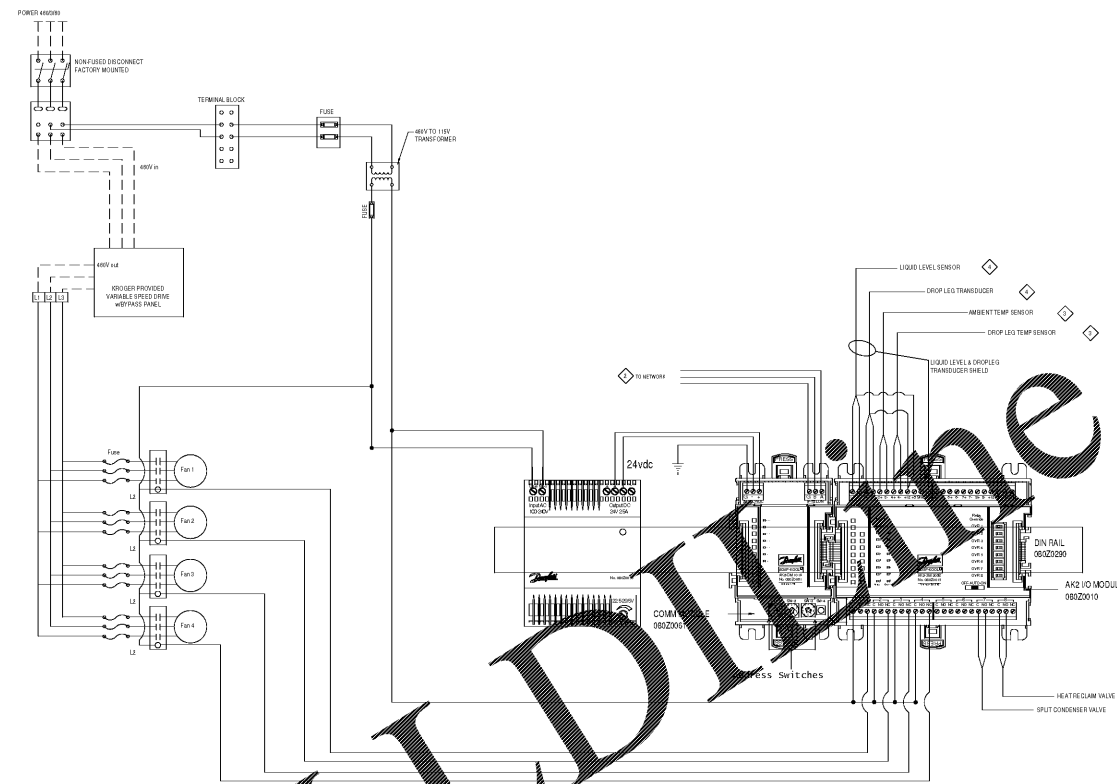


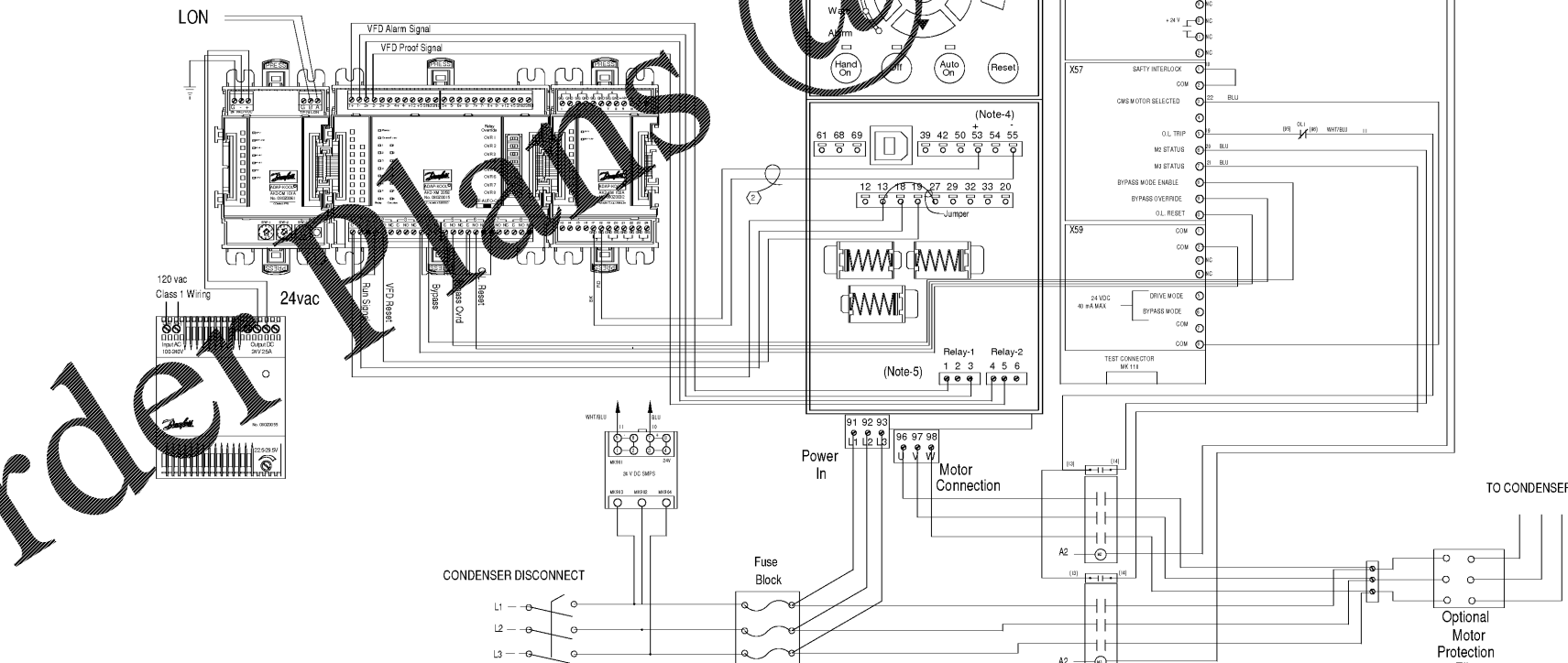
1 TYPICAL VFD AIR COOLED CONDENSER INSTALLATION



