# HUSSMANN®

# RLSCP with INNOVATOR Doors or INNOVATOR III Doors

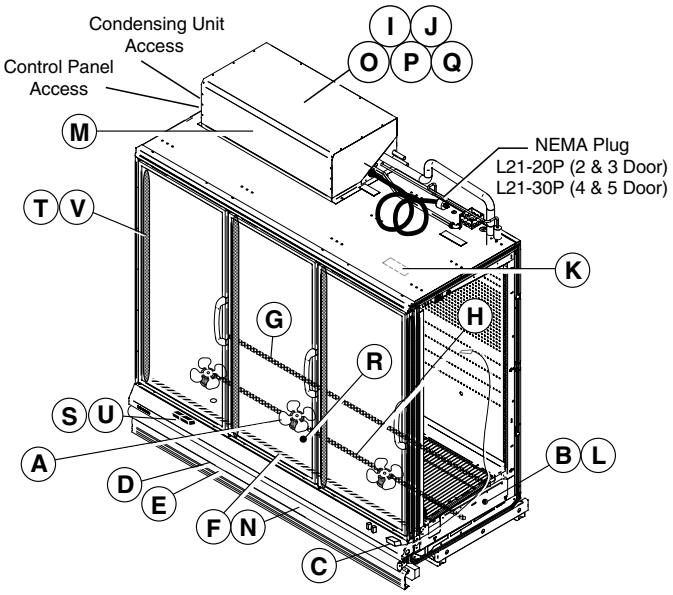
## Technical Data Sheet

## P/N 0520885_C

## NSF® Certified

**June 2015**

**DOE 2012**
**Energy Efficiency Compliant**




We reserve the right to change or revise specifications and product design in connection with any feature of our products. Such changes do not entitle the buyer to corresponding changes, improvements, additions or replacements for equipment previously sold or shipped.

**Warning:**
**Terminal block NOT for case-to-case wire connection!**

| Item | Part # | Description | Wiring Item # |
|---|---|---|---|
| **Fan Assemblies, and Thermostats** | | | |
| A. | | **12W Standard Energy Efficient** Fan Assembly | (1) |
| | 0477655 | Fan Motor, Evaporator | |
| | 0461805 | Fan Blade | |
| B. | 0344662 | Defrost Limit Thermostat | (2) |
| C. | 0461814 | Relay Control Thermostat or Fan and Anti-sweat Heater Thermostat | (3) |
| **Relays** | | | |
| D. | 0342598 | Anti-Sweat Heater Control Relay (120V) | (4) |
| E. | 0342599 | Fan Control Relay (208V) | (5) |
| **Heaters** | | | |
| F. | | Electric Defrost Heaters – Front (208V) | (6) |
| | 0441755 (1) | 2 Door Models | |
| | 0441756 (1) | 3 Door Models | |
| | 0441757 (1) | 4 Door Models | |
| | 0441758 (1) | 5 Door Models | |
| G. | | Electric Defrost Heaters — Rear (208V) | (7) |
| | 0463891 (1) | 2 Door Models | |
| | 0463892 (1) | 3 Door Models | |
| | 0463893 (1) | 4 Door Models | |
| | 0463894 (1) | 5 Door Models | |
| H. | | Drain Pan Heater — Electric (120V) | (8) |
| | 0387036 (1) | 2 Door Models | |
| | 0387037 (1) | 3 Door Models | |
| | 0387038 (1) | 4 Door Models | |
| | 0387039 (1) | 5 Door Models | |

| Item | Part # | Description | Wiring Item # |
|---|---|---|---|
| **Control Panel** | | | |
| I. | 0709307 | High Pressure Control | (9) |
| J. | 0404829001 | Low Pressure Control | (10) |
| K. | 0516544 | Safe-NET® Control | (11) |
| L | 0421192 | Safe-NET® Sensor | (12) |
| M. | 1H44071001 | Safe-NET Power Supply | (13) |
| **Refrigeration** | | | |
| N. | 0516897 | Condensate Pump | (14) |
| O. | | Compressor — 208V | (15) |
| | 0707742 | 2 Door Models | |
| | 0707745 | 3 Door Models | |
| | 0707751 | 4 Door Models | |
| | 0707754 | 5 Door Models | |
| P. | 0331344 | Sight Glass | |
| Q. | 0111482 | Drier | |
| R. | 0460992 | TEV 2 Door Models | |
| | 0460993000 | TEV 3-4-5 Door Models | |
| **Lamps, Ballasts, LED Fixtures and Power Supply** | | | |
| S. | 0489698 | 2 Lamp Ballast | |
| | 0489699 | 3 Lamp Ballast | |
| | 0424649 | Export Ballast | |
| T. | | Standard Fluorescent Lamp *Replace with like fixtures* | |
| U. | 0499399 | LED Power Supply | |
| V. | | LED Fixture *Replace with like fixtures* | |

