



Concerning the heat exchanger display monitor

► Description

The status of the heat exchanger and the procedure for recovering from an error.

Description	Heat exchangers play an important role in water-cooled vibration test systems by facilitating the cooling process within the vibration generator. These systems are primarily employed in large-scale vibration test setups. The heat exchanger's status can be monitored using the display monitor, which also provides instructions for inspecting its condition and resolving errors. Quick identification of an error's cause enables a more efficient recovery, resulting in reduced downtime.
Target series	K-series



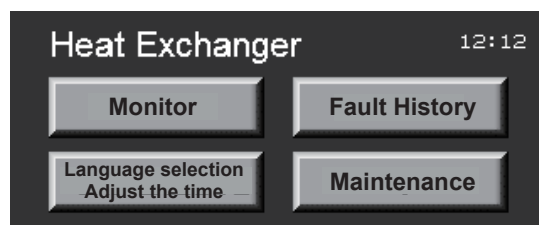
The monitor is a touch panel and can be operated intuitively.

• Top Screen

When the heat exchanger starts up, the opening screen appears, and after about 6 seconds, it changes to the top screen.



Opening screen

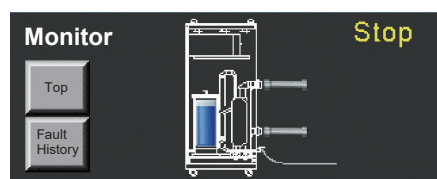


Top screen

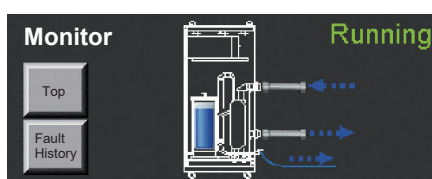
Monitor...The status of the equipment can be checked
 Fault History...Check the history of faults (errors)
 Language selection/Adjust the time...Set the time and language
 Maintenance...Used for maintenance
 *Customers may not use this feature.

• Monitoring screen

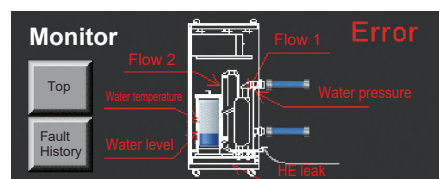
On the monitoring screen, you can check the following three states.



Stop



Running

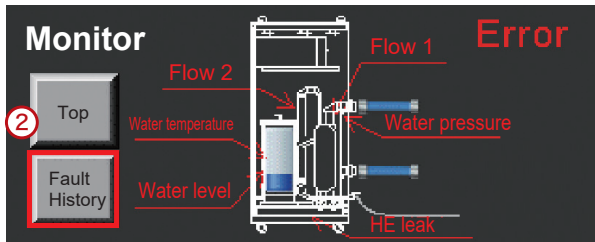


Error



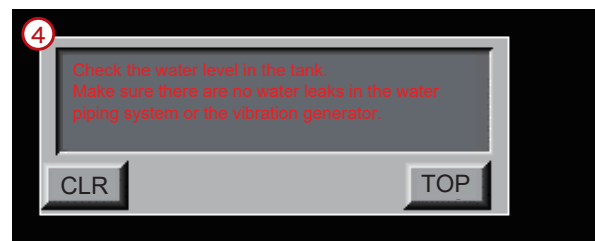
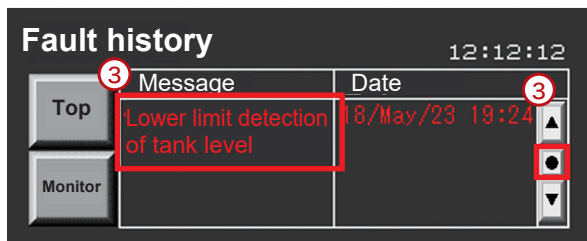
• Recovery procedure in the event of an abnormality (error)

1. When an abnormality occurs, the location of the abnormality is displayed on the monitoring screen.
2. Touch History.



Flow 1	Lack of primary water flow
Flow 2	Lack of secondary water flow
Water temperature	Abnormal water temperature in the tank
Water level	Abnormal water level in the tank
Water pressure	Abnormal primary water pressure
HE leak	Water leak in the heat exchanger
VE leak	Water leak inside the vibration generator

3. To access the error history, navigate to the fault message column and touch the central black circle located in the middle of the scroll bar.
4. The contents of the error and the methods of recovery are displayed.



Abnormal content	Check details	Cause
Temperature trip	Check on primary water circulation and the condition of the strainer.	Excessively high water temperature
Tank level trip	Check the water level in the tank and look for water leaks in the water piping system or the vibration generator.	Decrease in water volume.
Flow 1 trip	Check the primary water flow rate. Check that the cooling tower has started and that the valve is open/closed.	Decrease in water volume on primary side
Flow 2 trip	Check the secondary water flow rate. Check that the cooling tower has started and that the valve is open/closed.	Decrease in water volume on secondary side.

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Abnormal content	Check details	Cause
Pressure trip	Check the primary water pressure. Check that the cooling tower has started and that the valve is open/closed.	Decrease in water pressure on primary side.
HE leak	Ensure that there is no pooling of water within the heat exchanger and that there are no leaks in the piping.	Water leakage in heat exchanger.
VE leak	Check for water leaks inside the shaker. Check that there are no leaks in the piping.	Water leakage in vibration generator.

- **Language selection/Adjust time**

You can set the time and language by selecting “Language selection/Adjust time” on the top screen.

*The language selection can be switched by pressing and holding the English or Japanese for 2 seconds.



If the problem cannot be resolved, the vibration test system may be faulty.
Please contact the IMV Service Centre.



Inquiries