

Beckett

GENISYS® 7565 & 7585 120v Advanced Burner Controls



DESCRIPTION/APPLICATIONS

The Beckett GeniSys® Advanced Burner Control is a 120 Vac primary safety control for residential and light commercial oil burners used in boiler, furnace, and water heater applications having firing rates less than 20 GPH.

The GeniSys is used with a suitable cad cell flame sensor to control the oil burner motor, igniter, and optional solenoid valve. It has 24 Vac thermostat terminals compatible with both mechanical and many power stealing thermostats. It can also provide interrupted or intermittent duty ignition.



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Features

- Diagnostics and programming through the myTechnician™ app
- Last 50 cycles and last 15 faults
- Compatible with burners running #2 Fuel oil, up to 100% biodiesel, and up to 100% renewable diesel.
- Interrupted or Intermittent Duty Ignition
- Limited Recycle
- Limited Reset
- 8 Status Lights
- Valve-On Delay (also known as “Pre-Purge”)
- Motor-Off Delay (also known as “Post-Purge”)
- Blocked Vent and/or Combustion Air Inputs
- Technician Pump Priming Mode
- Disable Function
- Water Resistant Case
-

Definitions

Figure 1 – Getting to know the control

Top and Front Face Connections



- Thermostat Red (T_R)
- Thermostat White (T_W)
- Thermostat COMMON (T_C)*
- Air switch input (24VAC)*
- Air switch input (24VAC)*

Asterisk = If installed
 NOTE: All front connections are low voltage, 24 Vac connections



ACTION Button
 (See Table 2)

Under Side Connections

Caution: if replacing a non-Beckett control, these



Electrical Ratings

Power:

- Voltage: 120 Vac nominal (102 to 132 Vac)
 - Current: 100 mA nominal (150 mA max at 132 Vac)*
 - Frequency: 60 Hz
- *measured when the motor, valve, and igniter are all de-energized*

Inputs:

- Thermostat Anticipator Current: 0.1 A nominal
- Thermostat Voltage: 24 Vac nominal
- Combustion Air/Blocked Vent (Front side): 10mA @ 24Vac min (Underside): 1.9mA @ 120Vac min

Outputs:

- Motor: 120 Vac, 10 max full load amps (FLA), 60 max locked rotor amps (LRA)
- *Note: Reduce motor FLA rating by igniter and valve currents*
- Igniter: 120 Vac, 3 A max

English

This device complies with Industry Canada's Licence-Exempt RSS standard(s). Operation is subject to the following two conditions:

1. This device may not cause interference, and
2. This device must accept any interference, including interference that may cause undesired operation of the device.

Français

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes :

1. l'appareil ne doit pas produire de brouillage ;
2. l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en



**Incorrect Wiring
Will Result in**

Improper Control Operation

- The control wiring label colors may not match the wire colors of the burner or other manufacturers' controls.
- The control should be wired according to the appliance

3. Adjust the thermostat or boiler control to call for heat.
- If the pump has not been primed, refer to "Priming the Pump" in the "Operation" section of this manual.
4. Monitor burner operation to ensure that the burner ignites.
5. End the call for heat. Verify that the burner turns off before leaving the installation site.

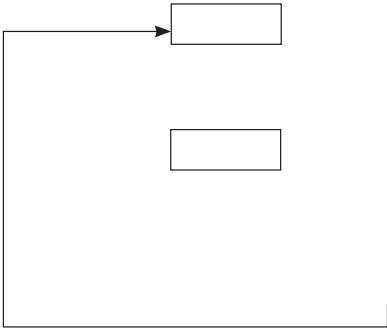
Check Safety Features

- Safe Start Check

1. Place a jumper across the cad cell terminals.
2. Refer to the steps for "Starting the System" and have the system call for heat.
3. Burner must not start. Verify that the SYS light is green, FLM light is yellow, and that the control remains in Standby mode.
4. End the call for heat and remove the cad cell jumper.

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1 = only if air switch is installed
2 = only if valve installed

- 10. Pump Prime:** The igniter and motor are on with the oil solenoid valve energized for 4 minutes. During Pump Prime mode, the cad cell is disregarded, allowing the technician to prime the pump without having to jumper the cad cell.






ACTION Button Operation

Table 2 explains what action the control will take when the button is pressed for different lengths of time during the various burner operating states.

Priming the Pump

1. Prepare the burner for priming by attaching a clear plastic hose over the bleed port fitting and fully opening the pump bleed

Table 2 - ACTION Button Operation

Intended Action	Press the ACTION Button	Results
To exit from (soft) Lockout	 1 Second Tap	Resets the Control
To exit from (hard) Lockout	 5+ Seconds	Resets the Control
To enter Pump Prime mode (2 steps)	 5+ Seconds  1 Second Tap	Step 1 - enables mode when pressed during valve-on delay, trial for ignition, or ignition carryover. Step 2 - starts pump prime on next call-for-heat.
To pause burner operation	 1+ Seconds	



Appendix A - Typical Boiler Wiring

Figure 3 – 7565 (for replacement of R8184G)
No valve-on delay, no motor-off delay.

Appendix - B Typical Furnace Wiring

Figure 6 – 7565 (for replacement of R8184G, R7184A)
No valve-on or motor-off delay

Figure 7 – 7565 (for replacement of R7184B)
Valve-on delay only (no motor-off delay)

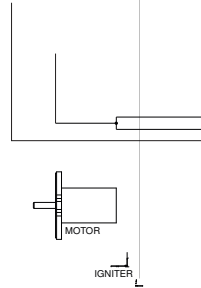


Figure 8 – 7565 (for replacement of R7184P)
Valve-on and motor-off delays

NOTE: To disable motor-off delay on a 7565 control, jumper L1 and limit together and wire as shown in Fig. 4 or just program it with a zero second motor-off delay



Limited Warranty Information

The R. W. BECKETT CORPORATION ("Beckett") warrants to persons who purchase its "Products" from Beckett for resale, or for incorporation into a product for resale ("Customers"), that its equipment is free from defects in material and workmanship. To qualify for warranty benefits, products must be installed by

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