**For LED lighting parts contact your Hussmann service representative at 1-800-922-1919. Please have your model and serial number available. Descriptions including size and color are at WWW.HUSSMANN.COM/SERVICEANDPARTS.**

**Refer to** Innovator Reach-In Glass Door Installation and Service **manual, P/N 0425683, for Innovator, Innovator II and Innovator III door and frame replacement parts.**

Data sheet-Reach-in RLSCP

**NOTE:** Revision C adds NOTE on page 3. Other changes marked by bar, underline or circle.


U.S. & CANADA 1-800-922-1919 • MEXICO 1-800-890-2900 • WWW.HUSSMANN.COM

English P/N 0520885
Spanish P/N 0538965

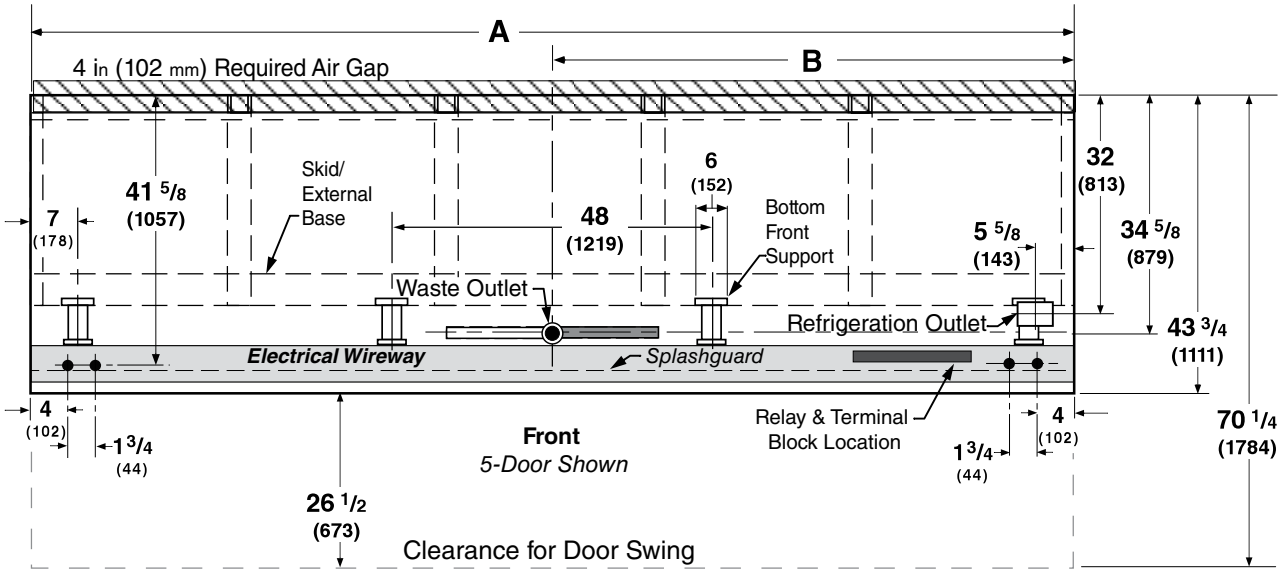
# Engineering
## Plan Views

**Reach-In**
**2, 3, 4 & 5 Door**

**RLSCP**
**Plan View**
**09-2010**

| PHYSICAL DATA | |
|---|---|
| Merchandiser Drip Pipe (in.) | 1 1/4 |
| Merchandiser Liquid Line (in.) | 3/8 |
| Merchandiser Suction Line (in.) | 7/8 |

