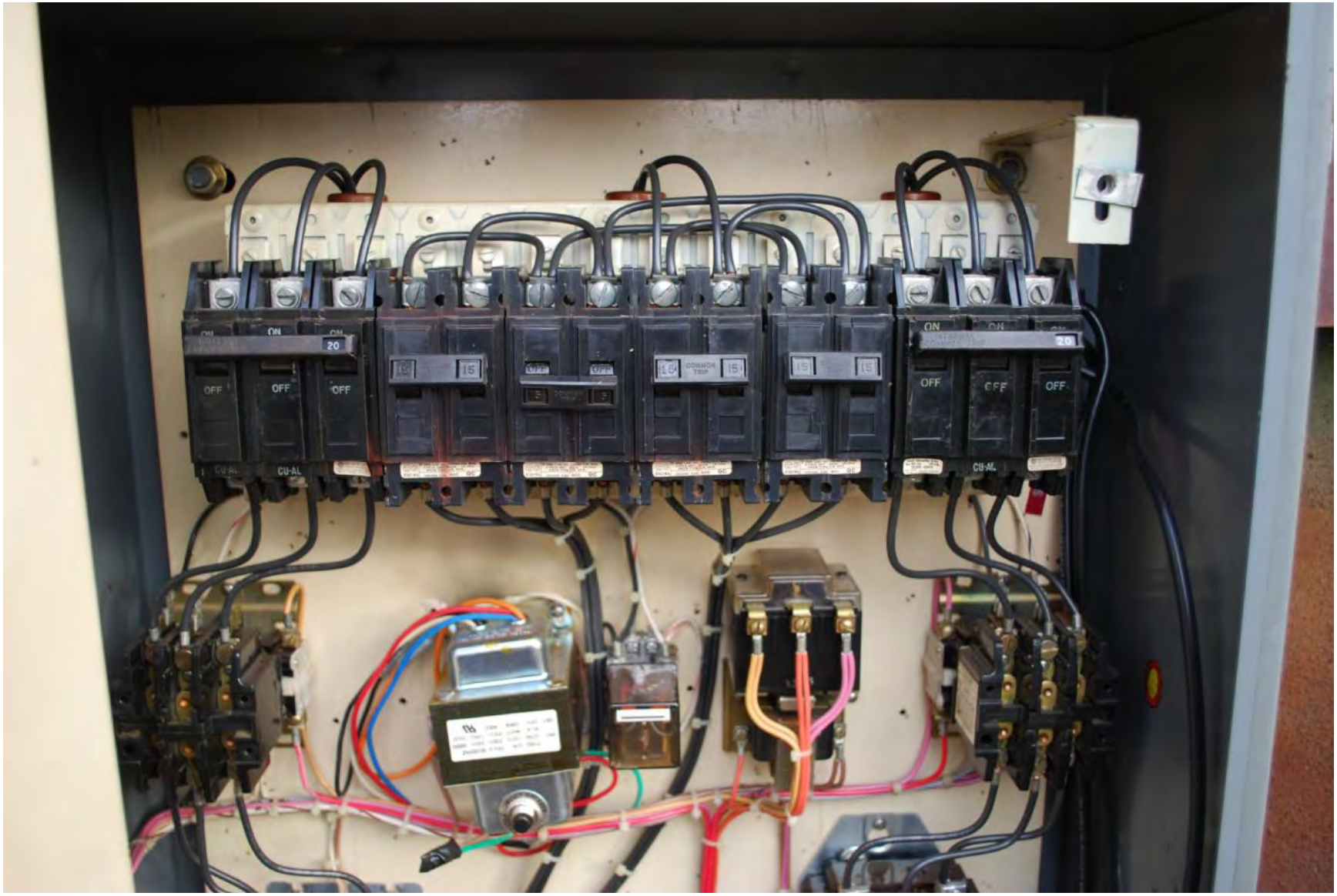
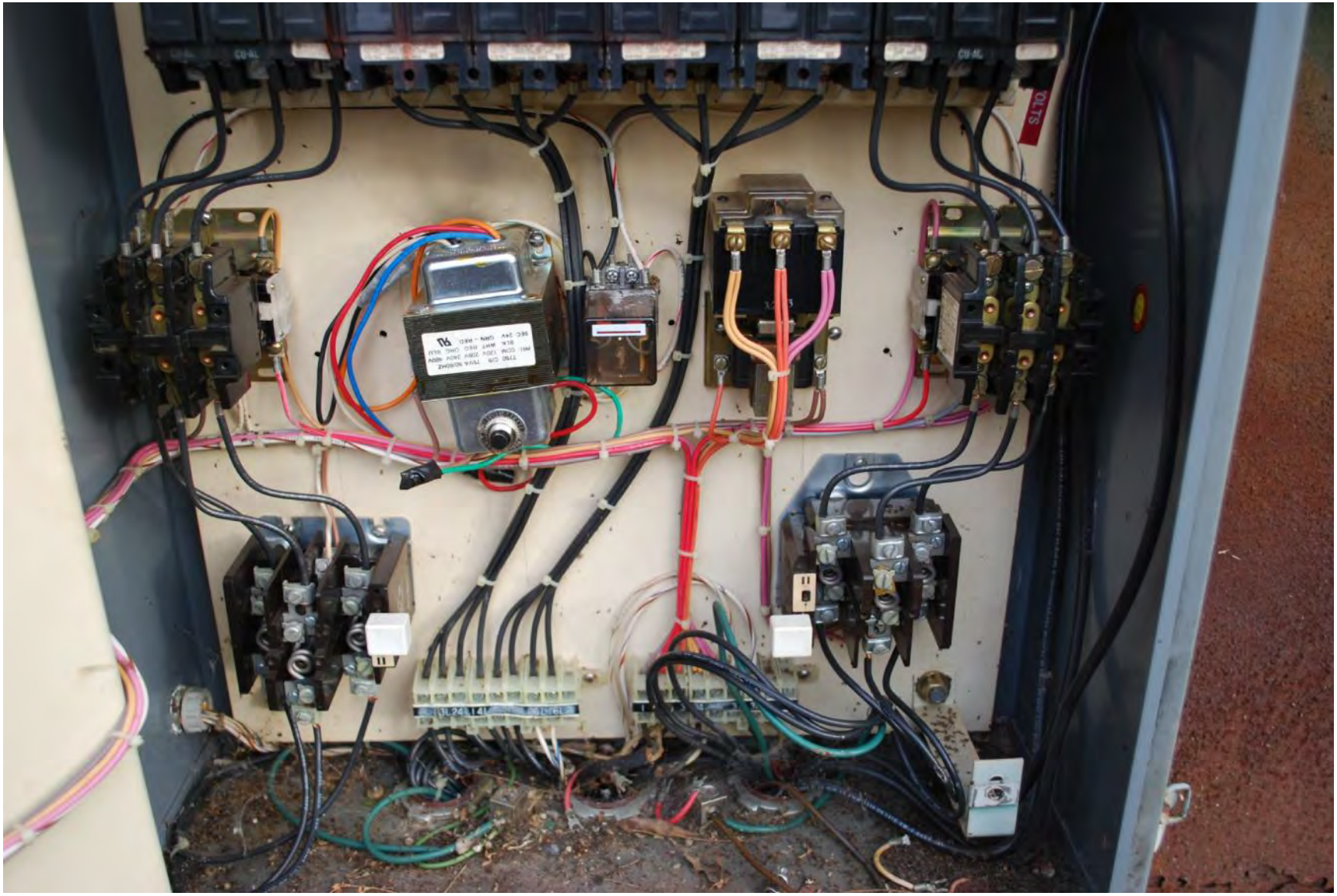
PUMP STATION
ACCESS ROAD
NO
PARKING

HYDR-O-MATIC
Electrical Controls
SERIAL NO.
MODEL NO.
HYDR O MATIC PUMP CO
ASHLAND OHIO
MADE IN U.S.A.

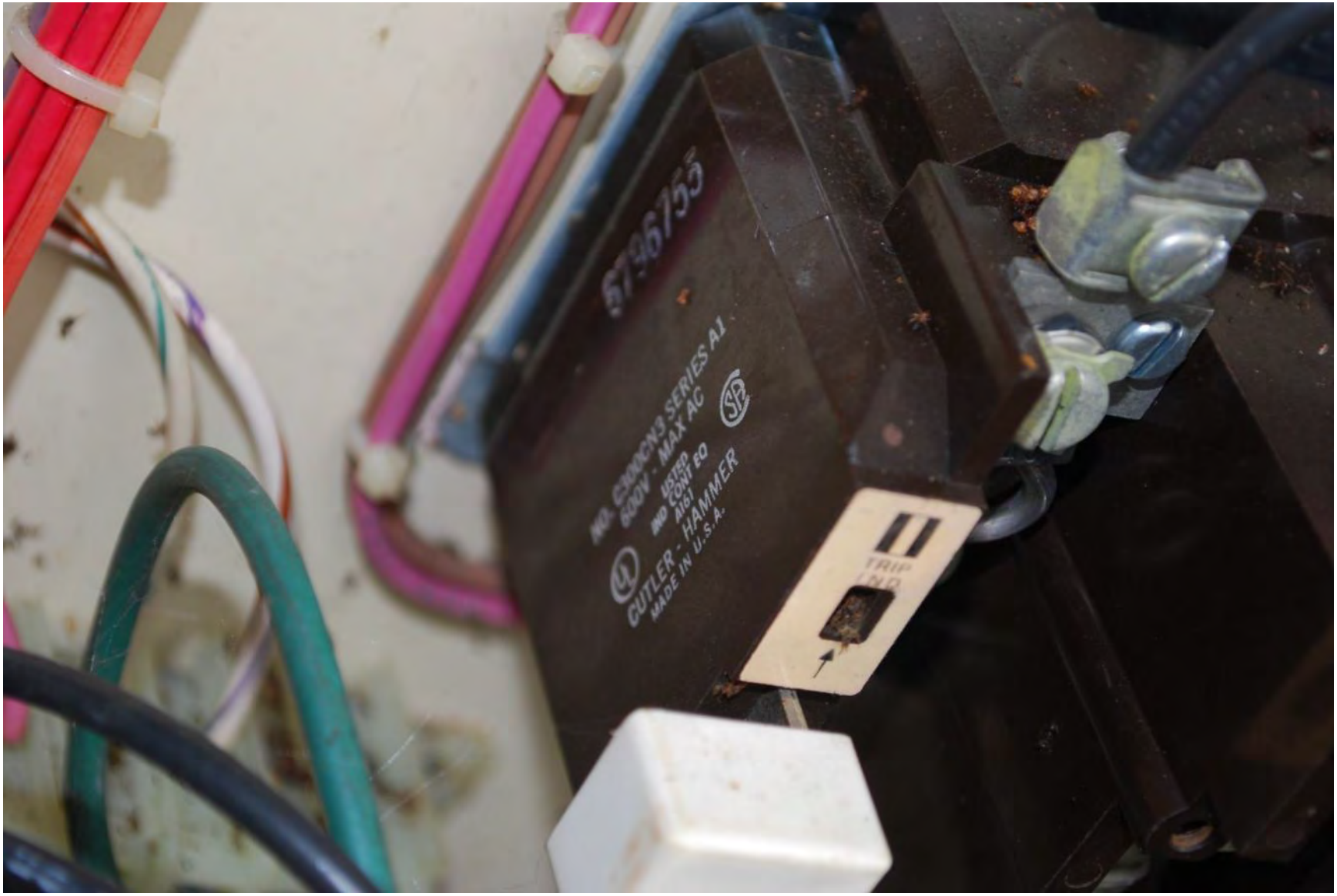
230 VOLTS
POWER PUMP 1
BLOWER
HEATER
LIGHTS
ALARM
POWER PUMP 2
PUMP 1 RUN
RESET
PUMP 2 RUN
RESET
RESET
HAND-OFF-AUTO
HAND-OFF-AUTO

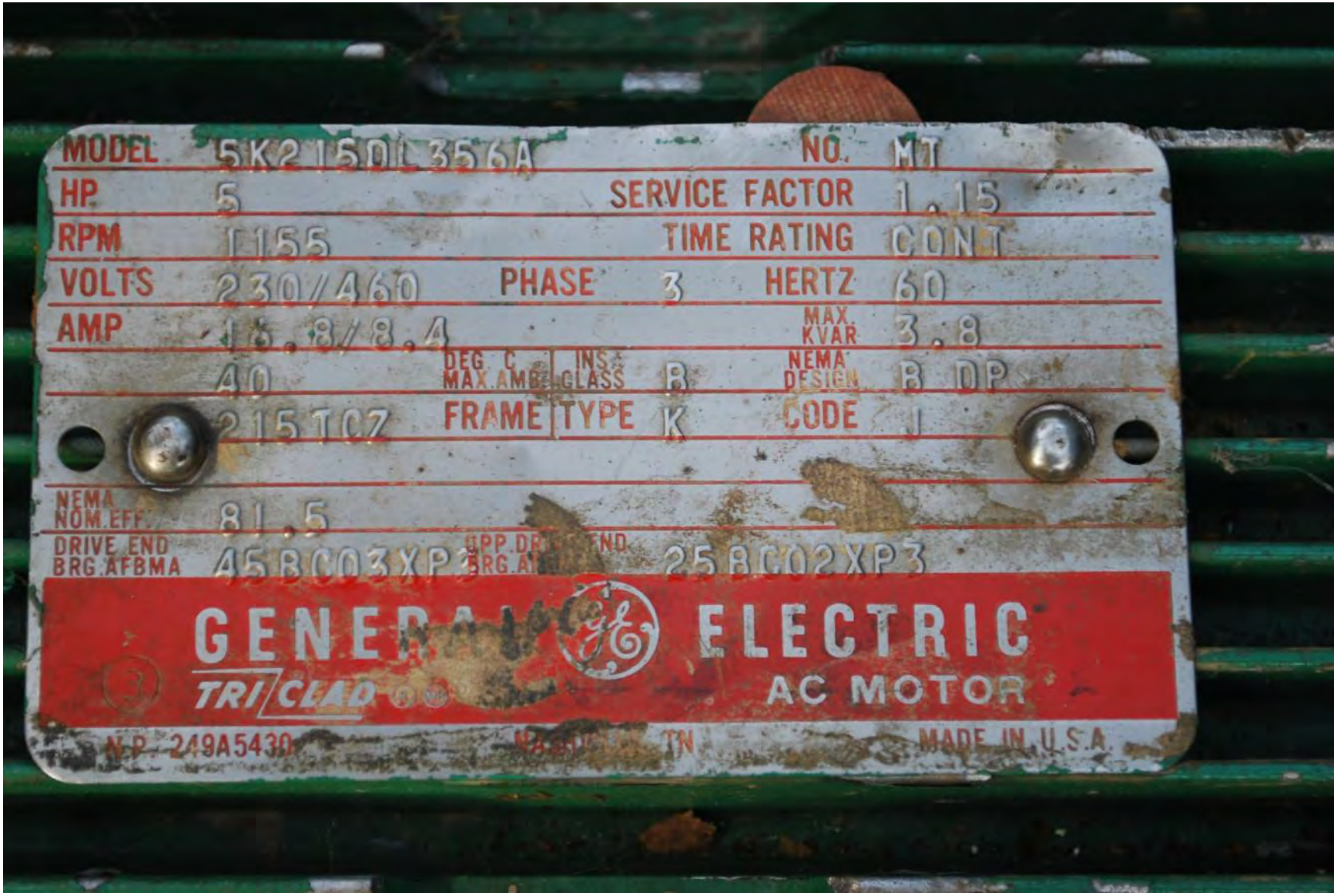
230 VOLTS
POWER PUMP 1
BLOWER
HEATER
LIGHTS
ALARM
POWER PUMP 2


ON
OFF
CU-AL
20
15



FURNAS ELECTRIC CO.
BATAVIA, ILLINOIS
42BE35AJ
CAT. NO.
RATING
MAX. VOLTS AC
F.L. AMPS.
L.R. AMPS.
HP.
1PH.
3PH.
120
240
480
600
30
30
30
180
150
120
1½
3
ABOVE 240V. BREAK ALL LINES
PER POLE 40 AMPS RESISTIVE
D25198-1


CUTLER - HAMMER
MADE IN U.S.A.


MODEL 5K215DL356A
NO. MT
HP 5
SERVICE FACTOR 1.15
RPM 1155
TIME RATING CONT
VOLTS 230/460
PHASE 3
HERTZ 60
AMP 15.8/8.4
MAX. KVAR 3.8
40
DEG C MAX.AMB.
INS. CLASS B
NEMA DESIGN B DP
215TC7
FRAME
TYPE K
CODE J
NEMA NOM.EFF. 81.5
DRIVE END BRG.AFBMA 45BC03XP3
OPP.DRIVE END BRG.AFBMA 25BC02XP3
GENERAL ELECTRIC
TRI/CLAD
AC MOTOR
MADE IN U.S.A.

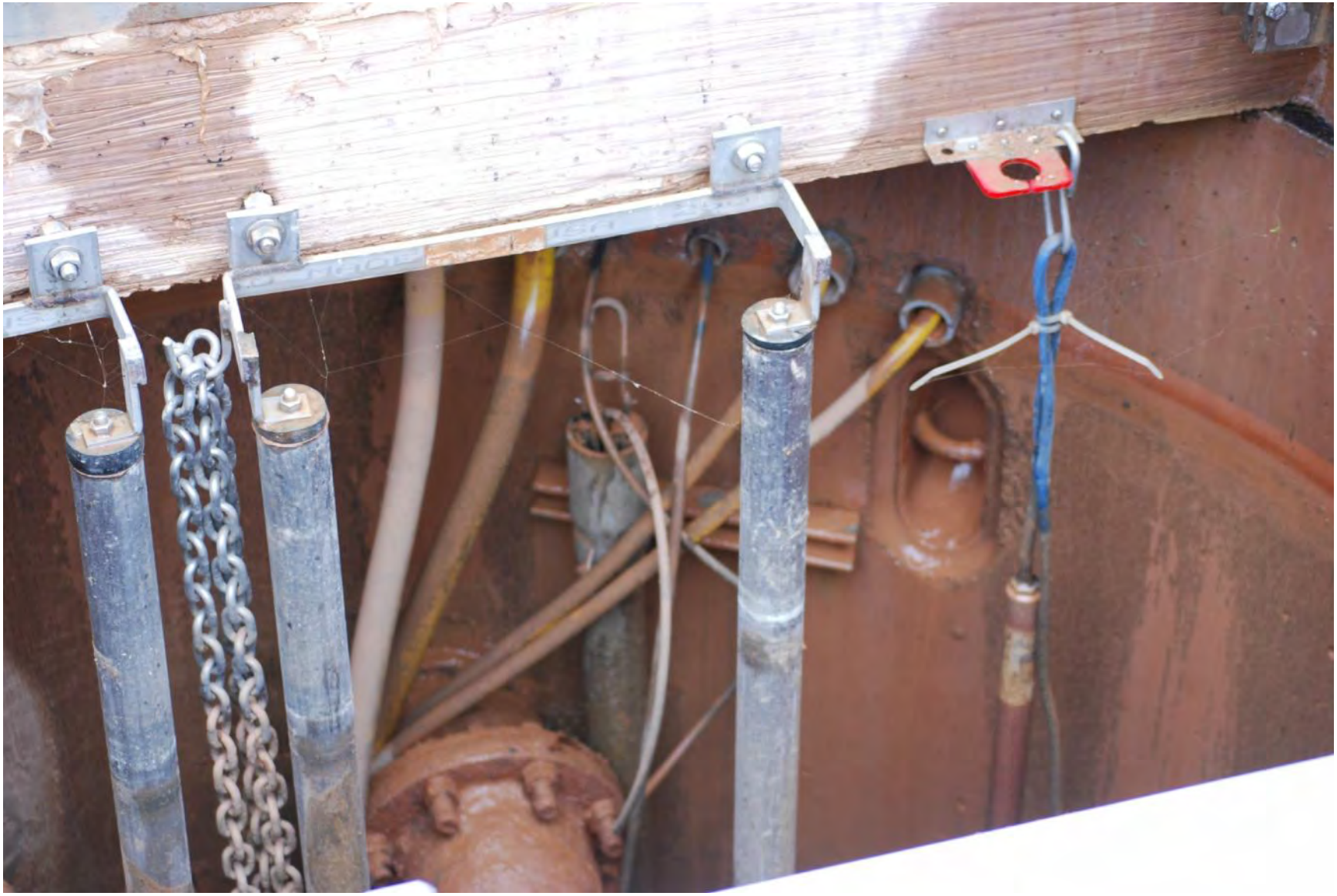
60 70 80 90
90
80
70
60

PUMP STATION
ACCESS ROAD
NO
PARKING

PUMP STATION
ACCESS ROAD
NO
PARKING
TOW-AWAY

PUMP STATION

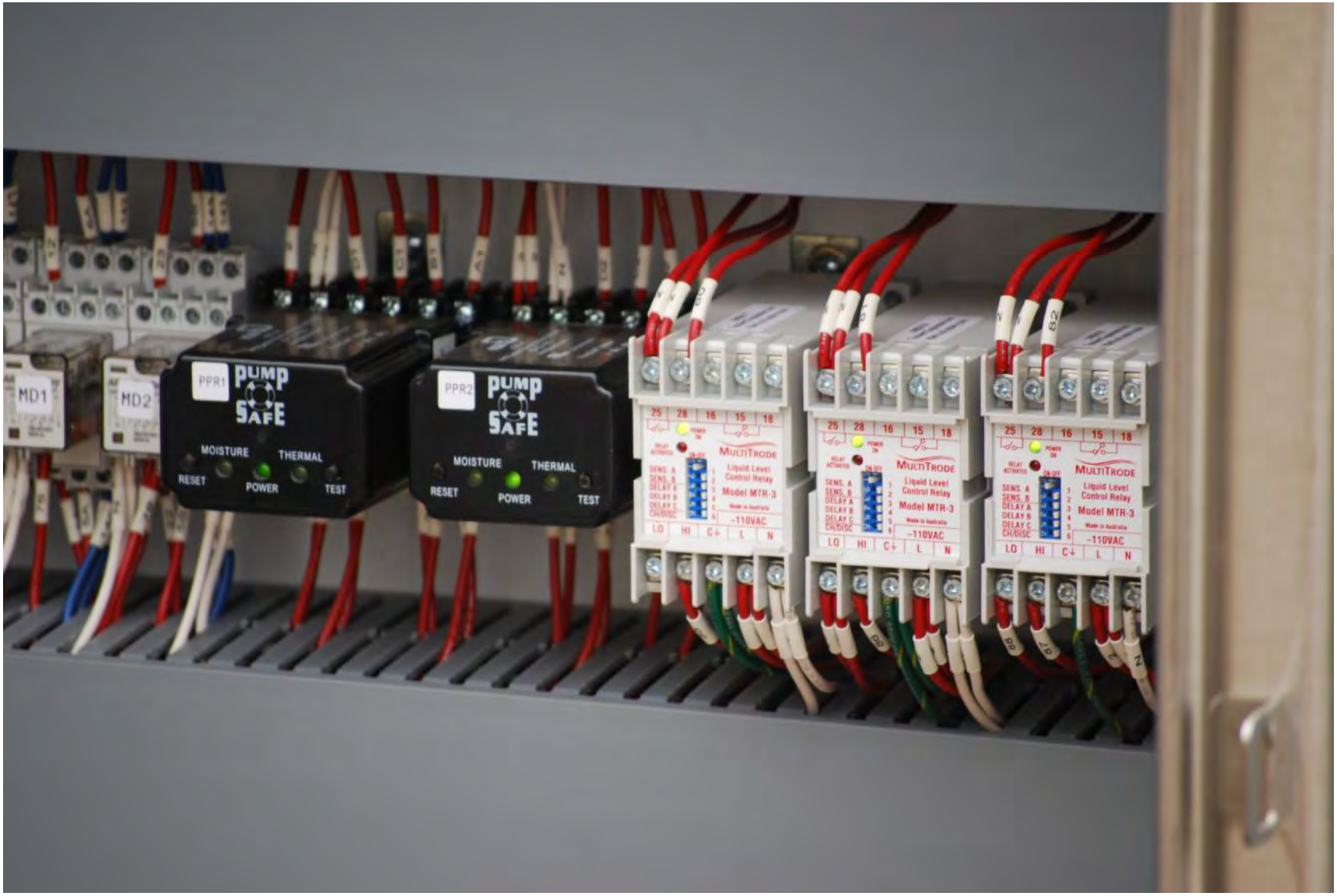
PUMP STATION
ACCESS ROAD
NO
PARKING



CB1
CB2
AL250KA
KAL361251021
SQUARE D
125 A
TVSS
The PROTECTOR
INNOVATIVE TECHNOLOGY
Suppression Circuit Status
1 LED per phase, normally on - OK
PTX080
DANGER
HIGH VOLTAGE
SEE WARNING LABEL

CB2
AL250KA
KAL361251021
SQUARE D
125 A
TVSS
The PROTECTOR
INNOVATIVE TECHNOLOGY
Suppression Circuit Status
1 LED per phase, normally on - OK
PTX080
c UL us
DANGER
HIGH VOLTAGE
SEE WARNING LABEL
Remote Alarm -
Dry Contacts
Access Point
8L1
8L2
8L3

ALT
POS.2
LOCK 2
NORMAL
LOCK 1
POS.1
TR1
TR2
TDR1
PF1
SF1
SF2
0T1


MD1
MD2
PPR1
PUMP SAFE
MOISTURE
THERMAL
RESET
POWER
TEST
PPR2
PUMP SAFE
MOISTURE
THERMAL
RESET
POWER
TEST
MULTITRODE
Liquid Level Control Relay
Model MTR-3
-110VAC
LO HI C+ L N
MULTITRODE
Liquid Level Control Relay
Model MTR-3
-110VAC
LO HI C+ L N
MULTITRODE
Liquid Level Control Relay
Model MTR-3
-110VAC
LO HI C+ L N

24VDC
PS
SITOP
SIEMENS

6L1
6L2
6L3
F10
F11
Telemecanique
SC1

8L1
8L2
8L3
F12
F13
Telemecanique
SC2

1L1
3L2
5L3
SS1
ESC
ENT
1L1

5L3
1L1
3L2
5L3
SS2
ESC
ENT

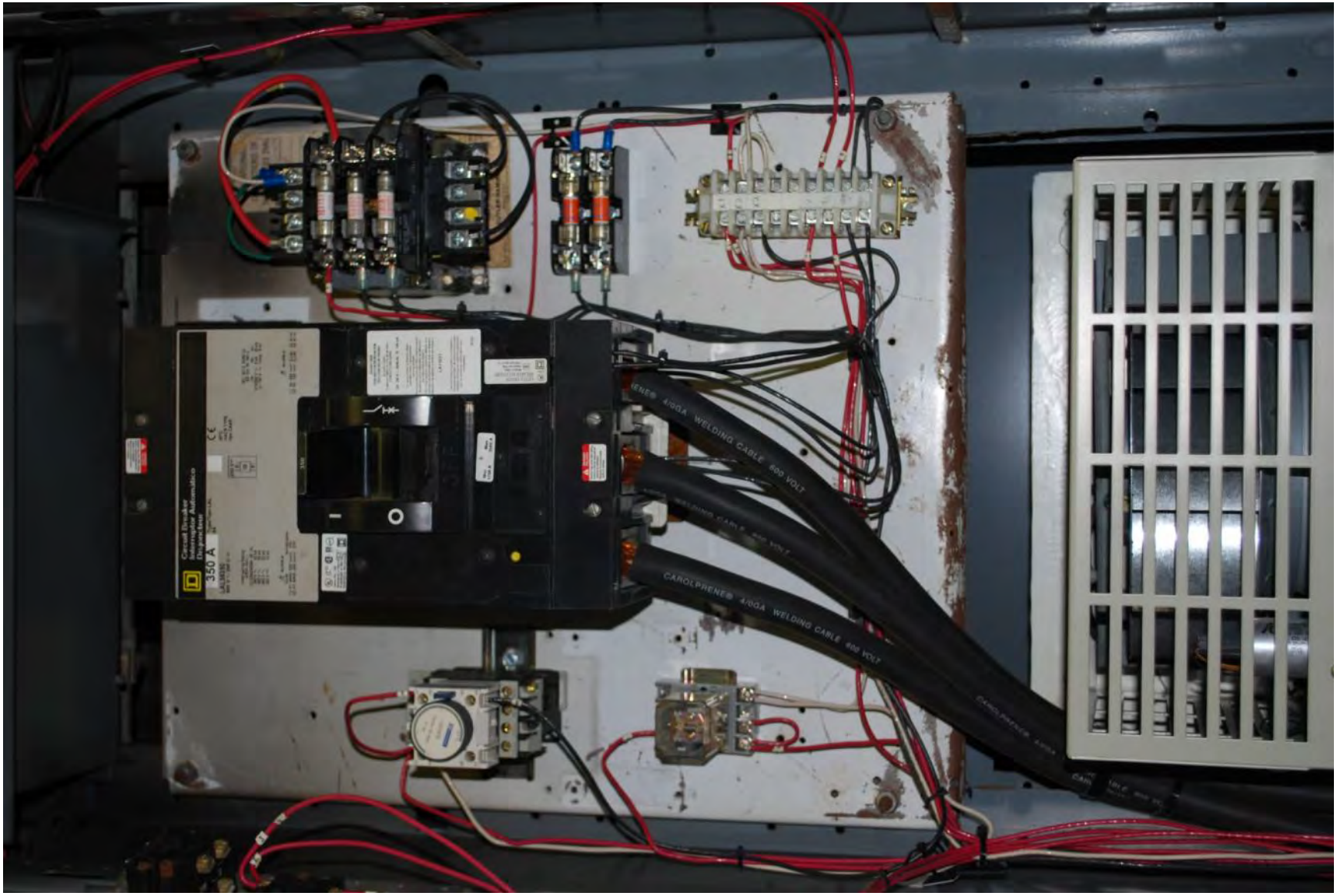
PURAF

POWER ON
MT2PC
PUMP 2 ELAPSED TIME METER
PUMP 1 ELAPSED TIME METER
PUMP 2 STARTER FAIL
PUMP 2 OVERTEMP
PUMP 1 STARTER FAIL
PUMP 1 OVERTEMP
PUMP 2 RESET
ALARM TEST
PUMP 1 RESET

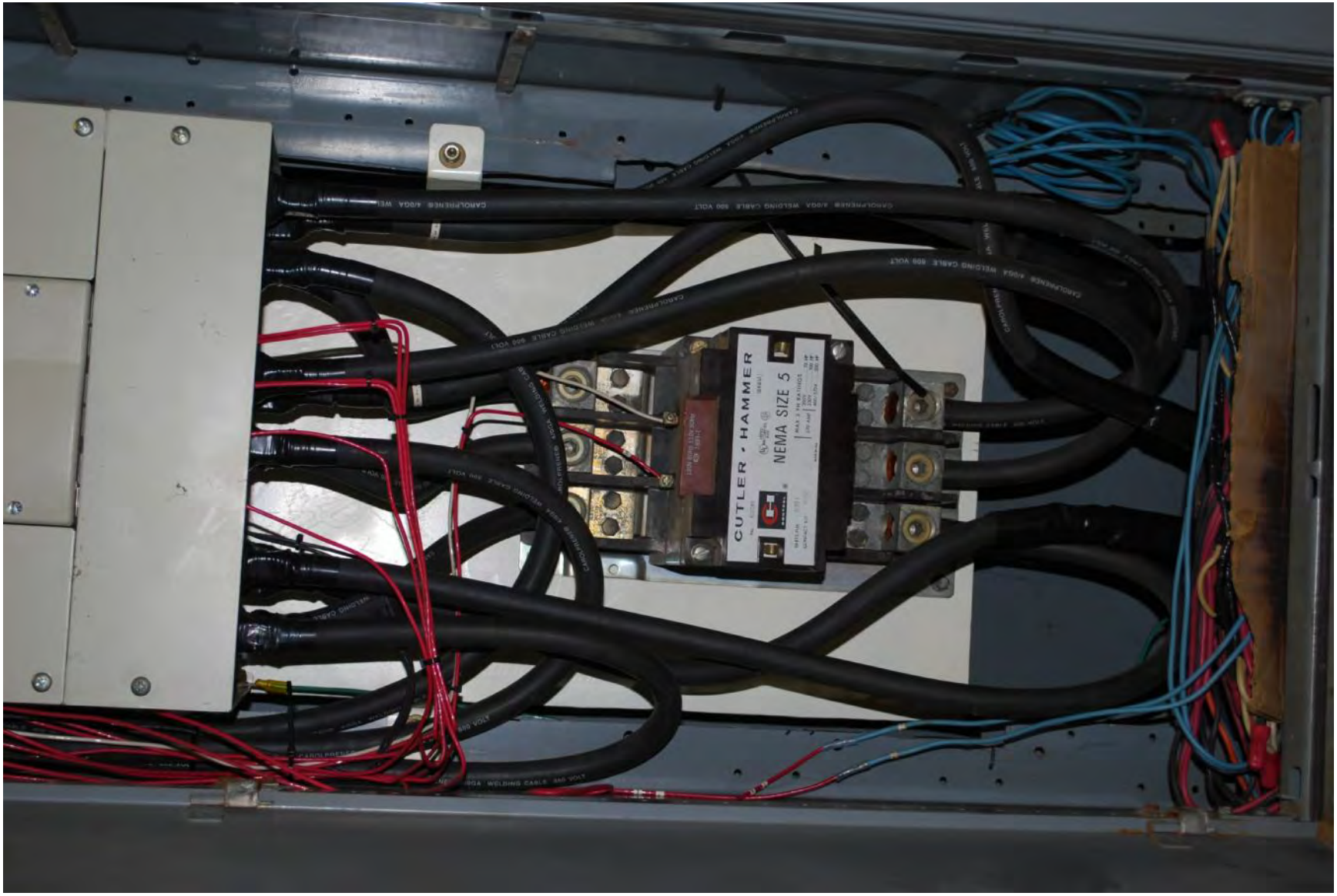
UNITROL

UNITROL

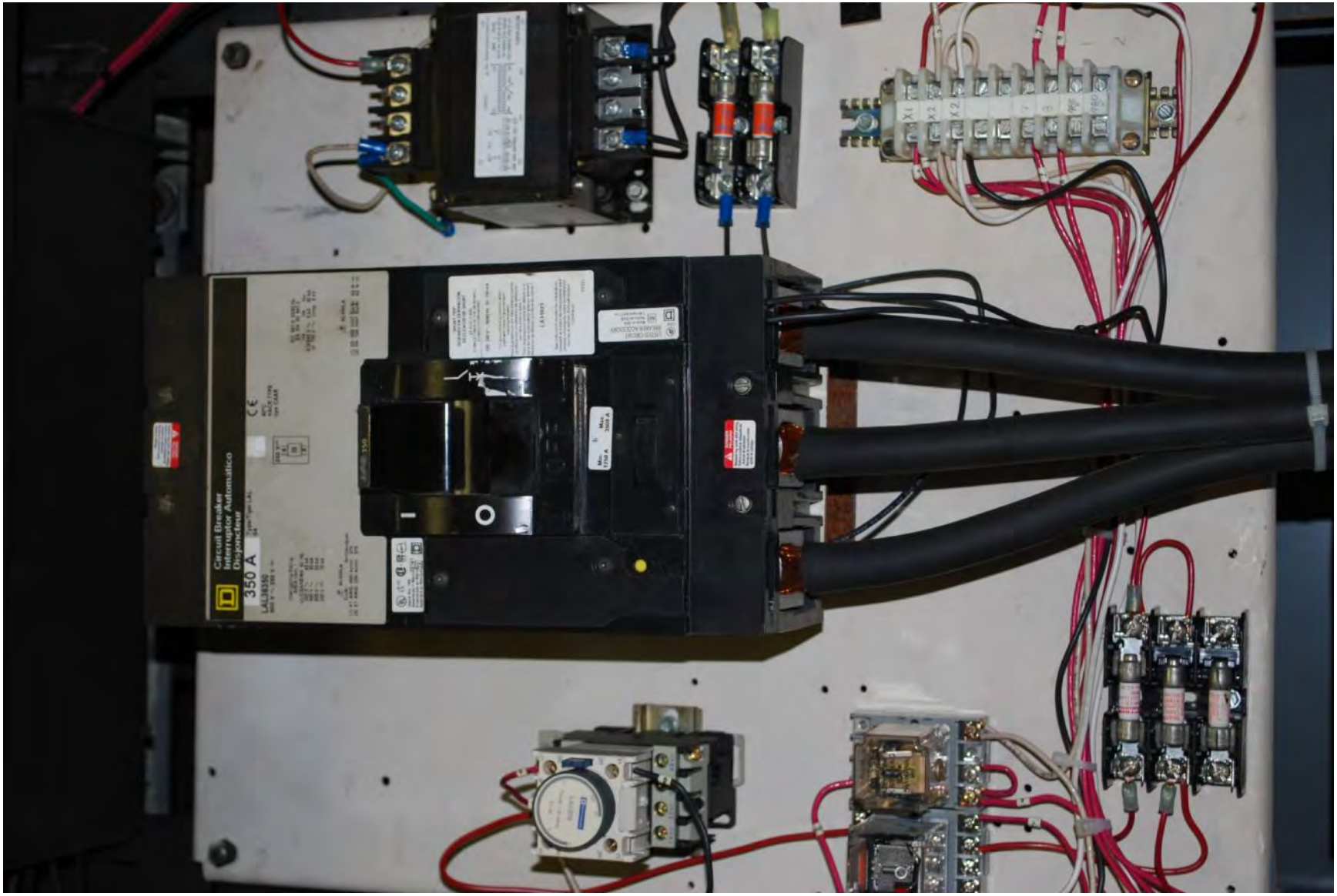
UNITROL
TEST
ON
RESET
TEST
ON
RESET
PROT. WATER LOW PRESSURE
WET WELL LOW LEVEL
SUMP PUMP HIGH LEVEL
COMBUSTIBLE GAS
PROT. WATER PUMP FAILURE


350 A
CAROLPRENE® 4/0GA WELDING CABLE 600 VOLT

SQUARE D
ATS46C25N
Telemecanique
ALTISTART 46


CUTLER - HAMMER
NEMA SIZE 5

elemecanique
SQUARE D
ATS46C25N
Telemecanique
SQUARE D
ALTISTART 46
DATA
PROG
FAULT
FEHLER
FALLO
POWER
LEISTUNG
POTENTIA


Circuit Breaker
Interrupteur Automatico
Disjoncteur
350 A
LAL36350

5L3
3L2
1L1
ESC
ENT

6T3
4
2T1
CAROLPRENE® 4/0GA WELDING CA
600 VOLT
CUTLE
HAMM
A SIZE
MAX 3 PH RATINGS
600 VOLT

2

RELIANCE
DUTY MASTER A-C MO
IDENTIFICATION NO.
FRAME
TYPE
H.P. 200
RPM 1785
HZ. 60
PH. 3
VOLTS 460
DRIVE END BRG.
OPP. DRIVE END BRG.
INS. CLASS B
AMB. C° 40
AMPS 223
DUTY CONT
CODE F
DESIGN
SF 1.0
RELIANCE ELECTRIC COMPANY
CLEVELAND OHIO 44117

D154 CONTROLLER
LEVEL IN FEET
20
18
16
14
12
10
8
6
4
2
0
STAGE 1
STAGE 2
STAGE 3
STAGE 4
LO
HI
MAN LEVEL SIMULATOR
RAISE
AUTO
LOWER
AUDIBLE ALARM SILENCE
U.S. FILTER
U.S. FILTER CONTROL SYSTEMS

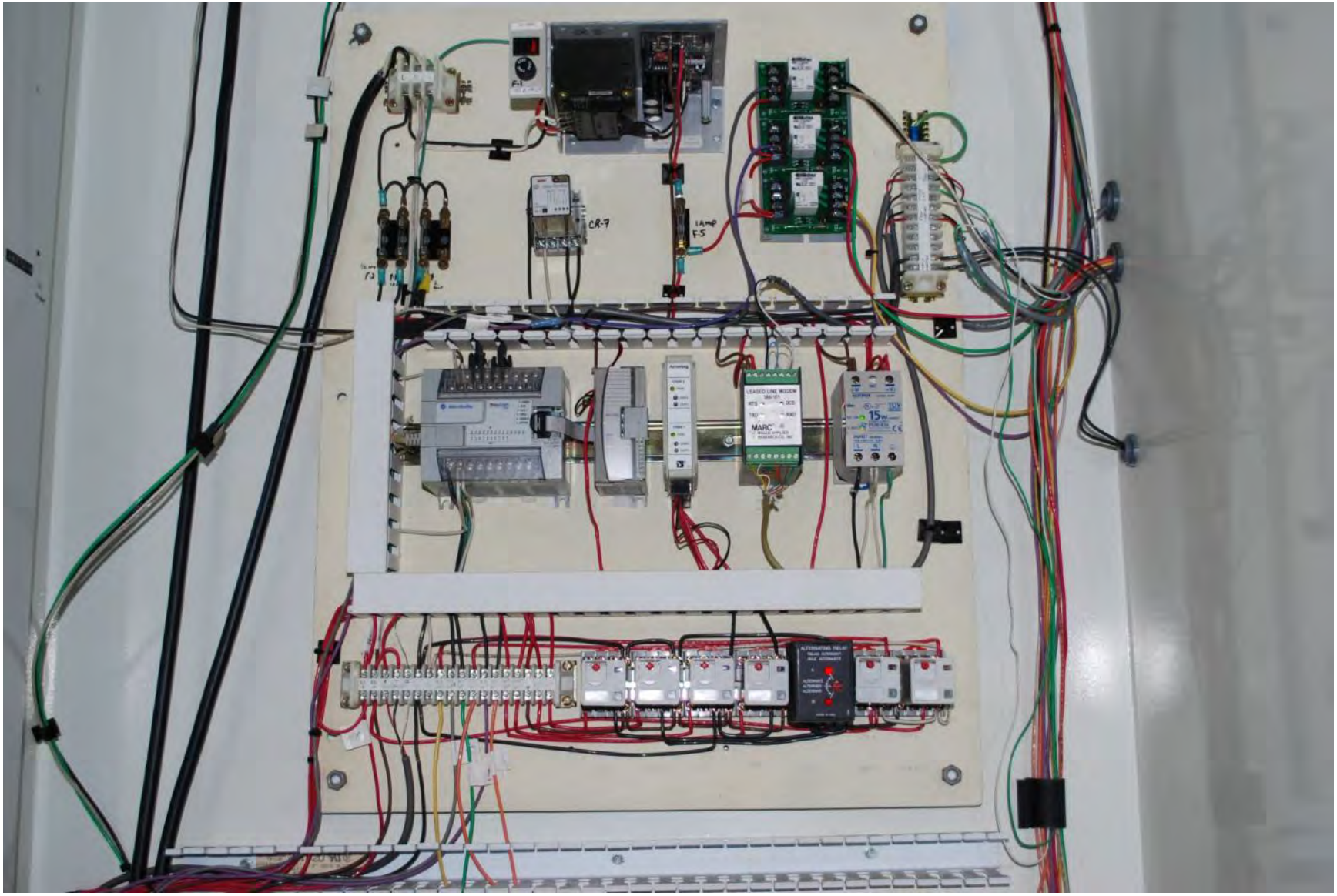
REQUIRED
RUN
FAIL
HAND OFF AUTO
REQUIRED
RUN
FAIL
HAND OFF AUTO
PUMP 1
PUMP 2

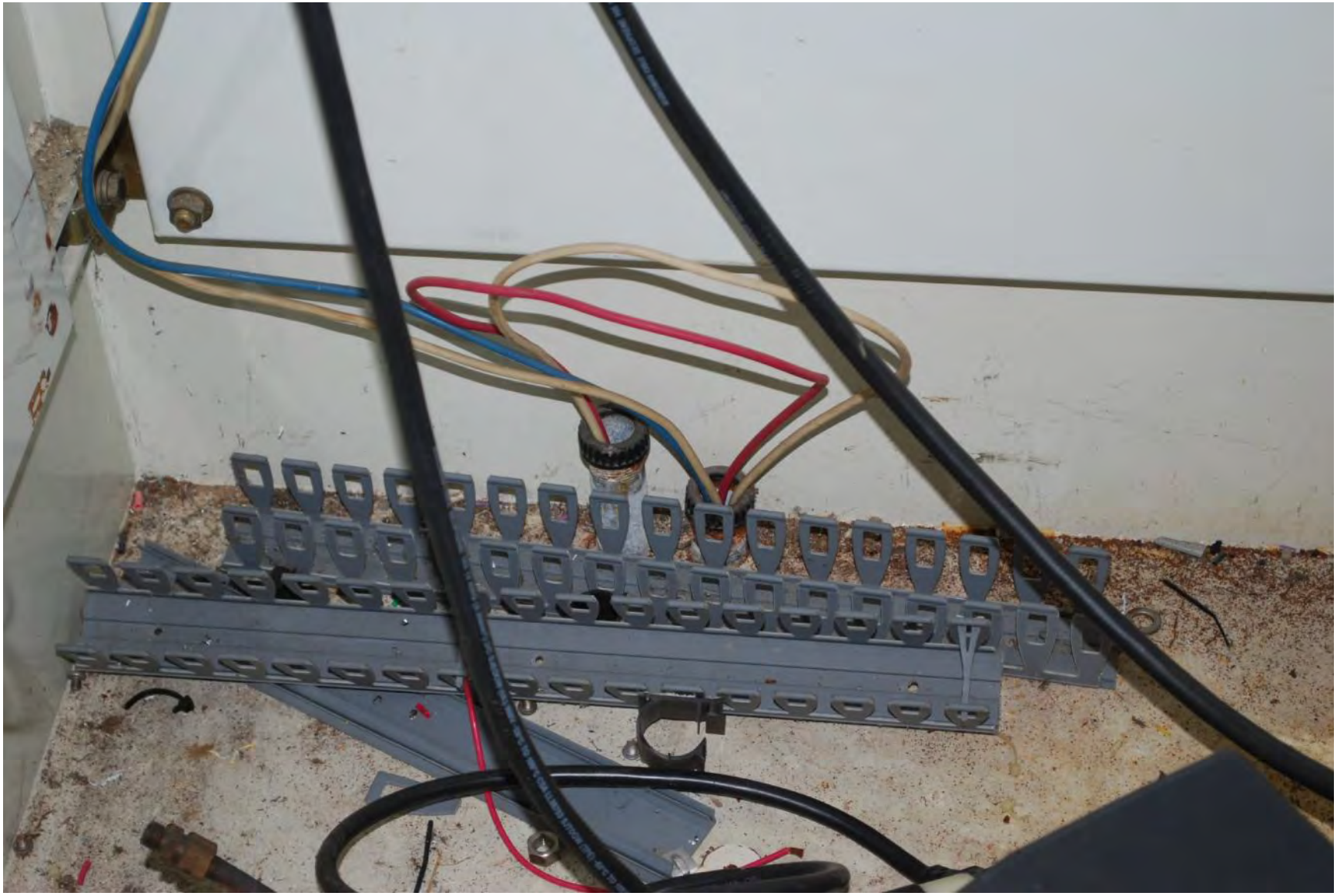
MOTOR OVERLOAD
LOW OIL LEVEL
GRINDER OVERLOAD
OIL OVERTEMP
POWER ON
RUN
OFF/RESET HAND AUTO
MUFFIN MONSTER
CAUTION
HIGH VOLTAGE
THIS EQUIPMENT MAY START, STOP, REVERSE OR RESTART AUTOMATICALLY. ELECTRICAL LOCKOUT PROCEDURES MUST BE UTILIZED PRIOR TO ANY SERVICE OF THE CONTROLLER OR EQUIPMENT.
REFER TO O&M PRIOR TO SERVICE OR OPERATION.

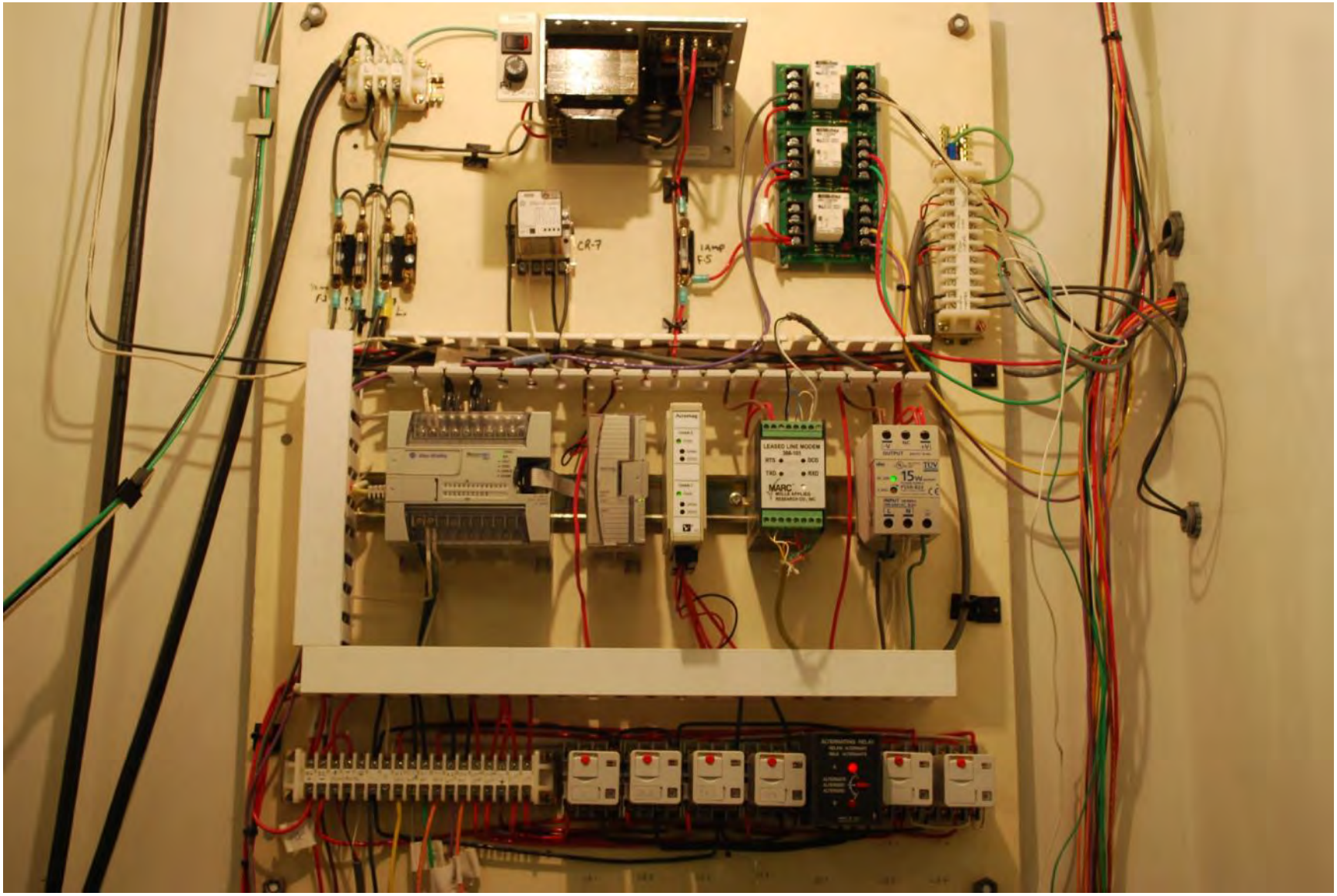
FISCHER & PORTER

Dayton

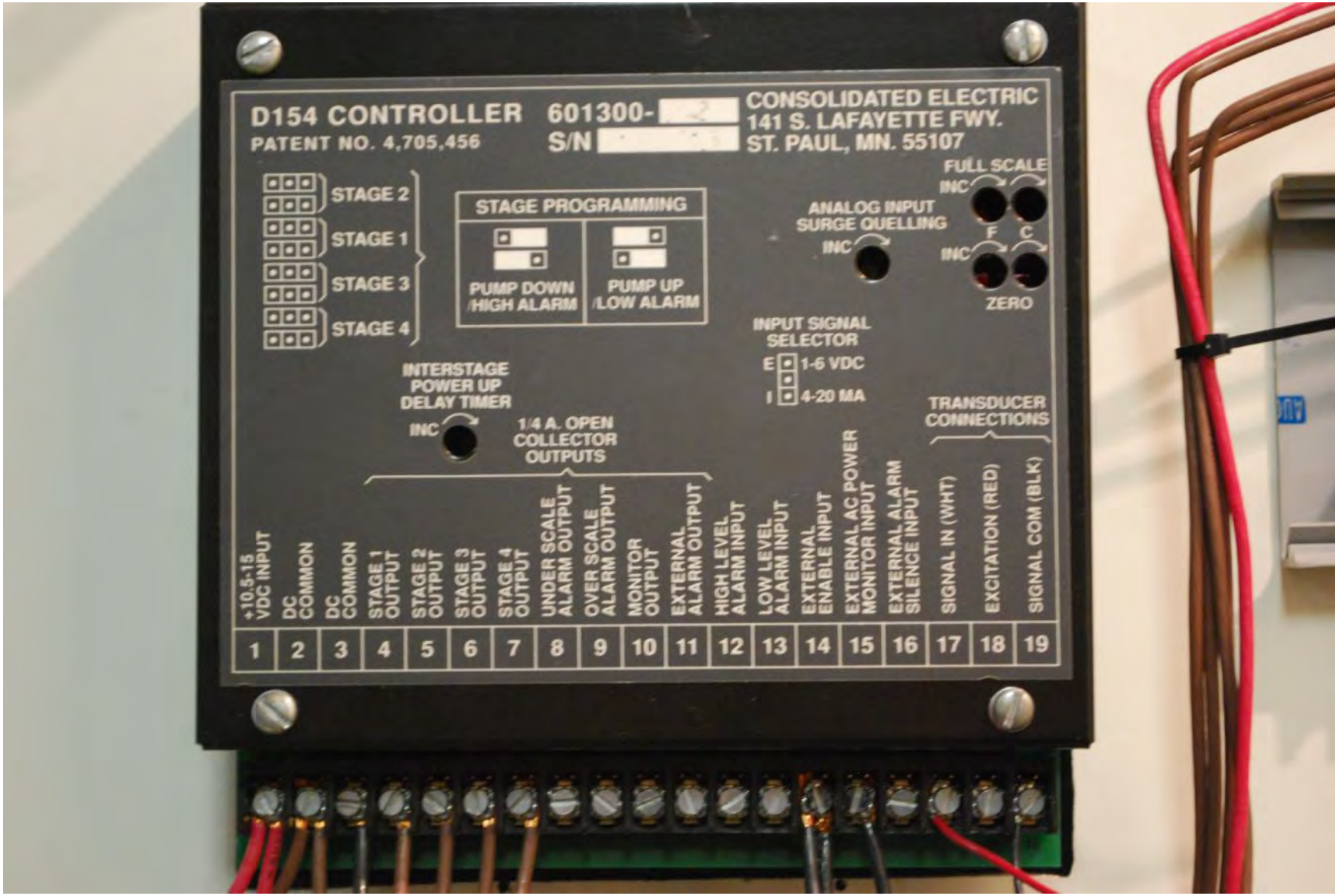
CAUTION
DOOR MUST BE FULLY
CLOSED BEFORE SWITCH
CAN BE OPERATED.

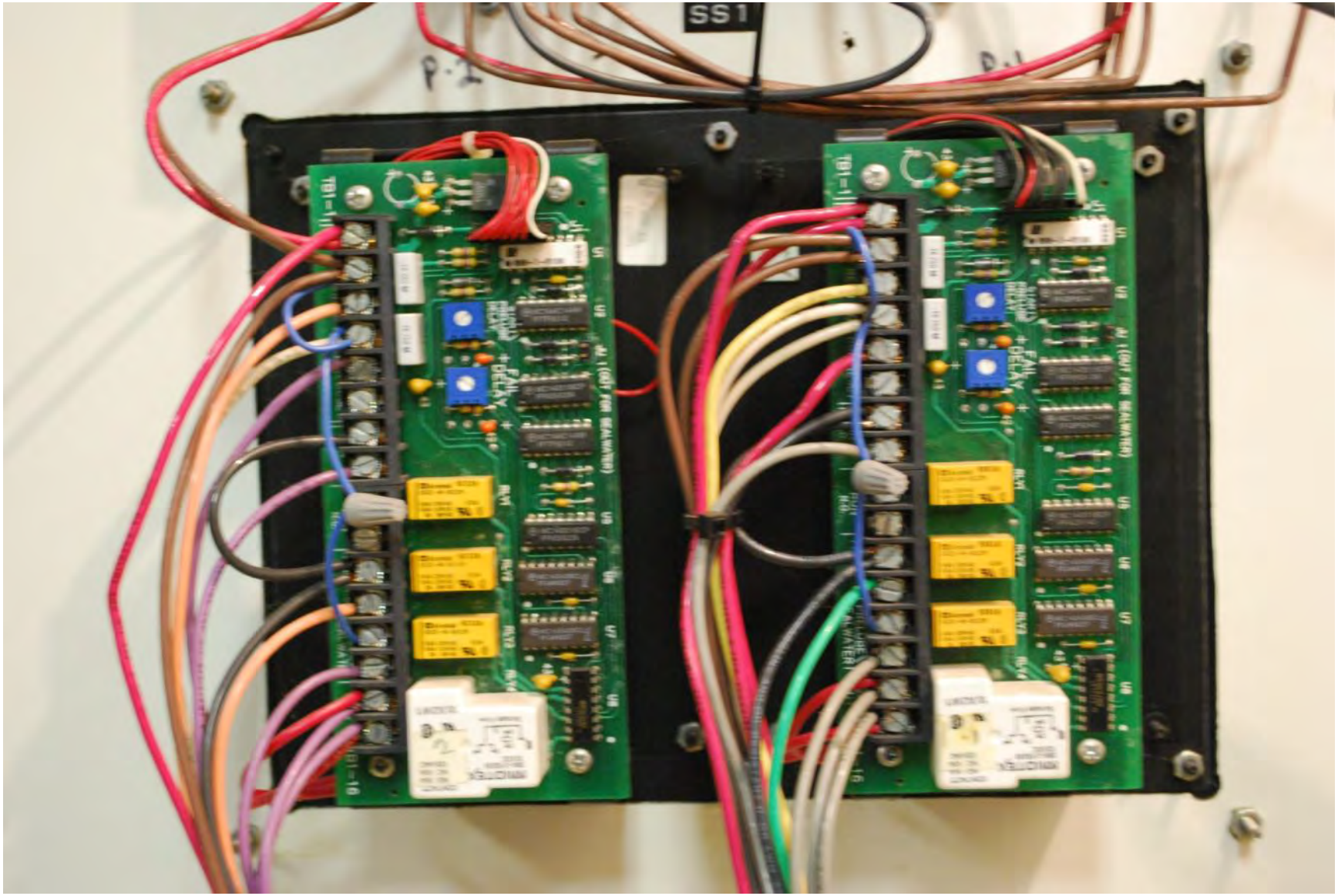

CR-7
LAMP F-5
LEASED LINE MODEM
MARC
15W

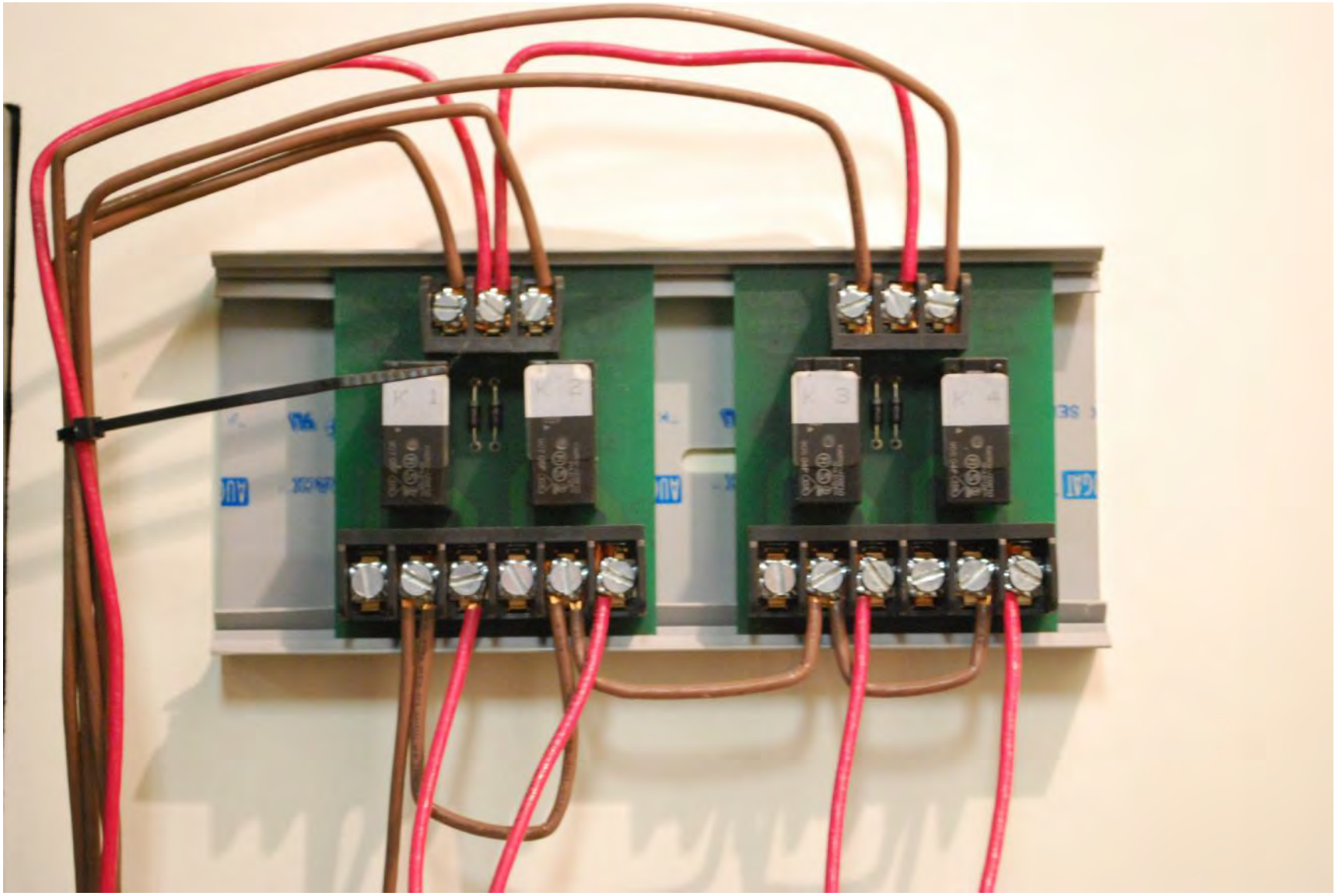


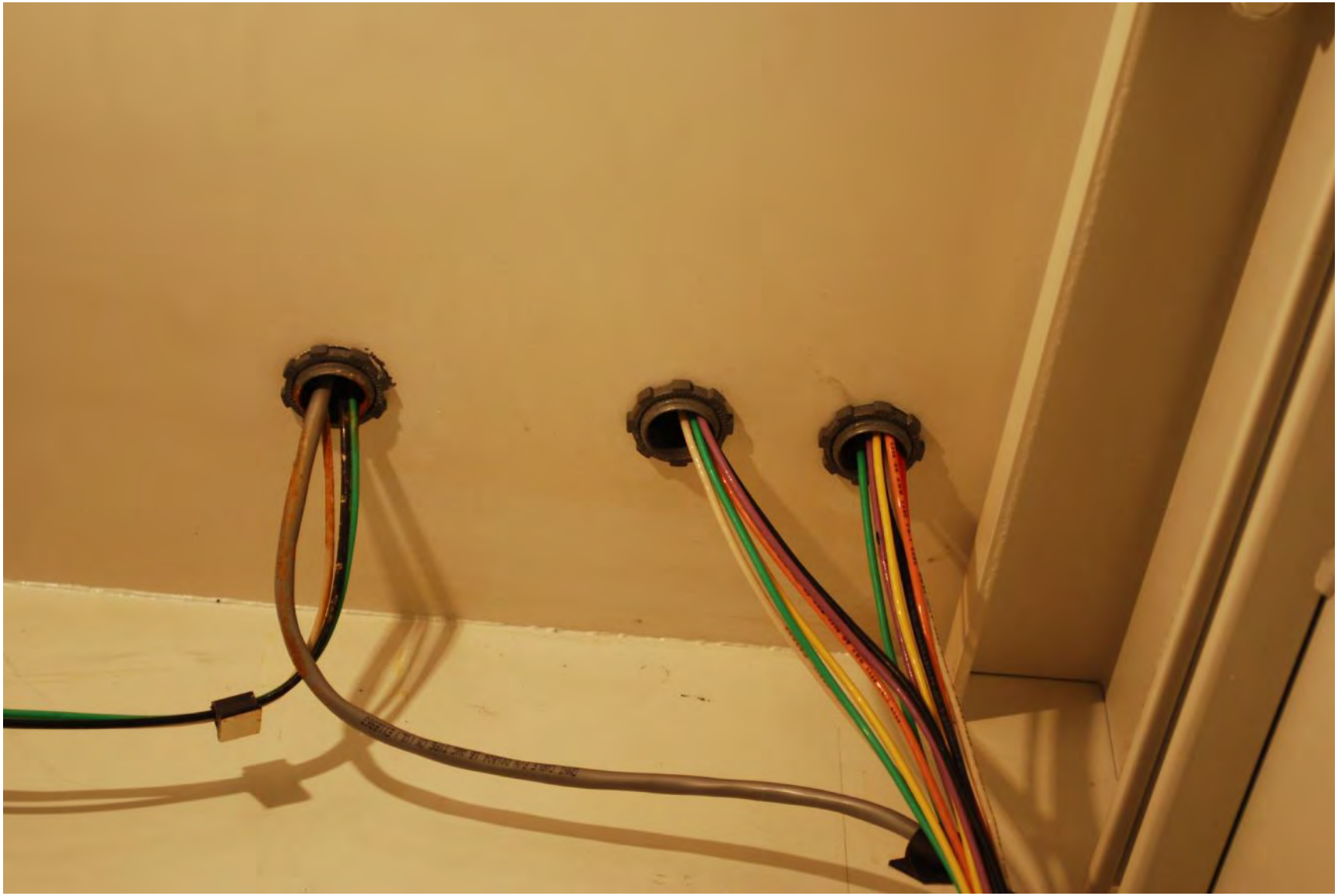

CR-7
LEASED LINE MODEM
MARC

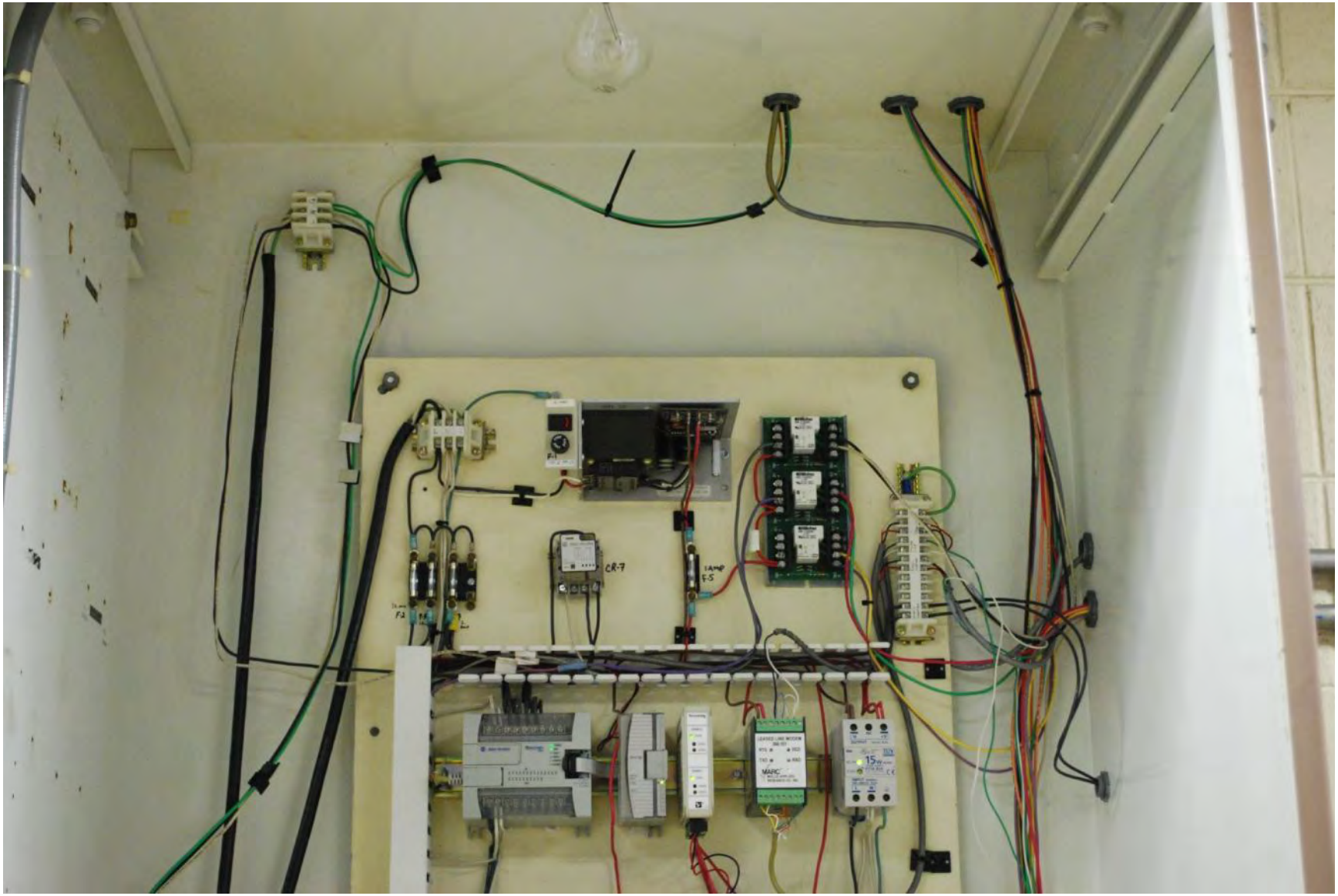
D154 CONTROLLER 601300-
PATENT NO. 4,705,456 S/N
CONSOLIDATED ELECTRIC
141 S. LAFAYETTE FWY.
ST. PAUL, MN. 55107
STAGE 2
STAGE 1
STAGE 3
STAGE 4
STAGE PROGRAMMING
ANALOG INPUT SURGE QUELLING
FULL SCALE
INC
F
C
ZERO
INTERSTAGE POWER UP DELAY TIMER
TRANSDUCER CONNECTIONS
+10.5-15 VDC INPUT
DC COMMON
DC COMMON
STAGE 1 OUTPUT
STAGE 2 OUTPUT
STAGE 3 OUTPUT
STAGE 4 OUTPUT
UNDER SCALE ALARM OUTPUT
OVER SCALE ALARM OUTPUT
MONITOR OUTPUT
EXTERNAL ALARM OUTPUT
HIGH LEVEL ALARM INPUT
LOW LEVEL ALARM INPUT
EXTERNAL ENABLE INPUT
EXTERNAL ALARM SILENCE INPUT
SIGNAL IN (WHT)
EXCITATION (RED)
SIGNAL COM (BLK)
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19
SS 1

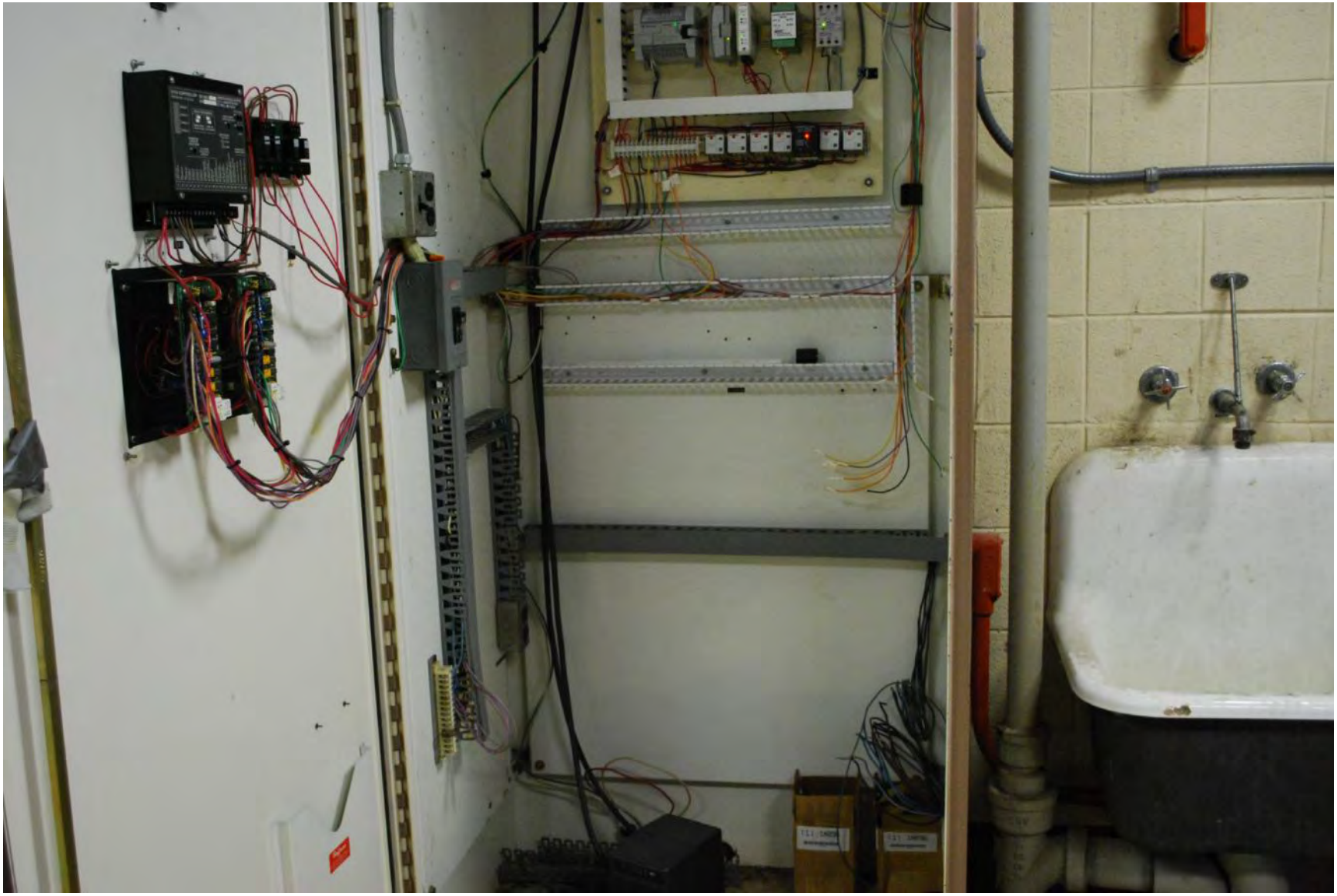

D154 CONTROLLER
PATENT NO. 4,705,456
601300-
S/N
CONSOLIDATED ELECTRIC
141 S. LAFAYETTE FWY.
ST. PAUL, MN. 55107
STAGE 2
STAGE 1
STAGE 3
STAGE 4
STAGE PROGRAMMING
PUMP DOWN /HIGH ALARM
PUMP UP /LOW ALARM
ANALOG INPUT SURGE QUELLING
INC
FULL SCALE
INC
F
C
INC
ZERO
INPUT SIGNAL SELECTOR
E
1-6 VDC
I
4-20 MA
INTERSTAGE POWER UP DELAY TIMER
INC
1/4 A. OPEN COLLECTOR OUTPUTS
TRANSDUCER CONNECTIONS
+10.5-15 VDC INPUT
DC COMMON
DC COMMON
STAGE 1 OUTPUT
STAGE 2 OUTPUT
STAGE 3 OUTPUT
STAGE 4 OUTPUT
UNDER SCALE ALARM OUTPUT
OVER SCALE ALARM OUTPUT
MONITOR OUTPUT
EXTERNAL ALARM OUTPUT
HIGH LEVEL ALARM INPUT
LOW LEVEL ALARM INPUT
EXTERNAL ENABLE INPUT
EXTERNAL AC POWER MONITOR INPUT
EXTERNAL ALARM SILENCE INPUT
SIGNAL IN (WHT)
EXCITATION (RED)
SIGNAL COM (BLK)
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19


