

EFOY fuel cells and accessories



Trouble shooting

Products	FW	Product versions
EFOY Fuel Cells	24.13	EFOY 80, EFOY 150, EFOY Pro 900, EFOY Pro1800, EFOY Pro 2800
EFOY Fuel Manager	25.05	FM2, FM4, FM8
Operating Panel	27.06	OP3

<https://www.efoy-pro.com/en/service/rma/>

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Fuel Cells

Error Code	Firmware	Typ	Automatic Restarts	Information	Service required
001.001	24.09	Error	0	Serial number is not configured correctly. Service at SFC required	yes
001.002	24.09	Error	0	At least one of the configurable devices not configured correctly..Service at SFC required	yes
001.003	24.09	Error	0	Battery type not configured. The battery type has not been configured or is not recognised. Please configure the battery via the settings. When using the EFOY lithium battery, please check if the communication cable to the battery is plugged in correctly.	
001.004	24.09	Error	0	PCB is misconfigured or PCB may be defective. Service at SFC required	yes
001.005	24.09	Error	0	Flash hardware test firmware and do the provisioning. Service at SFC required	yes
001.006	24.06	Error	0	Obsolete since firmware version 24.09	Update
010.001	24.09	Error	0	Stack temperature has been too high. Service at SFC required	yes
010.002	24.09	Error	0	Stack temperatur has been too high. Service at SFC required. Obsolete since firmware 24.10	yes
013.001	24.09	Error	1	Power has dropped too rapidly. Please try a Reset. If error reoccurs, Service at SFC required	yes
013.002	24.09	Error	1	Power of the fuel cell is too low. for a longer period This incident my occur with old units. Service at SFC required	yes
013.003	24.09	Error	1	Fuel Cell cannot generate power. Service at SFC required	yes
018.001	24.09	Error	1	Cell voltage has dropped. This incident may be caused by insufficient air supply or a blocked exhaust hose. Check air supply and exhaust hose. Check if previous warnings have been set (160.001). If Incident reoccurs after Reset, Service at SFC required	
018.002	24.09	Error	3	Cell voltage is too low during starting phase. This incident may be caused by insufficient air supply or a blocked exhaust hose. Check air supply and exhaust hose. Check if previous warnings have been set (160.001). If Incident reoccurs after Reset, Service at SFC required	
020.001	24.09	Error	0	Fuel cartridge is empty during startup. Please change fuel cartridge. If fuel cartridge is not empty, incident may have been caused by defective fuel cartridge (check with flashlight if both tubes are connected) or a defective pump in the fuel cell.	
020.002	24.09	Error	1	Fuel cartridge is empty during operation. Please change fuel cartridge. If fuel cartridge is not empty, incident may have been caused by defective fuel cartridge (check with flashlight if both tubes are connected) or a defective pump in the fuel cell.	
020.003	24.09	Error	0	No fuel is available because connected EFOY Fuel Manager cannot provide fuel. If fuel change fuel cartridges. If fuel cartridges are not empty, please check incidents on Fuel Manager.	