**Dimensions shown as in. & (mm).**




| | 2 Dr | 3 Dr | 4 Dr | 5 Dr |
|---|---|---|---|---|
| **General** | | | | |
| **(A)** Case Length (without ends or partitions) | 62 (1575) | 92 1/2 (2350) | 122 7/8 (3121) | 153 3/8 (3896) |
| ****NOTE:** Each solid end adds approximately 2 3/8 in (60 mm) to length of line up; each partition add approximately 2 3/4 in (70 mm); case to case joints can add approximately 1/8 in (3 mm) for gasket material. | | | | |
| Maximum O/S dimension of case back to front | 43 3/4 (1111) | 43 3/4 (1111) | 43 3/4 (1111) | 43 3/4 (1111) |
| *(Includes bumper. Add 26 1/2 in. (673 mm) for door swing.)* | Alllow an additional 4-in. when RLSCP is located along wall to allow SCP cover to open. | | | |
| Back of case to rear of splashguard | 39 7/8 (1013) | 39 7/8 (1013) | 39 7/8 (1013) | 39 7/8 (1013) |
| Width of Skidrail | 3 3/4 (95) | 3 3/4 (95) | 3 3/4 (95) | 3 3/4 (95) |
| Width of Bottom Front Support | 6 (152) | 6 (152) | 6 (152) | 6 (152) |
| **Electrical Service** | | | | |
| RH end of case to the center of nearest knockout | 4 (102) | 4 (102) | 4 (102) | 4 (102) |
| RH end of case to the center of LH knockout | 58 (1473) | 88 1/2 (2248) | 118 7/8 (3019) | 149 3/8 (3794) |
| Back O/S of case to center of knockout | 41 5/8 (1058) | 41 5/8 (1058) | 41 5/8 (1058) | 41 5/8 (1058) |
| ** NOTE: Electrical Field Wiring Connection Point is at terminal.* | | | | |
| **Waste Outlet** | | | | |
| **(B)** Right end of case to center of waste outlet | 23 7/8 (606) | 54 1/4 (1378) | 46 1/4 (1175) | 76 5/8 (1946) |
| Back O/S of case to center of waste outlet | 34 5/8 (879) | 34 5/8 (879) | 34 5/8 (879) | 34 5/8 (879) |
| **Water Seal** | | | | |
| Edge of water seal to center of waste outlet | 13 (330) | 13 (330) | 13 (330) | 13 (330) |
| Schedule 40 PVC drip pipe | 1 1/4 (32) | 1 1/4 (32) | 1 1/4 (32) | 1 1/4 (32) |
| *** NOTE: Field installed water seal outlets, tees, and connectors are shipped with case* | | | | |
| **Pump Outlet Tube (20 ft [6096 mm] length)** | 3/8 ID (9.5) | 3/8 ID (9.5) | 3/8 ID (9.5) | 3/8 ID (9.5) |
| **Plug: NEMA** |  L21-20P |  L21-20P |  L21-30P |  L21-30P |

# RLSCP

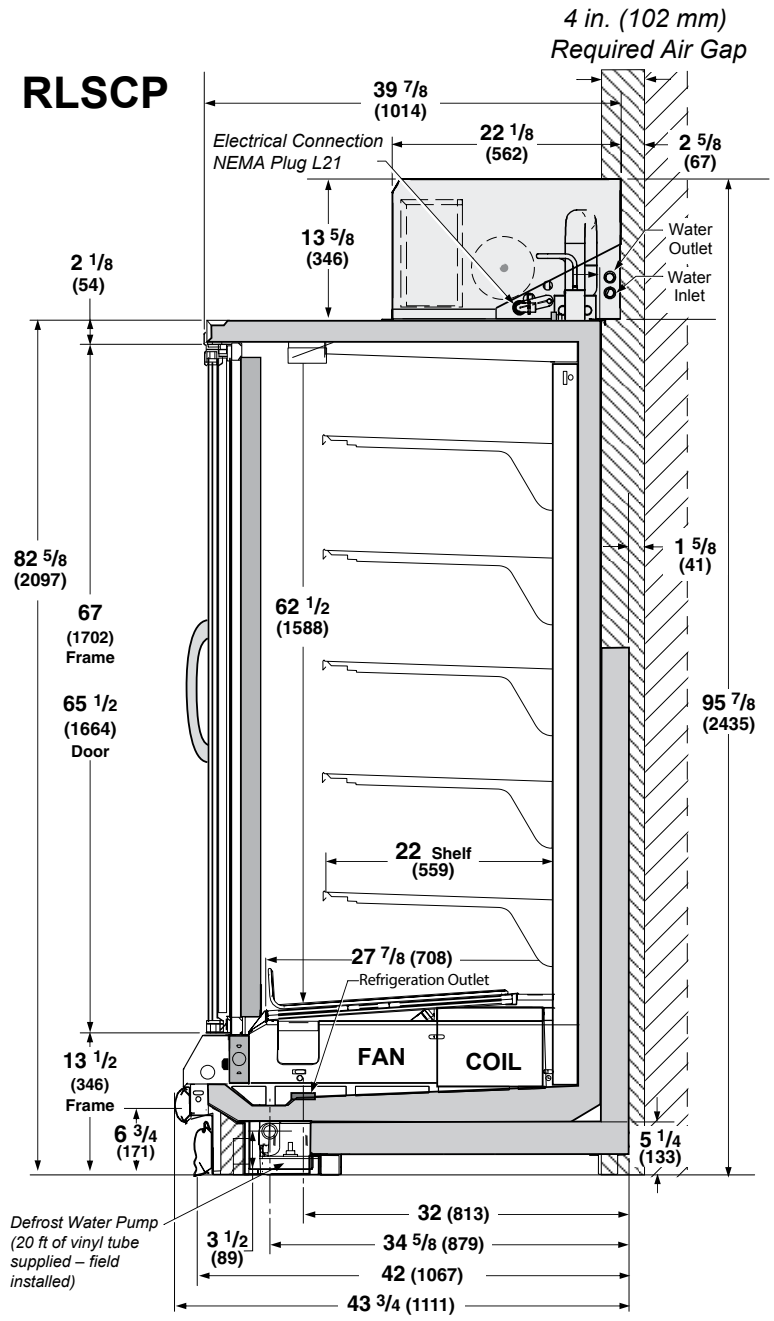
**With Innovator Doors or Innovator III Doors**
**Low Temperature**