SS1

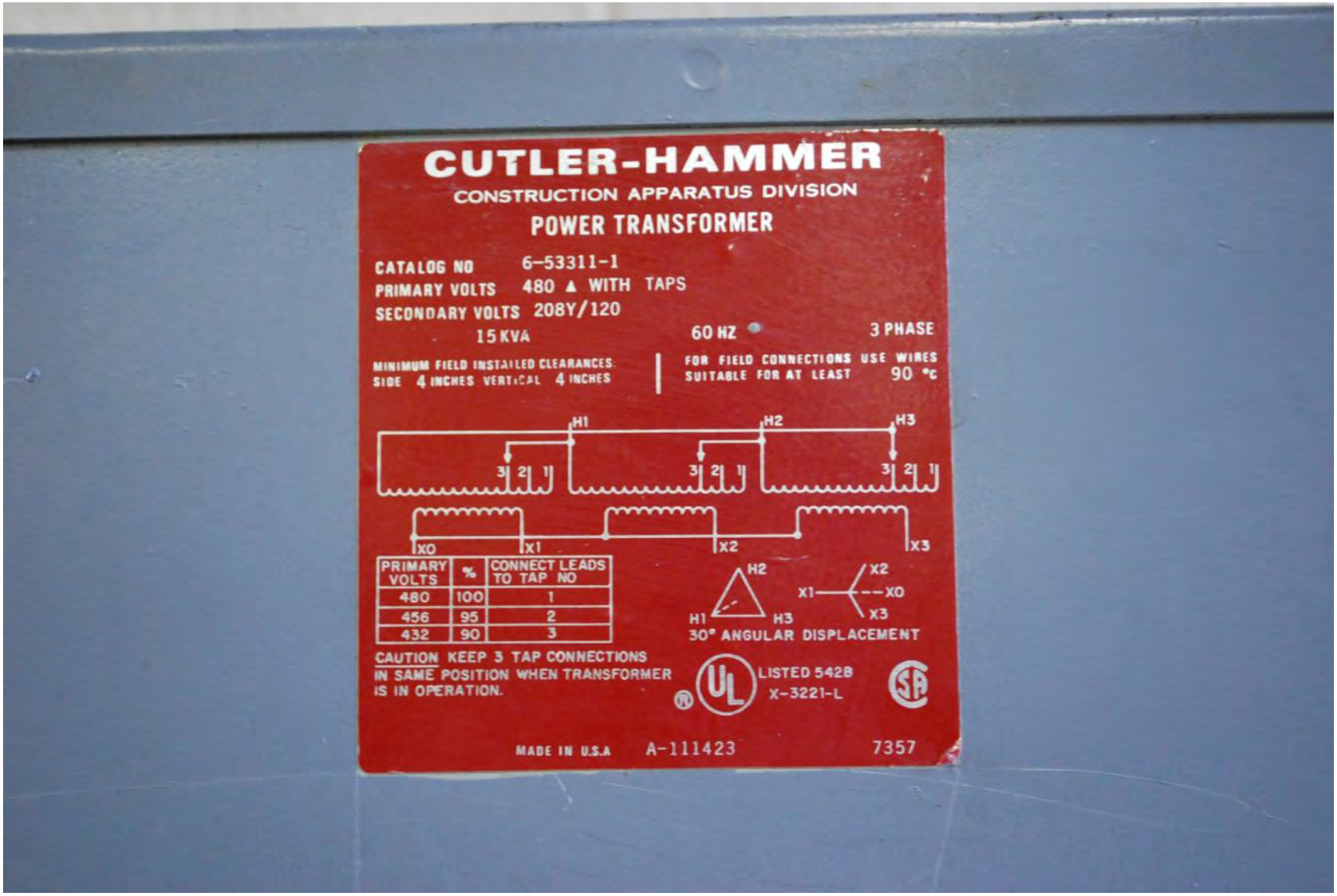


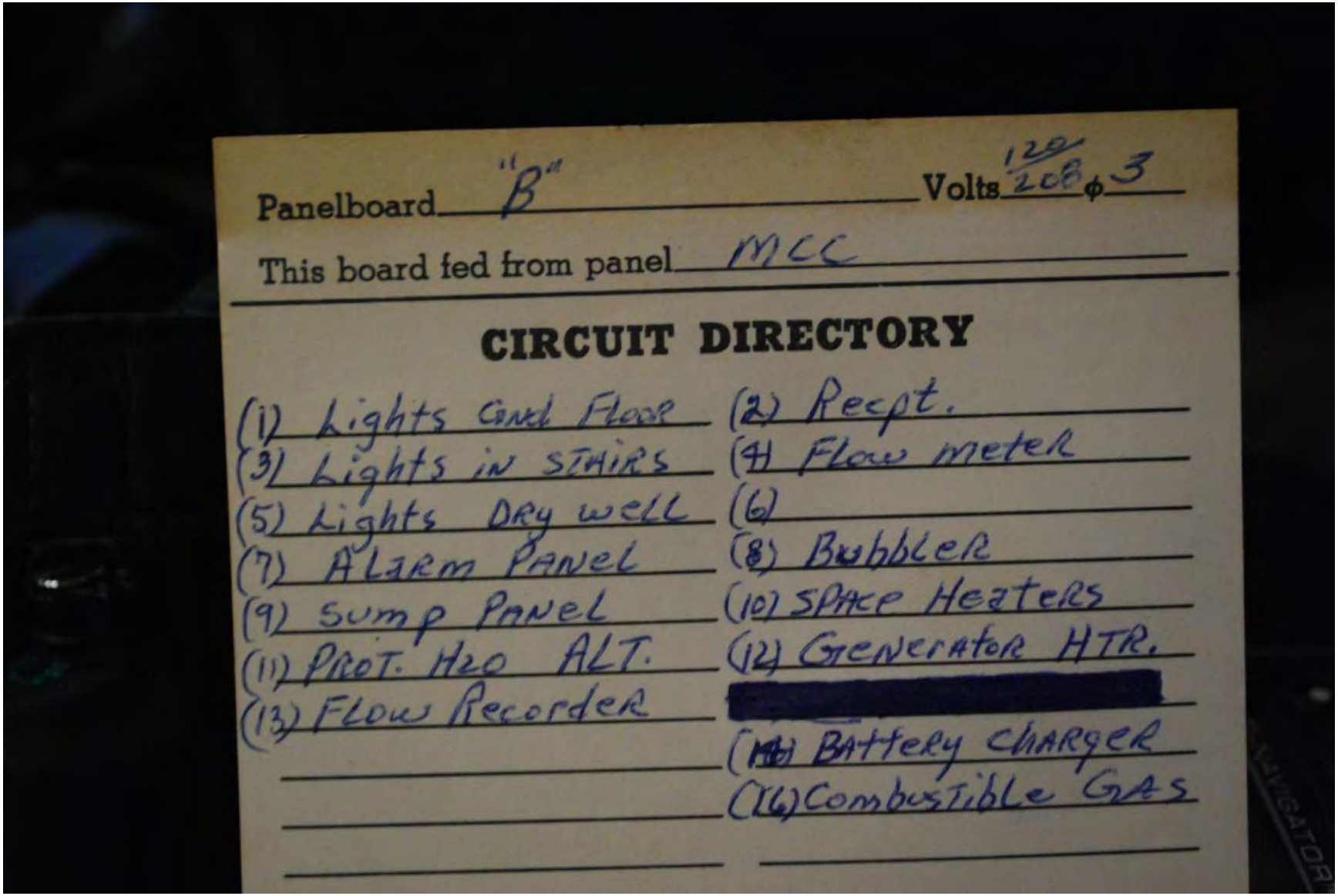



CR-7
LAMP
F-5



(1) 1N896
(1) 1N896


CUTLER-HAMMER
CONSTRUCTION APPARATUS DIVISION
POWER TRANSFORMER
CATALOG NO 6-53311-1
PRIMARY VOLTS 480 ▲ WITH TAPS
SECONDARY VOLTS 208Y/120
15 KVA
60 HZ
3 PHASE
MINIMUM FIELD INSTALLED CLEARANCES:
SIDE 4 INCHES VERTICAL 4 INCHES
FOR FIELD CONNECTIONS USE WIRES
SUITABLE FOR AT LEAST 90 °C
H1
H2
H3
3 2 1
3 2 1
3 2 1
X0
X1
X2
X3
PRIMARY VOLTS | % | CONNECT LEADS TO TAP NO
480 | 100 | 1
456 | 95 | 2
432 | 90 | 3
H2
X2
X1
X0
H1
H3
X3
30° ANGULAR DISPLACEMENT
CAUTION KEEP 3 TAP CONNECTIONS IN SAME POSITION WHEN TRANSFORMER IS IN OPERATION.
LISTED 5428
X-3221-L
MADE IN U.S.A
A-111423
7357

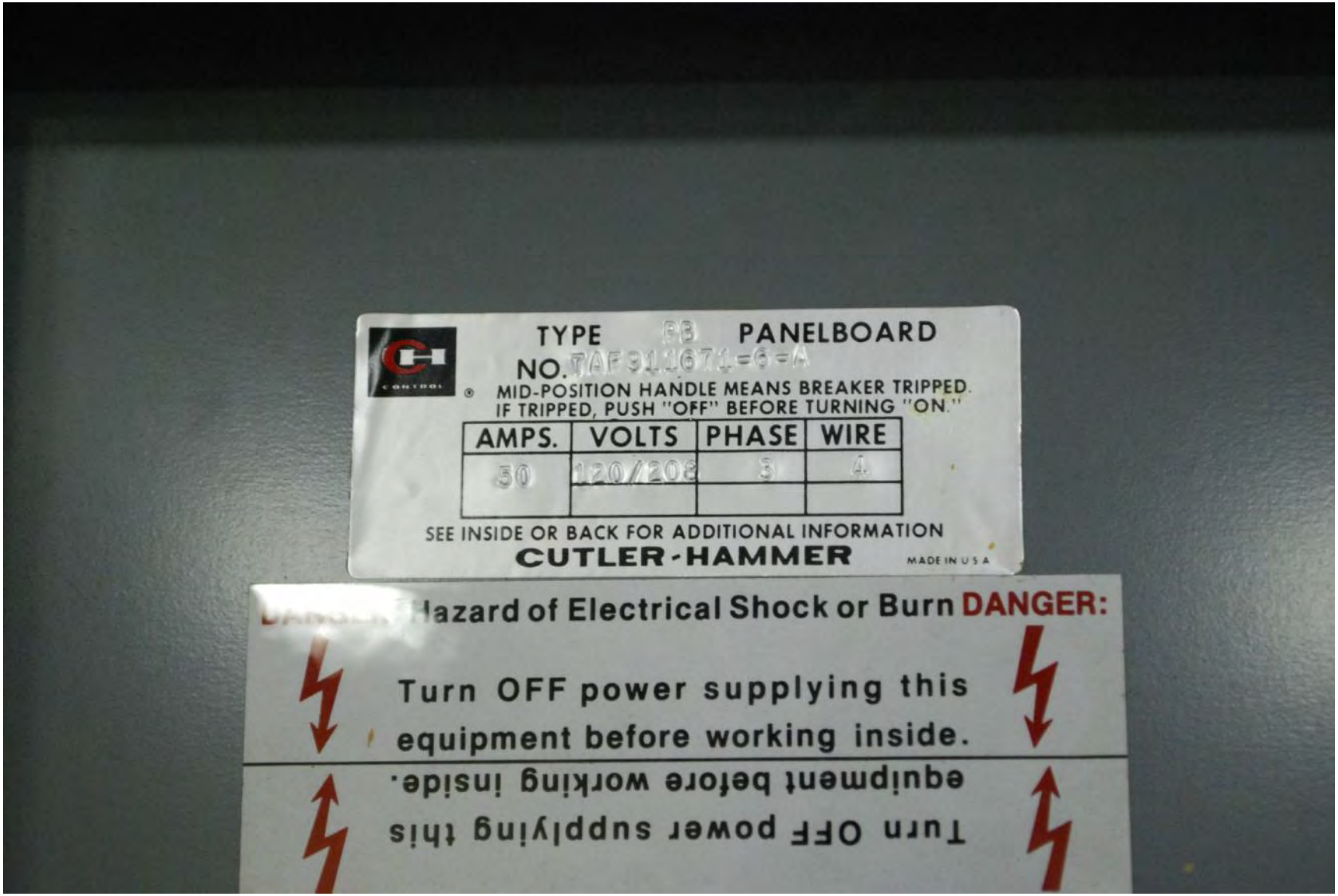


Panelboard "B" Volts 120/208 φ 3

This board fed from panel MCC

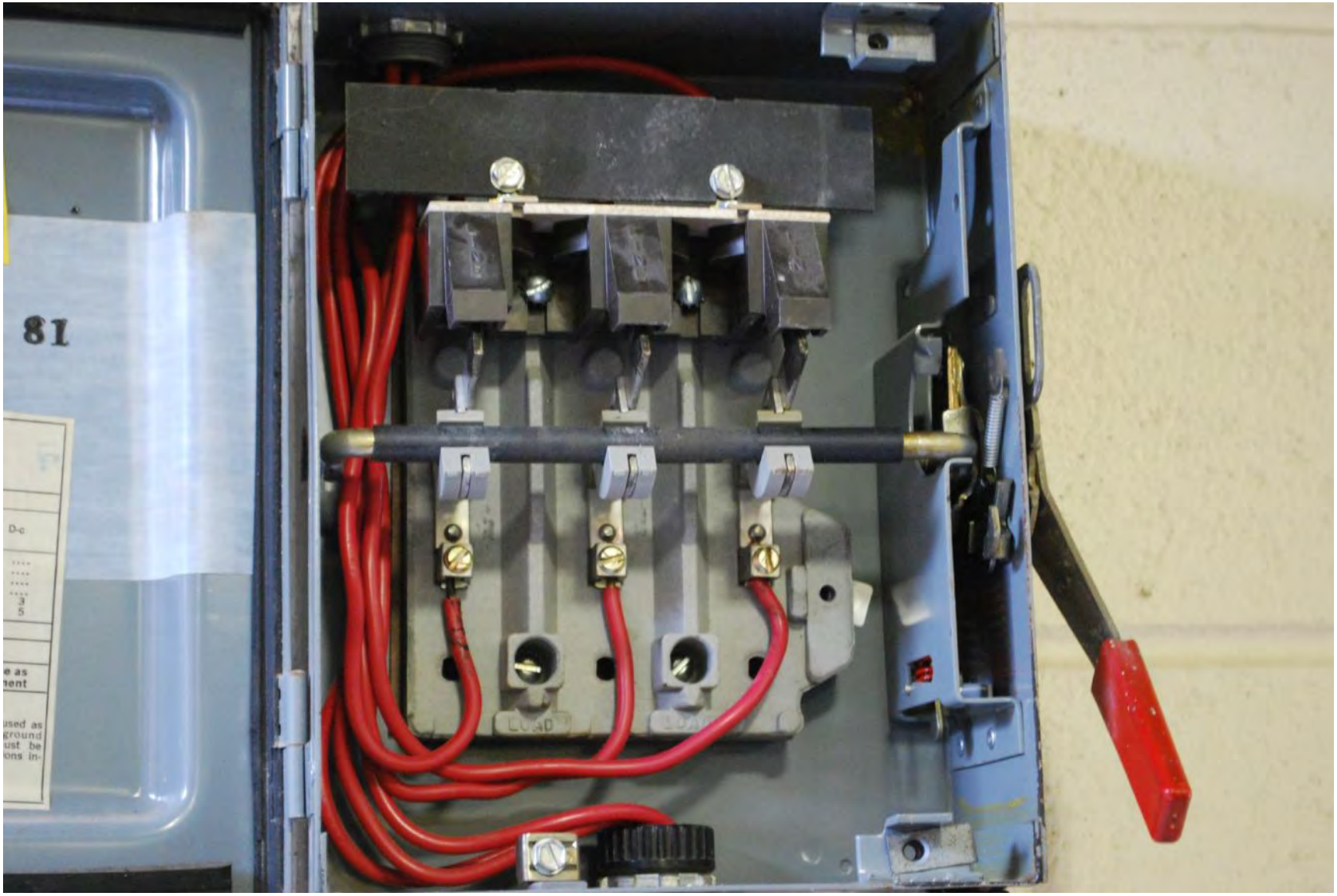
CIRCUIT DIRECTORY

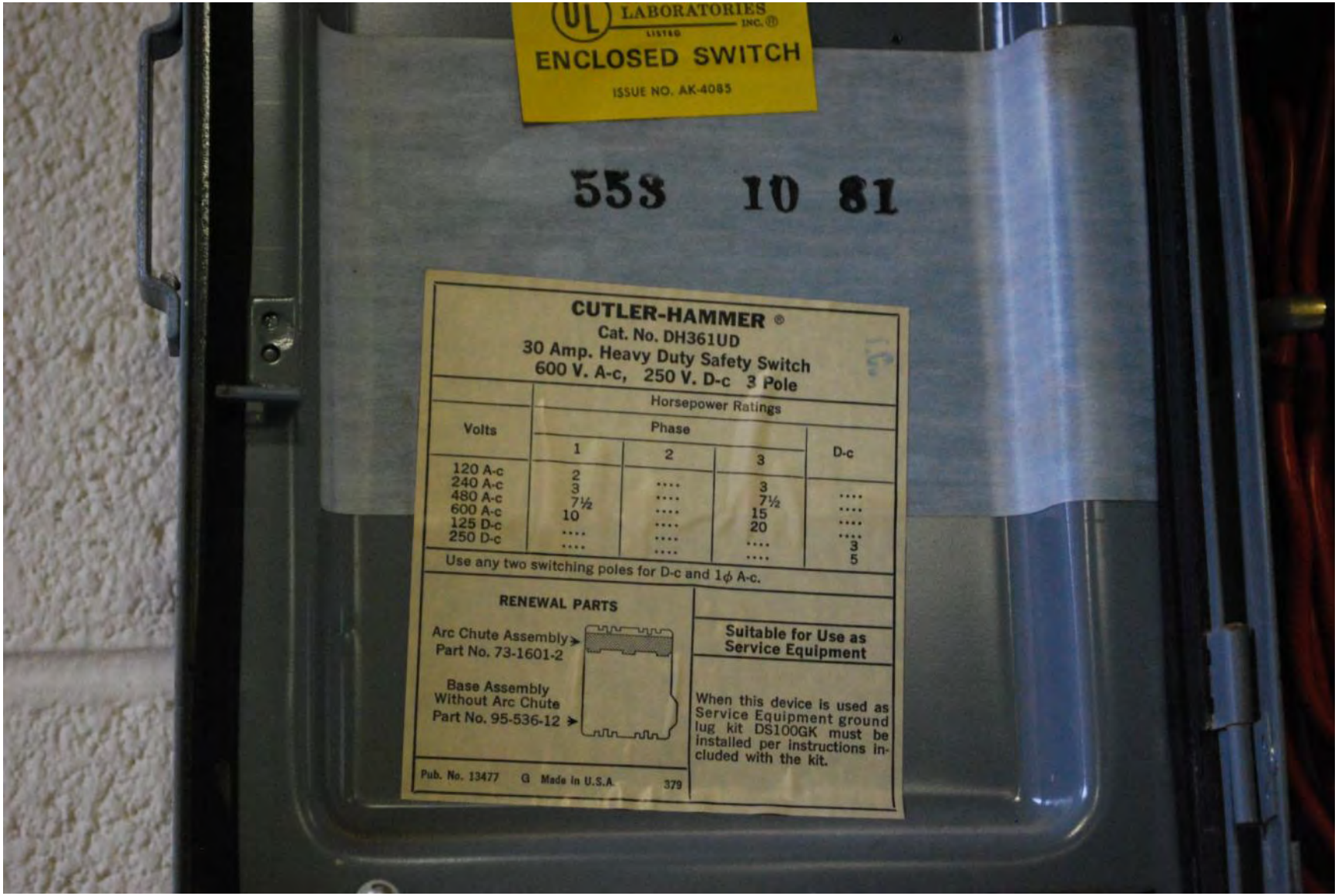
(1) Lights Gnd Floor
(2) Recpt.
(3) Lights in Stairs
(4) Flow meter
(5) Lights Dry well
(6)
(7) Alarm Panel
(8) Bubbler
(9) Sump Panel
(10) Space Heaters
(11) Prot. H2O Alt.
(12) Generator HTR.
(13) Flow Recorder
[redacted]
(14) Battery Charger
(15) Combustible Gas


TYPE PANELBOARD
NO.
MID-POSITION HANDLE MEANS BREAKER TRIPPED.
IF TRIPPED, PUSH "OFF" BEFORE TURNING "ON."
AMPS. VOLTS PHASE WIRE
30 120/208 3 4
SEE INSIDE OR BACK FOR ADDITIONAL INFORMATION
CUTLER-HAMMER
MADE IN U.S.A.
Hazard of Electrical Shock or Burn DANGER:
Turn OFF power supplying this
equipment before working inside.

CUTLER-HAMMER
DANGER: Hazard of Electrical Shock or Burn DANGER:
Turn OFF power supplying this equipment before working inside.
DANGER: Hazard of Electrical Shock or Burn DANGER:
Turn OFF power supplying this equipment before working inside.
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
18
20

TYPE PB PANELBOARD
NO. VAF 91 1671-6-A
MID-POSITION HANDLE MEANS BREAKER TRIPPED.
IF TRIPPED, PUSH "OFF" BEFORE TURNING "ON."
AMPS.
VOLTS
PHASE
WIRE
50
120/208
4
SEE INSIDE OR BACK FOR ADDITIONAL INFORMATION
CUTLER-HAMMER
MADE IN U.S.A.
DANGER: Hazard of Electrical Shock or Burn DANGER:
Turn OFF power supplying this
equipment before working inside.

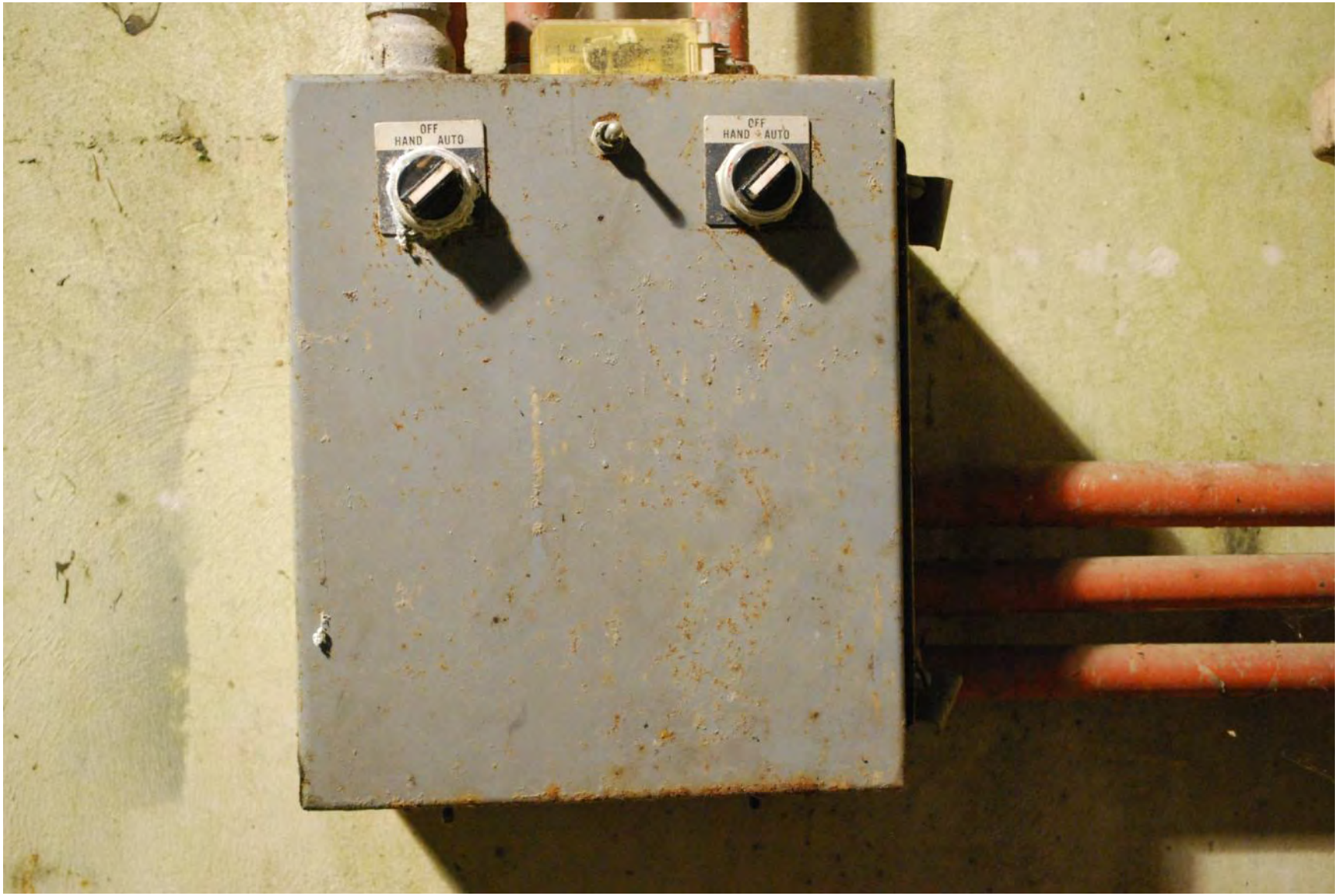

81
LOAD


UL LABORATORIES INC.
LISTED
ENCLOSED SWITCH
ISSUE NO. AK-4085
558 10 81
CUTLER-HAMMER ®
Cat. No. DH361UD
30 Amp. Heavy Duty Safety Switch
600 V. A-c, 250 V. D-c 3 Pole
Horsepower Ratings
Volts
Phase
1
2
3
D-c
120 A-c 2
240 A-c 3 3
480 A-c 7½ .... 7½ ....
600 A-c 10 .... 15 ....
125 D-c .... 20 ....
250 D-c 3
.... 5
Use any two switching poles for D-c and 1ϕ A-c.
RENEWAL PARTS
Arc Chute Assembly
Part No. 73-1601-2
Base Assembly
Without Arc Chute
Part No. 95-536-12
Suitable for Use as Service Equipment
When this device is used as Service Equipment ground lug kit DS100GK must be installed per instructions included with the kit.
Pub. No. 13477 G Made in U.S.A. 379

BALDOR
INDUSTRIAL MOTOR
BALDOR ELECTRIC CO
FT. SMITH, AR. MFG. IN U.S.A.
CAT. NO.
SPEC.
HP
VOLTS
AMPS
R.P.M.
FRAME
SER. F.
NEMA NOM. EFF.
RATING
CC
BEARINGS
ENCL.
184TC
HZ
60
PH
3
CODE
J
DES
B
CLASS
F
P.F.
%
USABLE AT 208V
13.8 A
DE
DDE
6205
TEFC
SN
NP1255

BALDOR®
INDUSTRIAL MOTOR
BALDOR ELECTRIC CO.
FT. SMITH, AR. MFG. IN U.S.A.
CAT. NO.
SPEC.
HP
VOLTS
AMPS
R.P.M.
FRAME
SER. F.
NEMA NOM. EFF
RATING
CC
BEARINGS
ENCL.
HZ
PH
CODE
DES
CLASS
P.F.
%
USABLE AT 208V
A
DE
ODE
SN
TEFC
NP1256

WARNING
REMOVING THIS METER
DOES NOT
DISCONNECT ELECTRIC SERVICE
8504


OFF
HAND AUTO
OFF
HAND AUTO

U.S. ELECTRICAL MOTORS
NOMINAL POWER SYSTEM
VOLTAGE 240-480
WARNING

CAL. 0-20.0 Ft.WC
SIGMA CONTROLS INC.
6.86
FUSE
ENTER
ACK
SIGMA CONTROLS INC.

A CONTROLS INC.

SER. NO.
VOLTS HERTZ PH. WIRE
CONTROL VOLTS VERTICAL BUS AMPS
HORIZONTAL BUS AMPS
MAXIMUM SHORT-CIRCUIT RATING IS AMPS
RMS SYMMETRICAL VOLTS MAXIMUM. DO NOT INSTALL ON CIRCUITS WITH AVAILABLE SHORT-CIRCUIT CURRENTS GREATER THAN THE LOWEST SHORT-CIRCUIT RATING OF THE INSTALLED UNIT.
DIAGRAMS, INSTRUCTION BOOK CONTAINING HEATER COIL SELECTION TABLES, FIELD WIRING REQUIREMENTS, AND OTHER PERTINENT DATA ARE LOCATED BEHIND THIS DOOR.
SECTION CONTROL CENTER
CUTLER-HAMMER
MADE IN U.S.A.

TURBINE PUMP
AURORA PU

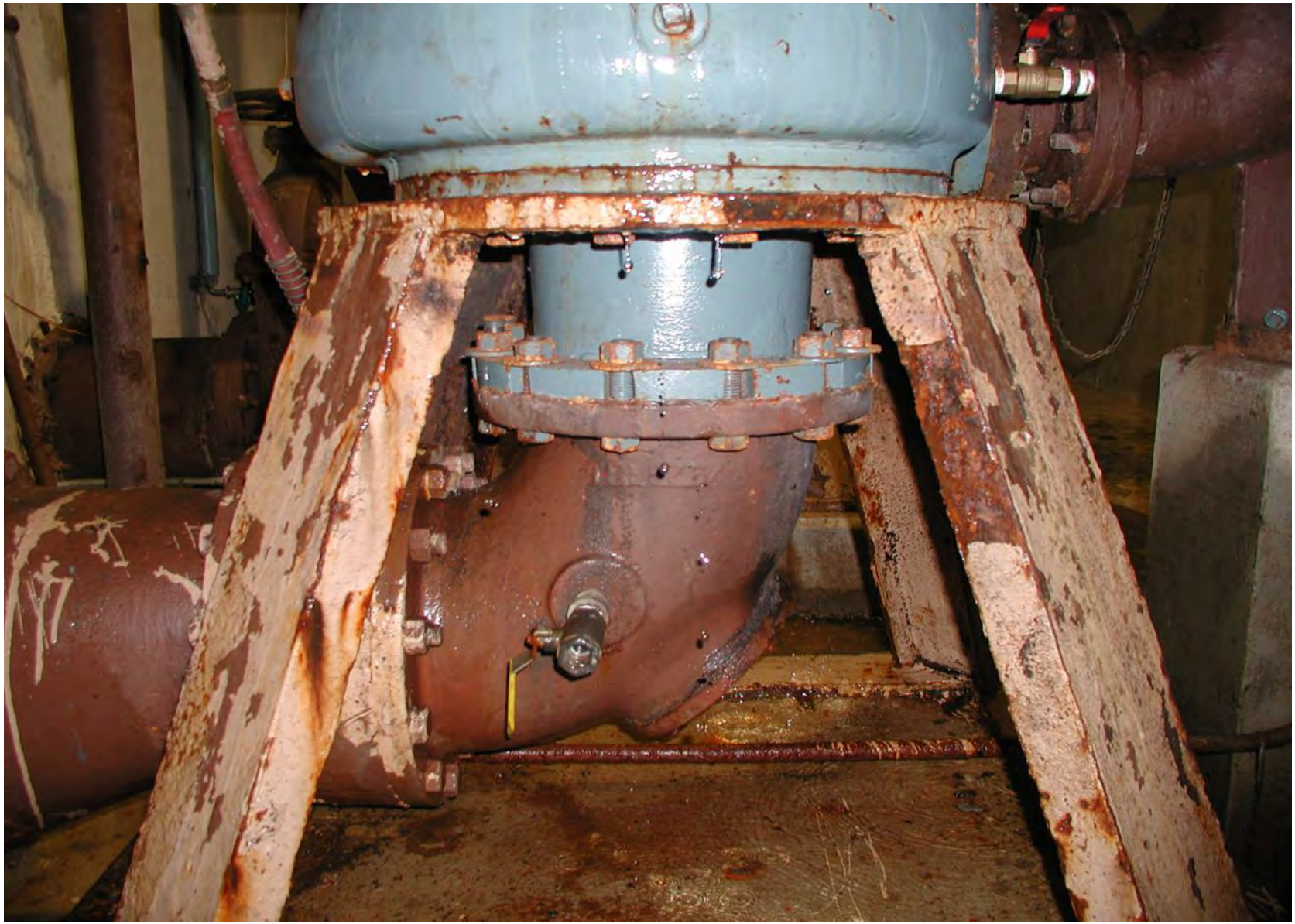
DANGER
HIGH
VOLTAGE

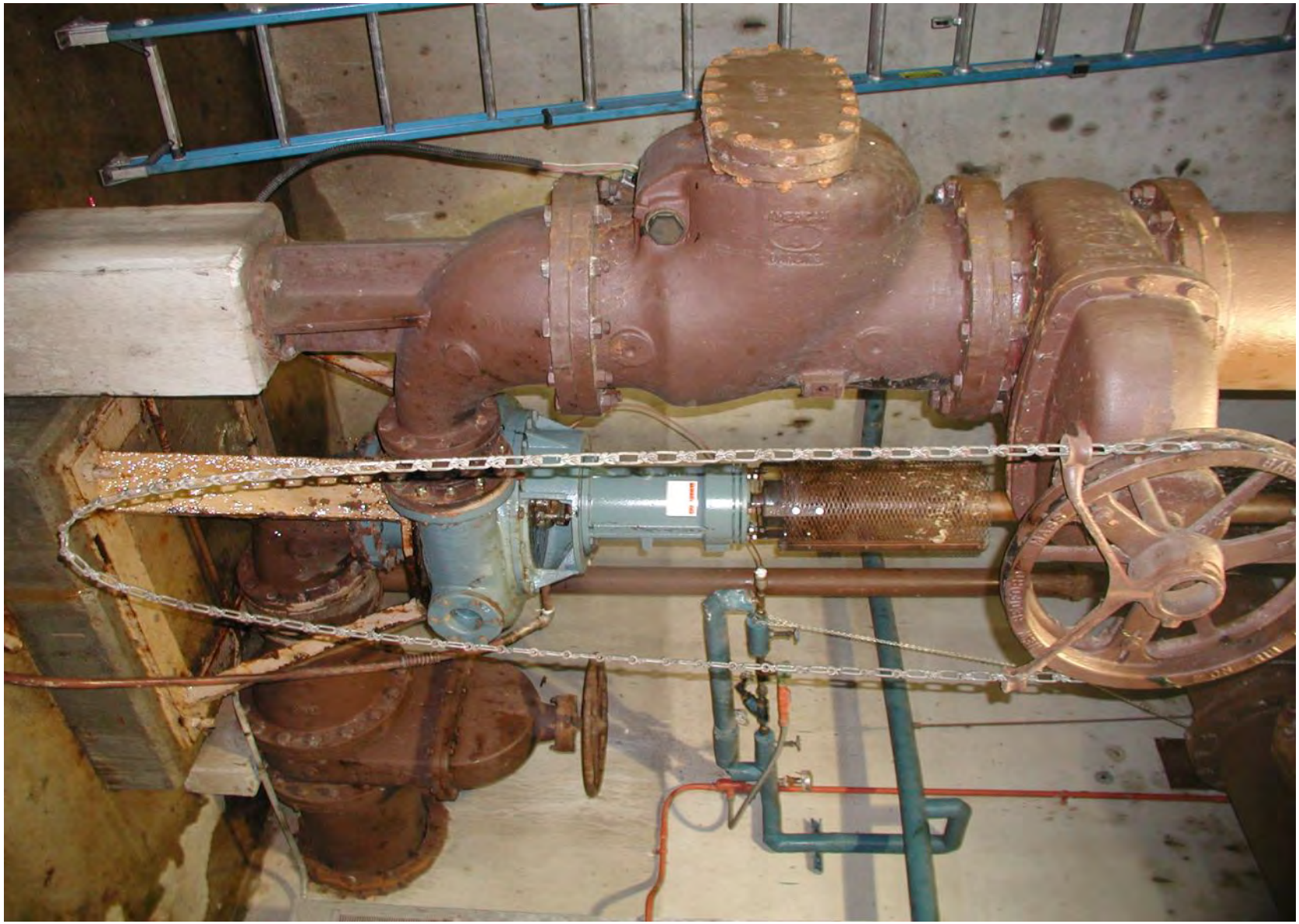
2

FISCHER & PORTER
FRIDAY
THURSDAY
WEDNESDAY
TUESDAY
SUNDAY
SATURDAY
NOON

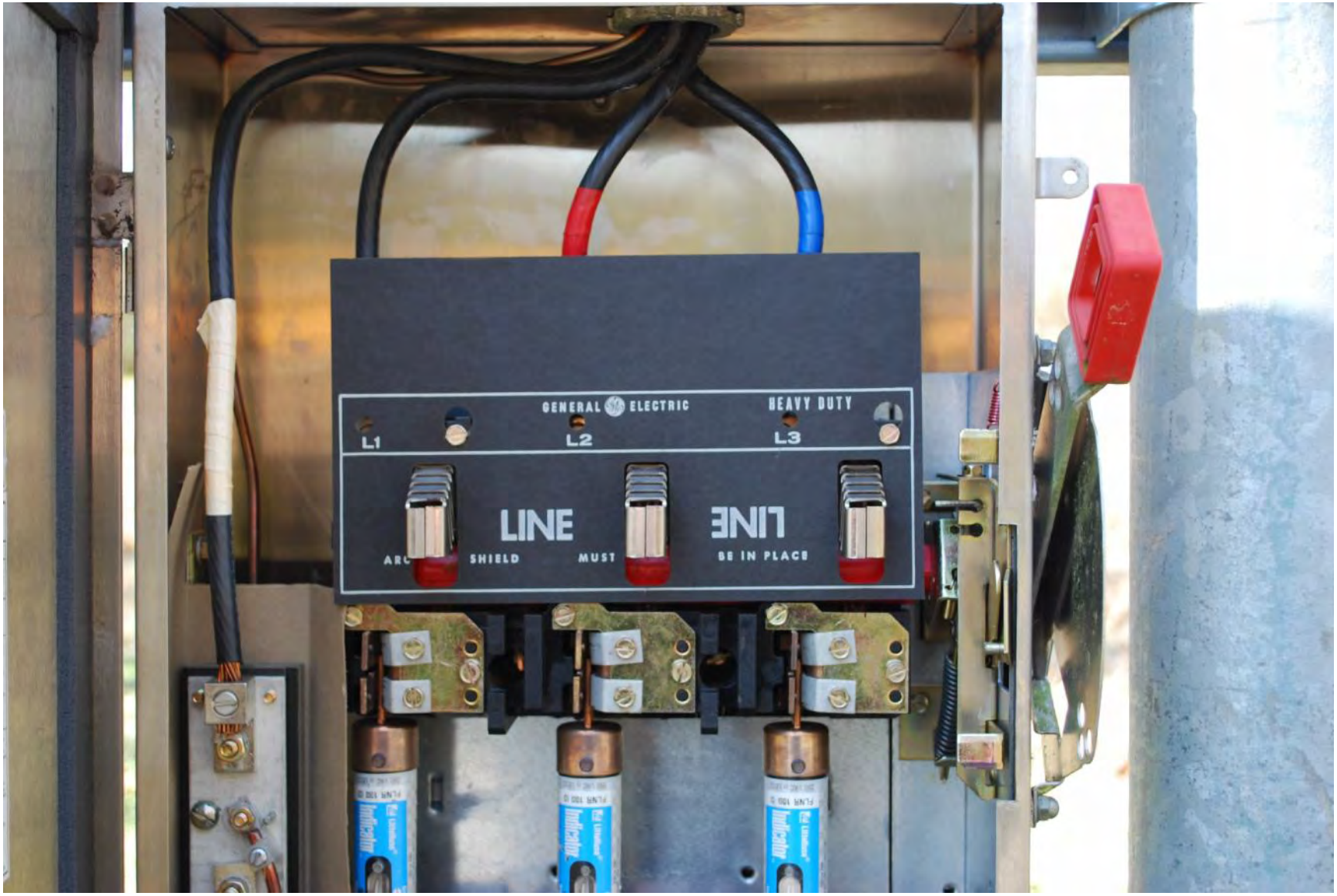
POWER ON
GRINDER OVERLOAD
MOTOR OVERLOAD
RUN
OIL OVERTEMP
LOW OIL LEVEL
OFF/RESET
HAND AUTO
MUFFIN MONSTER
CAUTION
HIGH VOLTAGE
THIS EQUIPMENT MAY START, STOP, REVERSE OR RESTART AUTOMATICALLY. ELECTRICAL LOCKOUT PROCEDURES MUST BE UTILIZED PRIOR TO ANY SERVICE OF THE CONTROLLER OR EQUIPMENT.
REFER TO O&M PRIOR TO SERVICE OR OPERATION.

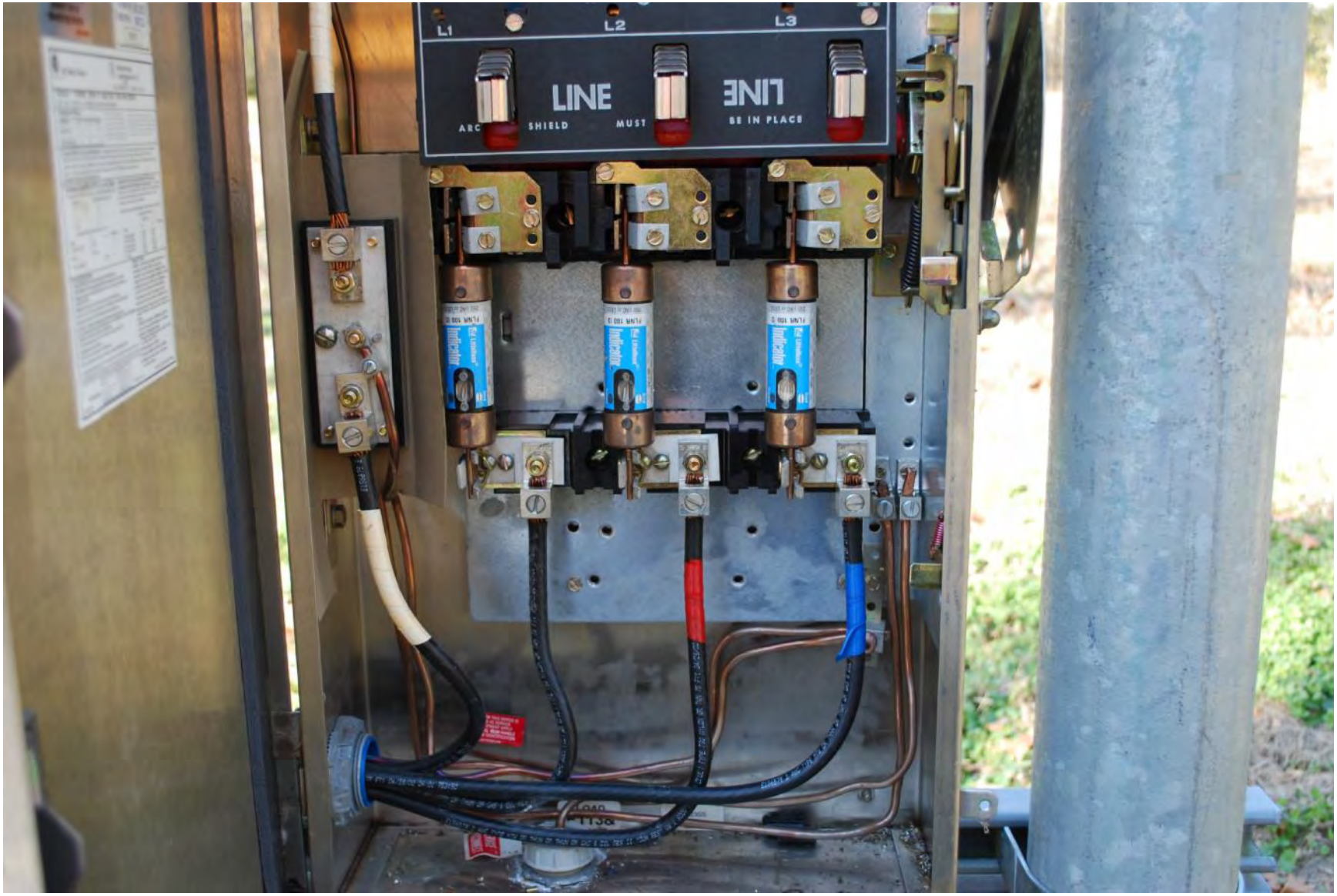
D154 CONTROLLER
U.S.FILTER
REQUIRED
RUN
FAIL
HAND OFF AUTO
REQUIRED
RUN
FAIL
HAND OFF AUTO





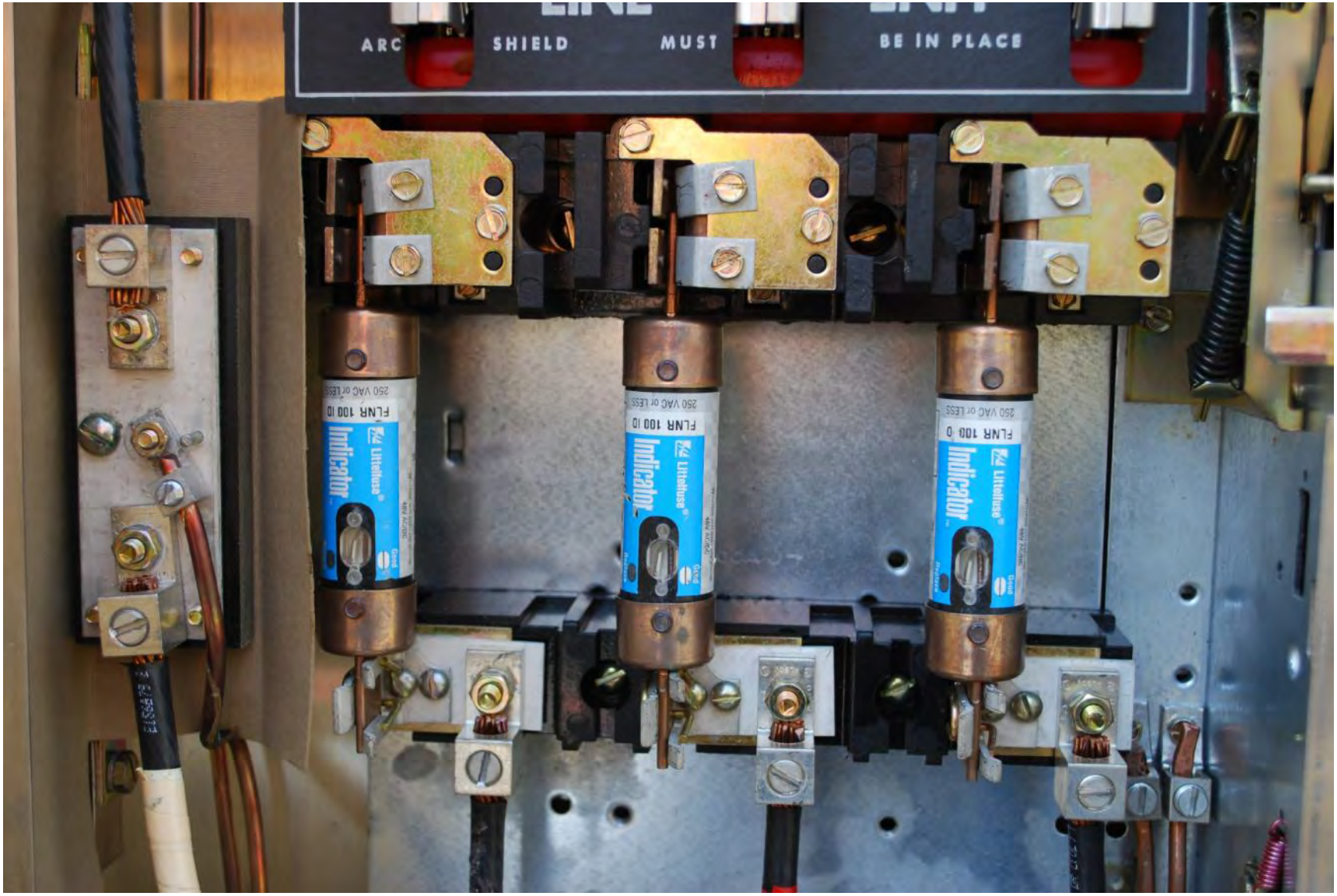
ON
OFF

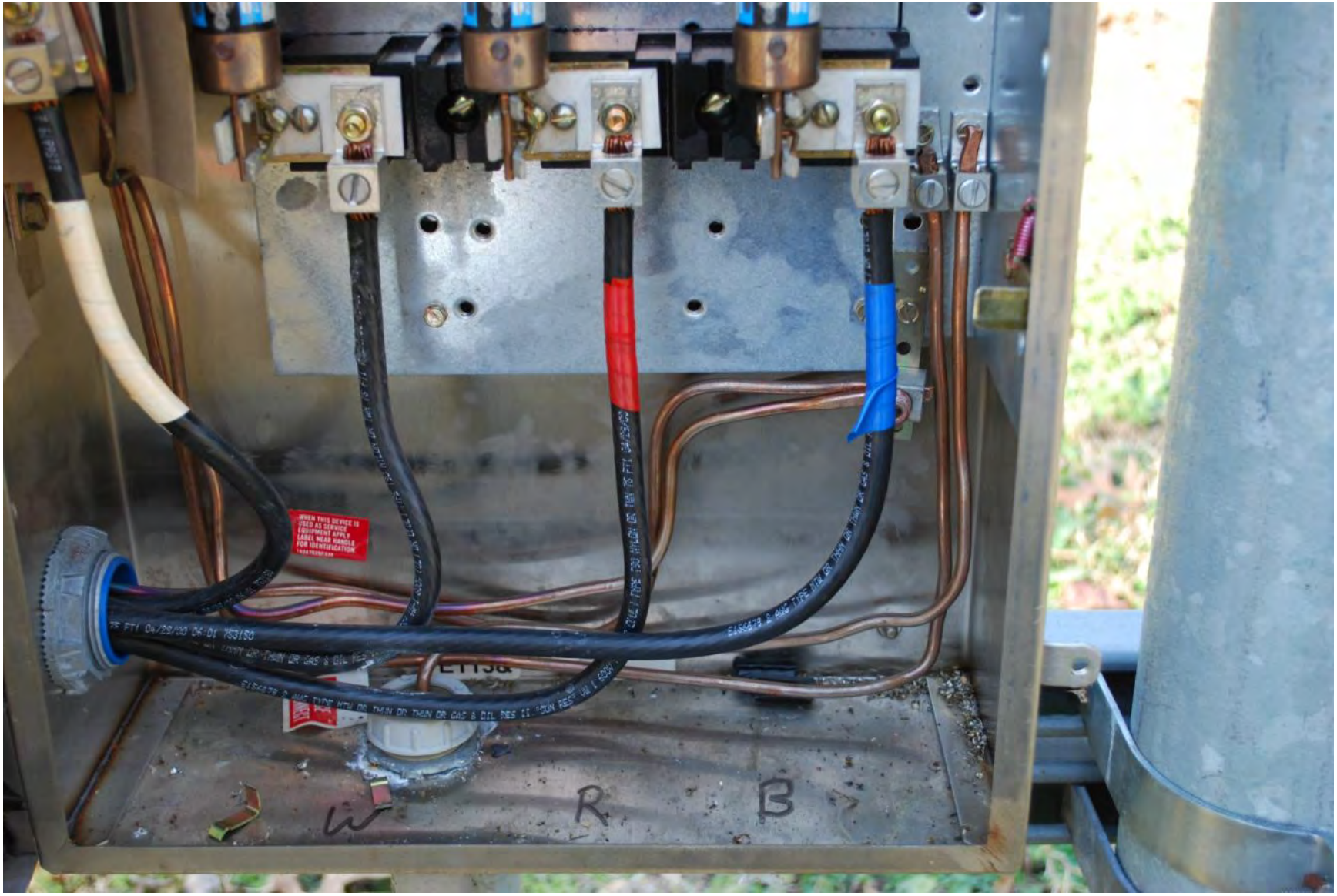

GENERAL ELECTRIC
HEAVY DUTY
L1
L2
L3
LINE
SHIELD
MUST
BE IN PLACE


L1
L2
L3
LINE
ARC SHIELD MUST
LINE
BE IN PLACE

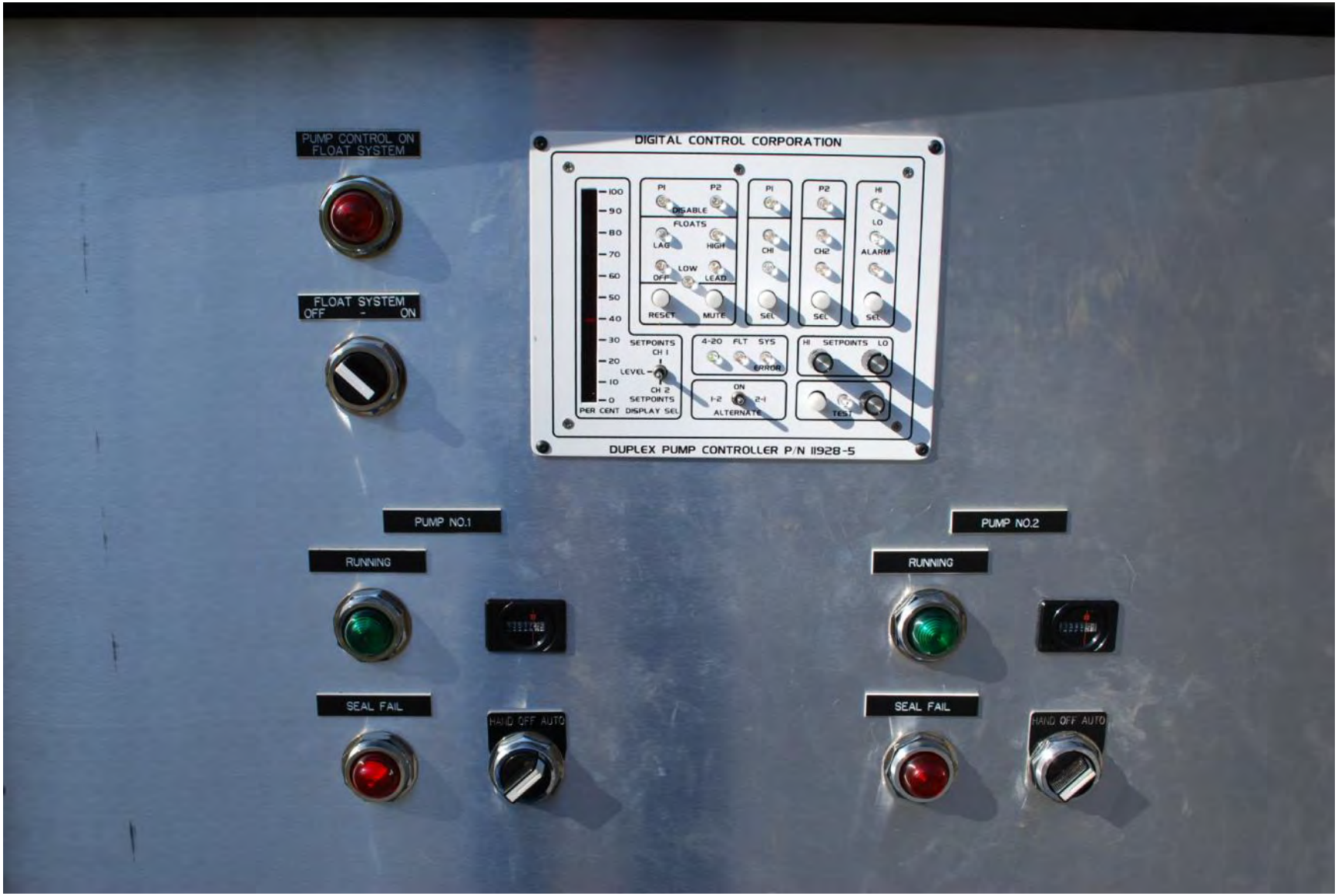
FLNR 100 ID
250 VAC or LESS
Littelfuse
Indicator
Good
FLNR 100 ID
250 VAC or LESS
Littelfuse
Indicator
Good
FLNR 100 D
250 VAC or LESS
Littelfuse
Indicator
Good

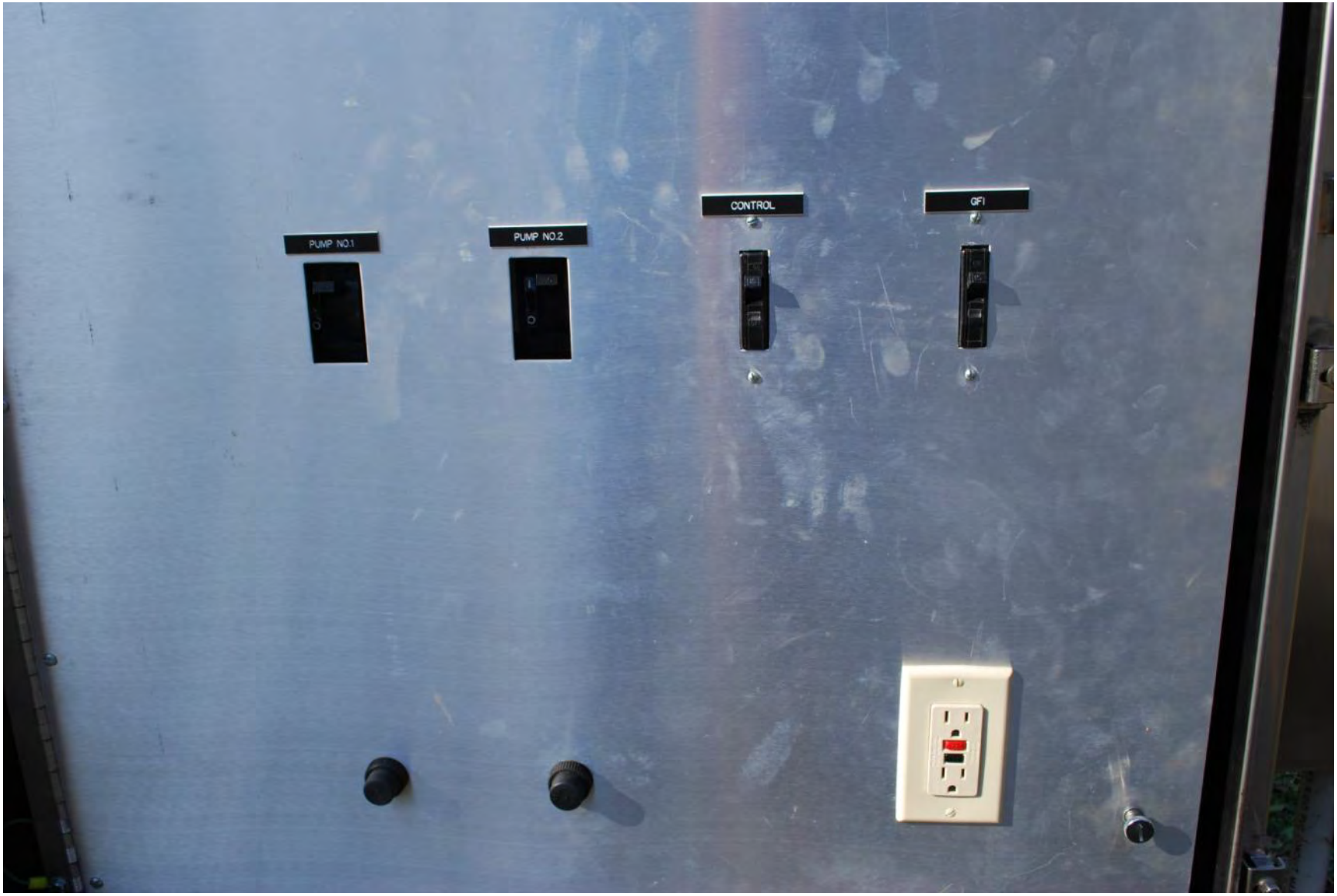
LINE
LINE


ARC
SHIELD
MUST
BE IN PLACE
Littelfuse
Indicator
FLNR 100 10
250 VAC or LESS

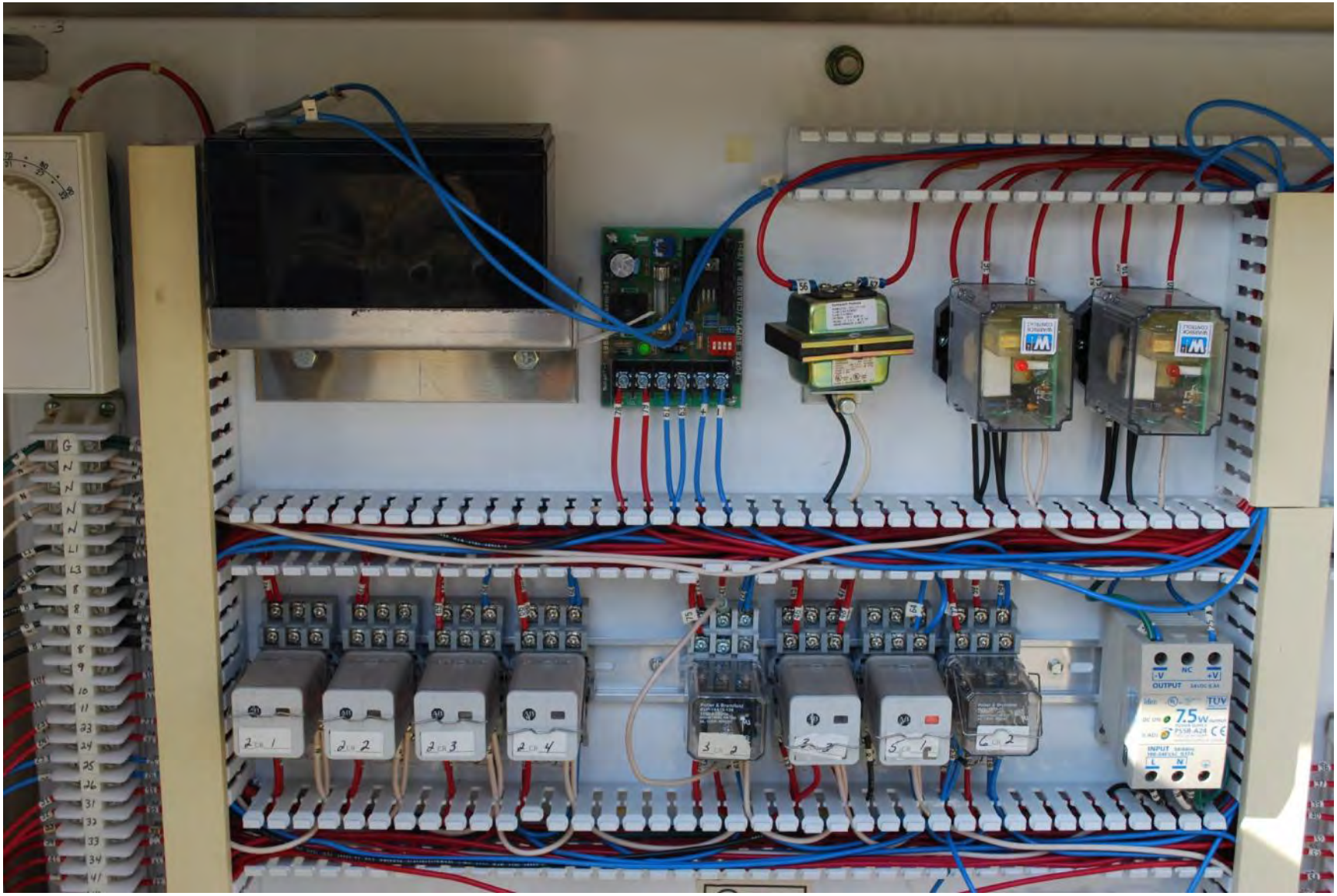

W
R
B

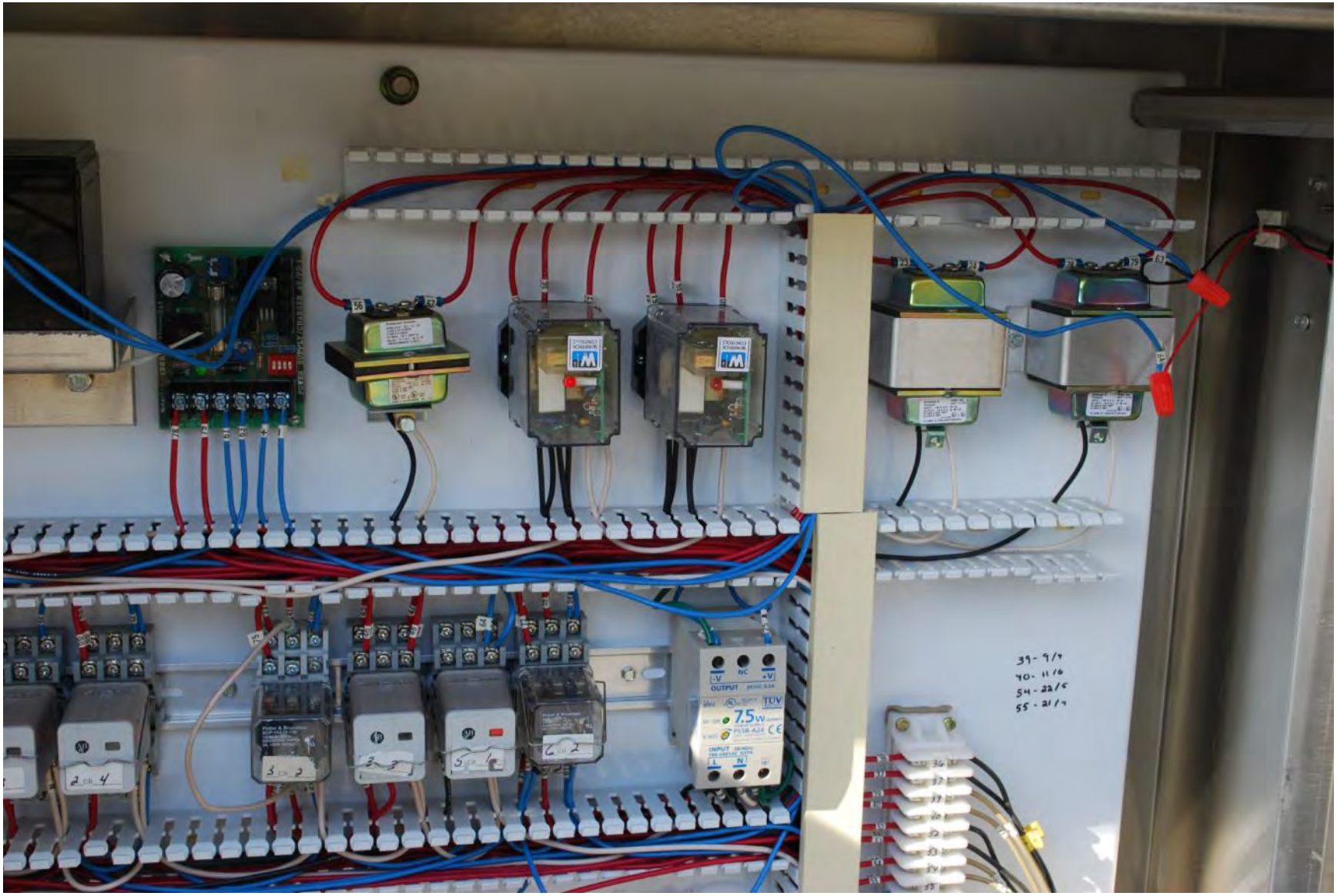
DIGITAL CONTROL CORPORATION
100
90
80
70
60
50
40
30
20
10
0
PER CENT
P1
P2
DISABLE
FLOATS
LAG
HIGH
OFF
LOW
LEAD
RESET
MUTE
P1
CH1
SEL
P2
CH2
SEL
HI
LO
ALARM
SEL
SETPOINTS
CH 1
LEVEL
CH 2
SETPOINTS
DISPLAY SEL
4-20
FLT
SYS
ERROR
ON
1-2
2-1
ALTERNATE
HI
SETPOINTS
LO
TEST
DUPLEX PUMP CONTROLLER P/N 11928-5


PUMP CONTROL ON FLOAT SYSTEM
FLOAT SYSTEM
OFF ON
DIGITAL CONTROL CORPORATION
DISABLE
FLOATS
LAG
HIGH
OFF
LOW
LEAD
RESET
MUTE
SETPOINTS
CH 1
LEVEL
CH 2
SETPOINTS
PER CENT DISPLAY SEL
4-20 FLT SYS
ERROR
ON
ALTERNATE
HI SETPOINTS LO
TEST
CH1
CH2
ALARM
SEL
DUPLEX PUMP CONTROLLER P/N 11928-5
PUMP NO.1
RUNNING
SEAL FAIL
HAND OFF AUTO
PUMP NO.2
RUNNING
SEAL FAIL
HAND OFF AUTO

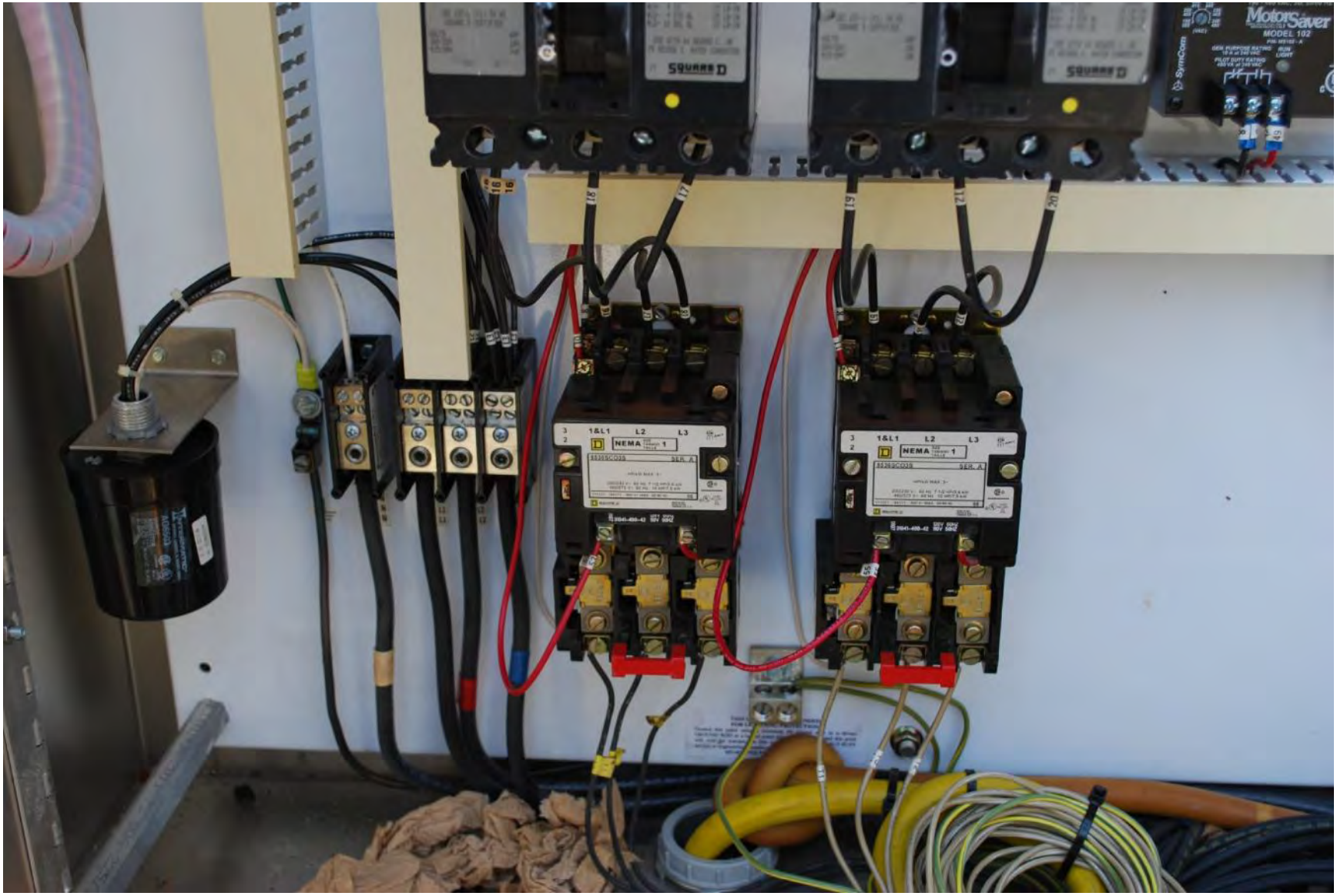

PUMP NO.1
PUMP NO.2
CONTROL
GFI

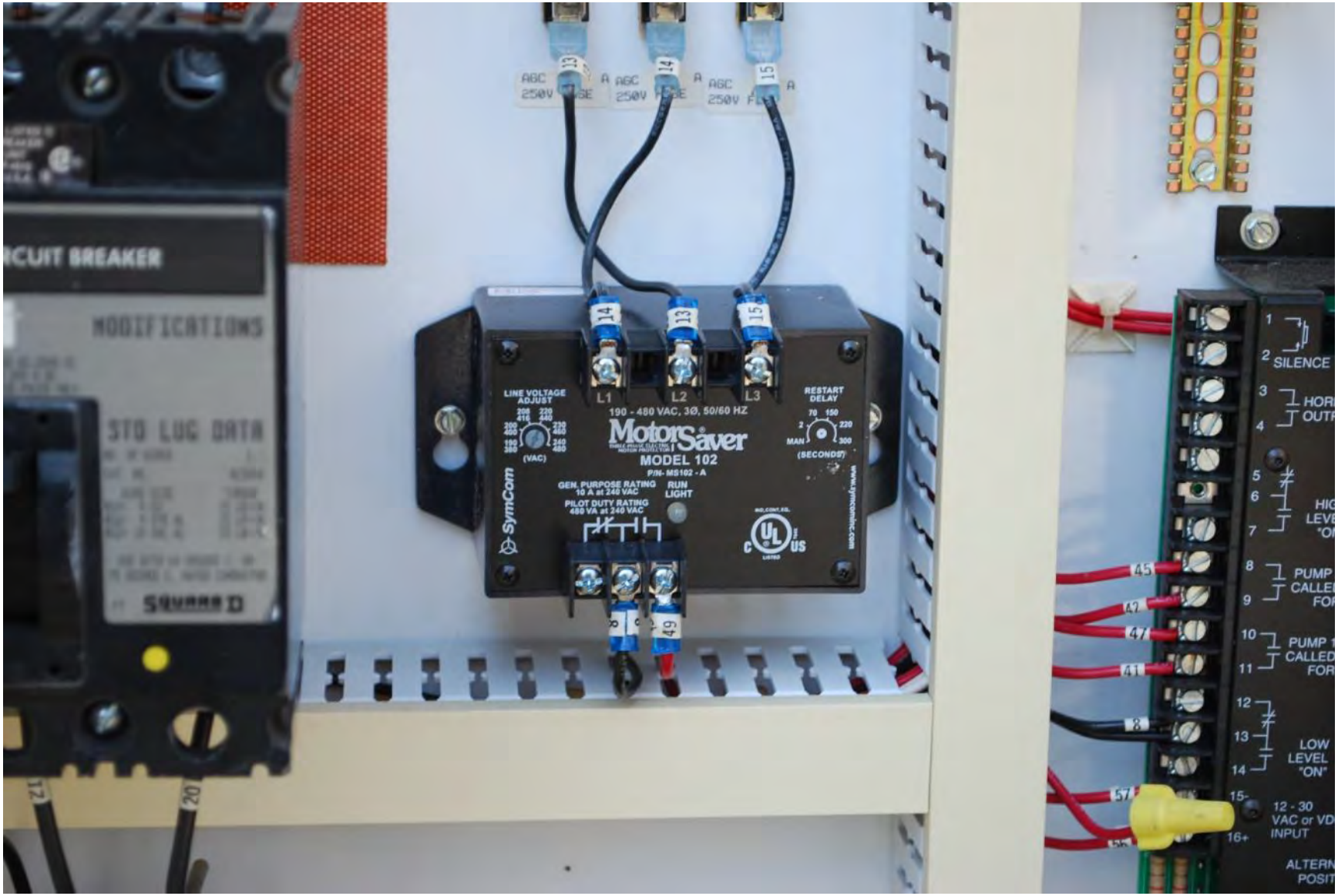
Proudly Built By
Engineer
PSD
Layout
GB
Assy./Wiring
BN
Inspection
BB
Serial No.
85813
Unit
B
Voltage
208 3 PH 4 W
Mfg. Date
5 12 4 10 1
West County Rd. 82, Suite 5
St. Paul MN
(651) 633-7522
Proudly Made in USA
PUMPAK LTD.
ST. PAUL, MINNESOTA
U.L. LISTED
INDUSTRIAL CONTROL PANEL
208 V 3 PH 60HZ
LARGEST MOTOR 5 HP
70 F.L.A. TOTAL
INSTALLER PLEASE NOTE:
THIS CABINET MUST BE MOUNTED PLUMB AND LEVEL SO DOOR(S) WILL CLOSE PROPERLY. SHIM AS NEEDED IF MOUNTING SURFACE IS NOT PLUMB/LEVEL.
HEALY-RUFF CO. (651) 633-7522 (651) 633-2671 Fax

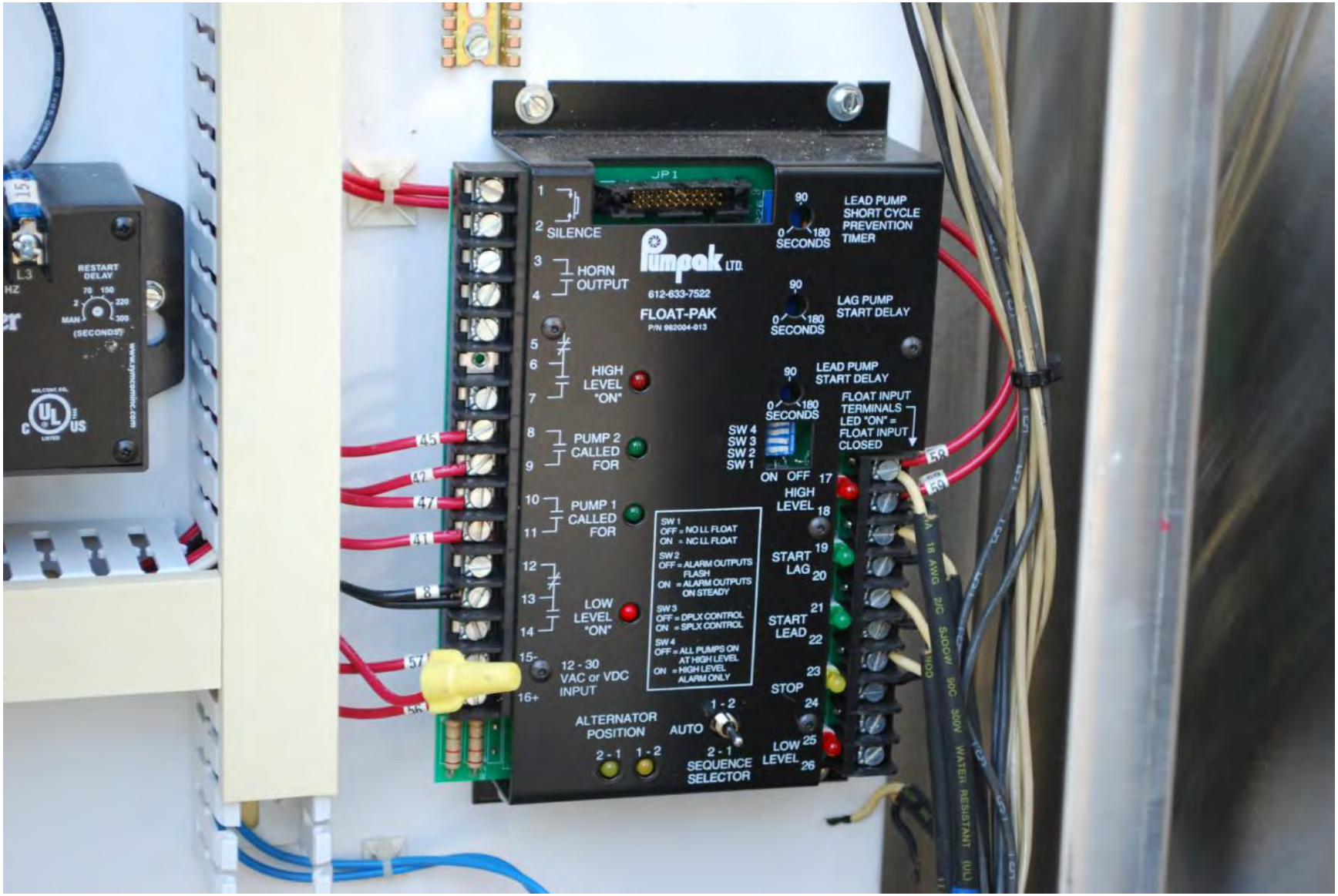

OUTPUT
7.5W

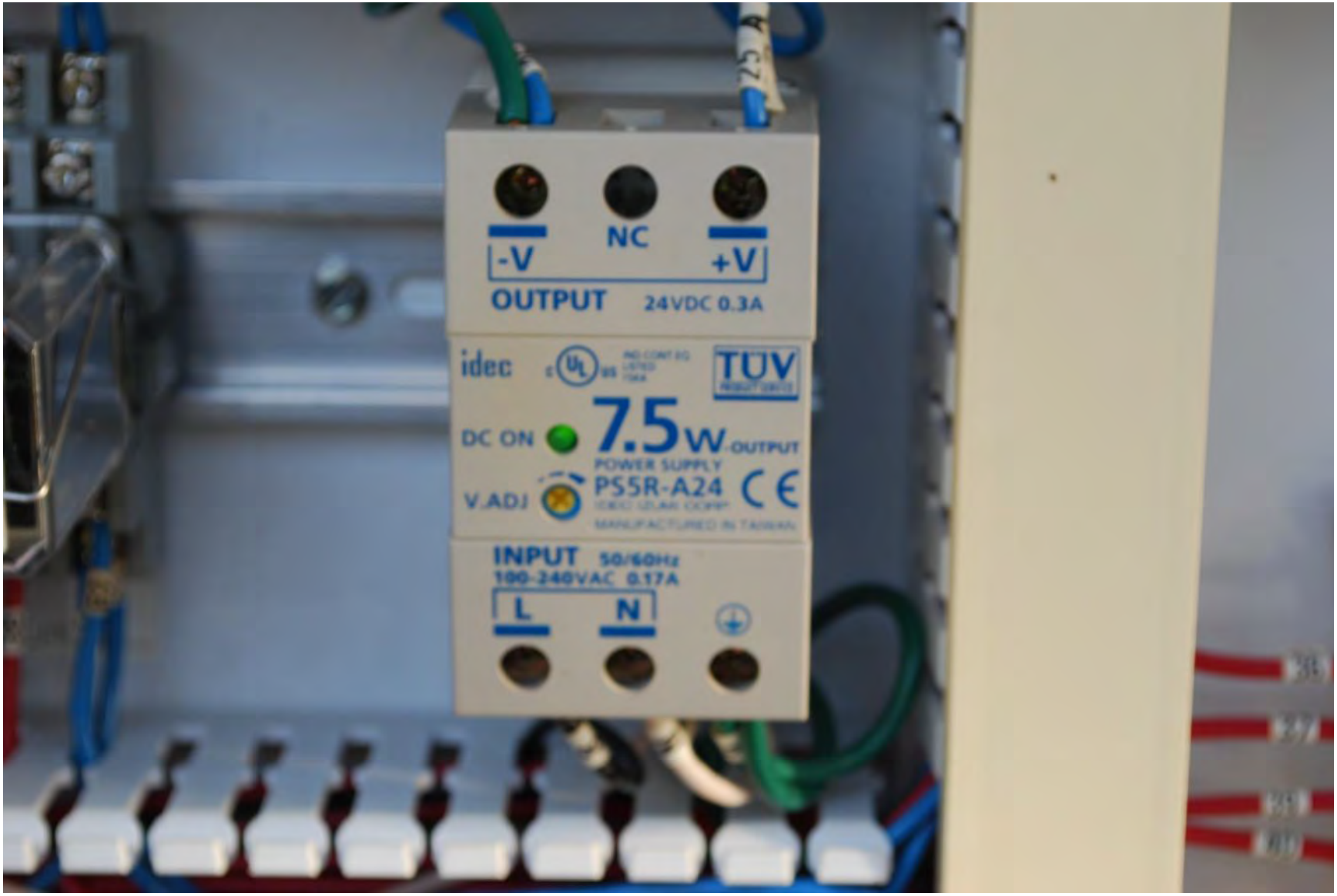

7.5W
OUTPUT
INPUT

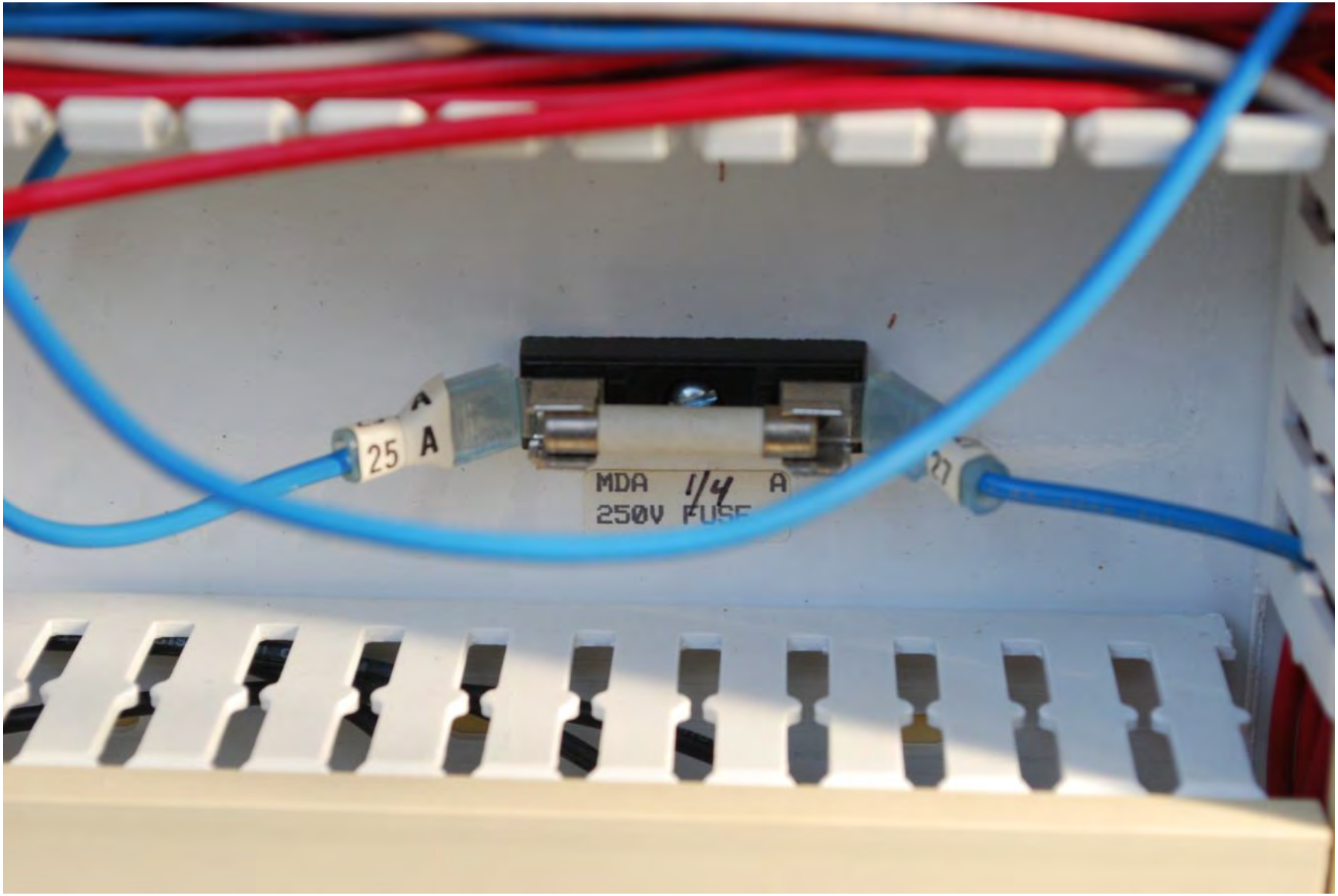
MOLDED CASE CIRCUIT BREAKER
30 AMP
MODIFICATIONS
CATALOG NO.
FAL34030
SERIES 2
STD LUG DATA
SQUARE D
MOLDED CASE CIRCUIT BREAKER
30 AMP
MODIFICATIONS
CATALOG NO.
FAL34030
SERIES 2
STD LUG DATA
SQUARE D
MotorSaver
MODEL 102

