STOELTING
A VOLLRATH® COMPANY

Model CC-A Series
SERVICE MANUAL

Manual No. 513692 Rev.0

This manual provides basic information about the machine. Instructions and suggestions are given covering its operation and care.

The illustrations and specifications are not binding in detail. We reserve the right to make changes to the machine without notice, and without incurring any obligation to modify or provide new parts for machines built prior to date of change.

DO NOT ATTEMPT to operate the machine until instructions and safety precautions in this manual are read completely and are thoroughly understood. If problems develop or questions arise in connection with installation, operation, or servicing of the machine, contact Stoelting.

STOELTING®
A VOLLRATH® COMPANY

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A Few Words About Safety

Safety Information

Read and understand the entire manual before operating or maintaining Stoelting equipment.

This manual provides the operator with information for the safe operation and maintenance of Stoelting equipment. As with any machine, there are hazards associated with their operation. For this reason safety is emphasized throughout the manual. To highlight specific safety information, the following safety definitions are provided to assist the reader.

The purpose of safety symbols is to attract your attention to possible dangers. The safety symbols, and their explanations, deserve your careful attention and understanding. The safety warnings do not by themselves eliminate any danger. The instructions or warnings they give are not substitutes for proper accident prevention measures.

If you need to replace a part, use genuine Stoelting parts with the correct part number or an equivalent part. We strongly recommend that you do not use replacement parts of inferior quality.

Safety Alert Symbol:

This symbol Indicates danger, warning or caution. Attention is required in order to avoid serious personal injury. The message that follows the symbol contains important information about safety.

Signal Word:

Signal words are distinctive words used throughout this manual that alert the reader to the existence and relative degree of a hazard.

WARNING

The signal word “WARNING” indicates a potentially hazardous situation, which, if not avoided, may result in death or serious injury and equipment/property damage.

CAUTION

The signal word “CAUTION” indicates a potentially hazardous situation, which, if not avoided, may result in minor or moderate injury and equipment/property damage.

CAUTION

The signal word “CAUTION” not preceded by the safety alert symbol indicates a potentially hazardous situation, which, if not avoided, may result in equipment/property damage.

NOTE (or NOTICE)

The signal word “NOTICE” indicates information or procedures that relate directly or indirectly to the safety of personnel or equipment/property.

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SECTION 1
DESCRIPTION AND SPECIFICATIONS

1.1 DESCRIPTION

The CC series machines are continuous flow custard machines. They are equipped with fully automatic controls to provide a uniform product and feature Quick-Freeze technology. This manual is designed to assist qualified service personnel and operators in the installation, operation and maintenance of the CC series frozen custard machines.

NOTE

Product breakdown could happen quicker if product is stored in the freezing cylinders for more than one hour. After a batch is made, close the flow control and empty the contents of the freezing cylinder.

The information in this booklet is to be used for reference of technical specifications only. It is intended for qualified service technicians. Never attempt to operate or service equipment without first thoroughly reading and understanding the appropriate Owner's and Service Manuals.

Figure 1-1 Model CC303

1.2 DIMENSIONS

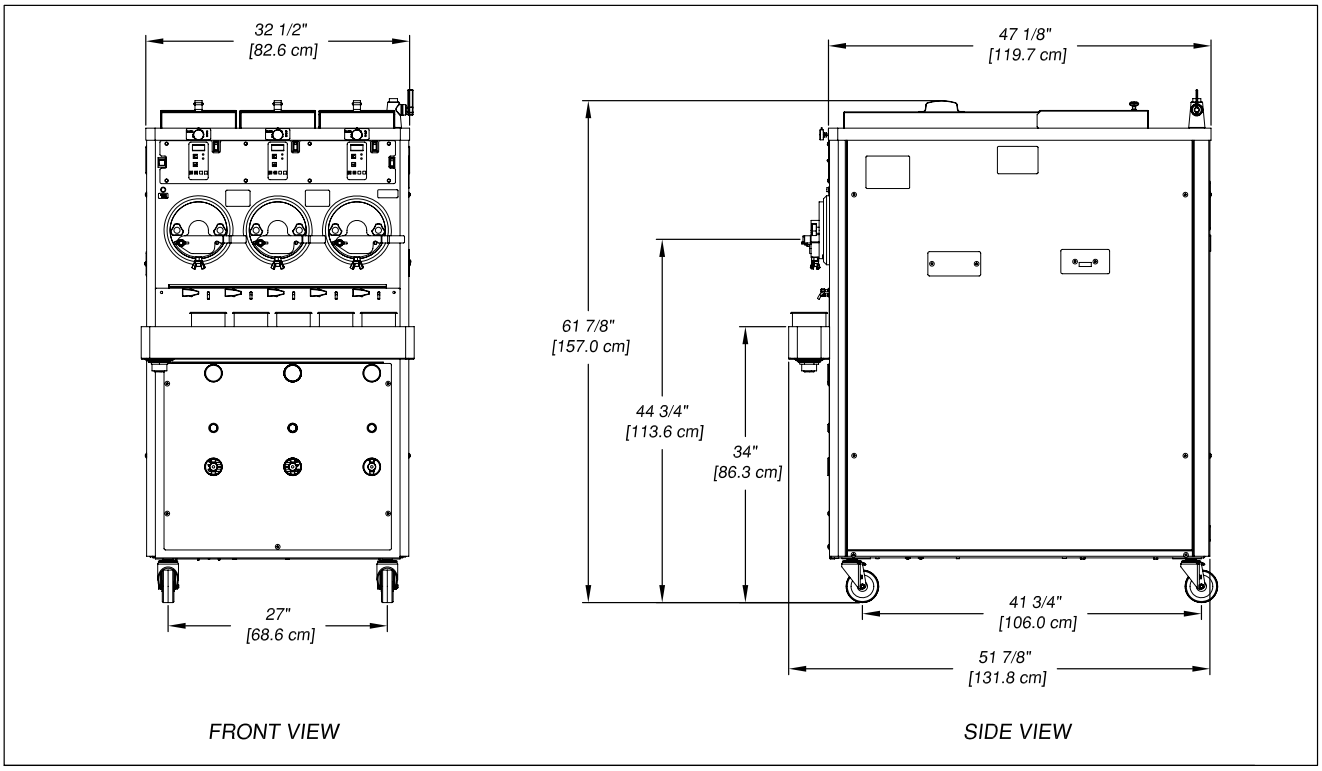


Figure 1-2 Model CC303 Dimensions

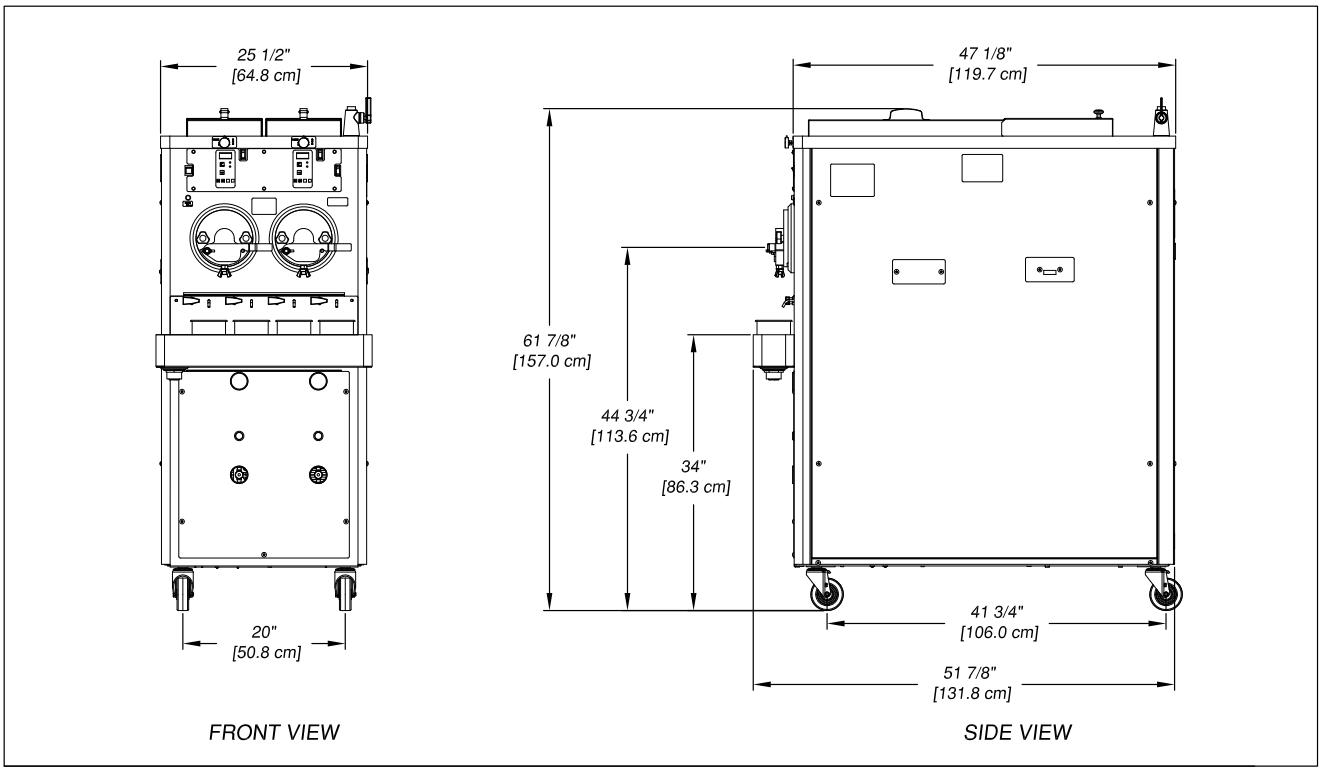


Figure 1-4 Model CC202 Dimensions

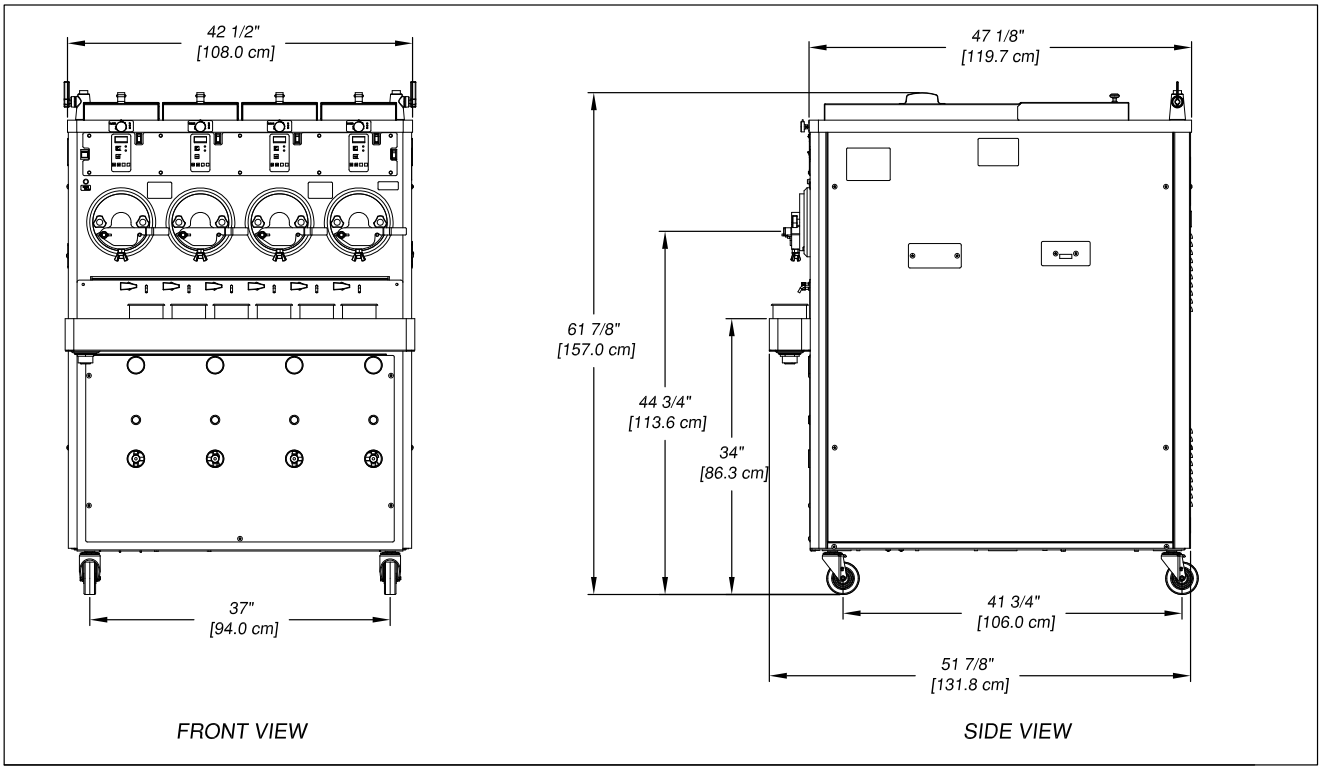


Figure 1-5 Model CC404 Dimensions

1.3 SPECIFICATIONS

	CC303A Air Cooled Remote		CC303A Water Cooled	
Dimensions	**Machine**	**with crate**	**Machine**	**with crate**
width	32-1/2'' (82,6 cm)	44-1/2'' (113,0 cm)	32-1/2'' (82,6 cm)	44-1/2'' (113,0 cm)
height	61-7/8'' (157,2 cm)	67'' (170,2 cm)	61-7/8'' (157,2 cm)	67'' (170,2 cm)
depth	47-1/8'' (119,7 cm)	60'' (152,4 cm)	47-1/8'' (119,7 cm)	60'' (152,4 cm)
Weight	895 lbs (405,9 kg)	970 lbs (439,9 kg)	1345 lbs (610,0 kg)	1420 lbs (644,1 kg)
Electrical	**1 Phase, 208-240 VAC, 60Hz**	**3 Phase, 208-240 VAC, 60Hz**	**1 Phase, 208-240 VAC, 60Hz**	**3 Phase, 208-240 VAC, 60Hz**
circuit ampacity (per barrel)	12A minimum	9A minimum	29A minimum	19A minimum
overcurrent protection device (per barrel)	25A maximum	15A maximum	50A maximum	30A maximum
Hopper Condensing Unit	**1 Phase, 115 VAC, 60Hz** NEMA5-15P power cord provided			
Drive Motor	Three - 3 hp			
Cooling	Air cooled units require one remote condensing unit (with compressor) per barrel. The condensing units ship from the factory with 20 lbs of R-404A for up to a 50' line set. Add 1 lb of refrigerant for every 10' increase to the line set. Line set max 100'.		Water cooled units are self contained and require a Standard Hose Adapter water fitting and a 1/2" OD drain fitting for each barrel. They are charged with R-404A. Maximum water pressure of 130 psi Minimum water flow rate of 3 GPM Ideal EWT of 60°-80°F	
Hopper Volume	Three - 8.8 gallon (33,32 liters)			

	CC303*
Refrigerant	R-404A
Charge	(W/C) 10 lbs (A/C) 24 lbs
AXV	28-32 psig
Head Pressure Regulator (Water Valve)	(W/C) 225-235 psig (A/C) 255 psig
Crankcase Pressure Regulator	25 psig
Lemon Ice AXV	38-42 psig
	Hopper
Hopper Refrigerant	R-134A
Hopper Charge	1 lb 3 oz
Suction Pressure	13-17 psig

* There is a separate refrigeration system for each freezing cylinder and a separate refrigeration system for hopper cooling. The refrigeration specifications are per freezing cylinder.

Maximum nitrogen pressure of 240 psig when leak testing.

	CC202A Air Cooled Remote		CC202A Water Cooled	
Dimensions	**Machine**	**with crate**	**Machine**	**with crate**
width	25-1/2'' (64,8 cm)	44-1/2'' (113,0 cm)	25-1/2'' (64,8 cm)	44-1/2'' (113,0 cm)
height	61-7/8'' (157,2 cm)	67'' (170,2 cm)	61-7/8'' (157,2 cm)	67'' (170,2 cm)
depth	47-1/8'' (119,7 cm)	60'' (152,4 cm)	47-1/8'' (119,7 cm)	60'' (152,4 cm)
Weight	632 lbs (286,6 kg)	707 lbs (320,6 kg)	930 lbs (421,8 kg)	1005 lbs (455,8 kg)
Electrical	**1 Phase, 208-240 VAC, 60Hz**	**3 Phase, 208-240 VAC, 60Hz**	**1 Phase, 208-240 VAC, 60Hz**	**3 Phase, 208-240 VAC, 60Hz**
circuit ampacity (per barrel)	12A minimum	9A minimum	29A minimum	19A minimum
overcurrent protection device (per barrel)	25A maximum	15A maximum	50A maximum	30A maximum
Hopper Condensing Unit	**1 Phase, 115 VAC, 60Hz** NEMA5-15P power cord provided			
Drive Motor	Two - 3 hp			
Cooling	Air cooled units require one remote condensing unit (with compressor) per barrel. The condensing units ship from the factory with 20 lbs of R-404A for up to a 50' line set. Add 1 lb of refrigerant for every 10' increase to the line set. Line set max 100'.		Water cooled units are self contained and require a Standard Hose Adapter water fitting and a 1/2" OD drain fitting for each barrel. They are charged with R-404A. Maximum water pressure of 130 psi Minimum water flow rate of 3 GPM Ideal EWT of 60°-80°F	
Hopper Volume	Two - 8.8 gallon (33,32 liters)			

	CC202*
Refrigerant	R-404A
Charge	(W/C) 10 lbs (A/C) 24 lbs
AXV	28-32 psig
Head Pressure Regulator (Water Valve)	(W/C) 225-235 psig (A/C) 255 psig
Crankcase Pressure Regulator	25 psig
Lemon Ice AXV	38-42 psig
	Hopper
Hopper Refrigerant	R-134A
Hopper Charge	1 lb 2 oz
Suction Pressure	13-17 psig

* There is a separate refrigeration system for each freezing cylinder and a separate refrigeration system for hopper cooling. The refrigeration specifications are per freezing cylinder.

Maximum nitrogen pressure of 240 psig when leak testing.

