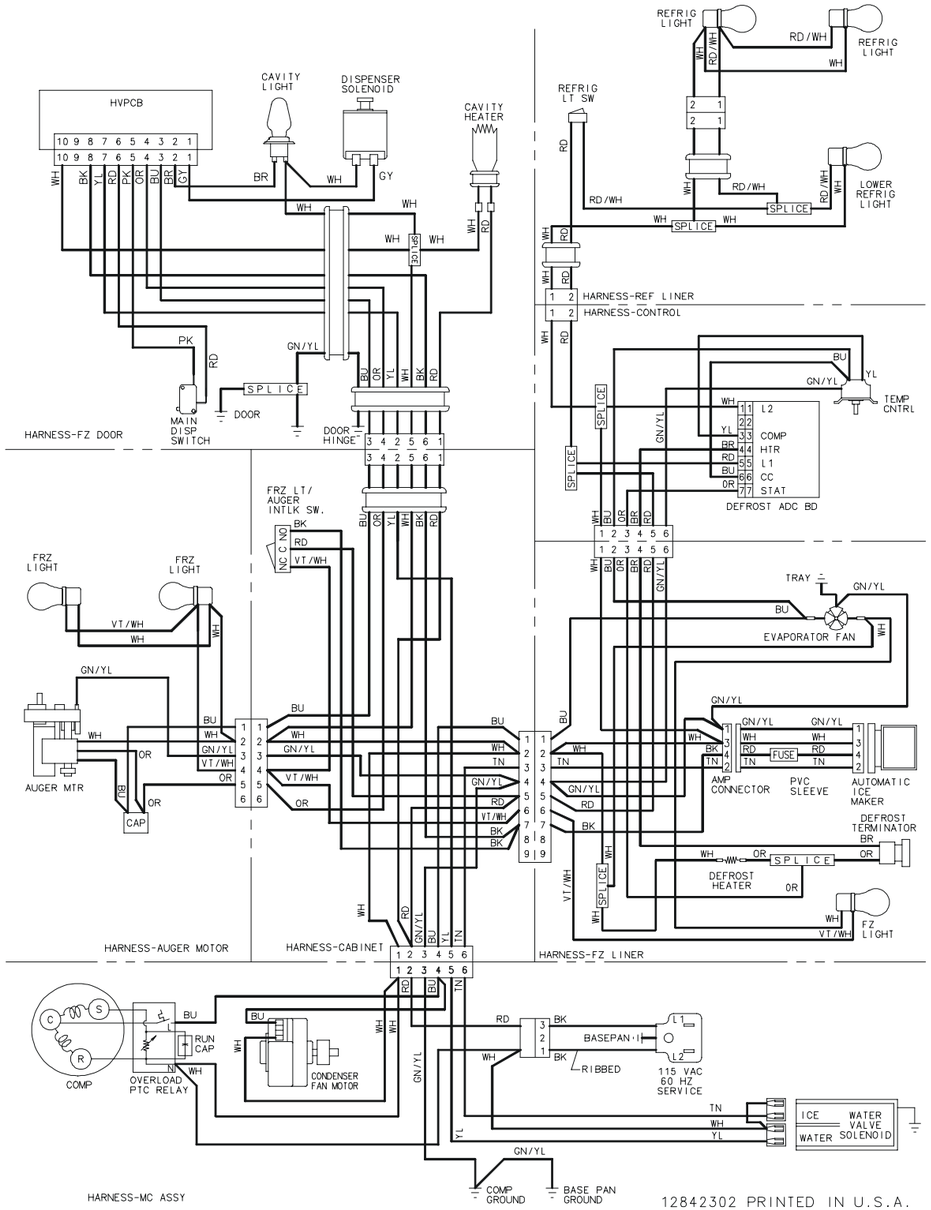
# Wiring Diagram

**⚠ WARNING**

To avoid risk of electrical shock that can cause death or severe personal injury, disconnect unit from power before servicing unless tests require power. Discharge capacitors through a 10,000-ohm resistor before handling. Wires removed during disassembly must be replaced on correct terminals to ensure proper grounding and polarization.







