

Robertshaw 8145-20

Robertshaw 8145-20 Defrost Timer Instruction Manual

Model: 8145-20 | Brand: Robertshaw

1. INTRODUCTION

The Robertshaw 8145-20 Defrost Timer is designed for reliable automatic defrost control in commercial freezers and refrigerators. This device accommodates various defrost systems, including electric defrost heaters, hot gas, and compressor off-cycle methods. This manual provides essential information for the safe installation, operation, and maintenance of your defrost timer.

2. SAFETY INFORMATION

CAUTION: RISK OF ELECTRIC SHOCK

- Always disconnect all power at the main panel before removing the insulator or servicing the device.
- More than one disconnect switch may be required to de-energize the device completely for servicing.
- Ensure the insulator is replaced after wiring is complete.
- Use copper conductors only for all wiring connections.

Failure to follow these instructions may result in electrical shock, fire, or serious injury.

3. INSTALLATION AND WIRING

This section outlines the general steps for installing and wiring the Robertshaw 8145-20 Defrost Timer. Refer to the wiring diagram on the product label for specific connection details.

3.1 Wiring Connections

The timer is designed for 120V operation. Ensure all connections are secure and comply with local electrical codes.

- **Supply Connections:** Use wire gauges suitable for 75°C (167°F). Refer to the table below for minimum wire gauge and maximum load ratings.

Supply Connection Ratings

Min. Gage Wire	Max Load
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Min. Gage Wire	Max Load
8 AWG	40A
10 AWG	30A
12 AWG	20A
14 AWG	10A

3.2 Setting Start Pins

Place the start pins in the outer (24-hour) dial at the desired time of day when the switch contacts are to reverse. Ensure that the dial pins are opposite the time pointer for correct operation.

CAUTION: Leave at least one hole between each adjacent pin on the dial.



Image 1: Robertshaw 8145-20 Defrost Timer with the cover open, revealing the internal 24-hour dial, 2-hour dial, and the wiring diagram on the inside of the cover. The image shows the terminal connections for L1, L2, N, and load connections.

4. OPERATING INSTRUCTIONS

4.1 Setting Back-Up Defrost Termination

To set the back-up defrost termination time, push down and rotate the pointer on the inside (2-hour) dial until it aligns with the desired termination time.

4.2 Setting Time of Day

To set the current time of day:

1. Grasp the knob located in the center of the inner (2-hour) dial.
2. Rotate the knob in a counter-clockwise direction. This action will cause the outer (24-hour) dial to revolve.
3. Align the correct time of day on the outer dial with the time pointer.
4. **Important:** Do not attempt to set the time control by grasping the outer dial. Only rotate the inner dial.

5. MAINTENANCE

Regular maintenance ensures the longevity and proper functioning of your defrost timer.

5.1 Removing the Movement from the Case

To remove the timer movement from its case, locate the spring clip at the right center of the case. Press this clip and lift the movement out.

5.2 Replacing the Movement in the Case

To replace the timer movement, insert the tabs on the left side of the time switch plate into the corresponding holes in the side of the case. Then, push down and snap the movement into place until it is secure.

5.3 Replacement Parts

For replacement of this control, contact your refrigerator manufacturer or a certified Robertshaw dealer.

6. TROUBLESHOOTING

If the defrost timer is not functioning as expected, consider the following common issues:

- **Timer Not Advancing:** Check for proper power supply to the timing motor (208-240V 60Hz). Ensure the inner dial is not obstructed.
- **Incorrect Defrost Cycles:** Verify that the start pins are correctly placed on the 24-hour dial and that there is at least one hole between adjacent pins.
- **No Defrost Activation:** Confirm that the wiring connections are secure and that the load is correctly connected to the N.O. (Normally Open) or N.C. (Normally Closed) terminals as required by your system.
- **Defrost Cycle Too Long/Short:** Adjust the 2-hour dial for back-up defrost termination as needed.

If issues persist after checking these points, contact customer support or a qualified technician.

7. SPECIFICATIONS

Feature	Detail
Brand	Robertshaw
Model Number	8145-20
Product Type	Defrost Timer
Voltage	120V (as per product title, though OCR shows 208-240V for motor/contact rating, user should verify specific model variant)
Switch Type	SPDT (Single Pole Double Throw)
Material	Steel
Colour	Grey
Product Dimensions (D x W x H)	76.2D x 20.3W x 15.2H centimetres
Item Weight	227 g
Number of Settings	2 (24-hour dial, 2-hour dial)
Included Components	Defrost Timer
UPC	662013124106, 696335176727
Maximum Contact Rating (Non-Inductive)	40A, 208-240 Vac
Maximum Contact Rating (HP)	2 hp, 208-240 Vac
Maximum Contact Rating (Pilot Duty)	690 VA, 208-240 Vac
Timing Motor	208-240V 60 Hz

8. WARRANTY INFORMATION

For specific warranty details regarding your Robertshaw 8145-20 Defrost Timer, please refer to the documentation provided with your purchase or contact Robertshaw customer service directly. Warranty terms typically cover manufacturing defects for a specified period from the date of purchase.

9. CUSTOMER SUPPORT

If you require further assistance, have questions about installation, operation, or need to order replacement parts, please contact Robertshaw customer service:

- **USA Customer Service:** [800-951-5526](tel:800-951-5526) or [800-732-8400](tel:800-732-8400)
- **Canada Customer Service:** [800-387-7978](tel:800-387-7978)

You can also visit the official Robertshaw website for additional resources and product information.

ASK A QUESTION ABOUT THIS MANUAL

Ask about setup, troubleshooting, compatibility, parts, safety, or missing instructions. Manuals+ will review the question and use this page's manual context to help answer it.

Name

Anonymous

Email

you@example.com

After a successful submission, we securely hash the supplied account or form email before sending it to Microsoft Advertising for conversion attribution. [Privacy details](#).

Question

Example: How do I reset this device or fix this error?

Details

Model number, symptoms, what you tried, or the section of the manual you are using.

Submit question