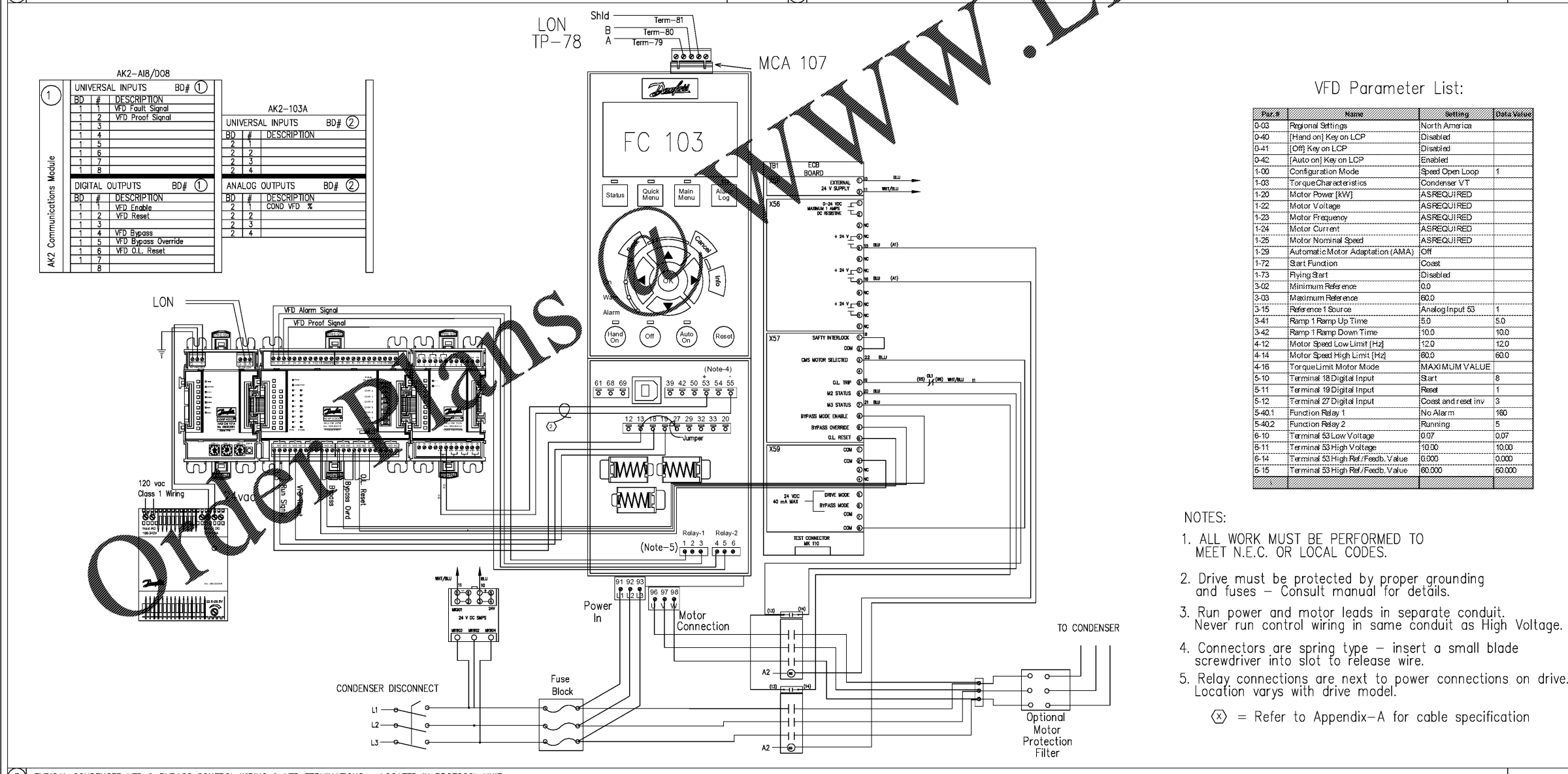


1 TYPICAL VFD AIR COOLED CONDENSER INSTALLATION

SCALE: NONE 2 TYPICAL VFD AIR COOLED CONDENSER WIRING SCHEMATIC

SCALE: NONE



AK2-A18/DO8

UNIVERSAL INPUTS BD# ①	
BD #	DESCRIPTION
1	VFD Fault Signal
2	VFD Proof Signal
3	
4	
5	
6	
7	
8	