	CC404A	
Dimensions	**Machine**	**with crate**
width	42-1/2'' (108,0 cm)	50'' (127,0 cm)
height	61-7/8'' (157,2 cm)	67'' (170,2 cm)
depth	47-1/8'' (119,7 cm)	60'' (152,4 cm)
Weight	1135 lbs (514,8 kg)	1210 lbs (548,8 kg)
Electrical	**3 Phase, 208-240 VAC, 60Hz**	
circuit ampacity (per barrel)	9A minimum	
overcurrent protection device (per barrel)	15A maximum	
Hopper Condensing Unit	**1 Phase, 115 VAC, 60Hz** NEMA5-15P power cord provided	
Drive Motor	Four - 3 hp	
Cooling	Air cooled units require one remote condensing unit (with compressor) per barrel. The condensing units ship from the factory with 20 lbs of R-404A for up to a 50' line set. Add 1 lb of refrigerant for every 10' increase to the line set. Line set max 100'.	Water cooled units are self contained and require a Standard Hose Adapter water fitting and a 1/2" OD drain fitting for each barrel. They are charged with R-404A. Maximum water pressure of 130 psi Minimum water flow rate of 3 GPM Ideal EWT of 60°-80°F
Hopper Volume	Four - 8.8 gallon (33,32 liters)	

	CC404*
Refrigerant	R-404A
Charge	24 lbs
AXV	28-32 psig
Head Pressure Regulator (Water Valve)	255 psig
Crankcase Pressure Regulator	25 psig
Lemon Ice AXV	38-42 psig
	Hopper
Hopper Refrigerant	R-134A
Hopper Charge	1 lb 4 oz
Suction Pressure	13-17 psig

* There is a separate refrigeration system for each freezing cylinder and a separate refrigeration system for hopper cooling. The refrigeration specifications are per freezing cylinder.

Maximum nitrogen pressure of 240 psig when leak testing.

	CC Remote Condensing Unit (1 per barrel)	
Dimensions	**Condenser**	
width	37-3/4'' (95,9 cm)	
height	17-1/4'' (43,7 cm)	
depth	28-1/4'' (71,7 cm)	
Weight	222 lbs (100,7 kg)	
Electrical	**1 Phase, 208-230 VAC, 60Hz**	**3 Phase, 208-230 VAC, 60Hz**
circuit ampacity	20A minimum	15A minimum
overcurrent protection device	25A maximum	20A maximum
Refrigerant	R-404A	

Menu	Display	Value
Product 1	Cut In T	30 °F
	Cut Out T	-20 °F
Product 2	Cut In T	30 °F
	Cut Out T	-20 °F
Standby	Cut In T	45 °F
	Cut Out T	40 °F
	On Time	60 seconds
	Off Time	900 seconds
	Stir On	5 seconds
	Stir Off	15 minutes
Storage	HprCutIn	39 °F
	HprCtOut	38 °F
	Hpr On	100 seconds
	Hpr Off	6 minutes

1.4 INTERNATIONAL ELECTRICAL SPECIFICATIONS

The table below shows the electrical requirements per barrel. Refer to the tables in Section 1.2 for the remainder of the specifications. There is a separate electrical circuit for each barrel.

	Air Cooled Remote		Water Cooled	
Electrical	**1 Phase, 200-220 VAC, 50Hz**	**3 Phase, 380-415* VAC, 50Hz**	**1 Phase, 200-220 VAC, 50Hz**	**3 Phase, 380-415* VAC, 50Hz**
circuit ampacity (per barrel)	12A minimum	6A minimum	32A minimum	12A minimum
overcurrent protection device (per barrel)	25A maximum	10A maximum	50A maximum	20A maximum
Hopper Condensing Unit	**1 Phase, 200-240 VAC, 50Hz** Requires a 15amp power cord			
Drive Motor	Three - 2 hp			

* The 380-415 VAC supply requires a neutral. The power supply must be 5 wire for proper operation.

	Remote Condensing Unit (1 per barrel)	
Electrical	**1 Phase, 200-220 VAC, 50Hz**	**3 Phase, 380-415 VAC, 50Hz**
circuit ampacity	20A minimum	15A minimum
overcurrent protection device	25A maximum	20A maximum

SECTION 2
MAINTENANCE AND ADJUSTMENTS

2.1 MACHINE ADJUSTMENT

This section is intended to provide maintenance personnel with a general understanding of the machine adjustments. It is recommended that any adjustments in this section be made by a qualified person.

2.2 OBTAINING READINGS AND MODIFYING SETTINGS (SERVICE PERSONNEL ONLY)

Readings and Settings on the IntelliTec control are accessed through the IntelliTec control menu settings. Locating the readings and settings are done using the up arrow (⇑) and left arrow (⇐) buttons on the membrane switch. A printed IntelliTec Menu Settings sheet is located in the information pouch behind the header panel.

IntelliTec Control Readings

To obtain machine readings, locate the value on the machine's menu settings sheet and follow the steps below.

A. Press and hold the SEL button for 8 seconds. While still holding the SEL button, press the up arrow button (⇑). The LCD screen will read DISPLAY.

B. Release both buttons.

C. Press the up arrow button (⇑) to navigate to the correct reading under DISPLAY or press the left arrow (⇐) button to navigate to the ERRCODES menu.

D. Press the up arrow (⇑) and left arrow (⇐) buttons to navigate through the rest of the readings as needed.

E. When all readings have been obtained, press SEL button until the ExitMenu screen is displayed. Then press the up arrow button (⇑) to return to the current mode display.

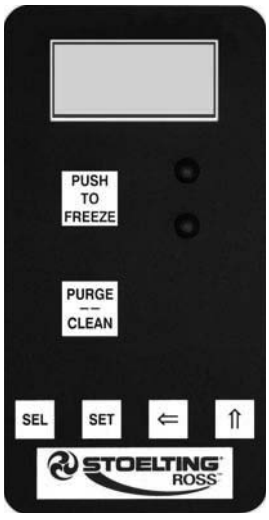


Figure 2-1 Membrane Switch

Modifying Control Settings

To change the value of a setting, locate it on the IntelliTec Menu Settings sheet and follow the steps below.

IMPORTANT:

Before making changes to any settings, record the original values. If the setting changes do not achieve desired results, return settings to their original values.

A. Press and hold the SEL button for 8 seconds. While still holding the SEL button, press the up arrow button (⇑). The LCD Screen will read DISPLAY.

B. Release both buttons.

C. Press the left arrow button (⇐) to get to the correct menu (Product1, Product 2, Stand By, Storage).

D. Press the up arrow button (⇑) to navigate to the value that needs to be changed.

E. Press the SET button to enter the edit mode.

F. Press the up arrow button (⇑) to change the setting.

G. Press the SET button to save the setting and exit the edit mode.

H. Press the up arrow (⇑) and the left arrow (⇐) buttons to navigate through the rest of the settings as needed.

I. When all changes have been completed, press the up arrow button (⇑) from ExitMenu to return to the current mode display.

2.3 READINGS (SERVICE PERSONNEL ONLY)

The IntelliTec control continuously monitors and records temperatures, voltages, amps, and error code details. Each reading is beneficial to service personnel when troubleshooting.

DISPLAY READINGS

Following are the readings available under the DISPLAY menu:

Hopper

The temperature of the hopper is constantly monitored by the IntelliTec control.

°F and amps

Suction line temperature on the freezing cylinder and drive motor amps are available on the same screen to assist with setup and troubleshooting.

Aux. Temp (°F)

This reading provides the ambient temperature around the IntelliTec control board.

Supply V (VAC)

The input voltage is recorded.

ERROR CODE READINGS

The following details are recorded under the ERRCODES menu for each of the last 25 error codes received:

Err1 (hours)

A timer begins when an error occurs. The timer records the number of hours since the error occurred. If power to the machine is interrupted, the timer will stop until power has been restored.

°F and amps

The suction gas temperature on the freezing cylinder and the drive motor amps are recorded at the time of the error.

Aux. Temp (°F)

Ambient temperature of the IntelliTec control board is recorded at the time of the error.

Str (°F)

The storage temperature is recorded at the time of the error.

VAC and Mode

The input voltage and mode at which the error occurred are recorded. See the table below for descriptions of each mode (Fig. 4-2).

Up Time (hours)

This value is a record of the total time the machine has been in service. If power is interrupted, the timer will stop until power is restored. This timer does not reset.

2.4 SETTINGS (SERVICE PERSONNEL ONLY)

Changing any setting on the IntelliTec control will alter machine operation and affect the product temperature, consistency, or life. Refer to the IntelliTec Menu Settings sheet located in the information pouch behind the header panel of the machine. If any of the following settings on the IntelliTec control differ from the settings sheet, it is recommended to return those settings to factory defaults.

PRODUCT1 AND PRODUCT2 MENUS:

Cut In T (°F)

This setting determines when refrigeration will start during Run Mode.

Cut Out T (°F)

This setting determines when refrigeration stops during Run Mode.

Product 1 / Product 2

This text is shown on the top line after the Push To Freeze button is pressed. The default value is “CUSTARD” for Product 1 and “PRODUCT2” for Product 2.

On Time (sec)

In case of a temperature sensor failure, this setting determines the length of a refrigeration cycle.

Code	Description	Compressor	Drive Motor	Details
1	Start-Up	Off	Off	
2	Standby	Off	Off	Waiting for a Cycle
3	Standby	Off	Off	
4	Standby	On	Off	
5	Standby	Off	Off	Sensor Fail
6	Standby	On	Off	Sensor Fail
7	Freeze Down	On	Off	Product 1
8	Run Mode	On	On	Product 1
9	Run Mode	Off	On	Product 1
10	Freeze Down	On	Off	Product 2
11	Run Mode	On	On	Product 2
12	Run Mode	Off	On	Product 2
13	Sensor Fail	On	On	Product 1
14	Sensor Fail	On	On	Product 2
15	Sensor Fail	Off	On	Product 2
16	Purge Mode	Hopper Only	On	
17	Clean Mode	Off	Off	
18	High Pressure Cutout	Off	Off	
19	Door Safety Switch Triggered	Off	Off	

Figure 2-2 Modes When Error Occurs

Off Time (sec)

In case of a temperature sensor failure, this setting determines the amount of time between refrigeration cycles.

STAND BY MENU:

Cut In T (°F)

This setting determines when refrigeration will start during Stand By Mode.

Cut Out T (°F)

This setting determines when refrigeration stops during Stand By Mode.

On Time (sec)

In case of a temperature sensor failure, this setting determines the length of a refrigeration cycle.

Off Time (sec)

In case of a temperature sensor failure, this setting determines the amount of time between refrigeration cycles.

STORAGE MENU:

Refriger

This setting changes how the control handles the storage refrigeration cycle. The setting is Hopper and should not be changed.

HprCutIn (°F)

This setting determines the temperature at which the hopper refrigeration cycle starts.

HprCtOut (°F)

This setting determines the temperature at which the hopper refrigeration cycle stops.

Hpr On

In case of a temperature sensor failure, this setting determines the length of a refrigeration cycle.

Hpr Off

In case of a temperature sensor failure, this setting determines the amount of time between refrigeration cycles.

2.5 DRIVE BELT TENSION ADJUSTMENT

To check belt tension, follow the steps below:

A. Remove a side panel and the back panel.

B. Use a Burroughs Belt Tension Gauge to set the tension for the drive belt. Set the belt tension to 40-50 lbs.

C. If an adjustment is necessary, loosen the four motor plate retaining nuts, adjust belt tension then retighten the four nuts.

NOTE

Belt life will be increased if new drive belts are checked after two or three weeks of operation.

2.6 PREVENTATIVE MAINTENANCE

It is recommended that a maintenance schedule be followed to keep the machine clean and operating properly.

A. DAILY

Disassemble and Clean

The frequency of cleaning the freezer and freezer parts must comply with local health regulations. Refer to the previous sections for proper disassembly and cleaning instructions.

Lubricate Front Wearguard

Petrol Gel sanitary lubricant or equivalent must be used when lubrication of parts is specifi ed. Apply a thin fi lm of sanitary lubricant to the inside and outside of the front wearguard.

Inspect Parts

Inspection for worn or broken parts should be made each time the freezer is disassembled. All worn or broken parts should be replaced to ensure safety to both the operator and the customer and to maintain good freezer performance and a quality

Lubricate Back End of the Auger

Lubricate the rear of the auger with a small amount of spline lubricant.

B. WEEKLY

Clean Inside Of Machine

Remove all side panels and clean the inside of the machine. Wipe any custard that may have dripped onto the inner panels with a damp soapy towel. Wash the drain tray.

C. MONTHLY

Clean Condenser Coils (And Filters If Applicable)

The coils on the hopper, dipping cabinet and remote condenser need to be cleaned to ensure proper airfl ow. Use compressed air to clean the condensers. Blow the air in the opposite direction of the normal airfl ow.

C. QUARTERLY

Replace Barrel Parts According To Schedule

Follow the Parts Replacement Schedule below to keep the freezer operating properly.

D. ANNUALLY

> **WARNING**
>
> High voltage will shock, burn or cause death. Turn off and lock out main power disconnect before servicing. Do not operate machine with panels removed.

Replace Barrel Parts

Follow the Parts Replacement Schedule below to keep the freezer operating properly.

Drive Belt Wear and Tension

Inspect the drive belts for wear. Check for wear marks from the belts rubbing on the pulley. Press fi rmly on the belts. When tension is properly adjusted, the belt will depress the approximate width of the belt with the pressure of a fi nger. If you think the belt is out of tension consult the Owner's Manual or contact Stoelting Customer Service.

2.7 EXTENDED STORAGE

Refer to the following steps for storage of the machine over any long shutdown period:

A. Turn the Main Freezer Power OFF-ON switch to the OFF position.

B. Disconnect (unplug) from the electrical supply source.

C. Clean all parts thoroughly with a warm water detergent. Rinse in clean water and dry parts. Do not sanitize.

NOTE

Do not let the cleaning solution stand in the hopper or in the freezing cylinder during the shutdown period.

D. Remove, disassemble and clean the faceplate, flow control assembly and beater shaft parts. Place the blades and the beater shaft wearguard in a plastic bag with a moist paper towel to prevent them from becoming brittle.

Part	Description	3 Months	Annually	Qty per Barrel
C-2000-50	Spring		X	12
C-2000-51	Blade		X	12
SL-0010	Seal - Beater Shaft	X		1
149014	Bushing - Front Auger Support	X		1
625174	O-Ring - Front Door	X		1

Figure 2-3 Parts Replacement Schedule

SECTION 3
TROUBLESHOOTING

3.1 ERROR CODES

When the machine experiences a problem, one of the following error codes will be displayed on the control panel. Each error code directs you to the system location of the malfunction.

ERROR CODE	MALFUNCTION
1	Soft
2	High Torque
3	Extended Run Time
4	Clean
5	Barrel Sensor
6	Hopper Sensor
7	Drive Motor
8	Cab Sensor
9	High Pressure Cutout
10	Auxiliary Sensor

To return the machine to normal operation, any error causing condition must be corrected and the Main Freezer Power Off/On switch in the Off position and back in the On position before the machine will return to normal operation.

3.2 TROUBLESHOOTING ERROR CODES

Error Code 1 - Soft Error

The Soft Error (E1) is an internal control board error that is logged for future analysis. The refrigeration is never stopped and the machine will continue to operate normally.

Error Code 2 - High Torque

If the control panel displays a High Torque Error (E2), the drive motor is running at a high load for 10 or more seconds. Place the Main Freezer Power Off/On switch in the Off position, wait until the product in the freezing cylinder thaws to a reasonably soft consistency and return the switch to the On position. If the error persists, it could be a sign of very low and/or fluctuating supply voltage. The error can also be caused by faulty motor or starting components which could product a high amp draw.

Error Code 3 - Run Time

The Run Time Error (E3) occurs when the compressor runs continuously for an extended period. This error could happen if the cutout value is not attained during “Standby Mode” or if the “Ready” signal does not come on in “Custard Mode” or “Lemon Ice Mode”.

The compressor will run continuously if a solenoid valve fails to open. This could be due to loose wiring, magnetic coil failure, a stuck valve or a faulty control board.

After the cause of the problem is found and remedied place the Main Freezer Power Off/On switch in the Off position and back in the On position.

Error Code 4 - Clean

If the machine is left in the Clean Mode for more than 20 minutes, the control panel will display a Clean Error (E4). This condition does not reflect a problem with the machine itself. The Clean Error has been programmed into the controller as a safeguard to protect the machine from potential damage caused by the machine being accidentally left in “Clean Mode”. The control will attempt to restart itself after 5 minutes. The display will then flash and read Restart. To immediately clear the Clean Error, place the Main Freezer Power Off/On switch in the Off position and back in the On position. After the Clean Error has been cleared, the machine will start a refrigeration cycle to protect the product in case the clean button was pressed by mistake.

Error Code 5 - Freezing Cylinder Sensor

The Freezing Cylinder Sensor Error (E5) indicates a failure of the freezing cylinder sensor or if the sensor is out of range. If the control panel displays an E5, place the Main Freezer Power Off/On switch in the Off position and back in the On position. If the control panel still displays the error code, refer to the machine's wiring diagram and the Temperature Sensor Chart (Figure 3-1). Check each lead of the sensor to ground for continuity. If continuity is found, replace the sensor. To check the resistance of the sensor, place a thermocouple on the suction line at the exit of the freezing cylinder. Compare temperature and sensor resistance with the table as reference. If measured value does not coincide with a value on the table (± 400 ohms), replace the sensor.

NOTE

When the machine encounters a Freezing Cylinder Sensor Error, the machine will continue to run using timers. This mode will allow the machine to continue making product until the machine is serviced.

Error Code 6 - Hopper Sensor

The Hopper Sensor Error (E6) indicates a failure of the hopper sensor or if the sensor is out of range. If the control panel displays an E6, place the Main Freezer Power Off/On switch in the Off position and back in the On position. If the control panel still displays the error condition code, refer to the machine's wiring diagram and the Temperature Sensor Chart (Figure 3-1). Check each lead of the sensor to ground for continuity. If continuity is found, replace the sensor. To check the resistance of the sensor, place a thermocouple on the suction line at the exit of the freezing cylinder. Compare temperature and sensor resistance with the table as reference. If measured value does not coincide with a value on the table (± 400 ohms), replace the sensor.

