



REFRIGERATION NOTES

1. ALL BRANCH CIRCUIT CONDUCTORS ARE TO BE RUN IN THE TEE RACE WAY OF SYSTEMS 3A,3B,3C,3D,3E,3F,3G,3H,3I,3J,3K,3L,3M,3N,3O,3P,3Q,3R,3S,3T,3U,3V,3W,3X,3Y,3Z.
2. ALL BRANCH CIRCUITS AND DEFERRED TERMINATION OF ALL REMAINING CASES TO BE CONNECTED TO THE ELECTRICAL JUNCTION BOX OF THE CASE.
3. ALL BRANCH CIRCUITS FOR CASES AND 100 AMP CASES ARE TO BE CONNECTED TO THE CIRCUIT SYSTEM ON TOP OF CASES.
4. ALL WALK-IN COOLERS AND FREEZERS TO HAVE CONTROL DEVICES INSTALLED BY CONTRACTOR AND WIRING BY ELECTRICAL CONTRACTOR. SEE DETAIL ON DWG. E-400.
5. ALL WALK-IN FREEZERS AND COOLERS TO HAVE A DOOR SWITCH INTO SHUT DOWN COIL SWITCHES ARE TO BE FURNISHED AND INSTALLED BY REFRIGERATION CONTRACTOR. ELECTRICAL CONTRACTOR COORDINATE WITH PACKING HOME SERVICE FOR ALSO SEE DETAIL ON DWG. E-400.
6. PROVIDE 1/2-20X28 DASHY CHAINED TO EACH REFRIG. UNIT. PROVIDE CONNECTIONS TO UNIT. DO NOT CUT OR SPLICE CONDUCTORS. CLEARLY LABEL ALL CONDUITS BY SYSTEM NAME.
7. ALL APPROVED SHIELDED CABLE SUPPLIED AND INSTALLED BY CONTRACTOR.
8. ALL CASES SHALL HAVE CONDUCTORS IN A TEE RACEWAY CONDUIT TO BE MOUNTED ABOVE TOP OF CASE.
9. NOT APPLICABLE.
10. ALL WALK-IN COOLERS AND FREEZERS PROVIDE A DOOR SWITCH FOR EACH COOL AS SHOWN ON THE DRAWING. SEE DETAILS 5 & 6 ON DRAWING FOR COMPLETE DEVICE ASSEMBLY.
11. ALL WIRING TO REFRIGERATED CASES, WALK-IN COOLERS, AND FREEZERS SHALL BE TYPE THHN BY SYSTEM NAME.
12. NOT APPLICABLE.
13. ALL CONTROL DEVICES IN REFRIGERATED FREEZERS INSTALLED AND WIRING BY ELECTRICAL CONTRACTOR. SEE DETAIL ON DWG. E-400.
14. USED.
15. CONTRACTOR SHALL INSTALL ONE (1) #12 (GREEN) CONDUCTOR TO EACH LINE UP OF CASES, COOLERS AND FREEZERS FOR REFRIGERATION EQUIPMENT WITH THE LONGEST APPROPRIATE LENGTH OF FLEXIBLE CONNECTIONS.

GENERAL

1. NETWORK LOOP CONSISTING OF 1-20-22X4 TO INTERCONNECT EACH CASE CONTROL BOARD WITH RESPECTIVE RACK CONTROLLER.
 - WHITE - TERMINAL 37
 - BLACK - TERMINAL 38
 - SL/GR - EARTH GROUND
2. MASTER/SLAVE NETWORK CONDUCTOR (M/N) CONSISTING OF 1-20-22X4 TO CONNECT MASTER CASE CONTROL BOARD TO SLAVE BOARD.
 - WHITE - TERMINAL 38
 - BLACK - TERMINAL 39
 - SL/GR - EARTH GROUND
3. CO. UNDERPRESSURE SHUT DOWN TO CONSIST OF 2-20-22X4 FROM EACH CASE CONTROL BOARD TO MOTOR CENTER. TERMINATE AT LEAK DETECTION & LVD PANEL. USE GENERAL NETWORK WIRING (S.A. LINE E-400).
 - WHITE - LAND ON TERMINAL 32
 - BLACK - LAND ON TERMINAL 33
 - SL/GR - LAND ON EARTH GROUND
4. ELECTRIC EXPANSION VALVE INSTALLED BY REFRIG. CONTRACTOR. WIRING BY ELEC. 20-0 OF WP PROVIDED WITH VALVE. PROVIDE BELEN. RESIST. P. LONGER CONDUCTOR IS REQUIRED. TERMINATE IN DEFERRED CONTROL PANEL. OCCUPY TERMINALS 4 & 5 PER MANUF. INSTRUCTIONS.
5. ELEC. CONTRACTOR TO REMOVE CONDUCTOR FROM TERMINAL 10 & CONNECT TO TERMINAL 10 IN EACH FAN COIL UNIT.
6. SUCTION PRESSURE TRANSDUCER INSTALLED BY REFRIG. CONTRACTOR. WIRING BY ELEC. WIRE SUPPLIED WITH TRANSDUCER. TERMINATE AT TERMINALS 20 & 21 IN COP.
7. ELEC. CONTRACTOR TO PROVIDE 20-22X4 BREAKER (#875) FROM THE FOLLOWING PROBES TO COP. (IF APPLICABLE)
 - DEFERST TERM. - TERMINALS 27 & 28
 - RETURN AIR TEMP. - TERMINALS 29 & 29
 - SUCTION TEMP. - TERMINALS 30 & 20
8. LIQUID SUPPLY SOLENOID INSTALLED BY REFRIG. CONTRACTOR. WIRING BY ELEC. TERMINATE IN DEFERRED CONTROL PANEL. OCCUPY TERMINALS 7 & 12 PER MANUF. INSTRUCTIONS.
9. ELEC. CONTRACTOR TO PROVIDE THE FOLLOWING FOR LEAK DETECTOR WIRING:
 - NON-RESISTIVE - 210 FROM LEAK DET. & 210 TO HORN SILENCE BUTTON
 - RESISTIVE - 210 FROM COP. 210 TO NON-RESISTIVE & 1-20-22X4 TO LEAK DETECTOR PANEL IN MOTOR ROOM