**DOE 2012** Energy Efficiency Compliant

Hussmann refrigerated merchandisers configured for sale for use in the United States meet or surpass the requirements of the DOE 2012 energy efficiency standards.

**Dimensions shown as in. & (mm).**

Allow an additional 4-in. (8-in. total) when RLSCP is located along wall to allow SCP cover to open.




## REFRIGERATION DATA

**Note:** This data is based on store temperature and humidity that does not exceed 75°F and 55% R.H.

| | FF | IC |
|---|---|---|
| **Discharge Air Set point(°F)** | –5 | –12 |
| **Differential** | 4 | 4 |

## DEFROST DATA

| **ALL** | **FF** | **IC** |
|---|---|---|
| **Frequency (hr)** | 24 | 24 |
| **Defrost Water (lb/Dr/day)** | **1.2** | **1.2** |

**(± 15%** based on case configuration and product loading.)

| **ELECTRIC** | **FF** | **IC** |
|---|---|---|
| **Temp Term (°F)** | 48° | 48° |
| **Failsafe (minutes)** | 45 | 45 |

**GAS** Not Available

**OFFTIME** Not Recommended

## CONVENTIONAL CONTROLS

| | **Cut In** | **Cut Out** |
|---|---|---|
| **HPC (psig)** | 320 | 395 |
| **LPC (psig)** | 15 | 5 |

**Refrigerant Charge (R-404A)** **8 lb**

| | **Water Flow Rate (GPM)** | **Water DP (PSI) (Maximum)** |
|---|---|---|
| **2Dr** | 1.30 | 5.0 |
| **3Dr** | 1.64 | 5.0 |
| **4Dr** | 2.55 | 5.0 |
| **5Dr** | 2.55 | 5.0 |

**NSF Certification**
This merchandiser model is manufactured to meet NSF/ANSI (National Sanitation Foundation) Standard #7 requirements for construction, materials & cleanability.

**RLSCP**
**With Innovator Doors or Innovator III Doors**
**Low Temperature**

**Hussmann recommends against frame heater cycling with** Innovator **doors or** Innovator III **doors to prevent door seals from freezing to the frames and tearing.**