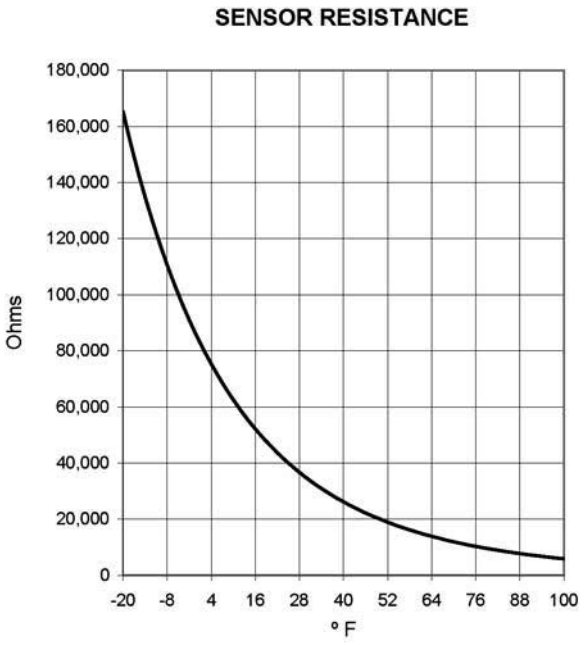


Figure 3-1 Temperature Sensor Resistance (10k Ohms)

Error Code 7 - Drive Motor

If the control panel displays a Drive Motor Error (E7), the control does not sense current coming from the drive motor. Place the Main Freezer Power Off/On switch in the Off position and back in the On position. If the error returns, use the machine's wiring diagram and check connections at the IntelliTec control and at the motor. An E7 may also be the result of a faulty drive motor contactor.

Error Code 8 - Cab Sensor

A Cab Sensor Error (E8) will not occur on the CC model machines.

Error Code 9 - High Pressure Cutout

High Pressure Cutout Errors (E9) are usually caused by a dirty or inefficient condenser. If the control panel displays an E9, place the Main Freezer Power Off/On switch in the Off position and back in the On position.

In air cooled condenser models, check for proper air clearance around the condenser and be sure condenser fan is functioning.

On water cooled condenser models, check for proper water flow through the condenser coil.

After the cause of the error is determined and corrected, place the Main Freezer Power Off/On switch in the Off position and back in the On position.

Error Code 10 - Auxiliary Sensor

An Auxiliary Temperature Sensor Error (E10) occurs if the temperature sensor on the control board fails. Place the Main Freezer Power Off/On switch in the Off position and back in the On position. If there is an E10 the control board may be faulty.

ALTERNATING FLASHING CONTROL PANEL LIGHTS

The display panel lights will flash in an alternating sequence under any error codes. Clear the error and place the Freezing Cylinder Off/On switch in the OFF position and back in the ON position.

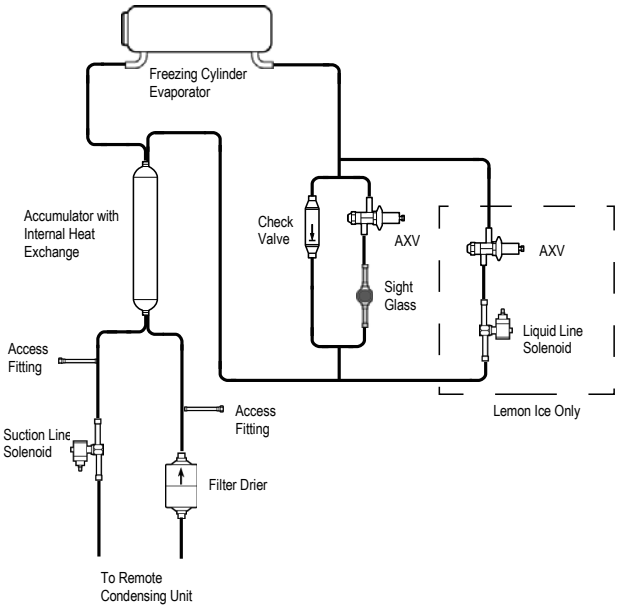
3.3 TROUBLESHOOTING

PROBLEM	POSSIBLE CAUSE	REMEDY
Custard is running too cold or auger blades chatter during running.	1 Flow is not high enough.	1 Increase the flow. Machine needs to run for at least a minute before you see a change in the product.
	2 Hopper is low or out of mix.	2 Add Mix
	3 Flow valve is plugged.	3 Check flow valve.
	4 The refrigeration system is set too cold for the mix.	4 Call Stoelting service department and we can help over the phone to adjust setting properly.
Custard is running too soft.	1 Flow is too high.	1 Decrease the flow. Machine needs to run for at least a minute before you see a change in the product.
	2 The refrigeration system for that barrel set too warm for the mix.	2 Call Stoelting service department and we can help over the phone to adjust setting properly.
	3 Condenser on remote unit is blocked.	3 Check for blockage and clean if necessary.
	4 Water cooled machine has water shut off.	4 Check that water is connected and turned on.
	5 Refrigeration system not functioning correctly.	5 Call Stoelting service department.
Beater motor freezes up in the run mode.	1 Hopper is low or out of mix.	1 Add Mix
	2 Flow valve is plugged.	2 Check flow valve.
	3 Flow valve is set too low.	3 Increase the flow setting.
	4 Belt is loose and slipping.	4 Check the belt and tighten if necessary.
Restriction of custard or lemon ice in the faceplate	1 Restriction in the faceplate.	1 Use the rake to free the restriction and increase the flow rate setting by about 0.5. After a minute, repeat these steps if no results are seen.
	2 Solid obstruction in faceplate.	2 Inspect the flow valve for solid custard or lemon pulp obstruction in the hopper.

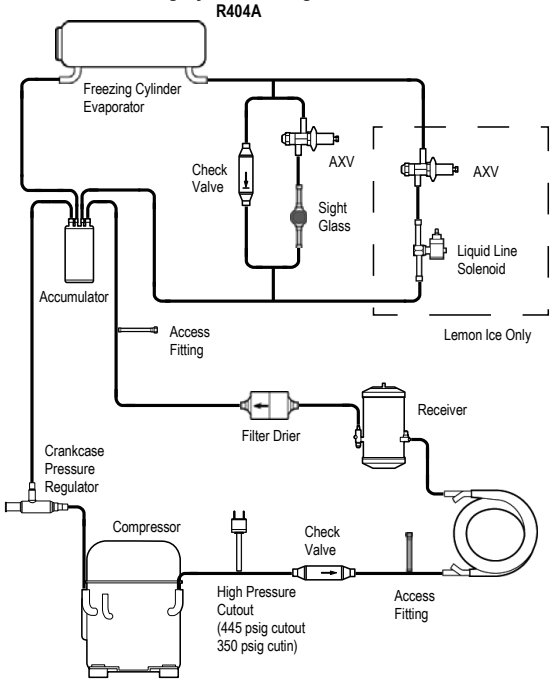
SECTION 4
REFRIGERATION & WIRING DIAGRAMS

4.1 REFRIGERATION DIAGRAMS

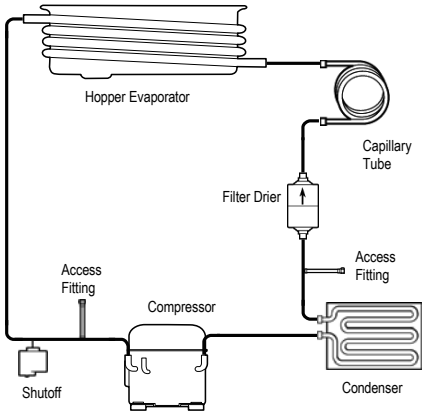
Air Cooled
Freezing Cylinder Refrigeration
R404A



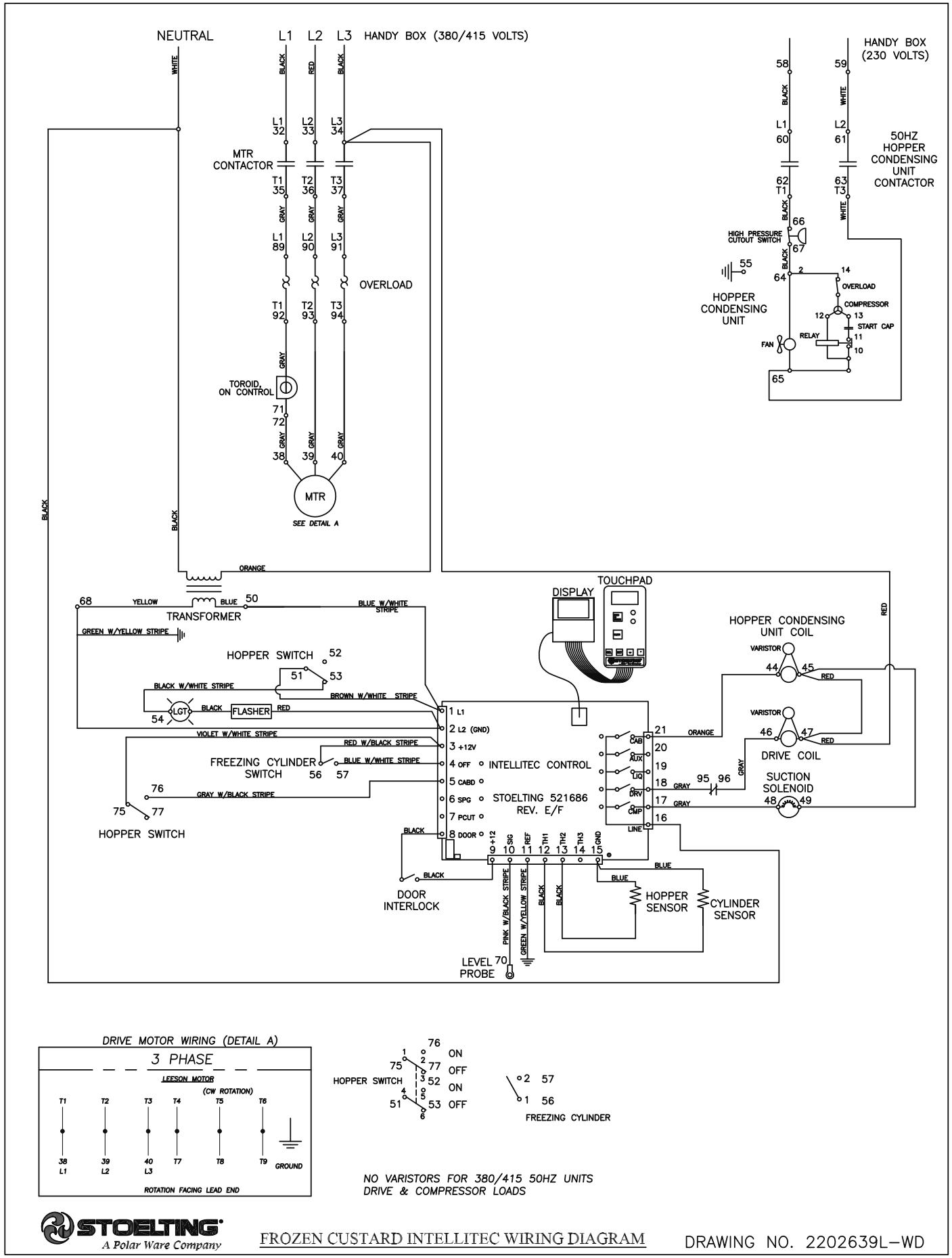
Water Cooled
Freezing Cylinder Refrigeration
R404A