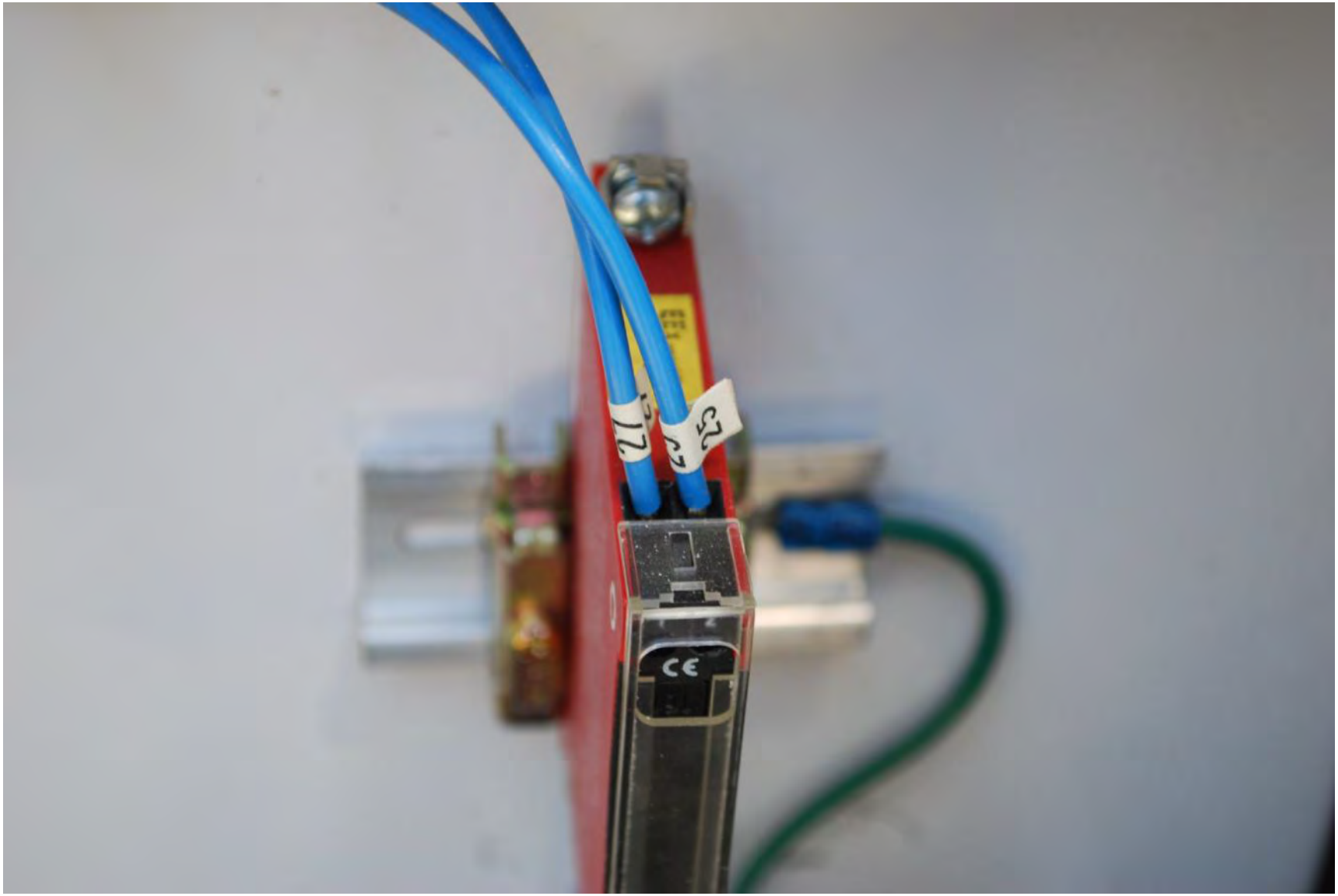

MotorSaver
MODEL 102
SQUARE D
NEMA 1
L1
L2
L3

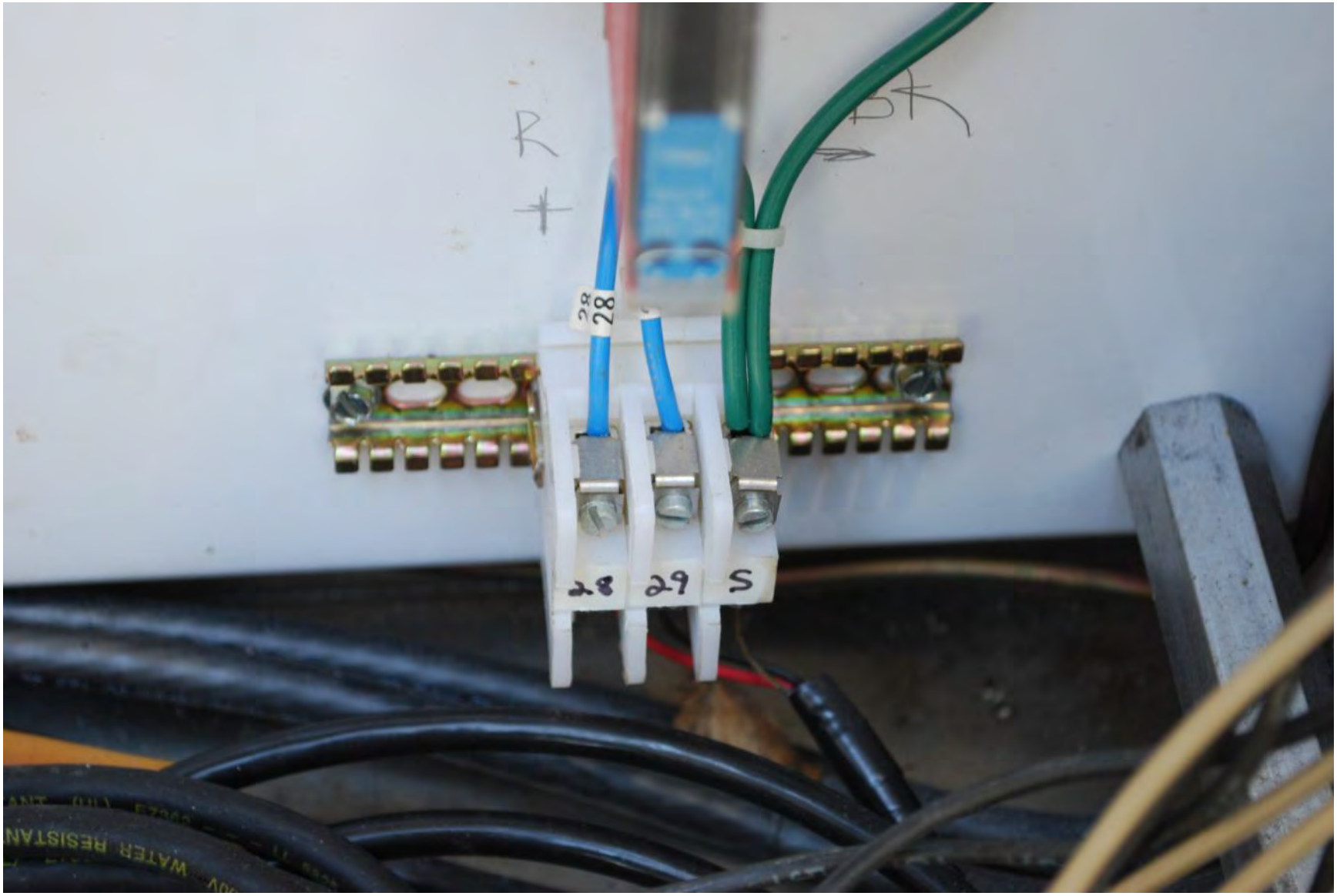

MODIFICATIONS
LINE VOLTAGE ADJUST
L1
L2
L3
190 - 480 VAC, 3Ø, 50/60 HZ
MotorSaver
MODEL 102
P/N- MS102 - A
GEN. PURPOSE RATING
10 A at 240 VAC
PILOT DUTY RATING
480 VA at 240 VAC
RUN LIGHT
RESTART DELAY
(SECONDS)
SymCom
SILENCE
LOW LEVEL "ON"
12 - 30 VAC or VD
INPUT

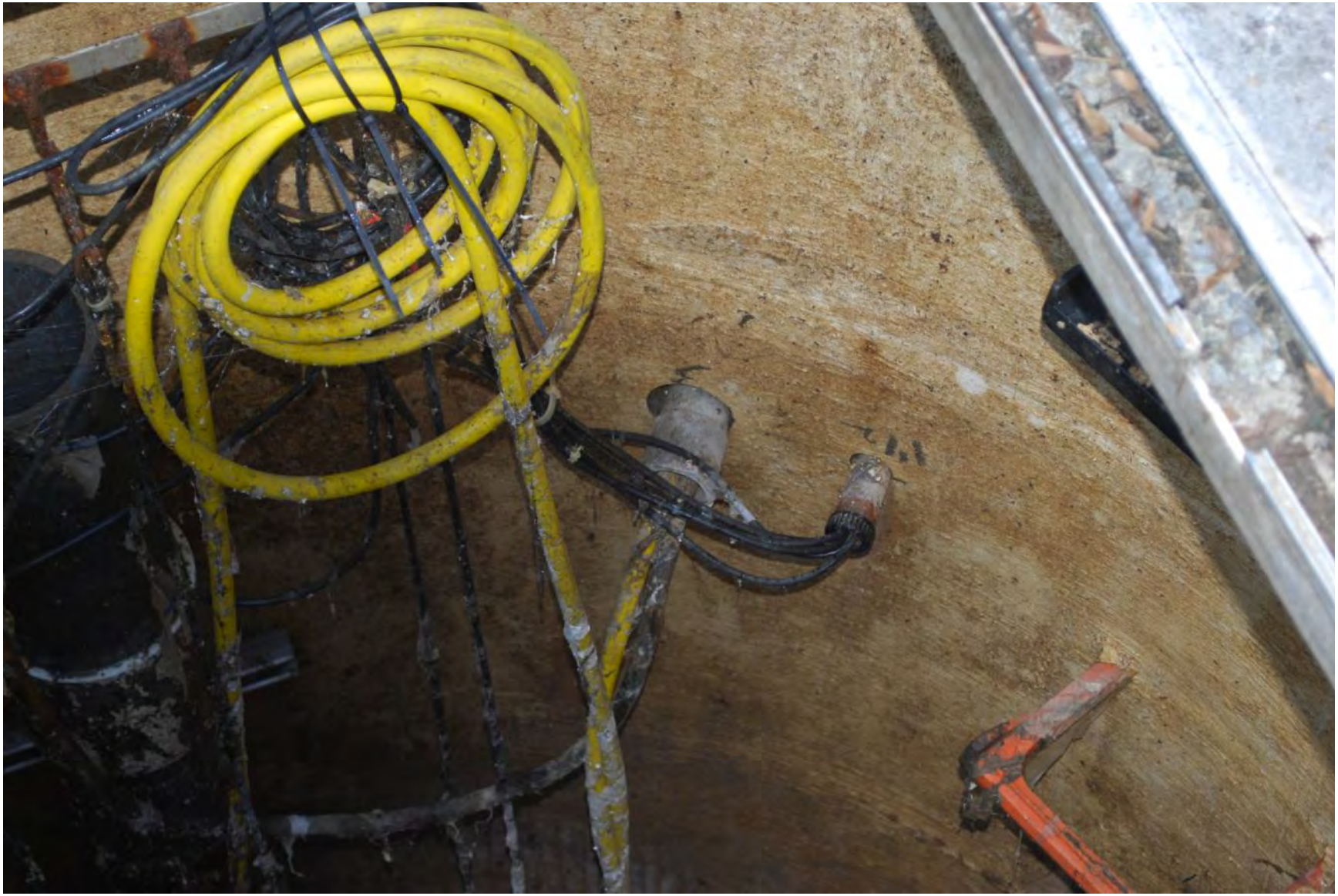

JP 1
SILENCE
HORN OUTPUT
Pumpak LTD.
612-633-7522
FLOAT-PAK
P/N 962004-013
LEAD PUMP SHORT CYCLE PREVENTION TIMER
LAG PUMP START DELAY
LEAD PUMP START DELAY
SECONDS
HIGH LEVEL "ON"
PUMP 2 CALLED FOR
PUMP 1 CALLED FOR
LOW LEVEL "ON"
12 - 30 VAC or VDC INPUT
FLOAT INPUT TERMINALS LED "ON" = FLOAT INPUT CLOSED
SW 4
SW 3
SW 2
SW 1
ON OFF
HIGH LEVEL
START LAG
START LEAD
STOP
LOW LEVEL
SW 1 OFF = NO LL FLOAT ON = NC LL FLOAT
SW 2 OFF = ALARM OUTPUTS FLASH ON = ALARM OUTPUTS ON STEADY
SW 3 OFF = DPLX CONTROL ON = SPLX CONTROL
SW 4 OFF = ALL PUMPS ON AT HIGH LEVEL ON = HIGH LEVEL ALARM ONLY
ALTERNATOR POSITION
AUTO
2 - 1
1 - 2
SEQUENCE SELECTOR
RESTART DELAY
(SECONDS)
18 AWG P/C SJOOW SOOW WATER RESISTANT (UL)

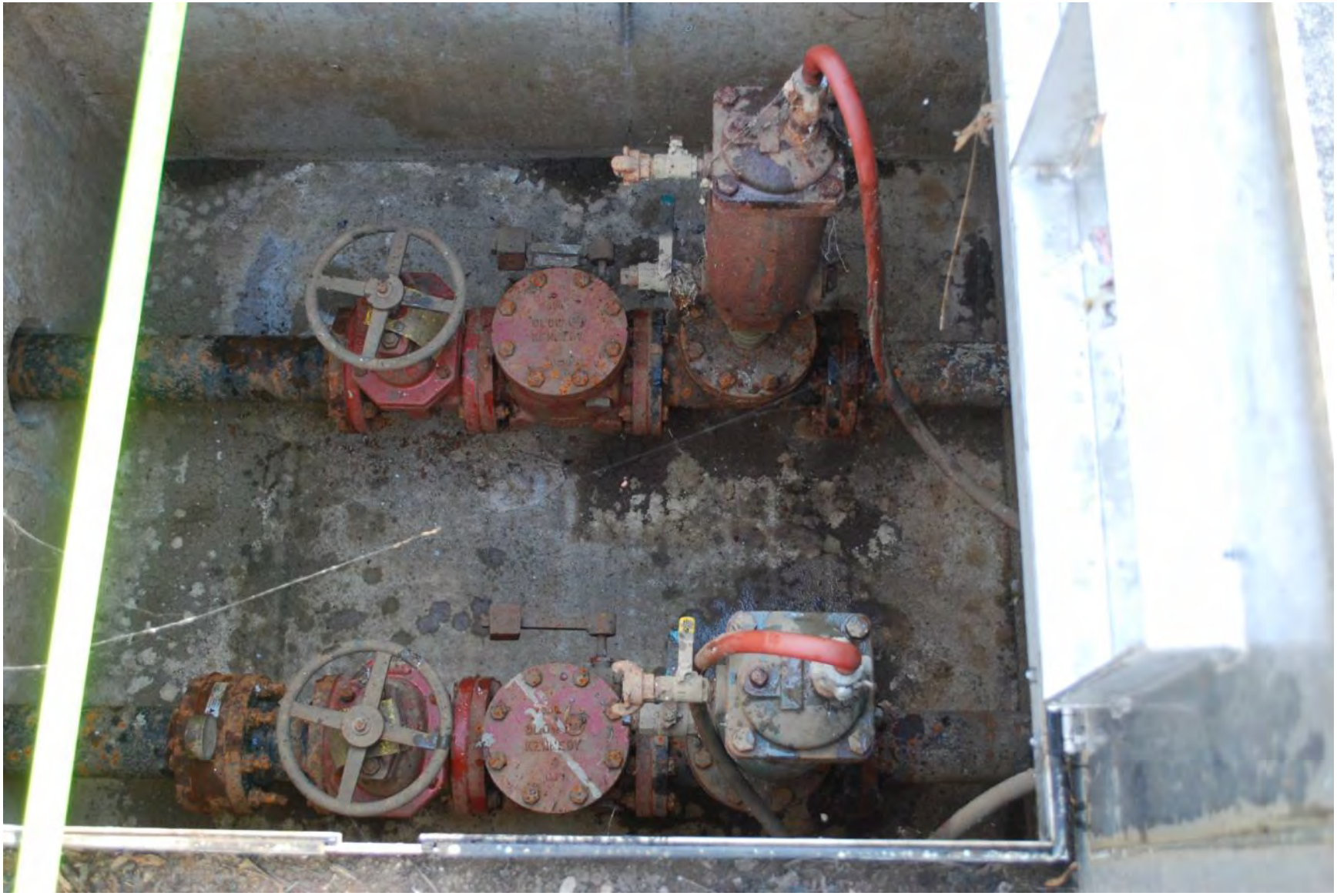

-V
NC
+V
OUTPUT 24VDC 0.3A
idec
TÜV
DC ON
7.5W OUTPUT
POWER SUPPLY
V.ADJ
PS5R-A24
INPUT 50/60Hz
100-240VAC 0.17A
L
N


25 A
MDA 1/4 A
250V FUSE


J27
J25
CE

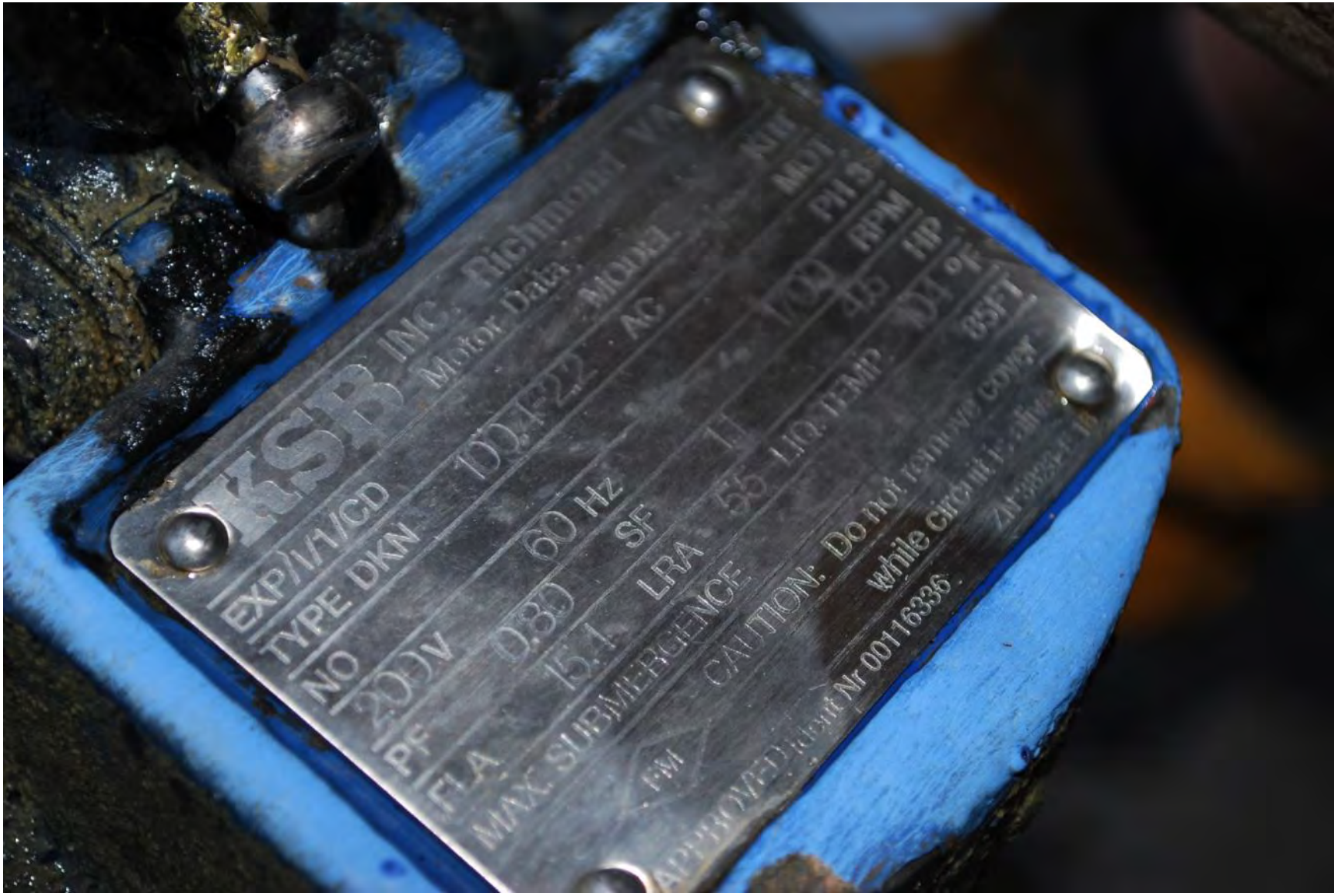

R
28
28
29
S





60 HZ
55
104
45

60 Hz
RPM
HP


KSB INC.
Motor Data
EXP/I/1/CD
TYPE DKN
NO
200V
PF
FLA
0.80
15.1
60 Hz
SF
LRA
55
MAX SUBMERGENCE
CAUTION: Do not
while circuit
Nr 00116336

60 Hz
LRA
55
CAUTION:
Nr 00116336

Submersible Motor Pump
MADE IN BRAZIL
gpm
H

Pump
#1
HALLIDAY

pump #1

WARNING
CALL 811

F334013
75 QA
75 QA
04505

UNITROL
NIXON

NIXON

ON
TEST
PROTECTED
WATER-PUMP
PW-1 A
OFF
ON
TEST
START
STOP
ON
TEST

OFF
TEST
ON
OFF
TEST
OFF
TEST

ALARM PANEL
SUMP PUMP
SP-1A
TEST
ON
SUMP PUMP
SP-1B
TEST
ON
ON
LOW PRESSURE AIR FAILURE
COMBUSTIBLE GAS
LOW PRESSURE AIR BLOWER
ON
TEST
START
STOP
PROJECTED WATER-PUMP PW-1 A
OFF
TEST
ON

ON
TEST
PROTECTED
WATER-PUMP
PW-1 A
OFF
ON
TEST
ON

ON
TEST
UNIT HEATER
ON
OFF
TEST

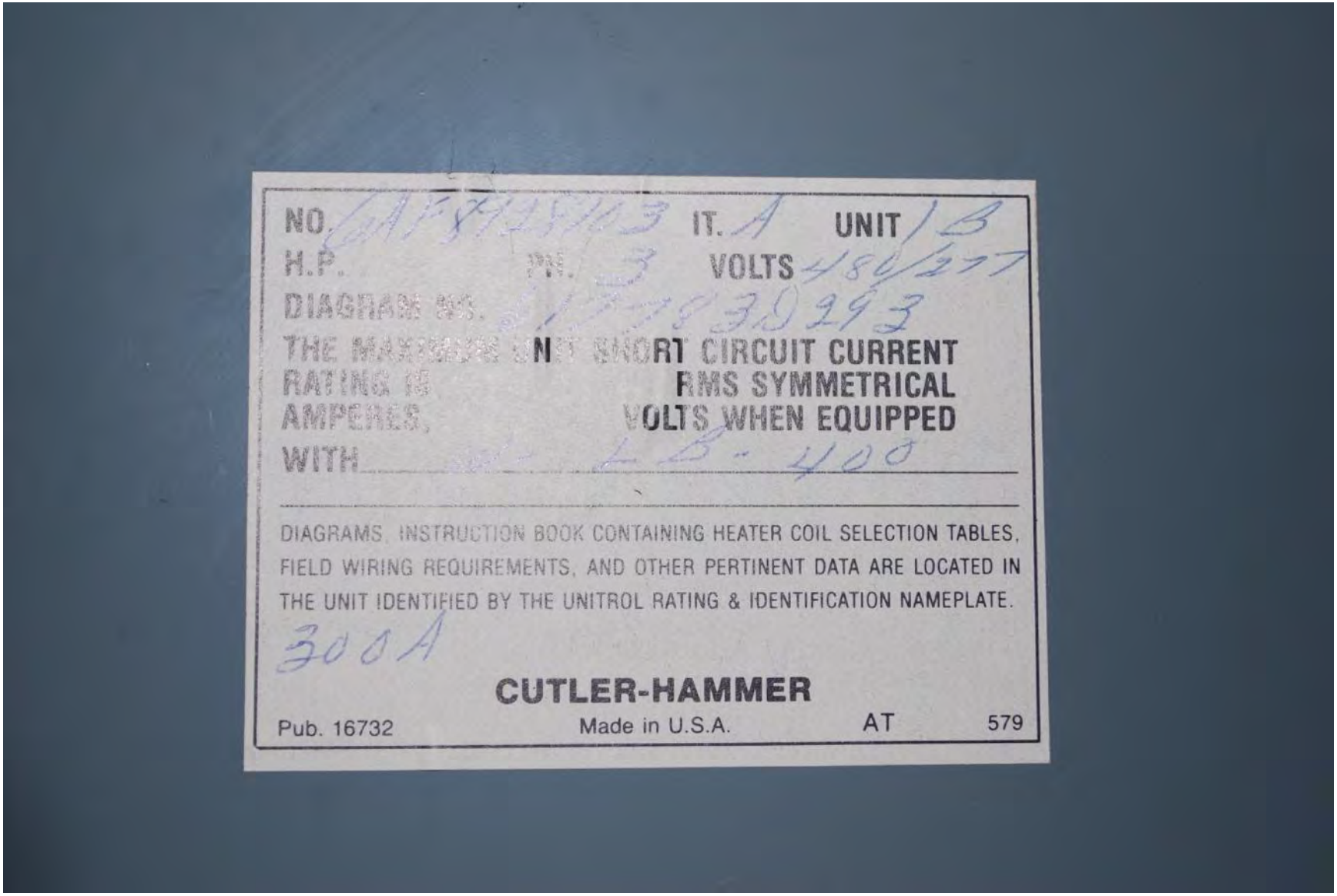
NIXON
Power Services Company

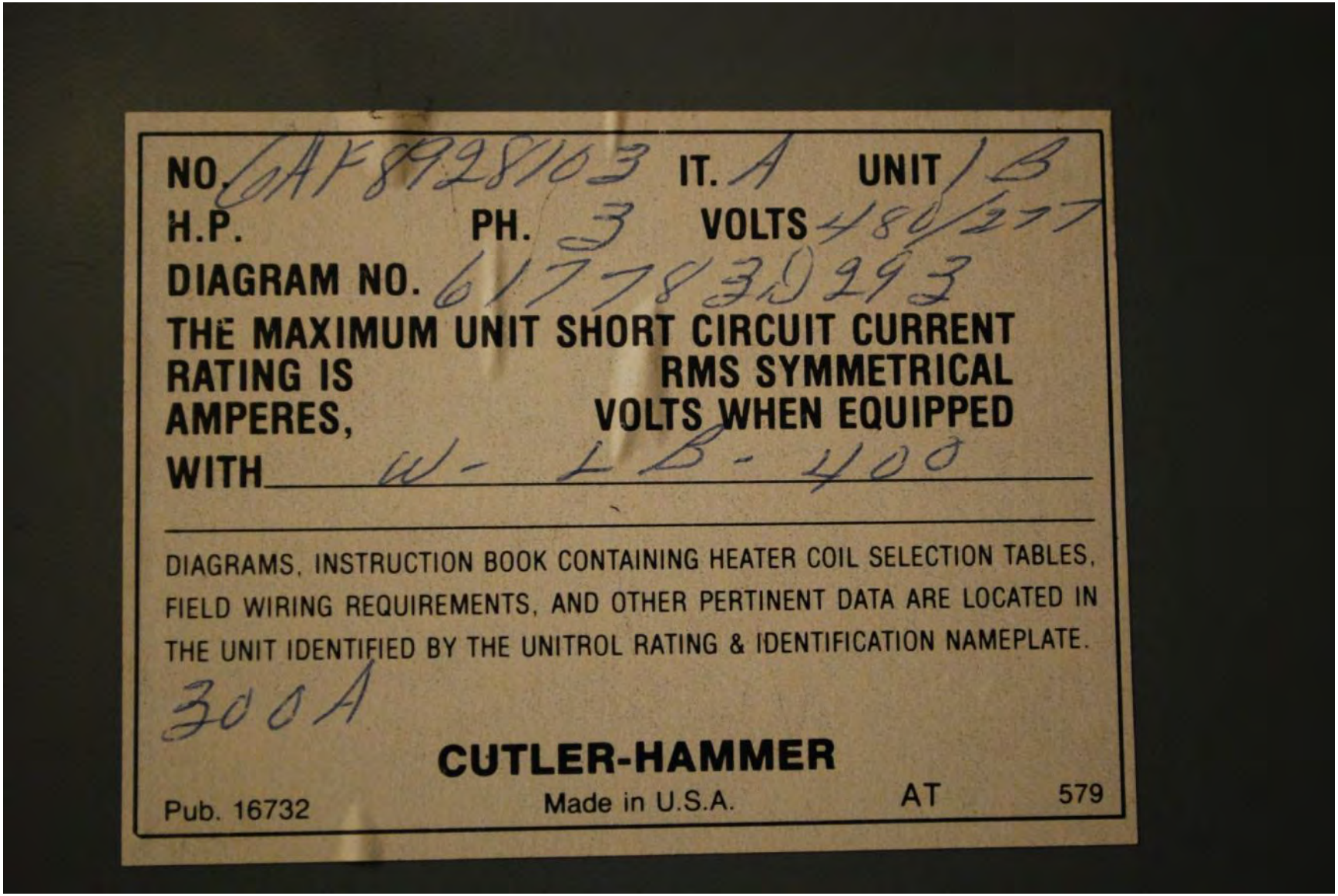
TEST

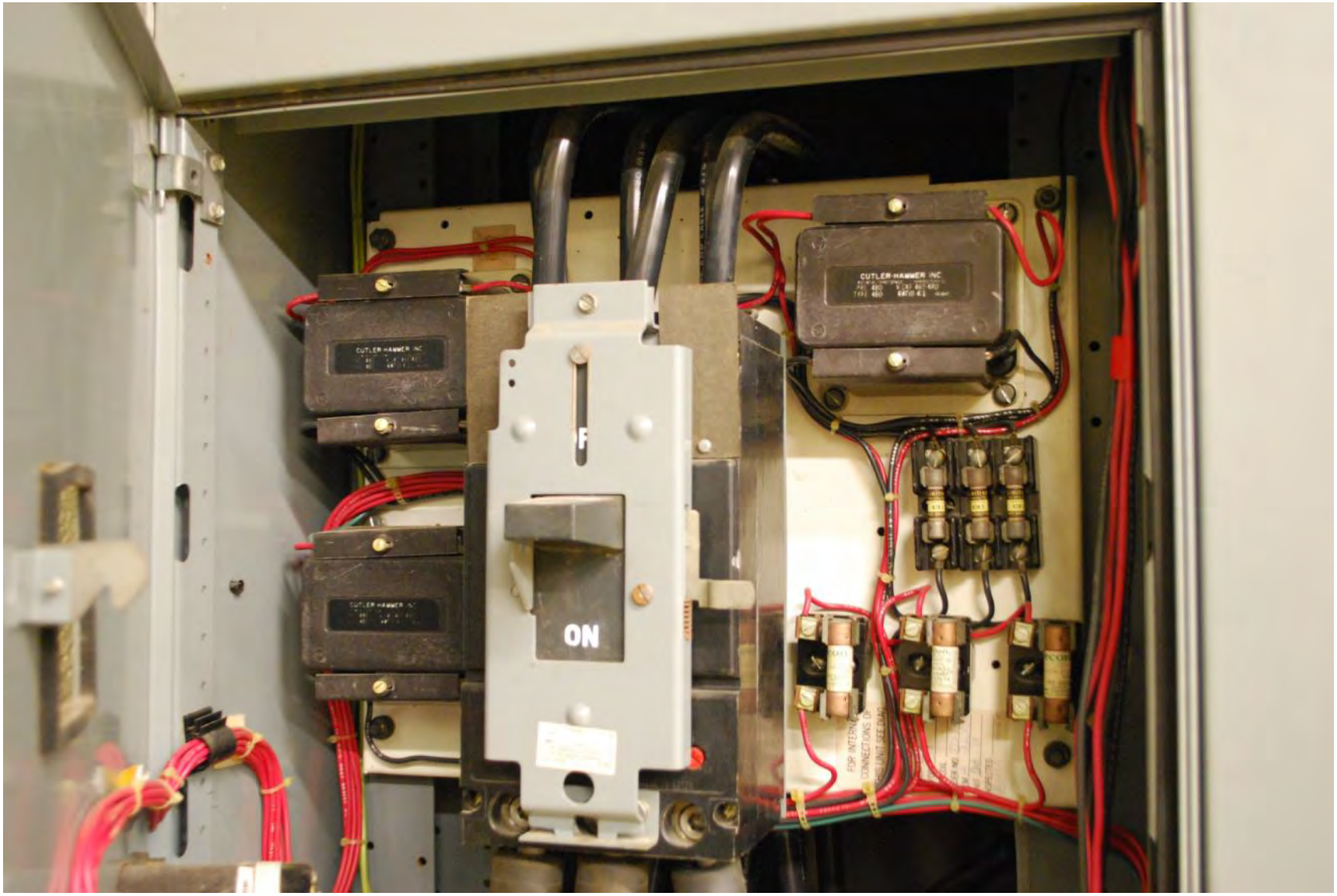
UNITROL
ON
NORMAL
EMERGENCY
NIXON
Power Services Company
24 HOUR EMERGENCY REPAIR SERVICE

NORMAL
EMERGENCY
P.B. TO NORMAL
P.B. TO EMERGENCY
ON
NIXON
Power Services Company
the generator people
24 HOUR EMERGENCY REPAIR SERVICE
ON

ON


NO. 6AF8722A3 IT. A UNIT B
H.P. PH. 3 VOLTS 480/277
DIAGRAM NO. 6T39293
THE MAXIMUM UNIT SHORT CIRCUIT CURRENT
RATING IS RMS SYMMETRICAL
AMPERES, VOLTS WHEN EQUIPPED
WITH LB-400
DIAGRAMS, INSTRUCTION BOOK CONTAINING HEATER COIL SELECTION TABLES, FIELD WIRING REQUIREMENTS, AND OTHER PERTINENT DATA ARE LOCATED IN THE UNIT IDENTIFIED BY THE UNITROL RATING & IDENTIFICATION NAMEPLATE.
300A
CUTLER-HAMMER
Pub. 16732 Made in U.S.A. AT 579


NO. CAF8928103 IT. A UNIT 1B
H.P. PH. 3 VOLTS 480/277
DIAGRAM NO. 6177830293
THE MAXIMUM UNIT SHORT CIRCUIT CURRENT RATING IS RMS SYMMETRICAL AMPERES, VOLTS WHEN EQUIPPED WITH W-LB-400
DIAGRAMS, INSTRUCTION BOOK CONTAINING HEATER COIL SELECTION TABLES, FIELD WIRING REQUIREMENTS, AND OTHER PERTINENT DATA ARE LOCATED IN THE UNIT IDENTIFIED BY THE UNITROL RATING & IDENTIFICATION NAMEPLATE.
300A
CUTLER-HAMMER
Pub. 16732
Made in U.S.A.
AT
579


CUTLER-HAMMER INC
ON

ON
FOR INTER
CONNECTIONS OF
ORDER NO.
ITEM
UNIT
INSPECTED
B
C
N

LOAD
GENERATOR
GENERATOR
NORMAL
UNITROL

FIRE
EXTINGUISHER
LOAD
GENERATOR
LOAD
GENERATOR
NORMAL
NORMAL

EMORY VALLEY
WASTEWATER FLOW
IMMERSION
TESTED!

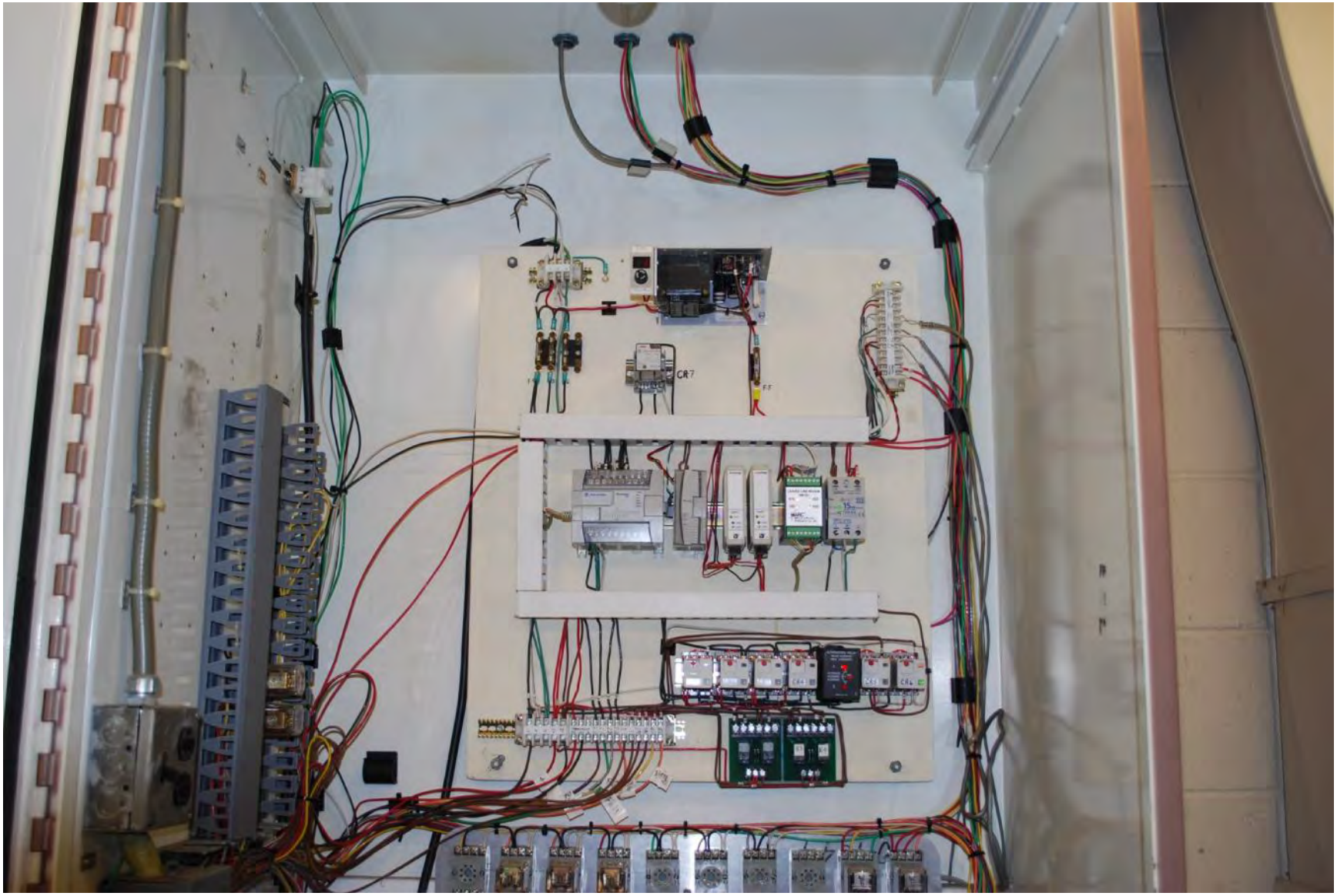
FIRE
EXTINGUISHER

FIRE
EXTINGUISHER

AMPERES 30
VOLTS 600
MAX HP (3 PH) 10
CONTROL
CUTLER-HAMMER
CAUTION
DOOR MUST BE FULLY
CLOSED BEFORE SWITCH
CAN BE OPERATED.
ON
OFF

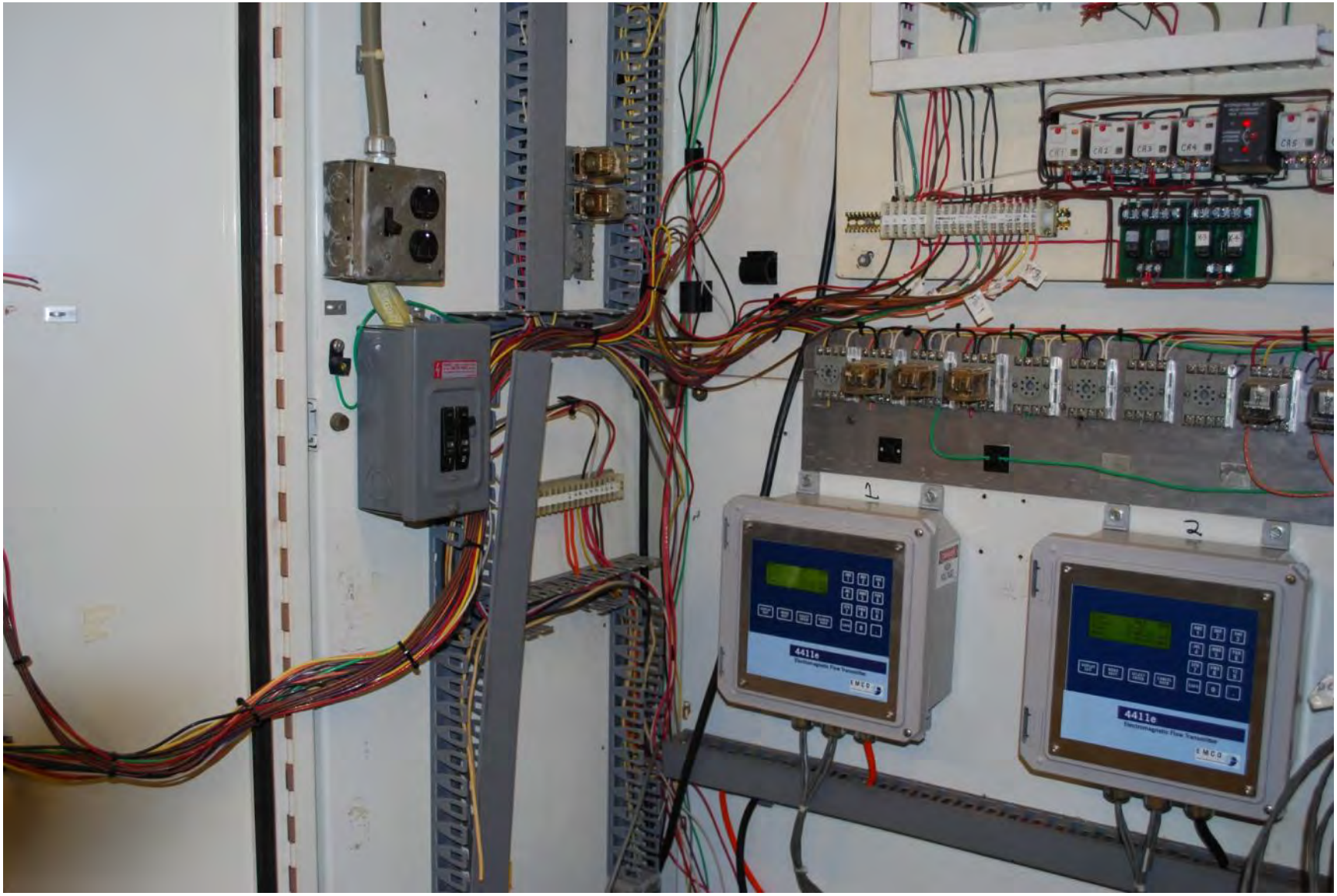
FEDERAL PACIFIC

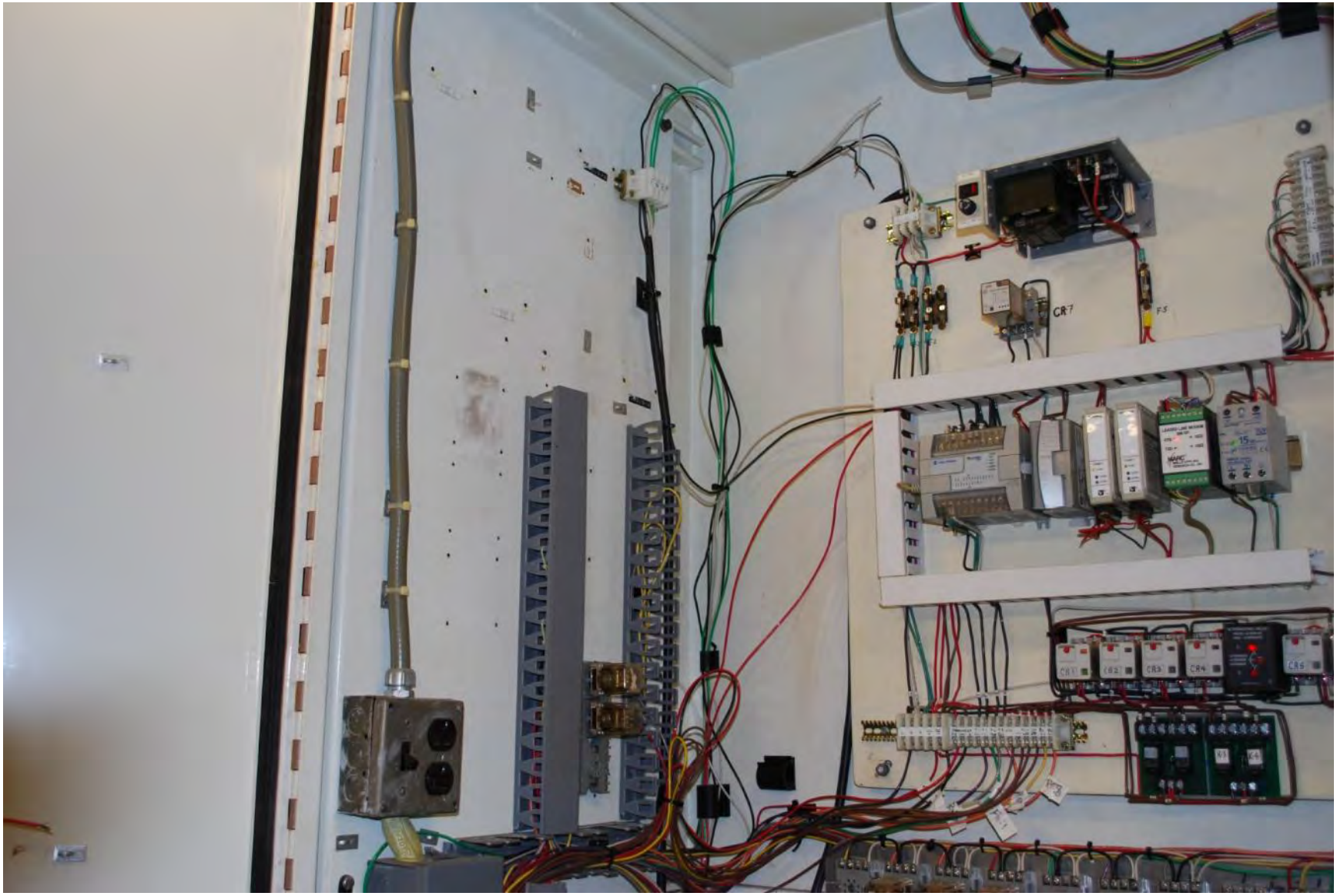
POWER ON
GRINDER OVERLOAD
MOTOR OVERLOAD
RUN
OIL OVERTEMP
LOW OIL LEVEL
OFF/RESET HAND AUTO
CAUTION


CR7

1
2
4411e
4411e

4411e
EMCO
4411e
EMCO

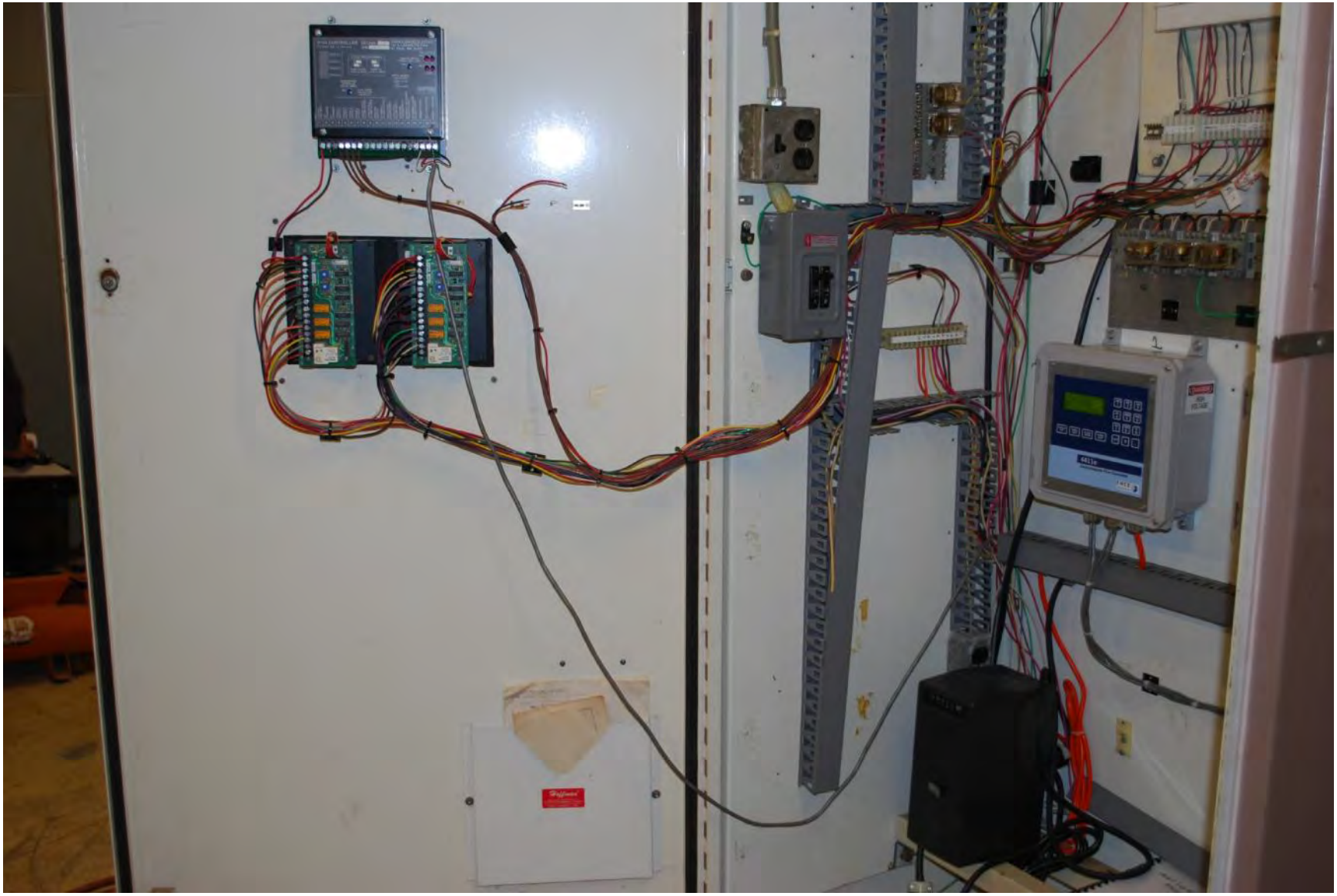

1
2
441le
441le

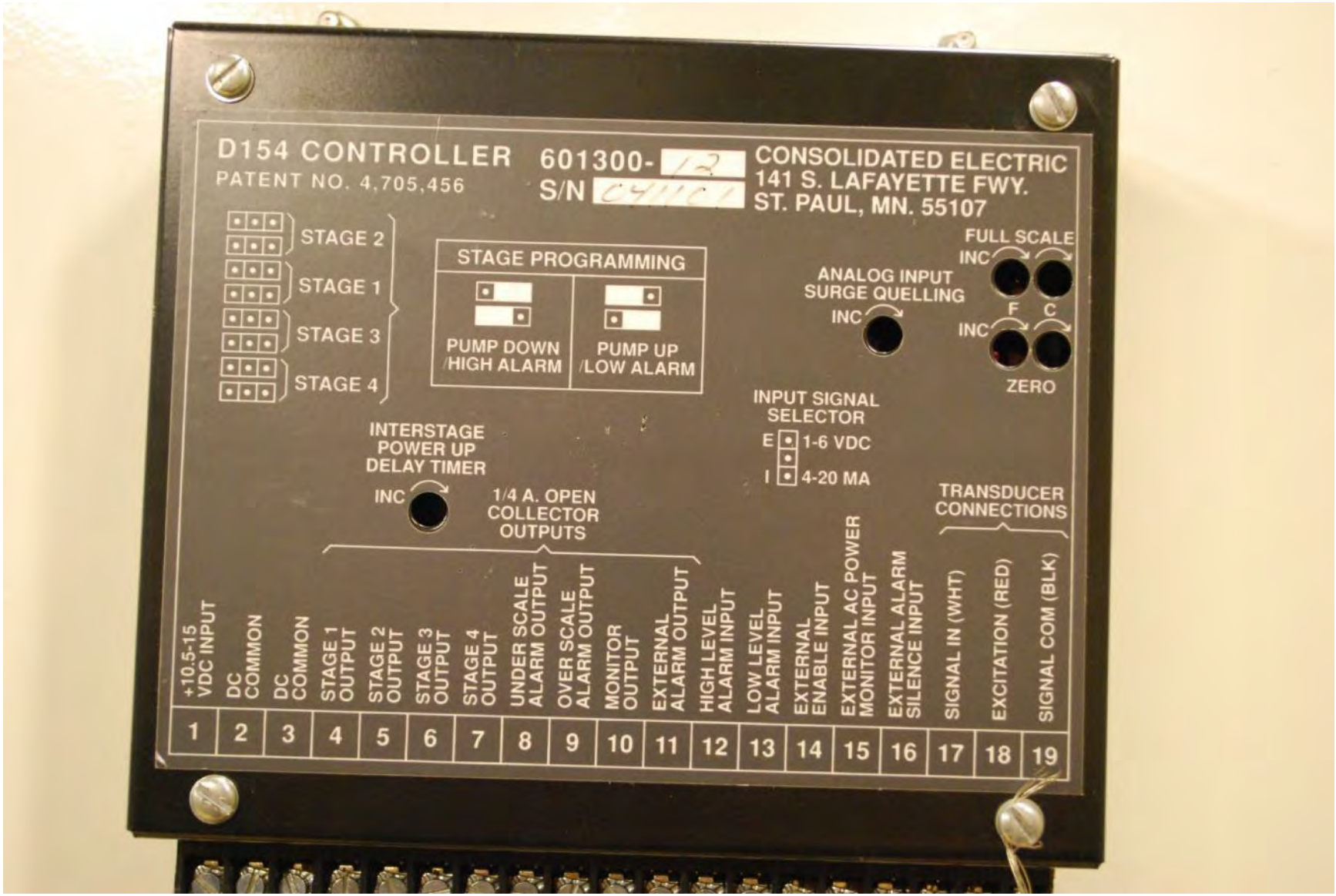

CR7
F5

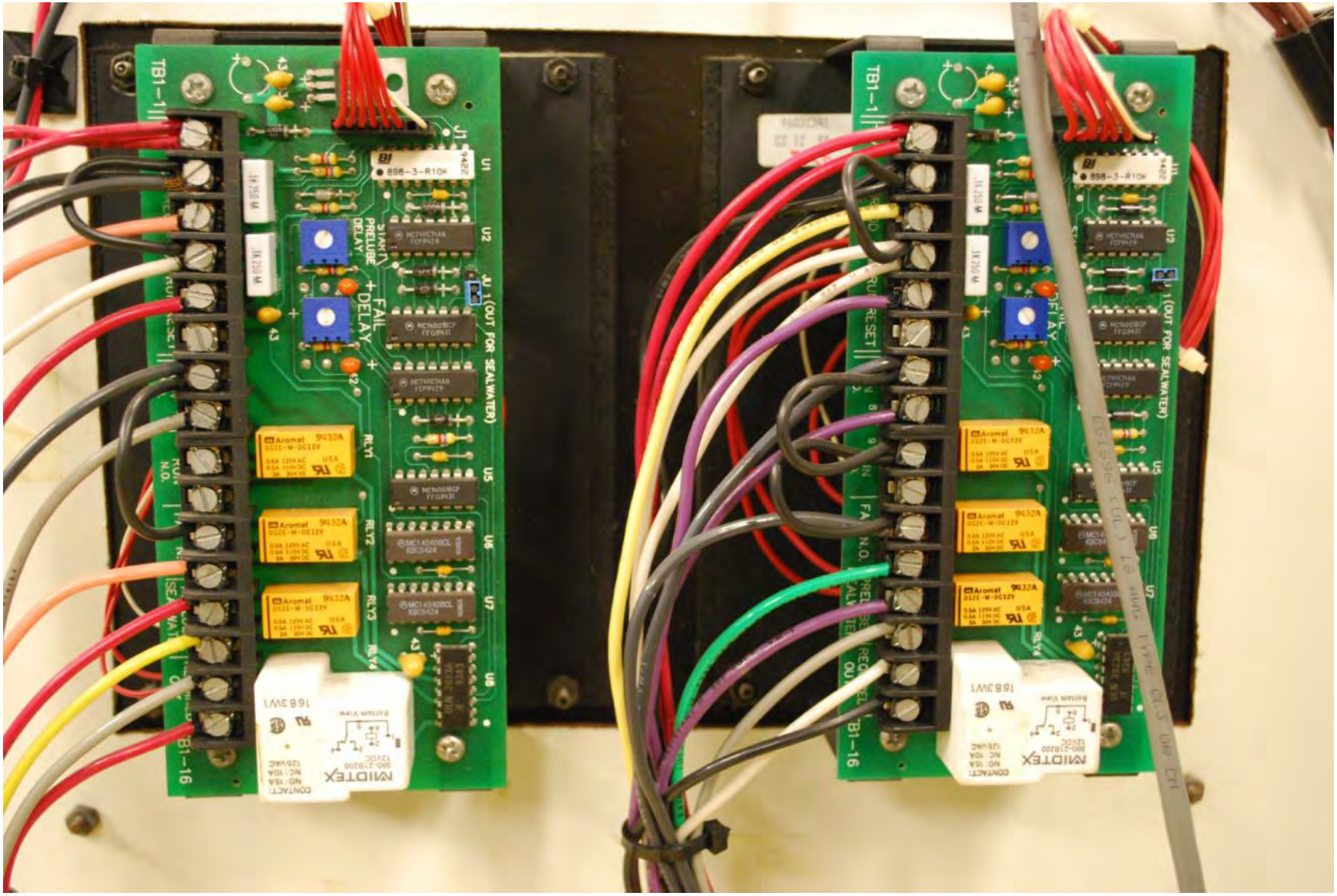
CR7
CR1
CR2
CR3
CR4
CR5
CR6

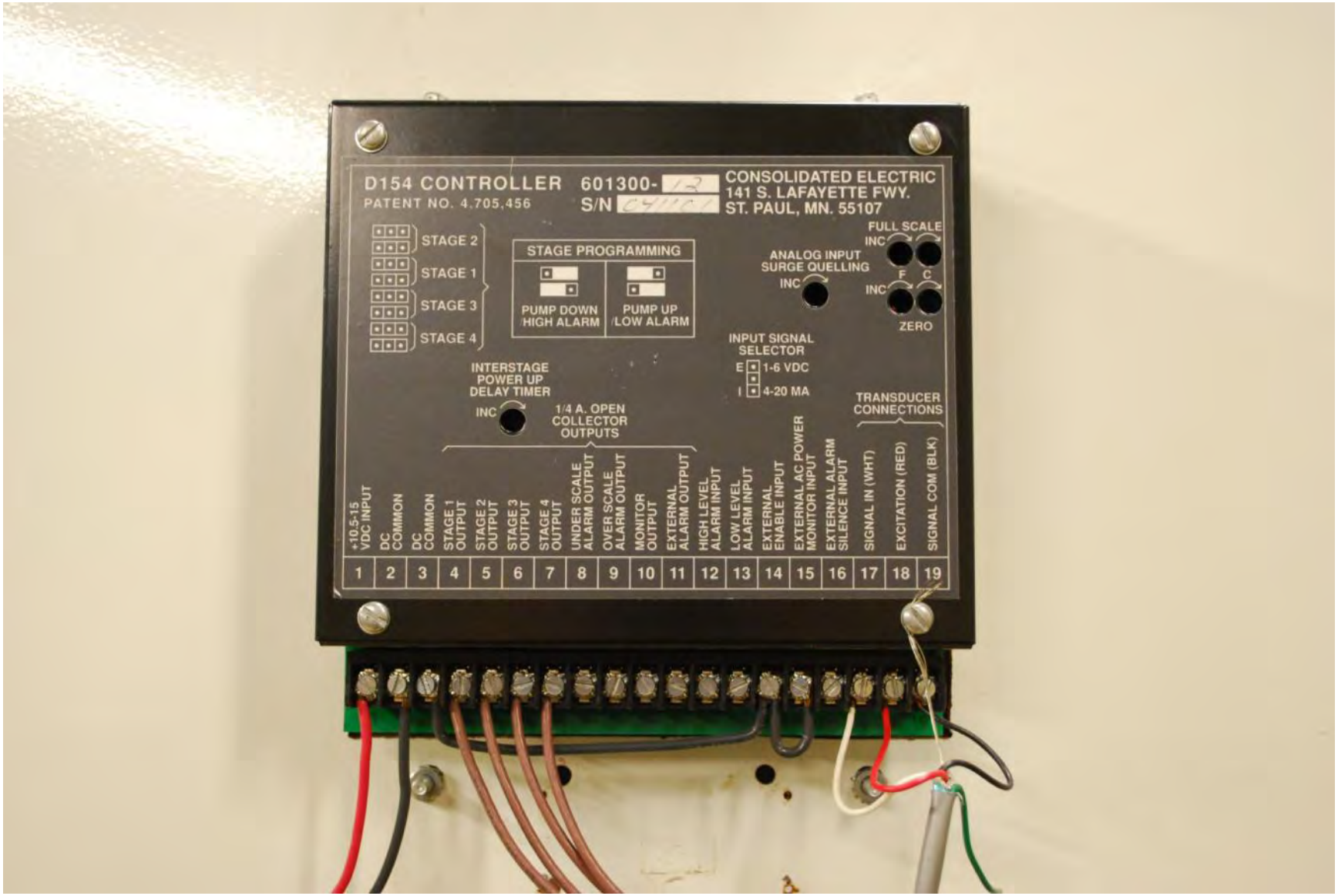
1
2
4411e
Electromagnetic Flow Transmitter
EMCO
4411e
Electromagnetic Flow Transmitter
EMCO

4411e
Electromagnetic Flow Transmitter
EMCO
4411e
Electromagnetic Flow Transmitter
EMCO
4411e Electromagnetic
Flow Transmi

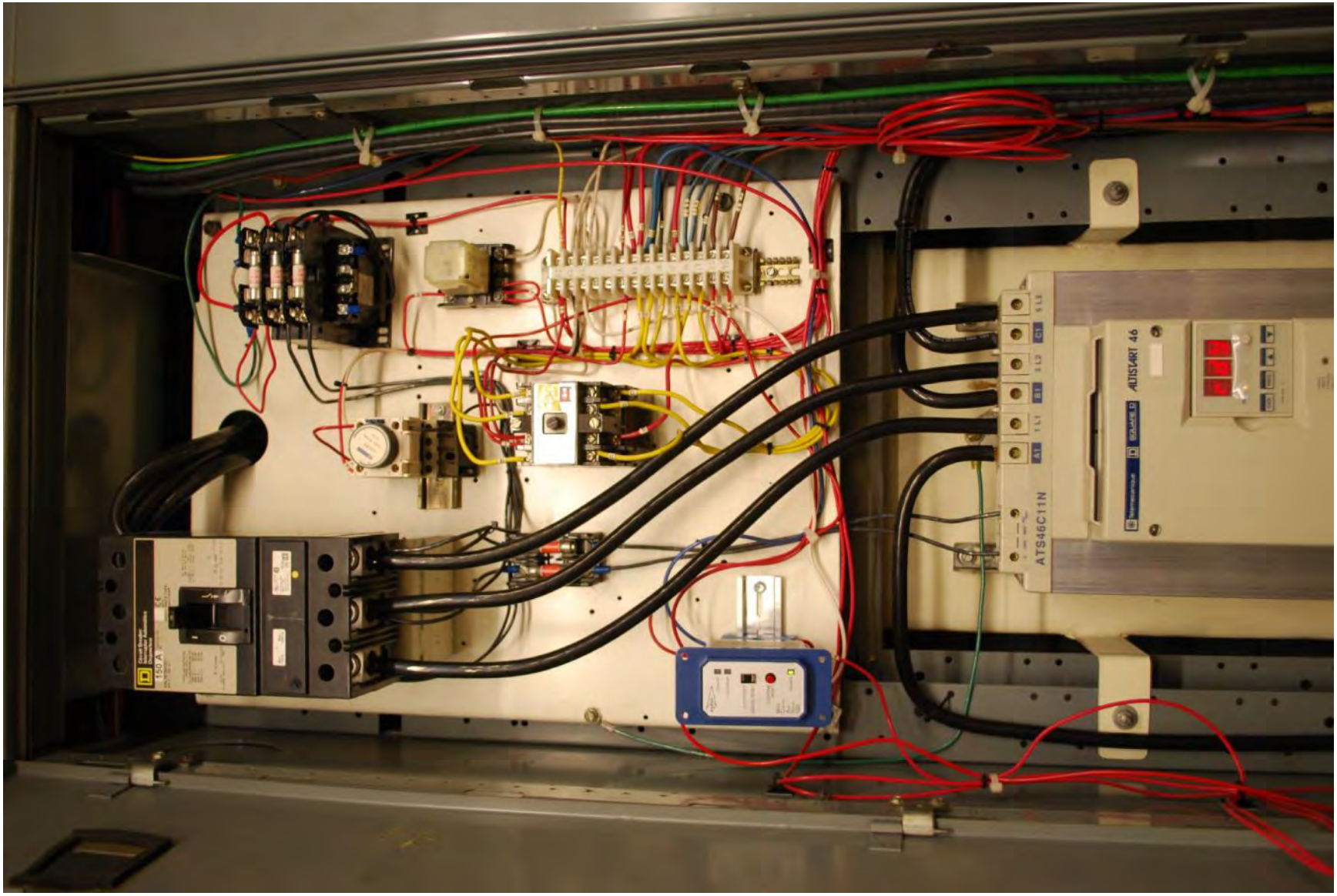


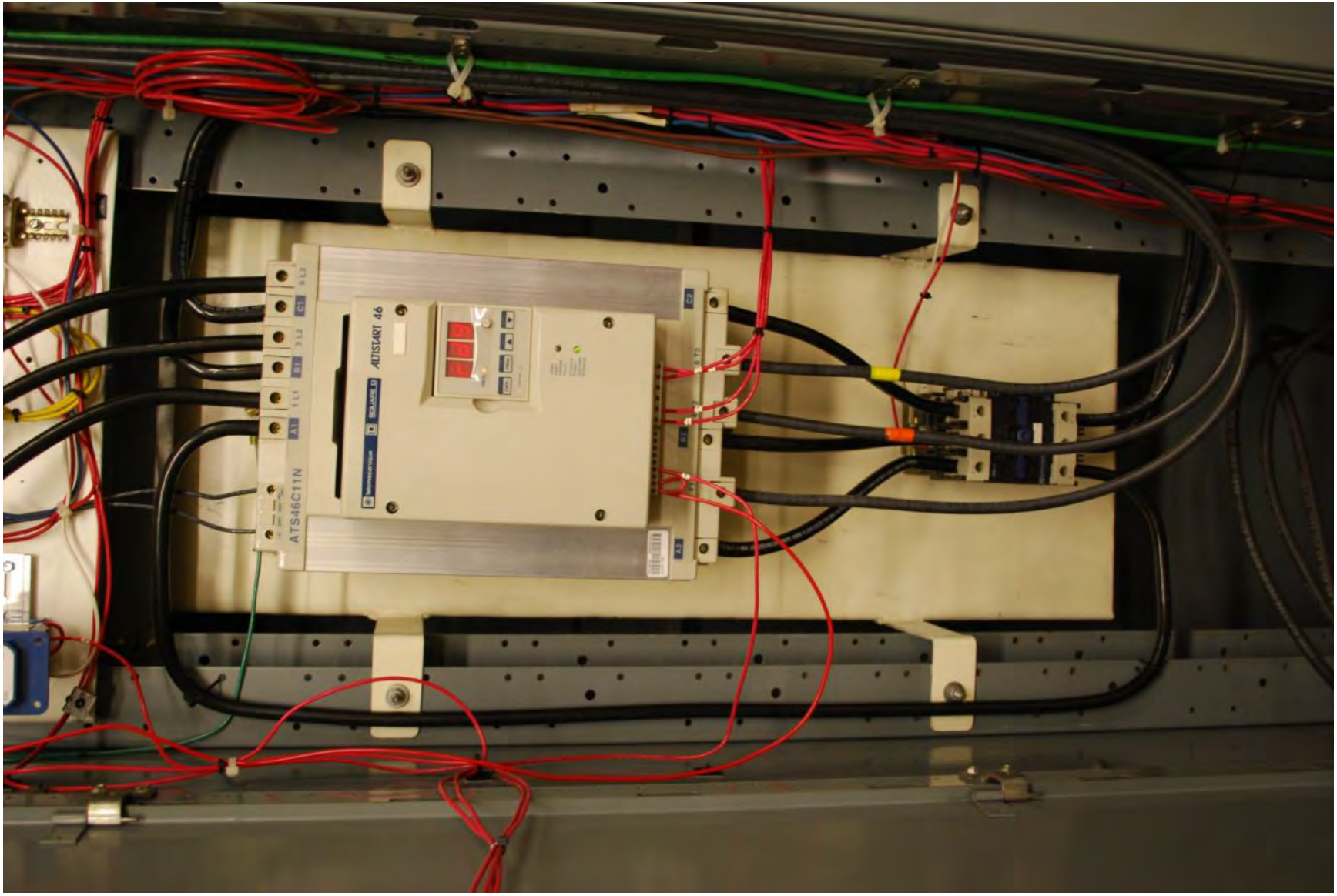

D154 CONTROLLER
PATENT NO. 4,705,456
601300-
S/N
CONSOLIDATED ELECTRIC
141 S. LAFAYETTE FWY.
ST. PAUL, MN. 55107
STAGE 2
STAGE 1
STAGE 3
STAGE 4
STAGE PROGRAMMING
PUMP DOWN /HIGH ALARM
PUMP UP /LOW ALARM
ANALOG INPUT SURGE QUELLING
INC
FULL SCALE
INC
F
C
INC
ZERO
INPUT SIGNAL SELECTOR
E
1-6 VDC
I
4-20 MA
INTERSTAGE POWER UP DELAY TIMER
INC
1/4 A. OPEN COLLECTOR OUTPUTS
TRANSDUCER CONNECTIONS
+10.5-15 VDC INPUT
DC COMMON
DC COMMON
STAGE 1 OUTPUT
STAGE 2 OUTPUT
STAGE 3 OUTPUT
STAGE 4 OUTPUT
UNDER SCALE ALARM OUTPUT
OVER SCALE ALARM OUTPUT
MONITOR OUTPUT
EXTERNAL ALARM OUTPUT
HIGH LEVEL ALARM INPUT
LOW LEVEL ALARM INPUT
EXTERNAL ENABLE INPUT
EXTERNAL AC POWER MONITOR INPUT
EXTERNAL ALARM SILENCE INPUT
SIGNAL IN (WHT)
EXCITATION (RED)
SIGNAL COM (BLK)
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19

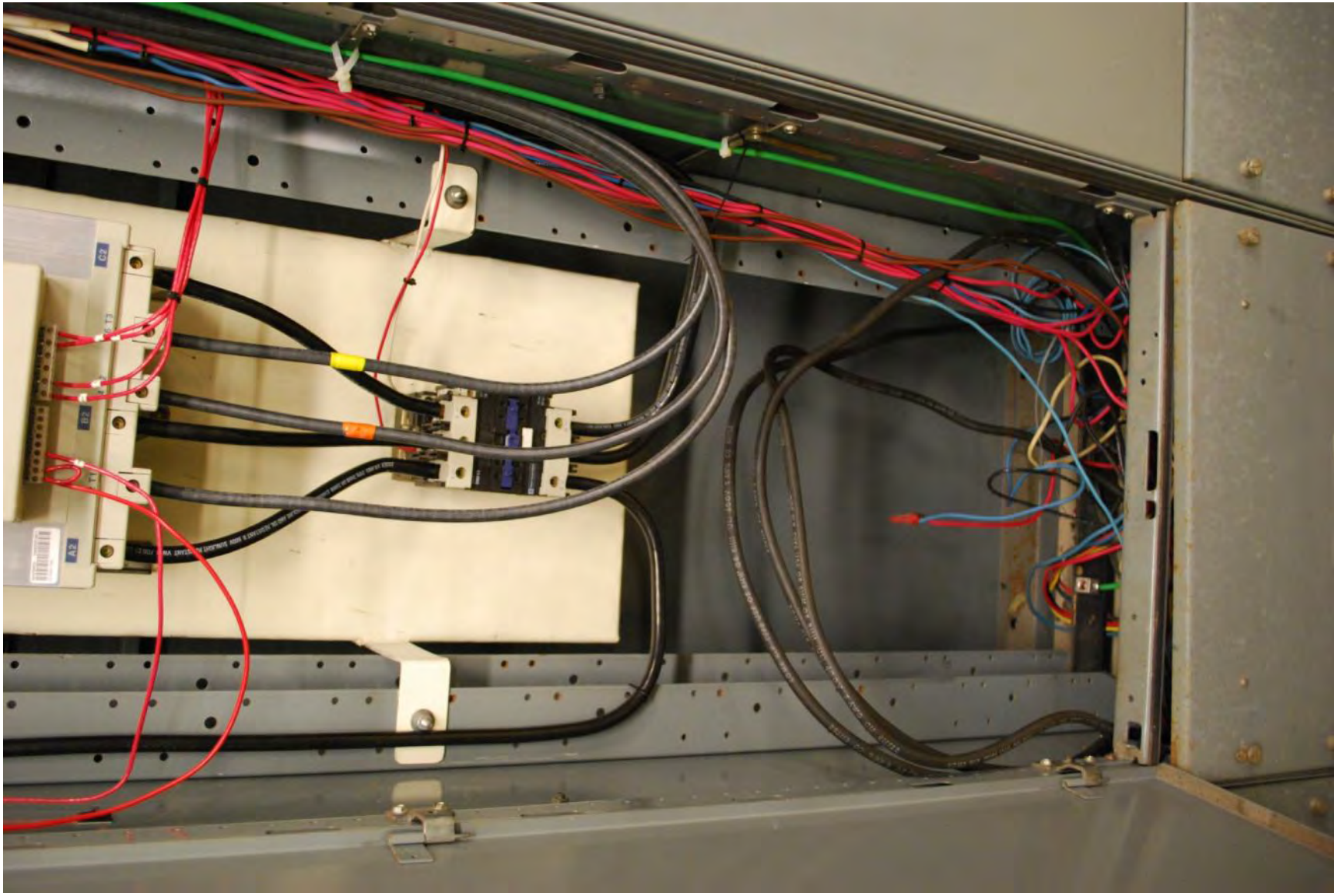

TB1-1
TB1-16
FAIL DELAY
PRELUBE DELAY
START
RESET
(OUT FOR SEALWATER)
Aromat
MIDTEX


D154 CONTROLLER
PATENT NO. 4,705,456
601300-
S/N
CONSOLIDATED ELECTRIC
141 S. LAFAYETTE FWY.
ST. PAUL, MN. 55107
STAGE 2
STAGE 1
STAGE 3
STAGE 4
STAGE PROGRAMMING
PUMP DOWN /HIGH ALARM
PUMP UP /LOW ALARM
ANALOG INPUT SURGE QUELLING
INC
FULL SCALE
INC
INC
F
C
ZERO
INPUT SIGNAL SELECTOR
E
1-6 VDC
I
4-20 MA
INTERSTAGE POWER UP DELAY TIMER
INC
1/4 A. OPEN COLLECTOR OUTPUTS
TRANSDUCER CONNECTIONS
+10.5-15 VDC INPUT
DC COMMON
DC COMMON
STAGE 1 OUTPUT
STAGE 2 OUTPUT
STAGE 3 OUTPUT
STAGE 4 OUTPUT
UNDER SCALE ALARM OUTPUT
OVER SCALE ALARM OUTPUT
MONITOR OUTPUT
EXTERNAL ALARM OUTPUT
HIGH LEVEL ALARM INPUT
LOW LEVEL ALARM INPUT
EXTERNAL ENABLE INPUT
EXTERNAL AC POWER MONITOR INPUT
EXTERNAL ALARM SILENCE INPUT
SIGNAL IN (WHT)
EXCITATION (RED)
SIGNAL COM (BLK)
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19