## Electrical Data

| **Number of Fans—12W** | **2** | **3** | **4** | **5** | | | | |
|---|---|---|---|---|---|---|---|---|
| | **Amperes** | | | | **Watts** | | | |
| **Merchandiser** | **2Dr** | **3Dr** | **4Dr** | **5Dr** | **2Dr** | **3Dr** | **4Dr** | **5Dr** |
| **Energy Efficient Evaporator Fan** | | | | | | | | |
| 120V 50/60Hz Innovator | 0.60 | 0.90 | 1.20 | 1.50 | 36 | 54 | 72 | 90 |
| 120V 50/60Hz Innovator III | 0.60 | 0.90 | 1.20 | 1.50 | 36 | 54 | 72 | 90 |
| **Door Anti-sweat Heaters (on fan circuit)** | | | | | | | | |
| 120V 50/60Hz Innovator | 1.50 | 2.30 | 3.00 | 3.80 | 182 | 273 | 364 | 455 |
| 120V 50/60Hz Innovator III | 0.90 | 1.30 | 1.70 | 2.20 | 104 | 156 | 208 | 260 |
| **Frame Anti-sweat Heaters (on fan circuit)** | | | | | | | | |
| 120V 50/60Hz Innovator | 0.78 | 1.18 | 1.57 | 1.97 | 94 | 141 | 188 | 236 |
| 120V 50/60Hz Innovator III | 0.78 | 1.18 | 1.57 | 1.97 | 94 | 141 | 188 | 236 |
| **Amp Rating at Plug 208V 3Ph 60 Hz** | **6.7** | **10.0** | **13.8** | **16.8** | | | | |
| **Condensate Pump 120V** | **1.9** | **1.9** | **1.9** | **1.9** | | | | |
| **Defrost** | | | | | | | | |
| Drain Heaters (120V) | 0.63 | 1.25 | 2.00 | 2.57 | 75 | 150 | 240 | 300 |
| **208V Electric Defrost** | 6.72 | 10.08 | 13.46 | 16.82 | 1400 | 2100 | 2800 | 3500 |
| **Standard Vertical LED Lighting 4100K*** | **2Dr** | **3Dr** | **4Dr** | **5Dr** | **2Dr** | **3Dr** | **4Dr** | **5Dr** |
| Hussmann EcoShine II™ [22 W] (120V) | 0.36 | 0.54 | 0.72 | 0.90 | 43 | 65 | 86 | 108 |
| Hussmann EcoShine II™ [22 W] (220V Export) | 0.20 | 0.29 | 0.39 | 0.49 | 43 | 65 | 86 | 108 |
| **Optional* Vertical LED Lighting** | | | | | | | | |
| Hussmann EcoShine II Plus [24 W] (120V) | 0.36 | 0.52 | 0.68 | 0.84 | 43 | 62 | 81 | 100 |
| Hussmann EcoShine II Plus [24 W] (220V) Export | 0.18 | 0.26 | 0.34 | 0.42 | 43 | 62 | 81 | 100 |
| GE Illumination (120V) | 0.30 | 0.45 | 0.60 | 0.75 | 36 | 54 | 72 | 90 |
| GE Illumination (220V Export) | 0.16 | 0.25 | 0.33 | 0.41 | 36 | 54 | 72 | 90 |

*ONLY LIGHTING CONFIGURATIONS THAT ARE COMPLIANT WITH THE U.S. DEPT OF ENERGY (DOE) 2012 REGULATION ARE AVAILABLE FOR SALE FOR USE IN THE U.S.A.

## Product Data

| | |
|---|---|
| **Recommended Usable Cube [1] (Cu Ft/Dr)** | 23.46 $ft^3$ /Dr (0.66 $m^3$ /Dr) |
| **AHRI Total Display Area [2] (Sq Ft/Dr)** | 13.31 $ft^2$ /Dr (1.24 $m^2$ /Dr) |
| **Shelf Area [3] (Sq Ft/Dr)** | 29.32 $ft^2$ /Dr (2.72 $m^2$ /Dr) |

[1] AHRI Refrigerated Volume less shelving and other unusable space: Refrigerated Volume/Unit of Length, $ft^3$/ft [$m^3$/m]

[2] Computed using AHRI 1200 standard methodology: Total Display Area, $ft^2$ [$m^2$]/Unit of Length, ft [m]

[3] Shelf surface area is composed of bottom deck plus standard shelf complement, as shown in the Hussmann **Product Reference Guide**. The standard shelf complement for this model is (5) rows of 22-inch shelves.

