

T.I. No.: 2023-18 Updated: -	Subject: Failure of the solid-state relay
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Date: 28/08/2023	Priority	Need for action
Affected machines:	High	As soon as possible
see table „Affected machines“	X Medium	X On next visit to the machine
As of date: Immediately	Low	FYI only

PROBLEM DESCRIPTION

Defective solid-state relays

In recent days we have received feedback about defective solid-state relays with **article no. 072044**.

Identifying sign



Figure 1: Solid-state relay, article no. 072044

A failed relay can look intact from the outside or burnt to varying degrees (see example picture). In many cases, one of the safety thermostats (Klixons) tripped. In some cases, the power board had to be replaced.

Production lot

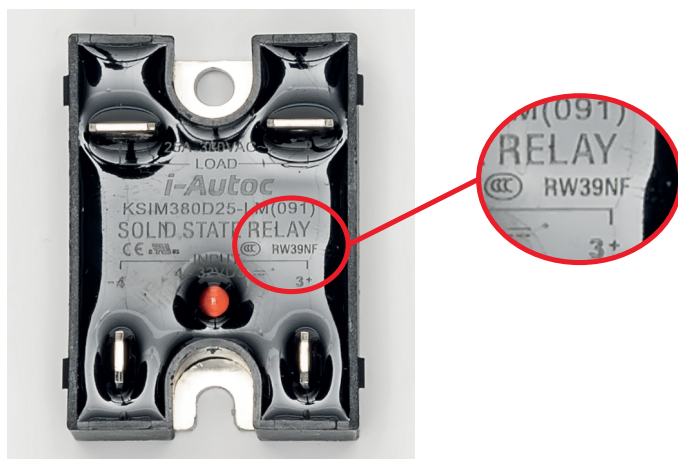


Figure 2: Faulty production lot

All failed relays are from the same production lot with the **code RW39**. The last two characters (NF in the example) are insignificant, see illustration above.

Affected machines

Machine type	As of production date	Until production date
Schaerer Coffee Prime	Calendar week 13/2023	Calendar week 22/2023
Schaerer Coffee Soul 10 & 12	Calendar week 13/2023	Calendar week 22/2023
Schaerer Coffee Skye	Calendar week 13/2023	Calendar week 22/2023

All machines delivered from calendar week 35/2023 onwards are explicitly checked at Schaerer for SSR with **production code RW39**.

Risk assessment

The solid-state relays are located in an area surrounded by flame-retardant material. Furthermore, the number of feedbacks is low compared to the number of machines produced. Therefore, there is no need to proactively visit the machines.

Additional damage

In individual cases, the **power board 079430** had to be replaced because the output to the solid-state relay no longer worked.

In rare cases, the wiring can be damaged by heat emission.

PROBLEM SOLUTION

Recommended measures

If you visit one of the affected machines built in 2023:

- ▶ Check the production code of the solid-state relays.
- ▶ If the relays are from the **RW39 lot**: Replace all relays.

Stocks

- ▶ Check the spare parts stock for the presence of solid-state relays with **production code RW39**.
- ▶ Sort out solid-state relays with **production code RW39**.
- ▶ Machines in stock: Check machines in stock before or during installation.

REPAIR INSTRUCTIONS

- ▶ Ensure professional repair with suitable tools and observe the electrical safety guidelines and the following information.

Plug-in connections and suitable insulating sleeves can be ordered from Schaefer Ltd.

- Plug-in connector 6.3 x 0.8 mm for 1.5 - 2.5 mm² (steel-nickel coating): #065'258; suitable for machine side wiring 1.5 mm² (between heater control board ending at Klixon) and boiler wiring 2.5 mm² (between boiler element and Klixon).
- Insulation (GWT compatible): #065'246
- Repair kit for wiring between relay and boiler (used when connectors and wiring have been damaged by overheating and the remaining wire is too short to crimp a new connector, or when professional tools are not available at the service shop: #075'294).
- ▶ Use suitable (professional) tools to mount the plug-in connections in an electrically safe manner (not sold by Schaefer Ltd).



Free of charge replacement material

Replacement relays (**article no. 072044**) and, if applicable, power boards (**article no. 079430**) can be ordered through the usual channels using the machine number(s). Replacements under warranty will only be made against return of the goods and indication of the serial number and date of removal or alternatively with clear indication "from spare parts stock".

This offer is valid until 31/12/2023 or until expiry of the machine's warranty period at the latest.

Return of material

- ▶ Return all material appropriately packaged and labelled.
- ▶ Label with the following information:
 - > Machine number
 - > Installation and removal date
 - > alternatively: "from spare parts stock".

Return address

Schaerer Ltd
Quality assurance
Niedermattstrasse 3
4528 Zuchwil
Switzerland

Service contact

Global Technical Support Team
GBU Professional Coffee Machines
> Support Hotline: +41 32 681 62 75 (10:00-11:30 CET/
15:00-16:30 CET)
> Support E-Mail: technical-support@schaerer.com