020.004	24.09	Error	0	No fuel is available because connected EFOY Fuel Manager cannot provide fuel. Please check incidents on Fuel Manager.	
030.001	24.09	Error	0	The intermediate tank level has dropped below 30%. Please refill Service Fluid. Check ambient temperature and installation (air cooling, air supply).	
030.002	24.09	Error	0	The intermediate tank level has dropped below 5% for at least one second. Incident resets automatically once fill level rises above 20%. Please refill Service Fluid. Check installation on leakages and air cooling, air supply. If incident reoccurs, Service at SFC required	
030.003	24.09	Error	0	The intermediate tank level has dropped fast. Please refill Service Fluid. Check installation on leakages. If incident reoccurs, Service at SFC required / RMA https://www.my-efoy.com/en/service/rma/	
040.001	24.09	Error	0	The device is frozen. Please defrost gently for at least 24 hours at room temperature. The fault is then automatically rectified. Please check battery and fuel level and previous incidents	
041.001	24.09	Error	0	The EFOY Fuel Cell has measured too high a temperature at the fuel reservoir. Ambient temperature and cooling must be checked.	
042.001	24.09	Error	0	The heat exchanger temperature is too high. This error resets automatically once the heat exchanger temperature falls below 30°C. Check ambient temperature and heat exchanger fan.	
043.001	24.09	Error	0	Frost protection is required, but due to another incident, the normal frost protection cannot be performed. Please check previous incidents, to avoid this occurs again	
050.001	24.09	Error	0	The battery voltage is too high. This incident resets automatically if battery voltage drops below the limit. Check battery, cables and chargers	
050.002	24.09	Error	0	The battery voltage is too low. This incident resets automatically if battery voltage rises above the limit. Check battery, cables, load and inverters.	
050.003	24.09	Error	0	The battery voltage is too high. This incident resets automatically if battery voltage drops below the limit. Check battery, cables and chargers. This error occurs when error 050.001 is not solved.	
050.004	24.09	Error	0	The battery voltage is too low. This incident resets automatically if battery voltage rises above the limit. Check battery, cables, load and inverters. This error occurs when error 050.002 is not solved.	
051.001	24.09	Error	0	Short charging cycles have been measured (five cycles in succession below the configured level - standard: 30 minutes). Please check battery configuration, degradation, connected loads and other chargers.	
070.001	24.09	Error	1	Incident on the reservoir measurement. May be caused by condensate within the reservoir or defective methanol sensors. If incident reoccurs after reset, Service at SFC required / RMA https://www.my-efoy.com/en/service/rma/	yes
070.002	24.09	Error	0	Defective sensor in the reservoir. If incident reoccurs after reset, Service at SFC required	yes
070.004	24.09	Error	0	The reservoir took too long to get filled. Check fuel supply. If incident reoccurs after reset, Service at SFC required	yes
070.005	24.09	Error	1	The reservoir took too long to get filled. Check fuel supply. If incident reoccurs after reset, Service at SFC required	yes
070.006	24.09	Error	1	The reservoir took too long to get filled. Check fuel supply. If incident reoccurs after reset, Service at SFC required	yes
070.007	24.09	Error	0	Incident on the reservoir measurement. If incident reoccurs after reset, Service at SFC required	yes
070.008	24.09	Error	1	Incident on the reservoir measurement. If incident reoccurs after reset, Service at SFC required	yes
071.001	24.09	Error	0	Defective component in the reservoir. If incident reoccurs after reset, Service at SFC required	yes
071.002	24.09	Error	0	Defective component in the reservoir. If incident reoccurs after reset, Service at SFC required	yes
075.001	24.09	Error	0	Defective component in the dosing process. If incident reoccurs after reset, Service at SFC required	yes
075.002	24.09	Error	0	Defective component in the dosing process. If incident reoccurs after reset, Service at SFC required	yes
075.003	24.09	Error	0	Defective component in the dosing process. If incident reoccurs after reset, Service at SFC required	yes
075.004	24.09	Error	0	Defective component in the dosing process. If incident reoccurs after reset, Service at SFC required	yes
081.001	24.09	Error	1	PCB may be defective. If incident reoccurs after reset, Service at SFC required	yes
083.001	24.09	Error	1	PCB may be defective. If incident reoccurs after reset, Service at SFC required	yes

083.002	24.09	Error	1	PCB may be defective. If incident reoccurs after reset, Service at SFC required	yes
084.001	24.09	Error	0	PCB may be defective. If incident reoccurs after reset, Service at SFC required	yes
085.001	24.09	Error	1	PCB may be defective. If incident reoccurs after reset, Service at SFC required	yes
086.001	24.09	Error	1	PCB may be defective. If incident reoccurs after reset, Service at SFC required	yes
090.001	24.09	Error	1	Defective component: temperature sensor. Service at SFC required	yes
090.002	24.09	Error	1	Defective component: temperature sensor. Service at SFC required	yes
090.003	24.09	Error	1	Defective component: temperature sensor. Service at SFC required	yes
090.004	24.09	Error	1	Defective component: temperature sensor. Service at SFC required	yes
090.005	24.09	Error	1	Defective component: temperature sensor. Service at SFC required	yes
090.006	24.09	Error	1	Defective component: temperature sensor. Service at SFC required	yes
090.007	24.09	Error	1	Defective component: Reservoir sensor. Service at SFC required	yes
090.008	24.09	Error	1	Defective component: Reservoir sensor. Service at SFC required	yes
090.009	24.09	Error	1	Defective component: Reservoir sensor. Service at SFC required	yes
090.010	24.09	Error	1	Defective component: PCB. Service at SFC required	yes
090.011	24.09	Error	2	Defective component: feeding pump. Service at SFC required	yes
090.012	24.09	Error	2	Defective component: dosing pump. Service at SFC required	yes
090.013	24.09	Error	2	Defective component: air pump. Service at SFC required	yes
090.014	24.09	Error	2	Defective component: circulation pump. Service at SFC required	yes
090.015	24.09	Error	2	Defective component: heat exchanger fan. Service at SFC required	yes
090.017	24.09	Error	1	Defective component: PCB. Service at SFC required	yes
091.001	24.09	Error	0	Software error. Firmware Update is required. Obsolete since firmware 24.10	yes
091.002	24.09	Error	0	Software error. Firmware Update is required. Obsolete since firmware 24.10	yes
091.003	24.09	Error	0	Software error. Firmware Update is required. Obsolete since firmware 24.10	yes
091.004	24.09	Error	0	Software error. Firmware Update is required. Obsolete since firmware 24.10	yes
091.005	24.09	Error	0	Software error. Firmware Update is required. Obsolete since firmware 24.10	yes
095.001	24.09	Error	0	An incompatible device with CAN communication has been connected to the SFC Bus. Please update the EFOY fuel cell firmware.	
095.002	24.09	Error	0	The communication cable (RJ-12) between the EFOY Battery and the fuel cell has been connected, while the fuel cell was charging. Please do not connect the communication cable while charging. Please switch the EFOY fuel cell off and connect the communication cable. If the fault occurs again, please check the data cable and the connector on the EFOY fuel cell.	
120.001	24.09	Warning	0	This is a note that informs about an incident on the Fuel Manager, while the EFOY fuel cell is in standby or sleep. Please check the Fuel Manager and restore operation.	
120.002	24.13	Warning	0	The fuel cartridge fill level is below the fuel cartridge sensor FS2. It is likely that the fuel cartridge(s) will need to be changed soon.	
130.001	24.09	Warning	0	Service Fluid level is low. Please refill service fluid.	
142.001	24.09	Warning	0	Cooling is insufficient. The EFOY fuel cell may reduce power output. This note resets automatically once normal operation is possible again. If this note reoccurs or persists, please check the installation and cooling	

