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Model	<b>RM 8xxx</b>		
Subject	<b>Testplan MES / AES</b>		



**Before testing make sure, that all cables are connected to the PCB ! Provide a possibility, that the 12 VDC supply , the AC supply , the +12 V heater supply and the D+/S+ connection (only on AES) can be interrupted easily ! The supply voltage must be between 11 VDC and 14 VDC.**

## 1. Test plan MES

No.	Action	Indication	Result
<b>1.</b>	<b>230 VAC Function test</b>		
1.1	Turn rotation knob to AC with AC supply not connected	AC LED and red LED must flash	
1.2	Provide AC supply (230 V)	AC LED lights green after a few seconds	AC relay switches
<b>2.</b>	<b>12 VDC Function test</b>		
2.1	Turn rotation knob to DC with +12 V heater supply not connected	DC LED and red LED must flash	
2.2	Provide +12 V heater supply	DC LED lights green after a view seconds	DC relay switches
<b>3.</b>	<b>Gas Function test</b>		
3.1	Turn to Gas, wait ca. 5,5 minutes (3 ignition trials)	Gas LED and red LED flash (gas lockout)	(3 ignition trials: 30 seconds ignition, 2 minutes ventilation pause, 30 seconds ignition, 2 minutes ventilation pause, 30 seconds ignition.
3.2	Switch off and on again; go to gas mode, provide gas to gas input tube	Gas LED lights green	Ignition starts until flame is on
<b>4.</b>	<b>Interior light test</b>		
4.1	Turn to any mode, open door		Interior light switches on
4.2	Close door		Interior light switches off
4.3	Turn to - OFF mode and open door		Interior light keeps off



## 2. Test plan AES

No.	Action	Indication	Result
<b>1.</b>	<b>230 VAC Function test</b>		
1.1	Turn to AC mode with AC supply not connected	Display shows "230" flashing with red LED	
1.2	Provide AC supply (230 V)	Display shows "230"	AC relay switches
<b>2.</b>	<b>12 VDC Function test</b>		
2.1	Turn rotation knob to DC with +12 V heater supply not connected	Display shows "12" flashing with red LED	
2.2	Provide +12 V heater supply	Display shows "12"	DC relay switches
<b>3.</b>	<b>Gas Function test</b>		
3.1	Turn to Gas, wait ca. 5,5 minutes (3 ignition trials)	Display shows "GAS" flashing with red LED (gas lockout)	3 ignition trials: 30 seconds ignition, 2 minutes ventilation pause, 30 seconds ignition, 2 minutes ventilation pause, 30 seconds ignition.
3.2	Switch off and on again; go to gas mode, provide gas to gas input tube.	Display shows "GAS"	Ignition starts until flame is on
<b>4.</b>	<b>Interior light test</b>		
4.1	Turn to any mode, open door		Interior light switches on
4.2	Close door		Interior light switches off
4.3	Turn to - OFF mode and open door		Interior light keeps off
<b>5.</b>	<b>AES Mode</b>		
5.1	Turn to AES mode; +12 VDC heater and AC supply not connected	Display shows "AES" changing with "GAS"; after ca. 5,5 min the display shows "AES" flashing with red LED (gas lockout).	3 ignition trials: 30 seconds ignition, 2 minutes ventilation pause, 30 seconds ignition, 2 minutes ventilation pause, 30 seconds ignition.
5.2	Provide AC supply	Display shows "AES" changing with "230"	AC relay switches
5.3	Remove AC and provide DC heater supply and D+ (alternator input)	Display shows "AES" changing with "12"	DC relay switches
5.4	Remove DC and wait approx. 15 Minutes	Display shows "AES" ; after 15 minutes the display shows "AES" changing with "GAS"	DC mode switches off; after 15 minutes (tankstop delay) ignition starts (3 attempts)