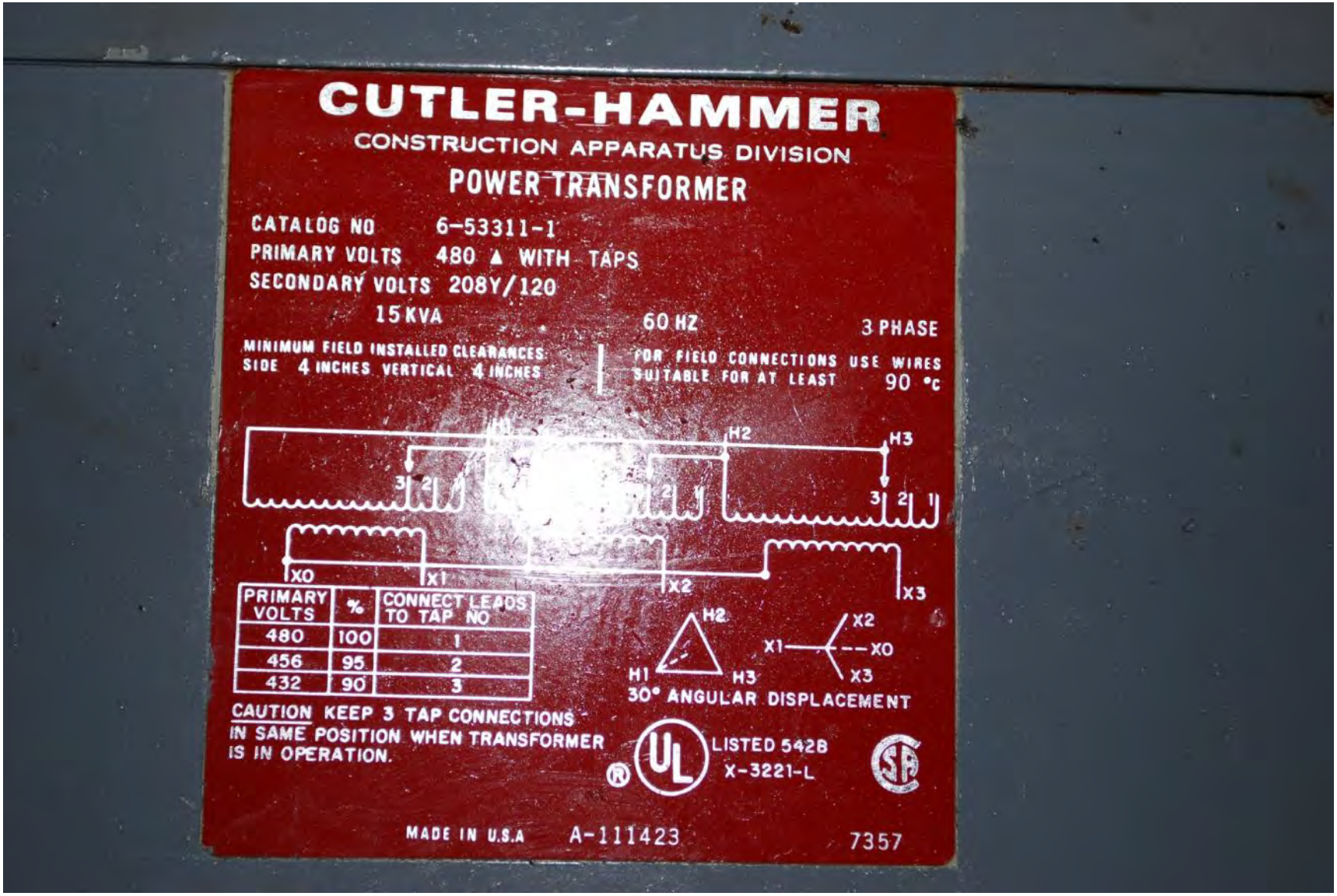
TEEL

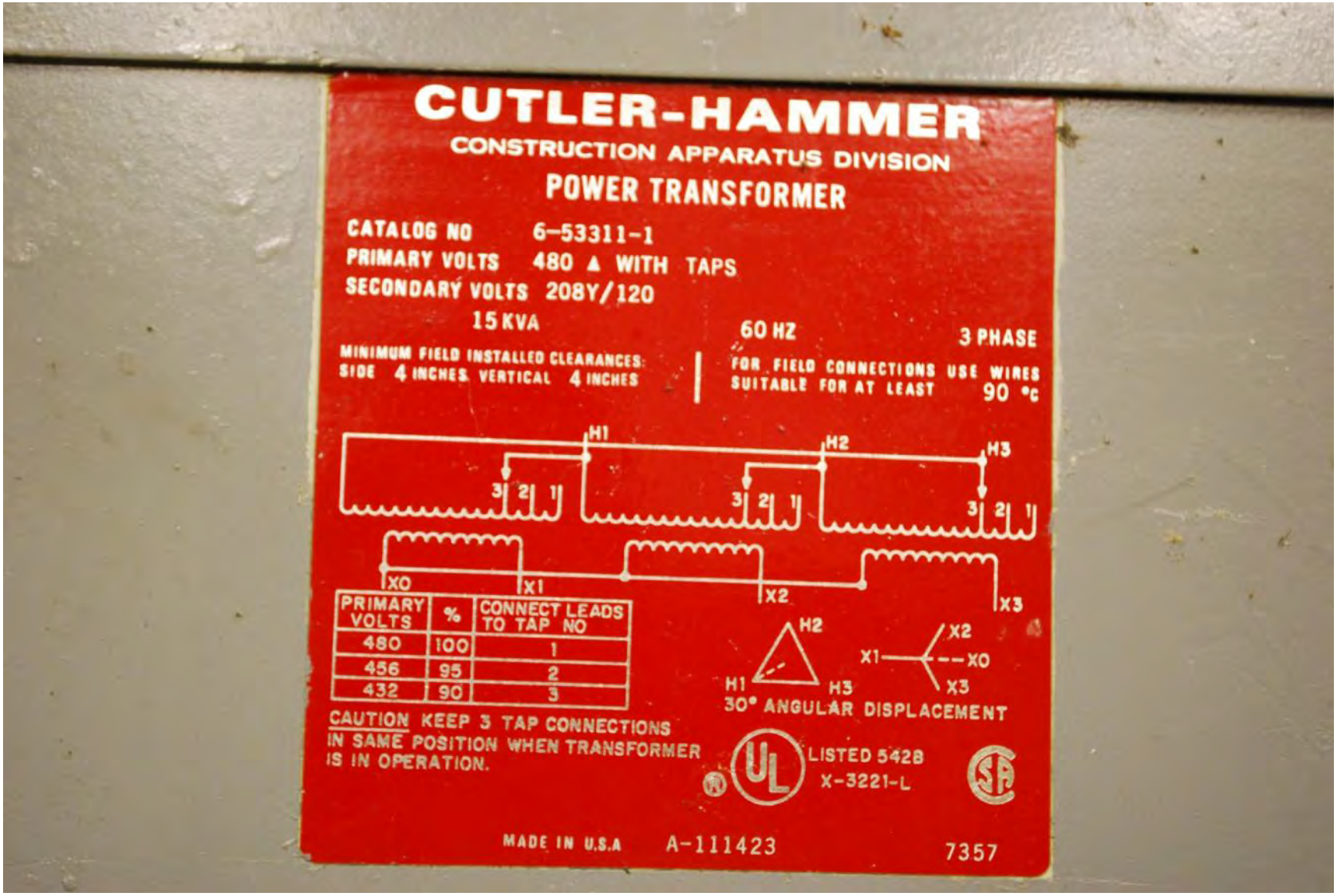

ATS46C11N
AUTOSTART 46

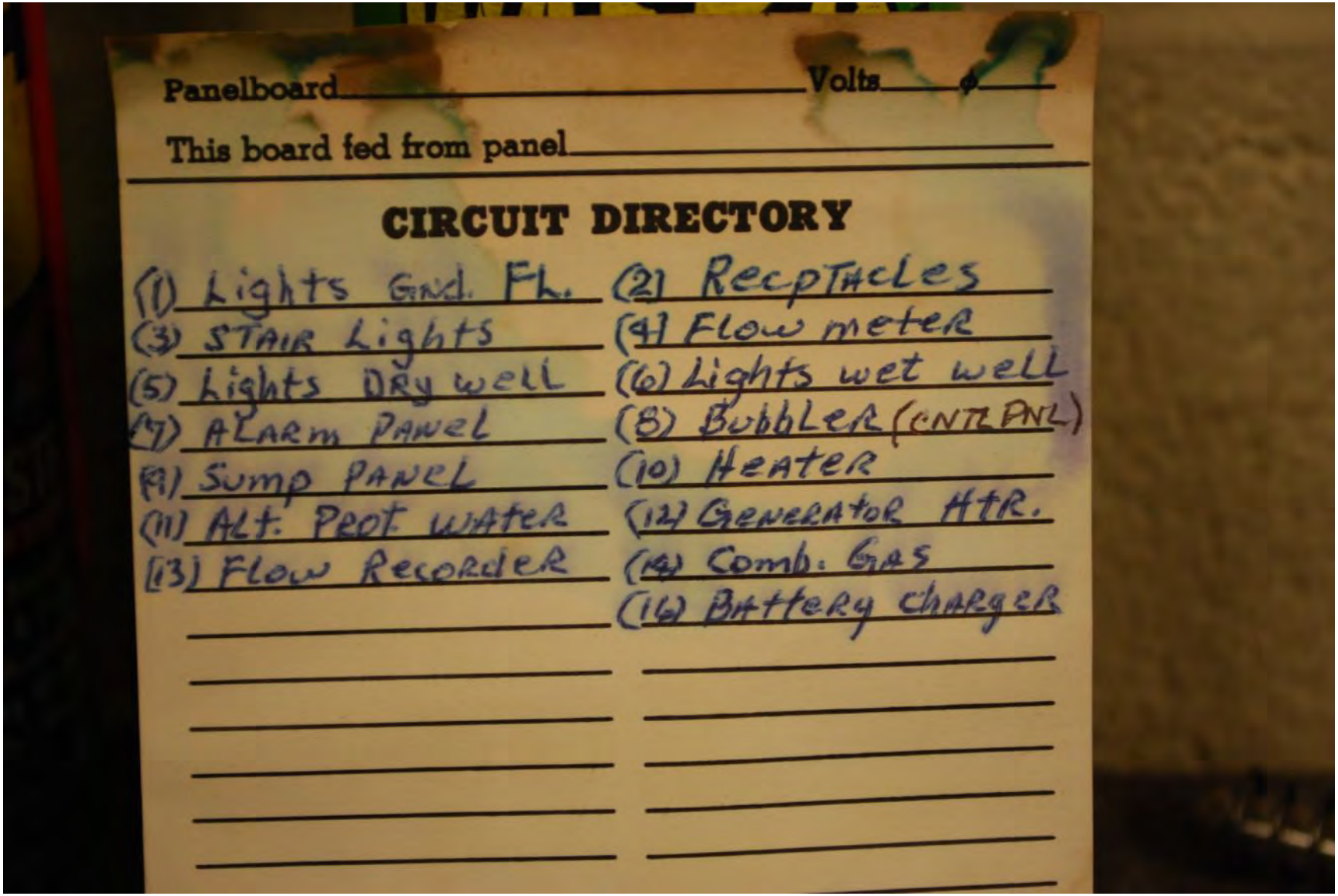

ATS46C11N
ALTISTART 46

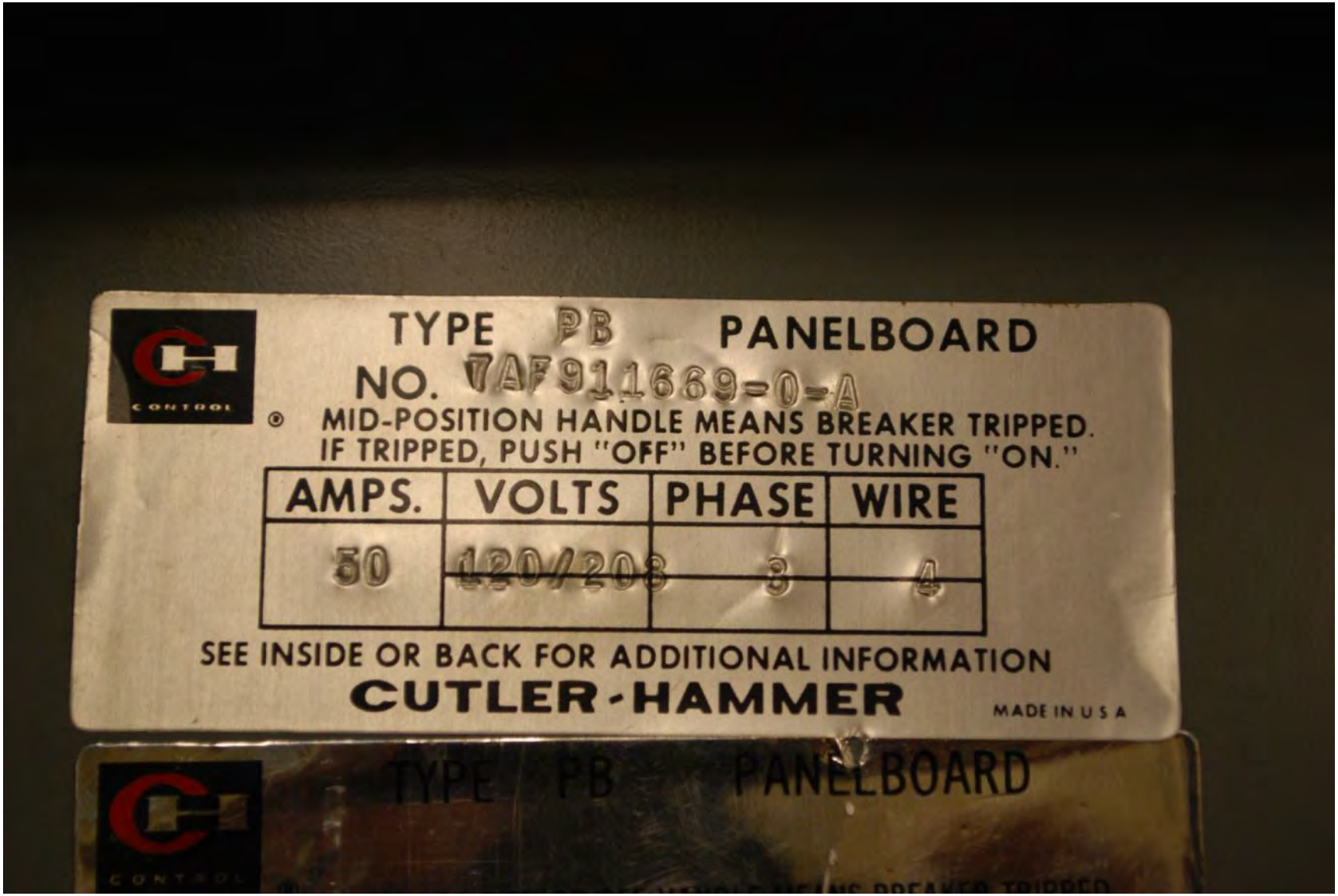


FLYGT
LEAKAGE
OVERTEMP
AUTO RESET
MANUAL RESET
OVERTEMP RESET
Mini
CONTROL
AND
STATUS
120
POWER


CUTLER-HAMMER
CONSTRUCTION APPARATUS DIVISION
POWER TRANSFORMER
CATALOG NO 6-53311-1
PRIMARY VOLTS 480 ▲ WITH TAPS
SECONDARY VOLTS 208Y/120
15 KVA
60 HZ
3 PHASE
MINIMUM FIELD INSTALLED CLEARANCES
SIDE 4 INCHES VERTICAL 4 INCHES
FOR FIELD CONNECTIONS USE WIRES
SUITABLE FOR AT LEAST 90 °C
H2
H3
3 2 1
3 2 1
XO
X1
X2
X3
PRIMARY VOLTS | % | CONNECT LEADS TO TAP NO
480 | 100 | 1
456 | 95 | 2
432 | 90 | 3
H2
H1
H3
X2
X1
XO
X3
30° ANGULAR DISPLACEMENT
CAUTION KEEP 3 TAP CONNECTIONS IN SAME POSITION WHEN TRANSFORMER IS IN OPERATION.
LISTED 5428
X-3221-L
MADE IN U.S.A
A-111423
7357


CUTLER-HAMMER
CONSTRUCTION APPARATUS DIVISION
POWER TRANSFORMER
CATALOG NO 6-53311-1
PRIMARY VOLTS 480 Δ WITH TAPS
SECONDARY VOLTS 208Y/120
15 KVA
60 HZ
3 PHASE
MINIMUM FIELD INSTALLED CLEARANCES:
SIDE 4 INCHES VERTICAL 4 INCHES
FOR FIELD CONNECTIONS USE WIRES
SUITABLE FOR AT LEAST 90 °C
H1
H2
H3
3
2
1
XO
X1
X2
X3
PRIMARY VOLTS | % | CONNECT LEADS TO TAP NO
480 | 100 | 1
456 | 95 | 2
432 | 90 | 3
CAUTION KEEP 3 TAP CONNECTIONS IN SAME POSITION WHEN TRANSFORMER IS IN OPERATION.
30° ANGULAR DISPLACEMENT
LISTED 5428
X-3221-L
MADE IN U.S.A
A-111423
7357


Panelboard
Volts
This board fed from panel
CIRCUIT DIRECTORY
(1) Lights Gnd. Fl.
(2) Receptacles
(3) Stair Lights
(4) Flow meter
(5) Lights Dry well
(6) Lights wet well
(7) Alarm Panel
(8) Bubbler (cntl pnl)
(9) Sump Panel
(10) Heater
(11) Alt. Prot. Water
(12) Generator Htr.
(13) Flow Recorder
(14) Comb. Gas
(16) Battery charger


TYPE PB PANELBOARD
NO. TAF911669-0-A
MID-POSITION HANDLE MEANS BREAKER TRIPPED.
IF TRIPPED, PUSH "OFF" BEFORE TURNING "ON."
AMPS. VOLTS PHASE WIRE
50 120/208 3 4
SEE INSIDE OR BACK FOR ADDITIONAL INFORMATION
CUTLER-HAMMER
MADE IN U.S.A.
TYPE PB PANELBOARD

2
4
6
8
10
12
14
16
18
20
22
24
1
3
5
7
9
11
13
15
17
SPARE
SPARE
SPARE

KOHLER
MODEL 123R0Z1
SPEC NO 10561A55
SER NO 096622
CONTINUOUS STANDBY RATING
KW 125
KVA 156.25
AMP 188.2
ALL RATINGS AT 85°F. & 500 FT. ALT
VOLTS 277/480
PHASE 3 PF 0.8
HERTZ 60 RPM 1800
BATT 12 WT
LBS
KOHLER CO. KOHLER, WIS. USA

HERTZ
A-C VOLTS
VOLTMETER-AMMETER
OFF
L1-L2
L1
L2-L3
L2
L1-L3
L3
L1-L1
A-C AMPERES
PRESSURE
WATER TEMP
REGULATOR RHEOSTAT
INCREASE VOLTS
LAMP TEST
RESET
KOHLER
EMERG. STOP
AUTO.
TEST
CENTER OFF

HERTZ
A-C VOLTS
VOLTMETER-AMMETER
OFF
L1-L2
L1
L2-L3
L2
L1-L3
L3
L0-L3
L0-L2
L0-L1
READ METER SCALES INDICATED BY LAMP
A-C AMPERES
PRESSURE
WATER TEMP
REGULATOR RHEOSTAT
INCREASE VOLTS
LAMP TEST
RESET
KOHLER
EMERG. STOP
AUTO.
TEST
CENTER OFF

EMCO

ITT Water & Wastewater U.S.A.
TRUMBULL CONNECTICUT
WARNING
TO REDUCE THE RISK OF
ELECTRICAL SHOCK, SEE
THE INSTRUCTION MANUAL
FOR PROPER INSTALLATION.
NRTL

3~60Hz 52kW 70hp
460V
ITT Water & Wastewater
TRUMBULL CONNECTION
WARNING
TO REDUCE THE RISK
ELECTRICAL SHOCK
THE INSTRUCTION MANUAL
FOR PROPER INSTALLATION

SAFETY ROPE
PULLING ROPE WILL
SHUT DOWN PUMPS
AND CALL THE W.W.T.P.
FOR HELP
USE ONLY IN AN
EMERGENCY ONLY

SIEMENS

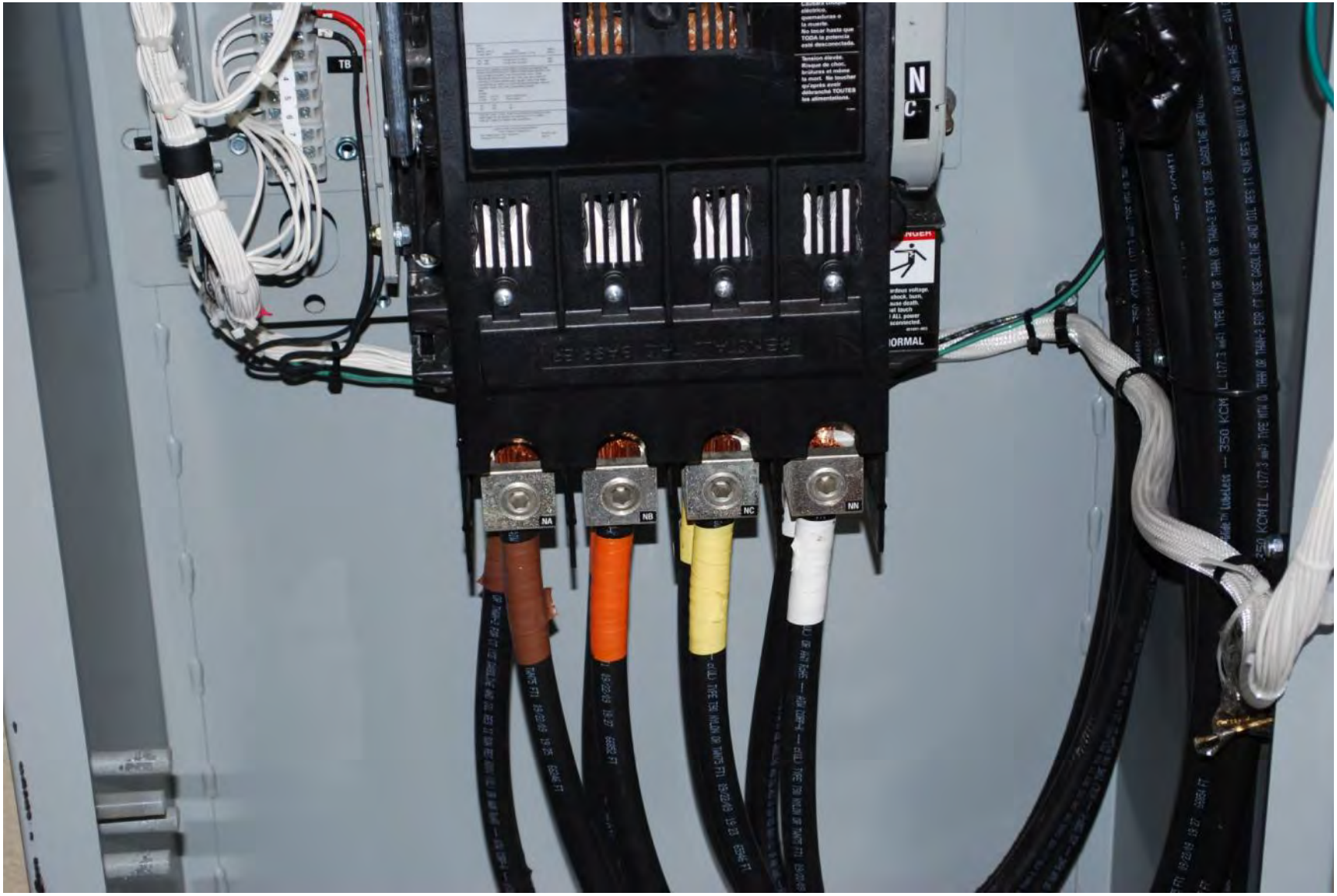
MARATHON ELECTRIC
Series 6
HIGH EFFICIENCY
CC003A
E49747
LR2025
EEV102077
WAUSAU.WISCONSIN 54401 MADE IN CHINA
MODEL HVN213TTDBA4026AA H
FRAME 213T
TYPE TDBA DES B PH 3 INS. CL. B2 DUTY CONT. MAX AMB °C 40
ENC
HP 7.5 VOLTS 208-230/460
HZ 60 SF 1.15 RPM 1760
F.L. AMPS 21.4-19.6/9.8 CODE H
CORR. AMPS MAX.CAP. KVAR
NEMA NOM.EFF. 88.5 NOM.P.F. 81.5
HP 5 VOLTS 190/380
HZ 50 SF 1.15
F.L. AMPS 16/8 RPM 1465
SHAFT END BRG. 307 OPP. END BRG. 206
230 VOLT MOTORS OPERATIONAL ON 208V NETWORKS AT
MAX.AMPS
T4 T5 T6 T7 T8 T9 T1 T2 T3
LOW VOLTAGE LINE
T4 T5 T6 T7 T8 T9 T1 T2 T3
HIGH VOLTAGE LINE
T1 T4 T7 T9 T8 T6 T5 T3 T2

ROOTS
ROTARY LOBE BLOWER
MODEL
33 U-RAI
SERIAL NO.
1005913652
PART NO.
6510502L
FOR OPERATING LIMITATIONS
REFER TO INSTRUCTION MANUAL
DRESSER
Roots
DRESSER, INC.
BLOWER.
RATION AND MAINTENANCE SUPPLIED WITH
REFER TO THE BLOWER INSTALLATIO

DANGER

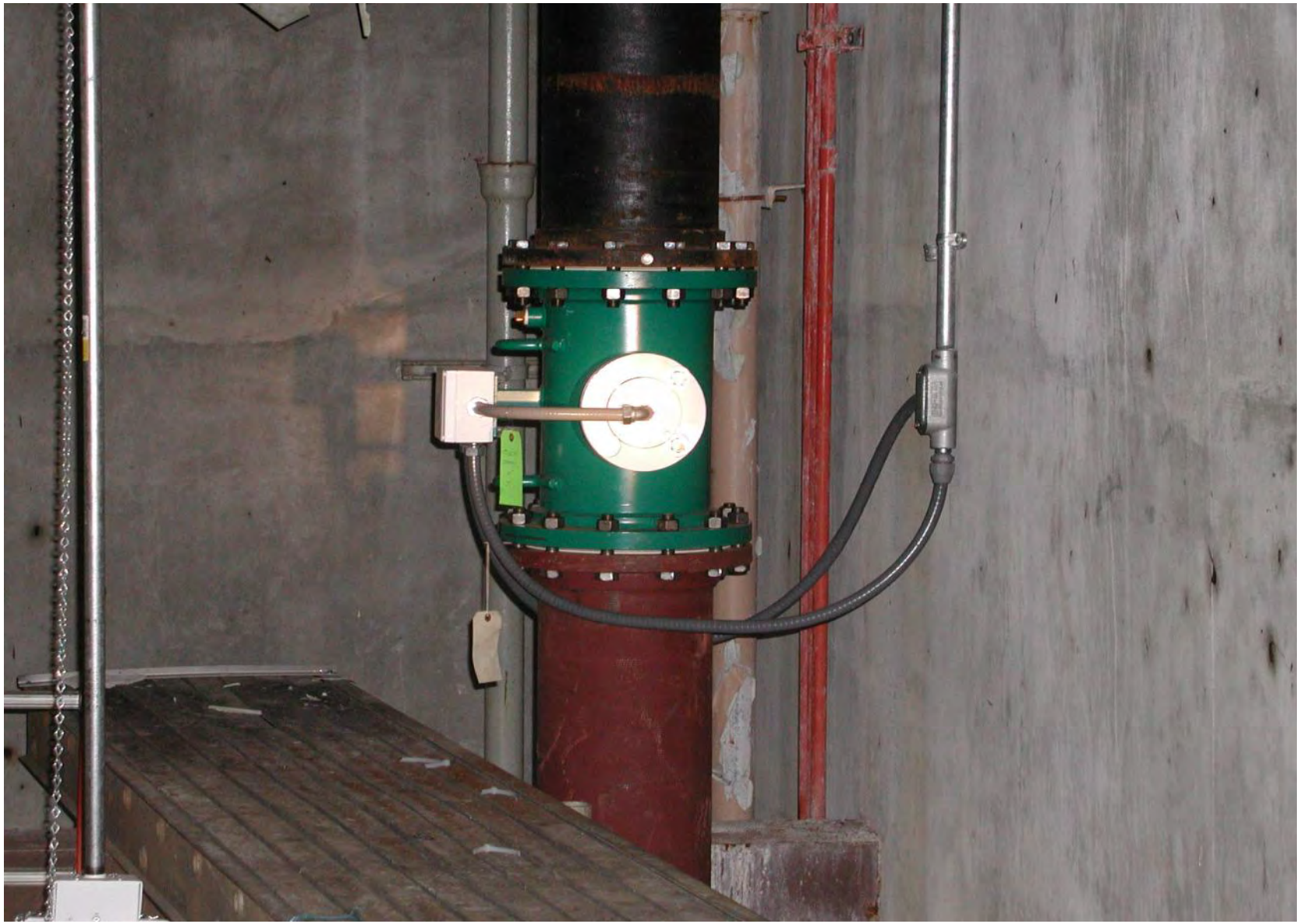
FIN MONSTER
JWC Environmental
CAUTION

ASCO®
25
Series 300
Factory Set to: 60HZ
Automatic Transfer Switch
RATINGS:
600 AMPS
480V 60HZ
3 PHASE
SERVICE DATA:
CAT. NO. J00300B30600N10C
BOM 785057
CONTROL PNL. 473670–006
WIRING DWG. 783739
S/O NO.
SERIAL NO. 578996 RE
TS COIL KIT 734768–004
RECTIFIER KIT 411785
CTRL CONT KIT CALL–FACTORY
FOR PROPER INSTALLATION & OPERATION
REFER TO OPERATOR'S MANUAL 381333–289
REPLACE THIS COVER AFTER SERVICING
TO REPLACE COVER INSERT HERE
TO REMOVE COVER RELEASE HERE
MADE IN MEXICO
Designed and manufactured by ASCO POWER TECHNOLOGIES, L.P. Florham Park, N.J. U.S.A.
609056-001

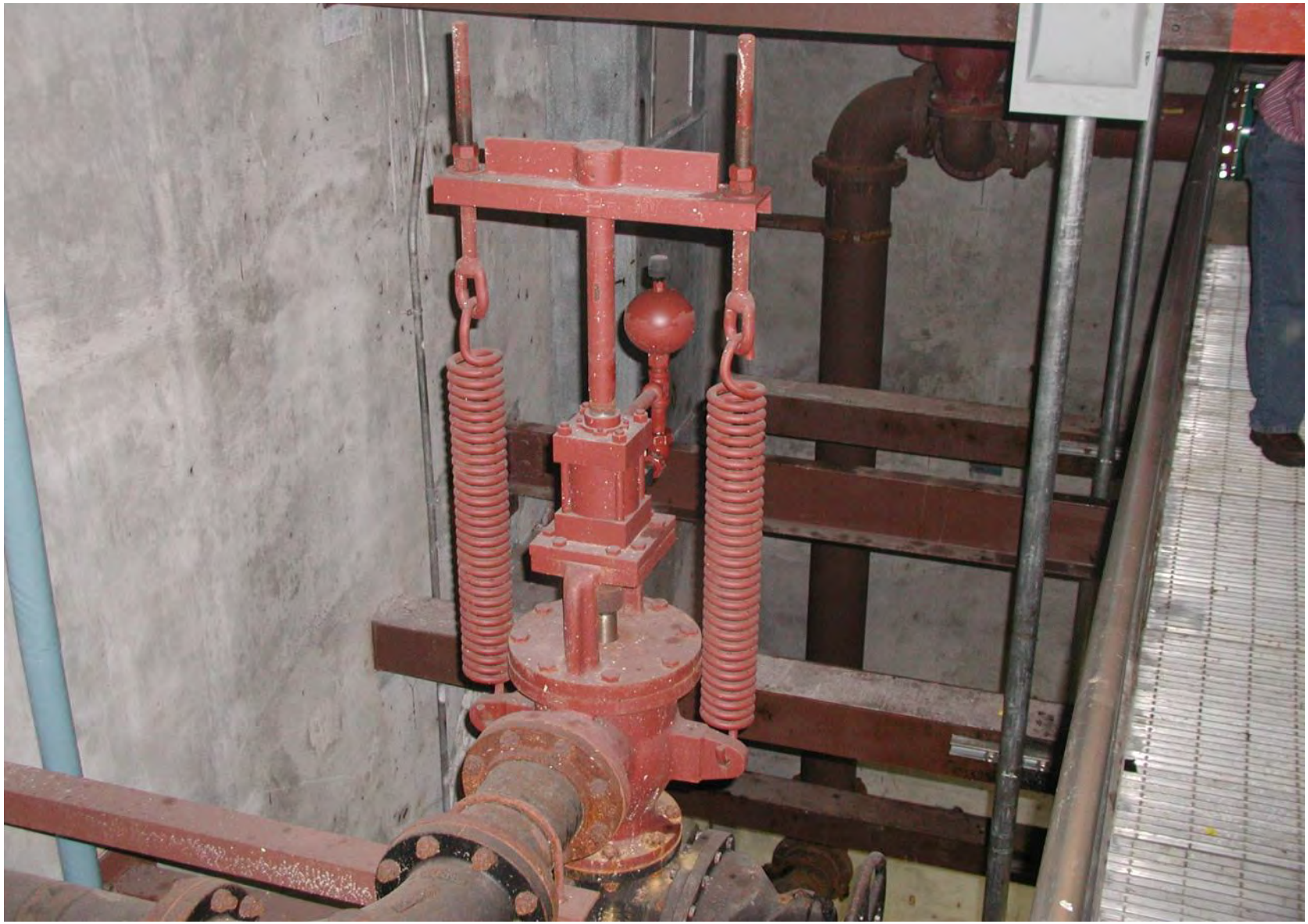

TB
NA
NB
NC
NN

GENERATOR
GENERATOR
NORMAL

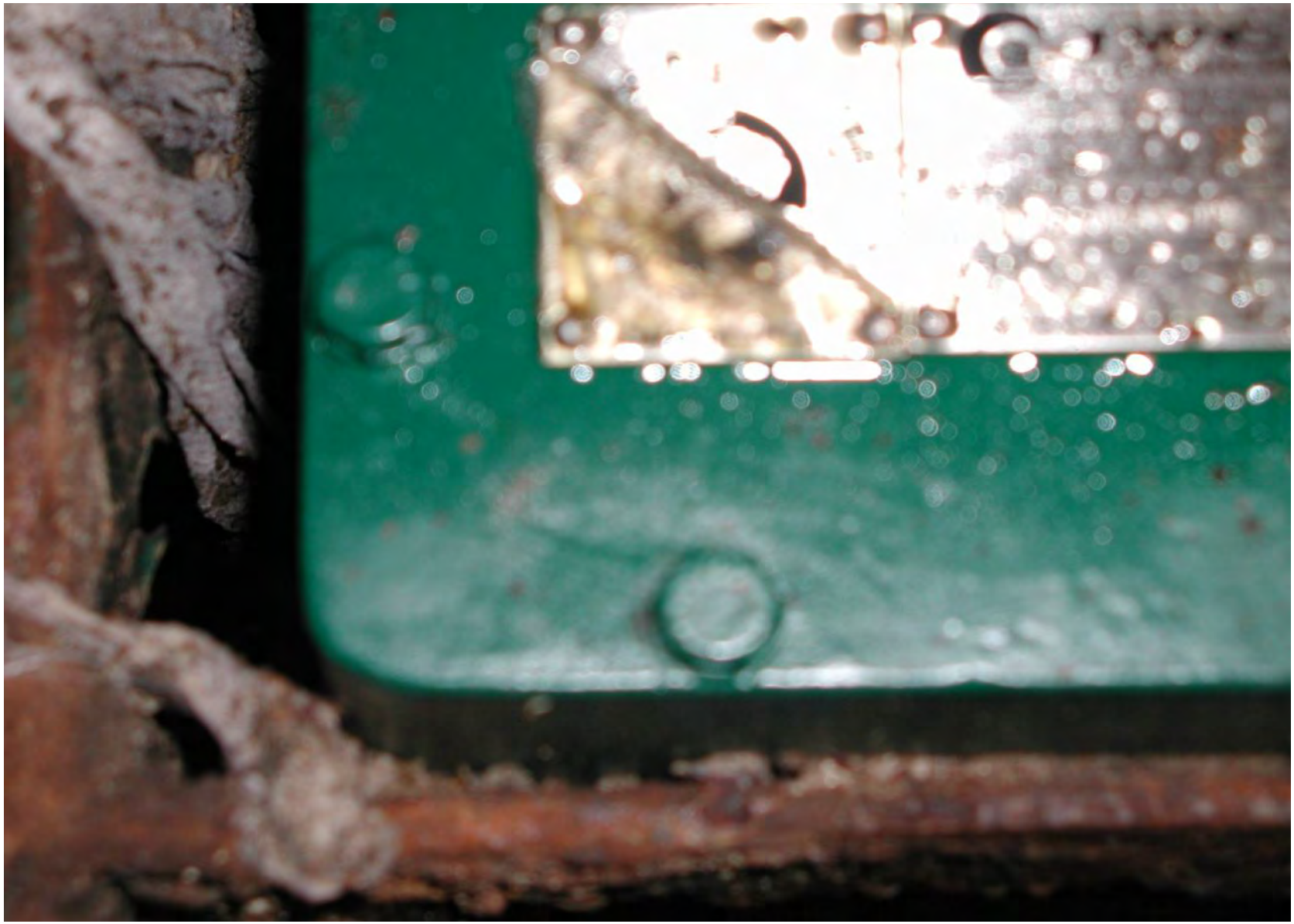
IMMERSION
TESTED!

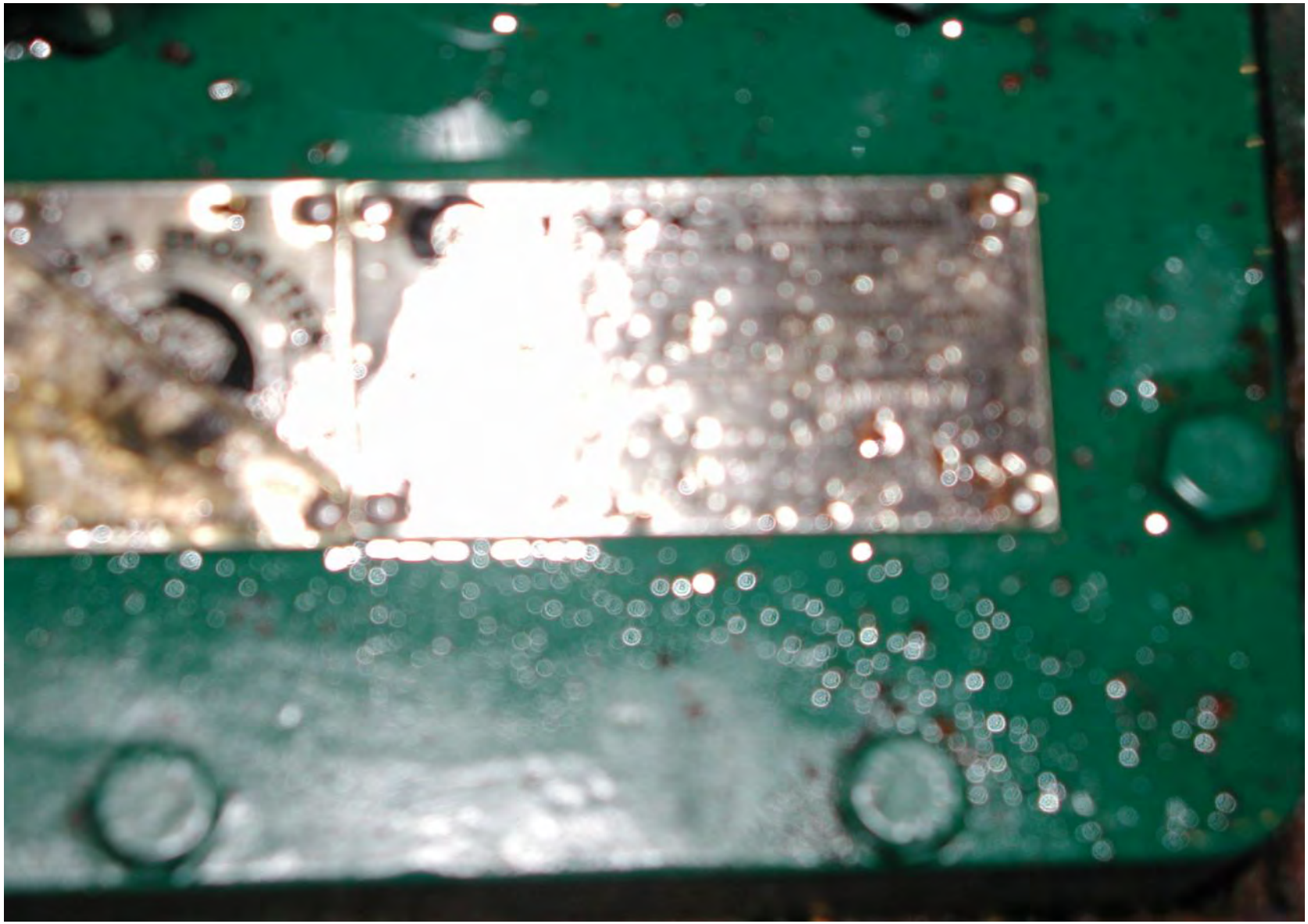


SAFETY ROPE



CAUTION

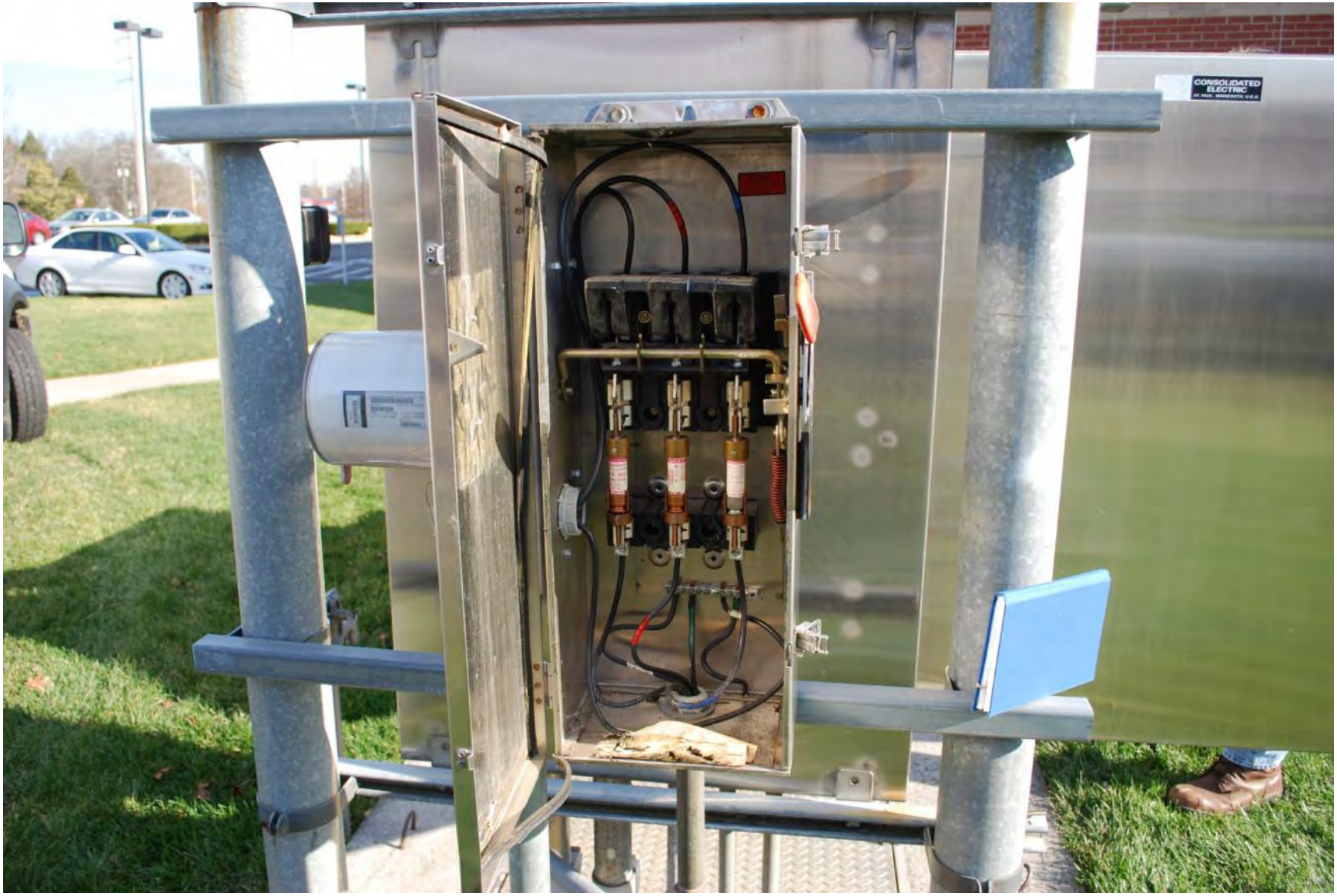


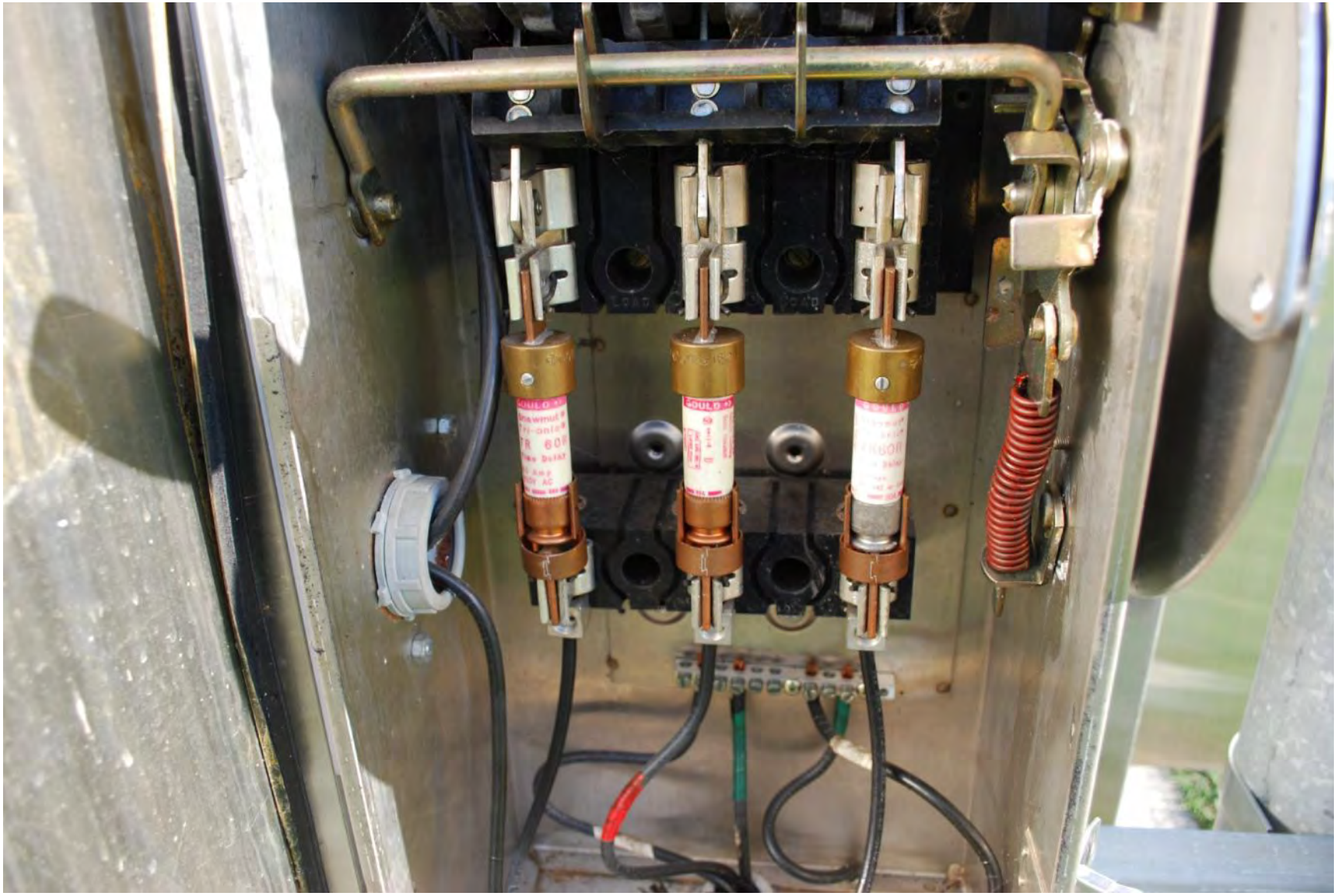


GFI
DUPLEX RECEPTACLE
CONTROL POWER
PUMP NO. 1
PUMP NO. 2
D152 CONTROLLER
LEVEL IN FEET
LEAD PUMP
LAG PUMP
LOW ALARM
HIGH ALARM
MAN LEVEL SIMULATOR
AUTO ALTERNATOR CONTROL SWITCH
Consolidated Electric
DANGER
Disconnect all sources of power before opening door. (Multiple and/or remote sources of power may be present.)
Hazardous voltages cause severe injury or death.
Consolidated Electric
Abnormal Level
Emergency High Level
Pump No. 1 Overtemp
Pump No. 2 Overtemp
Low Level Cutout
RUNNING
SEAL FAILURE
PUMP NO. 1
HAND-OFF-AUTO
RESET
RUNNING
SEAL FAILURE
PUMP NO. 2
HAND-OFF-AUTO
RESET

MAN LEVEL SIMULATOR
AUTO ALTERNATOR CONTROL SWITCH
Consolidated Electric
Consolidated Electric
Abnormal Level
Emergency High Level
Pump No. 1 Overtemp
Pump No. 2 Overtemp
Low Level Cutout
ACK
RST TST
RUNNING
SEAL FAILURE
PUMP NO. 1
HAND-OFF-AUTO
RESET
RUNNING
SEAL FAILURE
PUMP NO. 2
HAND-OFF-AUTO
RESET
LOW LEVEL CUTOUT RESET

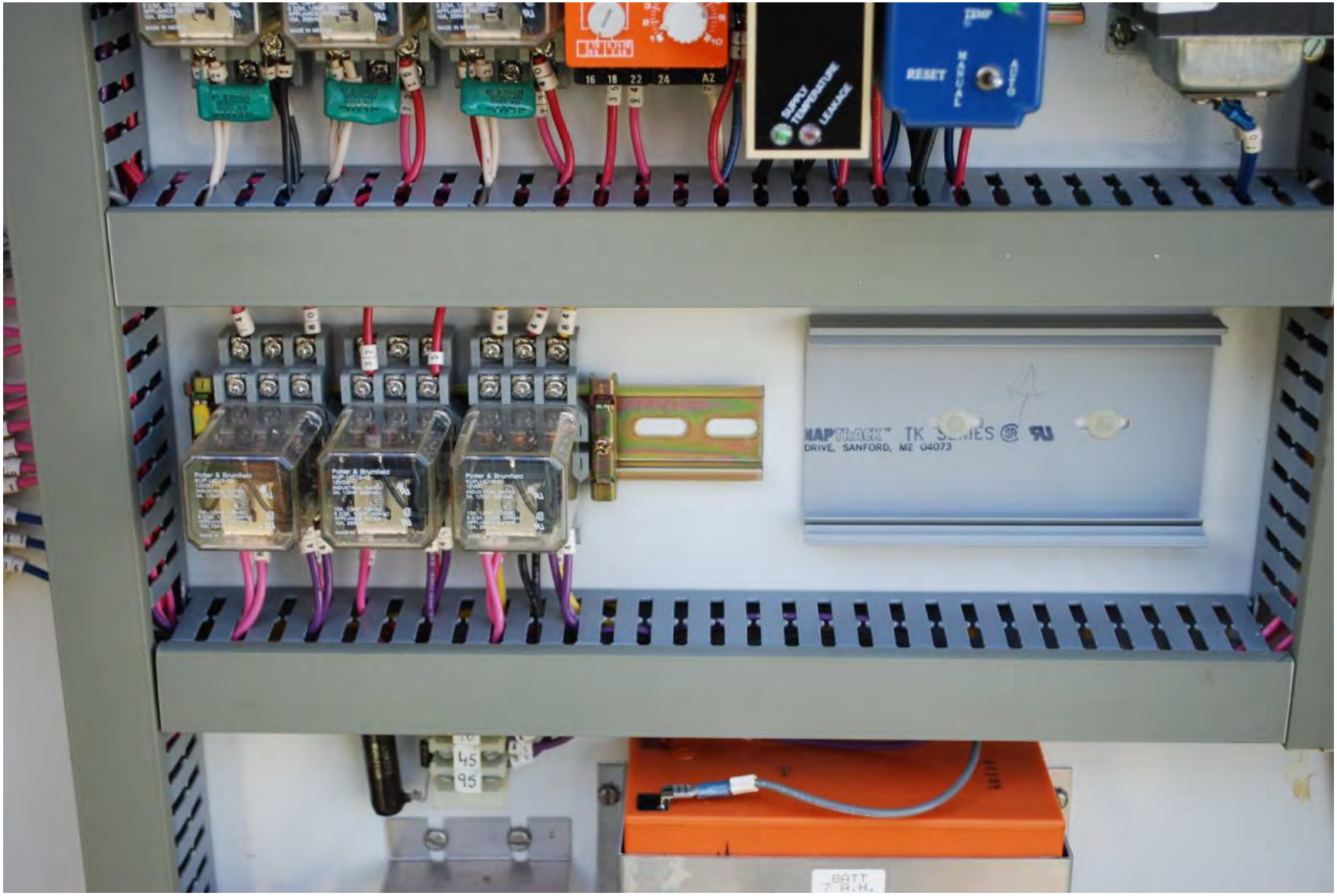
CONSOLIDATED ELECTRIC
ON
OFF

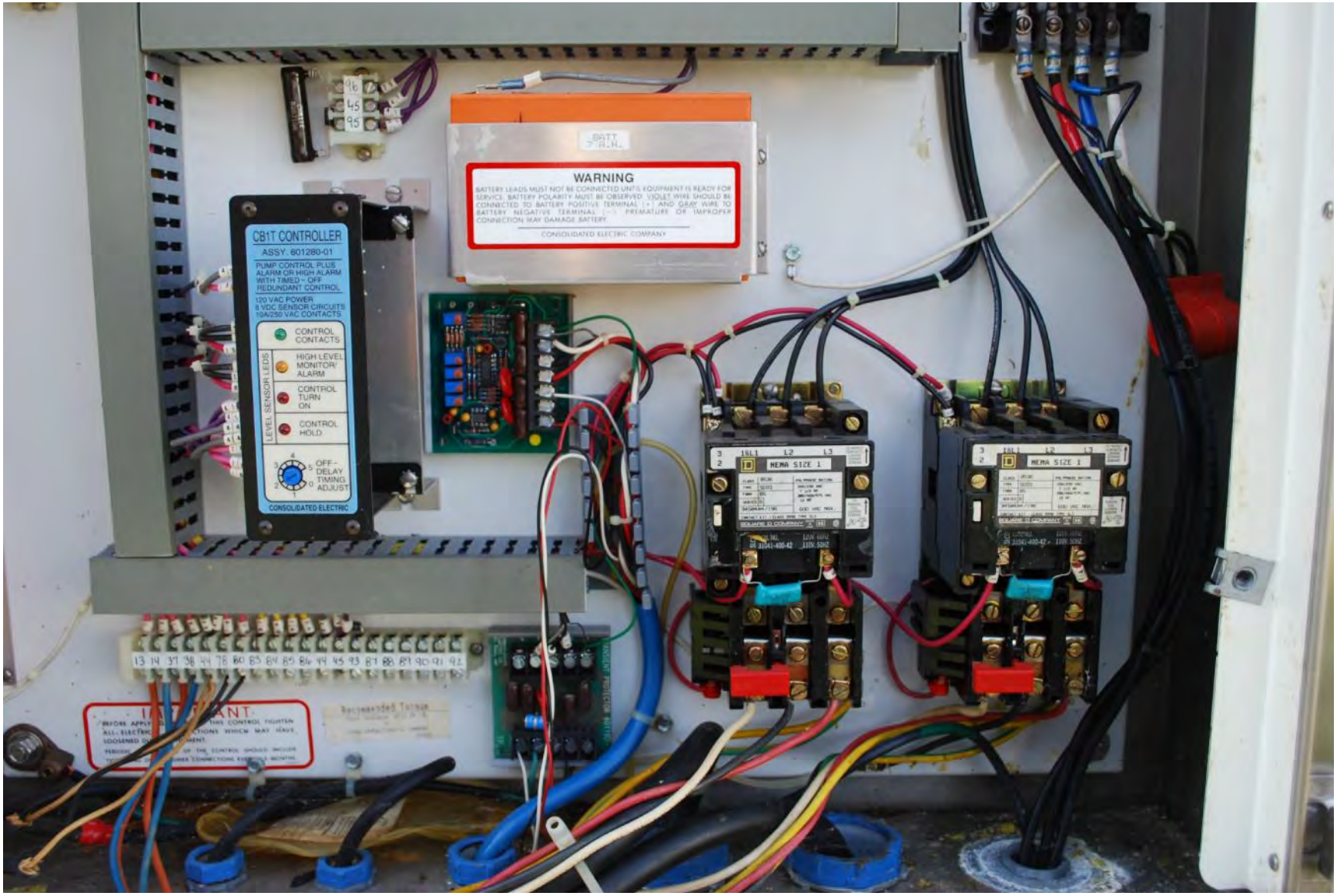

CONSOLIDATED
ELECTRIC

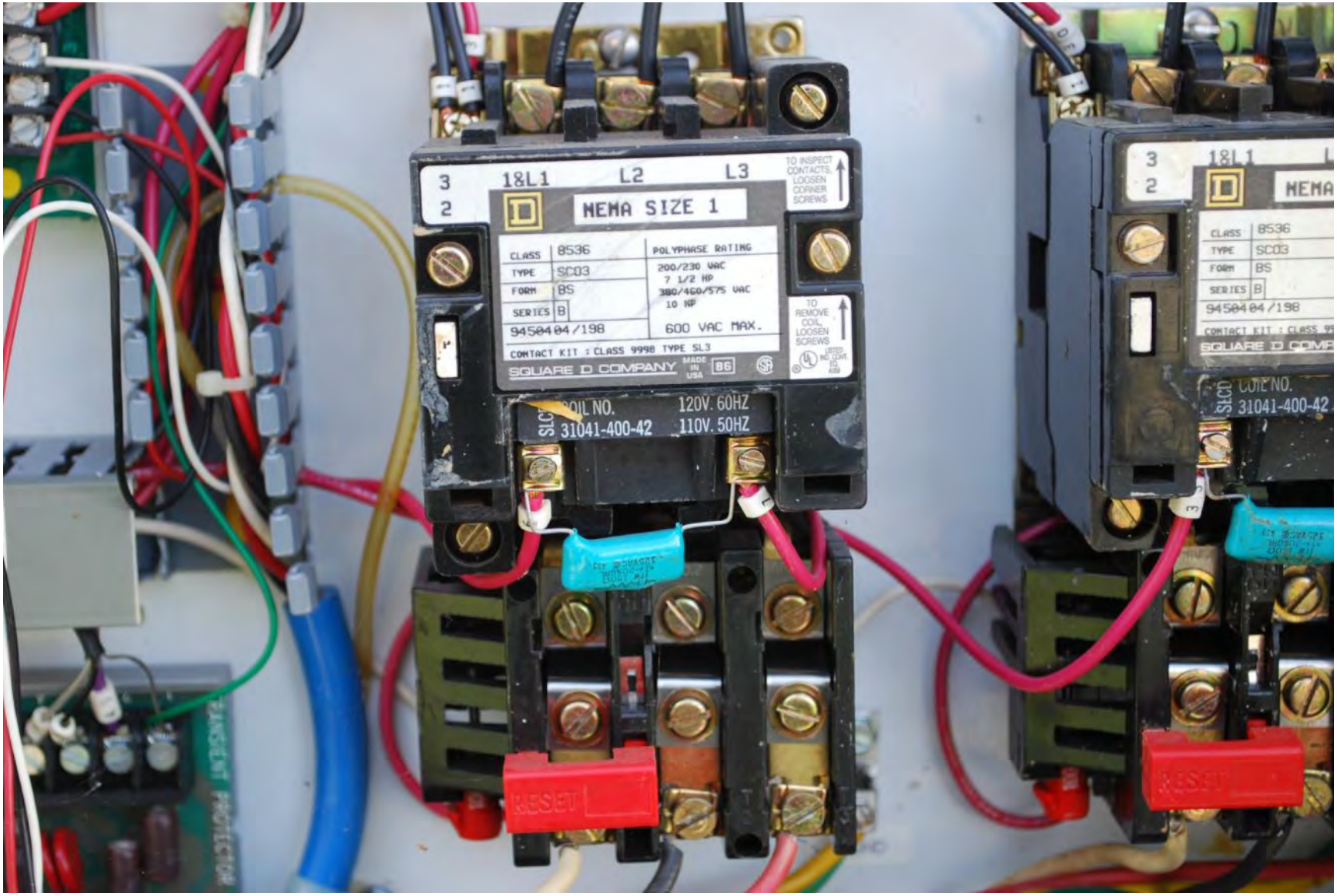


CIRCUIT BREAKER
3 POLE UNIT
ISSUE RT-42
MADE IN U.S.A.
THERMAL-MAGNETIC CIRCUIT BREAKER
15A
FHL36015
ON
OFF
CIRCUIT BREAKER
3 POLE UNIT
ISSUE RT-42
MADE IN U.S.A.
THERMAL-MAGNETIC CIRCUIT BREAKER
15A
FHL36015
ON
OFF

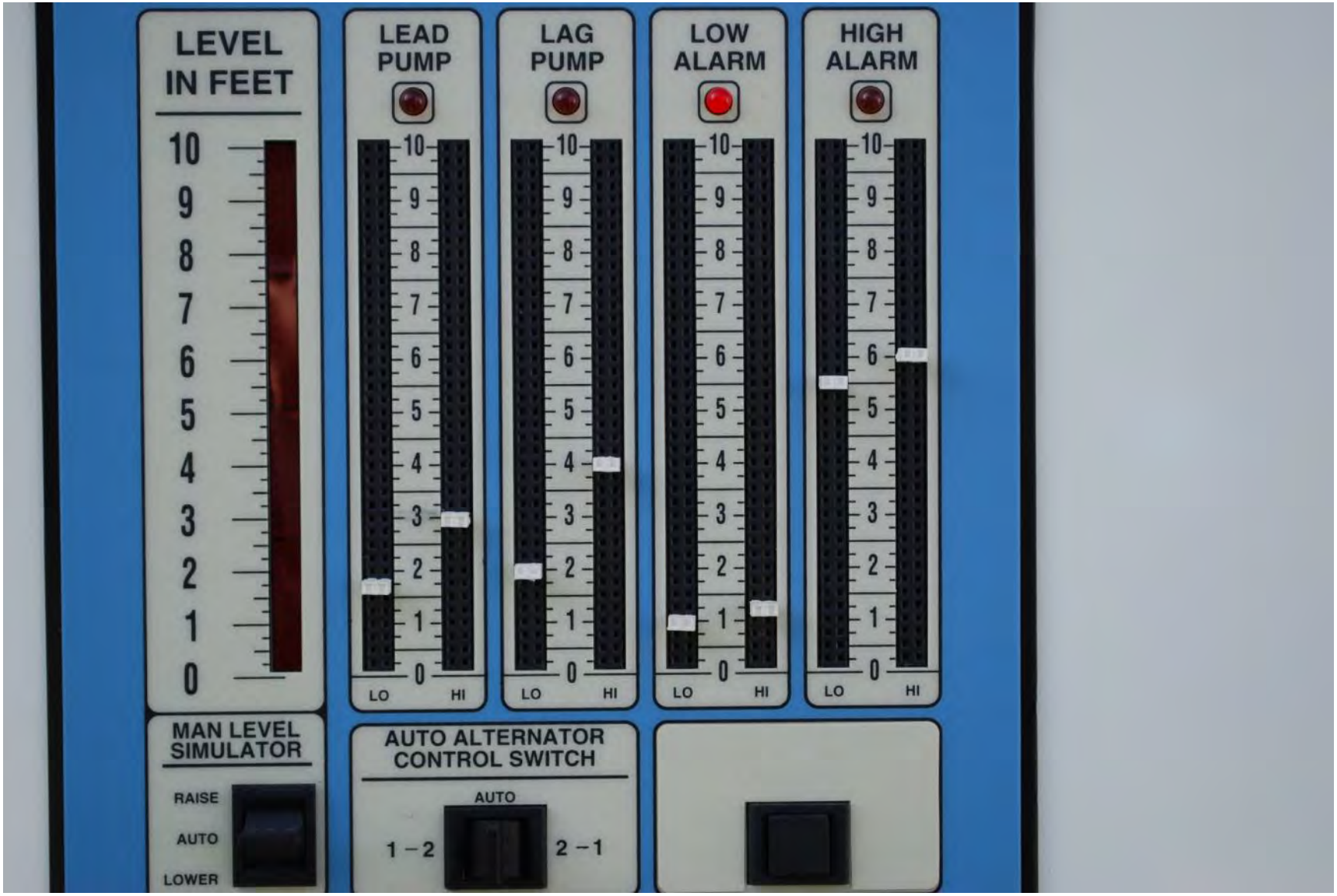
SBC2
1CR
120 V
2CR
120
3CR
120
1CT
120 V
CAS-1
CAS-2
UTI
40 VA
A1
1b
21
syrelec
corporation
FLYGT
MINI
CONTROL
AND
STATUS
SUPPLY
TEMPERATURE
LEAKAGE
LEAK
TEMP
RESET
MANUAL
AUTO


RESET
SUPPLY
TEMPERATURE
LEAKAGE
DRIVE, SANFORD, ME 04073
BATT
7 A.H.