# Side by Side Refrigerator —Technical Information

**MSD2655HEB MSD2655HEB0, MSD2655HEQ MSD2655HEQ0,**
**MSD2655HES MSD2655HES0, MSD2655HEW MSD2655HEW0,**
**MZD2665HEB MZD2665HEB0, MZD2665HEQ MZD2665HEQ0,**
**MZD2665HES MZD2665HES0, MZD2665HEW MZD2665HEW0,**
**PSD266LHEB PSD266LHEB0, PSD266LHEQ PSD266LHEQ0,**
**PSD266LHES PSD266LHES0, PSD266LHEW PSD266LHEW0,**
**PSD267LHES PSD267LHES0**

**NOTE: Refer to Service Bulletin F-896-S for complete diagnostics of Ice 'N Water™ dispenser control.**

- Due to a possibility of personal injury or property damage, always contact an authorized technician for service or repair of this refrigerator.
- Refer to Service Manual 16022689 for installation, operating, disassembly, icemaker, testing, and troubleshooting information.

**⚠ CAUTION**

All safety information must be followed as provided in Service Manual 16022689.

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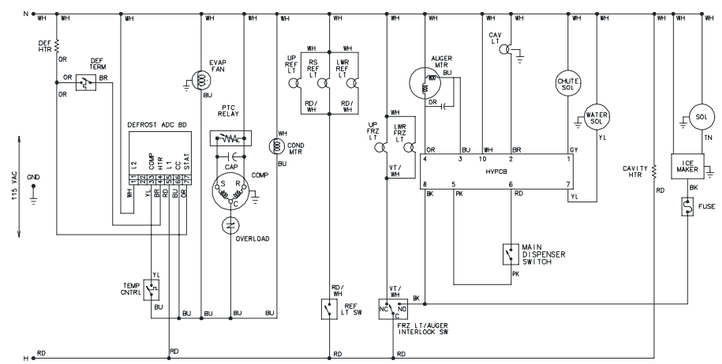
**No-Load Performance, Controls in Normal Position**

| | Kw/24 hr ±0.4 | | | Percent Run Time ±10% | | | Cycles/24 hr ±25% | | | Refrigerator Center Compartment Average Food Temperature ±3°F | | | Freezer Compartment Average Food Temperature ±3°F | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Ambient °F** | 70° | 90° | 110° | 70° | 90° | 110° | 70° | 90° | 110° | 70° | 90° | 110° | 70° | 90° | 110° |
| **26 cu ft** | 1.2 | 1.85 | 2.60 | 35 | 55 | 75 | 30 | 30 | 19 | 35 | 39 | 42 | 1 | 0 | -2 |

**Temperature Relationship Test Chart**

| | Evaporator Outlet ±3°F | | Evaporator Inlet ±3°F | | Suction Line ±7°F | | Average Total Wattage ±10% | | Suction Pressure ±2 In. Hg | | Head Pressure ± 5 PSIG | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Ambient °F** | 70° | 90° | 70° | 90° | 70° | 90° | 70° | 90° | 70° | 90° | 70° | 90° |
| **26 cu ft** | -15 | -15 | -16 | -16 | 72 | 98 | 132 | 138 | 6"(vac.) | 0 | 87 | 137 |

# Schematic



# Component Specifications

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| Component | Specifications all parts 115VAC/60HZ unless noted | |
|---|---|---|
| Compressor run capacitor | Volt<br>Capacitance | 220 VAC<br>15 µfd +10% -5% |
| Compressor | BTUH<br>Watt<br>Current Lock rotor<br>Current Full load<br>Resistance Run windings<br>Resistance Start windings | 905 BTUH<br>60 Hz / 153 watts<br>19.0 amps± 15%<br>1.26 amps± 15%<br>3.33 ohms± 15%<br>4.28 ohms± 15% |
| Damper control | Settings<br>#1<br>#4<br>#7 | Damper open temperatures<br>43.8°F<br>35.3°F<br>24.5°F |
| Freezer temperature control | Settings<br>#1 – out<br>#4 – out<br>#7 – out | Temperatures<br>5.3°F ±3.5°<br>-4.4°F ±2°<br>-11.3°F ±3.5° |
| Condenser motor | Rotation (facing end opposite shaft)<br>RPM<br>Watt<br>Current | Clockwise<br>1250 RPM<br>4.2 watts±15%@115VAC<br>0.063 amps± 15%@115VAC |
| Evaporator fan motor | Rotation (facing end opposite shaft)<br>RPM<br>Watt<br>Note: Fan blade must be fully seated on shaft to achieve proper airflow. | Clockwise<br>2800 RPM<br>5.9 ±15% watts@115VAC |
| Overload/Relay | Ult. trip amps @ 158°F (70°C)<br>Close temperature<br>Open temperature<br>Short time trip (seconds)<br>Short time trip (amps @77°F (25°C) | 2.67 amps± 15%<br>142°F ±48°<br>284°F ±41°<br>10 seconds ±5<br>11.0 amps ±2amps |
| Thermostat | Volt<br>Watt<br>Current<br>Resistance across terminals:<br>Above 42°F ±5°<br>Below 12°F ±7° | 120/240 VAC<br>495 watts<br>5.8/2.9 amps<br><br>Open<br>Closed |
| Evaporator heater | Volt<br>Wattage<br>Resistance | 115 VAC<br>450 ±5% watts @ 115VAC<br>29.3 ±7.5% ohms |
| Adaptive defrost board | Volt | 120VAC, 60 HZ<br>See adaptive defrost board section |
| Auger Motor | Rotation (facing end opposite shaft)<br>RPM | Power to blue and white is clockwise. Power to orange and white is counterclockwise<br>17± 3 RPM |
| Water Valve (primary)<br>Water Valve (secondary) | Watts<br>Watts | Brown side 35w, Yellow side 20w<br>Brown side 35w, Yellow side 20w |
| Light switch | Type<br>Volt<br>Current | SPST NC<br>125/250 VAC<br>8 / 4 amps |
| Light switch / Interlock | Type<br>Volt<br>Current | SPDT NO/NC<br>125/250 VAC<br>8 / 4 amps |
| DC Solenoid (Ice Chute) | Resistance across leads | 101 ohms ± 10% |