**ESTIMATED SHIPPING WEIGHT [4]**

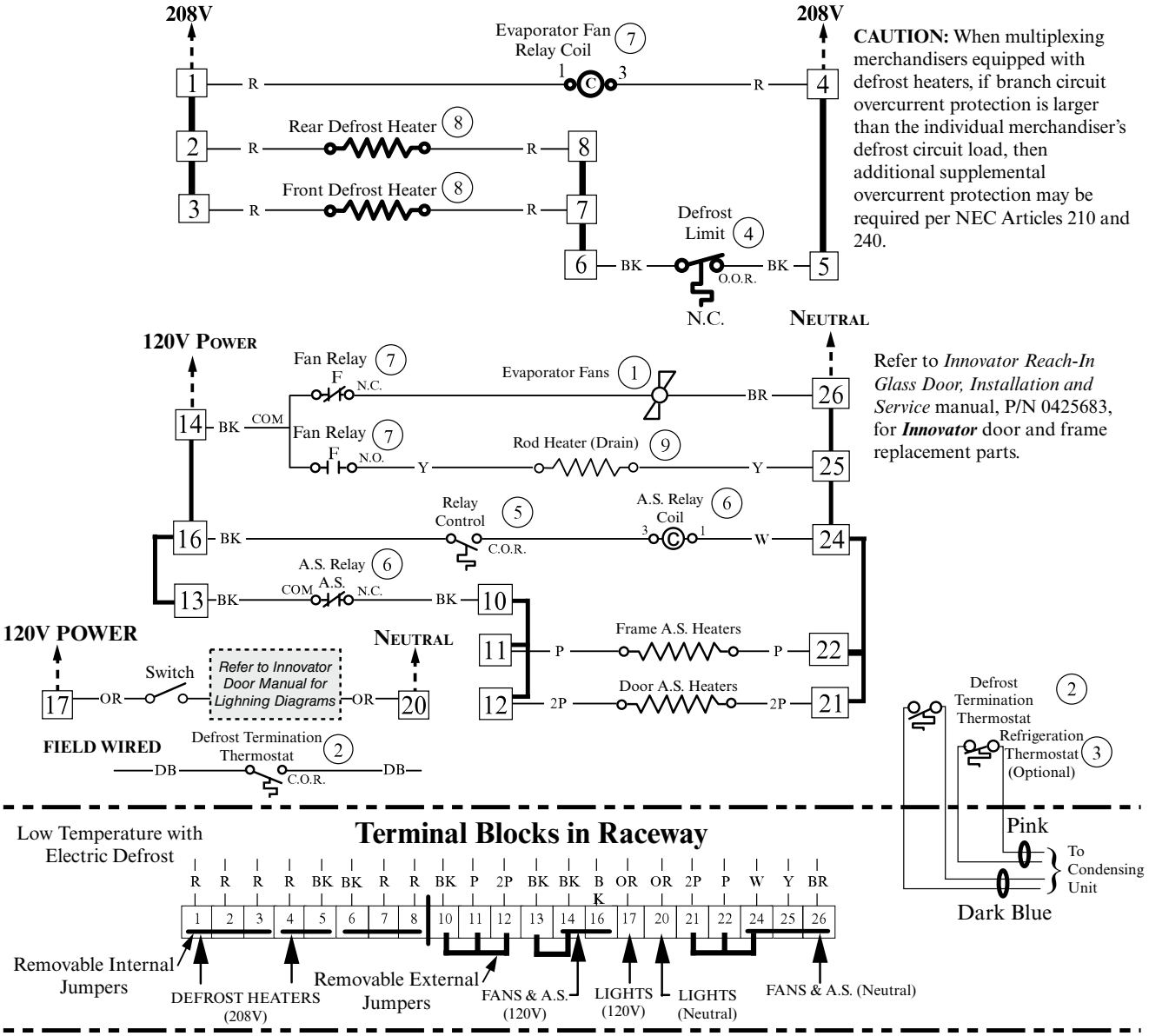
| Case | 2 Dr | 3 Dr | 4 Dr | 5 Dr | Solid End (each) |
|---|---|---|---|---|---|
| **lb** *(kg)* | 1297 (588) | 1595 (723) | 1895 (859) | 2174 (986) | 55 (25) |

[4] Actual weights will vary according to optional kits included.

# Fan and Heater Cicuits - Electric Defrost (standard)
# Low Temperature

CIRCLED NUMBERS = PARTS LIST ITEM NUMBERS
R = Red P = Purple 2P = Purple (2 Bands) DB = Dark Blue BK = Black
LB = Light Blue BR = Brown Y = Yellow OR = Orange W = White

**THESE ARE MARKER COLORS (WIRE MAY VARY.)**




**CAUTION:** When multiplexing merchandisers equipped with defrost heaters, if branch circuit overcurrent protection is larger than the individual merchandiser's defrost circuit load, then additional supplemental overcurrent protection may be required per NEC Articles 210 and 240.

