

Replacing PLC Battery



Mitsubishi PLC models:

- ACPU
- FX
- FX1N
- FX2N
- FX3G
- FX3U
- QCPU
- FX5U
- RnENCPU

Replacing PLC Battery

The FRAMO system on board your ship - whether it's a cargo pumping system or an anti-heeling system has a Programmable Logic Controller (PLC) included in the control system. In some of these systems - and particularly on board ships delivered in the period of 8/1989 until 3/2004 - there is a battery inside the PLC unit which allows for the retention of data during power out.

On a few occasions we received feedback from our customers that the battery had started to leak and dripped battery acid on the electronic card. This has happened in a few cases when the battery is getting very old.

In view of this we recommend that the battery is changed at least every 5th year, to prevent a more serious failure.



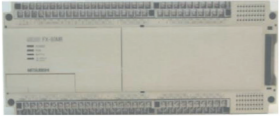
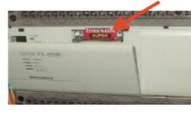











Battery should also be changed if the 'BATT' error LED is illuminated on the PLC.

To determine the PLC type onboard your vessel and the required action (if necessary) please refer to the below table:

Please put this information into your maintenance management system if the installation is equipped with a battery, to ensure correct follow up on this activity.

1. Before replacing the battery, switch off the PLC power supply and change battery within the given allocated time.

2. Genuine spare battery must be used - These are prepared with cable/connector which allows a quick change of the battery and can only be connected the correct way in order to prevent wrong polarity.
3. Please contact any Framo Service Station if problems occur or any questions should arise.

	Appearance (Can vary slightly from order to order)	Battery location	System	Production dates	Battery installed	Battery ID	Replacement period	Comments
ACPU			Cargo pumping system	1994 - 2006	Yes	A30677	5-Years	Battery to be changed within a maximum period of 3-minutes
FX			Cargo pumping system	1993 - 2003	Yes	A30662	5-Years	Battery to be changed within a maximum period of 20-seconds
			Antiheeling system	1993 - 2003	Yes	A30662	5-Years	Battery to be changed within a maximum period of 20-seconds
FX1N		N/A	Cargo pumping HPU Diesel Engine control	2001 - 2012	No	N/A	N/A	N/A
FX2N			Cargo pumping system	1998 - 2007	Some systems	A30662	5-Years	Battery to be changed within a maximum period of 20-seconds
FX3G		N/A	Cargo pumping HPU Diesel Engine control	2012 - Present	No	N/A	N/A	N/A
			Antiheeling system	2012 - Present	No	N/A	N/A	N/A
FX3U			Cargo pumping system	2007 - Present	Some systems	N/A	N/A	Battery can be left in place if found. No action required.
			Antiheeling system	2007 - Present	Yes	A66227	5-Years	Battery to be changed within a maximum period of 20-seconds
QCPU			Cargo pumping system	2006 - 2015	Yes	B42982	5-Years	Battery to be changed within a maximum period of 3-minutes
FX5U		N/A	Cargo pumping system	2017 - Present	No	N/A	N/A	N/A
			Antiheeling system	2017 - Present	No	N/A	N/A	N/A
RnENCPU			Cargo pumping system	2017 - Present	Yes	B42982	5-Years	Battery to be changed within a maximum period of 3-minutes

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