DIGITAL OUTPUTS BD# ①	
BD #	DESCRIPTION
1	VFD Enable
2	VFD Reset
3	
4	VFD Bypass
5	VFD Bypass Override
6	VFD O.L. Reset
7	
8	

AK2-103A

UNIVERSAL INPUTS BD# ②	
BD #	DESCRIPTION
1	
2	
3	
4	

ANALOG OUTPUTS BD# ②	
BD #	DESCRIPTION
1	COND VFD %
2	
3	
4	

VFD Parameter List:

Par. #	Name	Setting	Data Value
0-03	Regional Settings	North America	
0-40	[Hand on] Key on LCP	Disabled	
0-41	[Off] Key on LCP	Disabled	
0-42	[Auto on] Key on LCP	Enabled	
1-00	Configuration Mode	Speed Open Loop	1
1-03	Torque Characteristics	Condenser VT	
1-20	Motor Power [kW]	ASREQUIRED	
1-22	Motor Voltage	ASREQUIRED	
1-23	Motor Frequency	ASREQUIRED	
1-24	Motor Current	ASREQUIRED	
1-26	Motor Nominal Speed	ASREQUIRED	
1-29	Automatic Motor Adaptation (AMA)	Off	
1-72	Start Function	Coast	
1-73	Flying Start	Disabled	
3-02	Minimum Reference	10.0	
3-03	Maximum Reference	80.0	
5-15	Reference 1 Source	Analog Input 53	1
3-41	Ramp 1 Ramp Up Time	5.0	5.0
3-42	Ramp 1 Ramp Down Time	10.0	10.0
4-12	Motor Speed Low Limit [Hz]	12.0	12.0
4-14	Motor Speed High Limit [Hz]	80.0	60.0
4-16	Torque Limit Motor Mode	MAXIMUM VALUE	
5-10	Terminal 18 Digital Input	Start	8
5-11	Terminal 19 Digital Input	Reset	1
5-12	Terminal 27 Digital Input	Coast and reset inv	3
5-40.1	Function Relay 1	No Alarm	160
5-40.2	Function Relay 2	Running	5
6-10	Terminal 53 Low Voltage	0.07	0.07
6-11	Terminal 53 High Voltage	10.00	10.00
6-14	Terminal 53 High Ref / Facts Value	0.000	0.000
6-15	Terminal 53 High Ref / Facts Value	60.000	60.000

- 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.
- ⊗ = Refer to Appendix-A for cable specification

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

SCALE: NONE

**Kroger**  
 KROGER  
 STORE #473  
 2013 UNIVERSITY AVENUE  
 OXFORD, MISSISSIPPI 38655  
 A DEVELOPMENT OF THE KROGER COMPANY

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 Naos Design Group Of Mississippi, PLLC.  
 MARC BREETZ, ARCHITECT  
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 (p) 303.759.5777 (f) 720.360.4281  
 ARCHITECT OF RECORD

**CDS**  
 COMMERCIAL DESIGN SYSTEMS, INC.  
 13825 SW GALLEATH DRIVE  
 SHERWOOD, OREGON 97140  
 503.855.7000 (p) 503.855.8902  
 INTERIOR DESIGN

**Pickering**  
 Pickering Firm, Inc.  
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 Planning - Surveying  
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 Memphis, TN 38115  
 901.726.8810  
 ENGINEER OF RECORD:  
 STRUCTURAL  
 MECHANICAL  
 ELECTRICAL  
 CIVIL ENGINEER

**VSOFT**  
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 11280 CHESTER ROAD  
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**telgian**  
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 SUITE 100  
 PHOENIX, AZ 85044  
 T: (602) 836-4426  
 HTTP://WWW.TELGIAN.COM  
 FIRE PROTECTION

ISSUE LOG

NO.	REV.	DESCRIPTION	DATE
1	-	PERMIT SET	12/06/18
2	-	BID SET	03/21/19

JOB: 2019041 SCALE: AS SHOWN  
 SHEET NO.

**EM6.0**  
 ENERGY MANAGEMENT DANFOSS  
 DETAILS

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