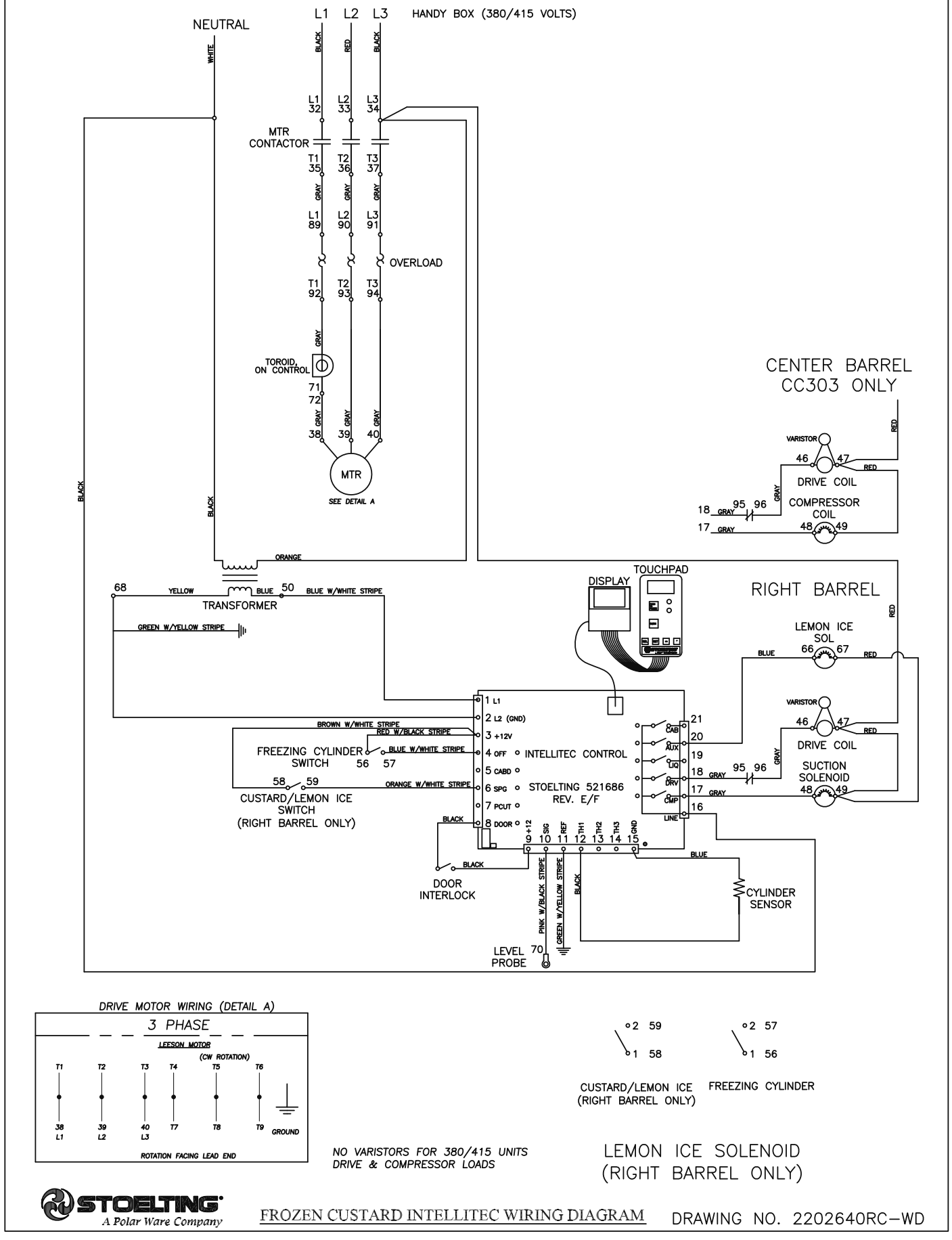


Hopper Refrigeration
R134A



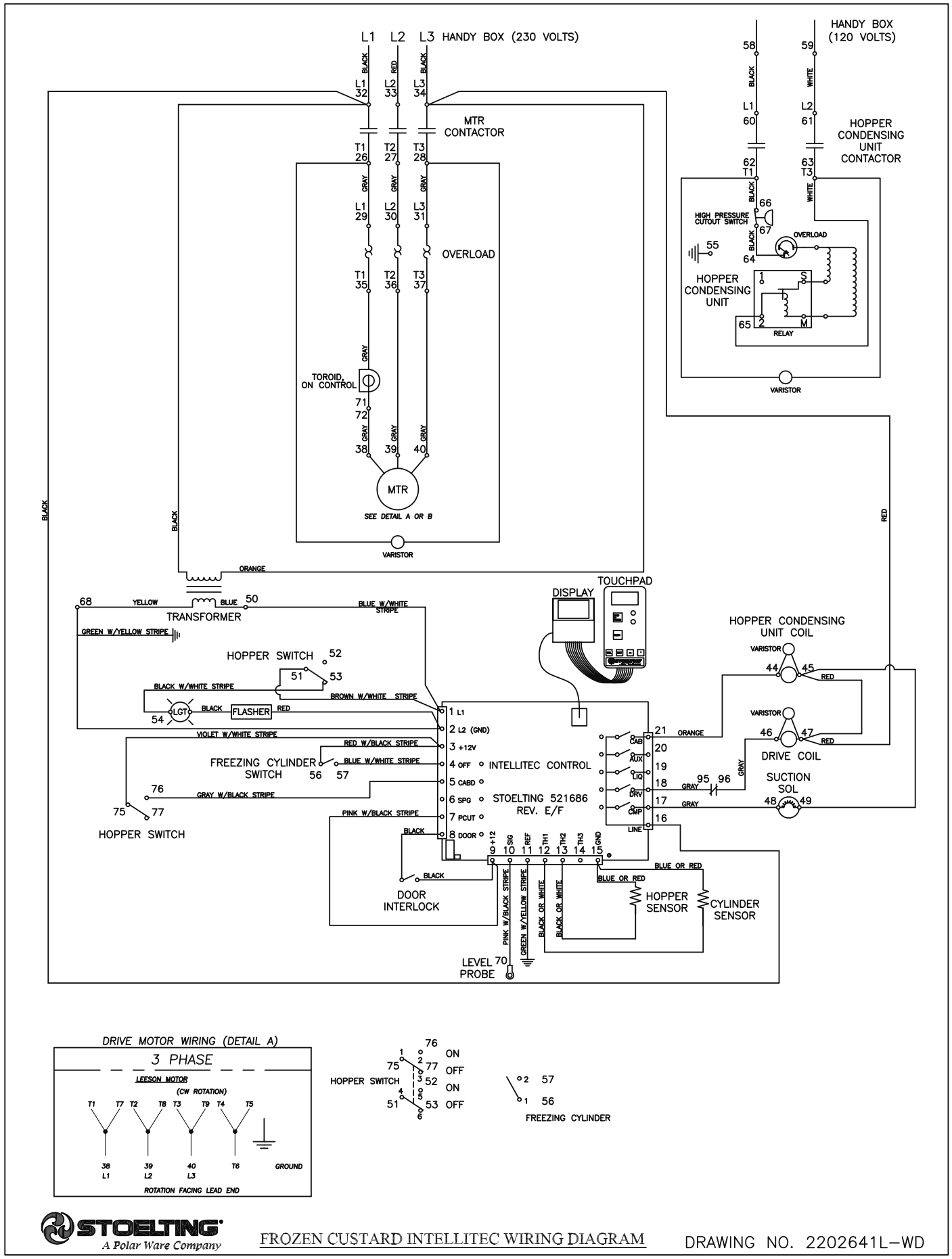
4.2 WIRING DIAGRAMS





STOELTING
A Polar Ware Company

FROZEN CUSTARD INTELLITEC WIRING DIAGRAM DRAWING NO. 2202640RC–WD



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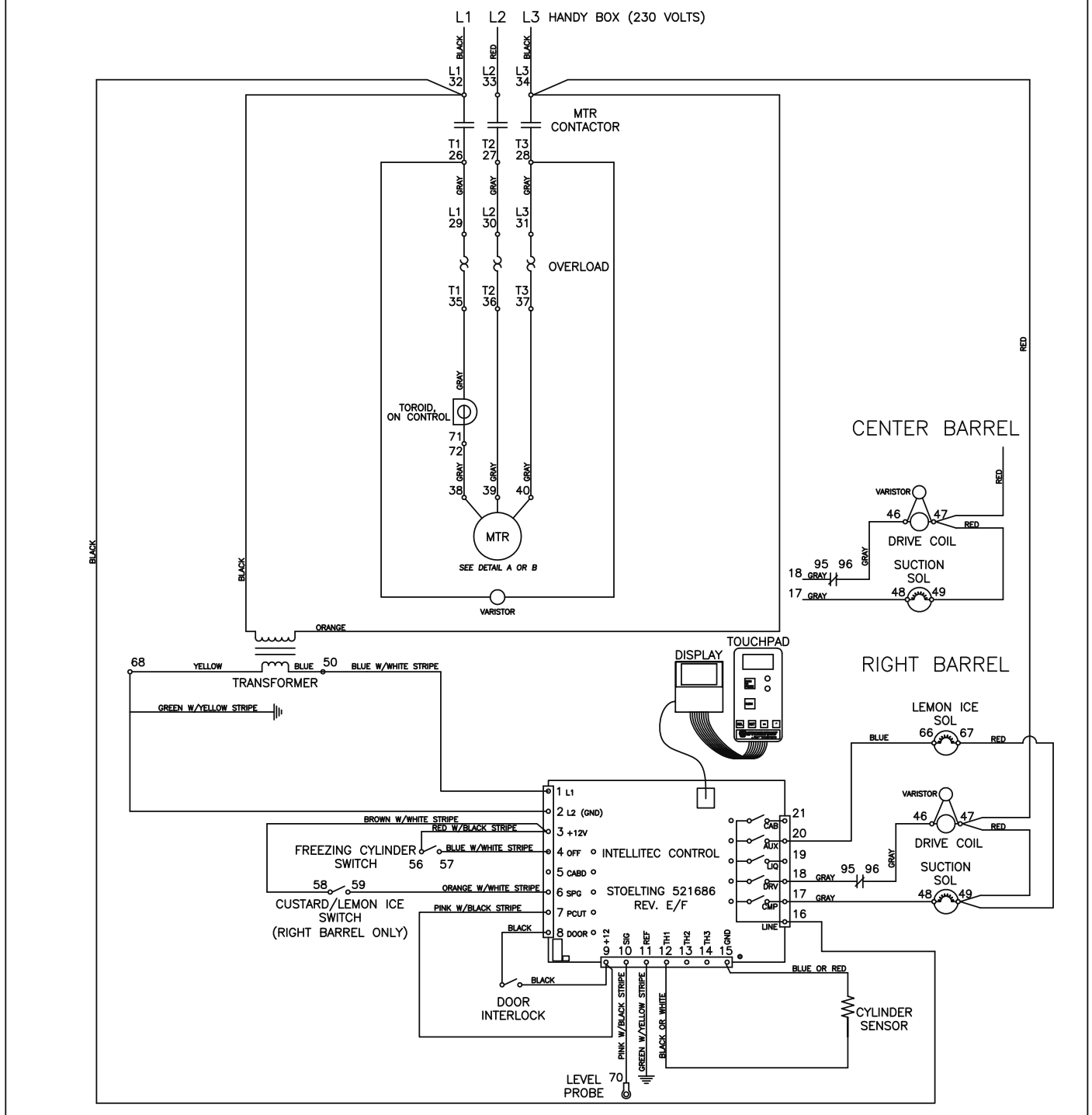
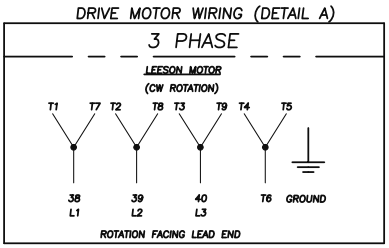
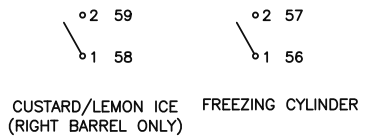
FROZEN CUSTARD INTELLITEC WIRING DIAGRAM

DRAWING NO. 2202641L–WD



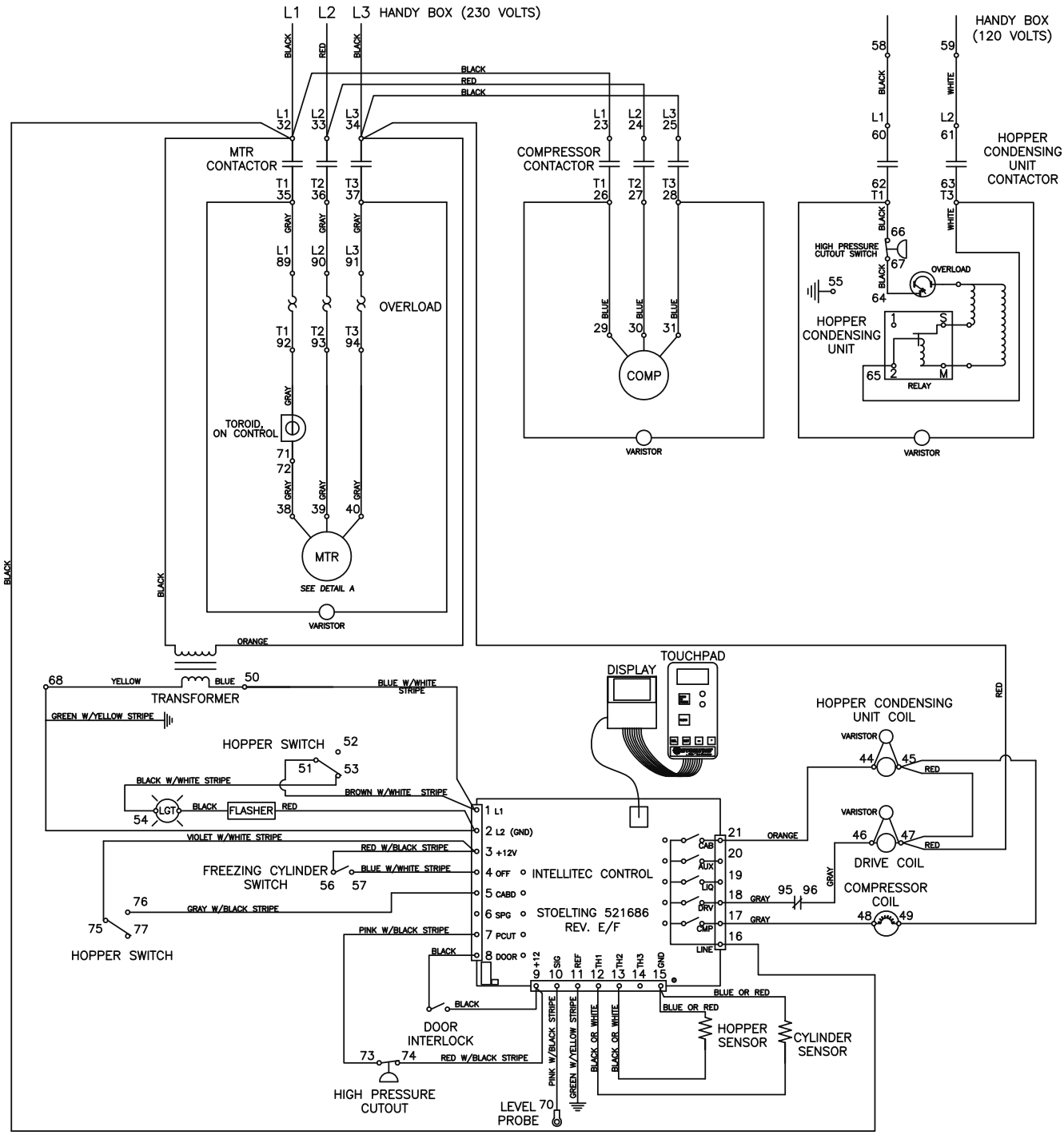


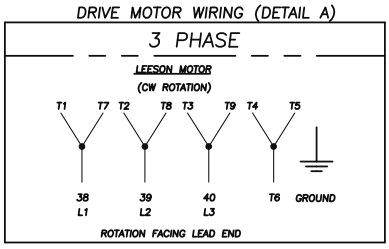


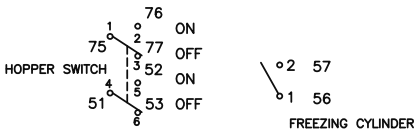
LEMON ICE SOLENOID
(RIGHT BARREL ONLY)

STOELTING
A Polar Ware Company

FROZEN CUSTARD INTELLITEC WIRING DIAGRAM DRAWING NO. 2202642RC–WD



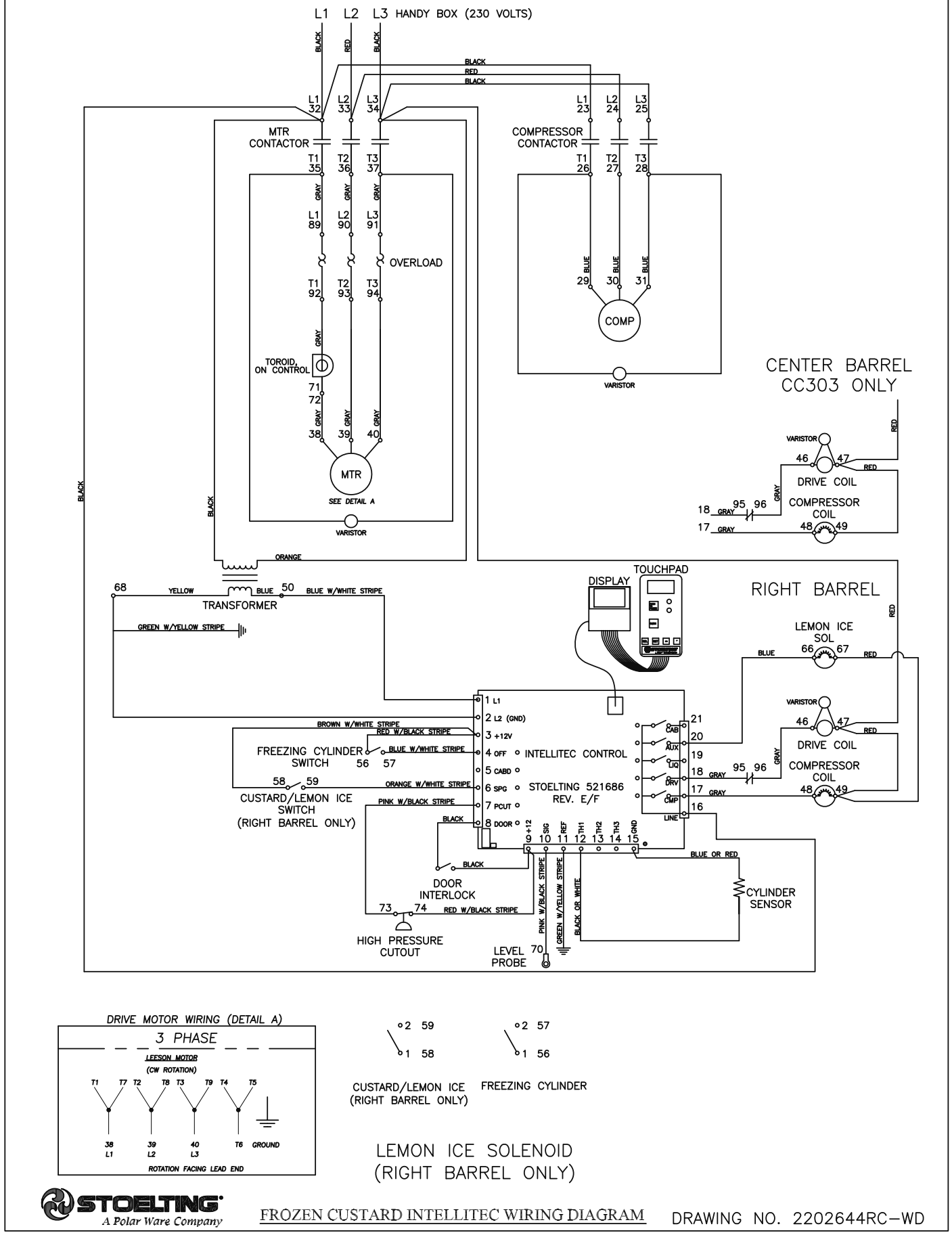




STOELTING
A Polar Ware Company

FROZEN CUSTARD INTELLITEC WIRING DIAGRAM

DRAWING NO. 2202643L–WD



STOELTING
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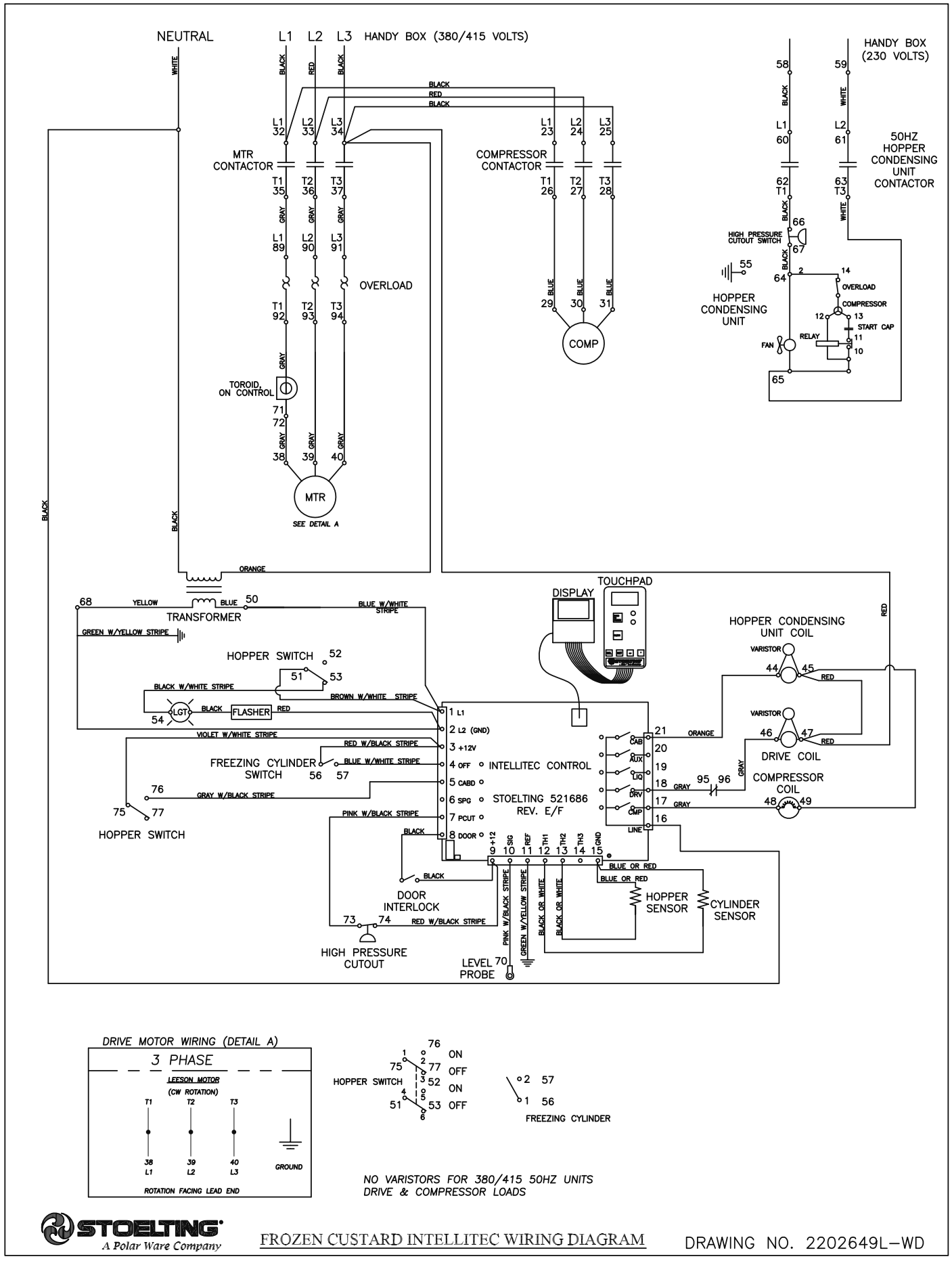
FROZEN CUSTARD INTELLITEC WIRING DIAGRAM