151.001	24.09	Warning	0	Note to inform the user about short charging cycles. This notes occurs if the EFOY has measured at least five charging cycles below the configurated min charge cycle duration (standard 30 minutes). The fuel cell is still properly working. This notes resets when the average charging cycle duration increases again. Note can be reset by a factory reset. Please check the battery, configured parameters, chargers and loads. If the EFOY measures 5 cycles in succession, the EFOY fuel cell will switch to incident 051.001 and stop charging.	
152.001	24.09	Warning	0	An EFOY Battery is configured, but no communication can be established or communication could not be maintained. Check communication cable and connector. Charging operation is possible with fixed parameters based on the measured battery voltage.	
152.002	24.09	Warning	0	A connected EFOY Battery is in an error state that does not allow charging. EFOY fuel cell will not start charging, the deep discharge protection is inactive as long as the error is active. Only frost protection operation is possible. Please identify and remedy the malfunction of the EFOY Battery.	
160.001	24.09	Warning	0	Note. Irregular ambient pressure and air volume flow was measured. This may reduce the EFOY's performance. If note recorrus, Service at SFC may be required / RMA https://www.my-efoy.com/en/service/rma/	
161.001	24.09	Warning	0	Note: The fresh air supply is insufficient. If the message appears again, check the exhaust hose and the installation situation.	
195.001	24.09	Warning	0	Note:The EFOY fuel cell has detected a newer firmware version for the connected accessories. A Firmware update of the EFOY fuel cell is required.	
EFOY Bluetooth Adapter is not blinking. Operating panel is OFF. EFOY LED is working. EFOY can start charging	24.09			The fuse for the communication interface is probably defective. Service at SFC required	yes
EFOY Bluetooth Adatper is blinking.LED on EFOY is OFF, Operating panel is OFF. Reset is not possible. Firmware Update is not possible.	24.09			Error with the software. Service at SFC required	yes