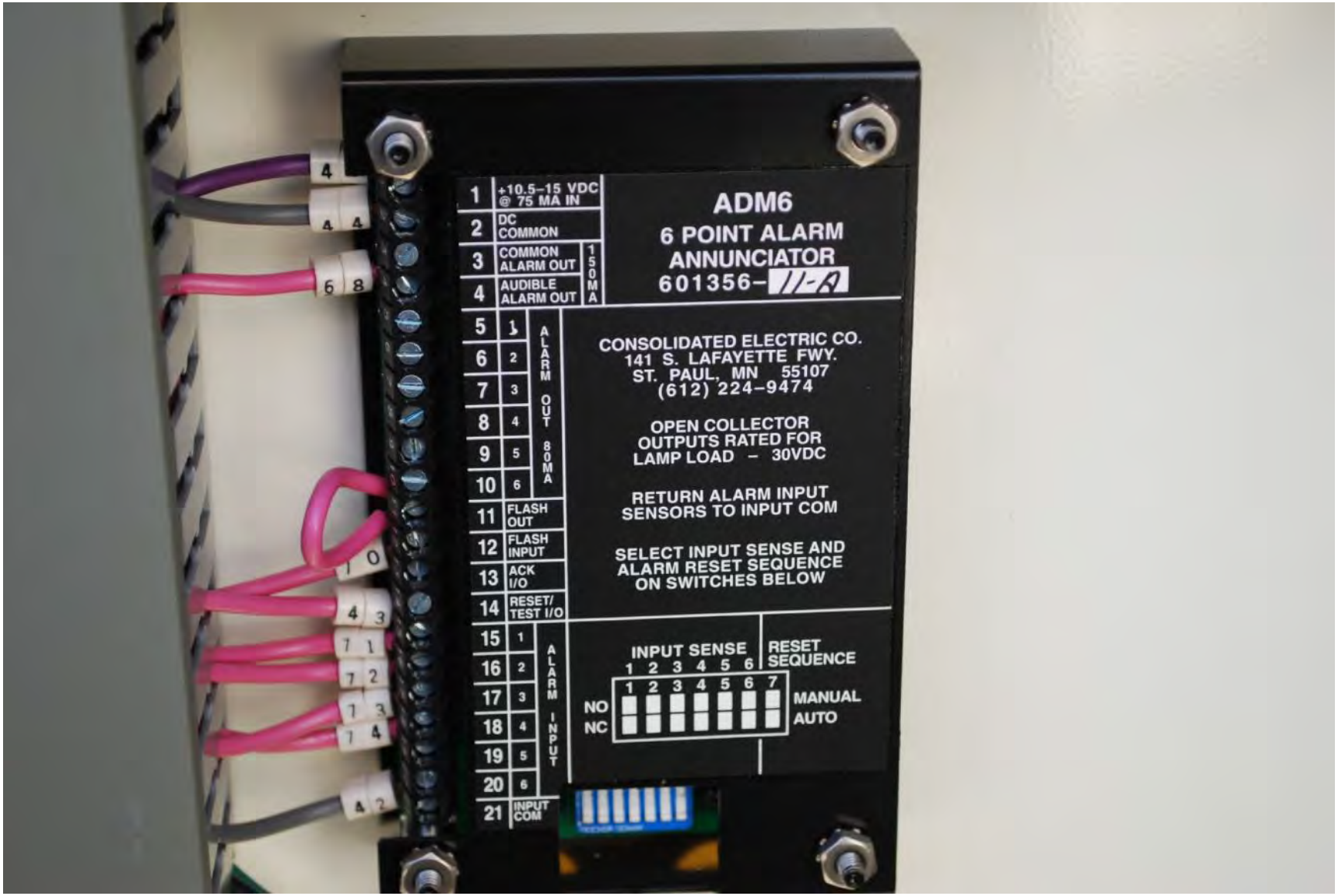

CB1T CONTROLLER
ASSY. 601280-01
PUMP CONTROL PLUS ALARM OR HIGH ALARM WITH TIMED – OFF REDUNDANT CONTROL
120 VAC POWER & VDC SENSOR CIRCUITS 10A/250 VAC CONTACTS
CONTROL CONTACTS
LEVEL SENSOR LEDS
HIGH LEVEL MONITOR/ ALARM
CONTROL TURN ON
CONTROL HOLD
OFF-DELAY TIMING ADJUST
CONSOLIDATED ELECTRIC
WARNING
BATTERY LEADS MUST NOT BE CONNECTED UNTIL EQUIPMENT IS READY FOR SERVICE. BATTERY POLARITY MUST BE OBSERVED. VIOLET WIRE SHOULD BE CONNECTED TO BATTERY POSITIVE TERMINAL (+) AND GRAY WIRE TO BATTERY NEGATIVE TERMINAL (–). PREMATURE OR IMPROPER CONNECTION MAY DAMAGE BATTERY.
CONSOLIDATED ELECTRIC COMPANY
NEMA SIZE 1
NEMA SIZE 1


3
2
1&L1
L2
L3
NEMA SIZE 1
CLASS 8536
TYPE SC03
FORM BS
SERIES B
9450404/198
POLYPHASE RATING
200/230 VAC
7 1/2 HP
380/460/575 VAC
10 HP
600 VAC MAX.
CONTACT KIT : CLASS 9998 TYPE SL3
SQUARE D COMPANY
MADE IN USA
86
TO INSPECT CONTACTS, LOOSEN CORNER SCREWS
TO REMOVE COIL, LOOSEN SCREWS
COIL NO.
31041-400-42
120V. 60HZ
110V. 50HZ
RESET
NEMA
CLASS 8536
TYPE SC03
FORM BS
SERIES B
9450404/198
COIL NO.
31041-400-42

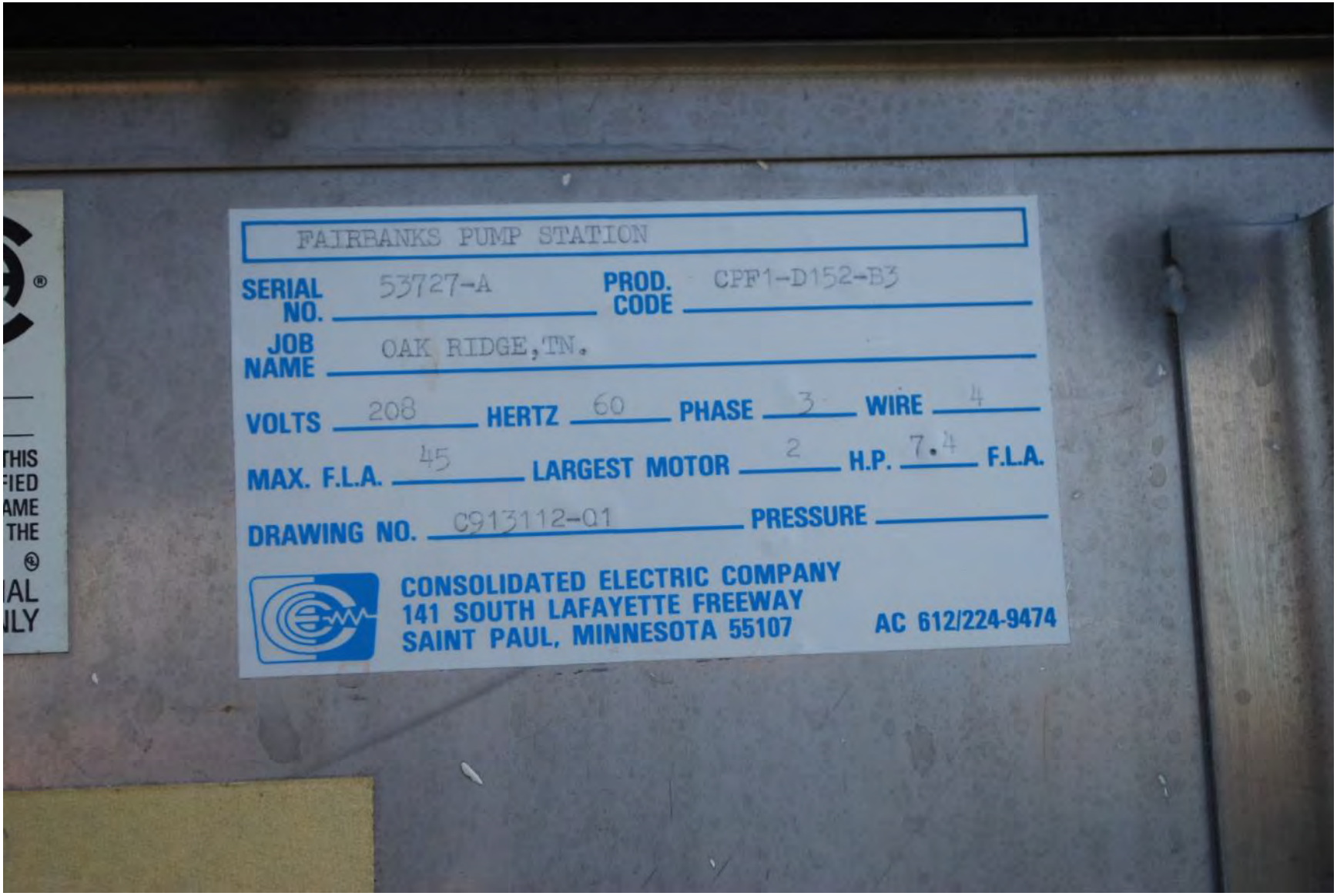
D152 CONTROLLER
CONSOLIDATED ELECTRIC
ST. PAUL, MN 55107
LISTED
INDUSTRIAL
CONTROL
EQUIPMENT
92X3
601273-21-C
S/N 12314
PATENT NO. 4,705,456
FUSE
1/4-AMP
SLO-BLO
TERMINAL TORQUE RATING: 12 IN-LBS MAX
CONTACT RATINGS
GENERAL PURPOSE
PILOT DUTY
10A @ 120VAC
2.88 @ 120VAC
6.67A @ 240VAC
10A @ 30VDC
1.96 @ 240VAC
120VAC
50/60HZ
20VA
L1
N
PUMP
NO.1
K1
PUMP
NO.2
K2
ALARM
SHOWN IN ENERGIZED/
NORMAL STATE
K3
EXTERNAL SILENCE
EXTERNAL AUDIBLE DRIVER O.C.
+13.8 VDC OUT
COMMON
TRANSDUCER CONNECTIONS
SIGNAL IN (WHT)
EXCITATION (RED)
SIGNAL COM (BLK)
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16


LEVEL IN FEET
10
9
8
7
6
5
4
3
2
1
0
LEAD PUMP
LAG PUMP
LOW ALARM
HIGH ALARM
LO
HI
MAN LEVEL SIMULATOR
RAISE
AUTO
LOWER
AUTO ALTERNATOR CONTROL SWITCH
AUTO
1 – 2
2 – 1

1/10
0 0 5 0 5 4
HOURS
Consolidated
Electric
1/10
0 2 3 5 9
HOURS
Consolidated
Electric


ADM6
6 POINT ALARM
ANNUNCIATOR
601356-II-A
1 +10.5–15 VDC @ 75 MA IN
2 DC COMMON
3 COMMON ALARM OUT
4 AUDIBLE ALARM OUT
150 MA
5 6 ALARM OUT 80MA
11 FLASH OUT
12 FLASH INPUT
13 ACK I/O
14 RESET/ TEST I/O
15 16 17 18 19 20 ALARM INPUT
21 INPUT COM
CONSOLIDATED ELECTRIC CO.
141 S. LAFAYETTE FWY.
ST. PAUL, MN 55107
(612) 224-9474
OPEN COLLECTOR OUTPUTS RATED FOR LAMP LOAD – 30VDC
RETURN ALARM INPUT SENSORS TO INPUT COM
SELECT INPUT SENSE AND ALARM RESET SEQUENCE ON SWITCHES BELOW
INPUT SENSE
1 2 3 4 5 6
RESET SEQUENCE
1 2 3 4 5 6 7
NO
NC
MANUAL
AUTO

CB1T CONTROLLER
ASSY. 601280-01
PUMP CONTROL PLUS
ALARM OR HIGH ALARM
WITH TIMED – OFF
REDUNDANT CONTROL
120 VAC POWER
8 VDC SENSOR CIRCUITS
10A/250 VAC CONTACTS
CONTROL
CONTACTS
LEVEL SENSOR LEDS
HIGH LEVEL
MONITOR/
ALARM
CONTROL
TURN
ON
CONTROL
HOLD
OFF –
DELAY
TIMING
ADJUST
CONSOLIDATED ELECTRIC


FAIRBANKS PUMP STATION
SERIAL NO. 53727-A
PROD. CODE CPF1-D152-B3
JOB NAME OAK RIDGE,TN.
VOLTS 208 HERTZ 60 PHASE 3 WIRE 4
MAX. F.L.A. 45 LARGEST MOTOR 2 H.P. 7.4 F.L.A.
DRAWING NO. C913112-01 PRESSURE
CONSOLIDATED ELECTRIC COMPANY
141 SOUTH LAFAYETTE FREEWAY
SAINT PAUL, MINNESOTA 55107
AC 612/224-9474

AUTO CRANE
DANGER
6406H
800-949-8864

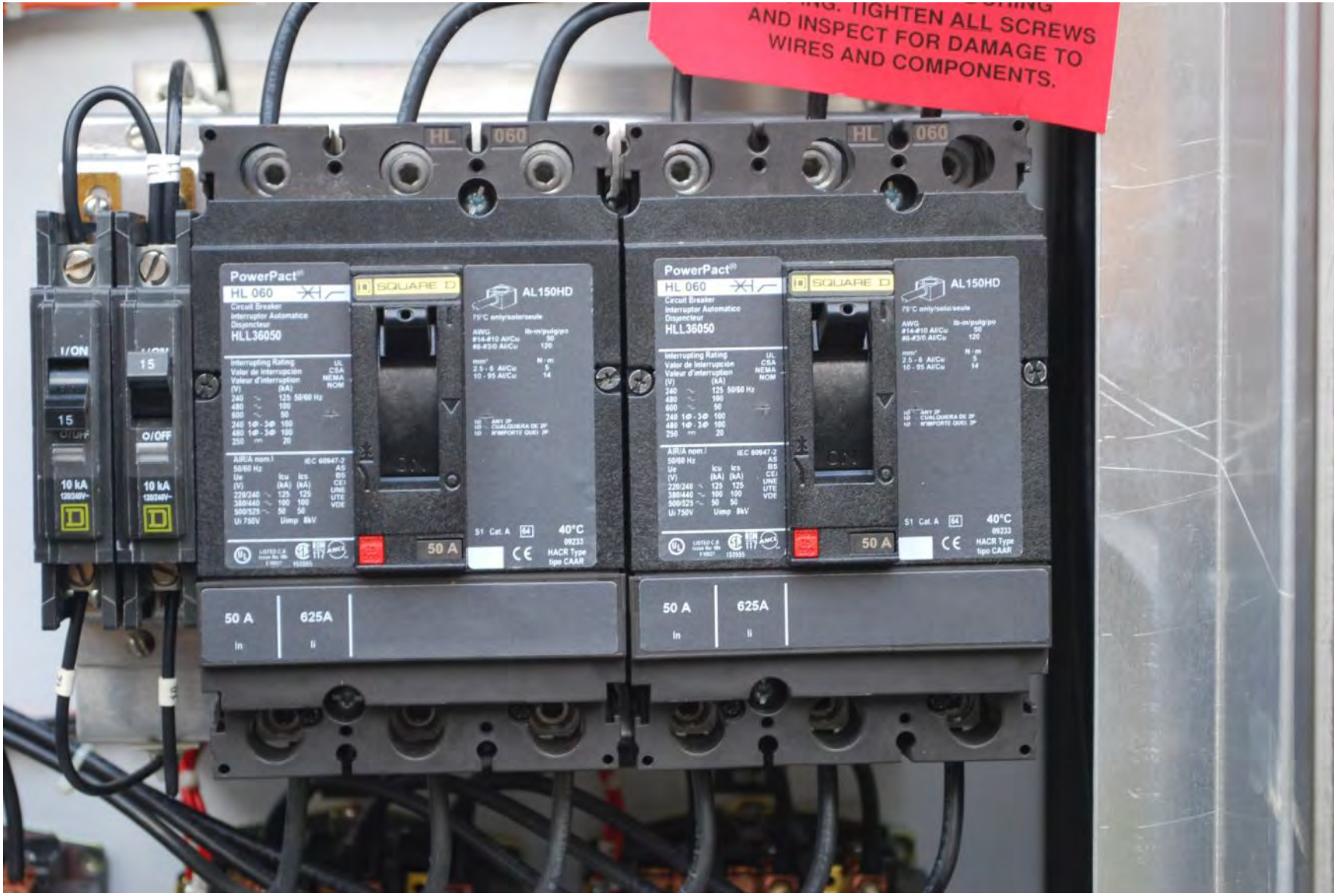
AUTO CRANE

LEVEL
SETTINGS
1
2
3
4
5
6
7
8
9
10
100%
90%
80%
70%
60%
50%
40%
30%
20%
10%
PEAK LEVELS
MT2PC
MULTITRODE DUPLEX PUMP CONTROLLER
PUMP 1
RUNNING
MANUAL
OFF
AUTO
SELECT ONE
AVAILABLE
FAULT (Auto Reset)
LOCKOUT (Man. Reset)
MOTOR OVERTEMP
SEAL FAILURE
RESET ONE
PUMP 2
RUNNING
MANUAL
OFF
AUTO
SELECT TWO
AVAILABLE
FAULT (Auto Reset)
LOCKOUT (Man. Reset)
MOTOR OVERTEMP
SEAL FAILURE
RESET TWO
ALARMS
ALARM 1
ALARM 2
ALARM RESET
PUMP 1
PUMP 2
NEXT START
ALTERNATE
DUTY SELECT
Leaders in Pump Station Management Technology
multitrode

PUMP 1 RUN
PUMP 2 RUN
sta-con
00368
HOURS
FLYGT
LEAKAGE
OVERTEMP
AUTO RESET
MANUAL RESET
OVERTEMP RESET
Mini CONTROL AND STATUS 120
POWER
FLYGT
LEAKAGE
OVERTEMP
AUTO RESET
MANUAL RESET
OVERTEMP RESET
Mini CONTROL AND STATUS 120
POWER
sta-con
00559
HOURS
PUMP 1
OFF
HAND
AUTO
PUMP 2
OFF
HAND
AUTO

MAIN
RECEPTACLE
CONTROL
MB 1
MB 2

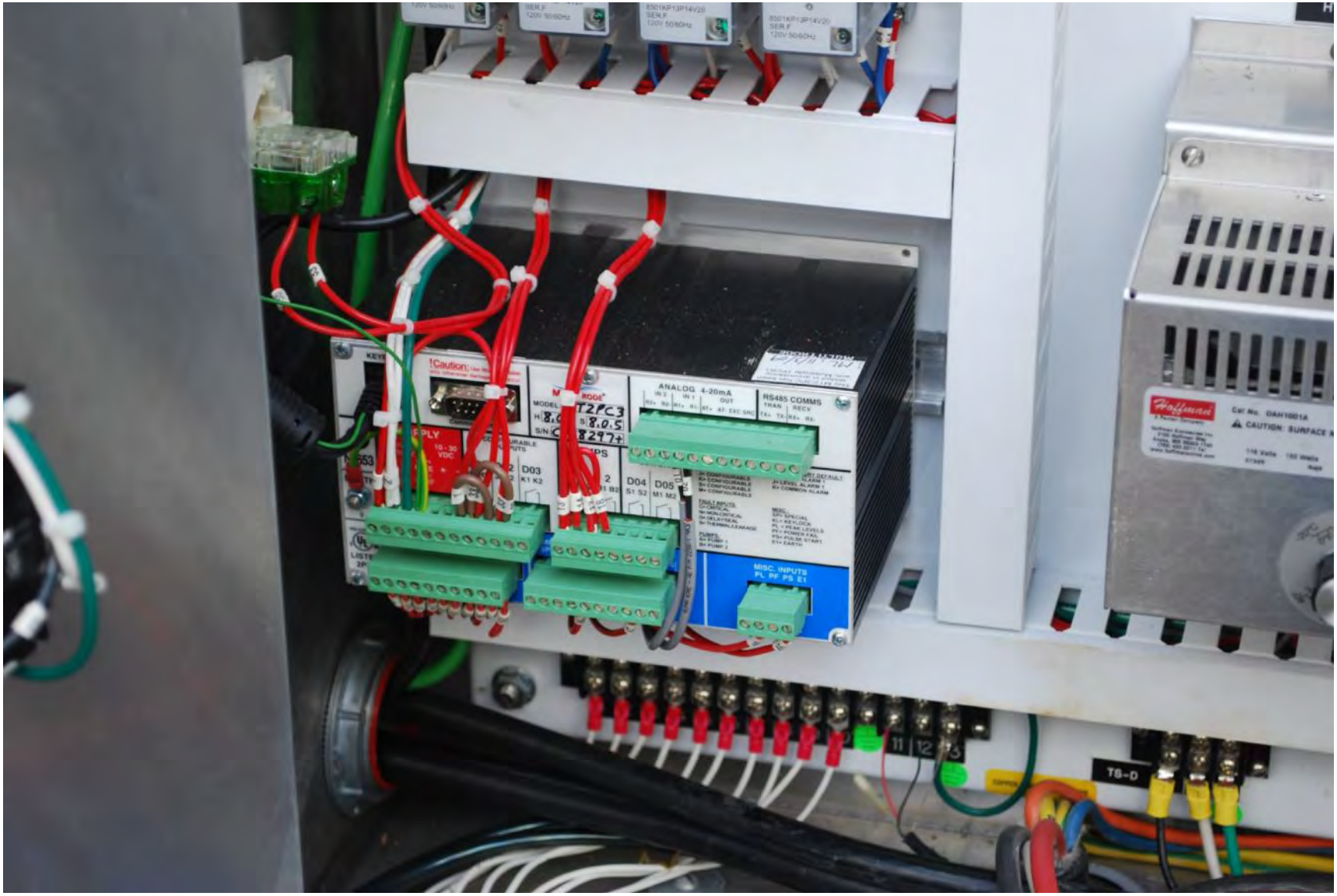
SDSA3650
PowerPact
HD 150
HDL36080
SQUARE D
AL150HD
80 A
40°C
80 A
1125A


AND INSPECT FOR DAMAGE TO
WIRES AND COMPONENTS.
PowerPact
HL 060
Circuit Breaker
HLL36050
SQUARE D
AL150HD
50 A
625A
In
Ii
I/ON
O/OFF
15
10 kA
40°C
HACR Type
tipo CAAR

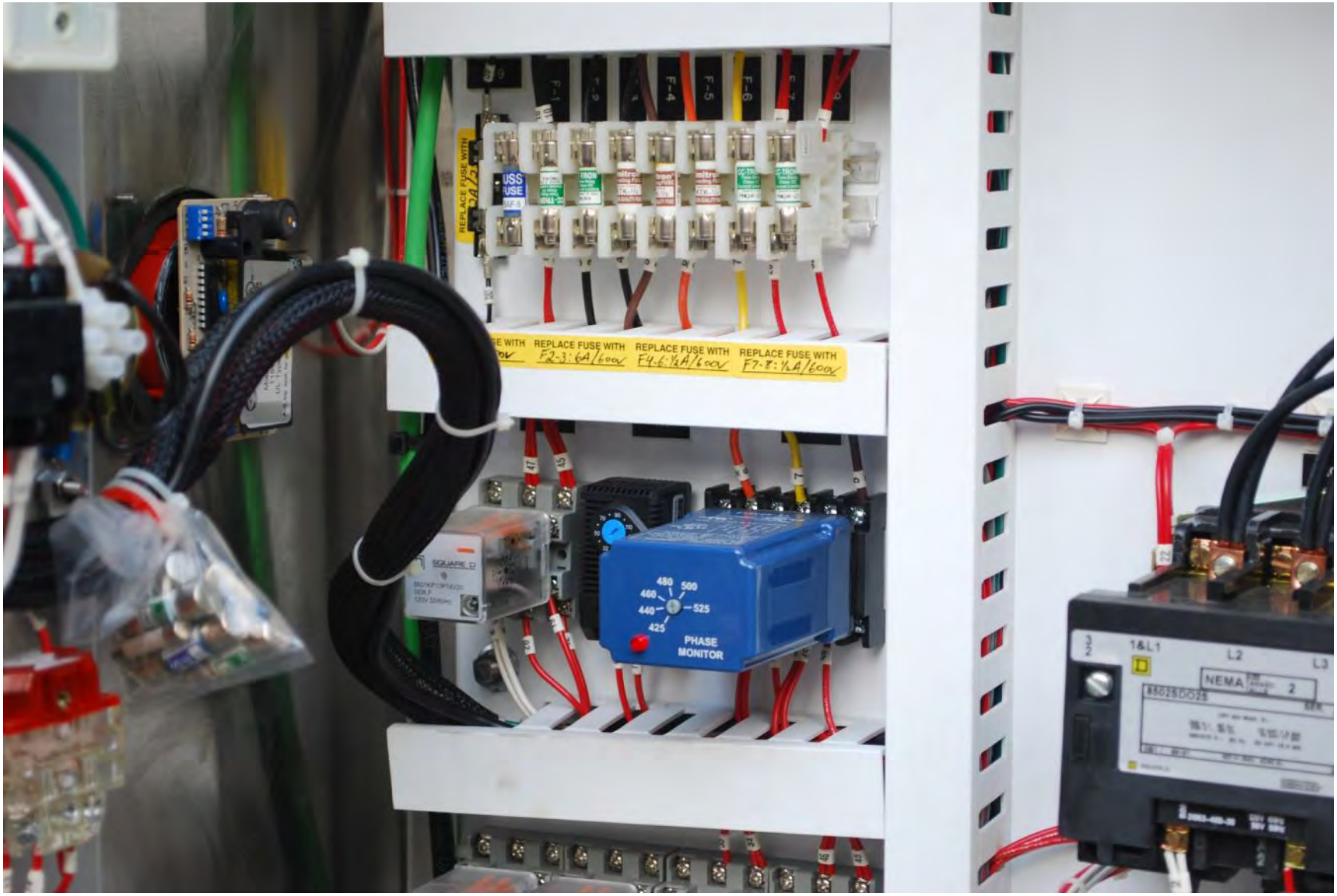
L3
2
SER. A
3
2
1&L1
L2
L3
NEMA SIZE TAMAÑO TAILLE 2
8502SDO2S
SER. A
HP/ kW MAX. 3~
200 V~ 60 Hz 10 HP/ 7,5 kW
230 V~ 60 Hz 15 HP/ 11 kW
460/575 V~ 60 Hz 25 HP/ 18,5 kW
600 V~ MAX. 50/60 Hz
24
31063-409-38
120V 60Hz
110V 50Hz
SSS-1
SSS-2

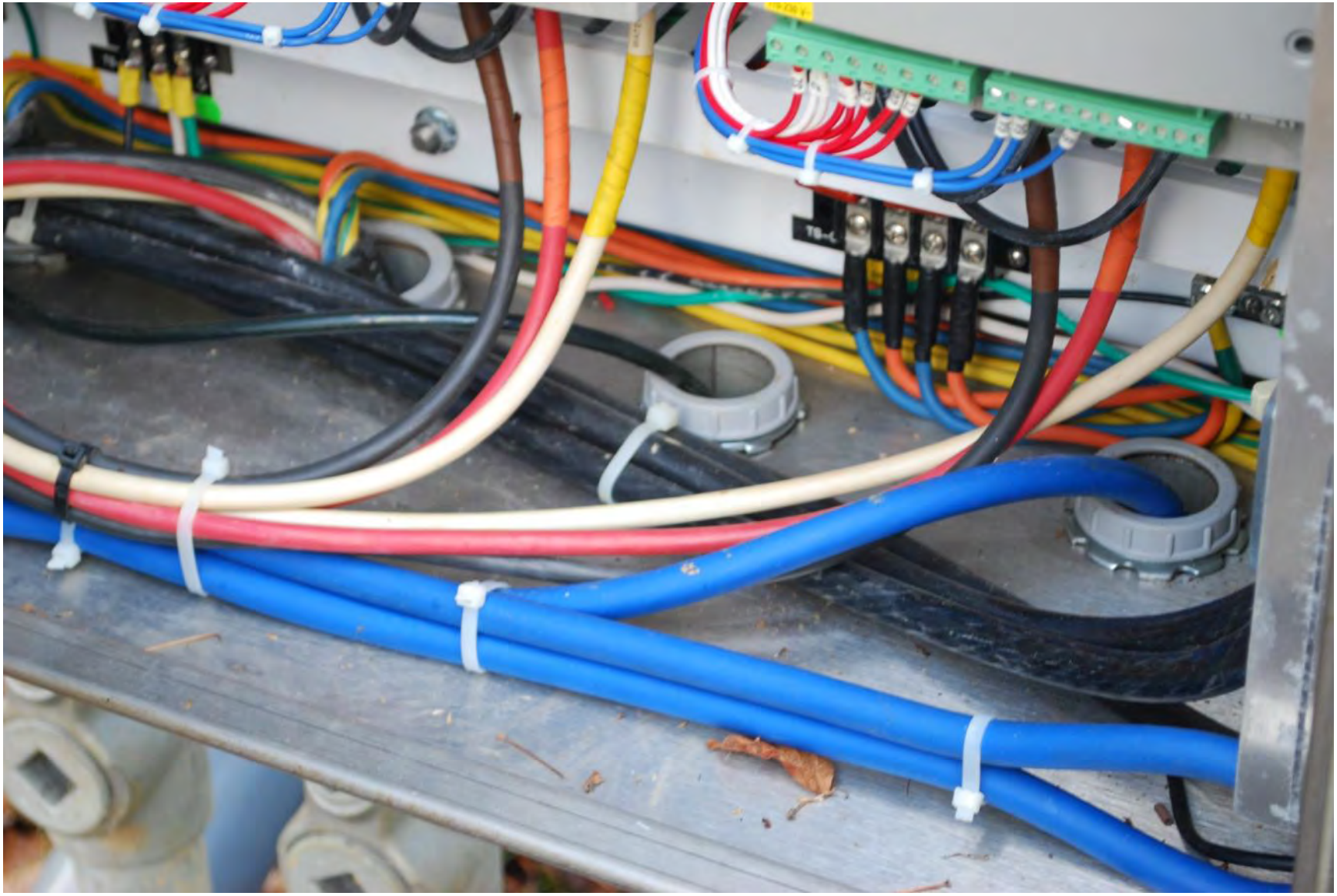
SSS-2
ATS48D32Y
208-690 V~
Telemecanique
Altistart 48
nLP
ESC
ENT

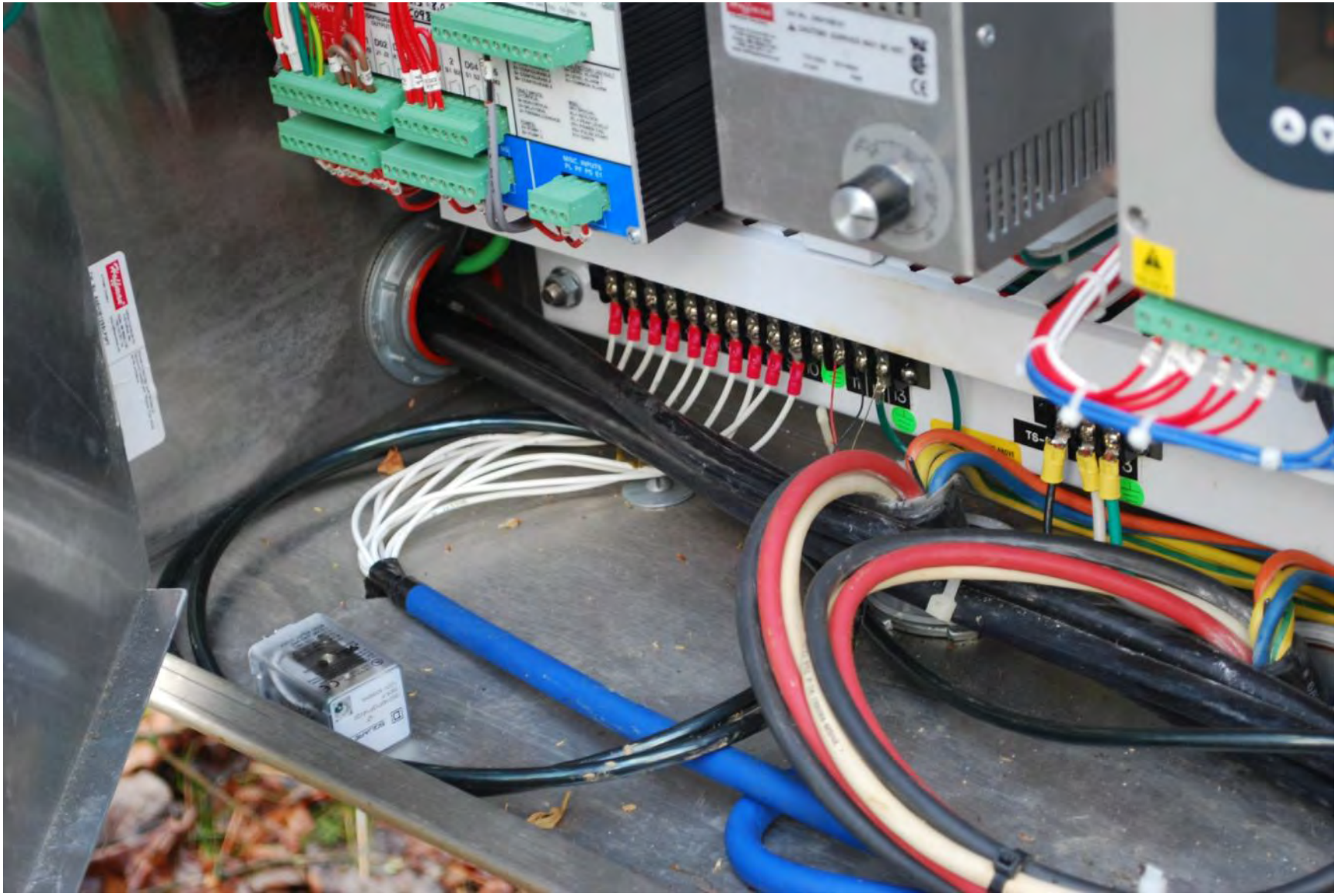
HT
SQUARE D
ANALOG 4-20mA
RS485 COMMS
Hoffman
Cat No. DAH1001A
CAUTION: SURFACE MAY BE HOT.
115 Volts 100 Watts
Telemecanique
Altistart 48
CL1-CL2
110-230 V~


ANALOG 4-20mA
RS485 COMMS
MISC. INPUTS
TS-D

PHASE
MONITOR
NEMA
SQUARE D
HT


REPLACE FUSE WITH
REPLACE FUSE WITH F2-3: 6A/600V
REPLACE FUSE WITH F4-6: ½A/600V
REPLACE FUSE WITH F7-8: ½A/600V
480
500
460
525
440
425
PHASE MONITOR
NEMA
L1
L2
L3





AS BUILT
GRACELAND ROAD L/S
480V 3Ø 4W
MCB
60A
TVSS
HB1
HB2
50A
SSS1 ATS4B
SSS2 ATS4B
PUMP 1 20 HP 26 FLA
PUMP 2 20 HP 26 FLA
IC1
IC2
SC1
SC2
(REMOVE BOND IF ALREADY BONDED AT SERVICE DISC.)
STOP/RUN
+24
R2
R4
18,32
2L37
F1 5A
F2-3 480V 6A
F4-6 0.5A
PM
CPT 2KVA 480V 120V
CCB 15A
DRB 15A
DR(GFI 15A
RECPT
D1
D2
D3
GRD BAR
RECEPTACLE
TVSS
MT2PC3
XDD
DDX
R8
R9
TO LINE# 68
TO LINE# 71
SSS1 R2A R2C
SSS2 R2A R2C
R1
R2
R3
R4
SC1 CLOSE 34
SSS1 CALL 2
SC2 CLOSE 39
SSS2 CALL 8
RL1
RL2
PUMP 1 RUN
PUMP 2 RUN
TIME METER 1
TIME METER 2
ETM
TH
VENTILATION FAN
A4
A5

GRACELAND ROAD L/S
QUOTE NO. 96013BA
DATE 05/1/09
DRAWN BY HOWIE T.
REVISION B
ITT-FLYGT
ITT-FLYGT CORP.
TRUMBULL, CT 06611
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SHALL NOT BE RELEASED, DUPLICATED, USED OR DISCLOSED
IN WHOLE OR IN PART FOR ANY PURPOSE WITHOUT THE EXPRESS
WRITTEN PERMISSION OF FLYGT AND SHALL BE CONSIDERED
CONFIDENTIAL INFORMATION.
When power is applied, the overtemp contacts will change state if the motor's temperature sensor(s) do not indicate high temp.
OVERTEMP
MOISTURE
MINICAS 1 (MC1)
MINICAS 2 (MC2)
THERMALS
SEAL FAIL
100V HEATER
ALARM LIGHT
ALARM HORN
SILENCE
PUMP 1 FAULT
PUMP 2 FAULT
ISOLATION 1
ISOLATION 2
UP TO SPEED 1
UP TO SPEED 2
SC1 CLOSE
SC2 CLOSE
AS BUILT
GRACELAND ROAD L/S
QUOTE NO. 96013BA
DATE 05/1/09
DRAWN BY HOWIE T.
REVISION B
ITT-FLYGT
ITT-FLYGT CORP.
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PAGE 2 OF 3

ITT-FLYGT CORP.
TRUMBULL, CT 06611
QUOTE NO. 96013BA
DATE 05/1/09
DRAWN BY HOWIE T.
REVISION B
GRACELAND ROAD L/S
POWER SUPPLY
12VDC
PRESSURE SENSOR
MULTI-TROBE M1SPC
PROBE
LAST WIRE #64
Nonintrinsically safe wiring terminals
TERMINAL STRIP B (TS-B)
TERMINAL STRIP C (TS-C)
4-20 mA PRESSURE SENSOR
MCB
PANEL LOADS
CUSTOMER HEDROV
JOB NAME GRACELAND ROAD L/S
ENCLOSURE UL TYPE RATING UL TYPE 1
VOLTAGE 480V PHASE 3 HZ 60
SERVICE 90 AMP
GROUND WIRE 3 AVG
TERMINAL 1 8 AVG
TERMINAL 2 3 AVG
TERMINAL 3 8 AVG
TERMINAL 4 8 AVG
TERMINAL 5 8 AVG
TABLE D
TABLE C
TABLE D
TABLE D
TABLE C
TABLE C
TABLE C
AS BUILT
THIS DOCUMENT IS THE PROPRIETARY PROPERTY OF FLYGT. IT HAS BEEN FURNISHED UPON THE CONDITION THAT IT SHALL NOT BE RELEASED, DUPLICATED, USED OR DISCLOSED IN WHOLE OR IN PART FOR ANY PURPOSE WITHOUT THE EXPRESS WRITTEN PERMISSION OF FLYGT AND SHALL BE CONSIDERED CONFIDENTIAL INFORMATION.
ITT-FLYGT CORP.
TRUMBULL, CT 06611
GRACELAND ROAD L/S
QUOTE NO. 96013BA
DATE 05/1/09
DRAWN BY HOWIE T.
REVISION B

AS BUILT

GRACELAND ROAD L/S			
QUOTE NO.	DATE	DRAWN BY	REVISION
96013BA	05/1/09	HOWIE T.	B

ITT-FLYGT — ITT-FLYGT CORP. TRUMBULL, CT 06611

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FLYGT

An ITT Industries company

AS BUILT

BILL OF MATERIAL

BY: HOWIE T.

QUOTE NO. 96013BA — Date: 7/17/2009 — Rev: B

JOB NAME GRACELAND ROAD L/S — SN: 09-0522

CUSTOMER NEDROW — PO: 07-2000

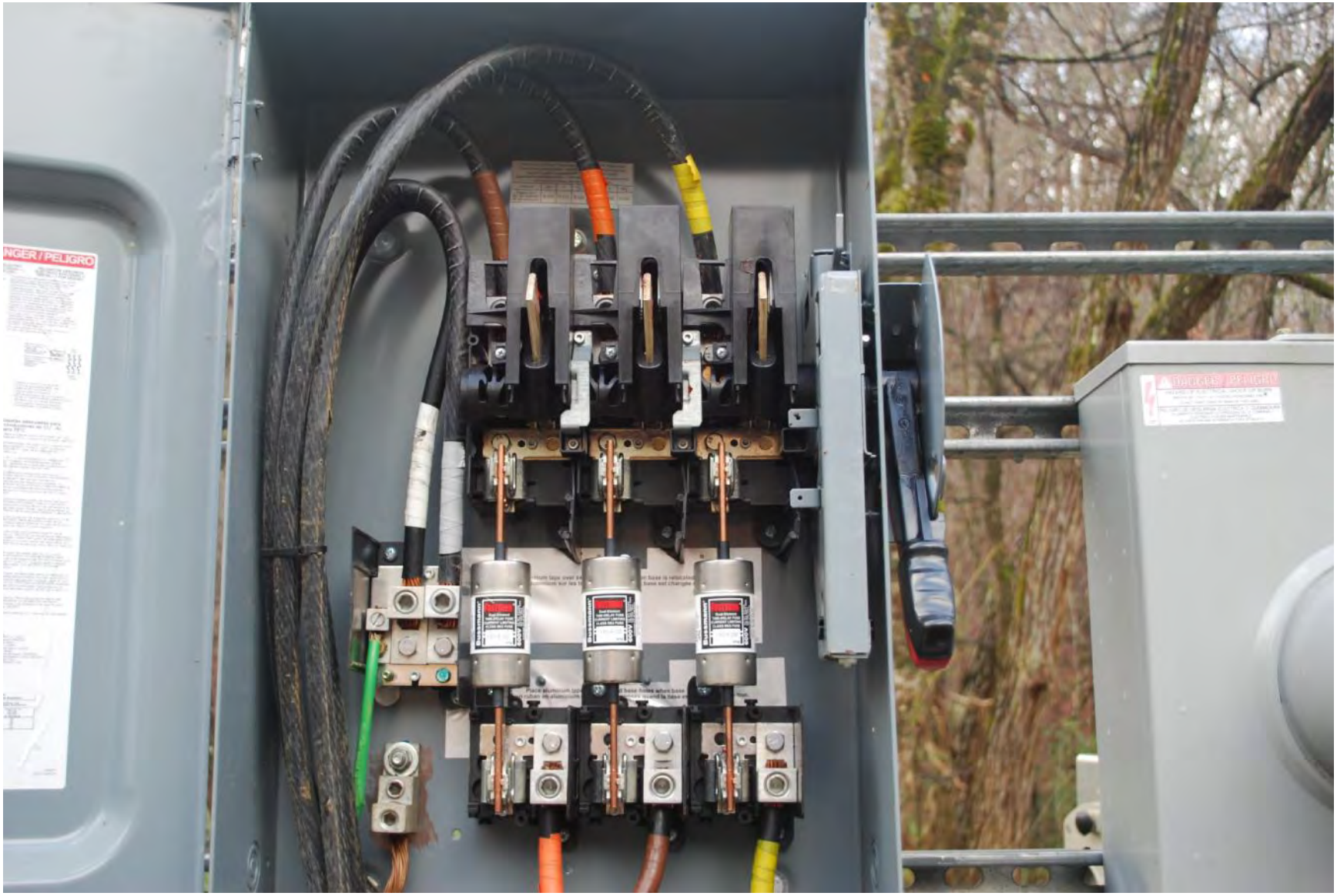
QTY	LEGEND	DESCRIPTION	MFG.	PART #	Check Off
1		ENCLOSURE (4X SS-3PT) 48x36x12	HOFFMAN	A48H3612SSLP-3PT	
1		SUB PANEL [ENCLOSURE 48 x 36]	HOFFMAN	A36P36	
1	N	ISOLATED NEUTRAL BLOCK 175 A Line [2/0 to 14] – Load [4 to 14]	MARATHON	1421570	
1	G	GROUND BUSS (#8-1)	SQD	PKDGTA	
1	G	GROUND BUSS (#6-1)	SQD	PK12GTA	
1	MCB	MAIN CIRCUIT BREAKER	SQD	HDL36060	
1		MULTI-LUG KITS (6-#14-#6)	SQD	PDC6HD6	
2	MB	MOTOR BREAKER	SQD	HLL36050	
1	CCB	CONTROL BREAKER	SQD	QOU115	
1	DRB	DUP RECEPTACLE BREAKER	SQD	QOU115	
2	SSS	SOLID STATE STARTER	SQD	ATS48D32Y S# 850341107014 S# 890341107012	
2	IC	ISOLATION CONTACTOR - NEMA (SZ 2, 120VAC COIL)	SQD	8502-SDO2V02S	
2	SC1-2	UPTO SPEED CONTACTOR - NEMA (SZ 2, 120VAC COIL)	SQD	8502-SDO2V02S	
1	CPT	CONTROL POWER TRANSFORMER	SQD	9070-T200D01	
1	FL	FLASHER (UR)	MPE	025-120-105	
1	AL	ALARM LIGHT (TYPE 4X)	INGRAM	LX-25 (RED)	
1	AH	ALARM HORN (4X, 120VAC)	INGRAM	AH115A8R	
3	TS	TERMINAL STRIP	MARATHON	SERIES 200	
1	TS	TERMINAL STRIP	MARATHON	SERIES 300	
1	*DR	DUPLEX RECEPTACLE (GFCI)	HUBBELL	GF20BKL	
1	F1	FUSE	BUSSMAN	BAF-5 /250V	
2	F2-3	FUSE	BUSSMAN	FNQ-R-6 /600V	
1	F9	FUSE	BUSSMAN	ABC-2 (2 amp)	
1		FUSE BLOCK	BUSSMANN	S-8301	
3	F4-6	FUSE (PHASE MONITOR)	BUSSMAN	KTK-1/2 / 600V	
2	F7-8	FUSE (SSS)	BUSSMAN	FNQ-R-1/2 /600V	
8		FUSE HOLDER (DIN RAIL MOUNT)	BUSSMAN	NDNF1	
2	HOA	HAND-OFF-AUTO SELECTOR (NO, NC) CONTACT	SQD	9001SKS46B	
2		(NC) CONTACT	SQD	9001-KA1	
2	RL	RUN LIGHT (120VAC)	SQD	9001-KA3	
2	ETM	ELAPSED TIME METER	REDINGTON	9001SKP1	
1	ASB	ALARM SILENCE PUSH BUTTON (NO) CONTACT	SQD	710-0016	
1			SQD	9001-SKR1U	
9	R1-9	CONTROL RELAY (120VAC, 11 PIN)	SQD	9001-KA2	
9		11 PIN SOCKET	IDEC	8501KP13P14V20	
1	PM	PHASE MONITOR (480V 12 PIN)	FLYGT	SR3P-05	
1		12 PIN SOCKET	CUSTOM CONN	14-40 32 14	
2	MC1-3	MINI-CAS (120V OR 24V) (ADD .1Uf 1000V CAPACITOR TO MINI-CAS PINS 5-7)	FLYGT ILLINOIS CAP	SD12-PC 14-40 71 29 104MSR102K	
2		11 PIN SOCKET (REVERSE)	OMRON	P3GA-11	
1	TH	THERMOSTAT (FAN)	HOFFMAN	ATEMNO	
1	FAN	VENTILATION FAN	HOFFMAN	A-6AXFN	
2		LOUVERS (SS)	HOFFMAN	AVK66SS6	
1		TAMPER COVER (LOUVER)	STA-CON	8 X 8	
2		COVERS OVER LOUVERS	STA-CON	8 X 8	
1	TH/HT	HEATER UNIT (100W)	HOFFMAN	D-AH1001A	
1	TVSS	ARRESTOR	SQD	6671 SDSA3650	
1	TVS	SURGE SUPPRESSOR (120Vac, 20KA) 2 POLE	SQD	12725 MULTI 9	
1	PS	12 VDC POWER SUPPLY	SQD	ABLTRM1202	
1	VC	VAPOR CAPSULE	ZERUST	VCC-1	

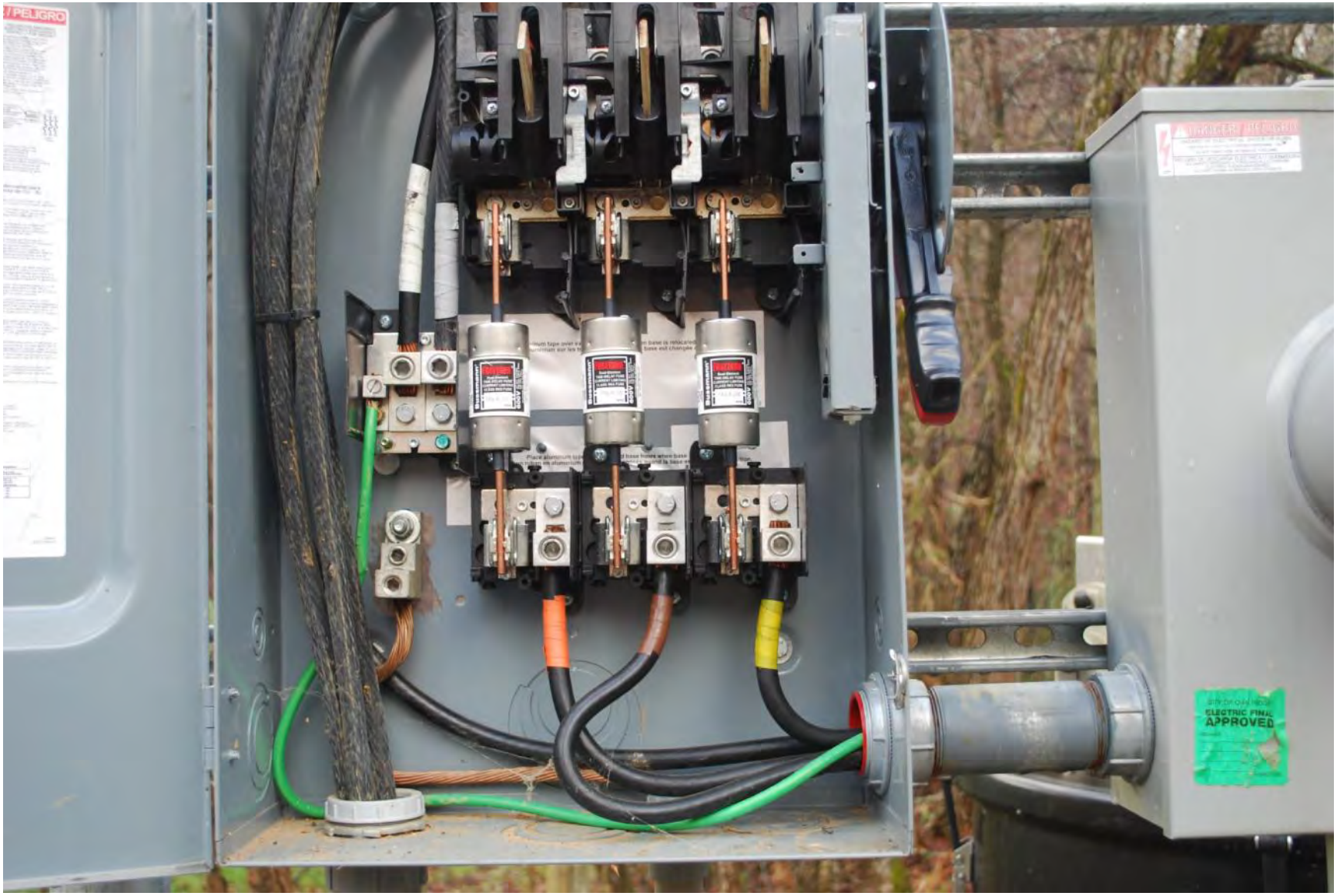
@ PROVIDED BY PUMP REP

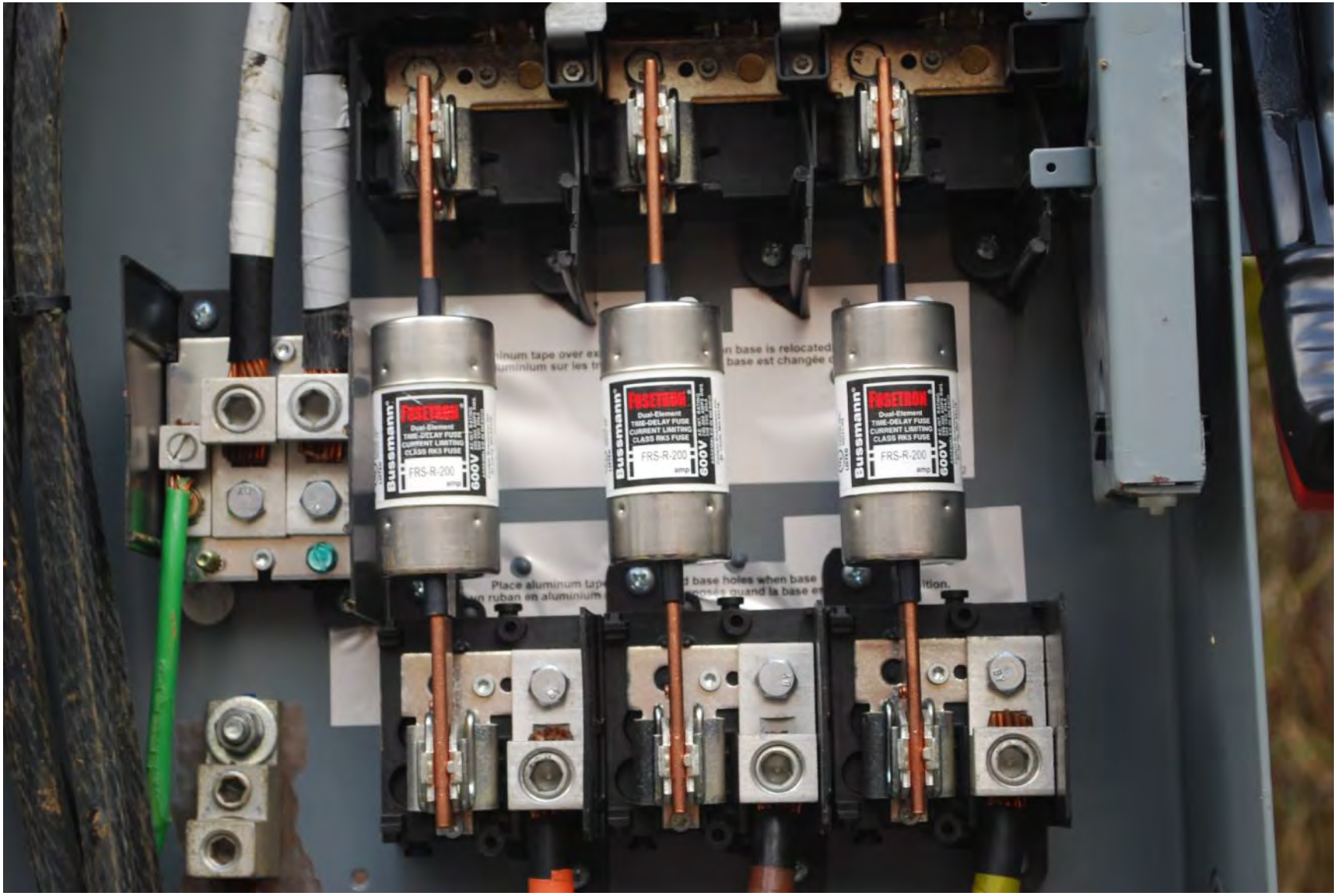
1 @	MT	MULTITRODE CONTROLLER	MULTITRODE	MT2PC-3 S# C098297+ STA-CON TO INSTALL

TABLE D
TABLE C
TABLE D
TABLE C
TABLE C

PAGE 3 OF 3

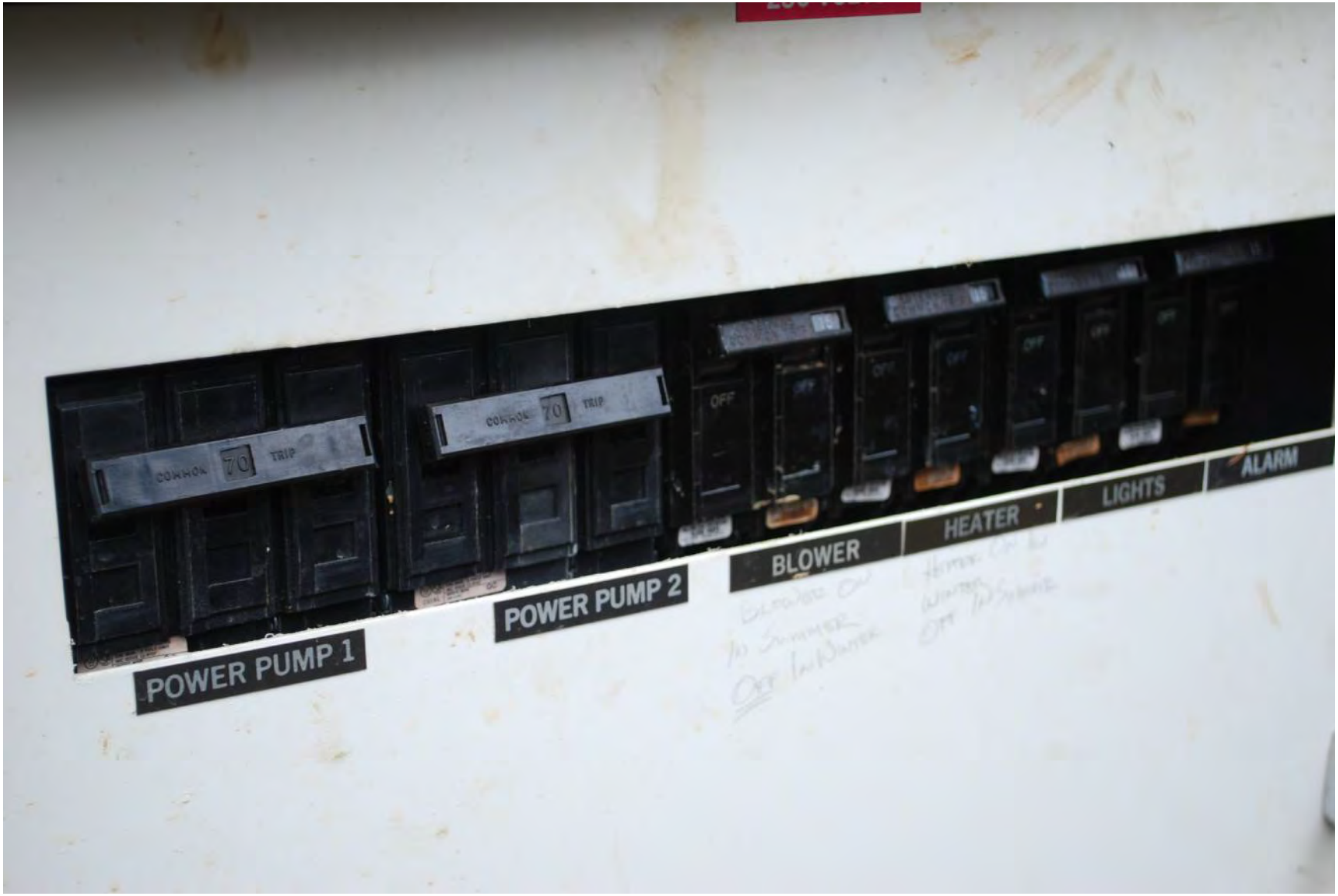



PELIGRO
ELECTRIC FINAL
APPROVED


Bussmann
FUSETRON
Dual-Element
TIME-DELAY FUSE
CURRENT LIMITING
CLASS RK5 FUSE
FRS-R-200
amp
600V

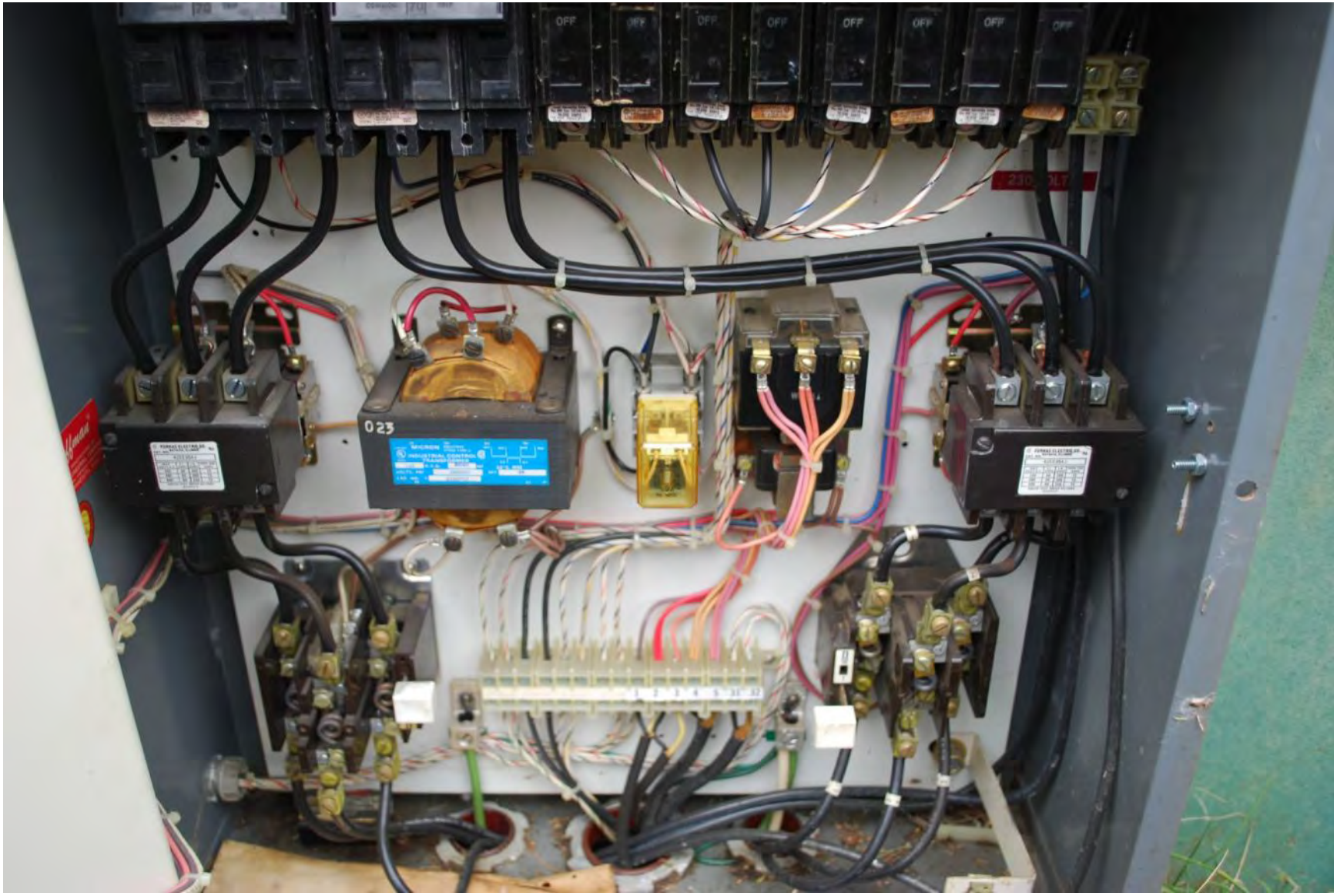
MODEL 5K254DL2010B
NO. DY
HP 15
SERVICE FACTOR 1.15
RPM 1760
TIME RATING CONT
VOLTS 230/460
PHASE 3
HERTZ 60
AMP 39.2/19.6
MAX KVAR 5.3
40
MAX AMB
INS. CLASS B
NEMA DESIGN B-DP
254TCZ
FRAME
TYPE K
CODE G
87.5
DRIVE END BRG. AFBMA 5OBC03JP3
APP DRIVE END BRG AFBMA 35BC02XP3
GENERAL ELECTRIC
TRI/CLAD
AC MOTOR
NASHVILLE, TN.
MADE IN U.S.A.

GENERAL ELECTRIC
TRI/CLAD
AC MOTOR
NASHVILLE TN
MADE IN U.S.A.
5K254DL2010B
NO. DY
SERVICE FACTOR 1.15
TIME RATING CONT
HERTZ 60
PHASE 3
230/460
39.2/19.6
AMP
VOLTS
RPM 1760
HP 15
FRAME 254TCZ
TYPE K
CODE G
NEMA DESIGN B
MAX KVAR 5.3
B-DP
87.5
5.0BC03JP3
35BC02XP3

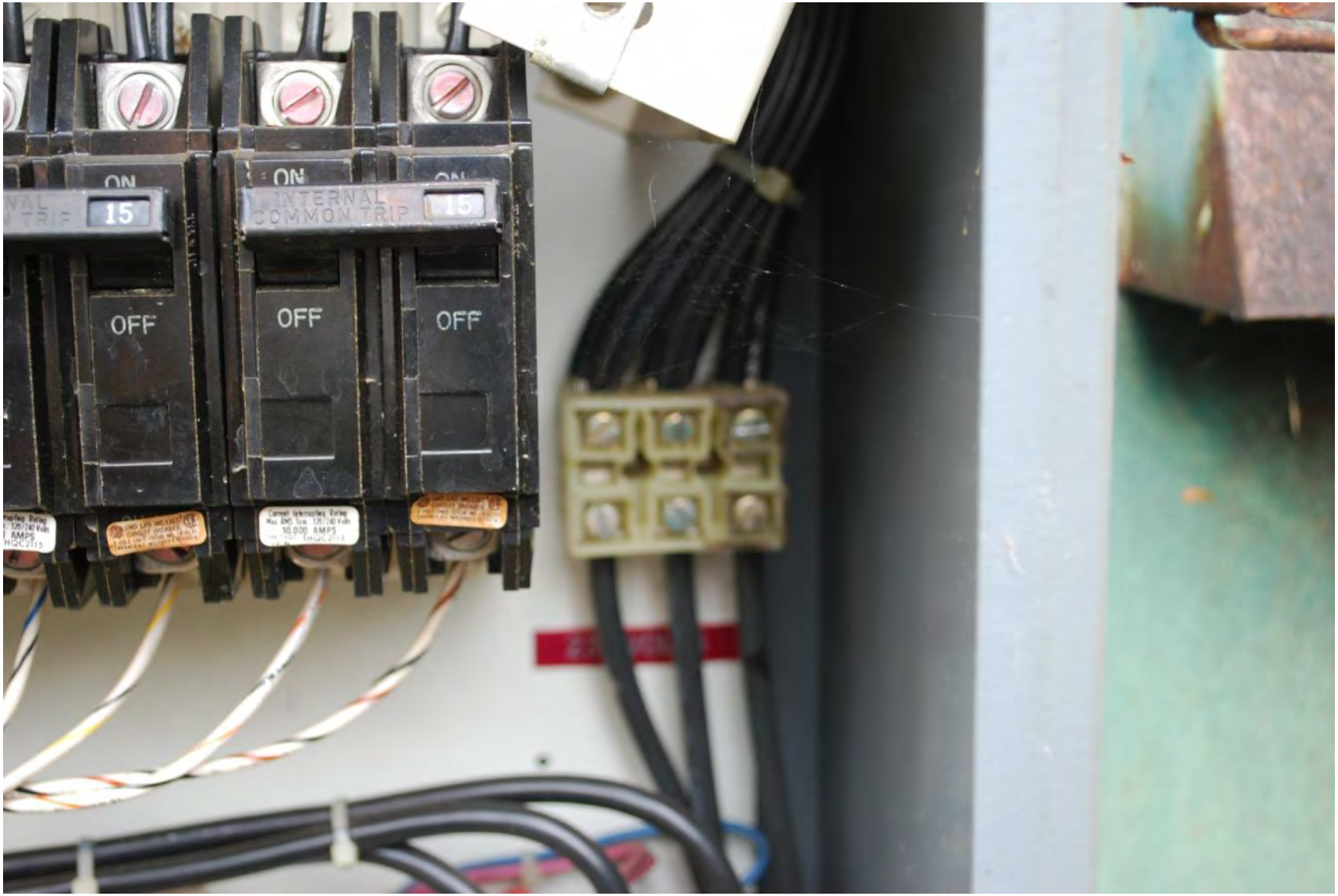

POWER PUMP 1
POWER PUMP 2
BLOWER
HEATER
LIGHTS
ALARM

RESET
PUMP 1 RUN
PUMP 2 RUN
RESET
RESET
HAND-OFF-AUTO
HAND-OFF-AUTO

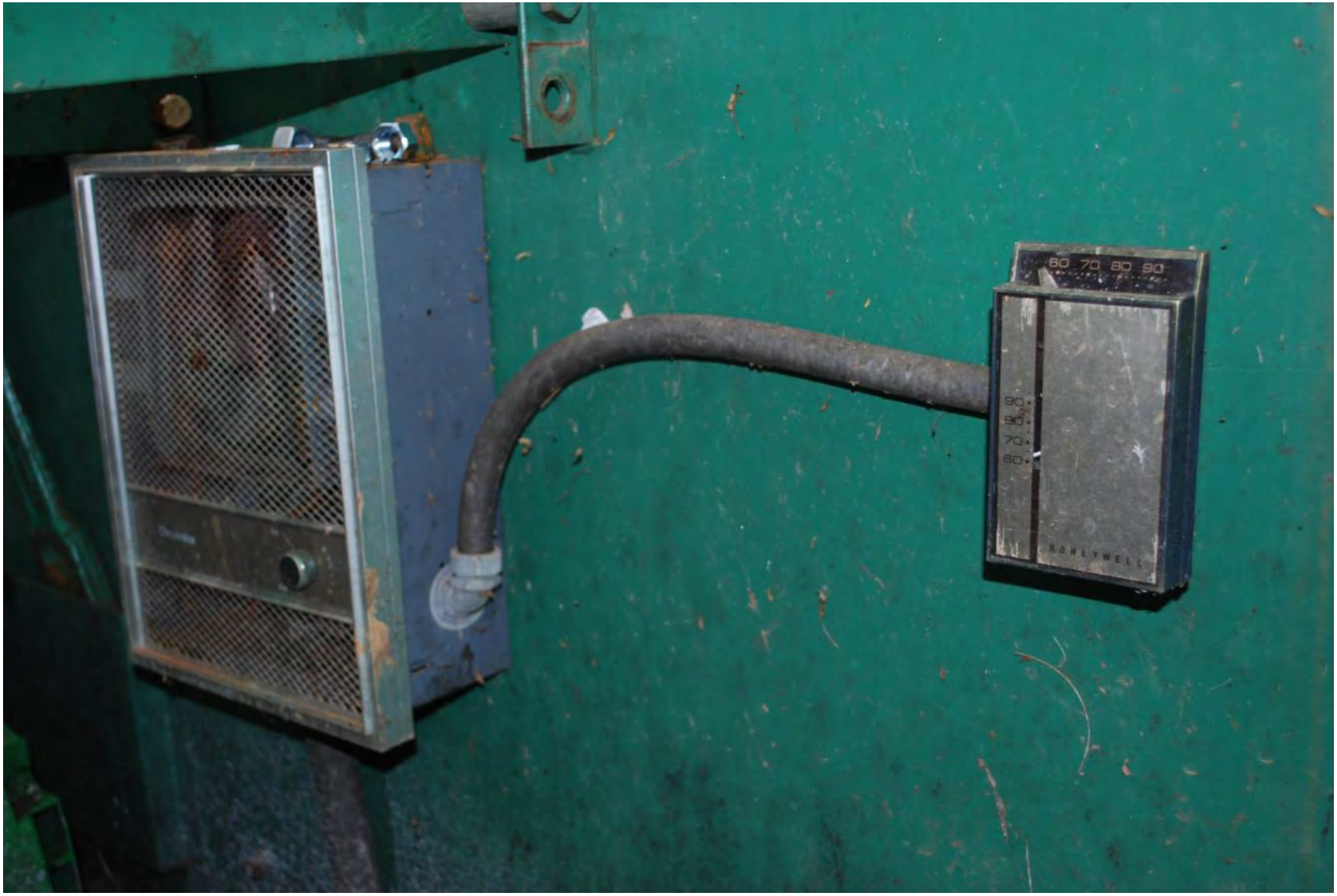
ON
OFF
15
023

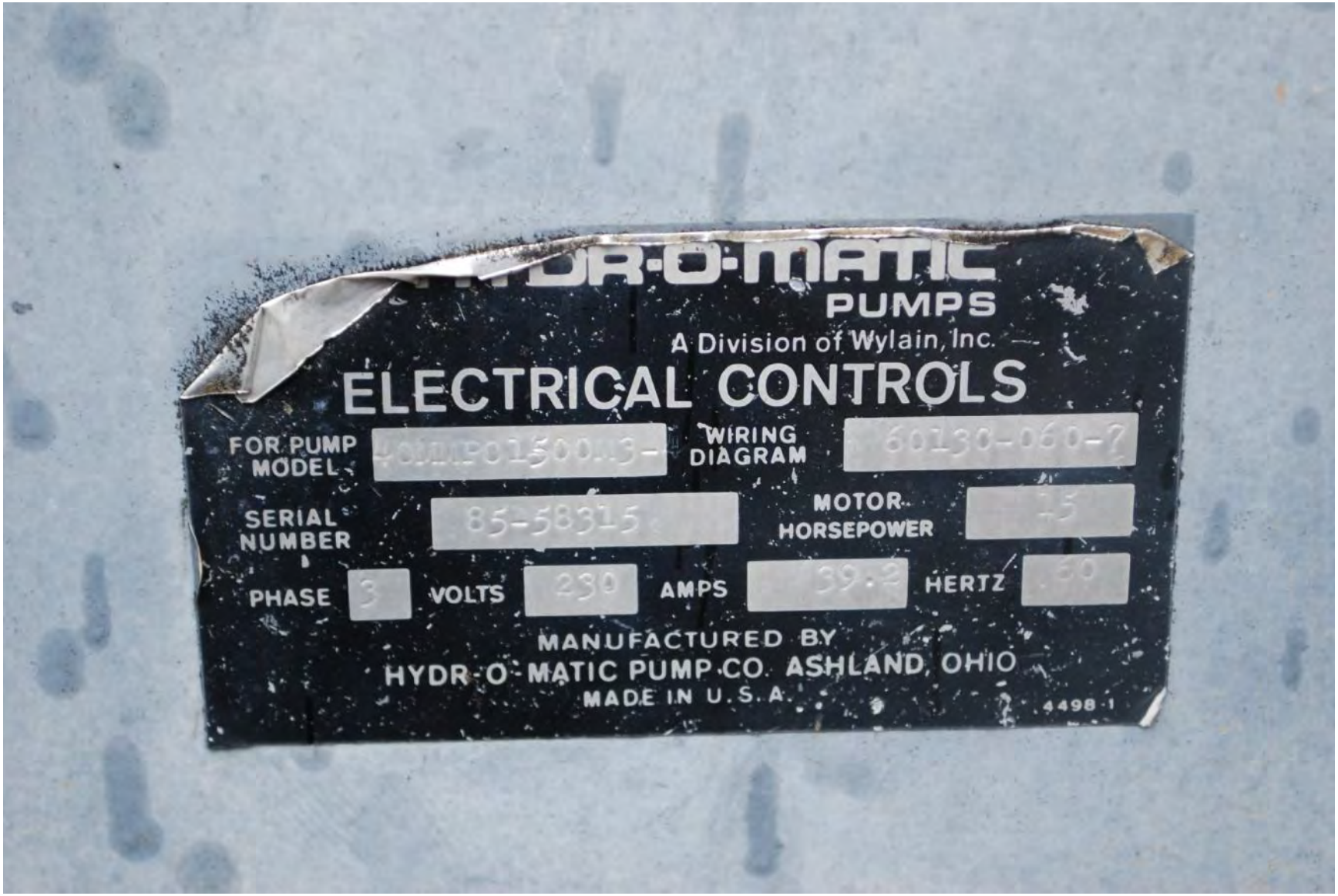

OFF
023

230 VOLTS
INTERNAL COMMON TRIP
15
INTERNAL COMMON TRIP
15


ON
15
OFF
ON
INTERNAL
COMMON TRIP
15
OFF
OFF

HYDR-O-MATIC®
PUMPS
A Marley Company
SELF-PRIMING
SEWAGE AND TRASH PUMPS
SERIAL NO 24020
ROTATE
MANUFACTURED BY
ASHLAND, OHIO
MADE IN U.S.A.
1101-1


60 70 80 90
90
80
70
60
HONEYWELL


PUMPS
A Division of Wylain, Inc.
ELECTRICAL CONTROLS
FOR PUMP MODEL
WIRING DIAGRAM
SERIAL NUMBER
85-58315
MOTOR HORSEPOWER
PHASE
3
VOLTS
230
AMPS
39.2
HERTZ
60
MANUFACTURED BY
HYDR-O-MATIC PUMP CO. ASHLAND, OHIO
MADE IN U.S.A.
4498-1

DANGER

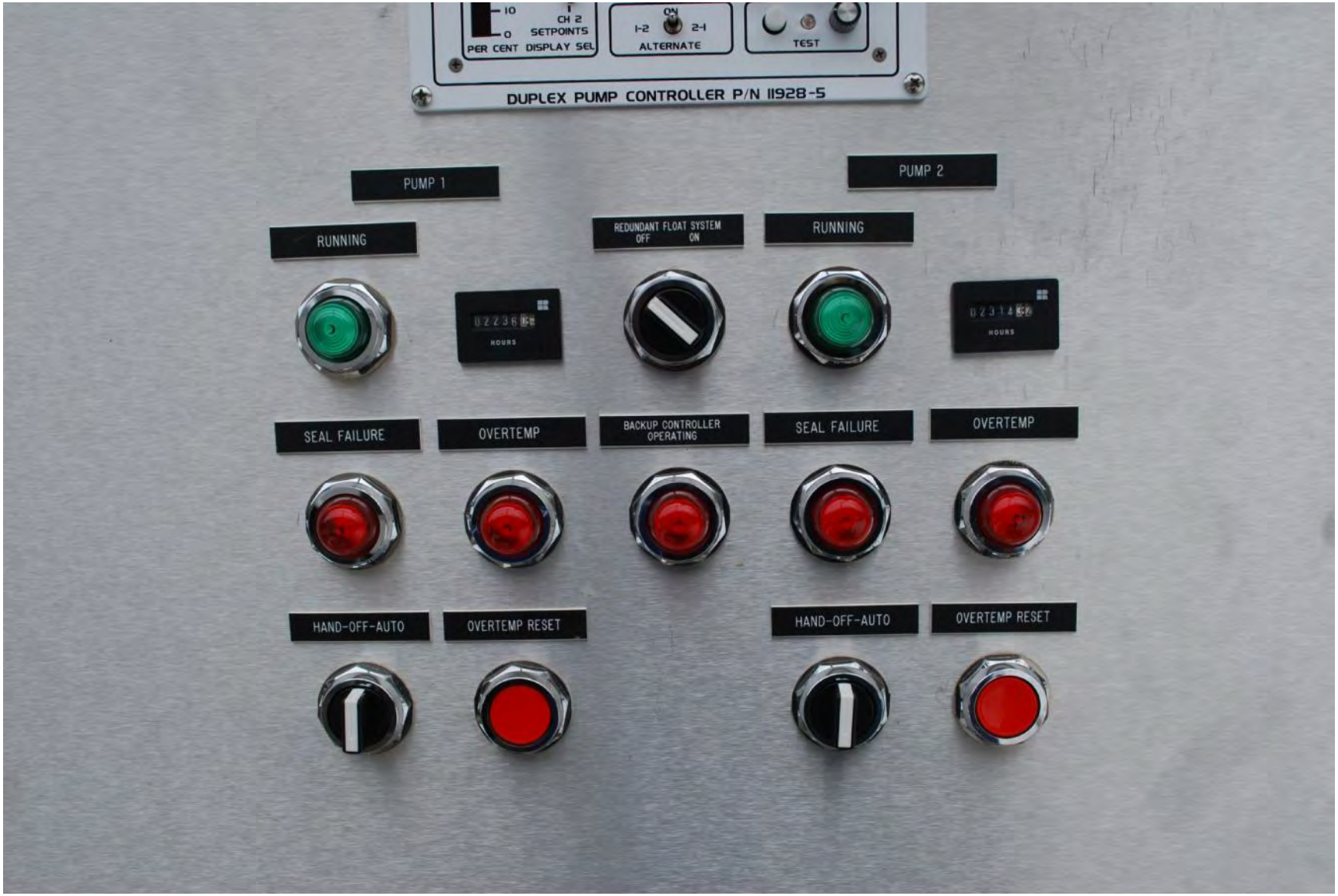
04652

GENERAL ELECTRIC
ARC SHIELD MUST BE IN PLACE
Littelfuse
Indicator
FLSR 200 ID
75 - 600 VAC

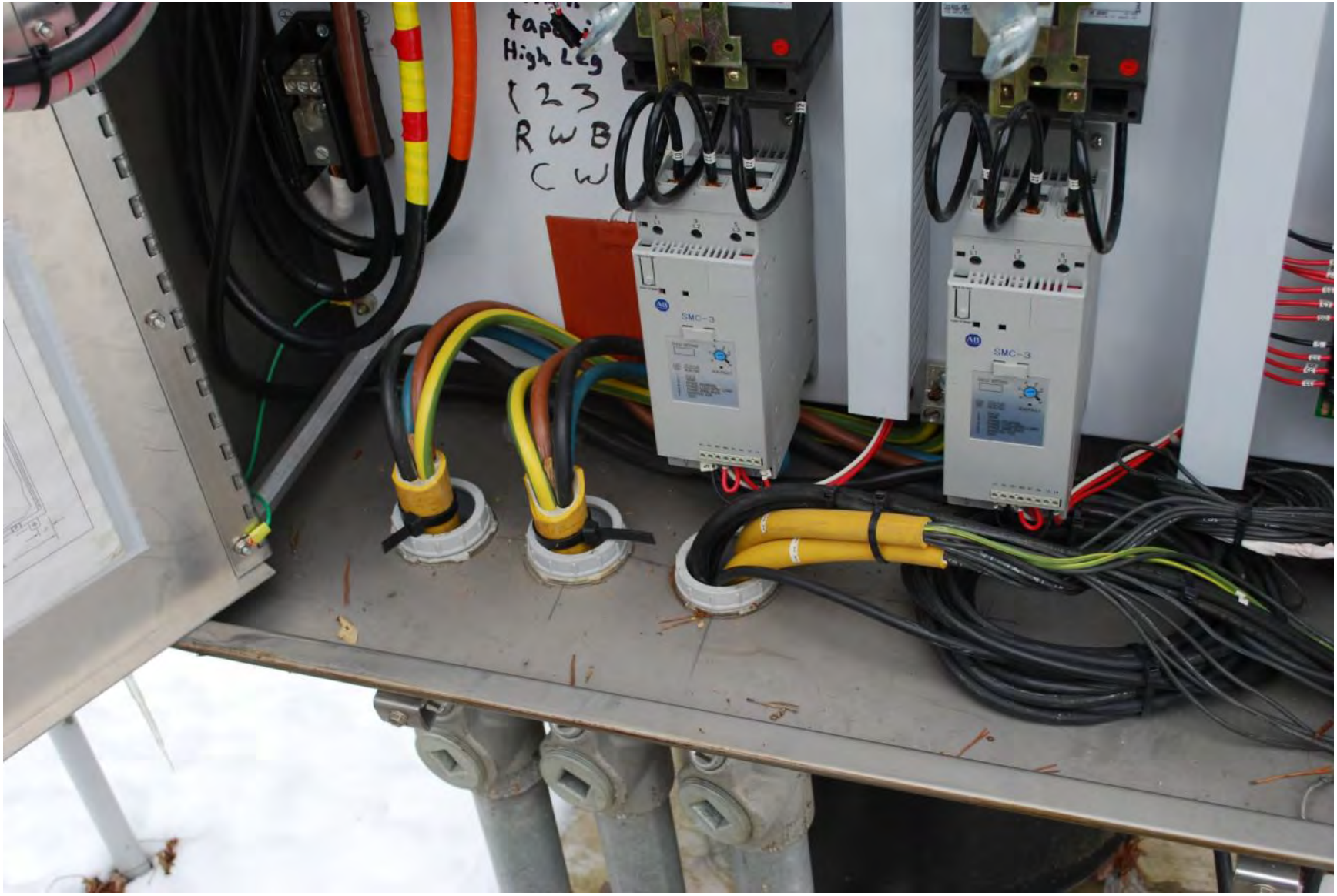
yellow with Red Tape is High Leg
LINE
L1
L2
L3
GENERAL ELECTRIC
HEAVY DUTY
ARC SHIELD MUST BE IN PLACE

FLSR 200 ID
75 - 600 VAC
FLSR 200 ID
75 - 600 VAC
FLSR 200 ID
75 - 600 VAC
LOAD/CHARGE
K504&

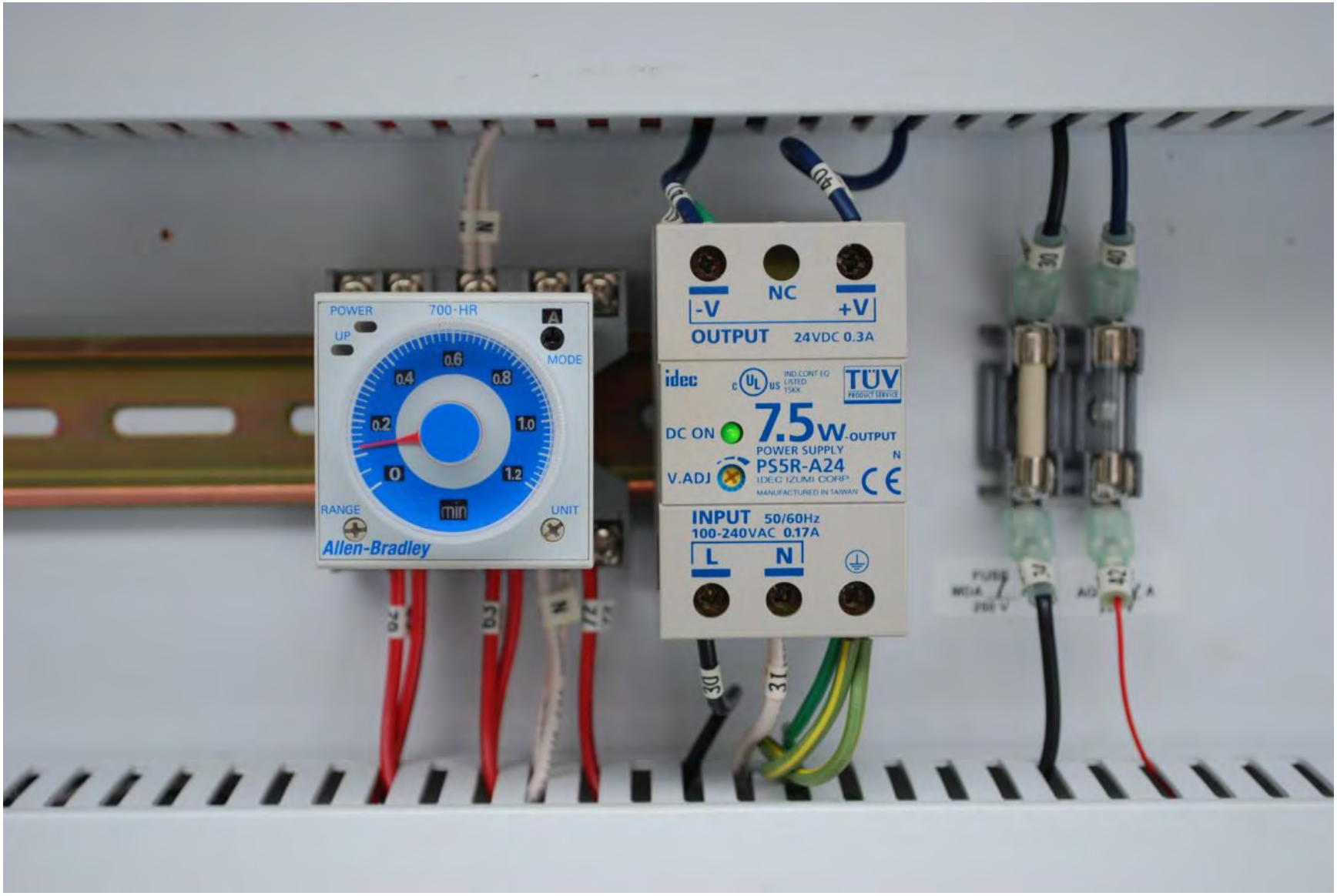
WET WELL LEVEL
DIGITAL CONTROL CORPORATION
P1
P2
DISABLE
FLOATS
LAG
HIGH
OFF
LOW
LEAD
RESET
MUTE
CH1
CH2
SEL
HI
LO
ALARM
100
90
80
70
60
50
40
30
20
10
0
SETPOINTS
CH 1
LEVEL
CH 2
SETPOINTS
PER CENT
DISPLAY SEL
4-20
FLT
SYS
ERROR
ON
1-2
2-1
ALTERNATE
TEST
DUPLEX PUMP CONTROLLER P/N 11928-5
PUMP 1
PUMP 2
RUNNING
REDUNDANT FLOAT SYSTEM
OFF
ON
RUNNING
HOURS
HOURS
SEAL FAILURE
OVERTEMP
BACKUP CONTROLLER
OPERATING
SEAL FAILURE
OVERTEMP

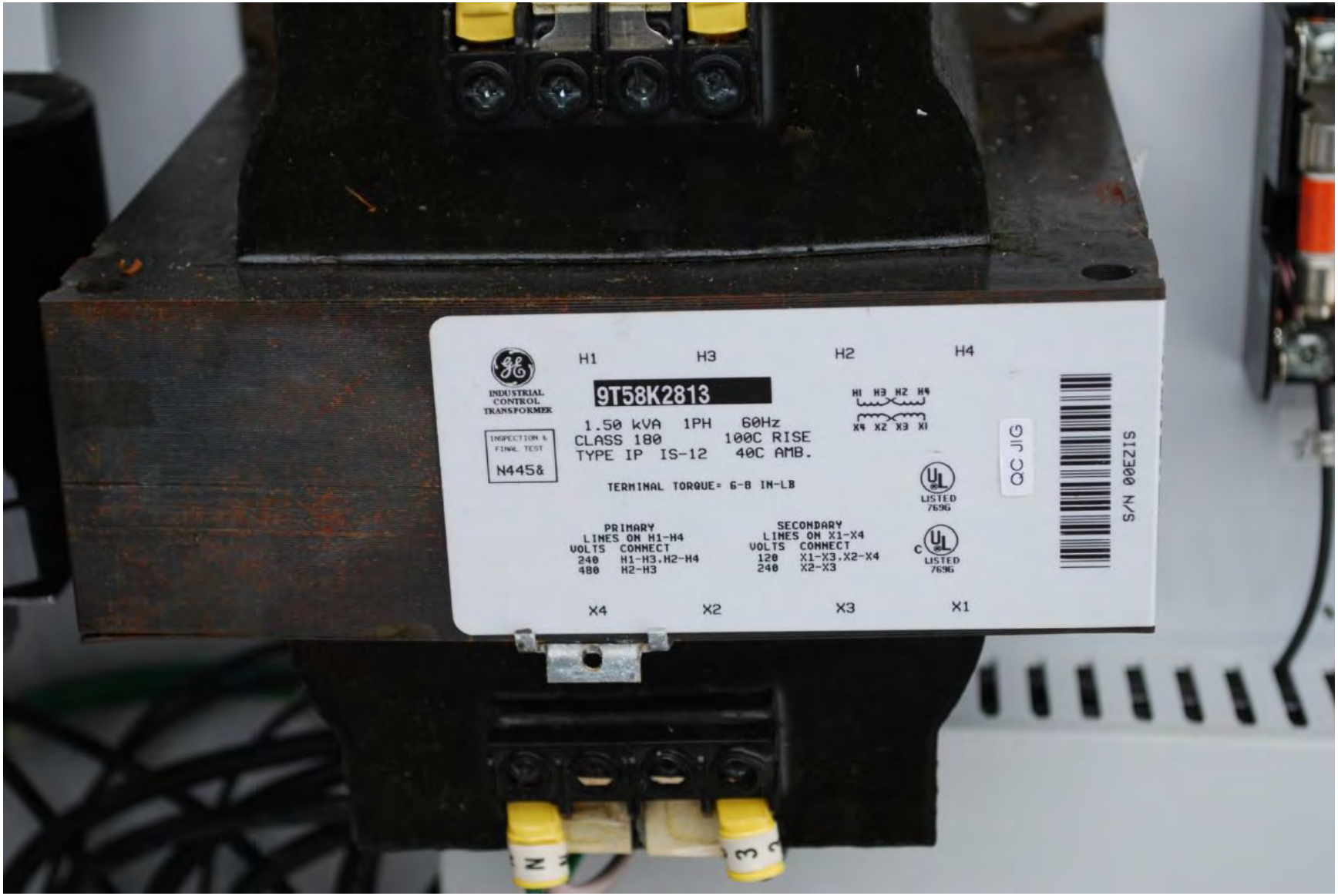

10
0
CH 2
SETPOINTS
PER CENT DISPLAY SEL
ON
1-2
2-1
ALTERNATE
TEST
DUPLEX PUMP CONTROLLER P/N 11928-5
PUMP 1
PUMP 2
RUNNING
REDUNDANT FLOAT SYSTEM
OFF ON
RUNNING
HOURS
HOURS
SEAL FAILURE
OVERTEMP
BACKUP CONTROLLER
OPERATING
SEAL FAILURE
OVERTEMP
HAND-OFF-AUTO
OVERTEMP RESET
HAND-OFF-AUTO
OVERTEMP RESET