DRAWING NO. 2202644RC–WD



STOELTING
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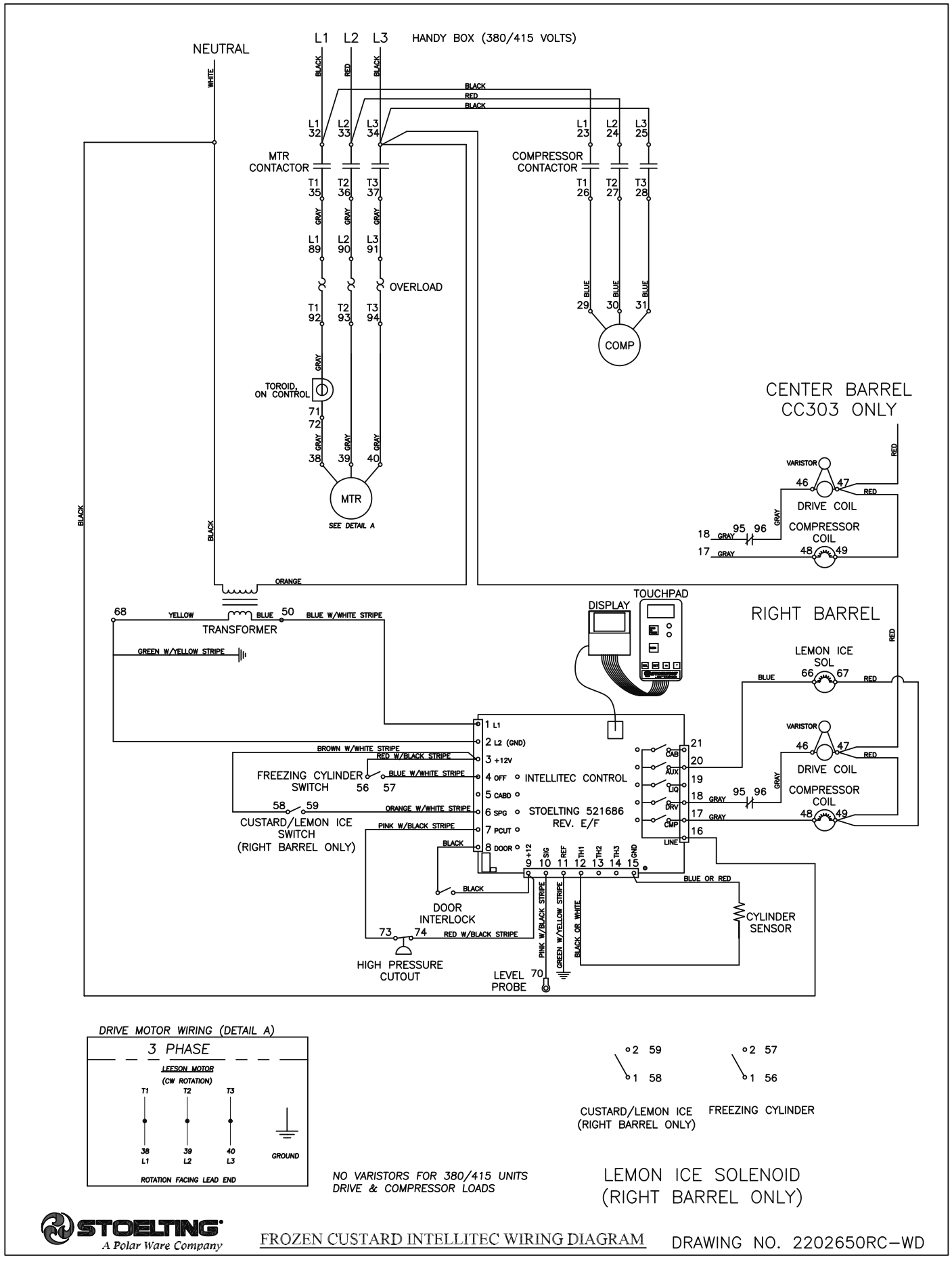
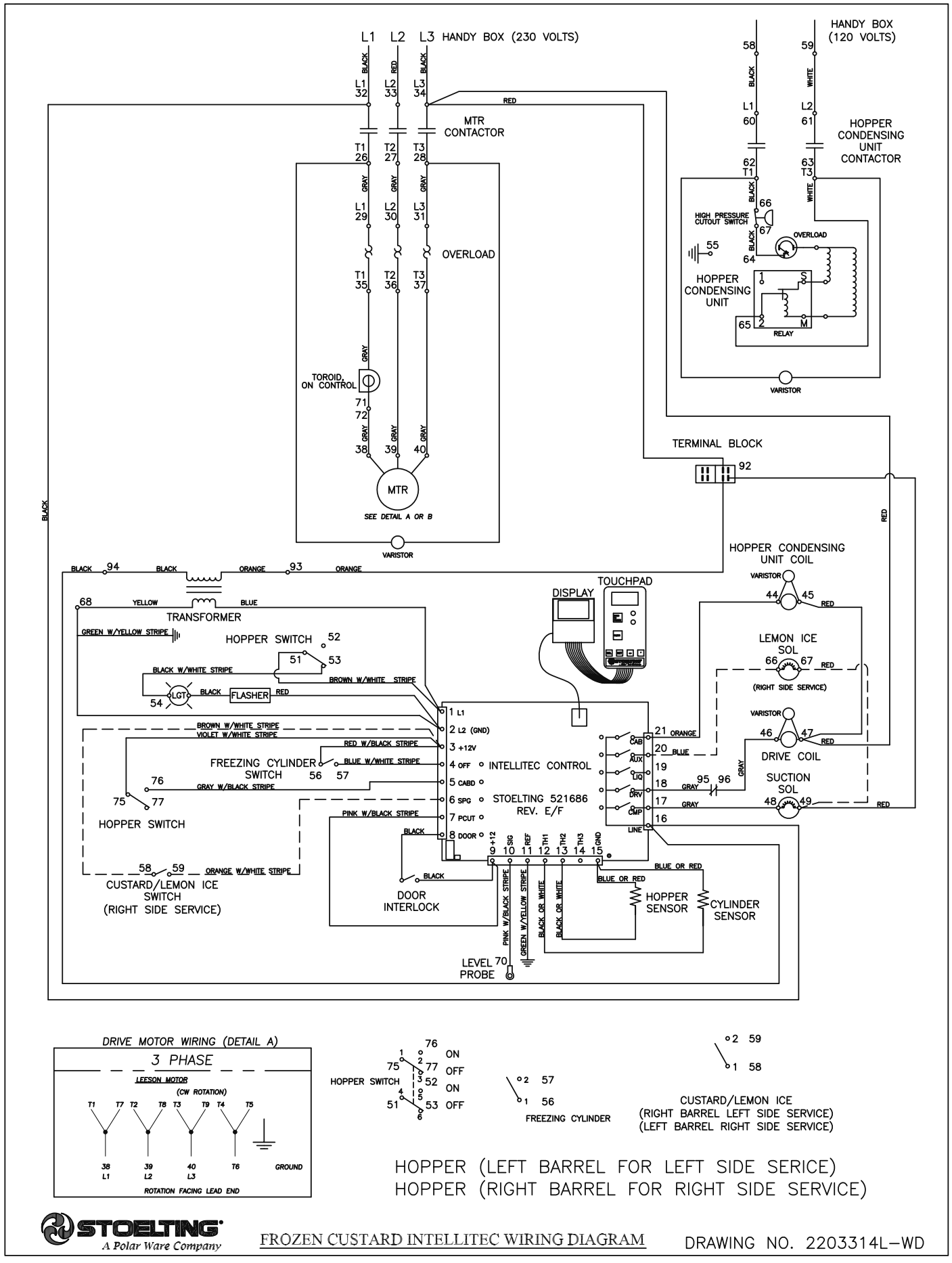
FROZEN CUSTARD INTELLITEC WIRING DIAGRAM

DRAWING NO. 2202649L–WD



STOELTING
A Polar Ware Company

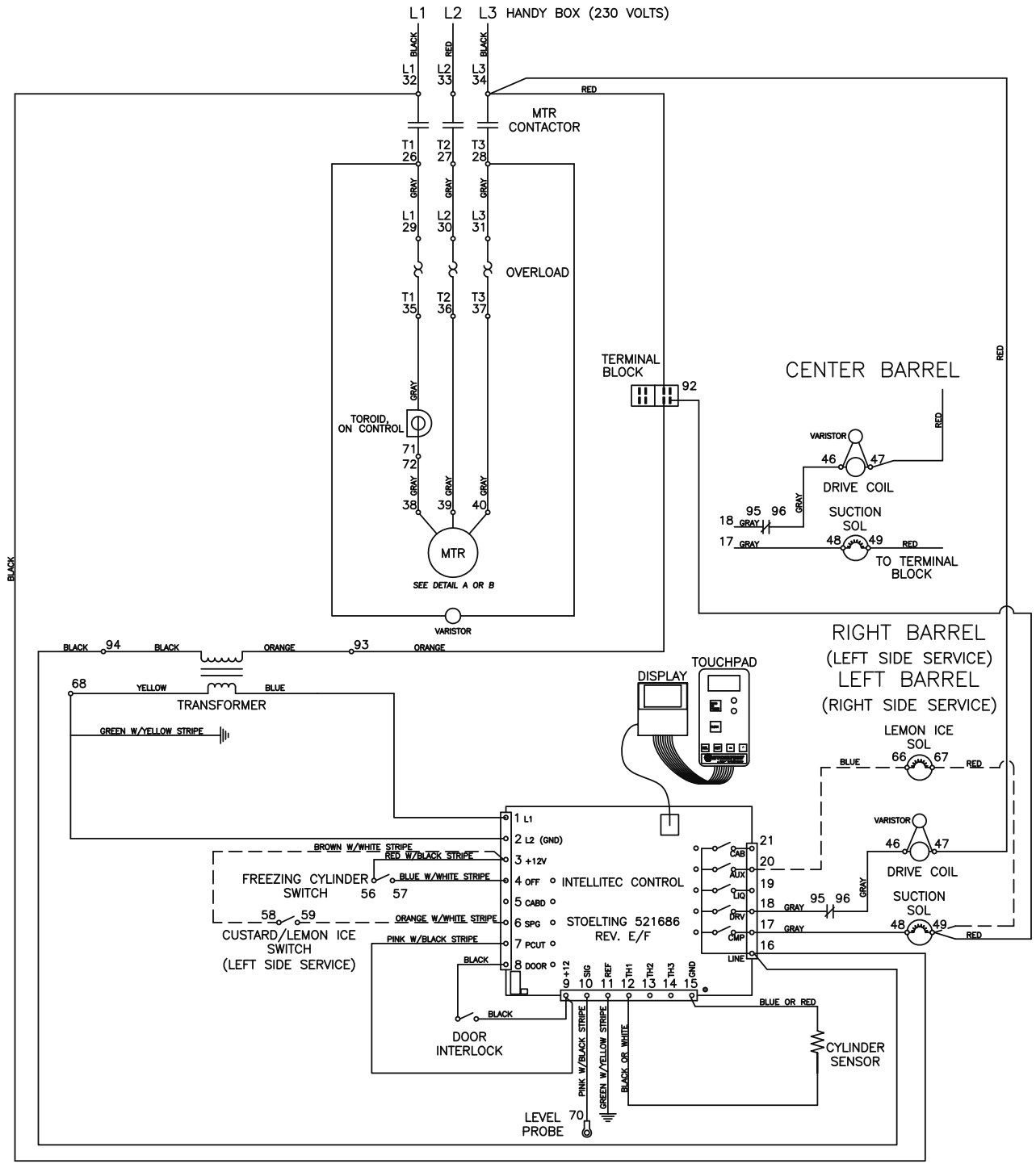
FROZEN CUSTARD INTELLITEC WIRING DIAGRAM DRAWING NO. 2202650RC–WD

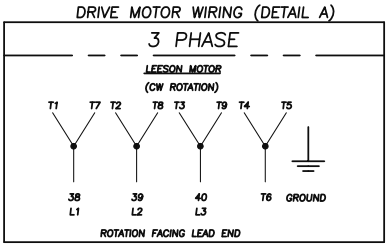


STOELTING
A Polar Ware Company

FROZEN CUSTARD INTELLITEC WIRING DIAGRAM

DRAWING NO. 2203314L–WD





CUSTARD/LEMON ICE
(RIGHT BARREL LEFT SIDE SERVICE)
(LEFT BARREL RIGHT SIDE SERVICE)

FREEZING CYLINDER

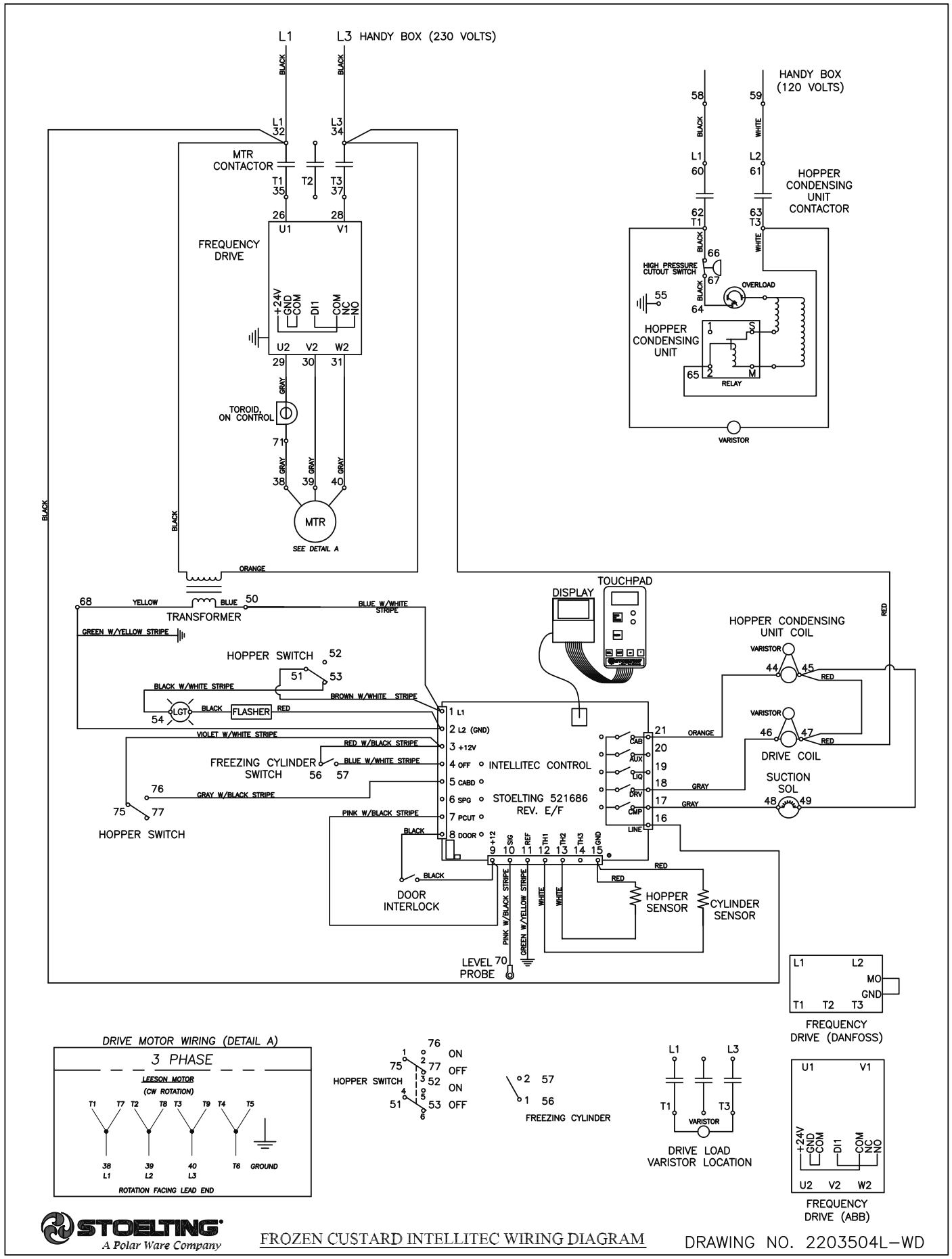
LEMON ICE SOLENOID
(RIGHT BARREL ONLY)
LEFT SIDE SERVICE

LEMON ICE SOLENOID
(LEFT BARREL ONLY)
RIGHT SIDE SERVICE

STOELTING
A Polar Ware Company

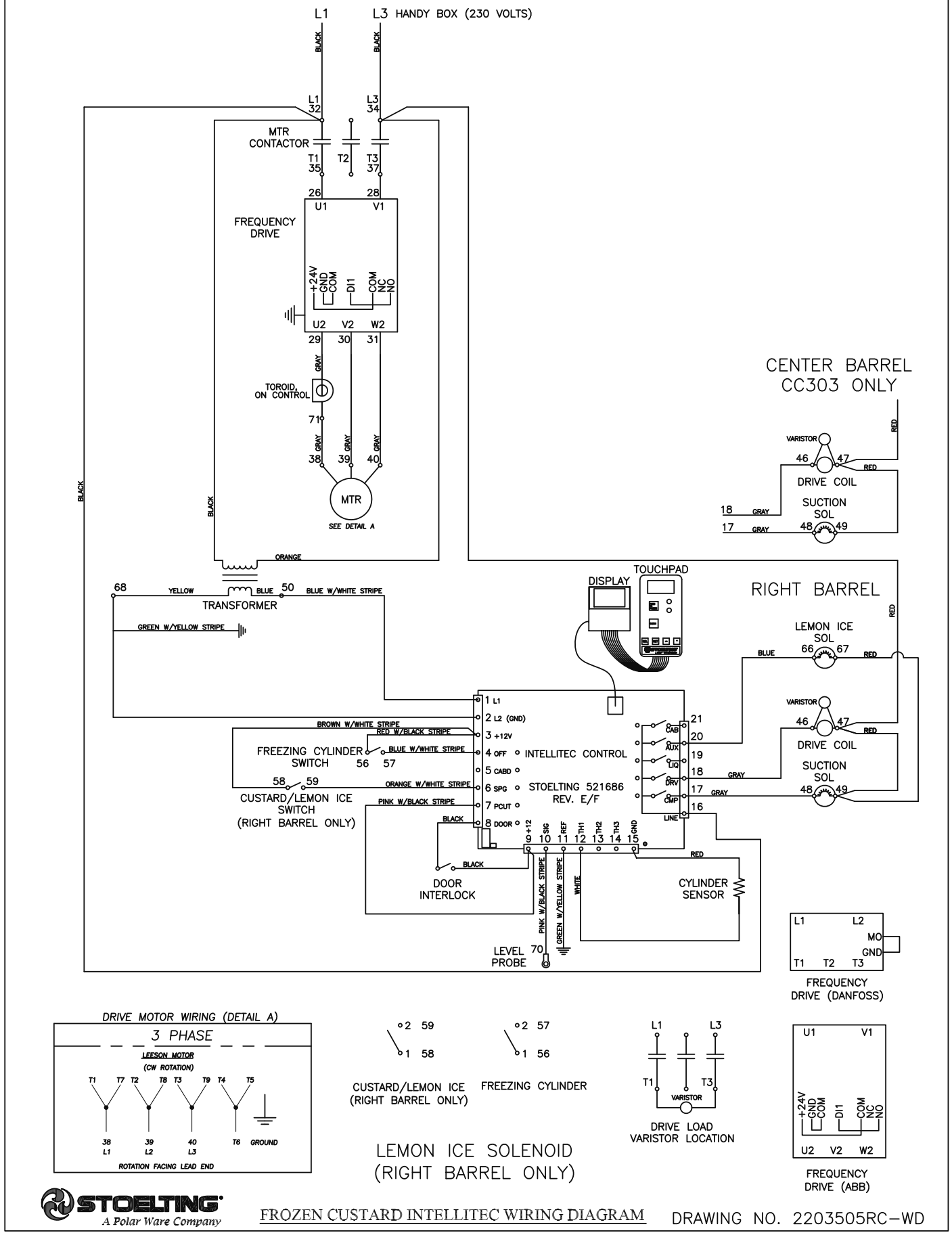
FROZEN CUSTARD INTELLITEC WIRING DIAGRAM