Fuel Manager

201.001	25.03	Error	0	Serial number is not configured correctly. Service at SFC required	yes
220.002	25.03	Error	0	All fuel cartridge connections on the EFOY Fuel Manager are deactivated. At least one fuel cartridge connector must be activated.	
220.003	25.03	Error	0	The Fuel Manager is not supplied with methanol. All fuel cartridges connected to the Fuel Manager are empty. Please replace the fuel cartridges	
241.001	25.03	Error	0	The ambient temperature measured on the EFOY Fuel Manager was too high. Operation was interrupted. Please wait until the temperature has dropped or provide better ventilation. The device starts automatically as soon as the temperature has dropped. If the problem occurs frequently, check the installation situation.	
250.001	25.03	Error	0	The battery voltage is too high. Check the battery voltage, the battery type and the parameters	
250.002	25.03	Error	0	The battery voltage is too low. Please check the battery and the charging cable, and charge the battery externally. Please replace a defective or deeply discharged battery.	
260.001	25.03	Error	0	The EFOY Fuel Manager is tilted too far to the longitudinal axis. The inclination should not exceed 35 °	
260.002	25.03	Error	0	The EFOY Fuel Manager is tilted too far to the transverse axis. The inclination should not exceed 20 °	
270.001	25.03	Error	0	The EFOY Fuel Manager tries to fill up the reservoir, which is already full. Please try a Reset. If error reoccurs, Service at SFC required	
270.002	25.03	Error	0	There is a malfunction with the reservoir filling in the EFOY Fuel Manager. Service at SFC required	yes
270.003	25.03	Error	0	The filling time of the reservoir was too long. Please try a Reset. If error reoccurs, Service at SFC required	yes
270.004	25.03	Error	0	Incident on the reservoir measurement. Please try a Reset. If error reoccurs, Service at SFC required	yes
271.001	25.03	Error	0	Incorrect configuration during FAT. Service at SFC required	yes
271.002	25.03	Error	0	Incorrect configuration during FAT. Service at SFC required	yes
271.003	25.03	Error	0	Incorrect configuration during FAT. Service at SFC required	yes
271.004	25.03	Error	0	Incorrect configuration during FAT. Service at SFC required	yes
271.005	25.03	Error	0	Incorrect configuration during FAT. Service at SFC required	yes
271.006	25.03	Error	0	Incorrect configuration during FAT. Service at SFC required	yes
271.007	25.03	Error	0	Incorrect configuration during FAT. Service at SFC required	yes
271.008	25.03	Error	0	Incorrect configuration during FAT. Service at SFC required	yes
271.009	25.03	Error	0	Incorrect configuration during FAT. Service at SFC required	yes
271.010	25.03	Error	0	Incorrect configuration during FAT. Service at SFC required	yes
271.011	25.03	Error	0	Incorrect configuration during FAT. Service at SFC required	yes
290.002	25.03	Error	0	A temperature sensor is defective. If incident reoccurs after reset, Service at SFC required	yes
290.003	25.03	Error	0	Inclination measuring is defective. If incident reoccurs after reset, Service at SFC required	yes
290.004	25.03	Error	0	Inclination measuring is defective. If incident reoccurs after reset, Service at SFC required	yes
290.005	25.03	Error	0	Above reservoir sensor defective. If incident reoccurs after reset, Service at SFC required	yes
290.006	25.03	Error	0	Medium reservoir sensor defective. If incident reoccurs after reset, Service at SFC required	yes
290.007	25.03	Error	0	Lower reservoir sensor defective. If incident reoccurs after reset, Service at SFC required	yes
290.008	25.03	Error	0	Sensor at connector 1 defective. If incident reoccurs after reset, Service at SFC required	yes
290.009	25.03	Error	0	Sensor at connector 2 defective. If incident reoccurs after reset, Service at SFC required	yes
290.010	25.03	Error	0	Sensor at connector 3 defective. If incident reoccurs after reset, Service at SFC required	yes

290.011	25.03	Error	0	Sensor at connector 4 defective. If incident reoccurs after reset, Service at SFC required	yes
290.012	25.03	Error	0	Sensor at connector 5 defective. If incident reoccurs after reset, Service at SFC required	yes
290.013	25.03	Error	0	Sensor at connector 6 defective. If incident reoccurs after reset, Service at SFC required	yes
290.014	25.03	Error	0	Sensor at connector 7 defective. If incident reoccurs after reset, Service at SFC required	yes
290.015	25.03	Error	0	Sensor at connector 8 defective. If incident reoccurs after reset, Service at SFC required	yes
290.016	25.03	Error	0	Feeding pump 1 may be defective. If incident reoccurs after reset, Service at SFC required	yes
290.017	25.03	Error	0	Feeding pump 2 may be defective. If incident reoccurs after reset, Service at SFC required	yes
290.018	25.03	Error	0	Feeding pump 3 may be defective. If incident reoccurs after reset, Service at SFC required	yes
290.019	25.03	Error	0	Feeding pump 4 may be defective. If incident reoccurs after reset, Service at SFC required	yes
290.020	25.03	Error	0	Feeding pump 5 may be defective. If incident reoccurs after reset, Service at SFC required	yes
290.021	25.03	Error	0	Feeding pump 6 may be defective. If incident reoccurs after reset, Service at SFC required	yes
290.022	25.03	Error	0	Feeding pump 7 may be defective. If incident reoccurs after reset, Service at SFC required	yes
290.023	25.03	Error	0	Feeding pump 8 may be defective. If incident reoccurs after reset, Service at SFC required	yes

Operating Panel

999.001	27.04	Error	0	The firmware update of the control panel has failed. The control panel needs probably to be returned for repair. Try the update again, if the incident reoccurs after reset, Service at SFC required.	yes
999.002	27.06	Error	0	Communication to EFOY failed! Please check the wiring! Please check the wiring! The control panel is supplied with power but communication with the EFOY fuel cell no longer works.	
999.003	27.06	Error	0	The EFOY fuel cell has not recognized the connected control panel. A firmware update of the EFOY fuel cell is required. If the message appears again, check the wiring.	