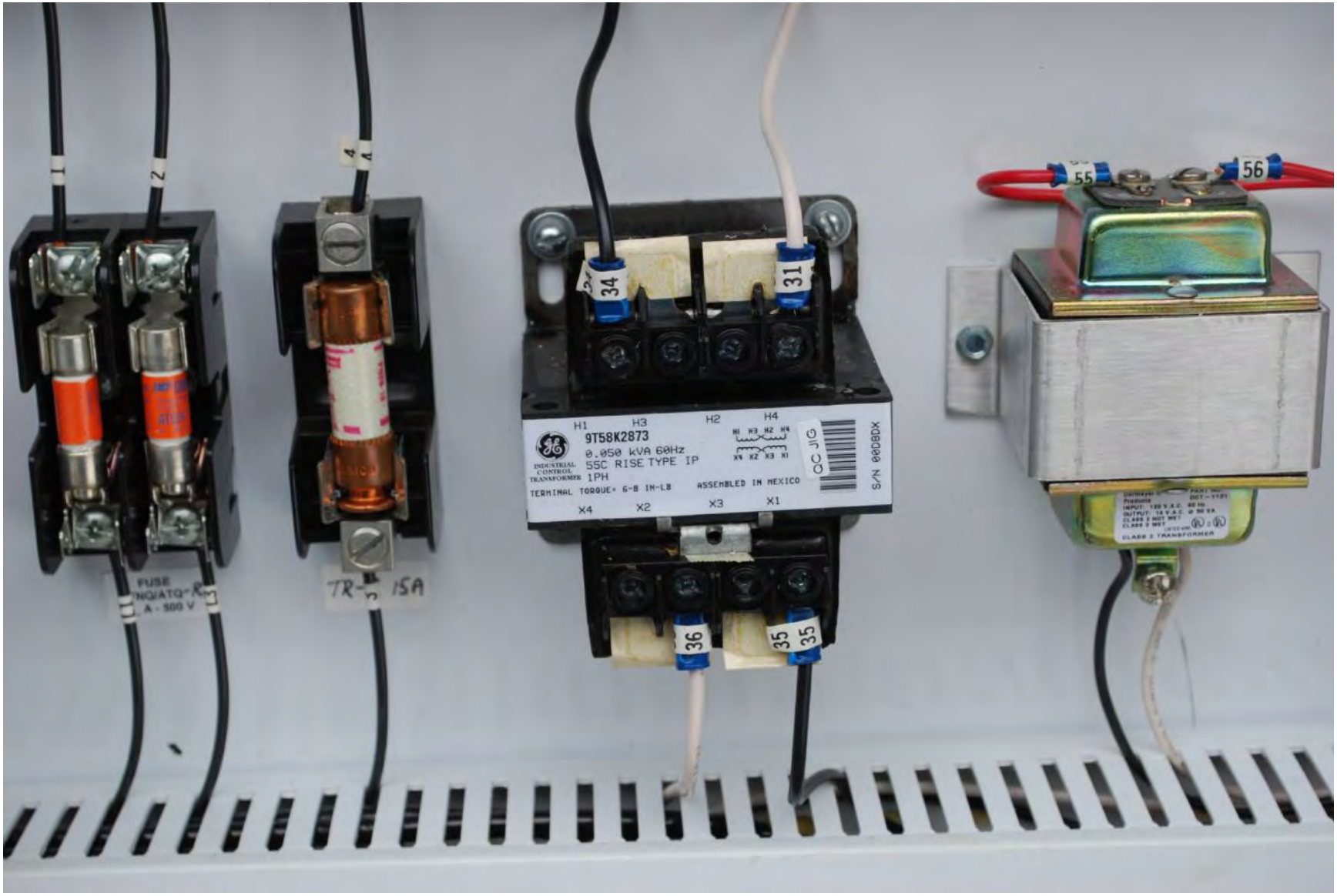
PUMP 1
PUMP 2
CONTROL
GFI
CONVENIENCE RECEPTACLE


High Leg
1 2 3
R W B
C W
SMC-3
SMC-3

SILENCE
HORN OUTPUT
HIGH LEVEL "ON"
PUMP 2 CALLED FOR
PUMP 1 CALLED FOR
LOW LEVEL "ON"
12 - 30 VAC or VDC INPUT
ALTERNATOR POSITION
SEQUENCE SELECTOR
STOP
SMC-3
SMC-3

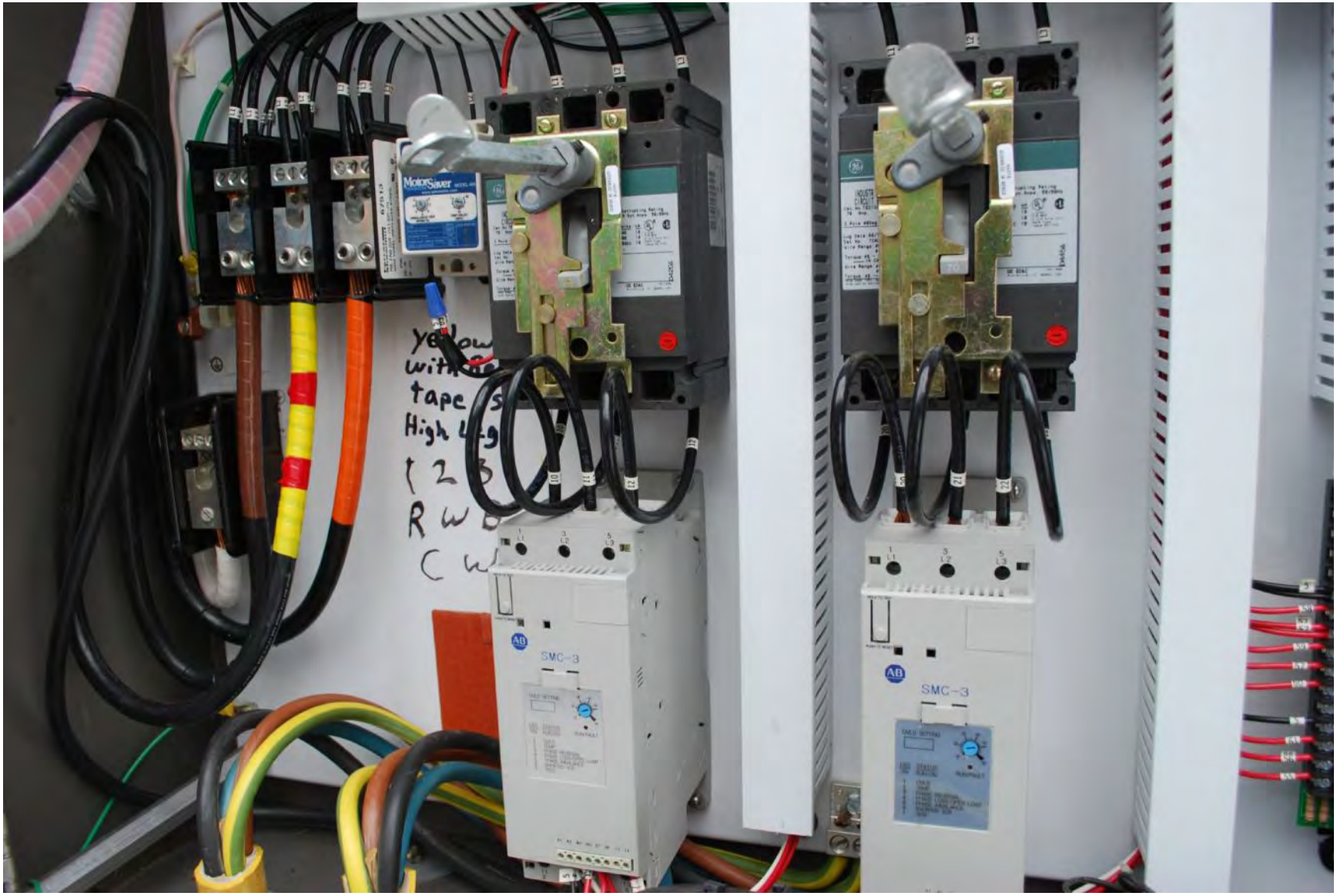

POWER
700-HR
UP
MODE
RANGE
UNIT
min
Allen-Bradley
-V
NC
+V
OUTPUT 24VDC 0.3A
idec
DC ON
7.5W OUTPUT
POWER SUPPLY
V.ADJ
PS5R-A24
IDEC IZUMI CORP.
INPUT 50/60Hz
100-240VAC 0.17A
L
N


H1
H3
H2
H4
INDUSTRIAL CONTROL TRANSFORMER
9T58K2813
1.50 kVA 1PH 60Hz
CLASS 180 100C RISE
TYPE IP IS-12 40C AMB.
INSPECTION & FINAL TEST
N445&
TERMINAL TORQUE= 6-8 IN-LB
LISTED 7696
QC JIG
S/N 00E2IS
PRIMARY
LINES ON H1-H4
VOLTS CONNECT
240 H1-H3.H2-H4
480 H2-H3
SECONDARY
LINES ON X1-X4
VOLTS CONNECT
120 X1-X3.X2-X4
240 X2-X3
LISTED 7696
X4
X2
X3
X1


1
2
4
34
31
55
56
H1
H3
H2
H4
9T58K2873
0.050 kVA 60Hz
55C RISE TYPE IP
1PH
INDUSTRIAL CONTROL TRANSFORMER
TERMINAL TORQUE= 6-8 IN-LB
ASSEMBLED IN MEXICO
X4
X2
X3
X1
OC JIG
S/N 0006DX
36
35
35
TR-
15A

SENSITIVITY
SENSITIVITY

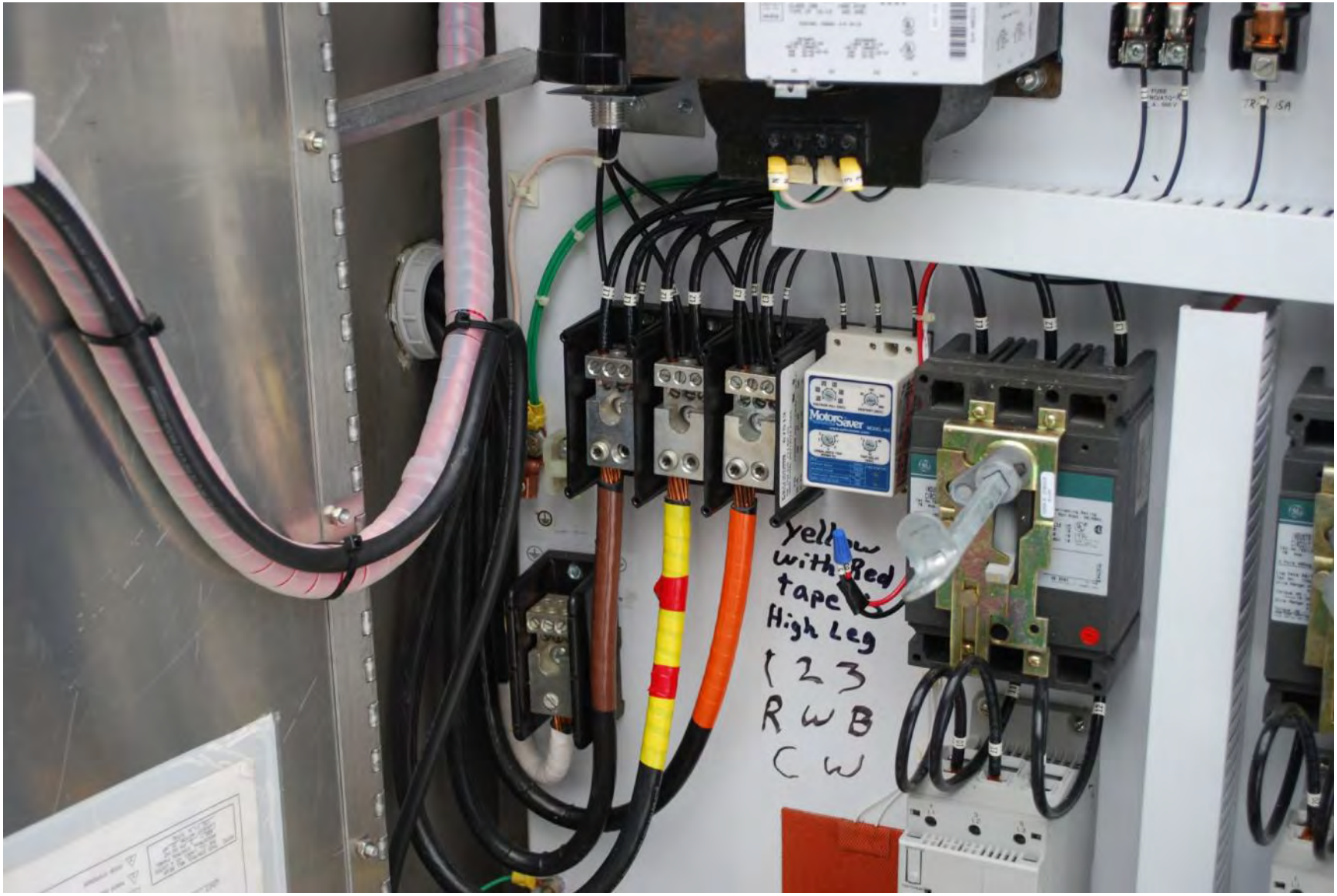
L1
L2
L3
VOLTAGE ADJ. (VAC)
RESTART (SEC)
MotorSaver
MODEL 460
www.symcominc.com
UNBALANCE TRIP (NEMA %)
TRIP DELAY (SEC)
LED STATUS
RUN
RESTART DELAY
REVERSE PHASE
UNBALANCE / SINGLE PHASE
HIGH / LOW VOLTAGE
GREEN
RED
Yellow
with Red
tape is


MotorSaver
SMC-3
SMC-3

PUSH TO RESET
A-B
SMC-3
OVLD SETTING
LED ON
STATUS RUN/ON
RUN/FAULT
1 OVLD
2 TEMP
3 PHASE REVERSAL
4 PHASE LOSS/OPEN LOAD
5 PHASE IMBALANCE
6 SHORTED SCR
7 TEST
A1 A2 IN1 IN2 97 98 13 14

INDUSTRIAL
CIRCUIT
Cat.No.TED13
70 Amp.
3 Pole 480
Lug Data: 60/
Cat No: TCA
Wire Range:
Torque: #6 -
IN C
Wire Range:
Torque: #6 -
rupting Rating
Sym.Amps, 50/60Hz
kA
18
18
10
LISTED
CIR.BKR
2 or 3 Pole Unit
HACR Type
Issue 22-7332
D445&
GE ED&C
PLAINVILLE, CT
70
N4378
ASSEMBLED IN MEXICO

Pumpak LTD
FLOAT-PAK
SILENCE
HORN OUTPUT
HIGH LEVEL 'ON'
PUMP 2 CALLED FOR
PUMP 1 CALLED FOR
LOW LEVEL 'OFF'
SECONDS


Yellow
with Red
tape
High Leg
1 2 3
R W B
C W

1
J2
12
HEADERS AND PLUGS
USE COPPER
CONDUCTORS ONLY.
TORQUE REQUIREMENT:
PLUGS: 1.47 Ft. Lbs.
"POLLUTION DEGREE 2"
1
J1
16
HI ALARM
P2
P1
J3
DIGITAL CONTROL CORPORATION
LISTED
CAUTION:
SERIAL NUMBER:
10,401 12/04

Allen-Bradley
SOFT STARTER
150-C60NBD
IEC/EN 60947-4-2
60A:AC-53b:4.5-30:1770
3 PHASE ONLY
Line Voltage 200V~480V~, 50/60Hz
Control Voltage 100V~240V~
MAX CONT.CURRENT
60A
LISTED A191
IND.CONT EQ
AUX. CONTACT RATINGS
MAKE
BREAK
Use 75°C Stranded Copper Wire Only
MADE IN KOREA

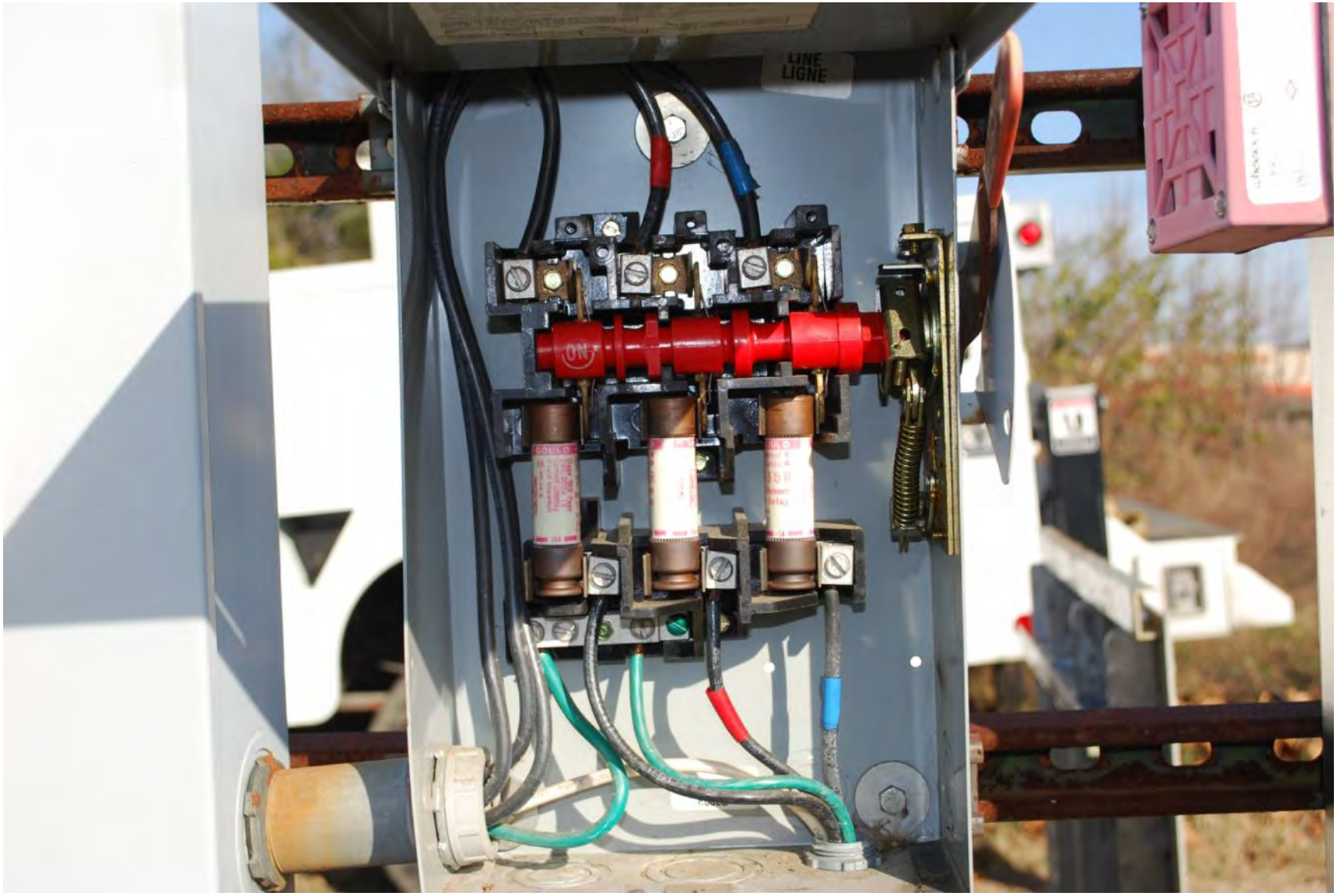
UNIT "A" – GUM HOLLOW PUMP STATION
7/16" DIA MOUNTING HOLES
DOOR CLAMPS
CHASSIS
48"
36"
13-3/4"
5/8"
3"
3"
NOTE: THIS CONTROL WILL BEAR THE U.L. LABEL AS A LISTED INDUSTRIAL CONTROL PANEL
480 V 3 PH 60 HZ
LARGEST MOTOR 31 HP
130 F.L.A. TOTAL
1 PADLOCKABLE HASP
2 INNER DOOR
3 DOOR STIFFENER
FINISH: STAINLESS STEEL
AS BUILT DRAWINGS
FINAL DRAWINGS SHOWING ANY CHANGES MADE IN MANUFACTURING
REV DATE DRFT
2 1/21/05 KAT
1 12/20/04 KAT
9/8/04 DRK
HEALY-RUFF
TITLE: NEMA 4X ENCLOSURE GUM HOLLOW PUMP STATION
PROJECT NAME: OAK RIDGE, TN.
UNIT: A LNU: SHEET: 1 OF 1
SCALE: NONE DWG NO: A86378-A-11
PRODUCTION NOTES:
30MM OPERATOR SWITCHES
NAMEPLATES:
1. PUMP NO. 1
2. PUMP NO. 2
5. HAND-OFF-AUTO
7. SEAL FAIL
8. RUNNING
10. CONTROL
13. OVERTEMP
14. CONVENIENCE OUTLET
16. WET WELL LEVEL
18. SILENCE
19. REDUNDANT FLOAT SYSTEM OFF- ON
21. OVERTEMP RESET
22. BACKUP CONTROLLER OPERATING
LEGEND:
1. CIRCUIT BREAKER
2. CIRCUIT BREAKER
5. SELECTOR SWITCH
6. ALARM LIGHT
7. LIGHT [RED]
8. LIGHT [GREEN]
10. CIRCUIT BREAKER
11. GFI RECEPTACLE
13. LIGHT [RED]
14. CIRCUIT BREAKER
15. ELAPSED TIME METER
16. DCC CONTROL
17. ALARM HORN
18. PUSHBUTTON
19. SELECTOR SWITCH
20. OVERLOAD [RESETS]
21. PUSHBUTTON
22. LIGHT [RED]

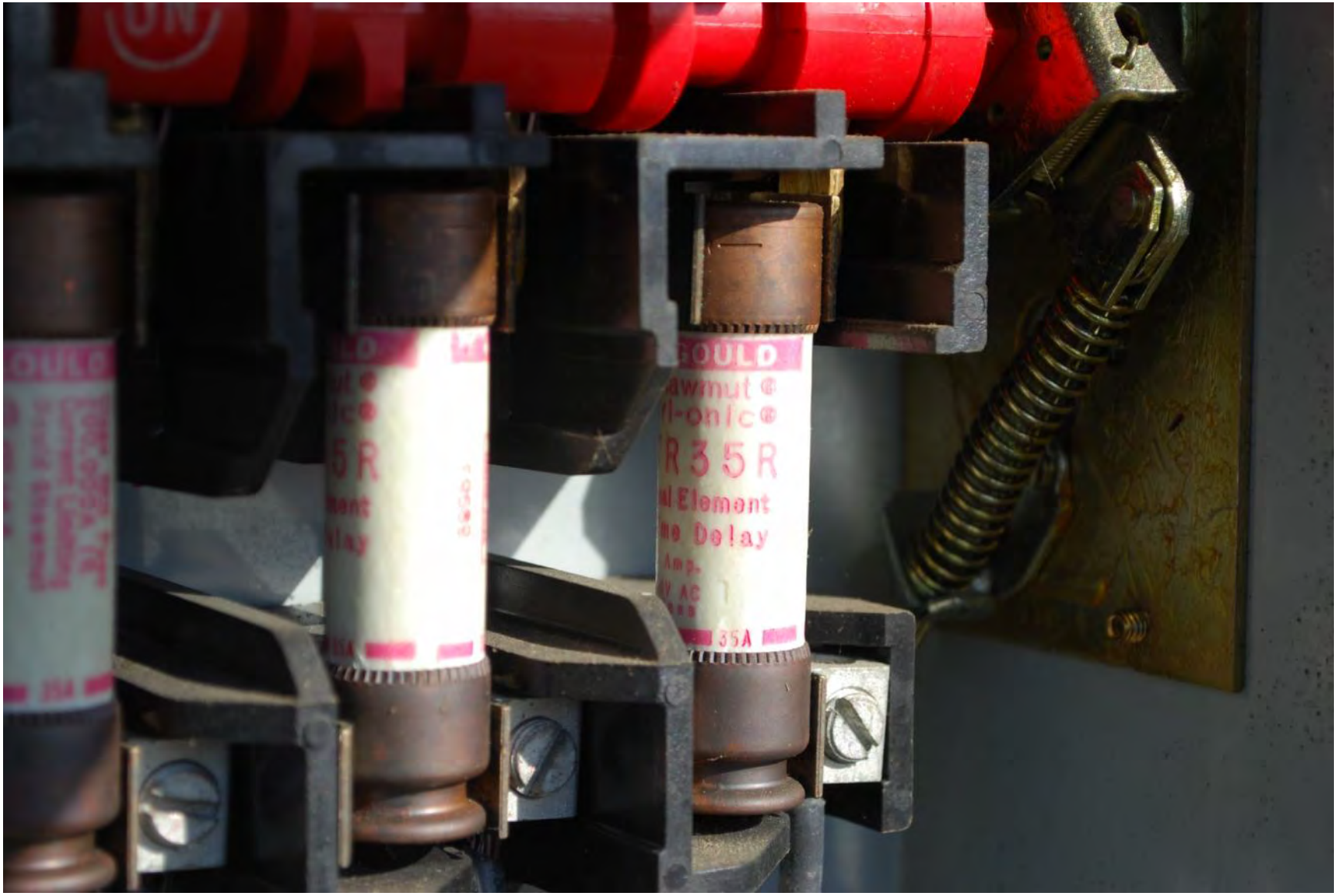
Proudly Built By
Engineer
GR
Layout
BN
Assy./Wiring
BN
Inspection
MR
Serial No.
B1378
Unit
A
Voltage
480/3PH 3W
Mfg. Date
1/20/05
1975 West County Rd. B2, Suite 5
St. Paul MN 55113
(651) 633-7522 Fax (651) 633-2671
Proudly Made in USA
HEALY-RUFF CO.
ST. PAUL, MINNESOTA
U. L. LISTED
INDUSTRIAL CONTROL PANEL
VOLTAGE
480
PHASE
3
HZ
60
H. P.
31
F. L. A.
130
ENC. TYPE
4X

DIGITAL CONTROL CORPORATION
DUPLEX PUMP CONTROLLER P.N. 8928-S
PUMP 1
PUMP 2
RUNNING
RUNNING
SEAL FAILURE
OVERTEMP
SEAL FAILURE
OVERTEMP
HAND-OFF-AUTO
OVERTEMP RESET
HAND-OFF-AUTO
OVERTEMP RESET
PUMP 1
PUMP 2

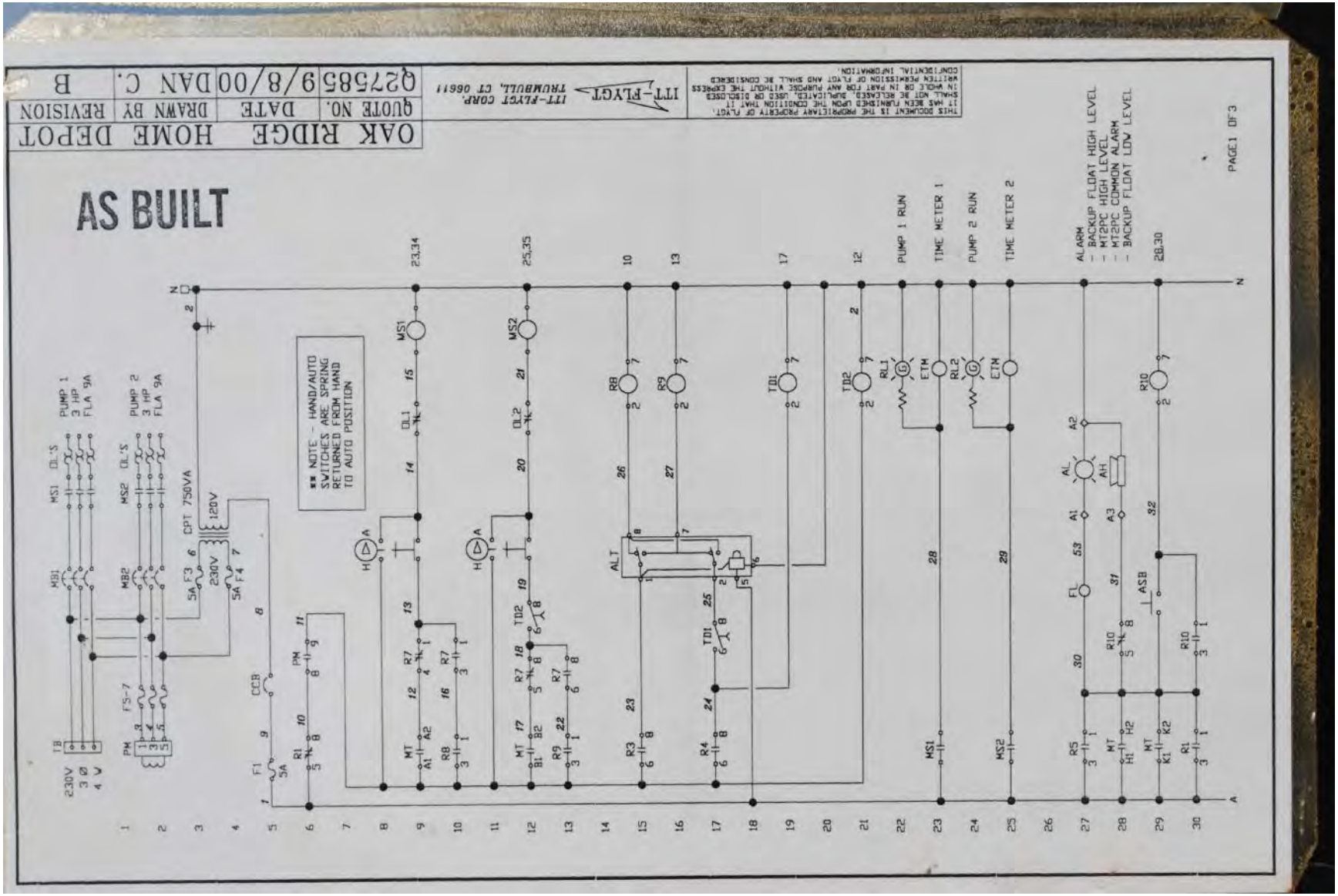
MADE IN BRAZIL
4-29KW
3~
230/460 V
60 Hz
1750 RPM
FLA 96/48
LRA 557/278
SUBM. MAX. 100 FT

MADE IN BRAZIL
LIQ. TEMP.


LINE
LIGNE
ON


ON
R35R
35A

ON
OFF


AS BUILT
OAK RIDGE HOME DEPOT
QUOTE NO. 9/8/00 DAN C. B
DATE DRAWN BY REVISION
Q27585
ITT-FLYGT TRUMBULL, CT 06611
ITT-FLYGT CORP.
PAGE1 OF 3
PUMP 1 RUN
TIME METER 1
PUMP 2 RUN
TIME METER 2
ALARM
- BACKUP FLOAT HIGH LEVEL
- MT2PC HIGH LEVEL
- MT2PC COMMON ALARM
- BACKUP FLOAT LOW LEVEL
NOTE - HAND/AUTO SWITCHES ARE SPRING RETURNED FROM HAND TO AUTO POSITION
PUMP 1 3 HP FLA 9A
PUMP 2 3 HP FLA 9A
CPT 750VA
120V
230V
230V 3 Ø 4 W

AS BUILT
OAK RIDGE- HOME DEPOT
REVISION B
DRAWN BY DAN C.
DATE 9/8/00
QUOTE NO. Q27585
ITT-FLYGT CORP.
TRUMBULL, CT 06611
ITT-FLYGT
THIS DOCUMENT IS THE PROPRIETARY PROPERTY OF FLYGT. IT HAS BEEN FURNISHED UPON THE CONDITION THAT IT SHALL NOT BE RELEASED, DUPLICATED, USED OR DISCLOSED IN WHOLE OR IN PART FOR ANY PURPOSE WITHOUT THE EXPRESS WRITTEN PERMISSION OF FLYGT AND SHALL BE CONSIDERED CONFIDENTIAL INFORMATION.
PAGE 2 OF 3
MULTI-TRODE MT2PC
PS100
4-20mA PRESSURE TRANSDUCER
EDS 5 SET AT 1
EDS 27 SET AT 4
EDS 29 SET AT 2
EDS 30 SET AT 2
SEAL - PUMP 1 (ORANGE)
THERMAL - PUMP 1 (BLUE)
SEAL - PUMP 2 (ORANGE)
THERMAL - PUMP 2 (BLUE)
CCT 75VA
120V
24V
F2 5A
FLOAT SYSTEM ACTIVATED
PL1
RESET
HIGH
LAG
LEAD
OFF
LOW N.C.
FR1
FR2
FR3
FR4
FR5
R1
R2
R3
R4
R5
R6
R7

AS BUILT
OAK RIDGE- HOME DEPOT
QUOTE NO. 9/8/00 DAN C. B
DATE DRAWN BY REVISION
Q27585
ITT-FLYGT
ITT-FLYGT CORP.
TRUMBULL, CT 06611
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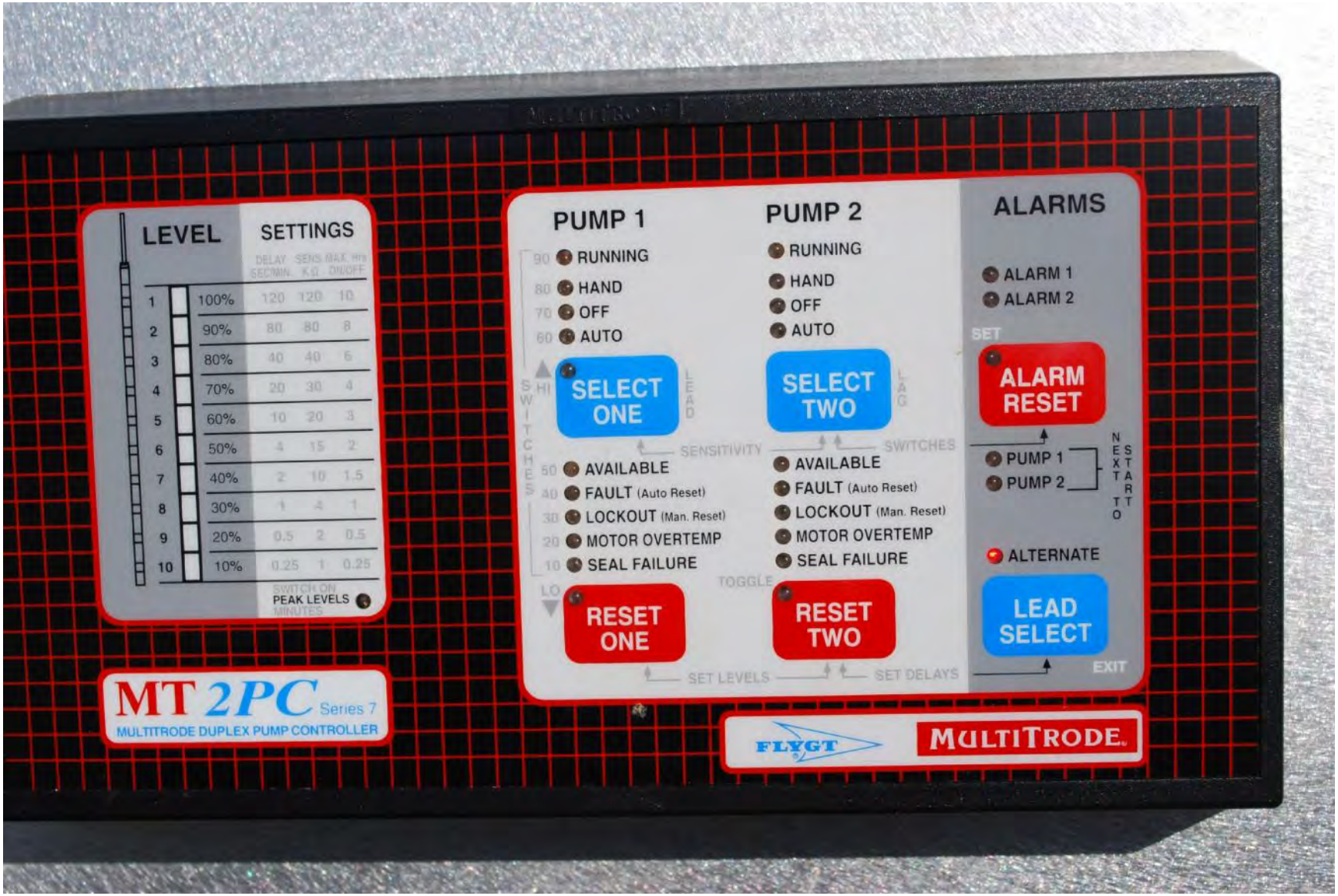
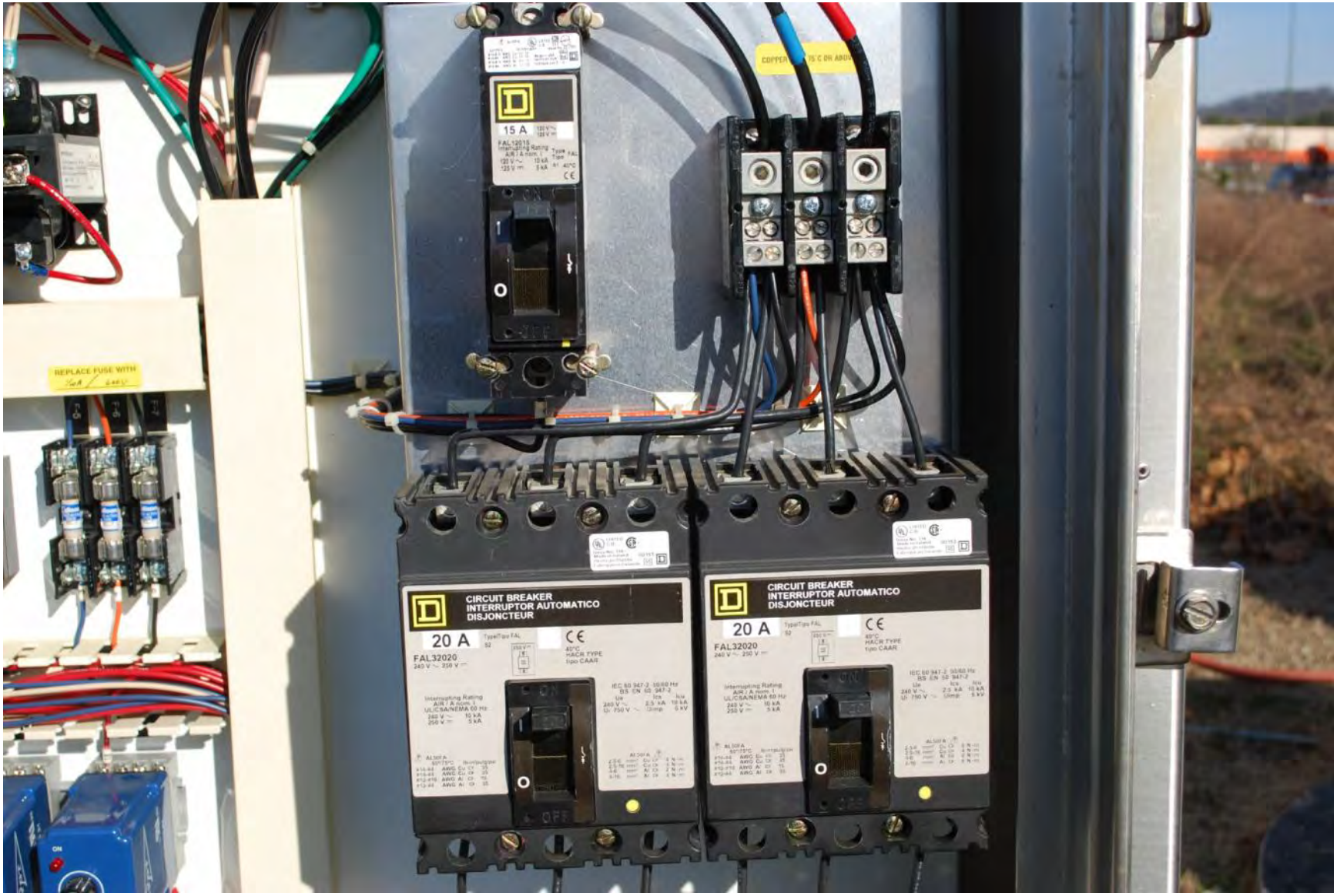
TERMINAL STRIP B (TS-B)
1 2 3 4 5 6 7 8 9 10
FR1 FR2 FR3 FR4 FR5
LOW OFF LEAD LAG HIGH
TERMINAL STRIP C (TS-C)
1 2 3 4
PUMP SENSOR CONNECTION
TERMINAL STRIP D (TS-D)
1 2 3
TRANSDUCER
CUSTOMER NEDROW
JOB NAME OAK RIDGE - HOME DEPOT
VOLTAGE 230V PHASE 3 HZ 60
H.P. #1 3HP #2 3HP #3 #4
F.L.A. 9A 9A
TOTAL F.L.A. 21A
SERIAL # 00-1409
LAST WIRE #52
PAGE 3 OF 3

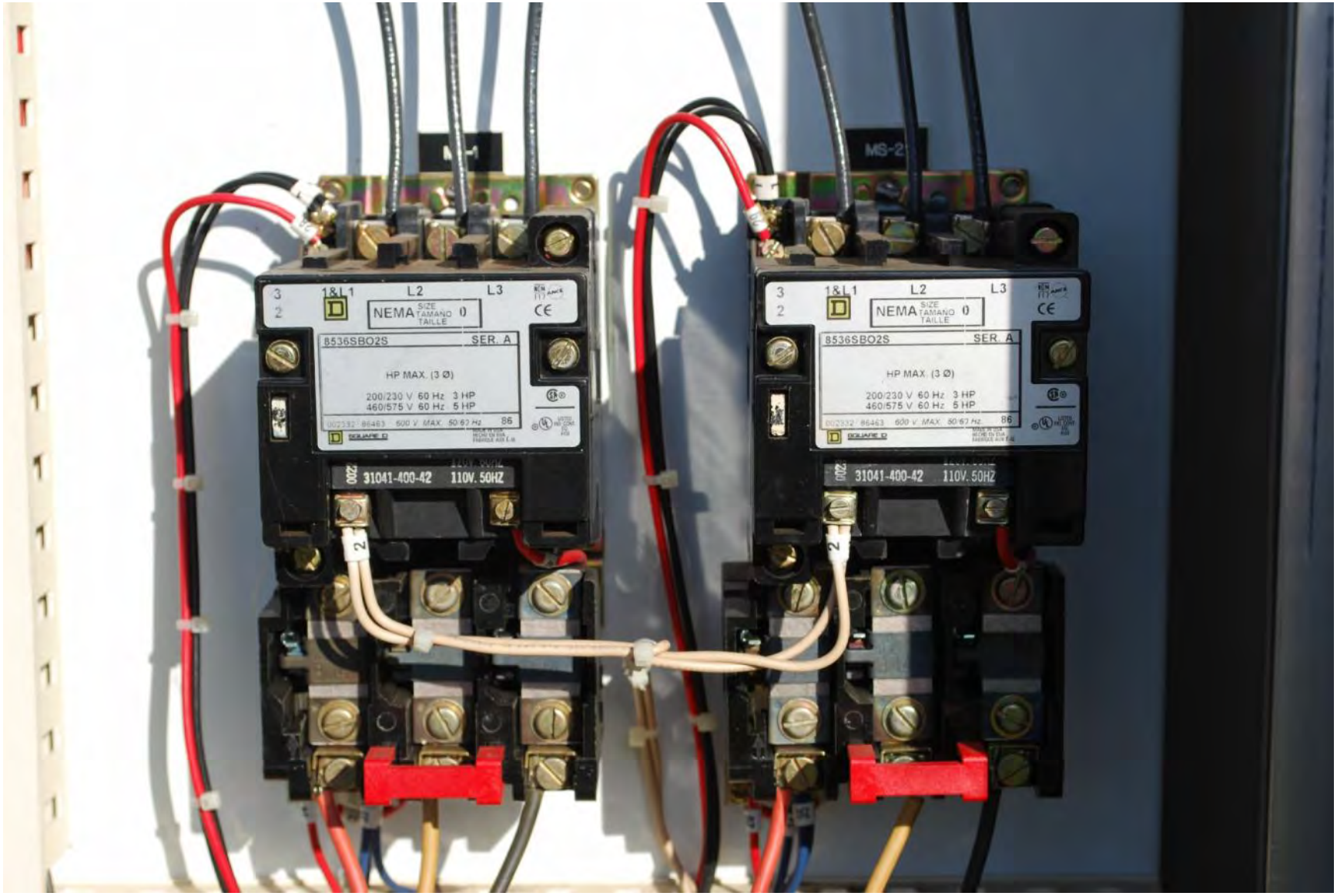
LEGEND SHEET

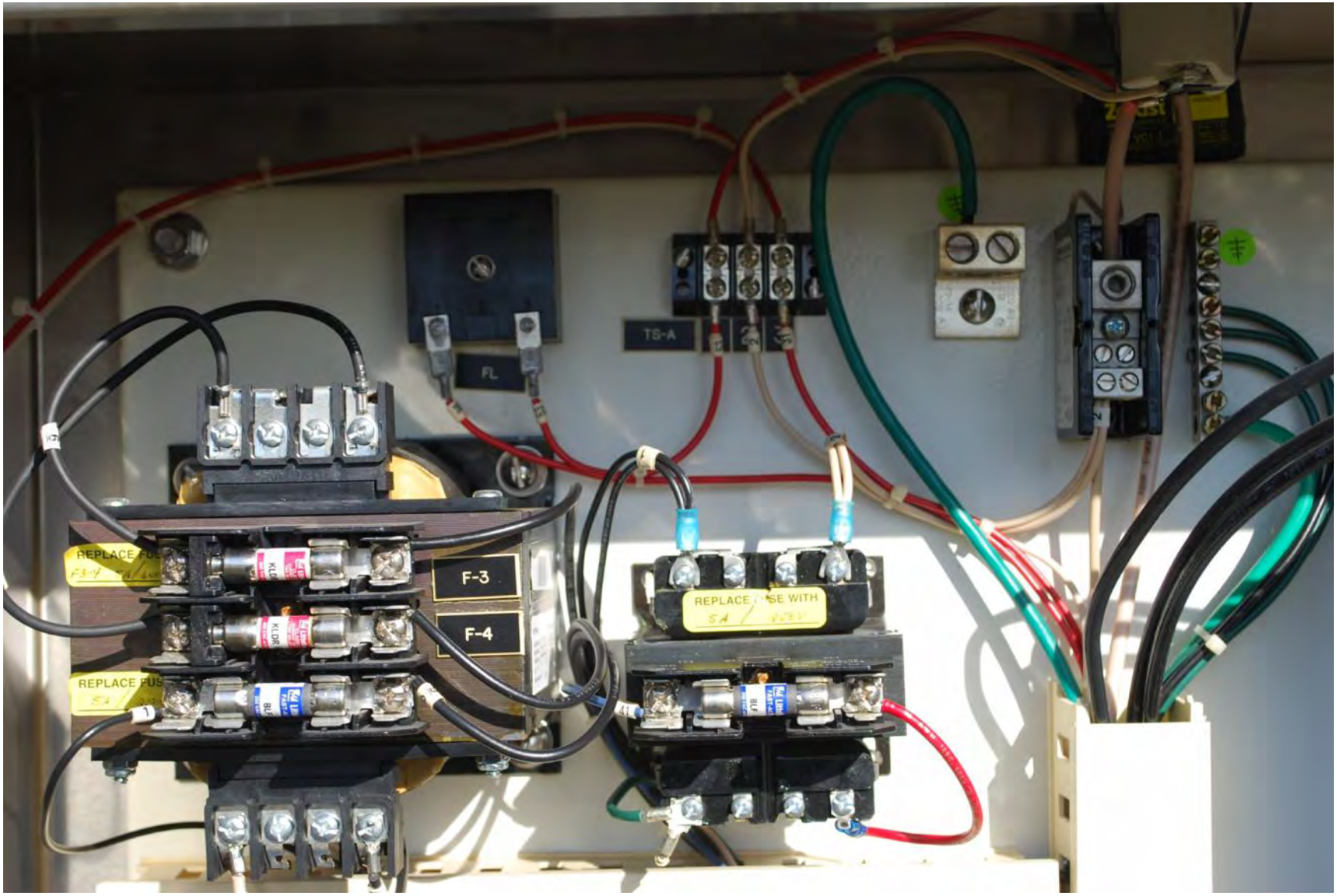
- AH ALARM HORN
- AL ALARM LIGHT
- HOA HAND OFF AUTO SWITCH
- ALT ALTERNATOR
- ASB ALARM SILENCE BUTTON
- BOAC BATTERY OPERATED ALARM/CHARGER
- CCB CONTROL CIRCUIT BREAKER
- CCT CONTROL CIRCUIT TRANSFORMER
- CPT CONTROL POWER TRANSFORMER
- DR DUPLEX RECEPTACLE
- DRB DUPLEX RECEPTACLE BREAKER
- DX DUPLEX CONTROLLER
- ECB EMERGENCY CIRCUIT BREAKER
- FB FUSE BLOCK
- FL FLASHER
- GCM* GROUND CHECK MONITOR
- GR GENERATOR RECEPTACLE
- ISR* INTRINSICALLY SAFE RELAY
- MB* MOTOR BREAKER
- MC* MINI-CAS
- MCB MAIN CIRCUIT BREAKER
- MS* MOTOR STARTER
- PM PHASE MONITOR
- R* CONTROL RELAYS
- SM1 SUB MEG 1
- SM2 SUB MEG 2
- TD* TIME DELAYS
- TS-* TERMINAL STRIP
- MTR MULTITRODE RELAY
- MTRA MULTITRODE ALARM RELAY
- MT2PC* MULTITRODE DUPLEX PUMP CONTROLLER
- MT3PC* MULTITRODE TRIPLEX PUMP CONTROLLER
- ULC ULTRA SONIC LEVEL CONTROLLER

LEVEL
PUMP 1
PUMP 2
ALARMS
SELECT ONE
SELECT TWO
ALARM RESET
RESET ONE
RESET TWO
LEAD SELECT
MT 2PC
MULTITRODE
CONTROL
MB 1
MB 2
PUMP 1 RUN
FLOAT SYSTEM ACTIVATED
PUMP 2 RUN
00254
00227
PUMP 1
HAND
AUTO
FLOAT HIGH LVL RESET
PUMP 2
HAND
AUTO

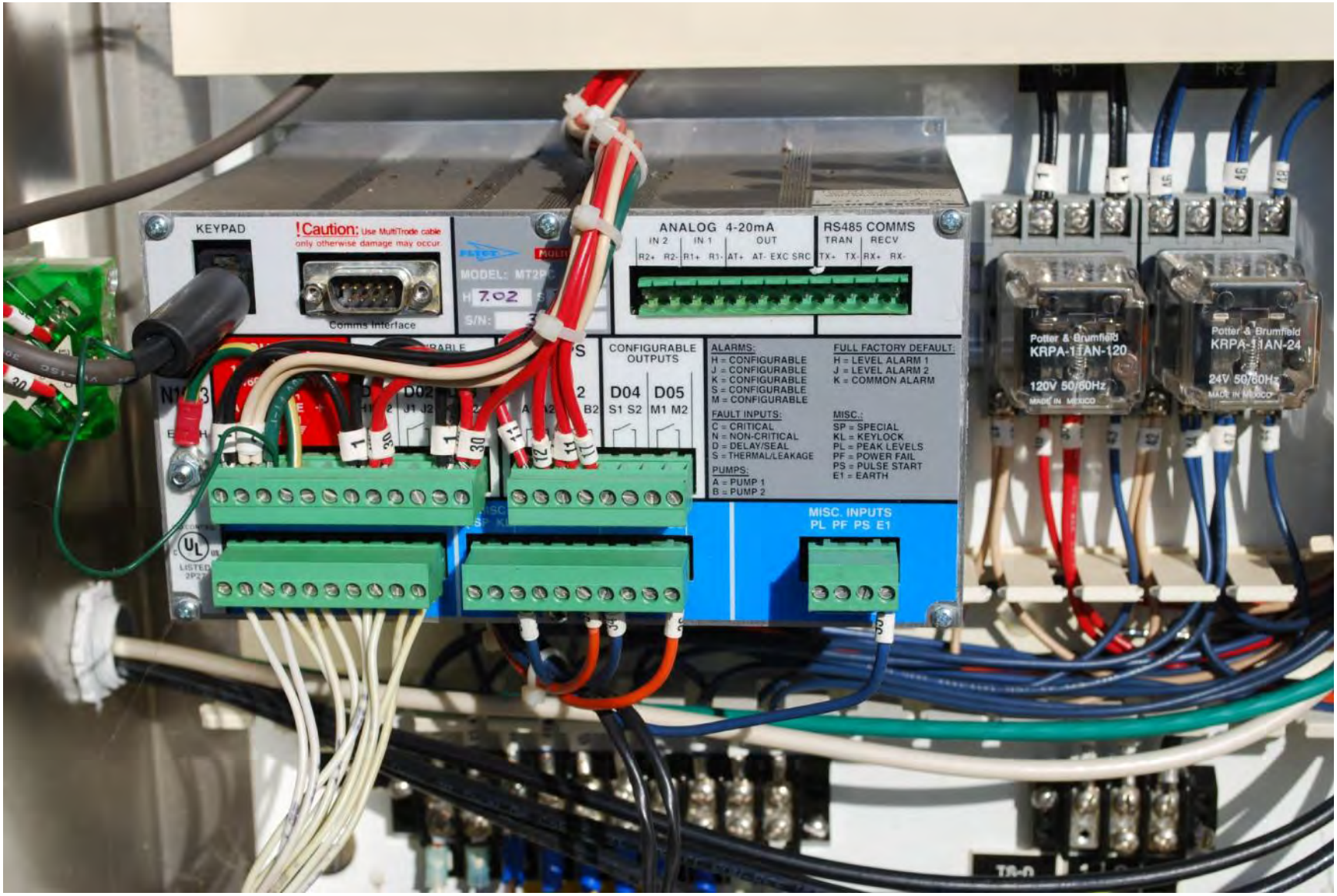

LEVEL
SETTINGS
DELAY SEC/MIN
SENS K Ω
MAX. Hrs ON/OFF
1 100% 120 120 10
2 90% 80 80 8
3 80% 40 40 6
4 70% 20 30 4
5 60% 10 20 3
6 50% 4 15 2
7 40% 2 10 1.5
8 30% 1 4 1
9 20% 0.5 2 0.5
10 10% 0.25 1 0.25
SWITCH ON MINUTES
PEAK LEVELS
MT 2PC Series 7
MULTITRODE DUPLEX PUMP CONTROLLER
PUMP 1
90 RUNNING
80 HAND
70 OFF
60 AUTO
SELECT ONE
LEAD
HI
SWITCHES
LO
SENSITIVITY
50 AVAILABLE
40 FAULT (Auto Reset)
30 LOCKOUT (Man. Reset)
20 MOTOR OVERTEMP
10 SEAL FAILURE
RESET ONE
TOGGLE
SET LEVELS
PUMP 2
RUNNING
HAND
OFF
AUTO
SELECT TWO
LAG
SWITCHES
AVAILABLE
FAULT (Auto Reset)
LOCKOUT (Man. Reset)
MOTOR OVERTEMP
SEAL FAILURE
RESET TWO
SET DELAYS
ALARMS
ALARM 1
ALARM 2
SET
ALARM RESET
NEXT TO START
PUMP 1
PUMP 2
ALTERNATE
LEAD SELECT
EXIT
FLYGT
MULTITRODE


15 A
CIRCUIT BREAKER
INTERRUPTOR AUTOMATICO
DISJONCTEUR
20 A
FAL32020
CIRCUIT BREAKER
INTERRUPTOR AUTOMATICO
DISJONCTEUR
20 A
FAL32020


MS-2
3
2
1&L1
L2
L3
NEMA SIZE TAMANO TAILLE 0
8536SBO2S
SER. A
HP MAX. (3 Ø)
200/230 V 60 Hz 3 HP
460/575 V 60 Hz 5 HP
600 V. MAX. 50/60 Hz
86
31041-400-42
110V. 50HZ
MS-2
3
2
1&L1
L2
L3
NEMA SIZE TAMANO TAILLE 0
8536SBO2S
SER. A
HP MAX. (3 Ø)
200/230 V 60 Hz 3 HP
460/575 V 60 Hz 5 HP
600 V. MAX. 50/60 Hz
86
31041-400-42
110V. 50HZ


TS-A
FL
F-3
F-4

POWER ON
220
230
210
240
200
PHASE
MONITOR
Potter & Brumfield
KRPA-11AN-120
120V 50/60Hz
PTT
ALTERNATING
RELAY
POS 1
Auto
POS 2
ON
100
% OF DELAY
ON
100
% OF DELAY


KEYPAD
!Caution: Use MultiTrode cable only otherwise damage may occur
Comms Interface
ANALOG 4-20mA
IN 2
IN 1
OUT
R2+ R2- R1+ R1- AT+ AT- EXC SRC
RS485 COMMS
TRAN
RECV
TX+ TX- RX+ RX-
CONFIGURABLE OUTPUTS
D04 D05
S1 S2 M1 M2
ALARMS:
H = CONFIGURABLE
J = CONFIGURABLE
K = CONFIGURABLE
S = CONFIGURABLE
M = CONFIGURABLE
FULL FACTORY DEFAULT:
H = LEVEL ALARM 1
J = LEVEL ALARM 2
K = COMMON ALARM
FAULT INPUTS:
C = CRITICAL
N = NON-CRITICAL
D = DELAY/SEAL
S = THERMAL/LEAKAGE
MISC.:
SP = SPECIAL
KL = KEYLOCK
PL = PEAK LEVELS
PF = POWER FAIL
PS = PULSE START
E1 = EARTH
PUMPS:
A = PUMP 1
B = PUMP 2
MISC. INPUTS
PL PF PS E1
Potter & Brumfield
KRPA-11AN-120
120V 50/60Hz
Potter & Brumfield
KRPA-11AN-24
24V 50/60Hz

CORPORATION
WARNING
TO REDUCE THE RISK OF
ELECTRICAL SHOCK, SEE
THE INSTRUCTION MANUAL
FOR PROPER INSTALLATION.
NRTL
3085.182-0011638
414
3085.182-6005
1700rpm S1
Max 40°C
4.3/8.7A
cosφ 0.83
IP68 20m L
78Kg

D152 CONTROLLER
LEVEL IN FEET
LEAD PUMP
LAG PUMP
LOW ALARM
HIGH ALARM
MAN LEVEL SIMULATOR
AUTO ALTERNATOR CONTROL SWITCH
AUDIBLE ALARM SILENCE
USFilter
OVERTEMP 1
MOISTURE 1
MOISTURE 2
OVERTEMP 2
RECEPTACLE
CONTROL
PUMP 1 RUN
PUMP 2 RUN

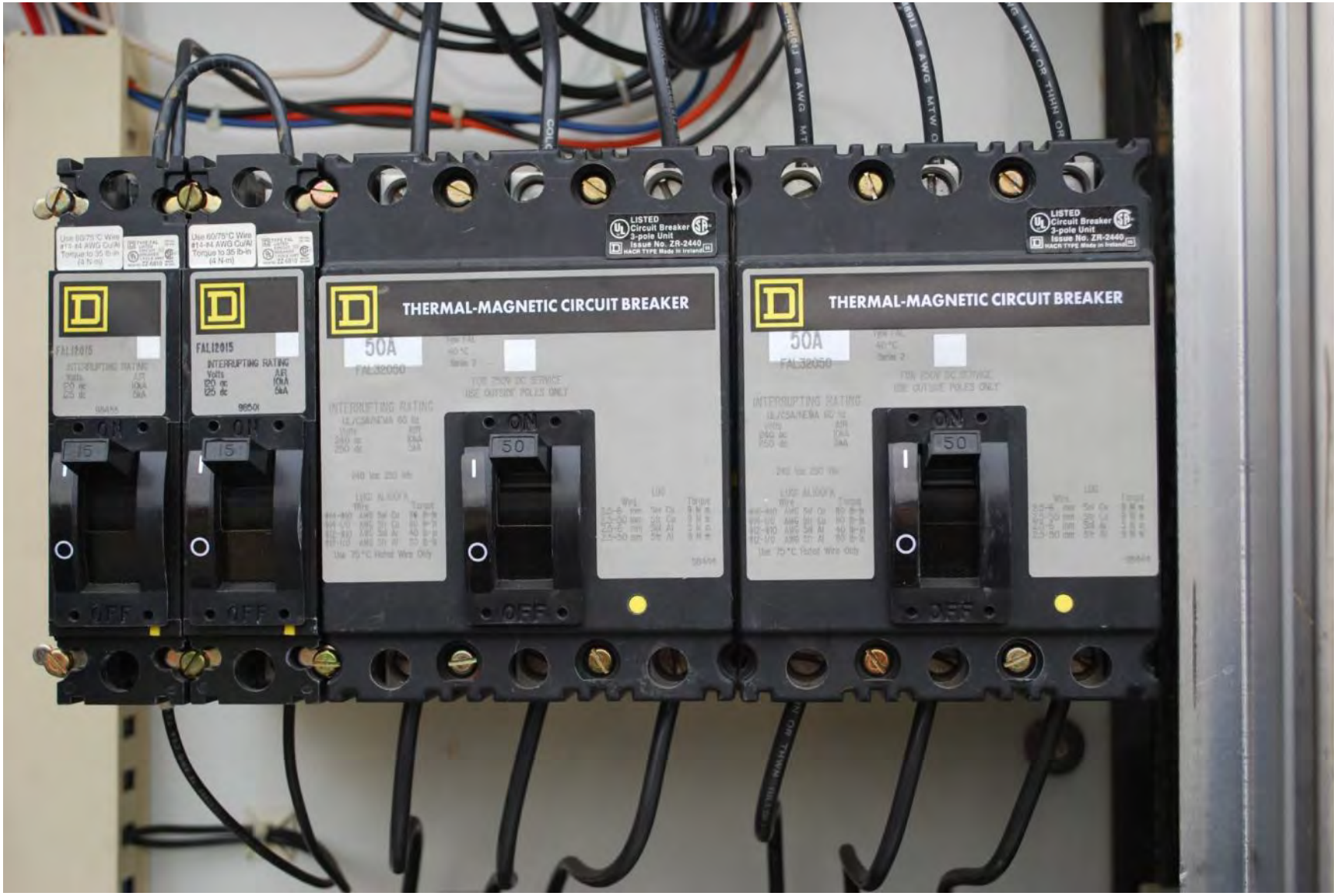
USFilter
OVERTEMP 1
MOISTURE 1
MOISTURE 2
OVERTEMP 2
RECEPTACLE
CONTROL
MB 1
MB 2
PUMP 1 RUN
PUMP 2 RUN
16293
14574
STA-CON, INC.
PUMP 2
HAND
AUTO
MINI-CAS 1 RESET
HIGH LVL RESET
MINI-CAS 2 RESET

AS BUILT
OAK RIDGE MARINA
ITT-FLYGT
ITT-FLYGT CORP.
TRUMBULL, CT 06611
PUMP 1 RUN
PUMP 2 RUN
ALARM LIGHT
THERMOSTAT/ HEATER
PUMP 1 HP 10 FLA 26
PUMP 2 HP 10 FLA 26
230V 3 Ø 4 W

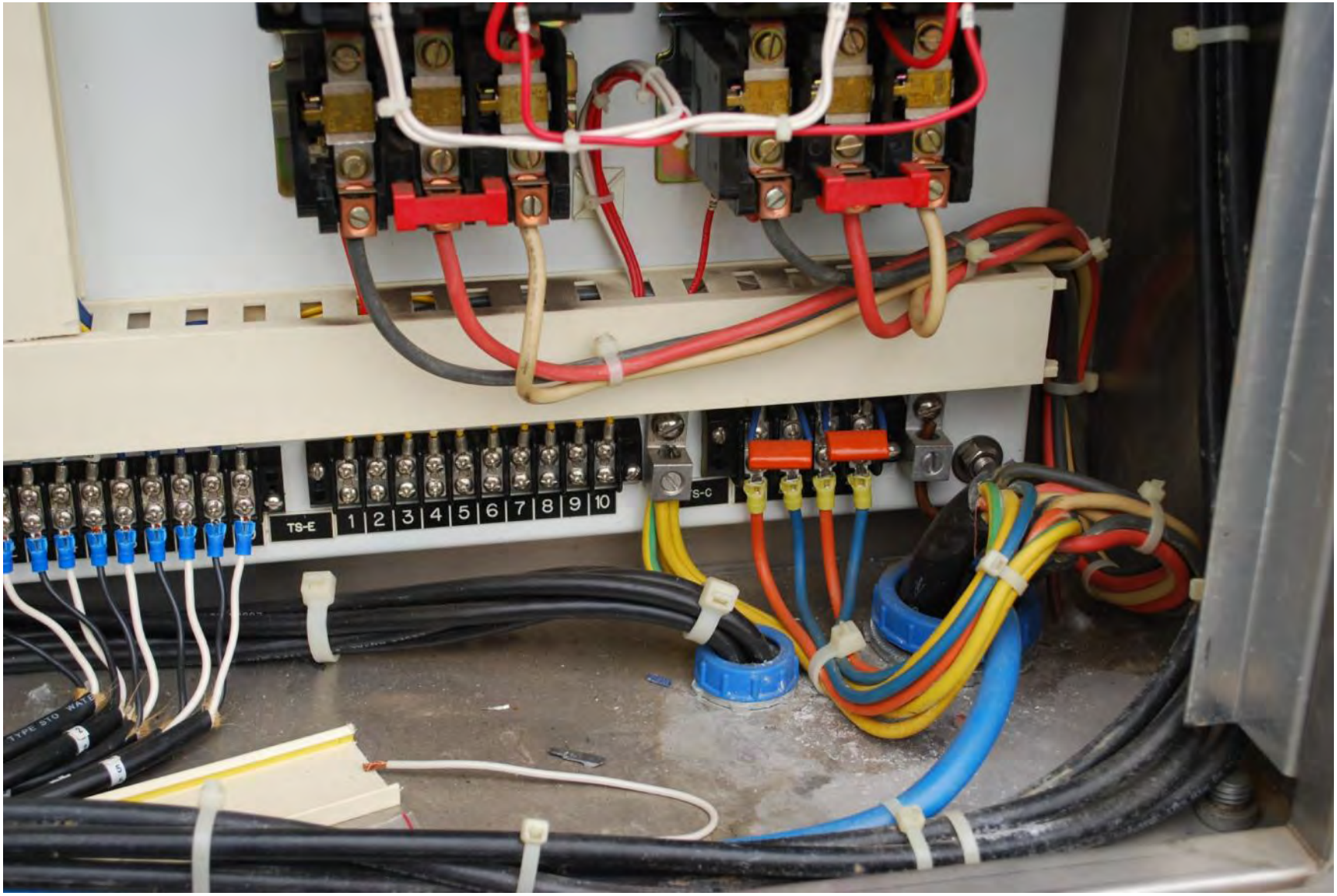
AS BUILT
OAK RIDGE MARINA
Q2335IA
10-28-98
HOWIE T.
A
ITT-FLYGT
ITT-FLYGT CORP.
TRUMBULL, CT 06611
OVERTEMP 1
MOISTURE 1
OVERTEMP 2
MOISTURE 2
D-132 CONTROLLER
120VAC INPUT
PUMP 1
PUMP 2
ALARM
SIGNAL INPUT (+VDC) (WHT)
EXITATION (+VDC) (RED)
SIGNAL COM (BLK)
INTRINSICALLY SAFE MODULE IS1-3 (601315-05)
BULLETIN A1000 MODEL LS7GSCL SUBMERSIBLE LEVEL TRANSDUCER
BLACK
RED
WHITE
COMMON
EXITATION
SIGNAL
CCT
THERMALS
SEAL FAIL
MINICAS 1 (MC1)
MINICAS 2 (MC2)
RESET
PAGE 2 OF 3

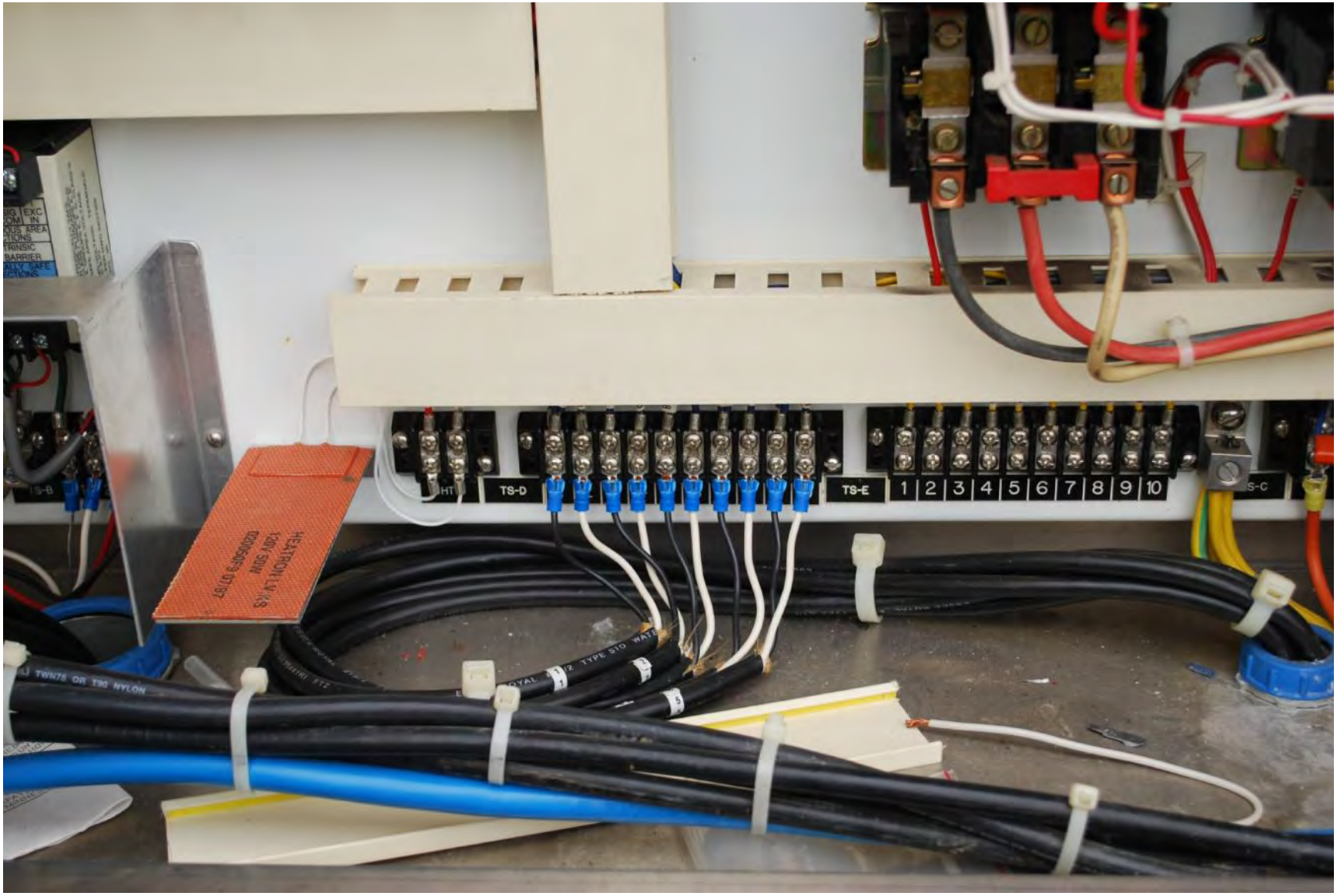
AS BUILT
OAK RIDGE MARINA
QUOTE NO. Q23351A
DATE 10-28-98
DRAWN BY HOWIE T.
REVISION A
ITT-FLYGT TRUMBULL, CT 06611
ITT-FLYGT CORP.
REMOTE TO FUTURE SCADA SYSTEM
LAST WIRE #70
LOW LEVEL
HIGH LEVEL
DISS ALARM
OVERTEMP 1 MOISTURE 1
OVERTEMP 2 MOISTURE 2
HI LEVEL
LOW
LAG
LEAD
OFF
RESET

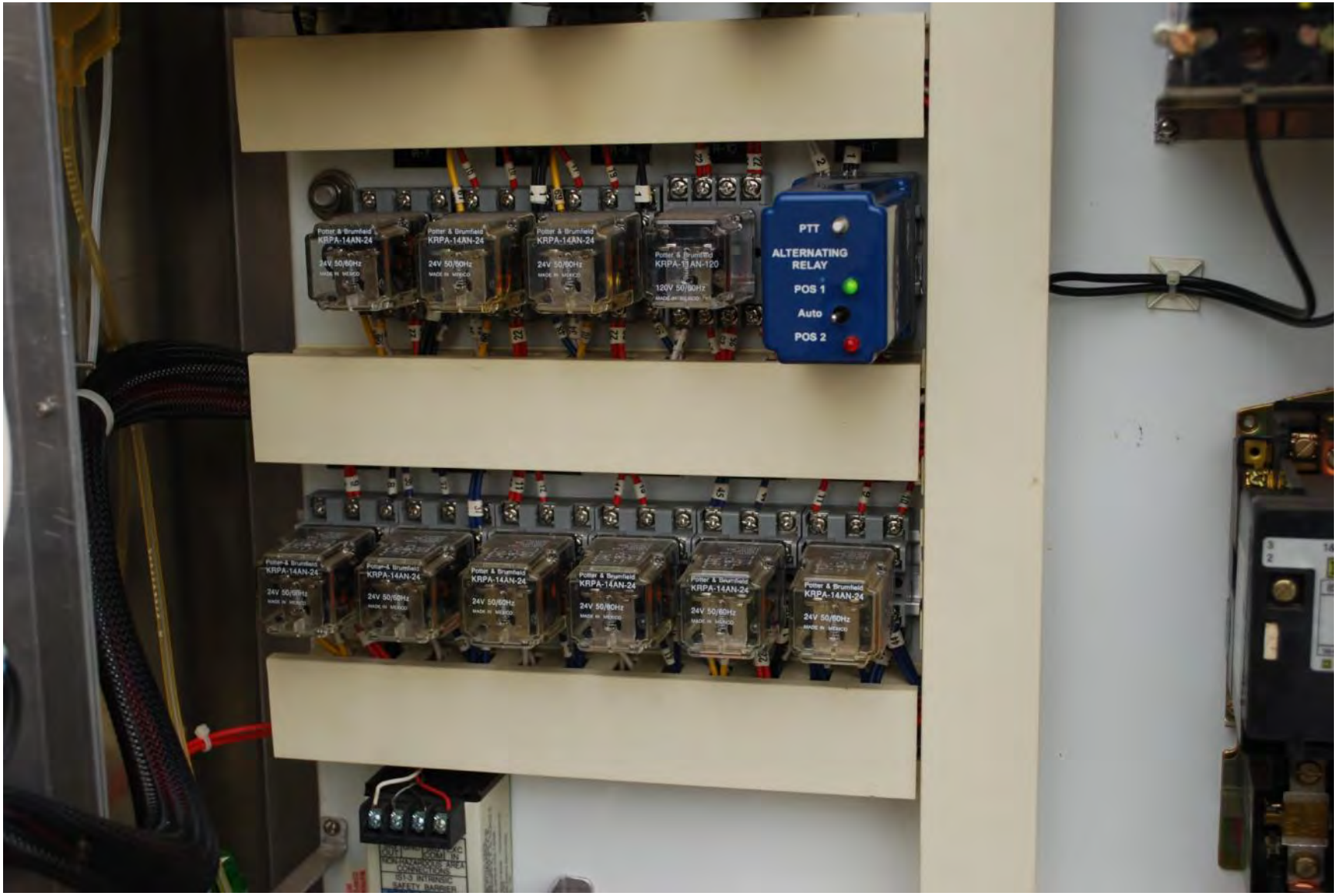
3127.180-2994
9860808 483
M21-12-4AL
Yser/ Y// 7.5 kW-10 hp 0.89
460/230 13/25 3~60 S1
1735
147