# Service Specifications

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**Seconds to dispense 10 oz. water**

| Supply pressure | 35 psig | 45 psig | 55 psig | 75 psig |
|---|---|---|---|---|
| Filter model Bypass installed | 4.7 | 4.0 | 3.6 | 3.1 |
| Filter model New filter installed | 9.0 | 5.0 | 4.4 | 3.6 |

A minimum supply pressure of 35 psig for water filter units. Minimum pressure requirement ensures that water valves close and sufficient water volume is available to fill icemaker. Proper fill is 140 cc. of water in 7.5 seconds. Failure of water valves to close because of low pressure will result in fill-tube freeze-up or dripping at cavity.

## Adaptive Defrost Board (ADC)

The ADC adapts the compressor run time between defrosts to achieve optimum defrost intervals by monitoring the cold control and length the defrost heater is on.
After initial power up, defrost intervals is 4 hours compressor run time). Defrost occurs immediately after the 4 hours.
Optimum defrost is 15 minutes. Each additional minute the defrost thermostat remains closed, 1 hr. is subtracted from the previous defrost interval. Each minute the thermostat opens prior to optimum defrost, it extends the next defrost interval 1 hr. When in defrost if defrost terminator opens there is a 6 minute drip time before compressor restarts or ADC will terminate defrost at 30 minutes even if defrost thermostat has not opened and will reset the defrost interval to the 8 hr. minimum setting.
4 hours of continuous compressor run resets the next defrost interval to 8 hours and will initiate a defrost, if 8 hours of compressor run time has also occurred.

**Power up** Refrigeration mode will occur unless both the cold control and defrost terminator are open, in that case the defrost mode will occur for 2 minutes.

**To Force Defrost:** Turn cold control on and off 3 times within 6 seconds.
A forced defrost is immediate without any delay regardless of the cold control state or the defrost terminator state. (When the ADC cycles the unit into defrost on it's own defrost it is delayed until 4 minutes after the compressor has been cycled off by the cold control.)
**Note:** Cold control contacts must make and break for defrost to occur. In some cases freezer door must be left open to warm the cold control sensing capillary up to get the cold control contact to make and break. If cold control contacts do not make and break unit will not force a defrost.

**To Terminate Defrost:** The only way to manually terminate defrost is to disconnect power to the unit. Unit will automatically come out of defrost at the end of the normal defrost cycle.

**Input Voltage Readings and Checks**

| | |
|---|---|
| **L1 to L2** | Line voltage should be present when the unit is powered |
| **CC to L2** | Line voltage should be present when the cold control contacts are closed and ADC is not in defrost. |
| **STAT to L2** | Line voltage should be present when the ADC is in defrost mode and the defrost terminator contacts are closed |

**Output Voltage Readings and Checks**

| | |
|---|---|
| **HTR to L2** | Line voltage should be present when the ADC is in defrost mode |
| **COMP to L2** | Line voltage should be present when the ADC is not in the defrost mode. |

**NOTE**: **Refer to Service Bulletin F-896-S for complete diagnostics of Ice 'N Water™ dispenser control.**