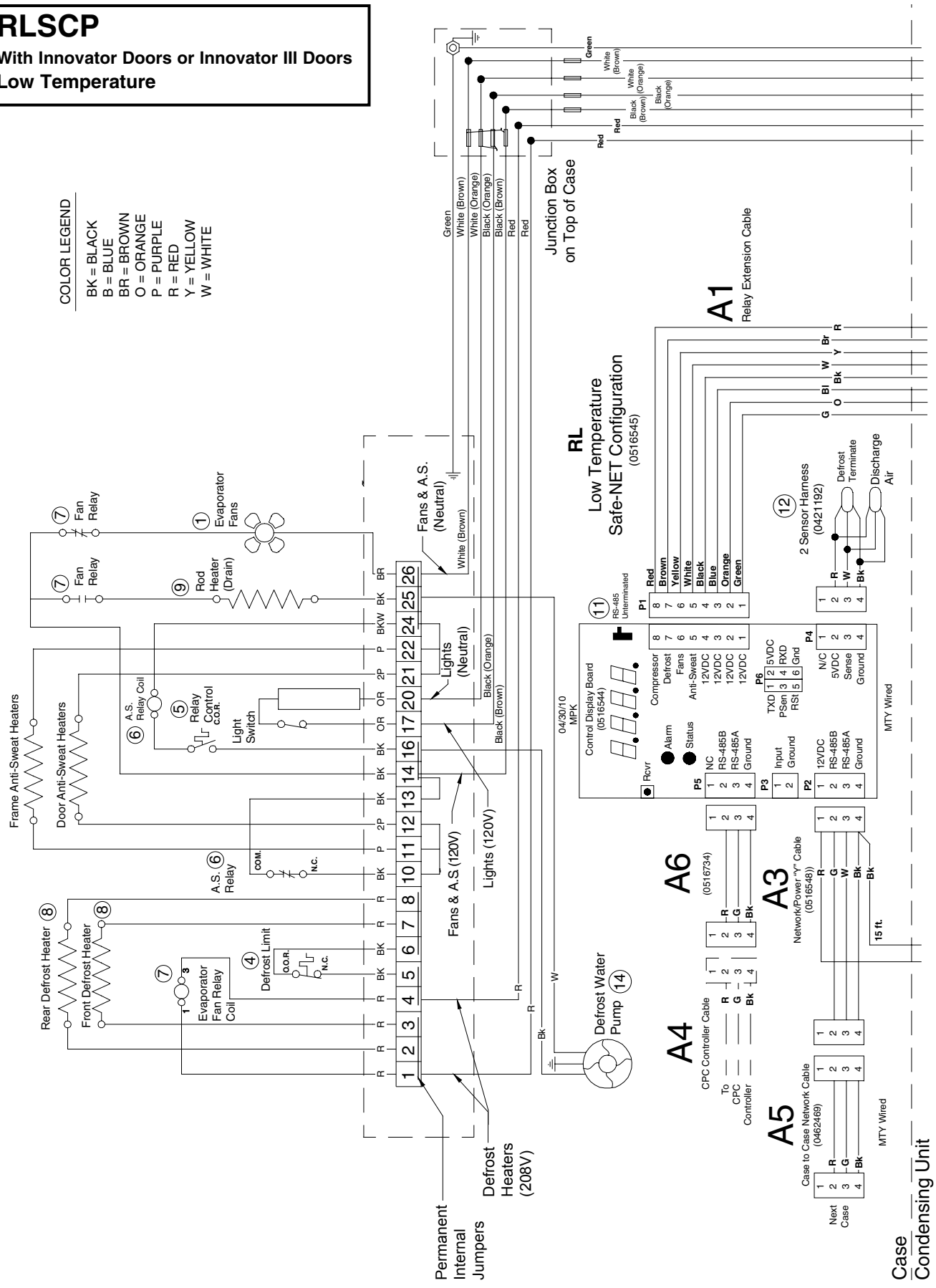
Refer to *Innovator Reach-In Glass Door, Installation and Service* manual, P/N 0425683, for ***Innovator*** door and frame replacement parts.