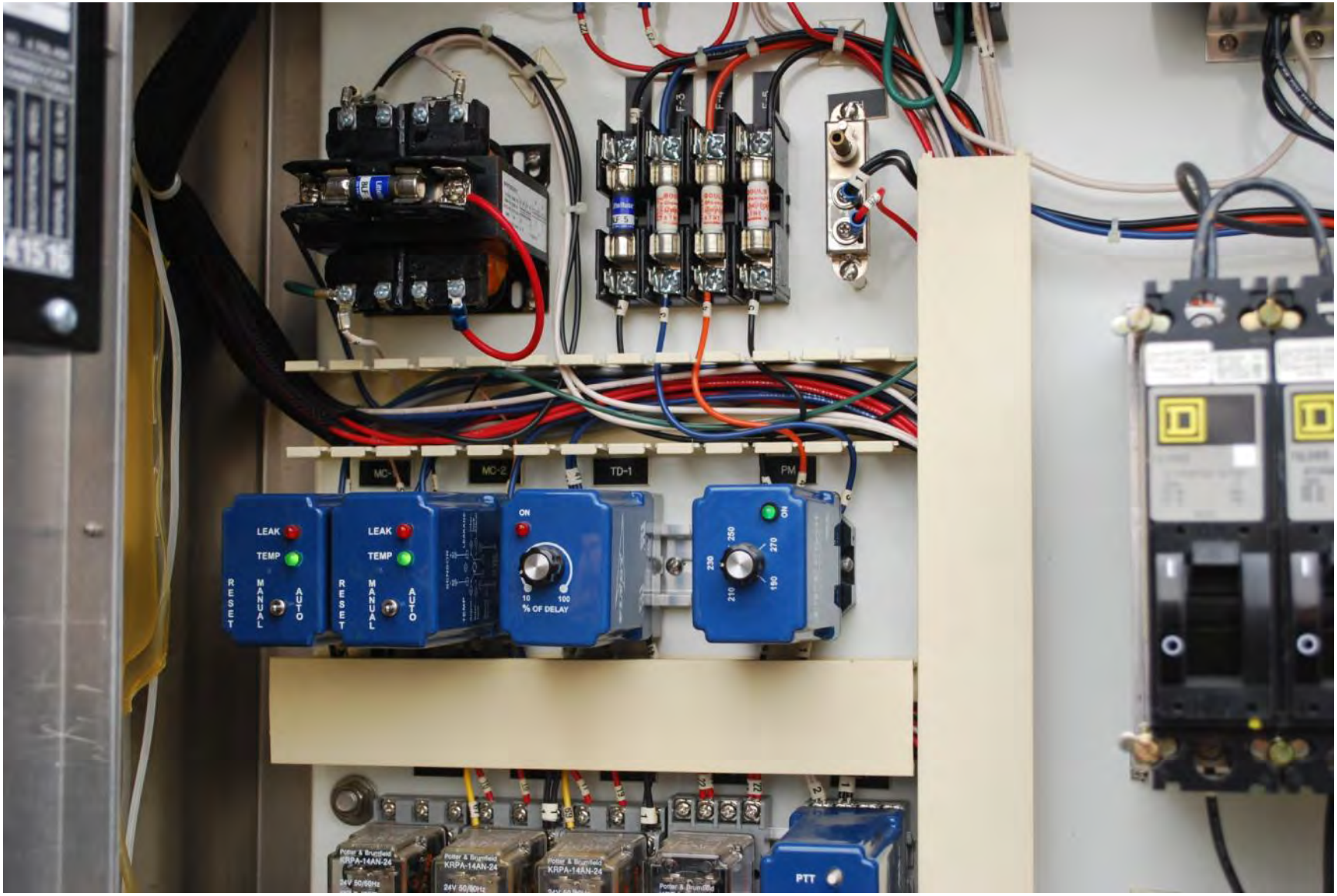

THERMAL-MAGNETIC CIRCUIT BREAKER
THERMAL-MAGNETIC CIRCUIT BREAKER
50A
50A
ON
OFF
15
50

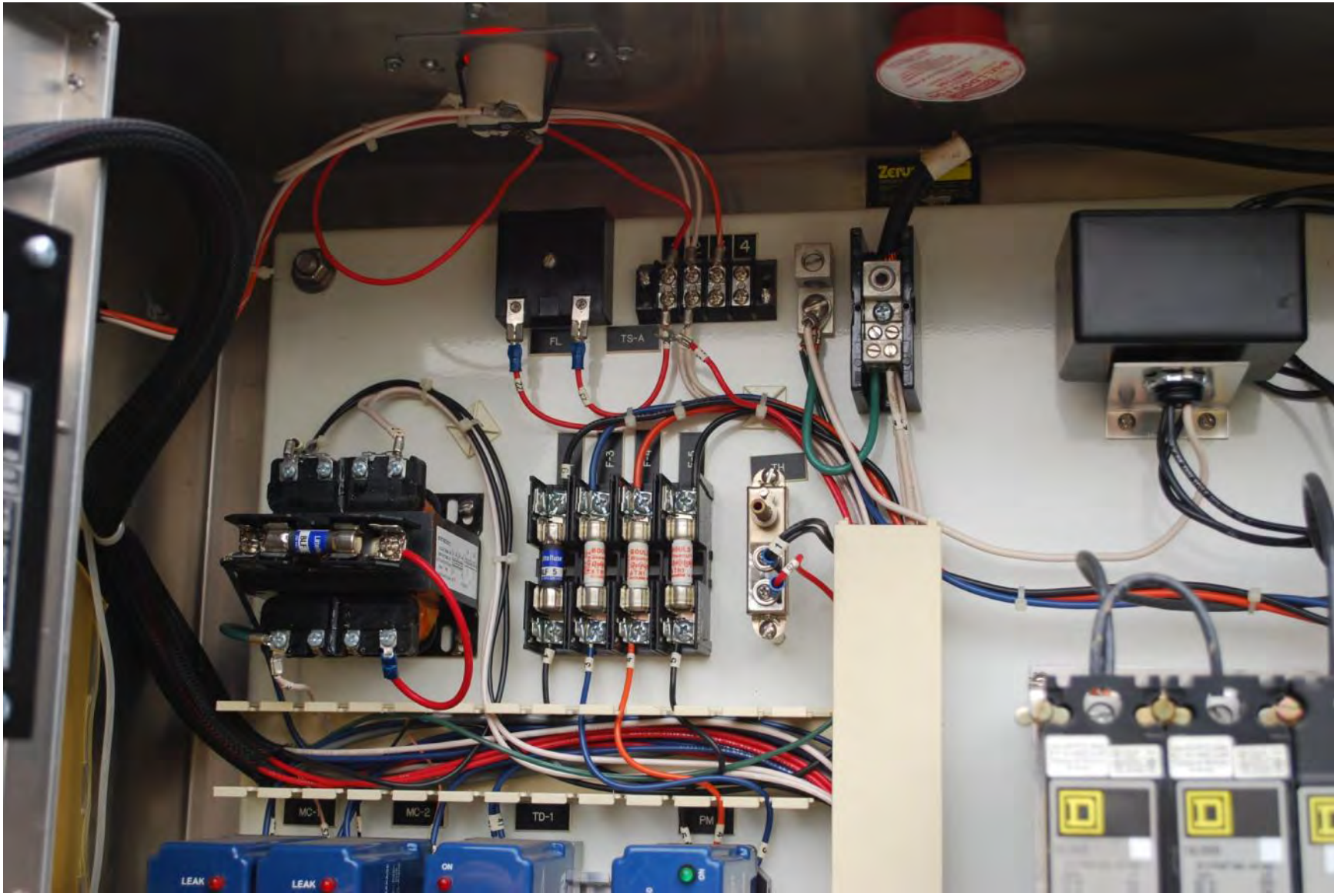
MS-2
3
2
1&L1
L2
L3
NEMA 2
8536SDO1S
SER. A
HP MAX.(3 Ø)
200 V
230 V
380/460/575 V
10 HP
15 HP
98481/88212
600V MAX.
86
120V 60HZ
110V 50HZ
31063-409-38

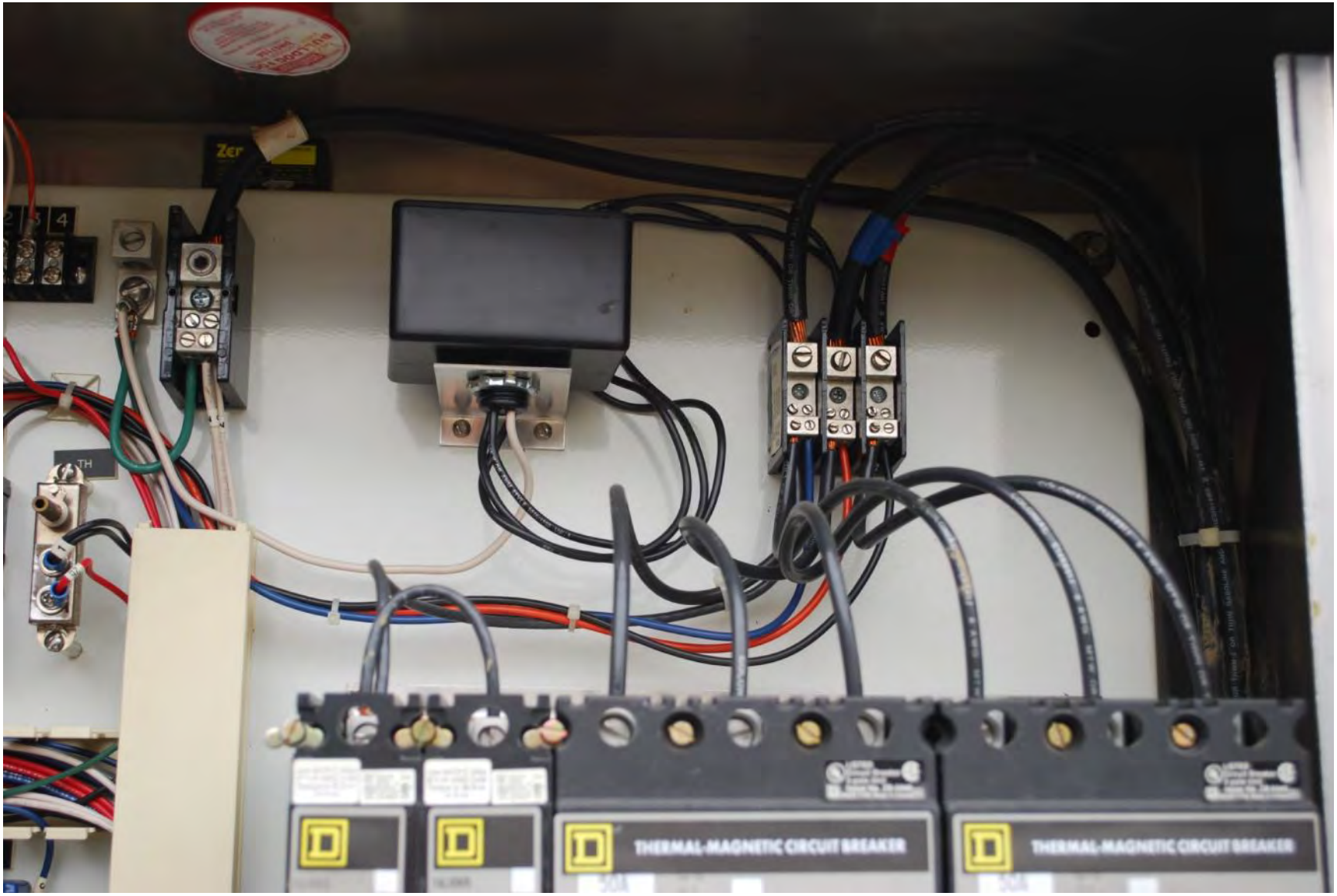

TS-E
1 2 3 4 5 6 7 8 9 10


TS-D
TS-E
1 2 3 4 5 6 7 8 9 10


PTT
ALTERNATING RELAY
POS 1
Auto
POS 2
Potter & Brumfield
KRPA-14AN-24
24V 50/60Hz
KRPA-14AN-120
120V 50/60Hz

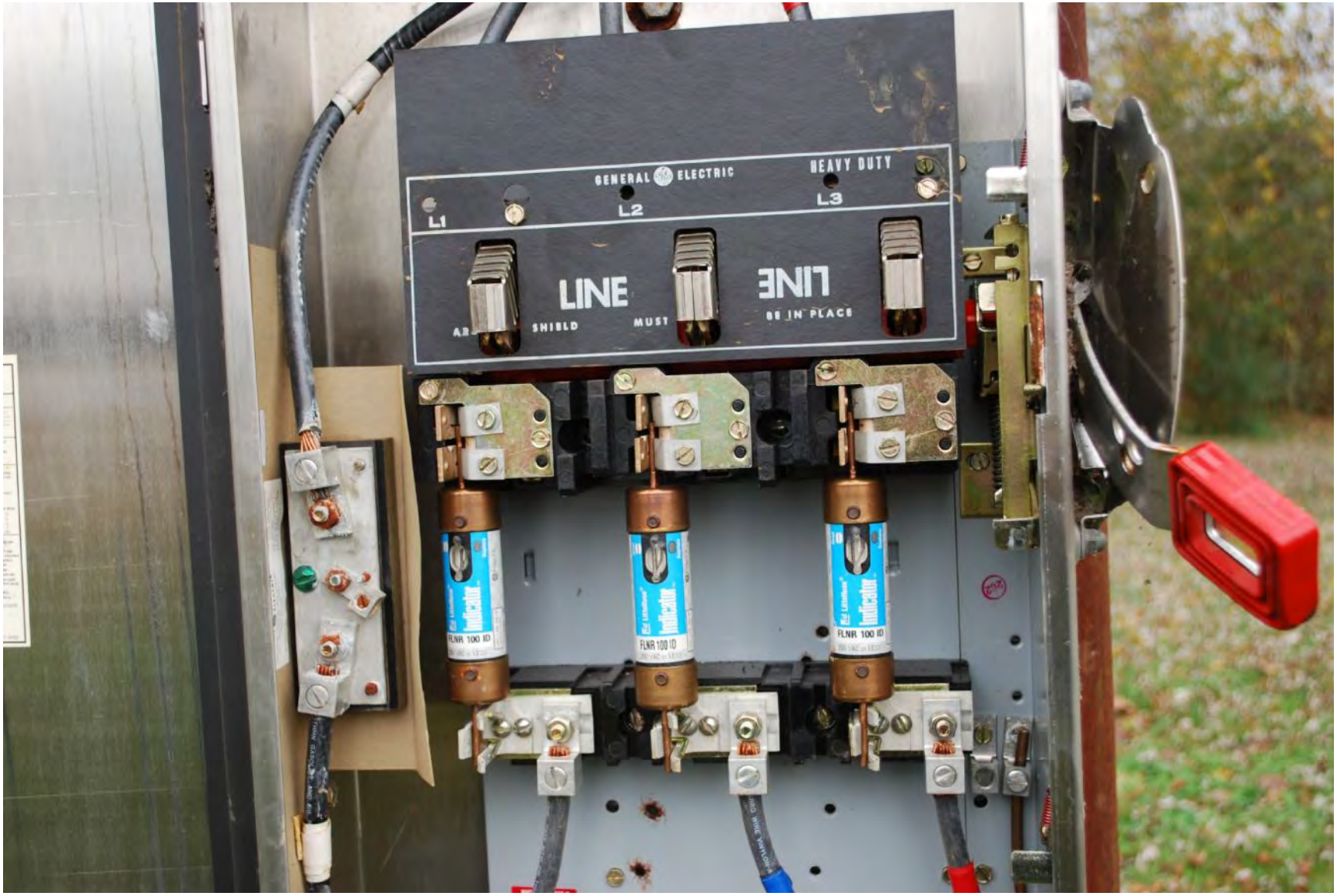

MC-1
MC-2
TD-1
PM
LEAK
TEMP
RESET
MANUAL
AUTO
ON
% OF DELAY
PTT

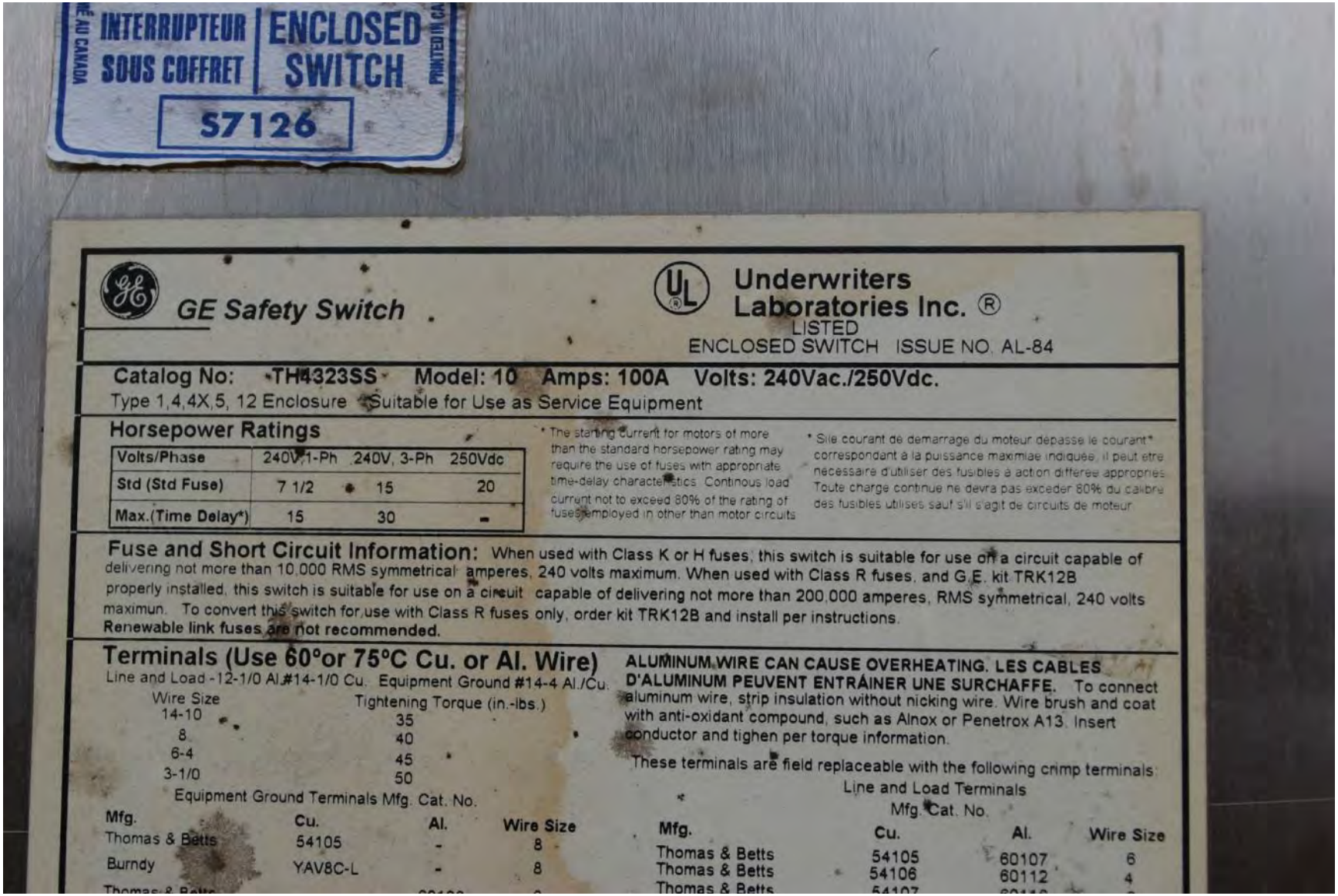

FL
TS-A
TH
MC-1
MC-2
TD-1
PM
LEAK
LEAK
ON


THERMAL-MAGNETIC CIRCUIT BREAKER
THERMAL-MAGNETIC CIRCUIT BREAKER

D152 CONTROLLER
USFILTER CONTROL SYSTEMS
LISTED
INDUSTRIAL
CONTROL
EQUIPMENT
92X3
601273-22
S/N 10283
PATENT NO. 4,705,456
FUSE
1/4-AMP
SLO-BLO
TERMINAL TORQUE RATING: 12 IN-LBS MAX
CONTACT RATINGS
GENERAL PURPOSE
10A @ 120VAC
6.67A @ 240VAC
10A @ 30VDC
PILOT DUTY
2.88A @ 120VAC
1.96A @ 240VAC
120VAC
50/60HZ
20VA
L1
N
PUMP
NO.1
K1
PUMP
NO.2
K2
ALARM
SHOWN IN ENERGIZED/
NORMAL STATE
K3
EXTERNAL SILENCE
EXTERNAL
AUDIBLE DRIVER O.C.
+13.8 VDC OUT
COMMON
TRANSDUCER
CONNECTIONS
SIGNAL IN (WHT)
EXCITATION (RED)
SIGNAL COM (BLK)
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16

3127.180–2994
15
9860809
483
M21–12–4AL
Yser/ Y//
7.5 kW–10 hp
0.89
460/230
13/25
3~60
S1
1735
147


GENERAL ELECTRIC
HEAVY DUTY
L1
L2
L3
LINE
LINE
SHIELD
MUST
BE IN PLACE
FLNR 100 ID
FLNR 100 ID
FLNR 100 ID

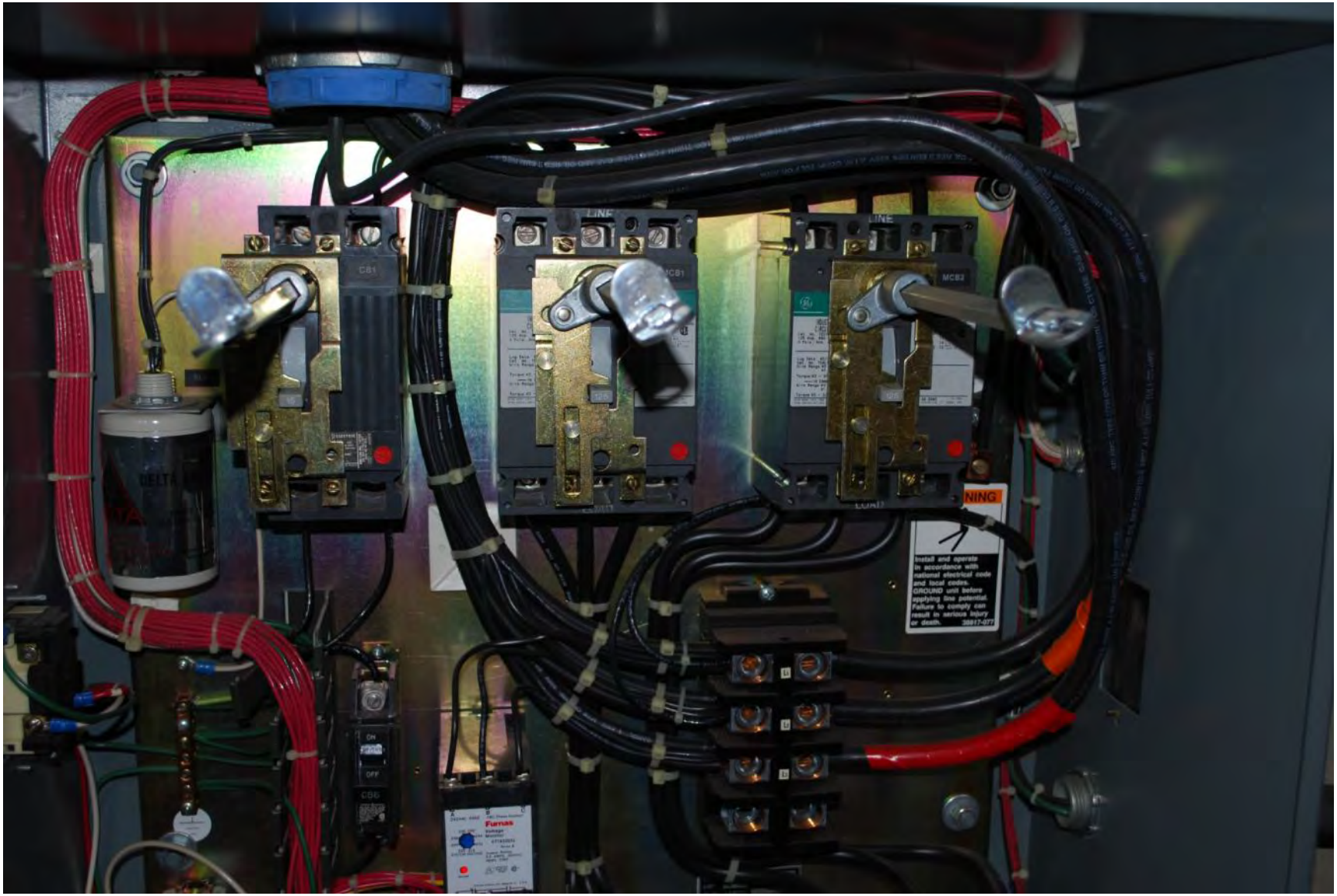

INTERRUPTEUR SOUS COFFRET
ENCLOSED SWITCH
S7126
GE Safety Switch
Underwriters Laboratories Inc. ®
LISTED
ENCLOSED SWITCH ISSUE NO. AL-84
Catalog No: TH4323SS Model: 10 Amps: 100A Volts: 240Vac./250Vdc.
Type 1,4,4X,5, 12 Enclosure Suitable for Use as Service Equipment
Horsepower Ratings
Volts/Phase 240V, 1-Ph 240V, 3-Ph 250Vdc
Std (Std Fuse) 7 1/2 15 20
Max.(Time Delay*) 15 30 -
* The starting current for motors of more than the standard horsepower rating may require the use of fuses with appropriate time-delay characteristics. Continous load currunt not to exceed 80% of the rating of fuses employed in other than motor circuits
* Sile courant de demarrage du moteur depasse le courant* correspondant à la puissance maximiae indiquée, il peut etre necessaire d'utiliser des fusibles à action differee appropries Toute charge continue ne devra pas exceder 80% du calibre des fusibles utilises sauf s'il s'agit de circuits de moteur
Fuse and Short Circuit Information: When used with Class K or H fuses, this switch is suitable for use on a circuit capable of delivering not more than 10,000 RMS symmetrical amperes, 240 volts maximum. When used with Class R fuses, and G.E. kit TRK12B properly installed, this switch is suitable for use on a circuit capable of delivering not more than 200,000 amperes, RMS symmetrical, 240 volts maximun. To convert this switch for use with Class R fuses only, order kit TRK12B and install per instructions.
Renewable link fuses are not recommended.
Terminals (Use 60°or 75°C Cu. or Al. Wire)
Line and Load -12-1/0 Al.#14-1/0 Cu. Equipment Ground #14-4 Al./Cu.
Wire Size Tightening Torque (in.-lbs.)
14-10 35
8 40
6-4 45
3-1/0 50
Equipment Ground Terminals Mfg. Cat. No.
Mfg. Cu. Al. Wire Size
Thomas & Betts 54105 - 8
Burndy YAV8C-L - 8
ALUMINUM WIRE CAN CAUSE OVERHEATING. LES CABLES D'ALUMINUM PEUVENT ENTRAÎNER UNE SURCHAFFE. To connect aluminum wire, strip insulation without nicking wire. Wire brush and coat with anti-oxidant compound, such as Alnox or Penetrox A13. Insert conductor and tighen per torque information.
These terminals are field replaceable with the following crimp terminals:
Line and Load Terminals
Mfg. Cat. No.
Mfg. Cu. Al. Wire Size
Thomas & Betts 54105 60107 6
Thomas & Betts 54106 60112 4

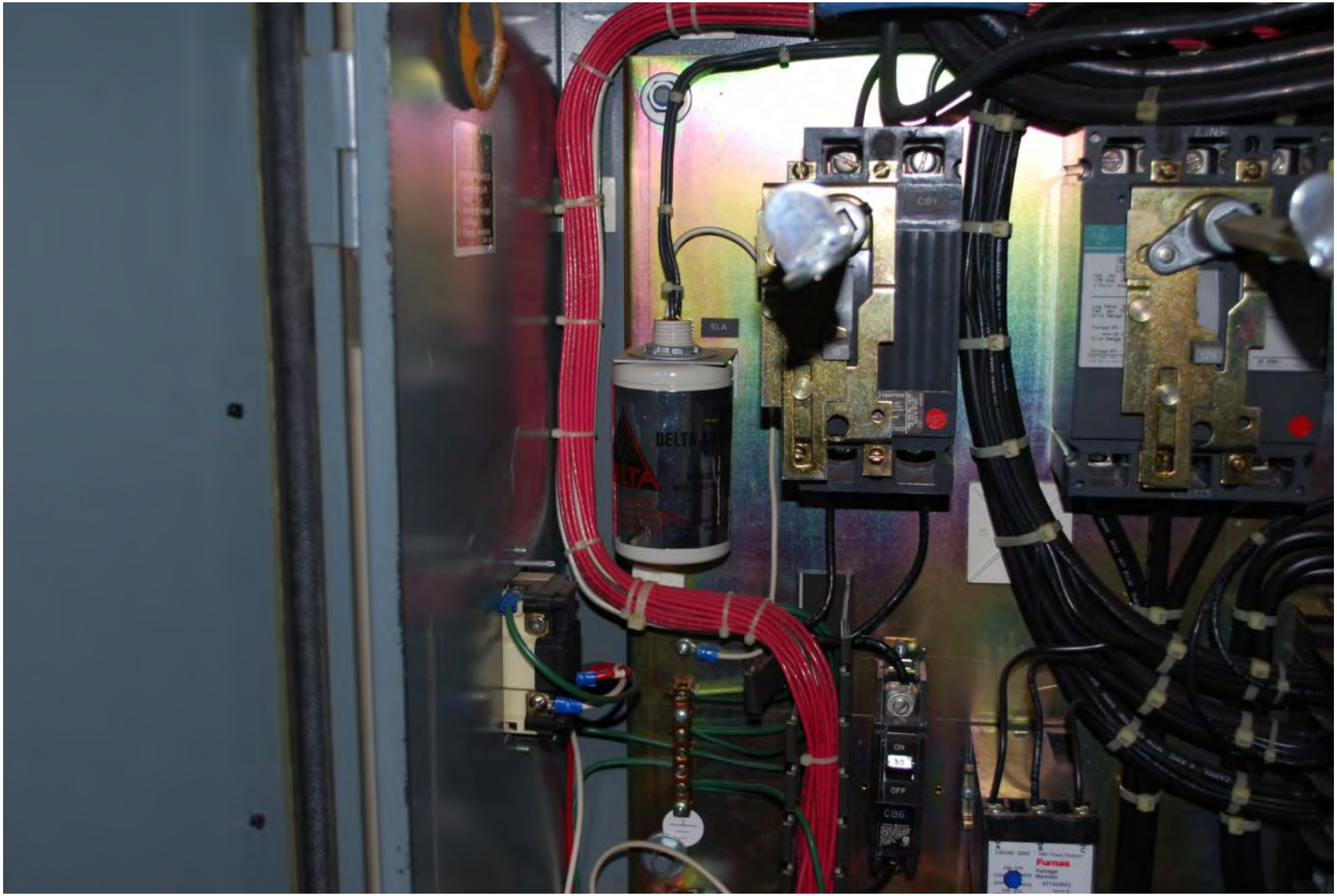
30
40
20
50
10

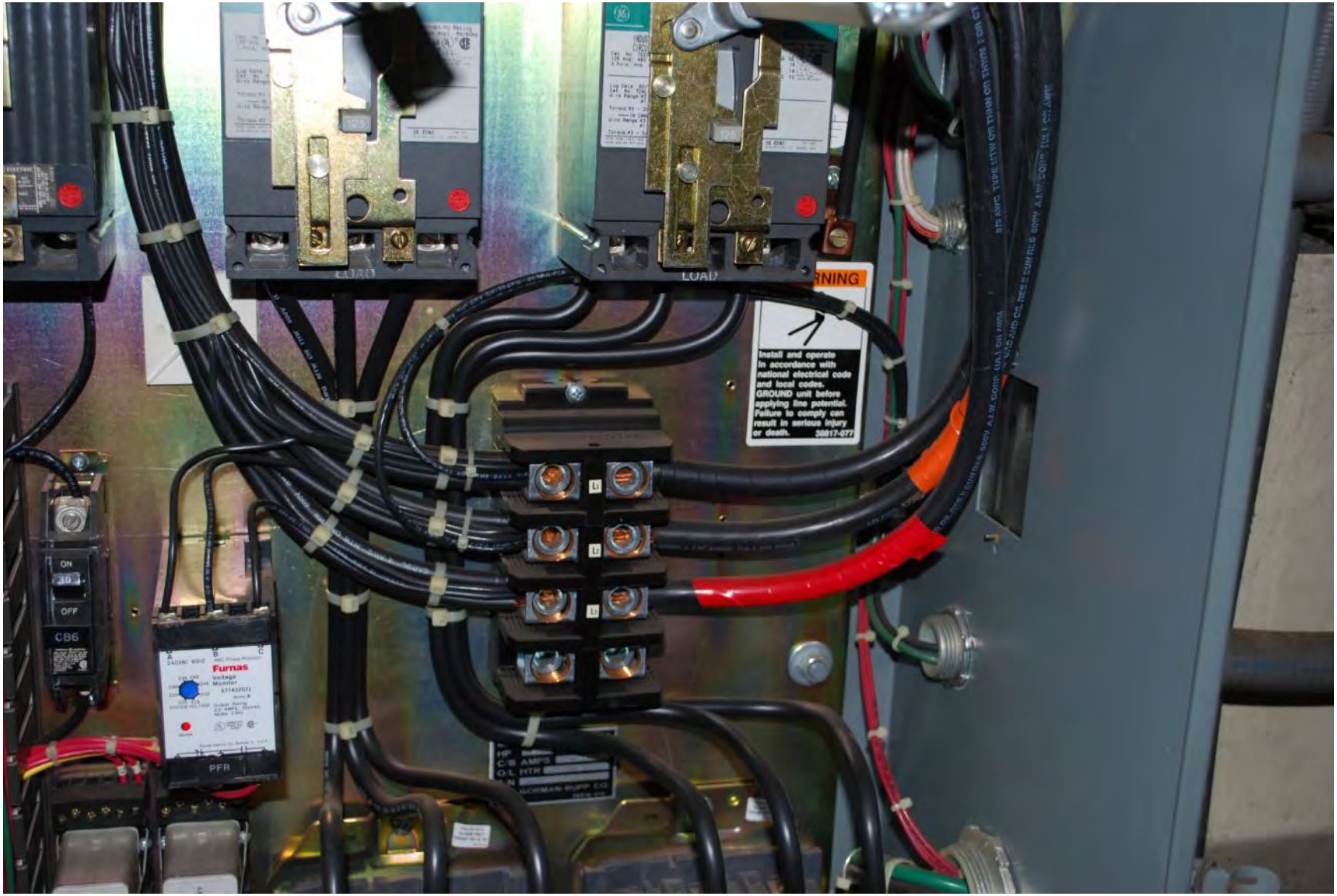
3086

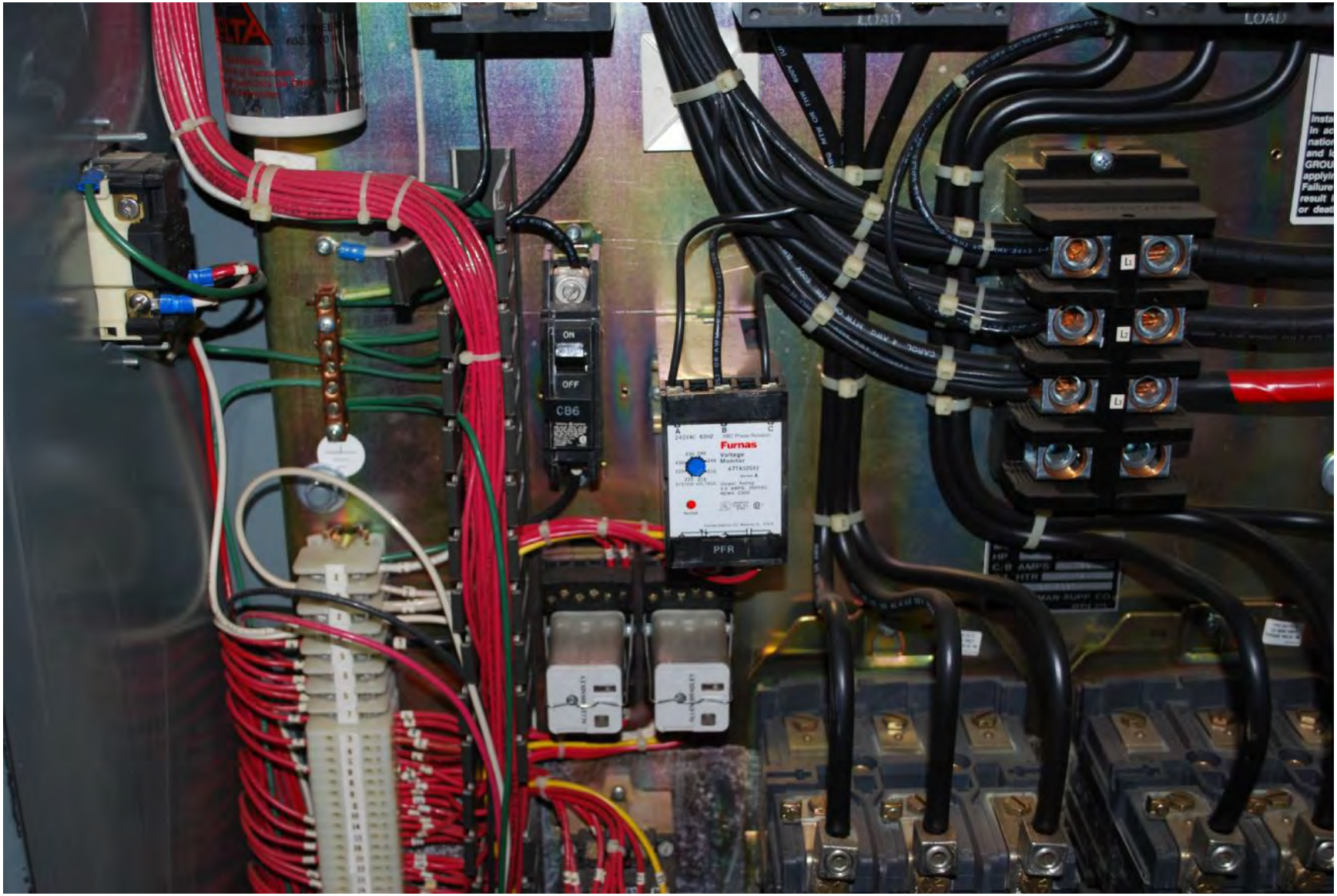
CHALLENGER
ELECTRICAL EQUIPMENT CORP.
Heavy Duty Safety Switch
VOLTS
STD. HP
AMP
200
MAX. HP

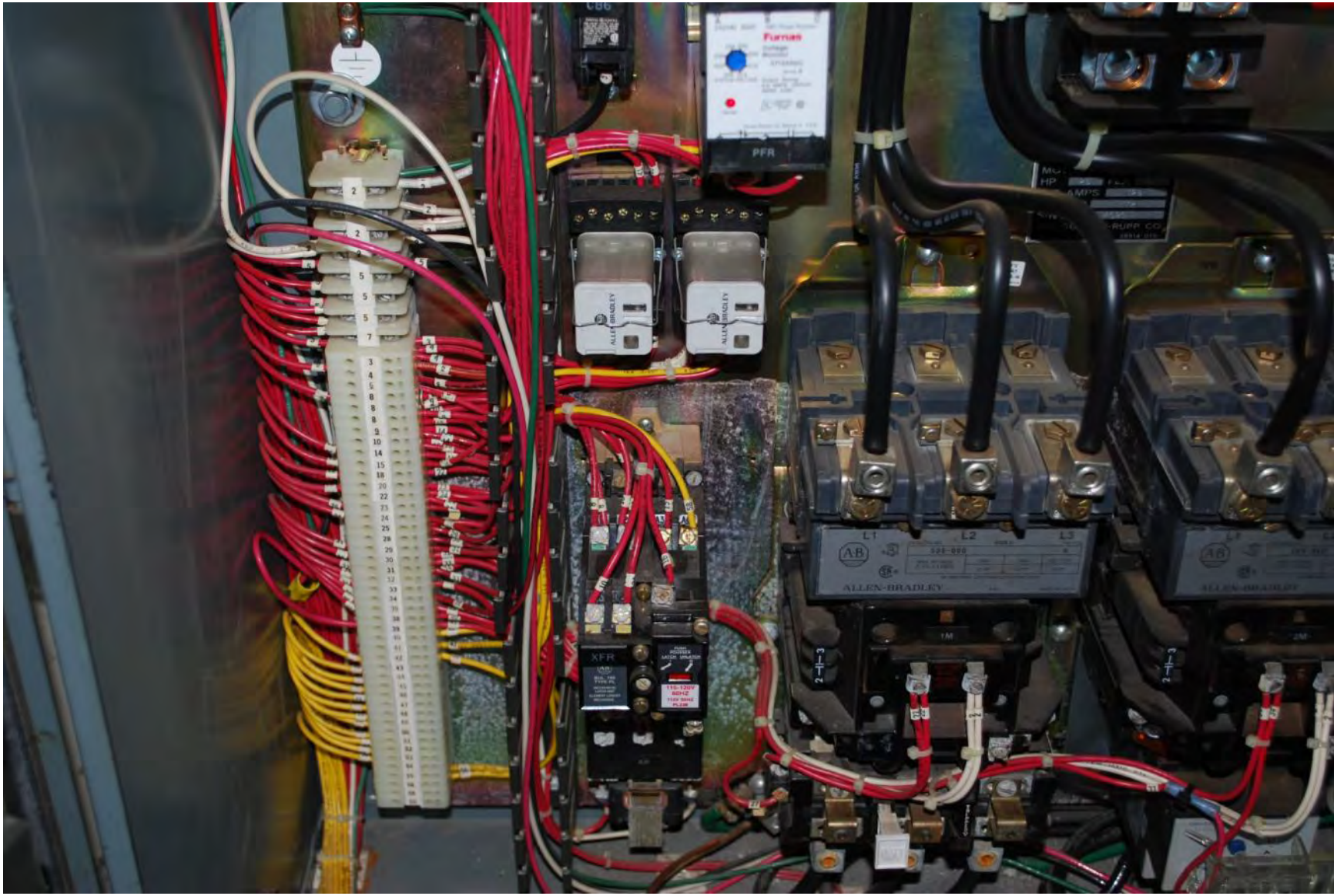
+072
GR
LEVEL CONTROL
OFF
TRANSFER TO
FLOAT CONTROL
BACK-UP CONTROL
(RESET)
PUMP CONTROL PANEL

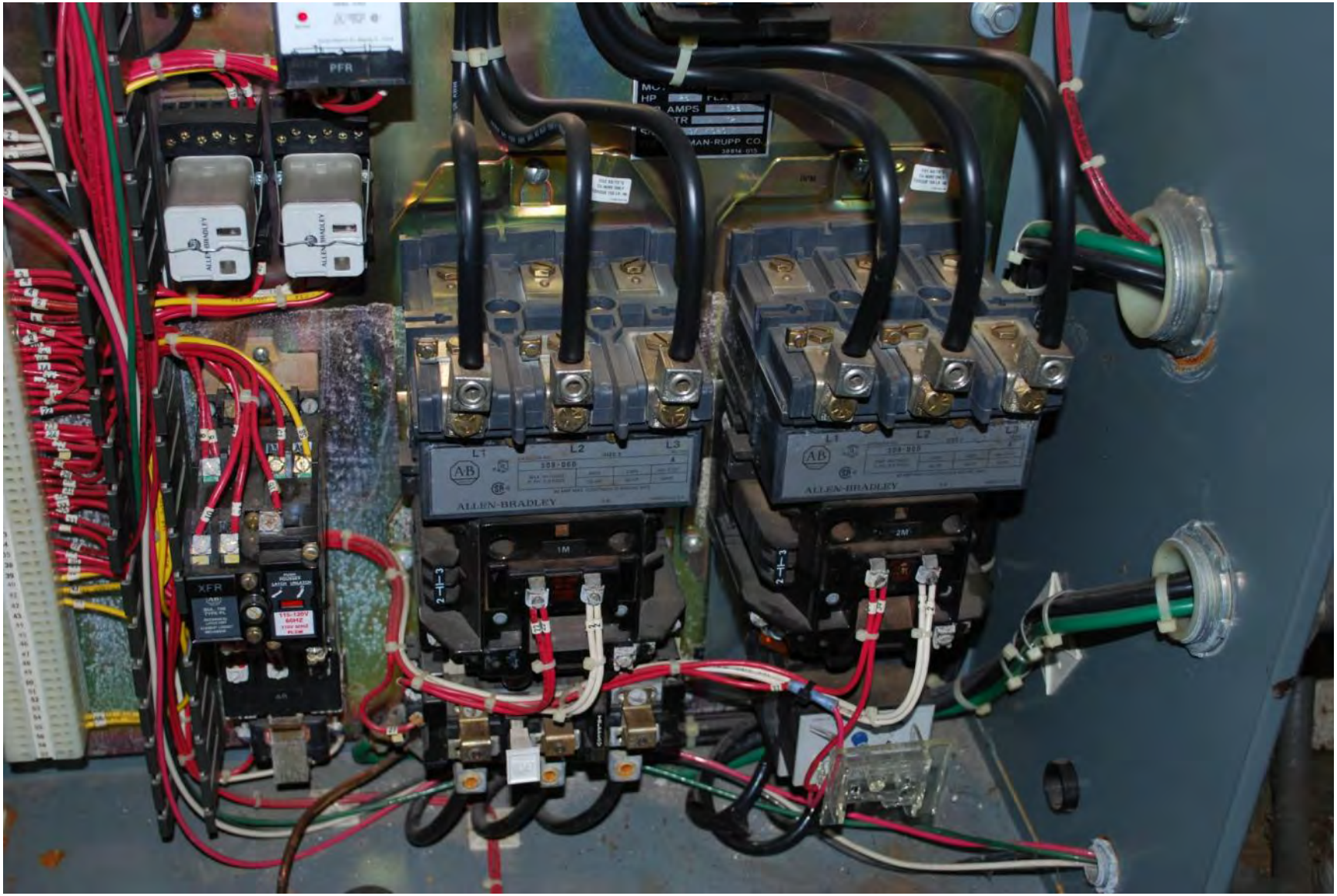

LINE
LINE
NING
Install and operate in accordance with national electrical code and local codes. GROUND unit before applying line potential. Failure to comply can result in serious injury or death.
Furnas

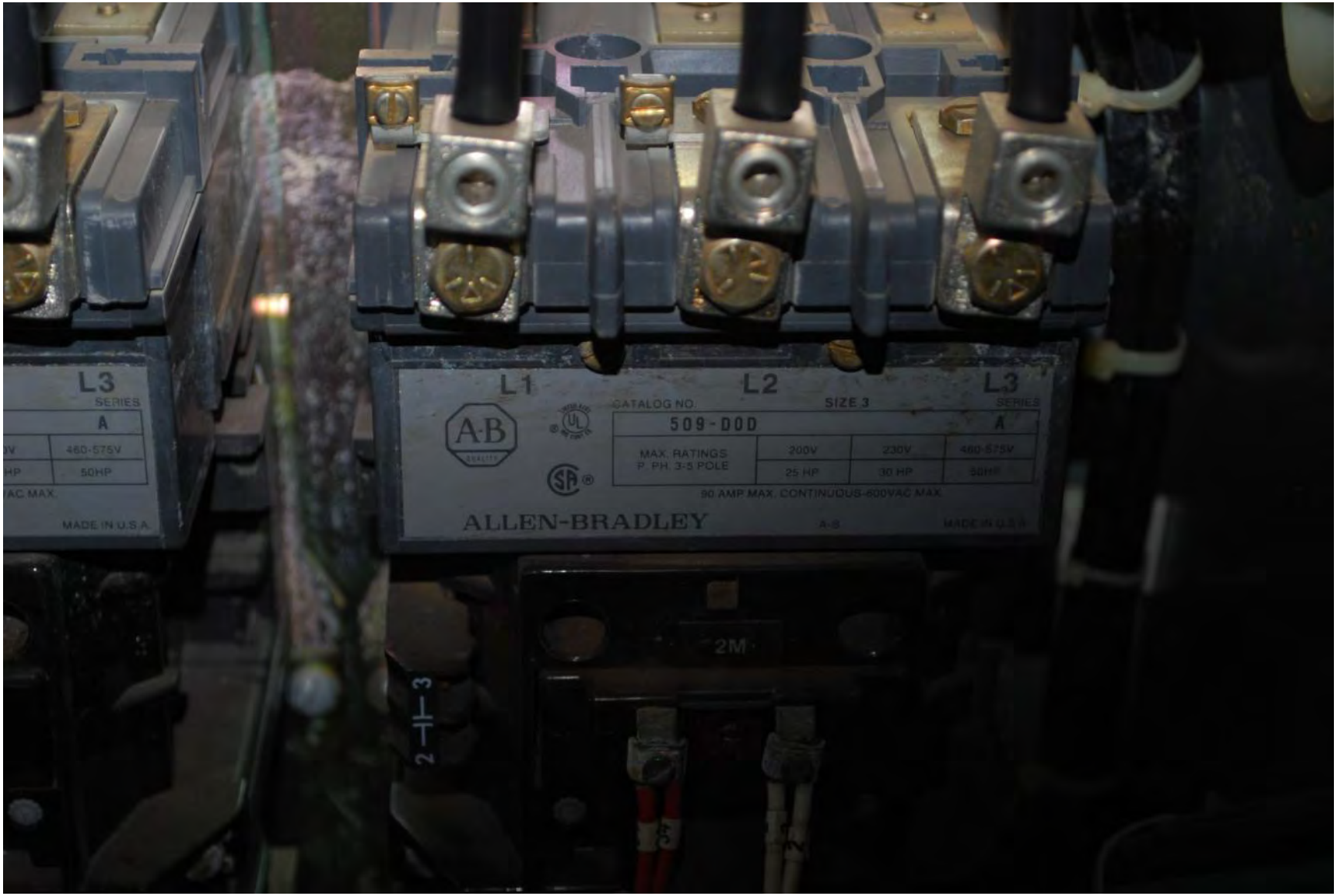

SLA
DELTA
CB1
ON
OFF
CB6
Fumas


LOAD
LOAD
Install and operate in accordance with national electrical code and local codes. GROUND unit before applying line potential. Failure to comply can result in serious injury or death.
ON
OFF
CB6
Furnas
PFR

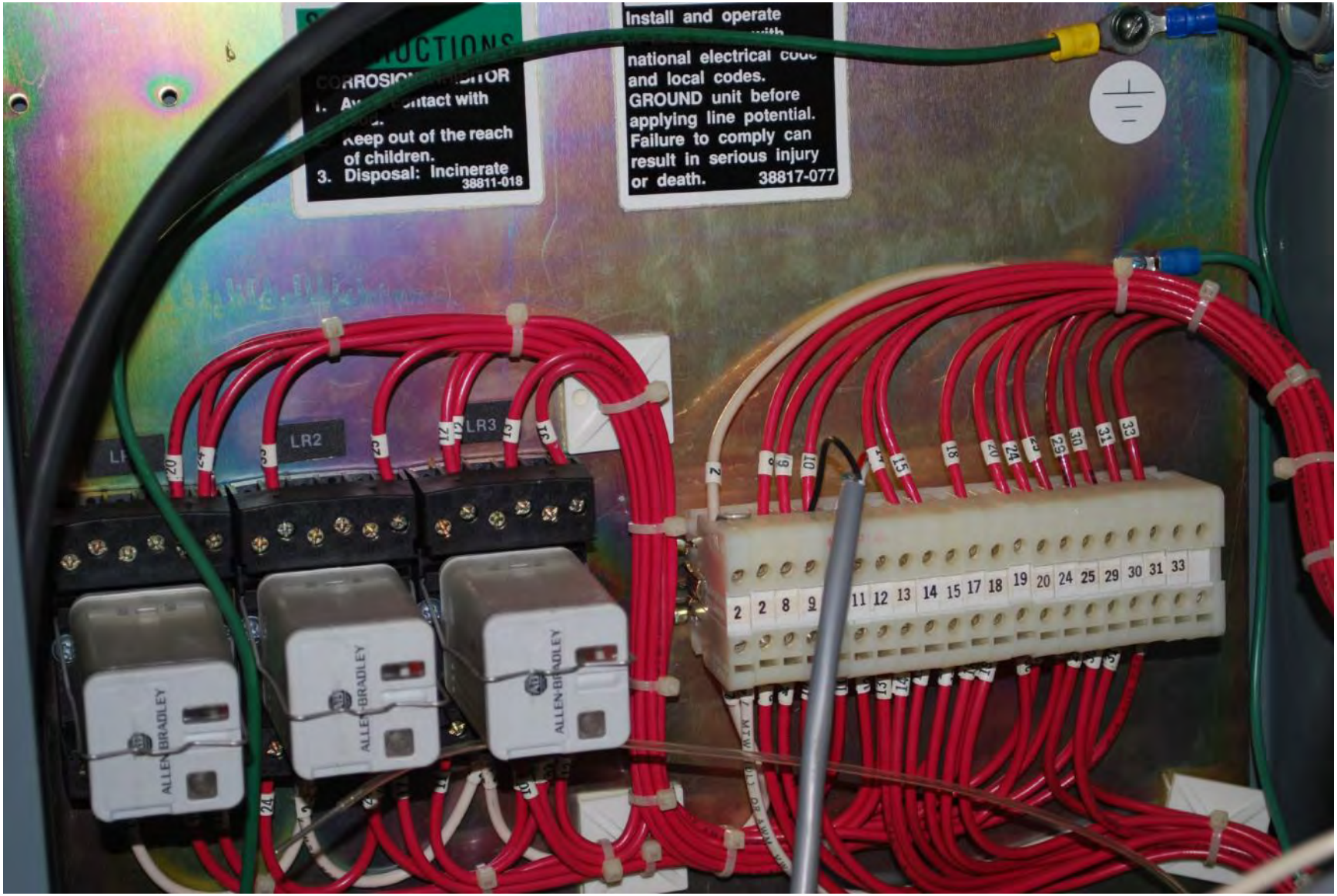

LOAD
LOAD
ON
OFF
CB6
Furnas
PFR


Furnas
PFR
ALLEN-BRADLEY
XFR


PFR
ALLEN-BRADLEY
XFR
L1
L2
L3
ALLEN-BRADLEY
1M
2M


L3
SERIES
A
460-575V
50HP
MADE IN U.S.A.
L1
L2
L3
CATALOG NO.
SIZE 3
SERIES
509-DOD
A
MAX. RATINGS
P. PH. 3-5 POLE
200V
230V
460-575V
25 HP
30 HP
90 AMP MAX. CONTINUOUS-600VAC MAX.
ALLEN-BRADLEY
2M
2
3

XFR
58


Install and operate
national electrical code
and local codes.
GROUND unit before
applying line potential.
Failure to comply can
result in serious injury
or death. 38817-077
Keep out of the reach
of children.
3. Disposal: Incinerate
38811-018
LR2
LR3
ALLEN-BRADLEY
ALLEN-BRADLEY
ALLEN-BRADLEY

SHD
+V
SIG
-V
TION –
HIS COVER PLATE MUST
E INSTALLED FOR PROPER
CONTROL OPERATION.
OUTPUTS
2 AMP, NON-INDUCTIVE, 120 VAC
A – A′ B – B′ C – C′ D – D′
POWER
8 WATTS
120 VAC ±10%
S – 2 – 1
Druck

FEET OF WATER
G-R
GORMAN-RUPP
OUTPUTS E-F-G-H
OUTPUT-A
OUTPUT-B
OUTPUT-C
ON Floats
LEVEL CONTROL
OFF
ON
BACK-UP CONTROL
(RESET)
TRANSFER TO
FLOAT CONTROL
PUMP CONTROL PANEL
THE GORMAN-RUPP COMPANY
WASTE WATER EQUIPMENT
VOLTS
PH
AMPERES
MIN. MAIN CONDUCTOR
DWG. NO.
S/N

CONTROL PANEL
DOMGAN

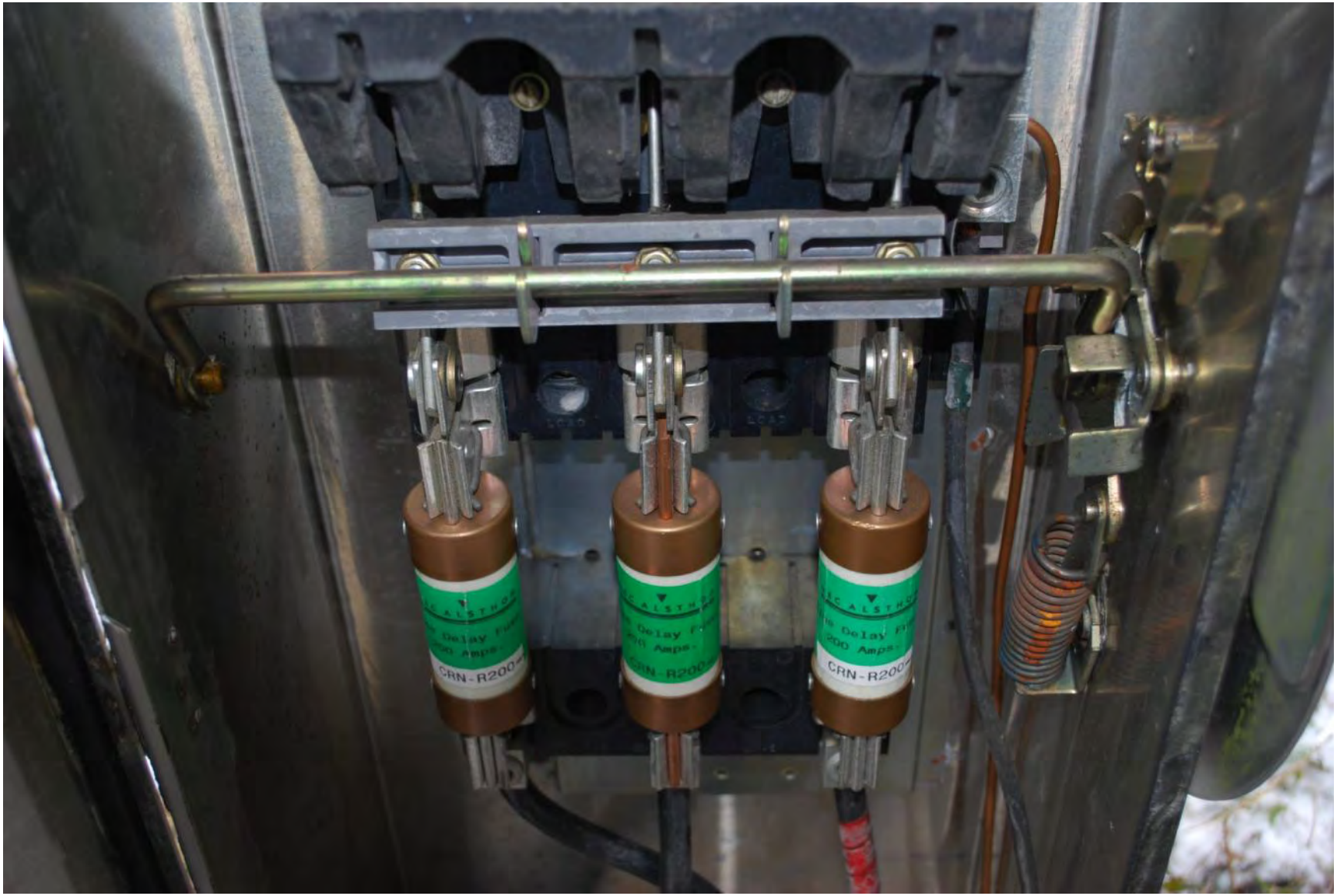
HEATER
CIRCUIT BREAKER
PUMP CONTROL PANEL
DONGAN
WARNING

THE GORMAN-RUPP COMPANY
MADE IN U.S.A.
38814-047
USABLE ON 575V NETWORKS AS
REFER TO CONNECTIONS IN CONDUIT BOX.
USABLE ON 208V NETWORKS AT
HP AT
AMP.
AMP.
HZ
CODE
DESIGN
CLASS INS
TIME RATING
MAX. AMB
RPM
FORM
TYPE
FRAME
SERVICE FACTOR
NO.
SER #
3-PHASE INDUCTION MOTOR

TRANSFORMER PRIMARY
CIRCUIT BREAKER
No. 1 PUMP MOTOR
CIRCUIT BREAKER
No. 2 PUMP MOTOR
CIRCUIT BREAKER
RESET OFF ON
RESET OFF ON
RESET OFF ON
PUMP CONTROL PANEL
THE GORMAN-RUPP COMPANY
MANSFIELD, OHIO
ST. THOMAS, ONTARIO
WASTE WATER EQUIPMENT
VOLTS
PH
W
HZ
MIN MAIN CONDUCTOR
AMPERES
DWG NO.
S/N
RUNNING
HOURS
RUNNING
HOURS
WARNING
This unit is designed for automatic control.
Unit can start without warning.
De-energize all power circuits before performing any maintenance.
Failure to do so can result in serious injury.
CAUTION
WARNING

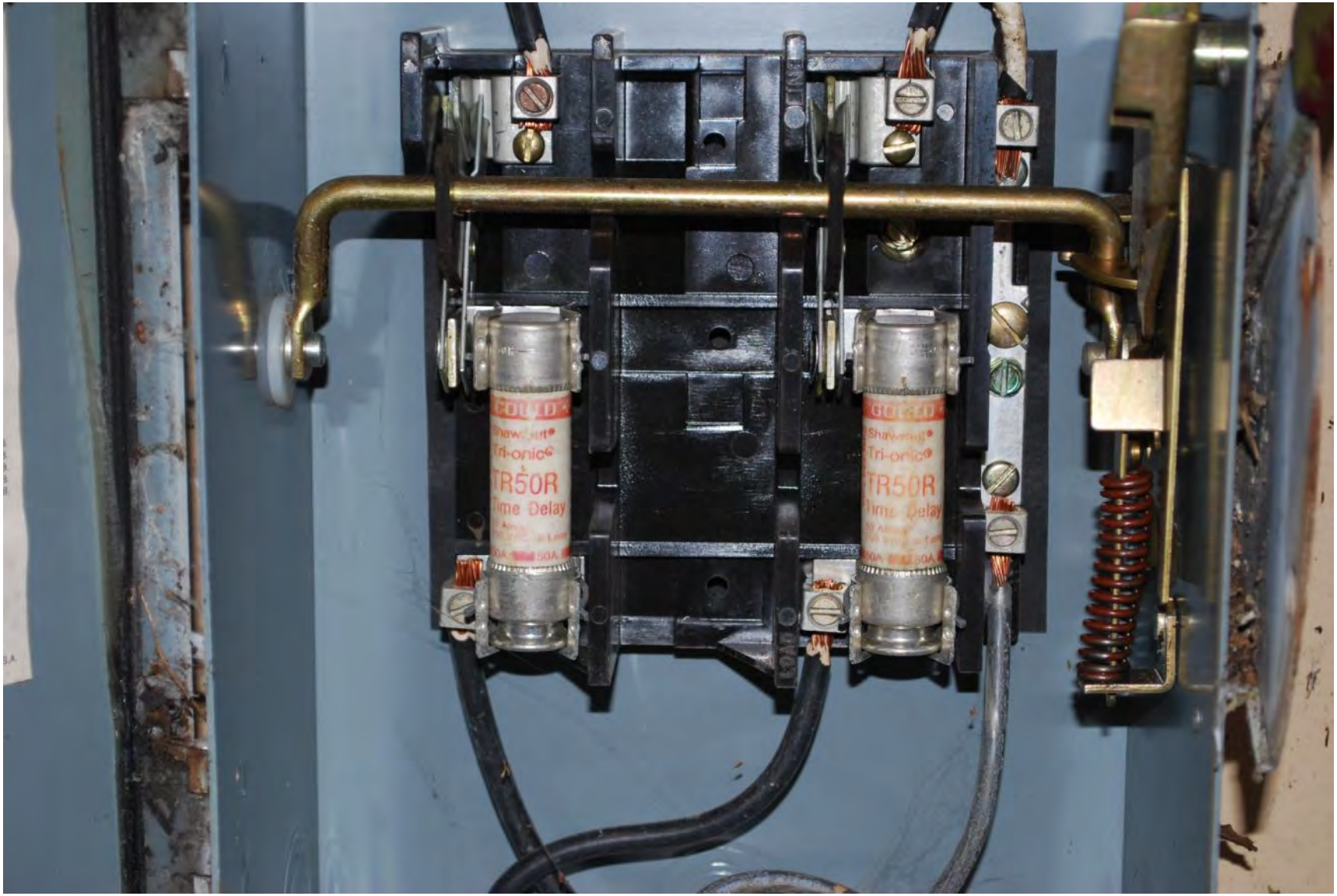
WARNING
This unit is designed for automatic control.
Unit can start without warning.
De-energize all power circuits before performing any maintenance.
Failure to do so can result in serious injury.
38881-239
CAUTION
Manual operation of pumps overrides all equipment protection devices. 38816-048
WARNING
This equipment contains more than one power source. More than one disconnect is required to de-energize the equipment for servicing. Failure to comply can result in serious injury or death.
38881-240
PUMP NO. 1
PUMP NO. 2
OFF
HAND
AUTO
AUTO
NO. 1 LEAD
NO. 2 LEAD
OFF
HAND
AUTO
RESET
RESET
RESET
ALARM SILENCE
RESET

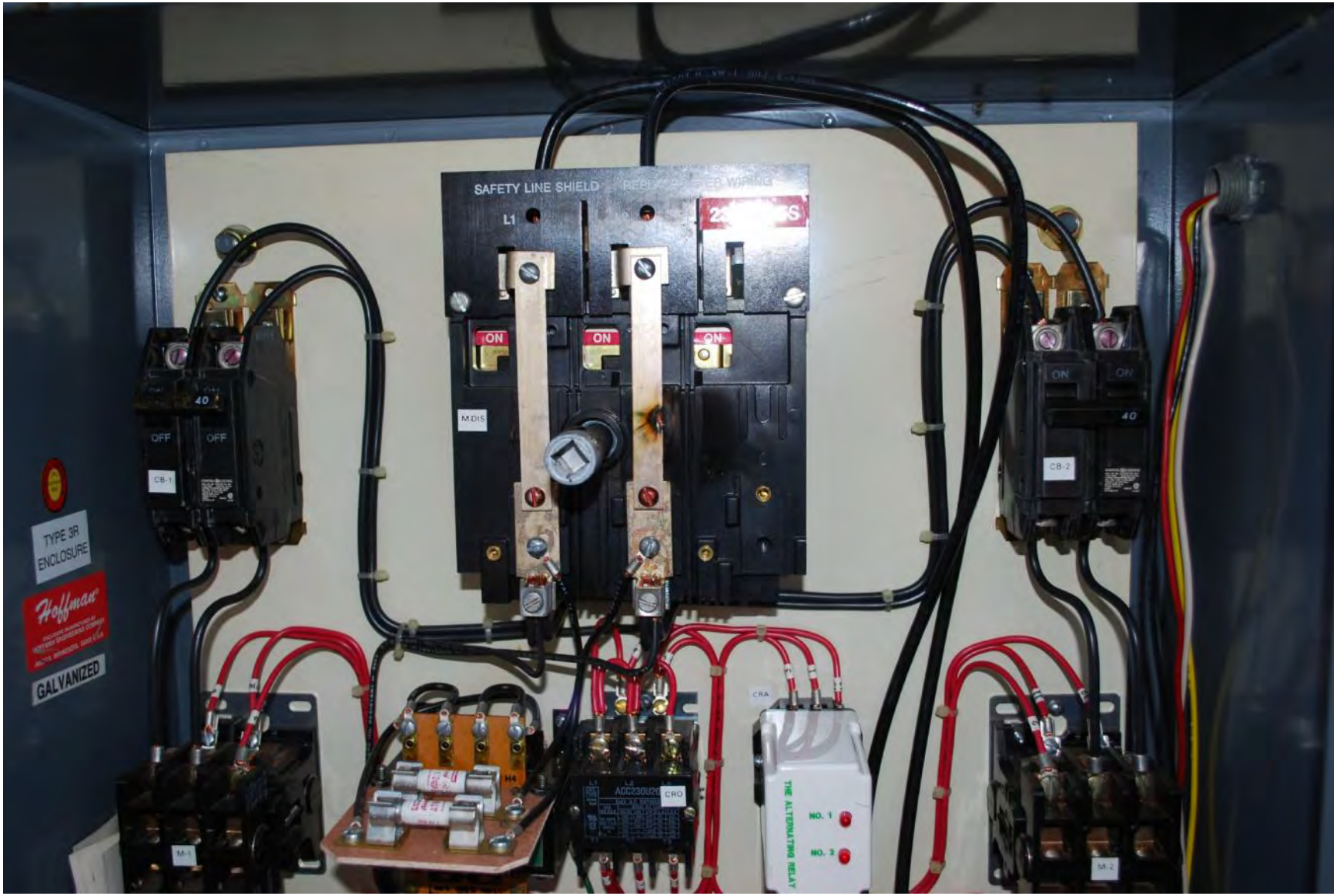
GORMAN-RUPP
WASTE WATER EQUIPMENT
PUMP CONTROL PANEL
THE GORMAN-RUPP COMPANY
MANSFIELD, OHIO
ST. THOMAS, ONTARIO
240
VOLTS
3
PH
W
60
HZ
MIN MAIN CONDUCTOR
180
AMPERES
DWG NO.
S/N
38814-016
WARNING
This unit is designed
for automatic control.


CRN-R200

Delay Fuse
200 Amps.
CRN-R200
Delay Fuse
200 Amps.
CRN-R200
Delay Fuse
200 Amps.
CRN-R200

ON
OFF

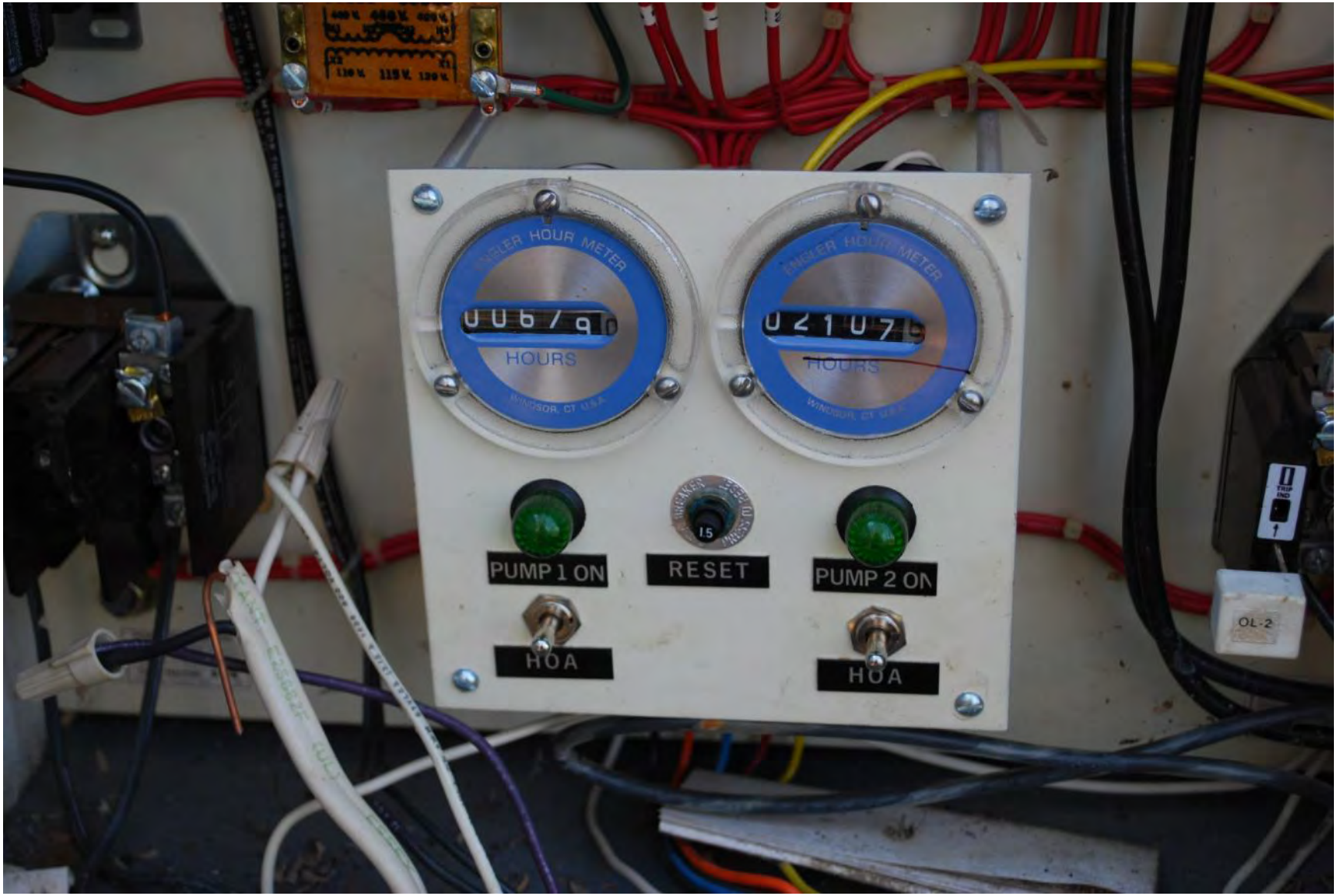

Tri-onic
TR50R
Time Delay

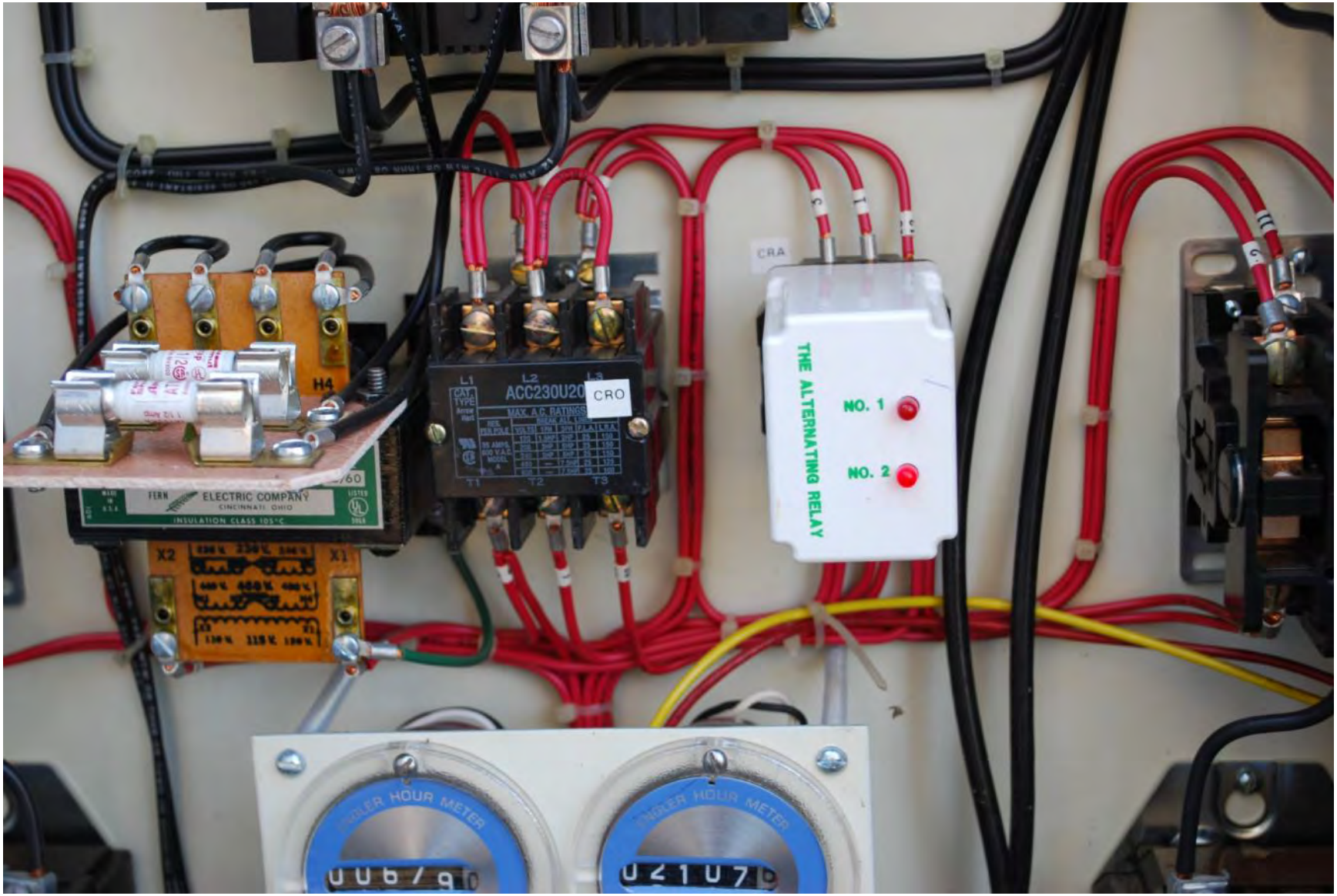

SAFETY LINE SHIELD
L1
ON
ON
ON
MDIS
OFF
OFF
CB-1
CB-2
TYPE 3R
ENCLOSURE
Hoffman
GALVANIZED
CRA
CRO
THE ALTERNATING RELAY
NO. 1
NO. 2
M-1
M-2

ON
40
OFF
OFF
CB-1
M-DIS
TYPE 3R
ENCLOSURE
Hoffman

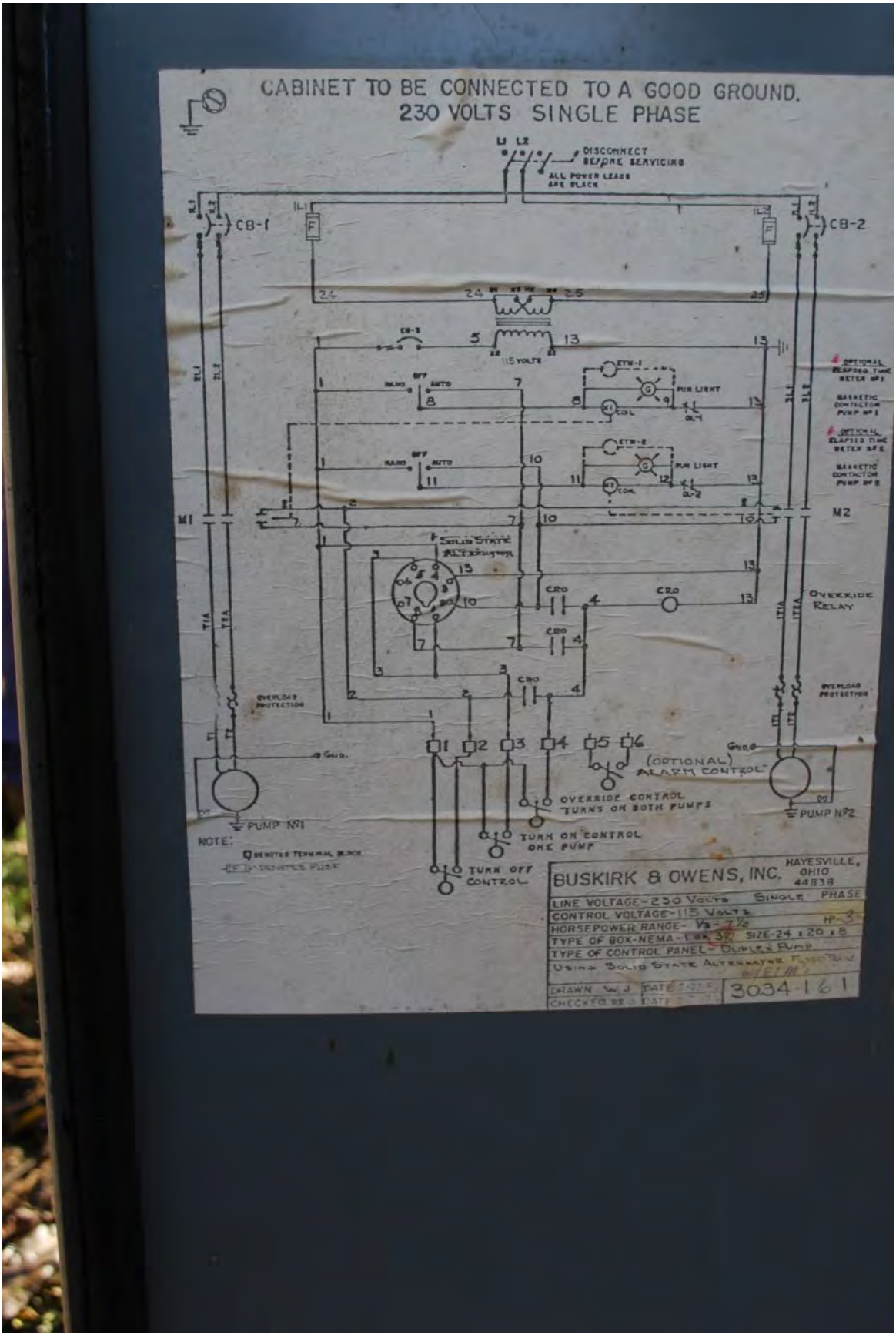
GALVANIZED
ELECTRIC COMPANY
ACC230U20
CRO
ENGLER HOUR METER
HOURS

