SPINNER SmartLoad Software D13350 G, D13351 E, D13352 F, D18060 D

Software Release Notes

1 New in this version

Besides some smaller improvements on the display messages the following features were added in the new software versions for the SmartLoads.

1.1 Overtemperature Protection

To prevent damage of the SmartLoad and components beyond during a loss of the cooling system an extendend overtemperature protection was added.

After opening the interlock at 260°C the load element needs to cool down to 60°C before the interlock is closed. The overtemperature threshold will be reduced gradually to 190°C and 120°C to keep the load element temperatures in a safe range.

Between the interlock open temperature of 120°C and the interlock close temperature of 60°C unlimited operation is possible.

After 6 hours of trouble-free operation or a power cycle the interlock open threshold will be reset to 260°C.

Overtemperatures will be displayed as a warning on the PLC. The warning can be reset (cleared on the PLC display) by pressing the pump button.

After reaching the threshold of 120°C a master alarm will be displayed on the PLC. The alarm can be reset (cleared on the PLC display) by pressing the pump button for more than 5 seconds.

1.2 Functional Test

A page on the PLC was integrated to facilitate the functional test (see manual).

Use the up / down keys on the PLC to navigate to this screen (left single loads, right dual loads):
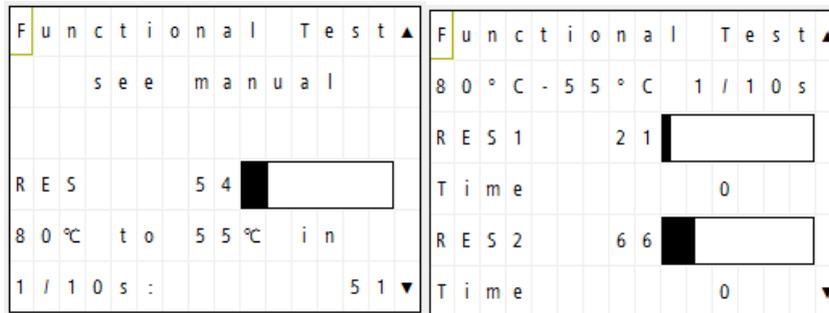
Perform the test as described in the manual. If a power of e.g., 1 kW is applied to the load you see the resistor temperature rising to 80°C. There the pump starts, and the resistor cools down. The cool down time to 55°C is displayed in 1/10 seconds. E.g., the readout in the left display 51 means 5.1 seconds.

1.3 Interlock (Dual Load only)

An overtemperature opens the interlock of the load element where the overtemperature occurred.

In version D13351 D an overtemperature in one load element opened the interlock of both load elements.

Overtemperature of the coolant opens both interlocks as in previous versions.

> **CAUTION**
>
> The interlocks open individually for each load element. Double check (by unplugging the interlock connector at the load) that the interlock of each load element is connected to the correct cabinets of the transmitter.

Template Normal.dotm

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1.4 Maintenance cycle

The weekly maintenance cycle was changed from Friday 08:00am to Tuesday 08:00am. It runs for 3 minutes pump and fan.

There is a second maintenance cycle that runs pump and fan each week starting with the power up of the load. This is a backup as the scheduled cycle on Tuesday won't run if the clock wasn't set.

2 Version Overview

Description	Software / Version / (Date)			
	D13350	**D13351**	**D13352**	**D18060**
Initial version	**A** (2019-03-04)		**A** (2019-04-23)	
Pump and fan start counter integrated (06.05.2019)	**B** (2019-05-06)	**A** (2019-05-19)	**B** (2019-05-19)	**A** (2020-05-04)
Fan on at 65°C	**C** (2020-06-25)	**B** (2020-06-25)	**C** (2020-06-25)	
Log file modified				**B** (2020-06-25)
Pushbutton pressed, then fan on added (D18060 only)	✕	✕	✕	✕
Pump start delay added (IR-Sensor) (04.11.2020)	**D** (2021-04-07)	**C** (2020-11-04)		
SPS start delay added (Operation state delayed due to new IR sensor version)	**E** (2021-10-27)	**D** (2021-10-21)	**D** (2021-11-22)	**C** (2021-11-22)
Software correction (version E was not executable, no green light, D13350 only)	**F** (2021-11-04)	✕	✕	✕
Customer specific version (updated display screens, maintenance cycle changed to Tuesday 08.00am)	✕	✕	**E** (2022-09-06)	✕
Overtemperature protection Functional test Interlock function (Dual Load only) Maintenance cycle changed to Tuesday 08:00am	**G** (2022-11-04)	**E** (2022-11-04)	**F** (2022-11-10)	**D** (2022-11-10)

3 Which SmartLoad uses which Software

BN	Description	Coolant	Product Manual	Early Software # (until May 2019)	Software # (from Mai 2019)
546404	25 kW, 230 V	Cool N	M36338	A89929	D13350
546404C0001	25 kW, 115 V				
546404C0200	25 kW, 230 V	Antifrogen N	M36480		
546404C0201	25 kW, 115 V				
546430	50 kW, ext. Hex	Cool N	M36445	D05100	D13352
546430C0100	50 kW, ext. Hex	w/o	M36453	D04487	
546430C0200	50 kW, ext. Hex	Antifrogen N	M36488	D05100	
546430C0210	50 kW, ext. Hex	w/o	M36489		
546430C0220	50 kW, ext. Hex, 50 m hose	Antifrogen N	M36541	n/a	
546434	25 kW, Dual	Cool N	M36397	D04111	D13351
546434C0200	25 kW, Dual	Antifrogen N	M36485		

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BN	Description	Coolant	Product Manual	Early Software # (until May 2019)	Software # (from Mai 2019)
546434C0220	25 kW, Dual, w/o Hex	w/o	M36556	n/a	D18060
546434C0230	25 kW, Dual, ext. Hex	Antifrogen N	M36560		
546435C0000	25 kW, ext. Hex, 230 V	Cool N	M36441	D04697	D13352
546435C0001	25 kW, ext. Hex, 115 V	Cool N	M36441	D03833	
546435C0100	25 kW, ext. Hex, 230 V	w/o	M36454	D05101	
546435C0200	25 kW, ext. Hex, 230 V	Antifrogen N	M36482	D04697	
546435C0201	25 kW, ext. Hex, 115 V	Antifrogen N	M36482	D03833	
546435C0210	25 kW, ext. Hex, 230 V	w/o	M36483	D04697	
546435C0211	25 kW, w/o Hex, 115 V	w/o	M36530	n/a	
546435C0220	25 kW, ext. Hex, 230 V, 50 m hose	Antifrogen N	M36540	n/a	
546435C0221	25 kW, ext. Hex, 115 V, 50 m hose	Antifrogen N	M36540	n/a	
546437	50 kW	Cool N	M36448	D04233 (until March 2019)	D13350 (from April 2019)
546437C0001	50 kW	Cool N	M36512		
546437C0200	50 kW	Antifrogen N	M36487		
546439	55 kW, ext. Hex	Cool N	M36459	D07270	D13352
546439C0100	55 kW, ext. Hex	w/o	M36507		
546439C0200	55 kW, ext. Hex	Antifrogen N	M36490		
546439C0201	55 kW, w/o Hex	w/o	M36492		
546439C0210	55 kW, ext. Hex	w/o	M36491		
546439C0220	55 kW, ext. Hex, 50 m hose	Antifrogen N	M36542	n/a	

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