TYPICAL CONNECTION SYMBOLOLOGY

TYPE	DESCRIPTION
○	INDICATES 1/2-20X28 BELEN. WIRE FROM COP. CONTROLLER IN MOTOR ROOM OR OTHER PANELS. WIRE TO BE ADJACENT CASE, COOLER, OR FREEZER.
□	INDICATES DEFROST TERMINATION
△	INDICATES EXPANSION VALVE
◇	INDICATES HORN STROKE FOR REFRIGERANT LEAK DETECTION ALARM (GENERAL-24VAC-META-STD) & ALARM HORN SILENCE BUTTON (COP-24VAC-META-STD) MOUNTED BELOW
⊕	INDICATES REFRIGERANT LEAK DETECTOR (MACHINERY) *MKS-500
⊖	INDICATES RETURN AIR TEMPERATURE PROBE
⊙	INDICATES LIQUID SUPPLY SOLENOID
⊚	INDICATES HORN STROKE SILENCE BUTTON
⊛	INDICATES SUCTION PRESSURE TRANSDUCER
⊜	INDICATES SUCTION TEMPERATURE PROBE
⊝	ELECTRIC EXPANSION PRESSURE REGULATOR

THE DRAWING AND ALL INFORMATION CONTAINED HEREIN IS THE PROPERTY OF APOLLO ENGINEERING, LLC. IT IS TO BE USED ONLY FOR THE PROJECT AND SITE SPECIFICALLY IDENTIFIED HEREIN. NO PART OF THIS DRAWING IS TO BE REPRODUCED, STORED IN A RETRIEVING SYSTEM, OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, ELECTRONIC OR MECHANICAL, INCLUDING PHOTOCOPYING, RECORDING, OR BY ANY INFORMATION STORAGE AND RETRIEVAL SYSTEM, WITHOUT THE WRITTEN PERMISSION OF APOLLO ENGINEERING, LLC.

CORPORATE OFFICES: FACILITIES DESIGN
 BOX 407, LAKELAND, FL 33807
 (888) 680-3095
 PHYSICAL ADDRESS:
 1300 AIRPORT RD., LAKELAND, FL 33811

Publix
 SUPER MARKETS

FISHER AND ASSOCIATES, LLC.
 ARCHITECTS
 PLANNERS
 INTERIOR DESIGNERS
 605 BELLEAIR RD. CLEARWATER, FL 34616 727-466-4400

ELECTRICAL REFRIGERATION CONTROL WIRING PLAN
EAST COBB PUBlix - #1745
EAST COBB CROSSING SHOPPING CENTER
 ROSEWELL ROAD
 MARIETTA, GA 30062

RELEASED FOR:
 BID
 PERMIT 07/16/20
 CONSTR.

REVISIONS:

HANDLE A 80011
 GEORGIA P.E. #527908

E-4a
 Issue Date: 04-01-20
 Project No.: 220036

SCALE = 1/8" = 1'-0"
APOLLO ENGINEERING, LLC
 CONSULTING ENGINEERS
 PEP069833
 6544 U.S. Hwy 41 North, Suite 9000, Apollo Beach, FL 33707
 Phone: 813.994.8400 / Fax: 813.904.8400
 404-410-1313
 Copyright 2020 - All rights reserved.