

Marine Safety Flash

A15-20 (15th September)



Faulty Clothes Dryer

Incident Overview

At 0640hrs, a fire alarm became active in the laundry area of the vessel. On initial inspection, there was signs of smoke emitting from the rear of the clothes dryer. The power supply was immediately removed by a crew member.

Key Findings

- Confirmed Failure of heater contactor in the closed position, causing the heater elements to stay on when the machine is not in operation.
- Both safety thermal switches have operated, and opened the circuit, but due to modifications, the thermal trips only cut the power to the front panel and not the supply to the heater elements.
- The modifications carried out have also disabled the high and low heat functions, as both heater elements are energised from the same contactor.
- It is likely the machines have been purchased as normal land based units and modified to suit a marine installation, in doing so removing the safety cut outs from a critical area.
- This is a supplier modification problem. The fault was not as a result of incorrect operation or misuse.



Damage to fan



Damage to safety cutouts



Damage to power lead

Recommendations

Crew have been instructed to unplug the dryer from the power supply when it is not in operation or left unattended until circuit modification can be carried out.

Electrical circuit should be as per the spec drawing or be modified so that the thermal trips are placed in series with the common white wire feeding the heater elements.