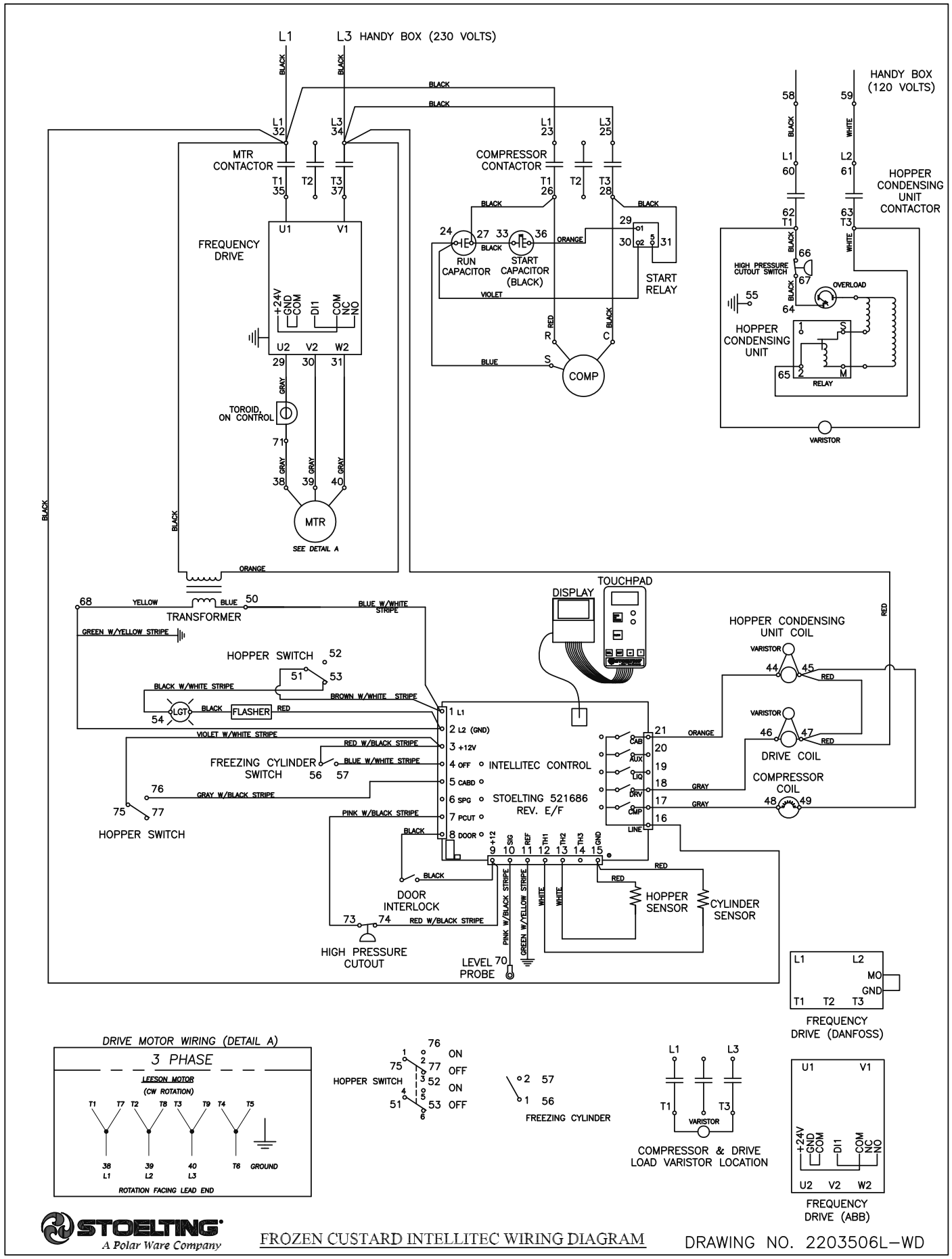
DRAWING NO. 2203315RC–WD

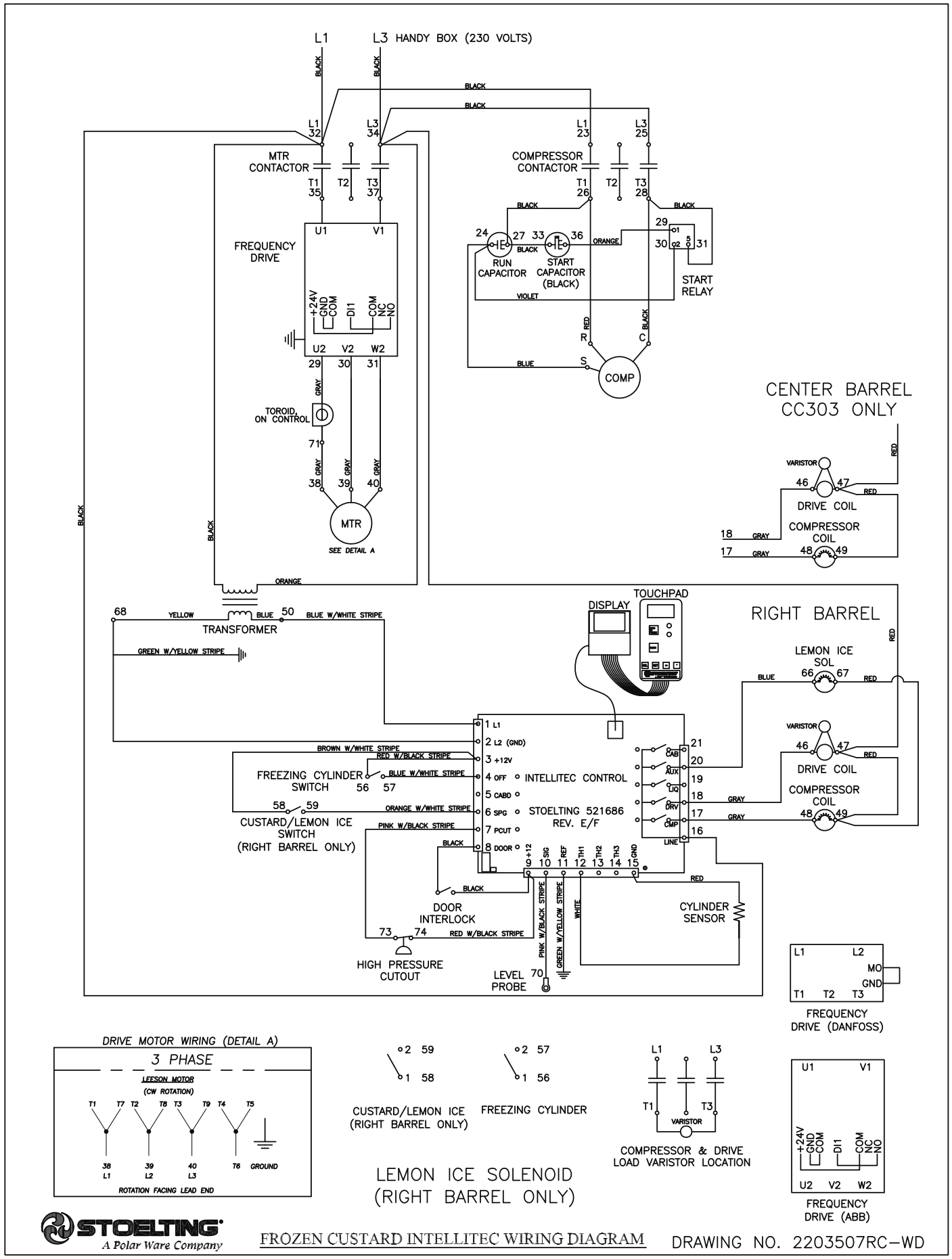


FROZEN CUSTARD INTELLITEC WIRING DIAGRAM

DRAWING NO. 2203504L–WD


L1
L3 HANDY BOX (230 VOLTS)
BLACK
L1
32
L3
34
MTR
CONTACTOR
T1
35
T2
T3
37
26
28
U1
V1
FREQUENCY
DRIVE
+24V
GND
COM
DI1
COM
NC
NO
U2
V2
W2
29
30
31
GRAY
TOROID,
ON CONTROL
71
GRAY
GRAY
GRAY
38
39
40
MTR
SEE DETAIL A
ORANGE
68
YELLOW
BLUE
50
BLUE W/WHITE STRIPE
TRANSFORMER
GREEN W/YELLOW STRIPE
CENTER BARREL
CC303 ONLY
RED
VARISTOR
46
47
RED
DRIVE COIL
SUCTION
SOL
18
GRAY
17
GRAY
48
49
TOUCHPAD
DISPLAY
RIGHT BARREL
RED
LEMON ICE
SOL
BLUE
66
67
RED
VARISTOR
46
47
RED
DRIVE COIL
SUCTION
SOL
GRAY
GRAY
48
49
1 L1
2 L2 (GND)
3 +12V
4 OFF
5 CABD
6 SPG
7 PCUT
8 DOOR
INTELLITEC CONTROL
STOELTING 521686
REV. E/F
21
20
19
18
17
16
CAB
AUX
LIQ
DRV
CMP
LINE
BROWN W/WHITE STRIPE
RED W/BLACK STRIPE
FREEZING CYLINDER
SWITCH
56
57
BLUE W/WHITE STRIPE
58
59
ORANGE W/WHITE STRIPE
CUSTARD/LEMON ICE
SWITCH
(RIGHT BARREL ONLY)
PINK W/BLACK STRIPE
BLACK
9 +12
10 SIG
11 REF
12 TH1
13 TH2
14 TH3
15 GND
BLACK
DOOR
INTERLOCK
RED
CYLINDER
SENSOR
WHITE
PINK W/BLACK STRIPE
GREEN W/YELLOW STRIPE
LEVEL
PROBE
70
L1
L2
MO
GND
T1
T2
T3
FREQUENCY
DRIVE (DANFOSS)
DRIVE MOTOR WIRING (DETAIL A)
3 PHASE
LEESON MOTOR
(CW ROTATION)
T1
T7
T2
T8
T3
T9
T4
T5
38
L1
39
L2
40
L3
T6
GROUND
ROTATION FACING LEAD END
2
59
1
58
CUSTARD/LEMON ICE
(RIGHT BARREL ONLY)
2
57
1
56
FREEZING CYLINDER
L1
L3
T1
T3
VARISTOR
DRIVE LOAD
VARISTOR LOCATION
U1
V1
+24V
GND
COM
DI1
COM
NC
NO
U2
V2
W2
FREQUENCY
DRIVE (ABB)
LEMON ICE SOLENOID
(RIGHT BARREL ONLY)
STOELTING
A Polar Ware Company
FROZEN CUSTARD INTELLITEC WIRING DIAGRAM
DRAWING NO. 2203505RC-WD


L1
L3 HANDY BOX (230 VOLTS)
BLACK
BLACK
MTR CONTACTOR
L1 32
L3 34
T1 35
T2
T3 37
FREQUENCY DRIVE
U1
V1
+24V
GND
COM
DI1
COM
NC
NO
U2
V2
W2
29
30
31
GRAY
TOROID, ON CONTROL
71
GRAY
GRAY
GRAY
38
39
40
MTR
SEE DETAIL A
BLACK
ORANGE
COMPRESSOR CONTACTOR
L1 23
L3 25
T1 26
T2
T3 28
BLACK
BLACK
24
27
33
36
BLACK
ORANGE
RUN CAPACITOR
START CAPACITOR (BLACK)
29
30
31
START RELAY
VIOLET
RED
BLACK
R
C
BLUE
S
COMP
HANDY BOX (120 VOLTS)
58
59
BLACK
WHITE
L1 60
L2 61
HOPPER CONDENSING UNIT CONTACTOR
62
63
T1
T3
BLACK
WHITE
66
HIGH PRESSURE CUTOUT SWITCH
67
OVERLOAD
55
64
BLACK
HOPPER CONDENSING UNIT
1
S
65
2
M
RELAY
VARISTOR
68
YELLOW
BLUE
50
TRANSFORMER
BLUE W/WHITE STRIPE
GREEN W/YELLOW STRIPE
HOPPER SWITCH
52
51
53
BLACK W/WHITE STRIPE
BROWN W/WHITE STRIPE
LGT
BLACK
FLASHER
RED
54
VIOLET W/WHITE STRIPE
RED W/BLACK STRIPE
FREEZING CYLINDER SWITCH
56
57
BLUE W/WHITE STRIPE
76
GRAY W/BLACK STRIPE
75
77
HOPPER SWITCH
PINK W/BLACK STRIPE
BLACK
DOOR INTERLOCK
73
74
RED W/BLACK STRIPE
HIGH PRESSURE CUTOUT
1 L1
2 L2 (GND)
3 +12V
4 OFF
5 CABD
6 SPG
7 PCUT
8 DOOR
INTELLITEC CONTROL
STOELTING 521686
REV. E/F
9 +12
SIG
REF
TH1
TH2
TH3
GND
10
11
12
13
14
15
LEVEL PROBE
70
PINK W/BLACK STRIPE
GREEN W/YELLOW STRIPE
WHITE
WHITE
RED
RED
HOPPER SENSOR
CYLINDER SENSOR
TOUCHPAD
DISPLAY
CAB
AUX
LIQ
DRV
CMP
21
20
19
18
17
16
LINE
ORANGE
GRAY
GRAY
HOPPER CONDENSING UNIT COIL
VARISTOR
44
45
RED
VARISTOR
46
47
RED
DRIVE COIL
COMPRESSOR COIL
48
49
RED
L1
L2
MO
GND
T1
T2
T3
FREQUENCY DRIVE (DANFOSS)
DRIVE MOTOR WIRING (DETAIL A)
3 PHASE
LEESON MOTOR
(CW ROTATION)
T1
T7
T2
T8
T3
T9
T4
T5
38
L1
39
L2
40
L3
T6
GROUND
ROTATION FACING LEAD END
76
1
2
75
77
ON
OFF
HOPPER SWITCH
3
4
52
ON
5
51
53
OFF
6
2
57
1
56
FREEZING CYLINDER
L1
L3
T1
T3
VARISTOR
COMPRESSOR & DRIVE LOAD VARISTOR LOCATION
U1
V1
+24V
GND
COM
DI1
COM
NC
NO
U2
V2
W2
FREQUENCY DRIVE (ABB)
STOELTING
A Polar Ware Company
FROZEN CUSTARD INTELLITEC WIRING DIAGRAM
DRAWING NO. 2203506L–WD