**Electric Defrost Sequence - Low Temperature**

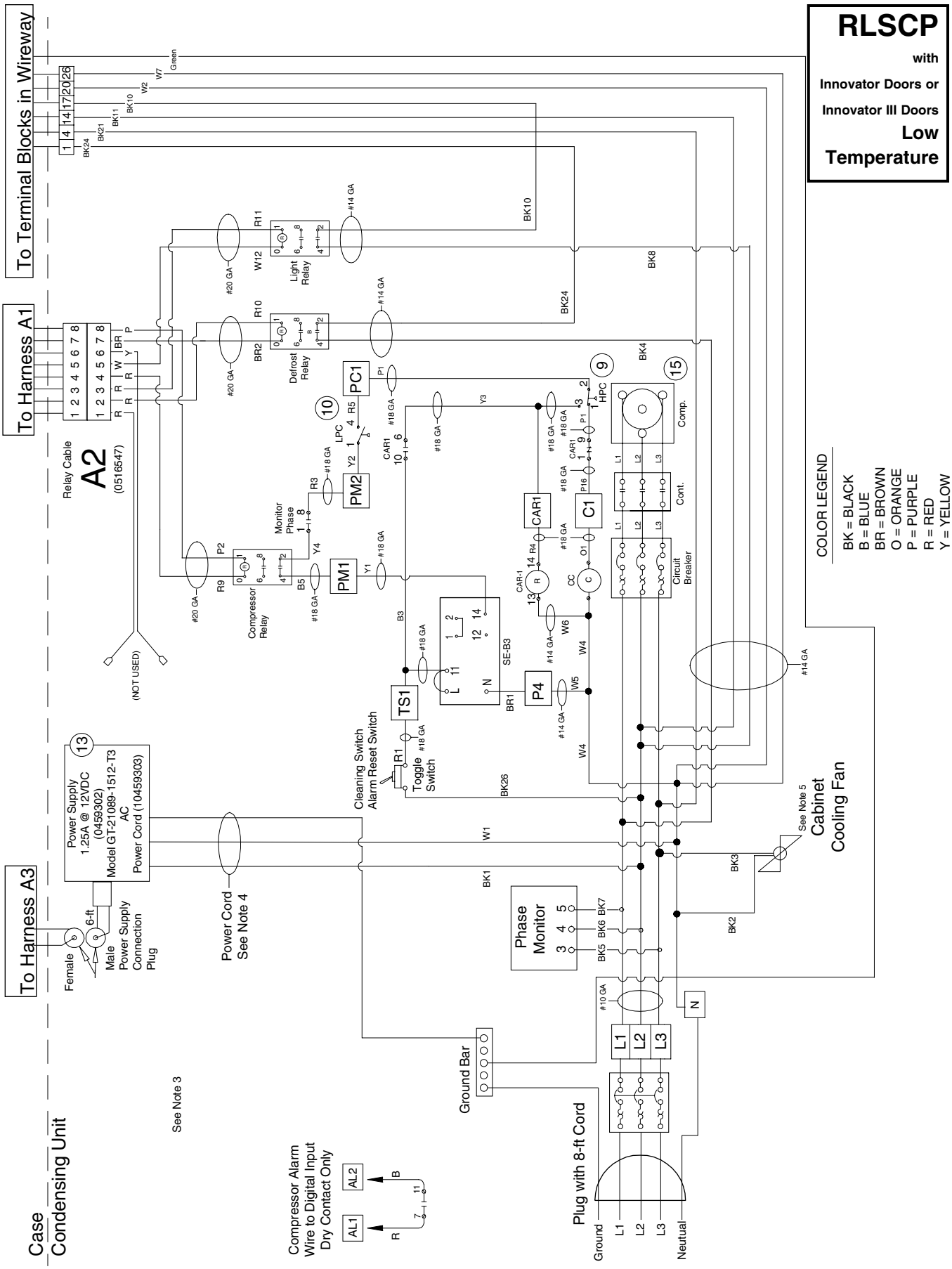
1. Power from the defrost contactor energizes Defrost Heaters and 208V Evaporator Fan Relay Coil (7). Relay Contacts open the fan circuit and energizes the Drain Pan Heater.
2. If the Defrost Heater raises internal air temperature above 90°F, the Defrost Limit Thermostat (4) will open.
3. Temperature rise of the evaporator closes the Relay Control Thermostat (5) at about 35°F, energizing 120V A.S. Relay Coil (6). This relay's contacts open the Frame and Door Heater Circuits.
4. When Defrost Termination Thermostat ends defrost period, the defrost contactor opens the Defrost Heater and Evaporator Fan Relay Coil Circuits. The Drain Pan Heater goes off and fans are on.
5. Temperature fall of the evaporator opens the Relay Control Thermostat (5) at about 20°F, de-energizing 120V A.S. Relay Coil (6). A.S. Relay Contacts close the Frame and Door Heater Circuits.

# RLSCP

**With Innovator Doors or Innovator III Doors**
**Low Temperature**




**RLSCP Wiring Diagram — Merchandiser**




**RLSCP Wiring Diagram — Condensing Unit**