2 TYPICAL VFD AIR COOLED CONDENSER WIRING SCHEMATIC

AK2-A18/D08		AK2-103A	
UNIVERSAL INPUTS BD# 1		UNIVERSAL INPUTS BD# 2	
BD #	DESCRIPTION	BD #	DESCRIPTION
1 1	VFD Fault Signal	2 1	
1 2	VFD Proof Signal	2 2	
1 3		2 3	
1 4		2 4	
1 5			
1 6			
1 7			
1 8			

DIGITAL OUTPUTS BD# 1		ANALOG OUTPUTS BD# 2	
BD #	DESCRIPTION	BD #	DESCRIPTION
1 1	VFD Stop	2 1	COND VFD %
1 2	VFD Reset	2 2	
1 3		2 3	
1 4	VFD Bypass	2 4	
1 5	VFD Bypass Override		
1 6	VFD OL Reset		
1 7			
1 8			



3 TYPICAL CONDENSER VFD & BYPASS CONTROL WIRING & VFD TERMINATIONS - LOCATED IN PROTOCOL UNIT

VFD Parameter List:

Param #	Parameter Name	Setting	Units
0-03	Regional Settings	North America	
0-40	Interlock Relay on LCP	Disabled	
0-41	OCF Relay on LCP	Disabled	
0-42	Autoset Frequency	0.00	Hz
1-20	Condenser Motor	Sheet Open Loop	
1-03	Torque/Current Protection	Condenser V/F	
1-20	Motor Power (kW)	A-SERIALIZED	
1-21	Motor Voltage	A-SERIALIZED	
1-22	Motor Frequency	A-SERIALIZED	
1-23	Motor Current	A-SERIALIZED	
1-24	Motor Torque	A-SERIALIZED	
1-25	Autoset Motor Speed	A-SERIALIZED	
1-26	Autoset Motor Adaptation (AK2A)	Off	
1-27	Start Function	Coast	
1-28	Stopping Start	Coast	
3-02	Minimum Frequency	0.00	Hz
3-03	Maximum Frequency	80.00	Hz
2-10	Reference Source	Analog Input 03	
3-41	Range 1 Ramp Up Time	5.00	s
3-42	Range 1 Ramp Down Time	5.00	s
3-43	Motor Speed Limit (Hz)	120.00	Hz
4-14	Motor Speed High Limit (Hz)	80.00	Hz
4-15	Motor Speed Low Limit (Hz)	0.00	Hz
5-10	Terminal 03 Digital Input	MAKES/NO MAKE	
5-11	Terminal 03 Digital Input	Reset	
5-12	Terminal 27 Digital Input	Coast and reset	
5-40-1	Function Relay 1	No Alarm	180
5-40-2	Function Relay 2	Stop	180
5-10	Terminal 03 High Voltage	0.00	V
6-11	Terminal 03 High Voltage	0.00	V
6-14	Terminal 03 High Ref. Pass. Value	0.000	
6-15	Terminal 03 High Ref. Pass. Value	0.000	

NOTES:

- ALL WORK MUST BE PERFORMED TO MEET N.E.C. OR LOCAL CODES.
- Drive must be protected by proper grounding and fuses - Consult manual for details.
- Run power and motor leads in separate conduit. Never run control wiring in same conduit as High Voltage.
- Connectors are spring type - insert a small blade screwdriver into slot to release wire.
- Relay connections are next to power connections on drive. Location varies with drive model.

(X) = Refer to Appendix-A for cable specification

CR architecture + design

creating extraordinary places
www.cr-arch.com
800-460-6949

MECHANICAL ELECTRICAL ENGINEERS

WWW.KUHNIGGS.COM

LENGUEN KEN LUCKY
LOUISVILLE, KENTUCKY
NEW YORK, NEW YORK

155A ALEXANDRIA PKWY SUITE 11
F.T. THOMAS, KENTUCKY 40375
858-442-8886 FAX

OWNER

Kroger

DATE	REVISION
10/23/2018	80% OWNER REVIEW
11/01/2018	100% BID PERMIT

PROJECT TITLE
KROGER STORE
R543

MERCURY BLVD.
HAMPTON, VA

CONTRACT NO. 517315
ISSUE DATE 10/23/2018

SHEET TITLE
ELECTRICAL
ENERGY
MANAGEMENT
SCHEDULES AND
DETAILS

SHEET NO.
EM1.3.6

ORDER PLANS

OWNERSHIP OF INSTRUMENTS OF SERVICE
All records, plans, specifications, drawings, and data, whether prepared by the Consultant or otherwise, shall remain the property of the Consultant. The Consultant shall retain the right to use any or all of the same in any other project without limitation.

11/17/2018 11:28:00 PM

2" REFERENCE LINE SCALE NONE