STOELTING
A Polar Ware Company

FROZEN CUSTARD INTELLITEC WIRING DIAGRAM

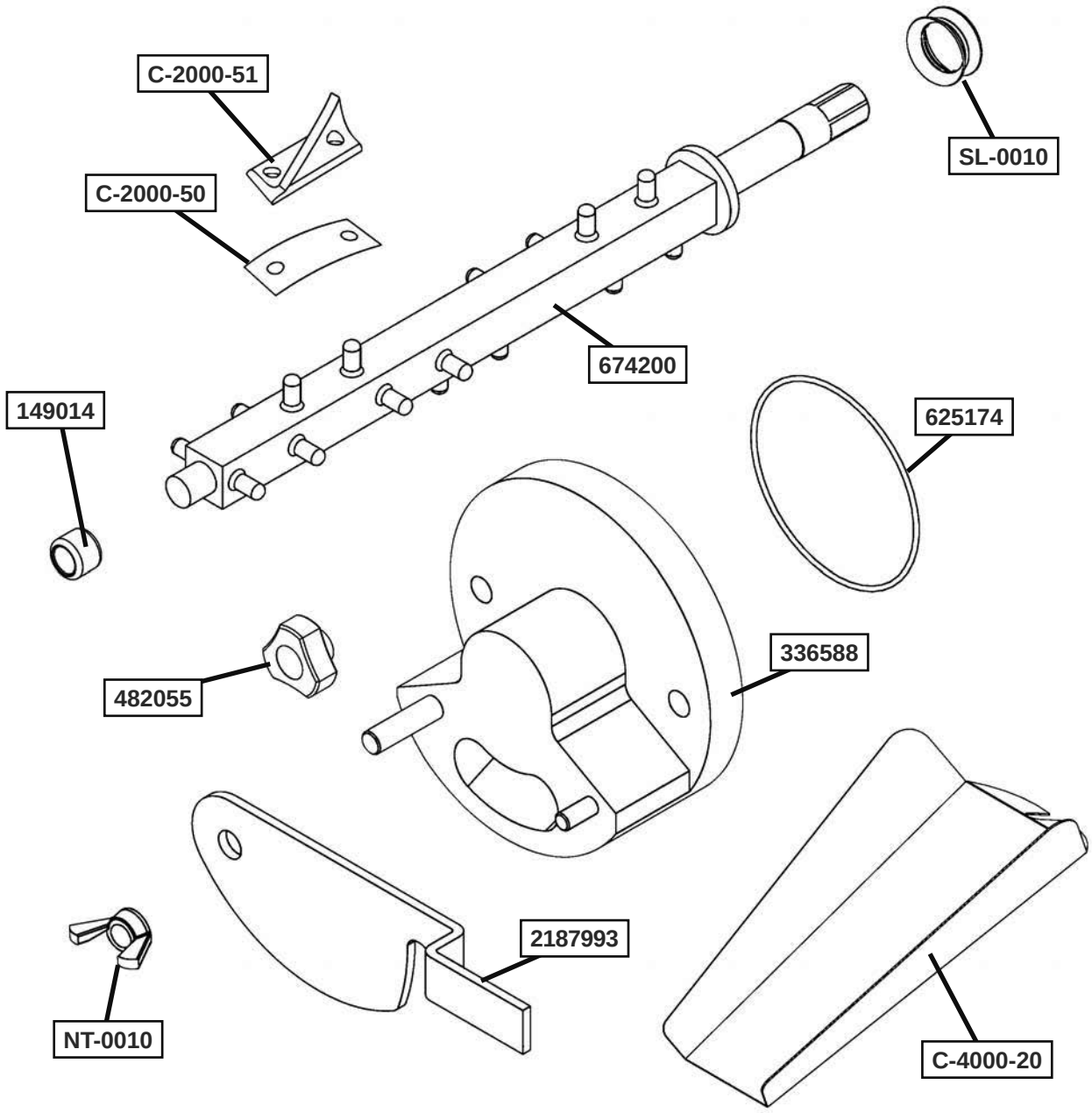
DRAWING NO. 2203507RC–WD

SECTION 5
REPLACEMENT PARTS

5.1 BRUSHES, DECALS AND MISCELLANEOUS

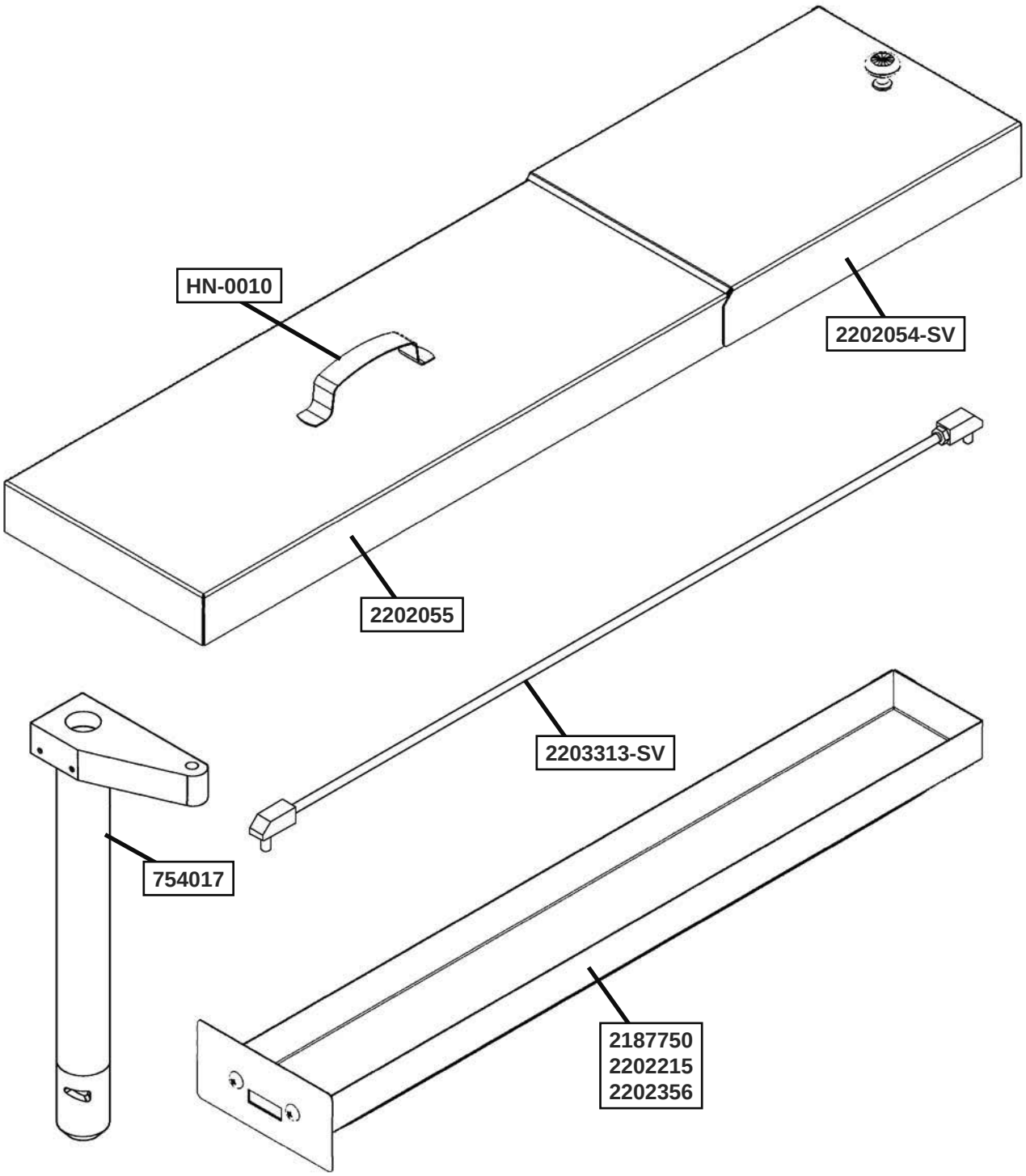
Part Number	Description	Quantity
BR-0020	Brush - Tubing (1/2”)	1
BR-0030	Brush - Head w/Handle	1
BR-0035	Brush - Handle (Barrel)	1
C74	O-Ring Pick	1
C-1000-25F	Decal - Caution 100 Degree	2
C-1000-25I	Decal - L.H. Barrel	1
C-1000-25J	Decal - Center Barrel	1
C-1000-25K	Decal - R.H. Barrel	1
C-1000-26C	Decal - Made In USA	1
C-2000-57	Wrench - Beater Shaft	1
C-4000-14	Guard Splash	1
236058	Card - Cleaning Instructions	1
236070	Card - IntelliTec - Assembly & Sanitizing (Culver’s)	1
236071	Card - IntelliTec - Start & Stop Production (Culver’s)	1
236072	Card - IntelliTec - Disassembly & Cleaning (Culver’s)	1
244138	Caster - Non-Locking (4”) (Each)	2
244139	Caster - Locking (4”) (Each)	2
324065	Decal - Water Inlet	-
324105	Decal - Caution Electrical Shock	-
324106	Decal - Caution Electrical Wiring Materials	-
324141	Decal - Caution Rotating Blades	-
324208	Decal - Attention Refrigerant Leak Check	-
324346	Decal - Caution Hazardous Moving Parts	-
324509	Decal - Cleaning Instructions	-
324566	Decal - Wired According To	-
324594	Decal - Attention Heat Sensitive	2
324686	Decal - Danger Automatic Start	2
324890	Decal - Hopper Off	1
324894	Decal - Flow Control	1 per barrel
324900	Decal - Safety Warning Alert (Open Market)	1
324905	Decal - Danger (Culver’s)	2
324907	Decal - Holding Product	1
430165	Cord - Power	1
490760	Leg	4
508048	Lubricant - Spline (2 oz Squeeze Tube)	1
508135	Petrol Gel - 4 oz Tube	1
513642	Manual - Owner’s	1
756095	Tubing - 5/8” ID - Rear Drain Hose (25’ Increments) (Per Inch)	-
764385	Valve Kit - Water Valve Repair	-
2202377	Pin Cleaning Tool - Front Plate	1
2203790	Sensor Probe Kit	-

5.2 AUGER SHAFT AND FACEPLATE PARTS



Part Number	Description	Quantity
C-2000-50	Spring	12 per barrel
C-2000-51	Blade (12 per Barrel)	12 per barrel
C-4000-19	Slide - Long (Chute) (14”)	1
C-4000-20	Slide - Short (Chute) (10”)	1
NT-0010	Wing Nut - Stainless Steel (Front Gate)	1 per barrel
SL-0010	Seal - Beater Shaft (Rear)	1 per barrel
149014	Wearguard - Front Beater Shaft (Small)	1 per barrel
336588	Front Door w/Pins	1 per barrel
482055	Knob - Front Door (Stainless) (3 Point)	2 per barrel
482061	Knob - Front Door (Stainless) (5 Point)	2 per barrel
538397	Hex Nut - Front Gate	1 per barrel
625174	O-Ring - Front Door (Black)	1 per barrel
674200	Beater Shaft	1 per barrel
2187993	Gate - Front	1 per barrel

5.3 HOPPER PARTS



Part Number	Description	Quantity
HN-0010	Handle - Rear Hopper Cover (Requires #647533)	1 per barrel
624645-5	O-Ring - Flow Valve (#754032) (5 Pack)	-
754017	Flow Valve (No O-Rings)	1 per barrel
2187750	Tray - Drain (CC303)	1
2202054-SV	Cover - Rear Hopper w/Handle	1 per barrel
2202055	Cover - Front Hopper	1 per barrel
2202215	Tray - Drain (CC202)	1
2202356	Tray - Drain (CC404)	1
2203313-SV	Flow Control Rod	1 per barrel

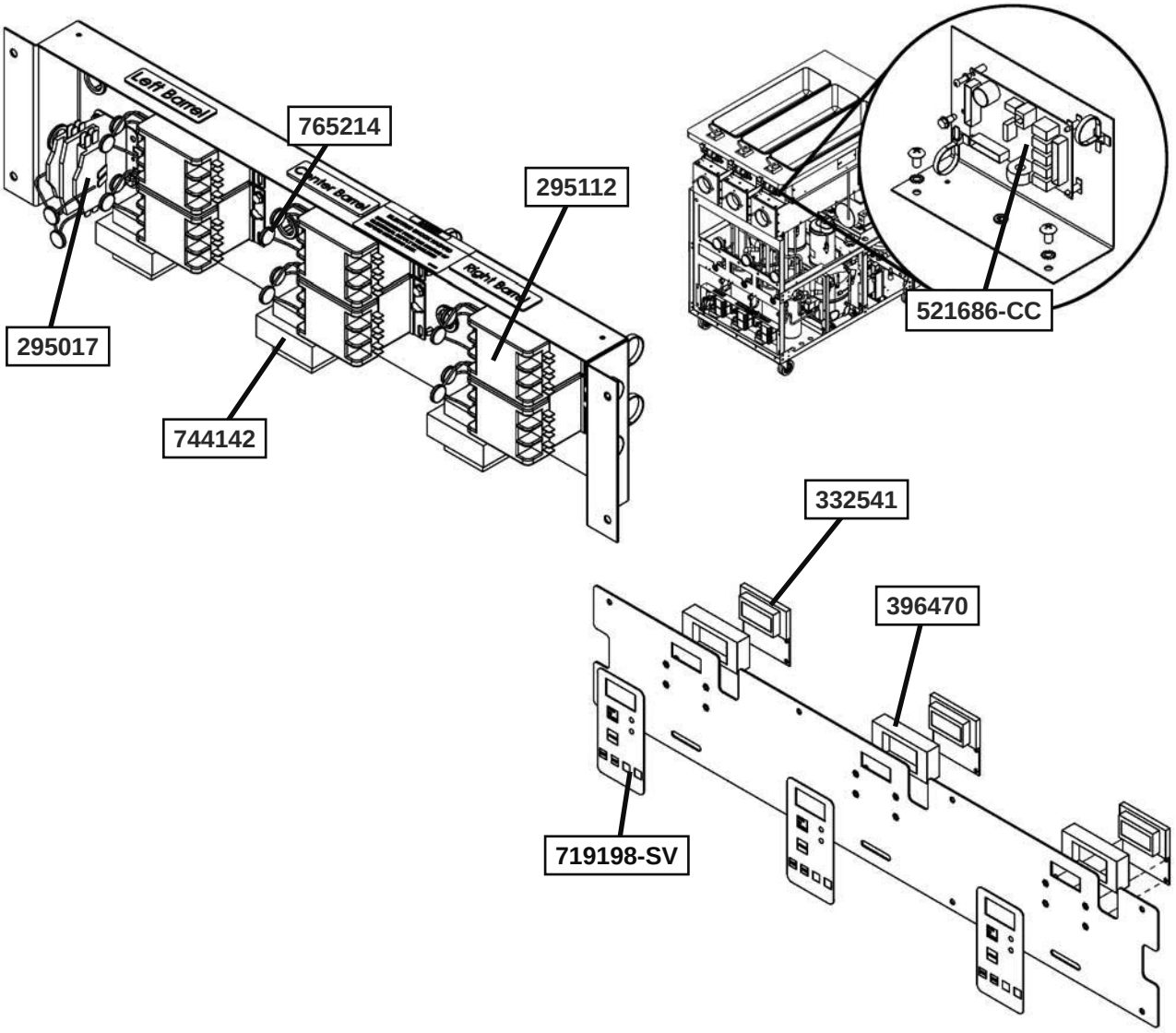
5.4 PANELS AND SCREWS

Part	Description	Quantity
647899	Screw - All Panels	-
2187744	Panel - Front Electrical (Culvers CC303) (L.H. Service)	1
2187751	Panel - Drain Tray Cover	1
2187754	Panel - Side Panel Cover	3
2187757	Panel - Rear (CC303)	1
2187785	Panel - Front Lower (CC303)	1
2202208	Panel - Front Electrical (GM CC303)	1
2202213	Panel - Front Electrical (GM CC202)	1
2202216	Panel - Rear (CC202)	1
2202230	Panel - Front Lower (CC202)	1
2202354	Panel - Front Electrical (Culvers CC404)	1
2202357	Panel - Rear (CC404)	1
2202371	Panel - Front Lower (CC404)	1
2202628	Panel - Rear (CC202 Abbott's)	1
2202635	Panel - Upper Side	2
2202636	Panel - Lower Side	2
2203289	Panel - Rear (CC303)	1
2203391	Panel - Front Electrical (Culver's CC303 R.H. Service)	1

5.5 FAUCET

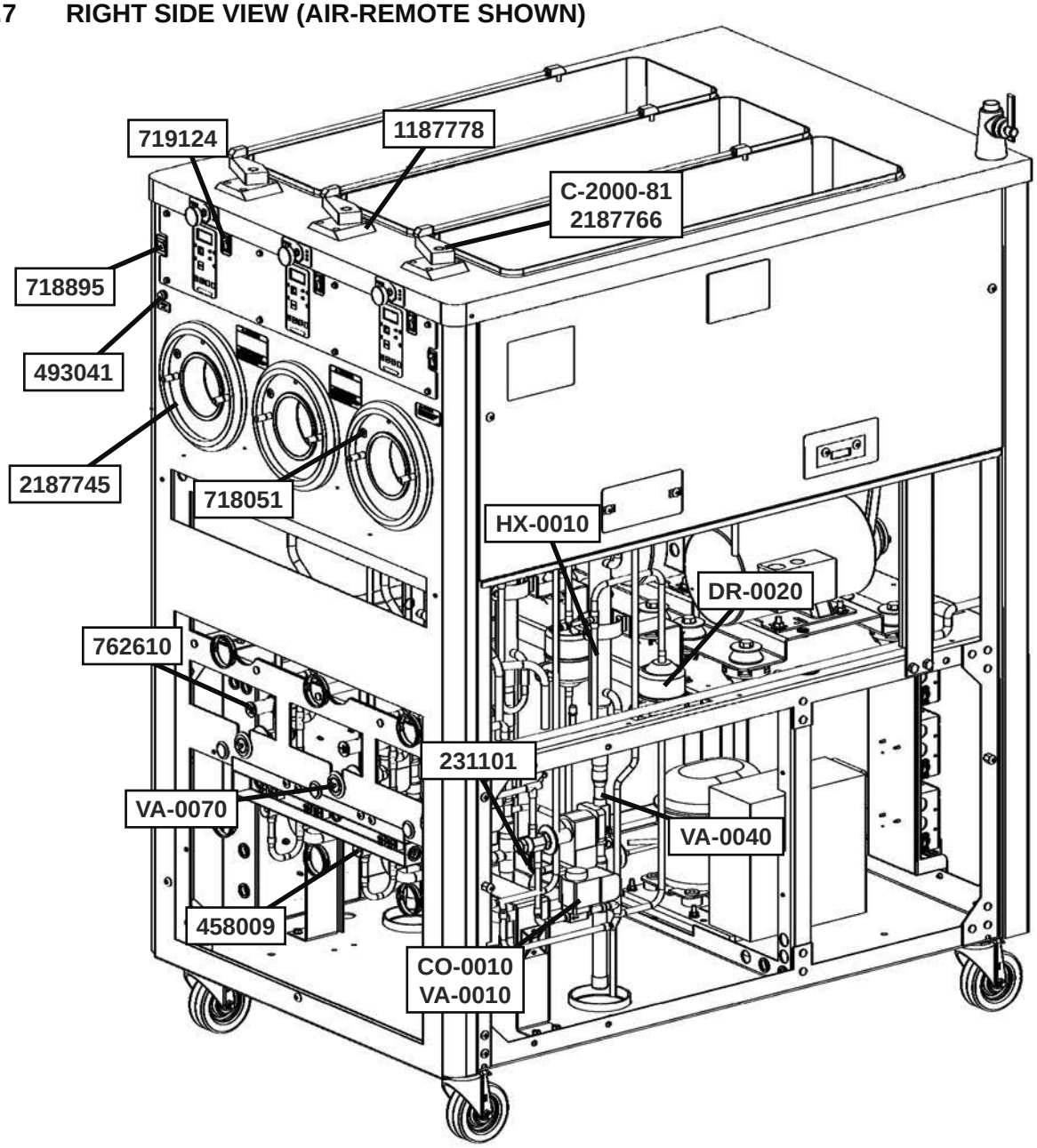
Part	Description	Quantity
360003	Extension (#FA-0010 Faucet)	1
369336	Aerator - Swing Faucet	1
369337	Faucet Arm - Swing Style	1
369337-SV	Faucet Arm Kit (Arm & Aerator)	-

