1. Select the **+** [Measurement icon] from the navigation bar

2. Search for the name of the asset you're measuring and select it from the list of suggested assets



rk.com

Motor Measurement

Measurement Date *:	Measured Speed (RPM):
<input type="text" value="08/07/2017 09:07:07 AM"/>	<input type="text"/>
Measurement Type:	Power Draw (kW):
<input type="text" value="Submeter"/>	<input type="text" value="627.00"/>
Voltage AB:	THD (%):
<input type="text"/>	<input type="text"/>
Voltage BC:	Insulation Resistance (MegOhms):
<input type="text"/>	<input type="text"/>
Voltage CA:	Vibration (in/sec):
<input type="text"/>	<input type="text"/>
Current A:	Surge/Motor Circuit (%):
<input type="text"/>	<input type="text"/>
Current B:	Motor Temperature:
<input type="text"/>	<input type="text"/>
Current C:	Ambient Temperature:
<input type="text"/>	<input type="text"/>
Power Factor (%):	
<input type="text"/>	

Pump Measurement

Measurement Date *:
<input type="text" value="08/07/2017 09:07:07 AM"/>
Static Suction Head(Feet of Head) *:
<input type="text" value="16.00"/>
Static Discharge Head (Feet of Head) *:
<input type="text" value="145.00"/>
Pump Discharge Flow Rate (MGD) *:
<input type="text" value="9.67"/>
Pump Discharge Pressure (PSI) *:
<input type="text" value="61.5"/>
Fluid Density (lb/ft3) *:
<input type="text" value="62.42"/>
Clearwell Level(Feet):
<input type="text"/>

3. If you're measuring a pump, you'll see both Motor & Pump Measurement blocks; if you're measuring a motor that's not associated with a pump (e.g., a blower or fan), you'll see only the Motor Measurement block

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Save **X**

Motor Measurement

Measurement Date *: 08/07/2017 09:07:07 AM

Measurement Type: Submeter

Voltage AB:

Voltage BC:

Voltage CA:

Current A:

Current B:

Current C:

Power Factor (%):

Measured Speed (RPM):

Power Draw (kW): 627.00

THD (%):

Insulation Resistance (MegOhms):

Vibration (in/sec):

Surge/Motor Circuit (%):

Motor Temperature:

Ambient Temperature:

Pump Measurement

Measurement Date *: 08/07/2017 09:07:07 AM

Static Suction Head(Feet of Head) *: 16.00

Static Discharge Head (Feet of Head) *: 145.00

Pump Discharge Flow Rate (MGD) *: 9.67

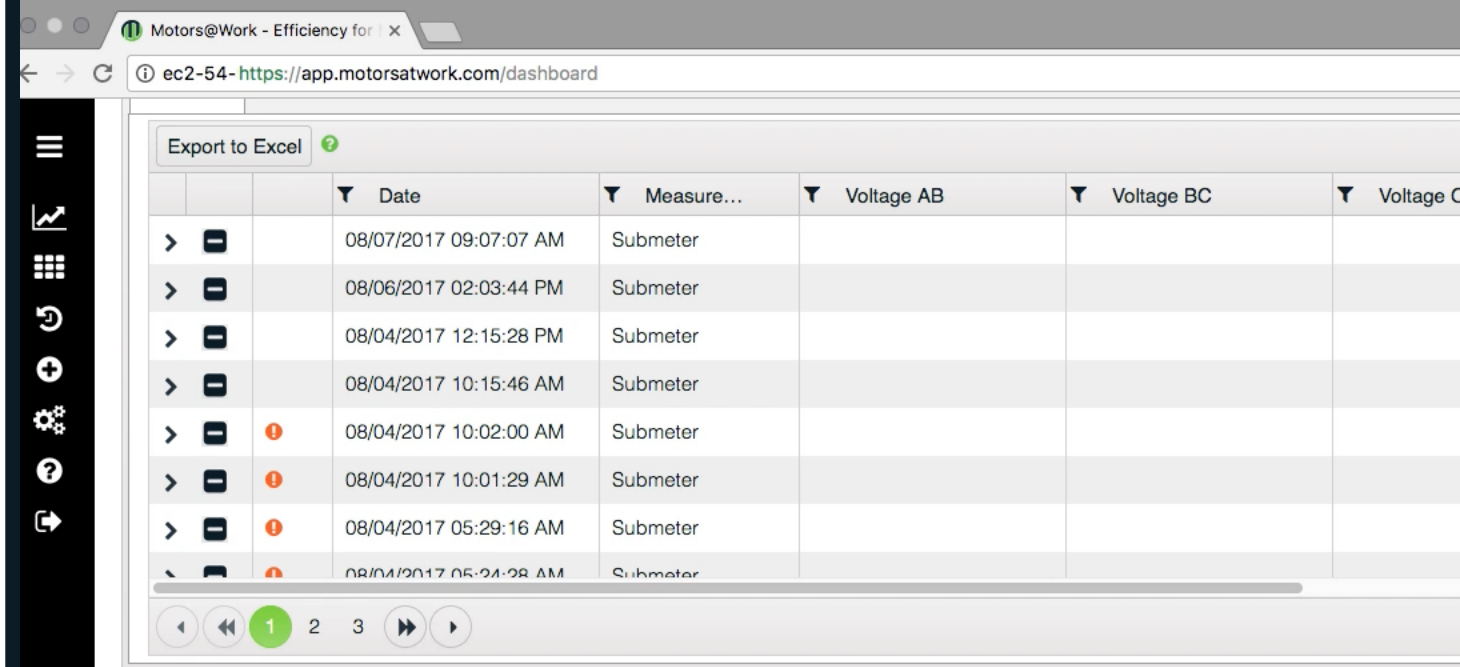
Pump Discharge Pressure (PSI) *: 61.5

Fluid Density (lb/ft3) *: 62.42

Clearwell Level(Feet):