5.6 ELECTRICAL PANELS



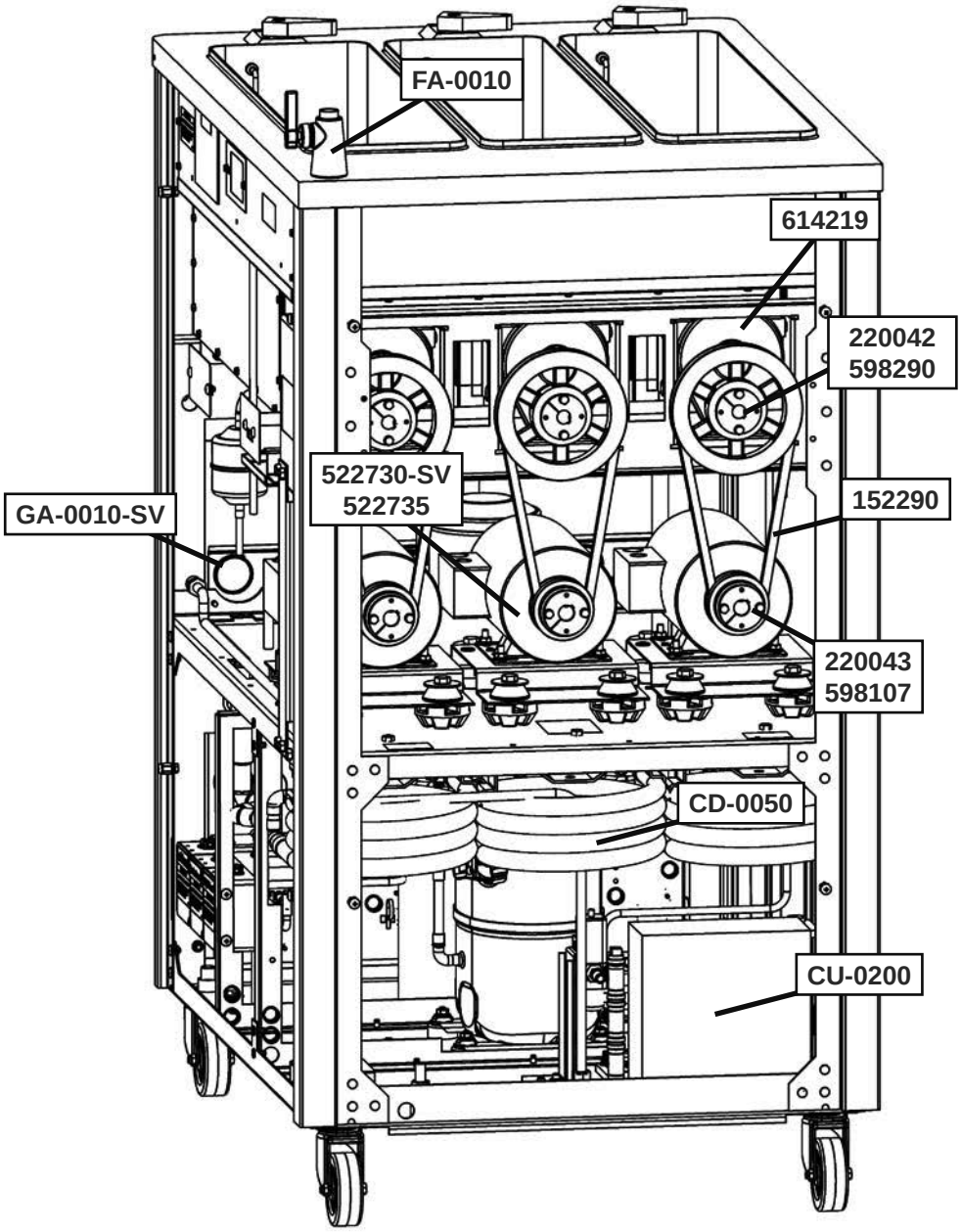
Part	Description	Quantity
229115	Cable - Phone (Control Board To Display Board)	1 per barrel
230622	Capacitor - Start (#522856 Motor)	1 per barrel
230653	Capacitor - Run (#282090 Compressor)	1 per barrel
231058	Capacitor - Start (#282090 Compressor)	1 per barrel
231075	Capacitor - Run (#522856 Motor)	1 per barrel
295017	Contactor (45CG20AG) (Hopper Condenser)	1
295112	Contactor - Compressor / Drive	2 per Barrel
332541	Board - Display Module	1 per Barrel
396470	Gasket - Display (1 Per Barrel)	1 per barrel
493042	Flasher - Indicator Light	1
521686-CC	Board - Program (IntelliTec)	1 per barrel
618142	Relay (#282090 Compressor) (1 PH)	1 per barrel
618231	Relay - Overload (3 PH)	1 per barrel
719098-SV	Switch - Membrane Strip (Touchpad & Ribbon)	1 per barrel
744142	Transformer	1 per barrel
765214	Varistor Harness	-

5.7 RIGHT SIDE VIEW (AIR-REMOTE SHOWN)



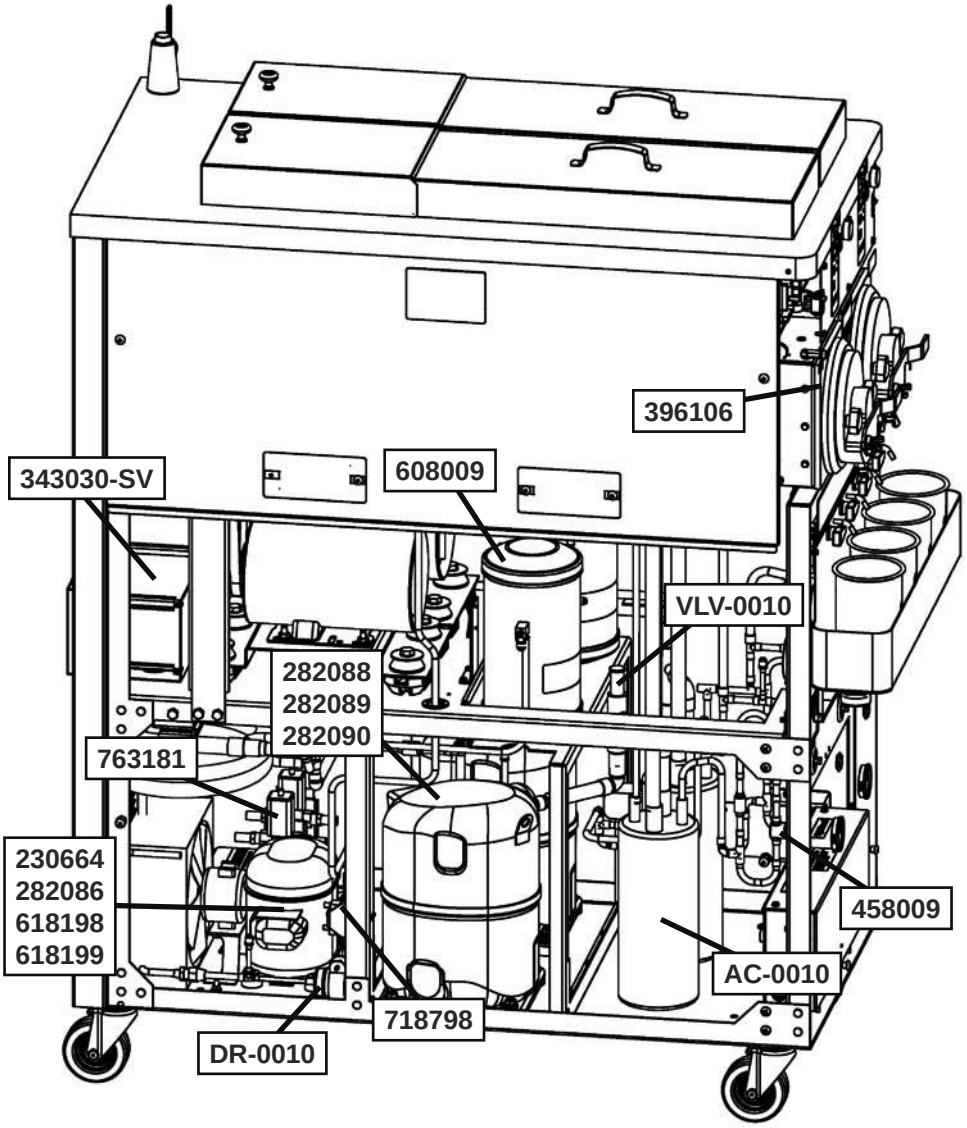
Part	Description	Quantity
C-2000-81	Flow Control Gear Arm	1 per barrel
CO-0010	Valve Coil - Solenoid (240V) (VA-0010) (Barrel)	-
DR-0020	Drier - Filter (3/8” OD) (Cap Tube)	1
HX-0010	Heat Exchanger - 7/8” (Suction Side)	1 per barrel
VA-0010	Valve - Solenoid (3/8”)	1
VA-0040	Valve - Solenoid (7/8”) (Suction)	1 per barrel
VA-0070	Valve - Expansion (AXV)	1 per barrel + 1
231101	Cap Tube Only	1
458009	Sight Glass	1 per barrel
493041	Indicator Light (Hopper Off)	1
718051	Switch - Reed (Door Interlock)	1 per barrel
718895	Switch - Rocker (Hoppers)	1
719124	Switch - Rocker (Freezing Cylinders / Lemon Ice)	1 per barrel + 1
762610	Valve - ORI (Air Remote)	1 per barrel
1187778	Hopper Cover Stop	1 per barrel
2187745	Trim Ring - Front Barrel	1 per barrel
2187766	Gearbox - Flow Control	1 per barrel

5.8 REAR VIEW (WATER-COOLED SHOWN)



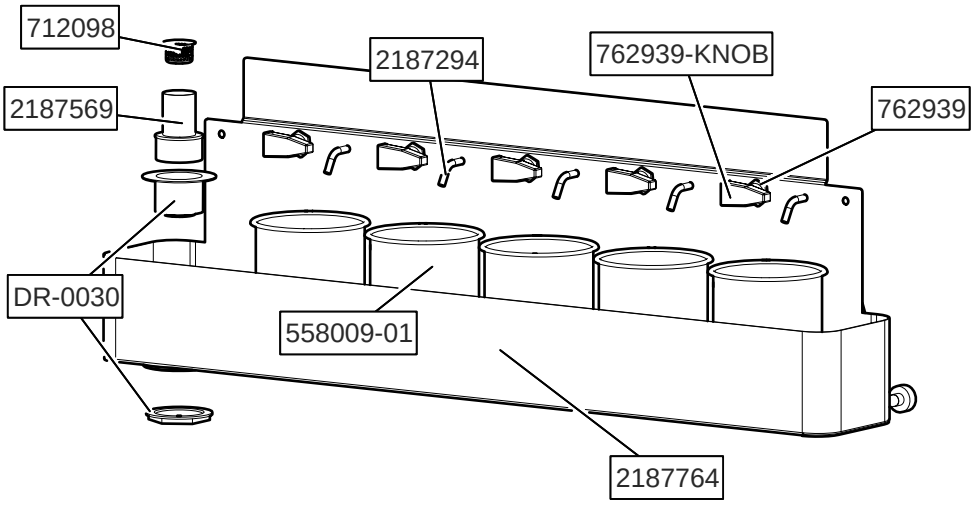
Part	Description	Quantity
CD-0050	Condenser - 2 Ton (Water-Cooled)	1 per barrel
CU-0200	Condensing Unit w/Compressor (Hopper) (60 Hz)	1
CU-0205	Condensing Unit - Hopper (50 Hz)	1
FA-0010	Faucet - Swing-Out	1
GA-0010-SV	Gauge - Barrel Pressure (Suction)	-
152272	Belt - Gripnotch (BX32) (Ser. #31243 - #34299)	1 per barrel
152290	Belt - V (BX36) (Ser. #34300 Plus)	1 per barrel
220042	Bushing - Pulley (Speed Reducer) (#598290 Pulley)	1 per barrel
220043	Bushing (#598107 Pulley)	1 per barrel
285011	Condensing Unit (50 Hz)	1
522730-SV	Motor - Drive w/Base (1 PH & 3 PH) (3 HP)	1 per barrel
522735	Motor - Drive (380V - 415V) (3 PH) (50 Hz)	1 per barrel
598107	Pulley - Drive Motor (Ser. #343004 Plus)	1 per barrel
598290	Pulley - Speed Reducer (Ser. #343004 Plus)	1 per barrel
598577	Pulley - Speed Reducer (Ser. #31243 - #343299)	1 per barrel
598608	Pulley - Drive Motor (Ser. #31243 - #34299)	1 per barrel
614219	Speed Reducer	1 per barrel

5.9 LEFT SIDE VIEW (WATER-COOLED SHOWN)



Part	Description	Quantity
AC-0010	Accumulator / Heat Exchanger - 7/8”	1 per barrel
DR-0010	Drier - Filter (1/4” OD)	1
VLV-0010	Valve - Crankcase Pressure Regulator (7/8”)	1 per barrel
230664	Capacitor - Start (Hopper Condenser Compressor)	1
282086	Compressor (For CU-0200 Hopper Condenser)	-
282088	Compressor - 3 PH (60 Hz)	1 per barrel
282089	Compressor - 3 PH (380-420V) (50 Hz)	1 per barrel
282090	Compressor - 1 PH (No Capacitors) (60 Hz)	1 per barrel
343030-SV	Drive - Variable Speed (1 PH)	1 per barrel
396106	Gasket - Front Evaporator	1 per barrel
608009	Receiver	1 per barrel
618198	Relay - Current (Hopper Condenser Compressor)	1
618199	Relay - Overload (Hopper Condenser Compressor)	1
718794	Switch - High Pressure Auto Reset (Water-Cooled)	1 per barrel
718798	Switch - High Pressure Cutout	1
763181	Valve - Water	1 per barrel

5.10 DIPPING TROUGHS



Part	Description	Quantity
DR-0030	Drain (Round Dividers)	1
558009-01	Pot - Round	1 per barrel + 2
712098	Strainer	1
762925	Valve - Needle (Water Supply)	-
762939	Valve Ball (Water Supply)	1 per barrel + 2
762939-KNOB	Knob - Valve Ball (Requires #1171955 Set Screws)	1 per barrel + 2
1171955	Set Screw - Eccentric (Valve Ball Knob)	-
2187294	Spout - Needle Valve	1 per barrel + 2
2187297	Dipping Trough Divider (CC303 L.H. Service)	1
2187535	Dipping Trough Divider (CC404)	1
2187569	Overflow	1
2187763	Dipping Trough Assembly (CC303)	1
2187764	Dipping Trough (CC303 L.H. Service)	1
2187915	Dipping Trough Divider (CC303 R.H. Service)	1
2202063	Dipping Trough Divider (CC202)	1
2202218	Dipping Trough Assembly (CC202)	1
2202219	Dipping Trough (CC202)	1
2202359	Dipping Trough Assembly (CC404)	1
2202360	Dipping Trough (CC404)	1
2203393	Dipping Trough (CC303 R.H. Service)	1

WARRANTY
CUSTARD EQUIPMENT AND BATCH EQUIPMENT

1. **Scope**:
   PW Stoelting, L.L.C. ("Stoelting") warrants to the first user (the "Buyer") that the freezing cylinders, hoppers, compressors, drive motors, speed reducers, beaters, and auger shafts of Stoelting custard equipment and batch equipment will be free from defects in materials and workmanship under normal use and proper maintenance appearing within two (2) years, and that all other components of such equipment manufactured by Stoelting will be free from defects in material and workmanship under normal use and proper maintenance appearing within twelve (12) months after the date that such equipment is originally installed.

2. **Disclaimer of Other Warranties**:

   THIS WARRANTY IS EXCLUSIVE; AND STOELTING HEREBY DISCLAIMS ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR PARTICULAR PURPOSE.

3. **Remedies**:
   Stoelting's sole obligations, and Buyer's sole remedies, for any breach of this warranty shall be the repair or (at Stoelting's option) replacement of the affected component at Stoelting's plant in Kiel, Wisconsin, or (again, at Stoelting's option) refund of the purchase price of the affected equipment, and, during the first twelve (12) months of the warranty period, deinstallation/reinstallation of the affected component from/into the equipment. Those obligations/remedies are subject to the conditions that Buyer (a) signs and returns to Stoelting, upon installation, the Start-Up and Training Checklist for the affected equipment, (b) gives Stoelting prompt written notice of any claimed breach of warranty within the applicable warranty period, and (c) delivers the affected equipment to Stoelting or its designated service location, in its original packaging/crating, also within that period. Buyer shall bear the cost and risk of shipping to and from Stoelting's plant or designated service location.

4. **Exclusions and Limitations**:
   This warranty does not extend to parts, sometimes called "wear parts", which are generally expected to deteriorate and to require replacement as equipment is used, including as examples but not intended to be limited to o-rings, auger seals, auger support bushings, and drive belts. All such parts are sold

   AS IS.

   Further, Stoelting shall not be responsible to provide any remedy under this warranty with respect to any component that fails by reason of negligence, abnormal use, misuse or abuse, use with parts or equipment not manufactured or supplied by Stoelting, or damage in transit.

   THE REMEDIES SET FORTH IN THIS WARRANTY SHALL BE THE SOLE LIABILITY STOELTING AND THE EXCLUSIVE REMEDY OF BUYER WITH RESPECT TO EQUIPMENT SUPPLIED BY STOELTING; AND IN NO EVENT SHALL STOELTING BE LIABLE FOR ANY INCIDENTAL OR CONSEQUENTIAL DAMAGES, WHETHER FOR BREACH OF WARRANTY OR OTHER CONTRACT BREACH, NEGLIGENCE OR OTHER TORT, OR ON ANY STRICT LIABILITY THEORY.