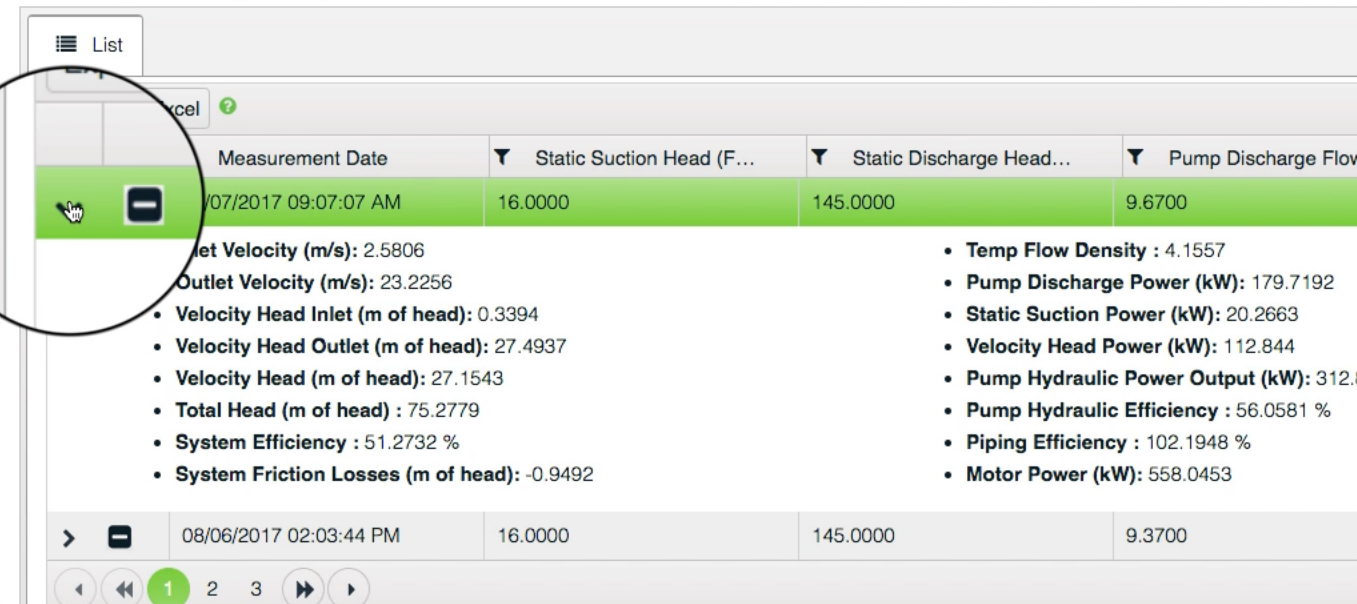
4. Enter your measurements: to calculate motor efficiency, enter, at a minimum, **Power draw (kW)** or three phases' **Current & Voltage**; to calculate pump efficiency, also enter the **Flow rate (mgd) & Pressure (psi)**
5. Click **Save** to create the measurement record

6. Click the > [caret] to expand your measurement and see Motors@Work's analysis
7. If present, hover over the ! [Warning icon] to read your notifications



		Date	Measure...	Voltage AB	Voltage BC	Voltage C
>	[-]	08/07/2017 09:07:07 AM	Submeter			
>	[-]	08/06/2017 02:03:44 PM	Submeter			
>	[-]	08/04/2017 12:15:28 PM	Submeter			
>	[-]	08/04/2017 10:15:46 AM	Submeter			
>	[-]	08/04/2017 10:02:00 AM	Submeter			
>	[-]	08/04/2017 10:01:29 AM	Submeter			
>	[-]	08/04/2017 05:29:16 AM	Submeter			
>	[-]	08/04/2017 05:24:28 AM	Submeter			

Pump Measurement




Measurement Date	Static Suction Head (F...	Static Discharge Head...	Pump Discharge Flow
08/07/2017 09:07:07 AM	16.0000	145.0000	9.6700

- Inlet Velocity (m/s): 2.5806
- Outlet Velocity (m/s): 23.2256
- Velocity Head Inlet (m of head): 0.3394
- Velocity Head Outlet (m of head): 27.4937
- Velocity Head (m of head): 27.1543
- Total Head (m of head): 75.2779
- System Efficiency : 51.2732 %
- System Friction Losses (m of head): -0.9492
- Temp Flow Density : 4.1557
- Pump Discharge Power (kW): 179.7192
- Static Suction Power (kW): 20.2663
- Velocity Head Power (kW): 112.844
- Pump Hydraulic Power Output (kW): 312.4
- Pump Hydraulic Efficiency : 56.0581 %
- Piping Efficiency : 102.1948 %
- Motor Power (kW): 558.0453



Get an unexpected result?

Need more help?

Motors@Work's online [Help Library](#) contains the latest tips & tricks — just click the  [[Help icon](#)].