ENGLER HOUR METER
HOURS
PUMP 1 ON
RESET
PUMP 2
HOA
HOA

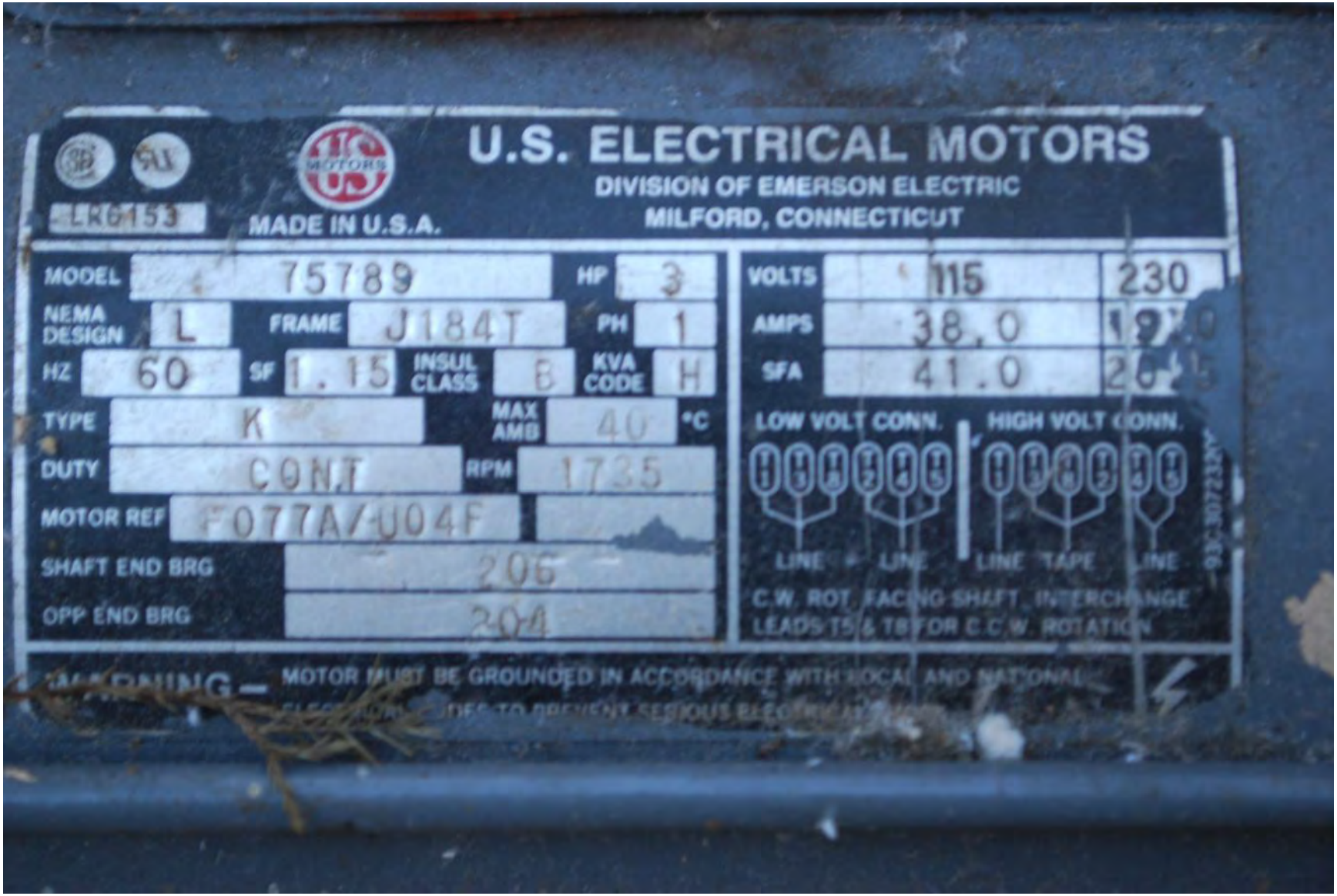

ENGLER HOUR METER
HOURS
WINDSOR, CT U.S.A.
ENGLER HOUR METER
HOURS
WINDSOR, CT U.S.A.
PUMP 1 ON
RESET
PUMP 2 ON
HOA
HOA
OL-2

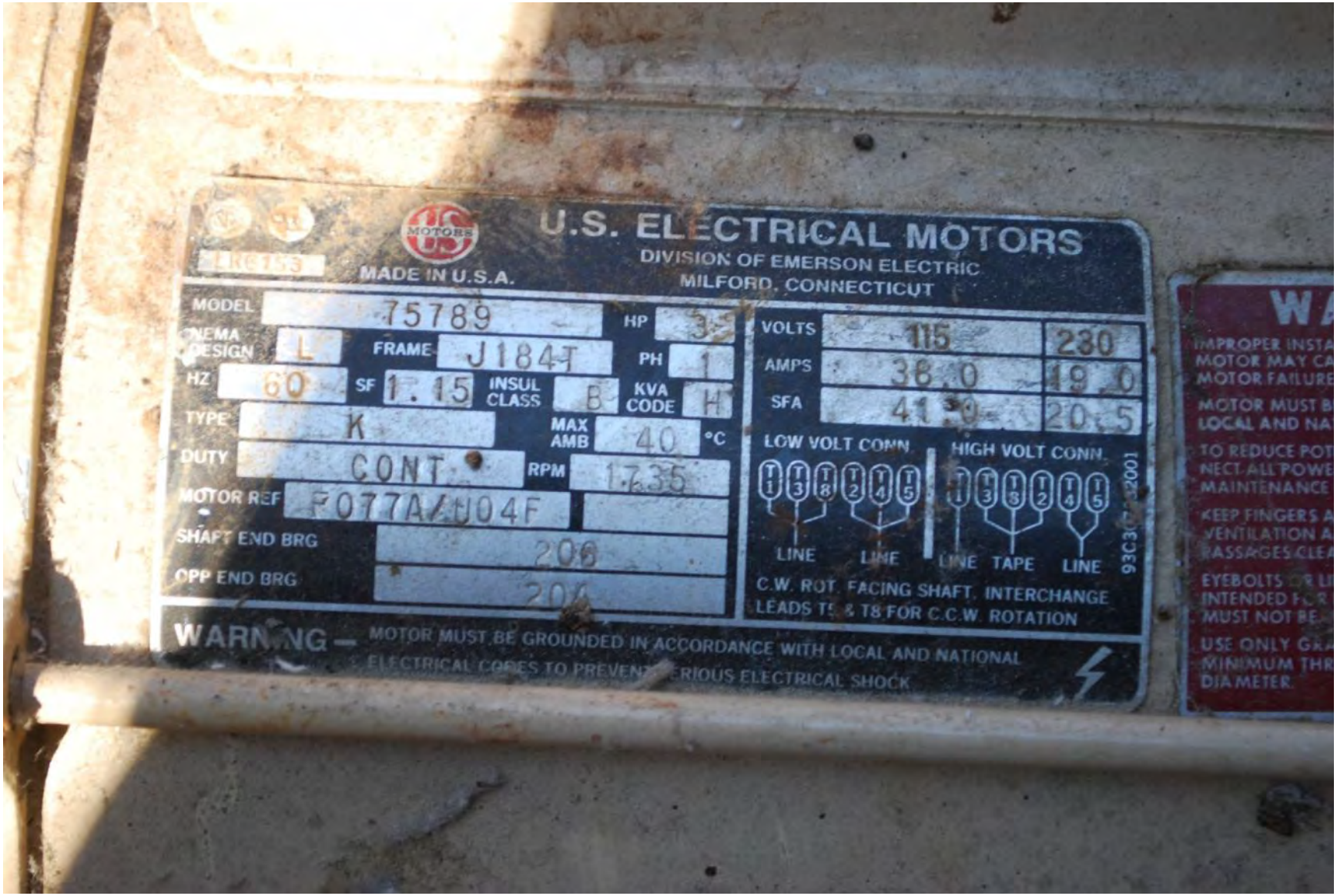

CRA
THE ALTERNATING RELAY
NO. 1
NO. 2
CRO
ACC230U20
ELECTRIC COMPANY
CINCINNATI OHIO
INSULATION CLASS 105°C
H4
X2
X1
L1
L2
L3
T1
T2
T3
HOUR METER
HOUR METER

CAUTION
DISCONNECT BEFORE SERVICING
BUSKIRK & OWENS, INC.
Electrical Controls
WIRING DIAGRAM
03034-161
MODEL
MOTOR HORSEPOWER
3
SERIAL NUMBER
III-991-2850
PHASE
1
AMPS
18.0
VOLTS
230
HERTZ
60
MANUFACTURED BY
BUSKIRK & OWENS, INC. HAYESVILLE, OHIO 44838

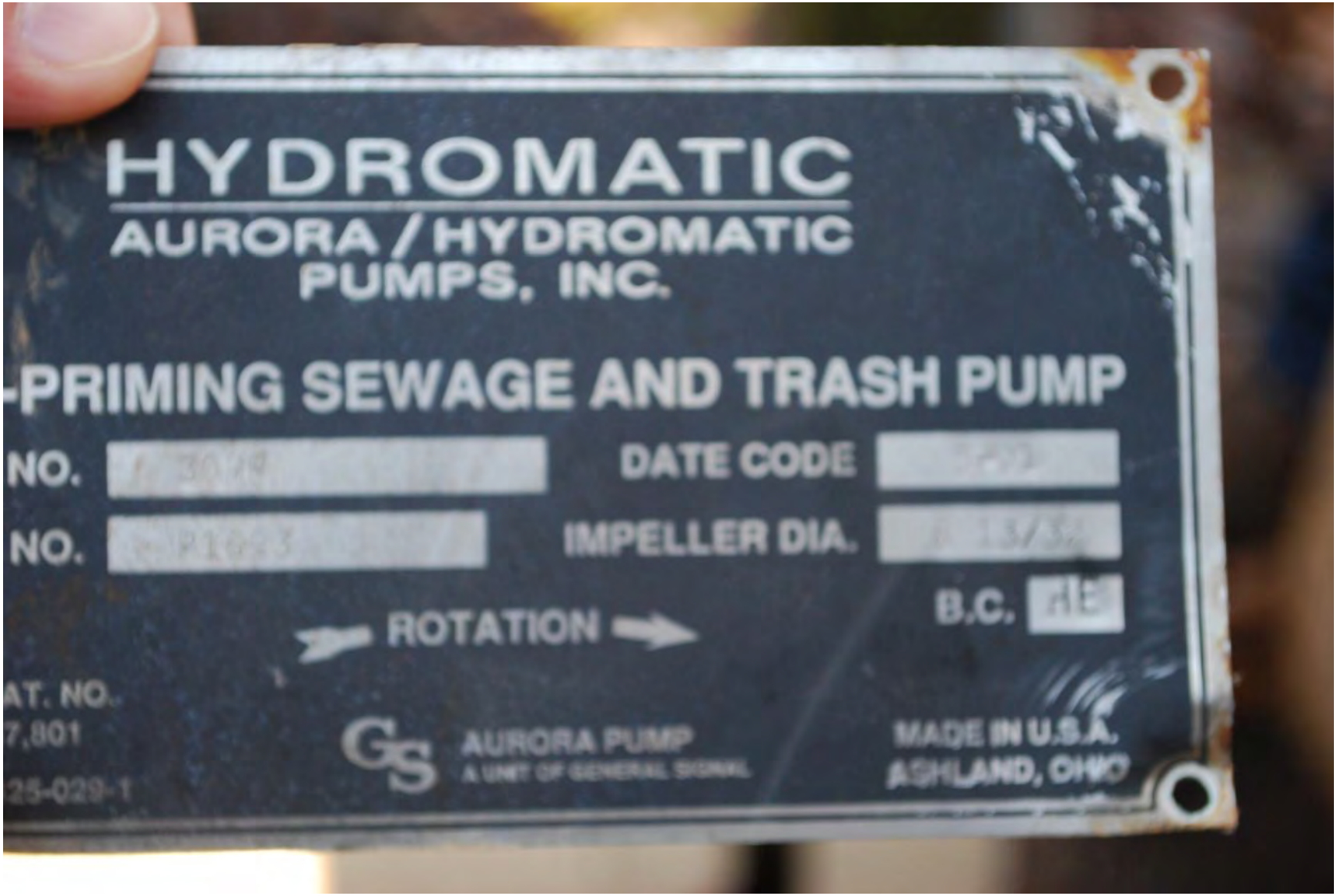

CABINET TO BE CONNECTED TO A GOOD GROUND.
230 VOLTS SINGLE PHASE
L1 L2
DISCONNECT BEFORE SERVICING
ALL POWER LEADS ARE BLACK
CB-1
CB-2
115 VOLTS
HAND OFF AUTO
RUN LIGHT
COIL
M1
M2
SOLID STATE ALTERNATOR
CR0
OVERRIDE RELAY
OVERLOAD PROTECTION
(OPTIONAL) ALARM CONTROL
OVERRIDE CONTROL TURNS ON BOTH PUMPS
TURN ON CONTROL ONE PUMP
TURN OFF CONTROL
PUMP NO1
PUMP NO2
NOTE:
BUSKIRK & OWENS, INC.
HAYESVILLE, OHIO 44838
LINE VOLTAGE-230 VOLTS SINGLE PHASE
CONTROL VOLTAGE-115 VOLTS
HORSEPOWER RANGE- 1/2 - 7 1/2 HP-3
TYPE OF BOX-NEMA-1 OR 3R SIZE-24 x 20 x 8
TYPE OF CONTROL PANEL - DUPLEX PUMP
3034-161

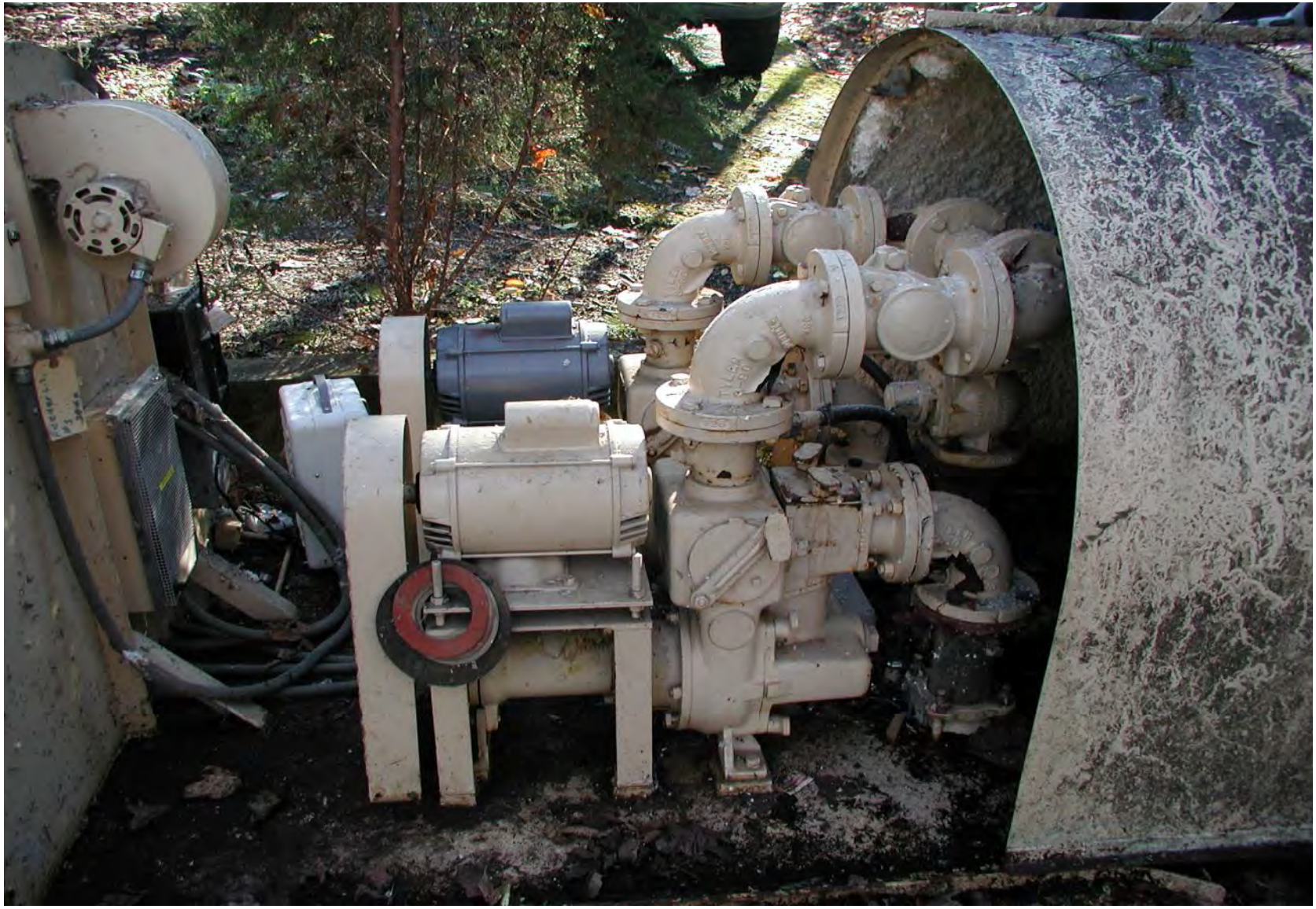
PUSH TO TEST
CAUTION
Workforce


U.S. ELECTRICAL MOTORS
DIVISION OF EMERSON ELECTRIC
MILFORD, CONNECTICUT
MADE IN U.S.A.
MODEL 75789
HP 3
NEMA DESIGN L
FRAME J184T
PH 1
HZ 60
SF 1.15
INSUL CLASS B
KVA CODE H
TYPE K
MAX AMB 40 °C
DUTY CONT
RPM 1735
MOTOR REF F077A/U04F
SHAFT END BRG 206
OPP END BRG 204
VOLTS 115 230
AMPS 38.0
SFA 41.0
LOW VOLT CONN.
HIGH VOLT CONN.
LINE LINE LINE TAPE LINE
C.W. ROT. FACING SHAFT, INTERCHANGE
MOTOR MUST BE GROUNDED IN ACCORDANCE WITH

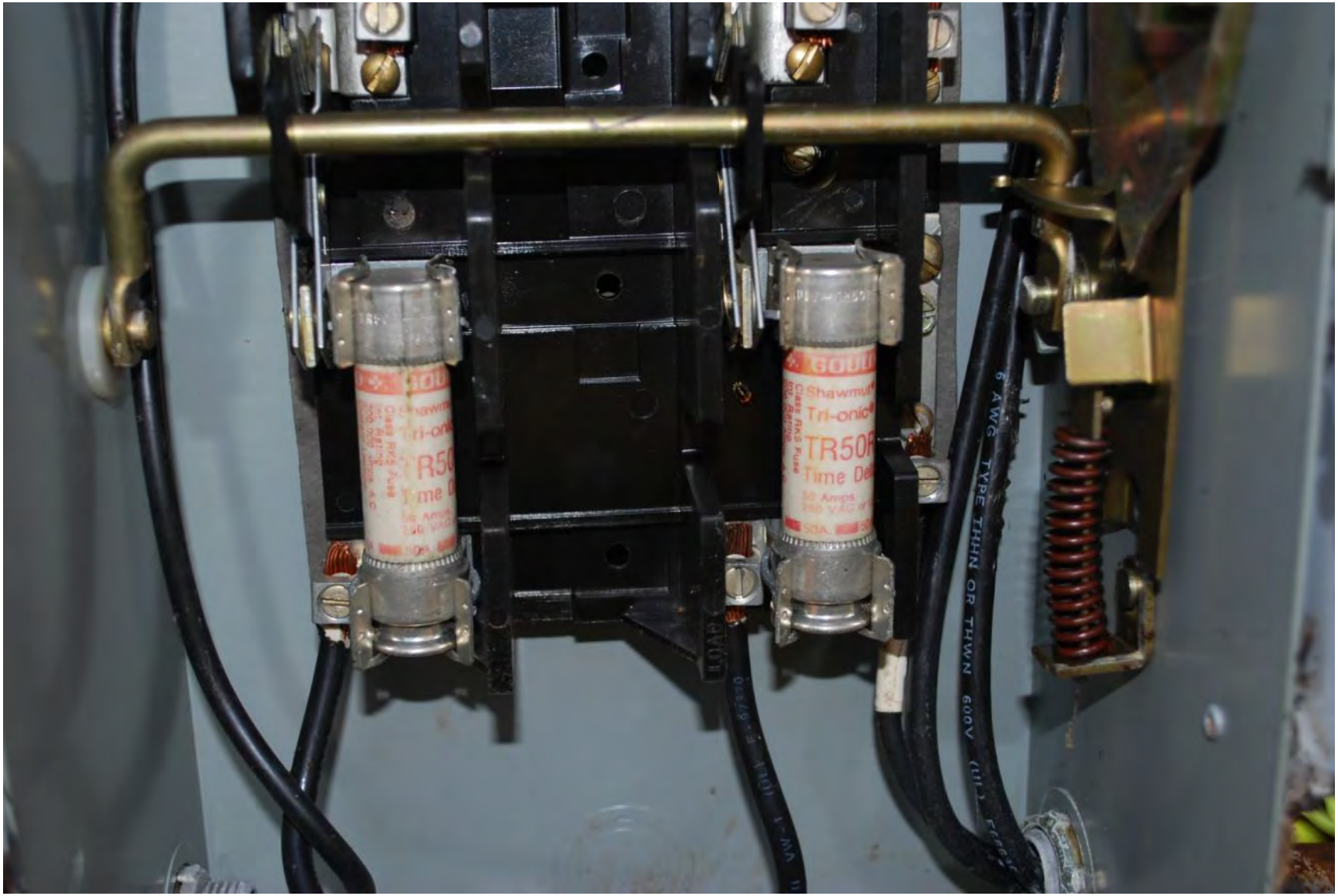

U.S. ELECTRICAL MOTORS
DIVISION OF EMERSON ELECTRIC
MILFORD, CONNECTICUT
MADE IN U.S.A.
MODEL 75789
HP 3
NEMA DESIGN L
FRAME J184T
PH 1
HZ 60
SF 1.15
INSUL CLASS B
KVA CODE H
TYPE K
MAX AMB 40 °C
DUTY CONT
RPM 1735
MOTOR REF F077A/U04F
SHAFT END BRG 208
OPP END BRG 204
VOLTS 115 230
AMPS 38.0 19.0
SFA 41.0 20.5
LOW VOLT CONN
HIGH VOLT CONN.
LINE LINE LINE TAPE LINE
C.W. ROT. FACING SHAFT. INTERCHANGE
LEADS T5 & T8 FOR C.C.W. ROTATION
WARNING — MOTOR MUST BE GROUNDED IN ACCORDANCE WITH LOCAL AND NATIONAL
ELECTRICAL CODES TO PREVENT SERIOUS ELECTRICAL SHOCK

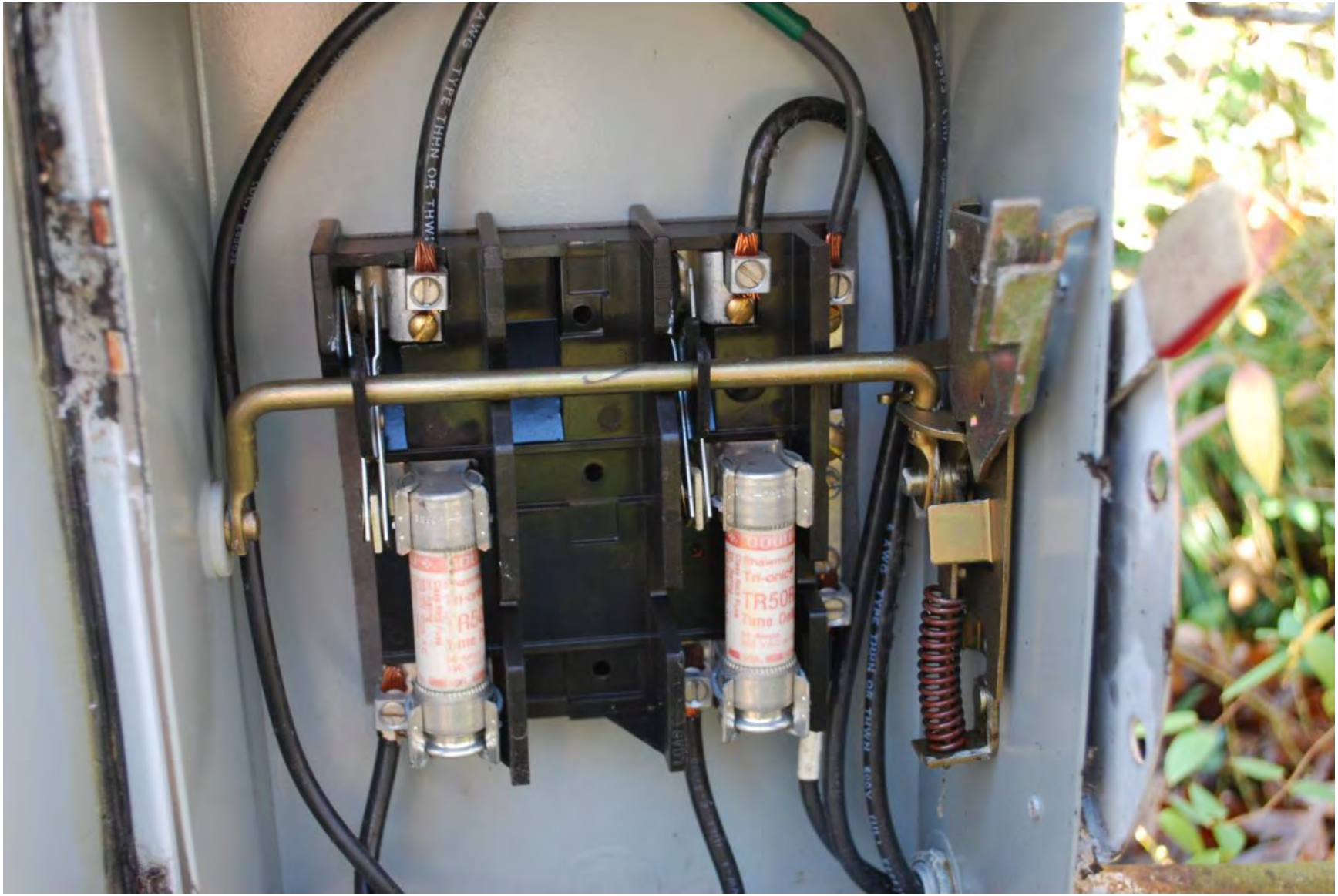
SWITCH CAN TRIP DURING SHIPMENT
RESET PRIOR TO START UP

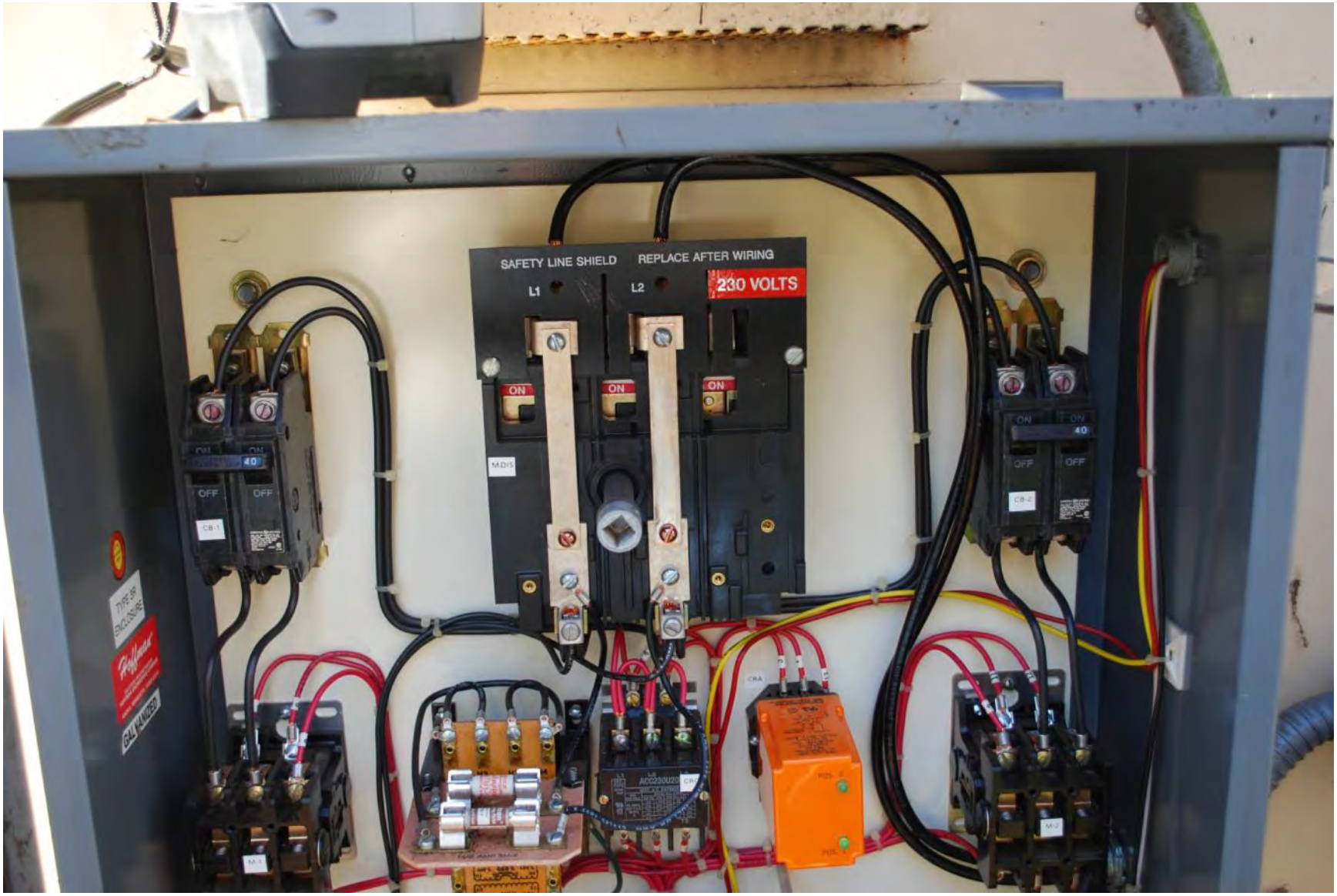

HYDROMATIC
AURORA / HYDROMATIC
PUMPS, INC.
PRIMING SEWAGE AND TRASH PUMP
NO.
DATE CODE
NO.
IMPELLER DIA.
B.C.
ROTATION
AT. NO.
7,801
25-029-1
AURORA PUMP
A UNIT OF GENERAL SIGNAL
MADE IN U.S.A.
ASHLAND, OHIO

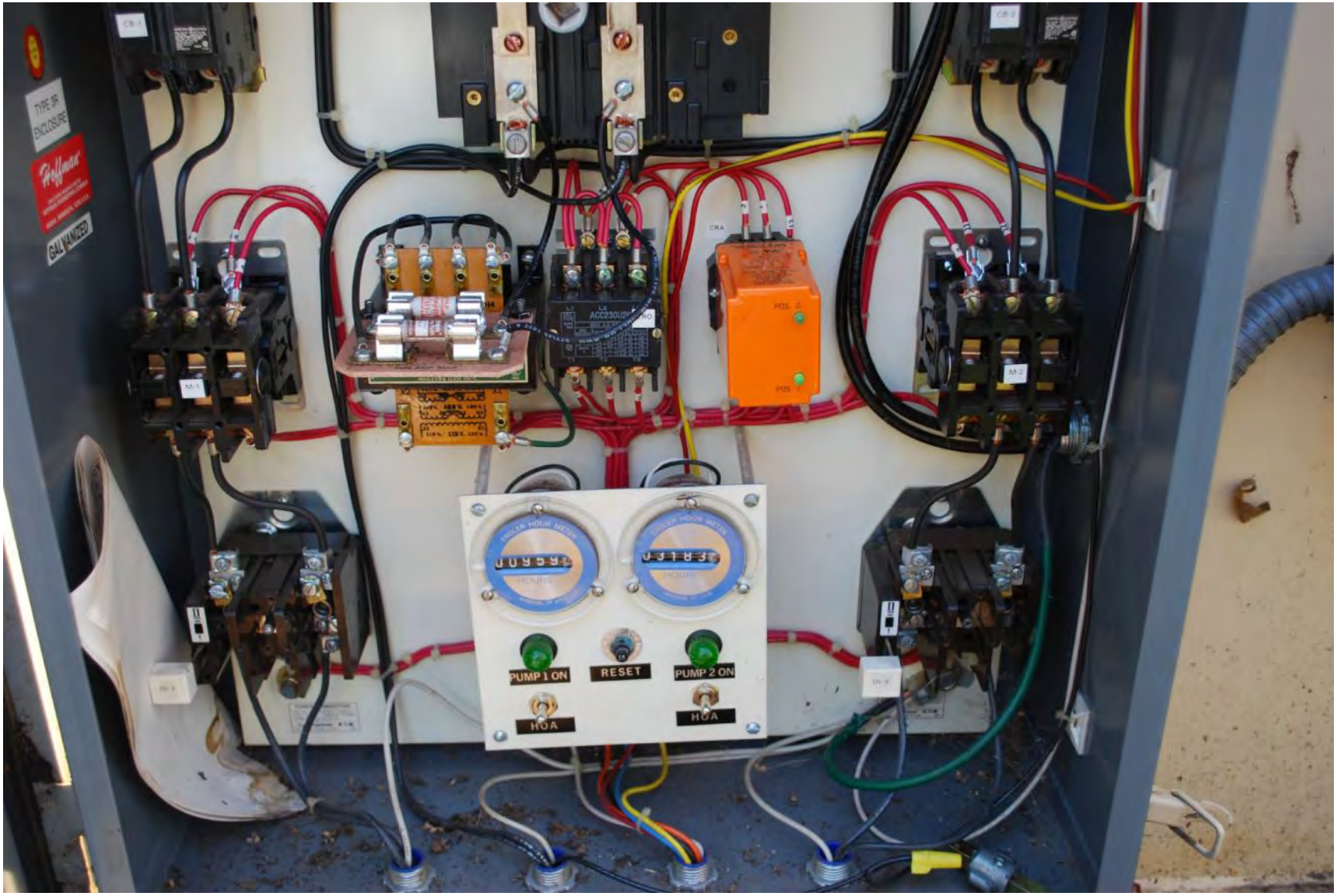


U.S. ELECTRICAL MOTORS
DIVISION OF EMERSON ELECTRIC
MILFORD, CONNECTICUT
MADE IN U.S.A.
MODEL 75789
HP 3
NEMA DESIGN L
FRAME J184T
PH 1
HZ 60
SF 1.15
INSUL CLASS B
KVA CODE H
TYPE DVR DP
MAX AMB 40 °C
DUTY CONT
RPM 1735
MOTOR REF F07TA/V01F
SHAFT END BRG 206
OPP END BRG 204
VOLTS 115 230
AMPS 36.0 19.0
SFA 41.0 20.5
LOW VOLT CONN.
HIGH VOLT CONN.
LINE LINE LINE TAPE LINE
C.W. ROT. FACING SHAFT. INTERCHANGE LEADS T5 & T8 FOR C.C.W. ROTATION
93C307232001
WARNING — MOTOR MUST BE GROUNDED IN ACCORDANCE WITH LOCAL AND NATIONAL ELECTRICAL CODES TO PREVENT SERIOUS ELECTRICAL SHOCK.
SUITABLE FOR 208 VOLT OPERATION
93A121271001 D

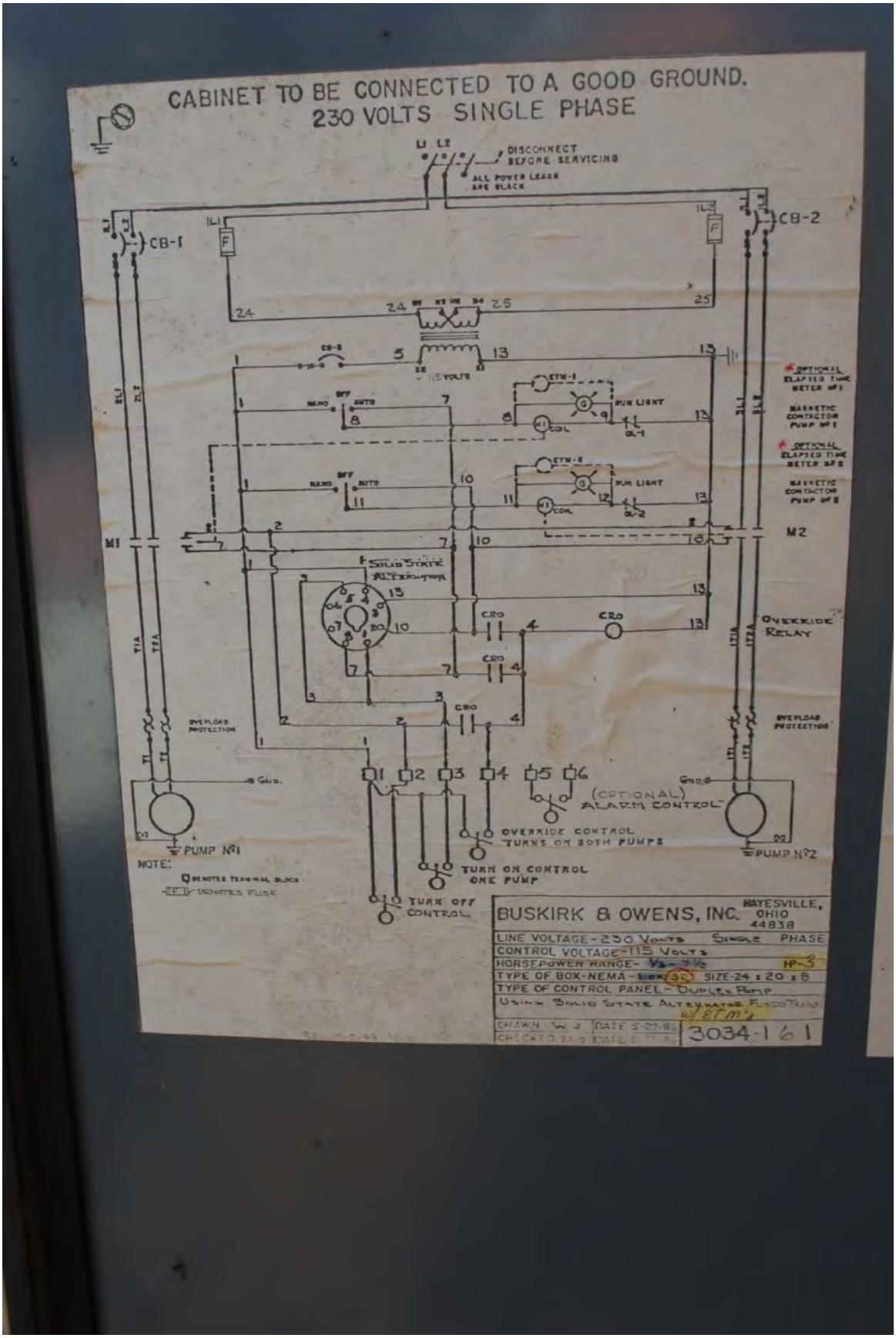

Shawmut
Tri-onic
TR50R
Time Del
50A
6 AWG TYPE THHN OR THWN 600V




SAFETY LINE SHIELD
REPLACE AFTER WIRING
L1
L2
230 VOLTS
ON
ON
ON
OFF
OFF
OFF
OFF
40
40


TYPE 3R ENCLOSURE
Hoffman
GALVANIZED
PUMP 1 ON
RESET
PUMP 2 ON
HOA
HOA

CAUTION
DISCONNECT BEFORE SERVICING
BUSKIRK & OWENS, INC.
Electrical Controls
MODEL
WIRING DIAGRAM
SERIAL NUMBER
MOTOR HORSEPOWER
PHASE
AMPS
VOLTS
HERTZ
2245
MANUFACTURED BY
BUSKIRK & OWENS, INC. HAYESVILLE, OHIO 44838
Bulletin C300 — Size
Standard Trip Eut
Overload Rela
HEATER COIL SELECTI
This overload relay has two steps
(low or high) obtained by position
coils as shown in the Heater Coil Se
Note the location of the pointed te
heater coil.
Select heater coils according to t
pere rating. Note both the catalog nu
position in which the coils must be
Mount the coils in the position c
to the column that includes the m
rating. All coils must be mounted in t
sition for a given overload relay.
The Heater Coil Selection Table is
motors having a 1.15 service factor.
heater coils will allow a maximum
rated motor current. For motors with a
factor use one size smaller heater co
in the same position as the regular
The approximate ultimate tripping
a 40° C ambient, can be determined
plying the minimum currents by 1.25.
RENEWAL PARTS
For complete Renewal Parts Inform
Publication No. C300C-1 which may be
from a local Cutler-Hammer Representa
WARNING — To provide continued
for shock hazard, the compl

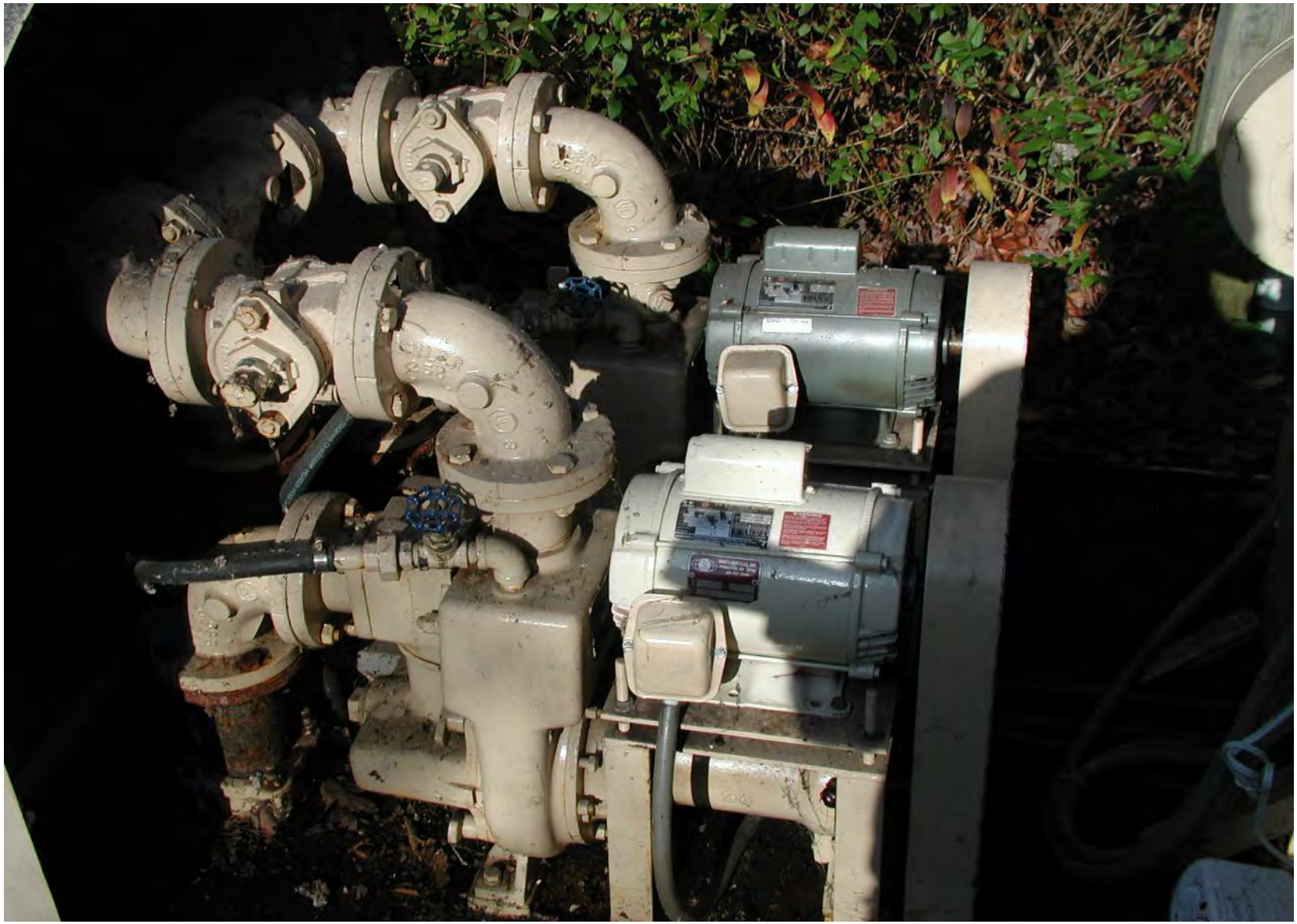

CABINET TO BE CONNECTED TO A GOOD GROUND.
230 VOLTS SINGLE PHASE
DISCONNECT BEFORE SERVICING
ALL POWER LEADS ARE BLACK
CB-1
CB-2
115 VOLTS
HAND OFF AUTO
PUR LIGHT
COIL
M1
M2
Solid State Alternator
CR0
OVERRIDE RELAY
OVERLOAD PROTECTION
(OPTIONAL) ALARM CONTROL
OVERRIDE CONTROL TURNS ON BOTH PUMPS
TURN ON CONTROL ONE PUMP
TURN OFF CONTROL
PUMP N°1
PUMP N°2
NOTE:
DENOTES TERMINAL BLOCK
DENOTES FUSE
BUSKIRK & OWENS, INC.
HAYESVILLE, OHIO 44838
LINE VOLTAGE - 230 Volts Single PHASE
CONTROL VOLTAGE - 115 Volts
HORSEPOWER RANGE - HP-3
TYPE OF BOX-NEMA - SIZE 24 x 20 x 8
TYPE OF CONTROL PANEL - Duplex Pump
Using Solid State Alternator Float Trans
w/ETM's
3034-161

230 VOLTS SINGLE PHASE
CONNECT CABINE
IMPORTANT
WHEN ORDERING PARTS REFER TO SERIAL NO. ALSO MANUFACTURER'S PART NO.
NEMA 3 DEAD FRONT ENCLOSURE
NEMA ENCLOSURE
TO LEVEL CONTROLS
TO PUMP NO 1
TO PUMP NO 2
GROUND SCREW
RESET PUMP LOCKOUT
HP-3

ENGLER HOUR METER
HOURS
ENGLER HOUR METER
HOURS
PUMP 1 ON
RESET
PUMP 2 ON
H O A
H O A

OFF
15
20
OFF
15
OFF
15
ON
ON
ON

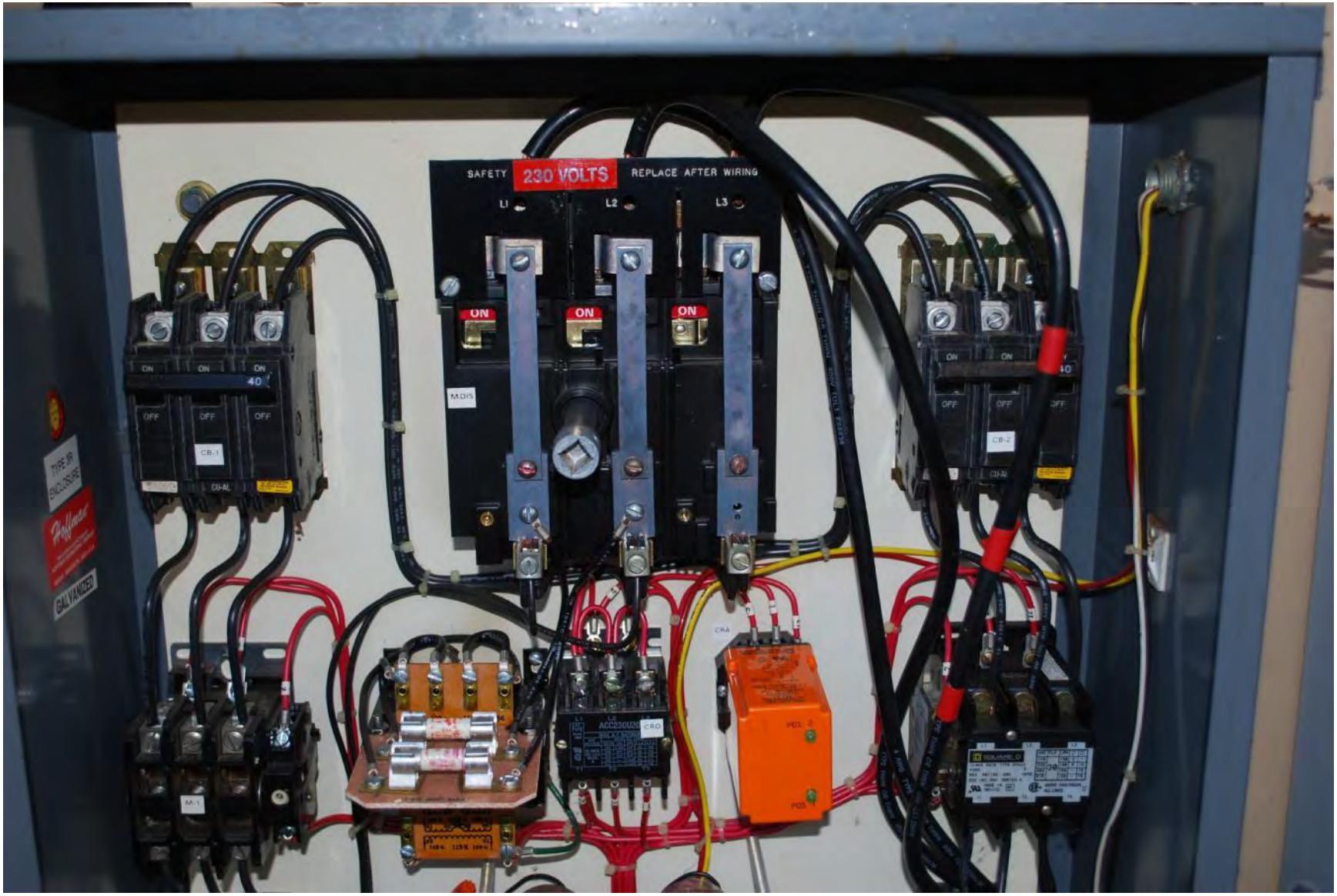
15 KVA
15 KVA

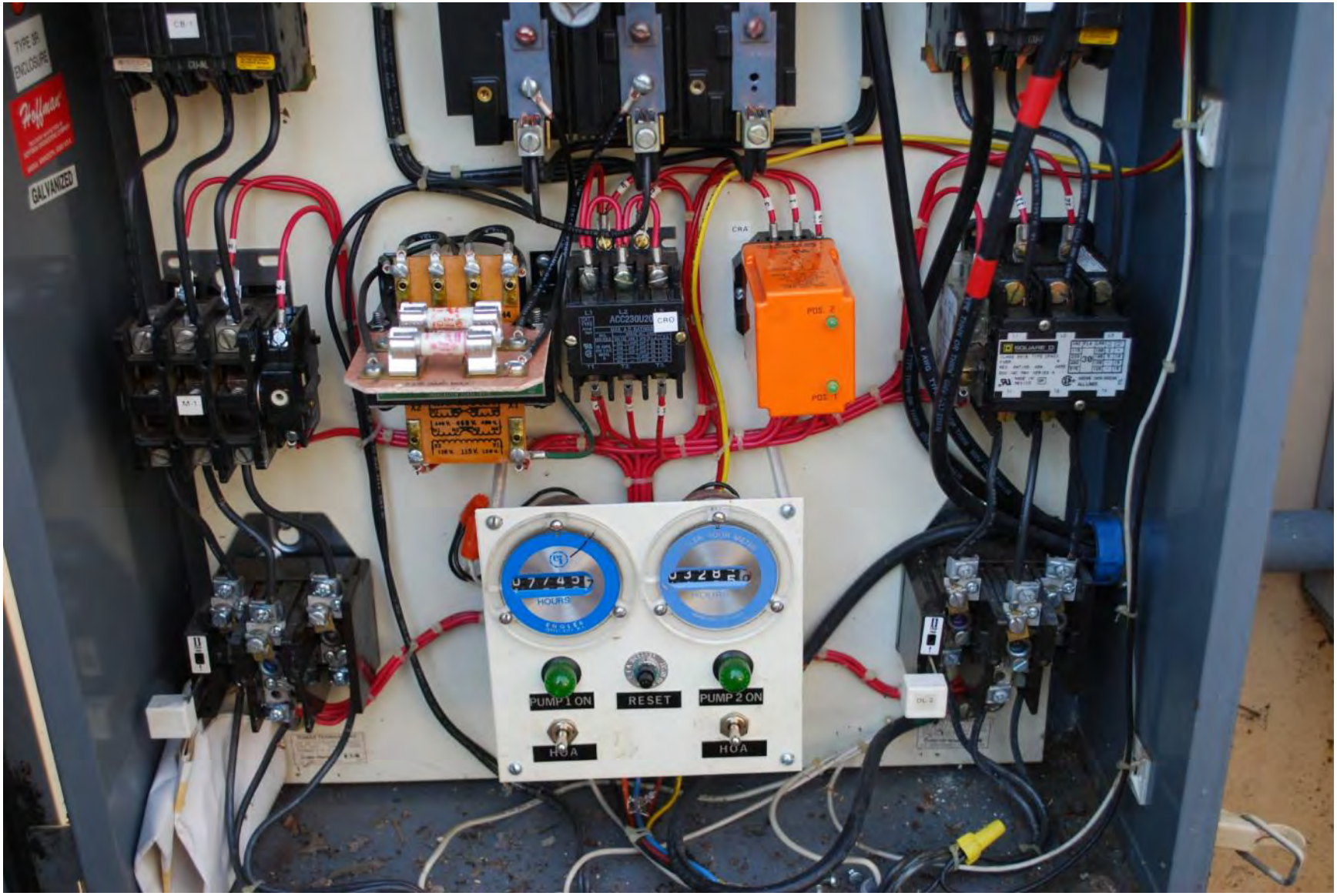


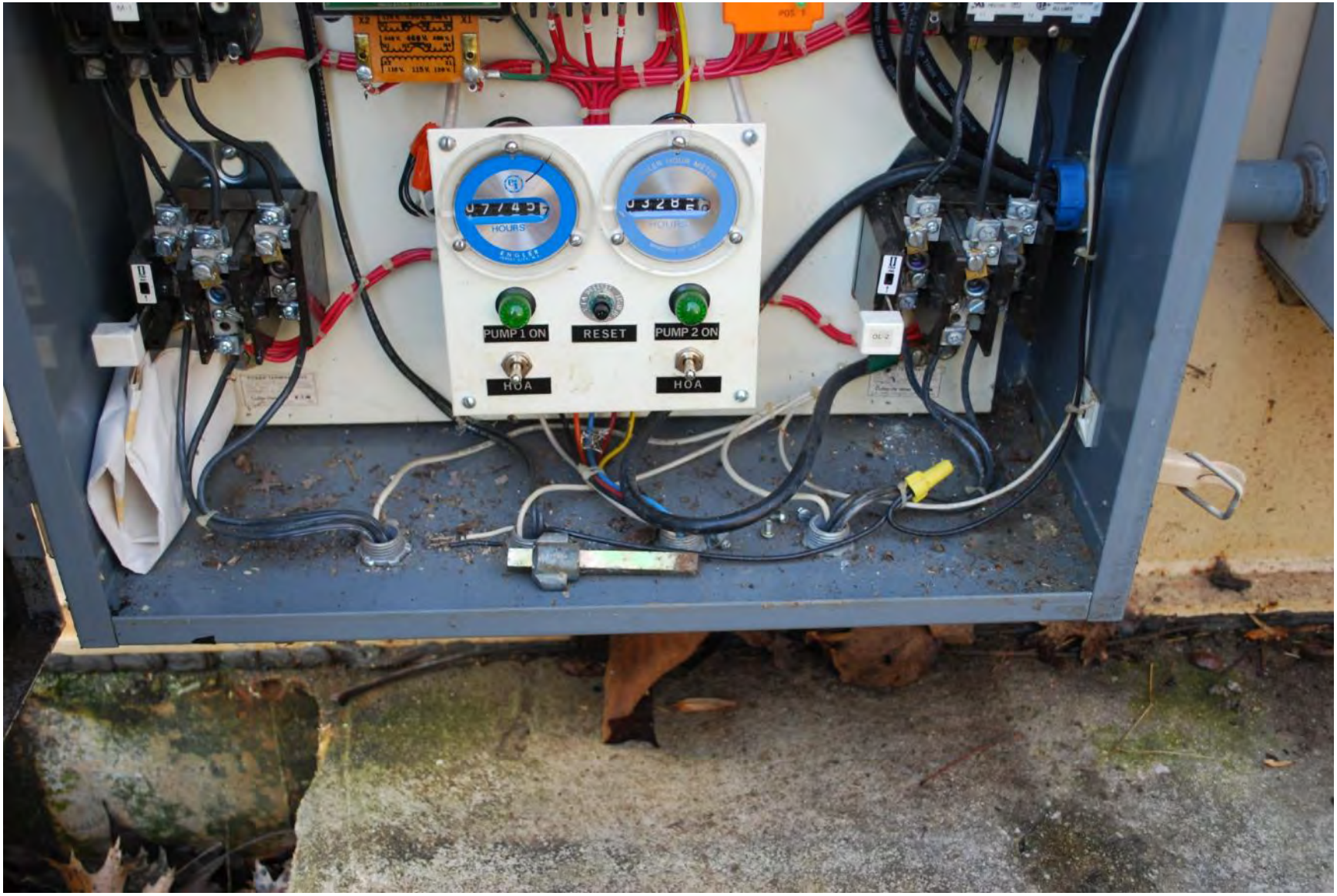
15 KVA
8
15 KVA
6

MODEL E805A HP 7.5 PH 3 HZ 60 RPM 1740 DES B
FRAME 213T TYPE D ENCL DP SF 1.15 CODE H NEMA NOM EFFICIENCY 84.0
VOLTS 208-230/460 ID U05U028R021M INSUL CLASS B
FL AMPS 22.2/20.4/10.2 SHAFT END BRG 6208-2Z MAX AMB 40°C
OPP END BRG 6206-2Z DUTY CONT
USABLE ON 208V 60HZ AT 22.2 AMPS MAX
ALTERNATE RATINGS
24.0/12.0 AMPS MAX AT 190/380V 50HZ
40°C AMB 1.15 SF CLASS B
50°C AMB 1.15 SF CLASS F
U.S. ELECTRICAL MOTORS
DIVISION OF EMERSON ELECTRIC CO.
ST. LOUIS, MO
MADE IN MEXICO 391842-882
LINE
HI VOLT
COM
Y
LO VOLT
LINE
WARNING: IMPROPER INSTALLATION OF THIS MOTOR MAY RESULT IN FIRE, EXPLOSION, ELECTRIC SHOCK OR OTHER PERSONAL INJURIES
● READ OPERATING INSTRUCTIONS ● MOTOR MUST BE GROUNDED PER LOCAL AND NATIONAL CODES
● DISCONNECT ALL POWER SOURCES BEFORE MAINTENANCE ● DO NOT PLACE FINGERS OR OBJECTS NEAR OPENINGS ● DO NOT USE EYEBOLTS OR LIFTING HOOKS TO LIFT ANYTHING EXCEPT THE PRODUCT

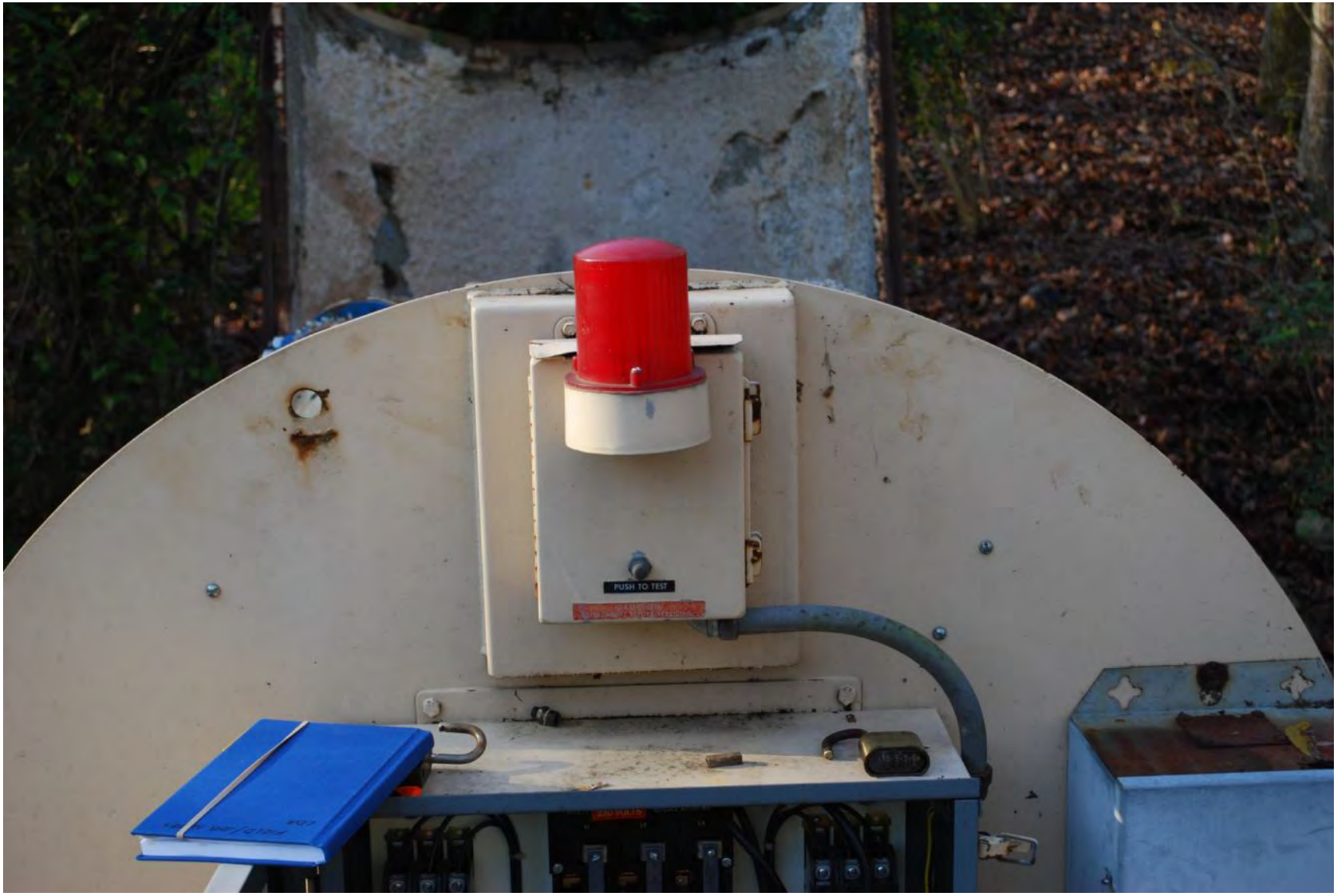
GOULD
TR70R
GOULD
TR70R

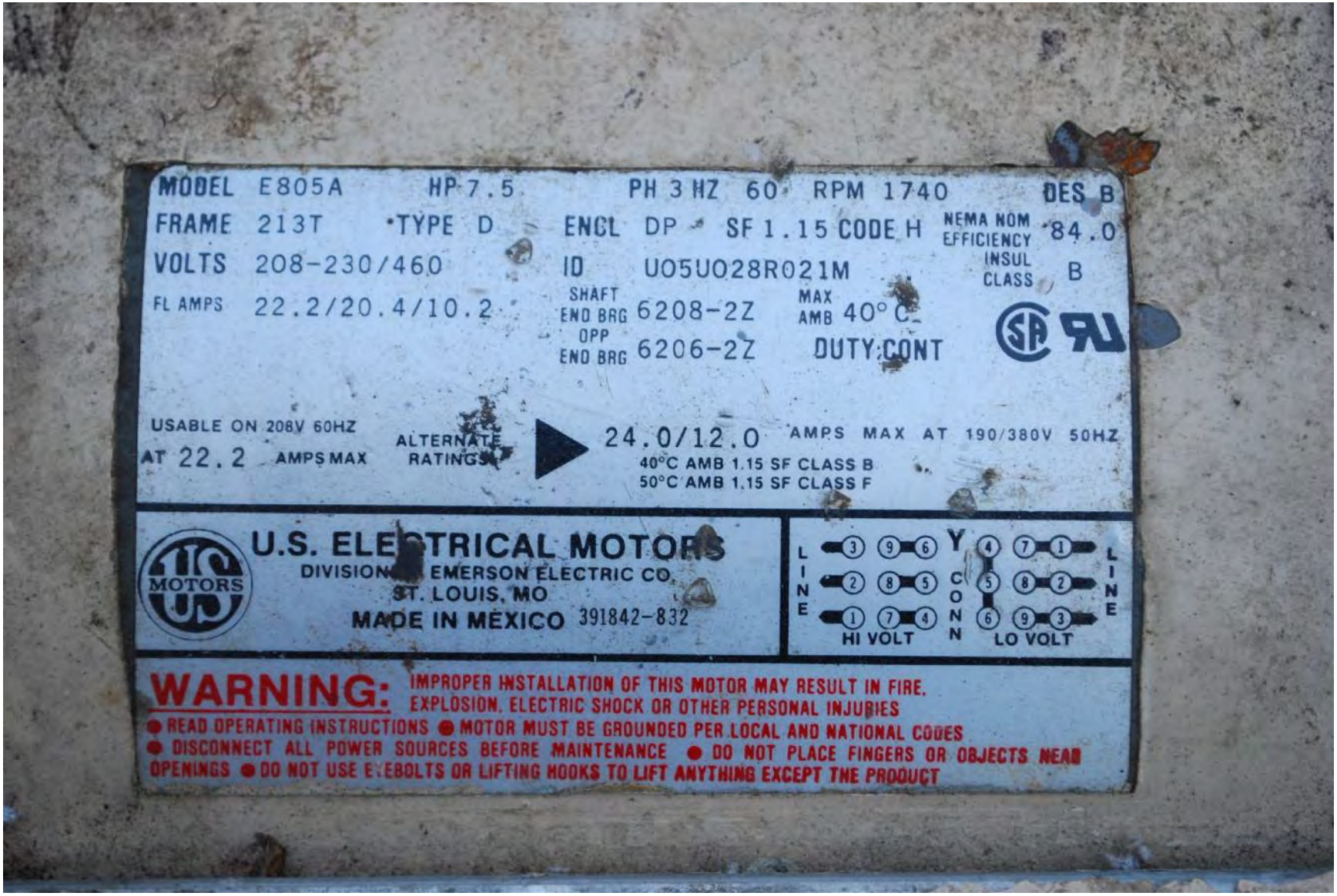

SAFETY
230 VOLTS
REPLACE AFTER WIRING
L1
L2
L3
ON
ON
ON
OFF
OFF
OFF
CB-1
CB-2
M-1
CR-1
CR-2
TYPE 3R ENCLOSURE
Pollmar
GALVANIZED


TYPE 3R ENCLOSURE
Hoffman
GALVANIZED
HOURS
PUMP 1 ON
RESET
PUMP 2 ON
HOA
HOA


HOURS
PUMP 1 ON
RESET
PUMP 2 ON
HOA
HOA

CAUTION
DISCONNECT BEFORE SERVICING
BUSKIRK & OWENS, INC.
Electrical Controls
MODEL
WIRING DIAGRAM
03031-161
SERIAL NUMBER
MOTOR HORSEPOWER
7.5
PHASE
3
AMPS
20.0
VOLTS
230
HERTZ
60
2245
MANUFACTURED BY
BUSKIRK & OWENS, INC. HAYESVILLE, OHIO 44838


PUSH TO TEST

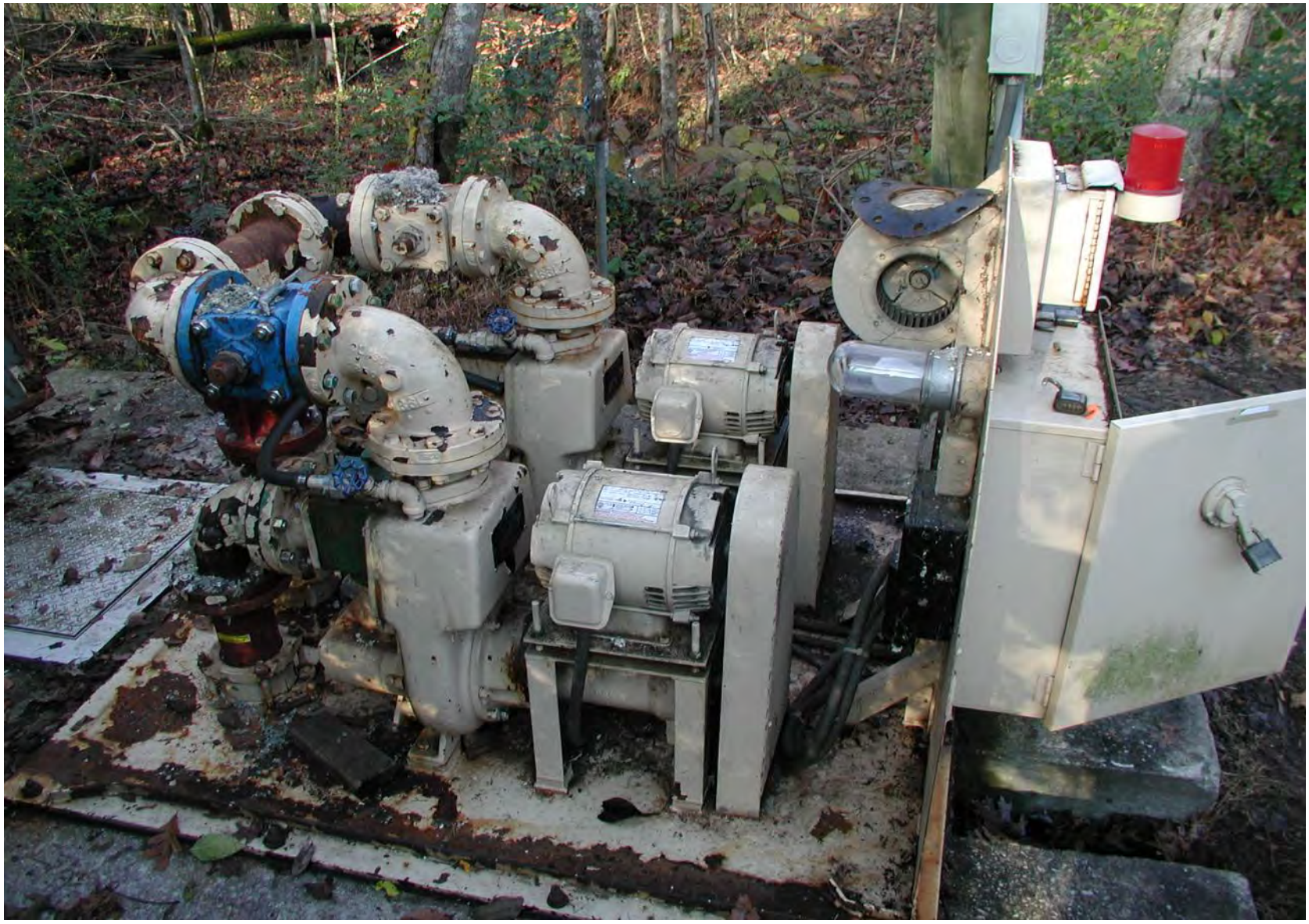

MODEL E805A HP 7.5 PH 3 HZ 60 RPM 1740 DES B
FRAME 213T TYPE D ENCL DP SF 1.15 CODE H NEMA NOM EFFICIENCY 84.0
VOLTS 208-230/460 ID U05U028R021M INSUL CLASS B
FL AMPS 22.2/20.4/10.2 SHAFT END BRG 6208-2Z MAX AMB 40° C
OPP END BRG 6206-2Z DUTY CONT
USABLE ON 208V 60HZ AT 22.2 AMPS MAX
ALTERNATE RATINGS
24.0/12.0 AMPS MAX AT 190/380V 50HZ
40°C AMB 1.15 SF CLASS B
50°C AMB 1.15 SF CLASS F
MOTORS
U.S. ELECTRICAL MOTORS
DIVISION OF EMERSON ELECTRIC CO.
ST. LOUIS, MO
MADE IN MEXICO 391842-832
LINE
Y CONN
HI VOLT
LO VOLT
WARNING: IMPROPER INSTALLATION OF THIS MOTOR MAY RESULT IN FIRE, EXPLOSION, ELECTRIC SHOCK OR OTHER PERSONAL INJURIES
● READ OPERATING INSTRUCTIONS ● MOTOR MUST BE GROUNDED PER LOCAL AND NATIONAL CODES
● DISCONNECT ALL POWER SOURCES BEFORE MAINTENANCE ● DO NOT PLACE FINGERS OR OBJECTS NEAR OPENINGS ● DO NOT USE EYEBOLTS OR LIFTING HOOKS TO LIFT ANYTHING EXCEPT THE PRODUCT

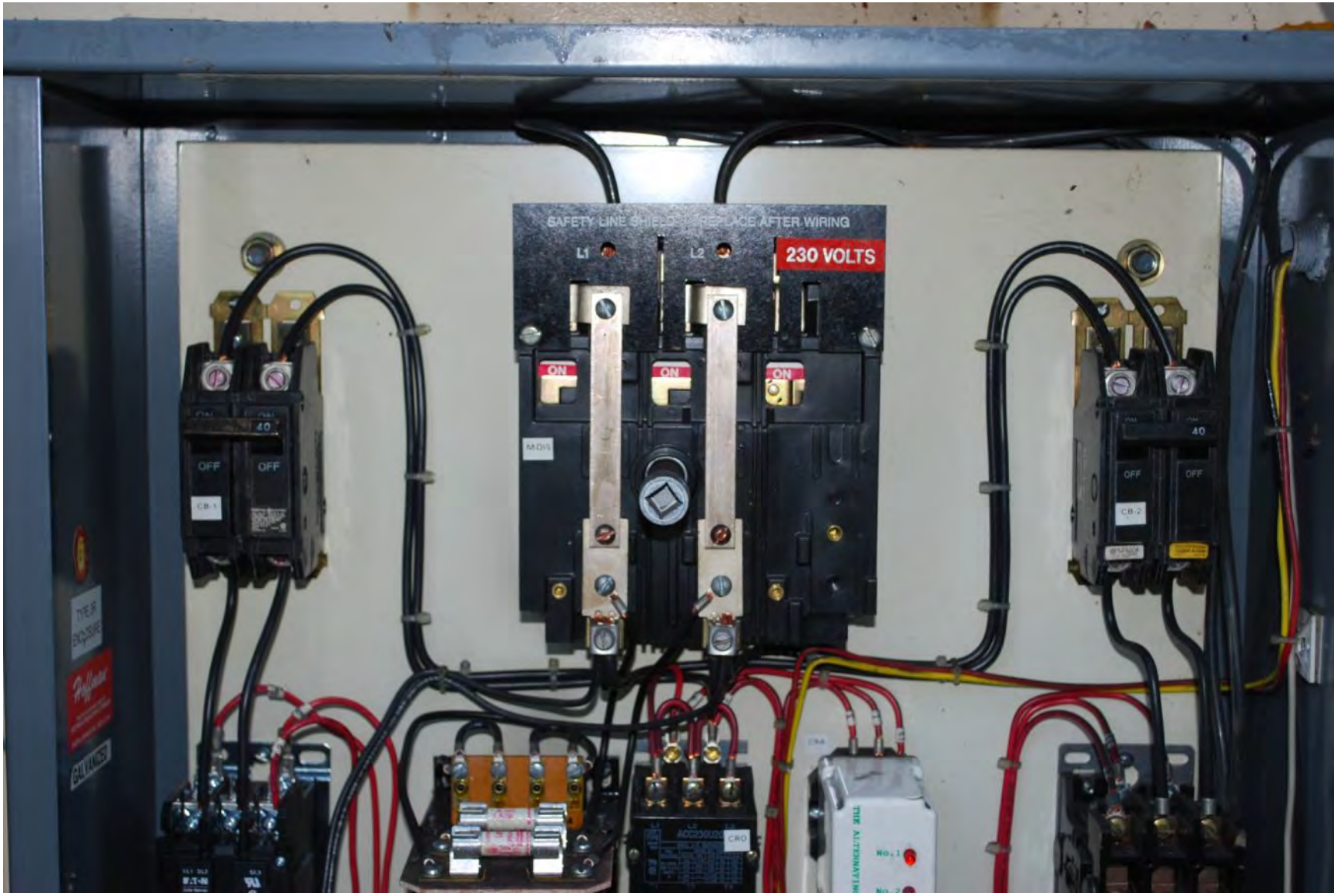
MODEL
For Use
NEMA 600
Patent
Delta Mfg.
Connect the
Breaker's Coil
to the Neutral
LIGHTNING

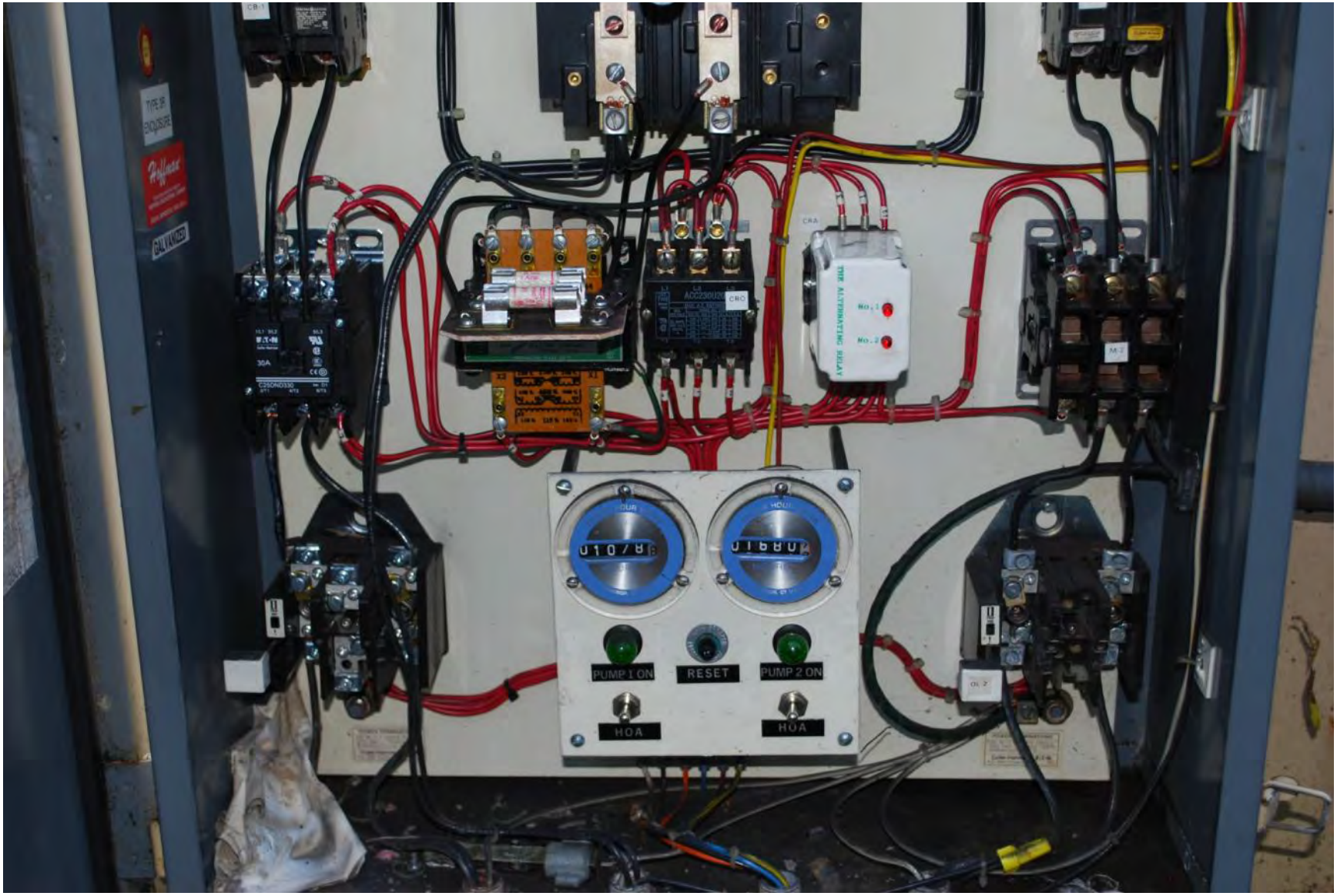
40 mp.

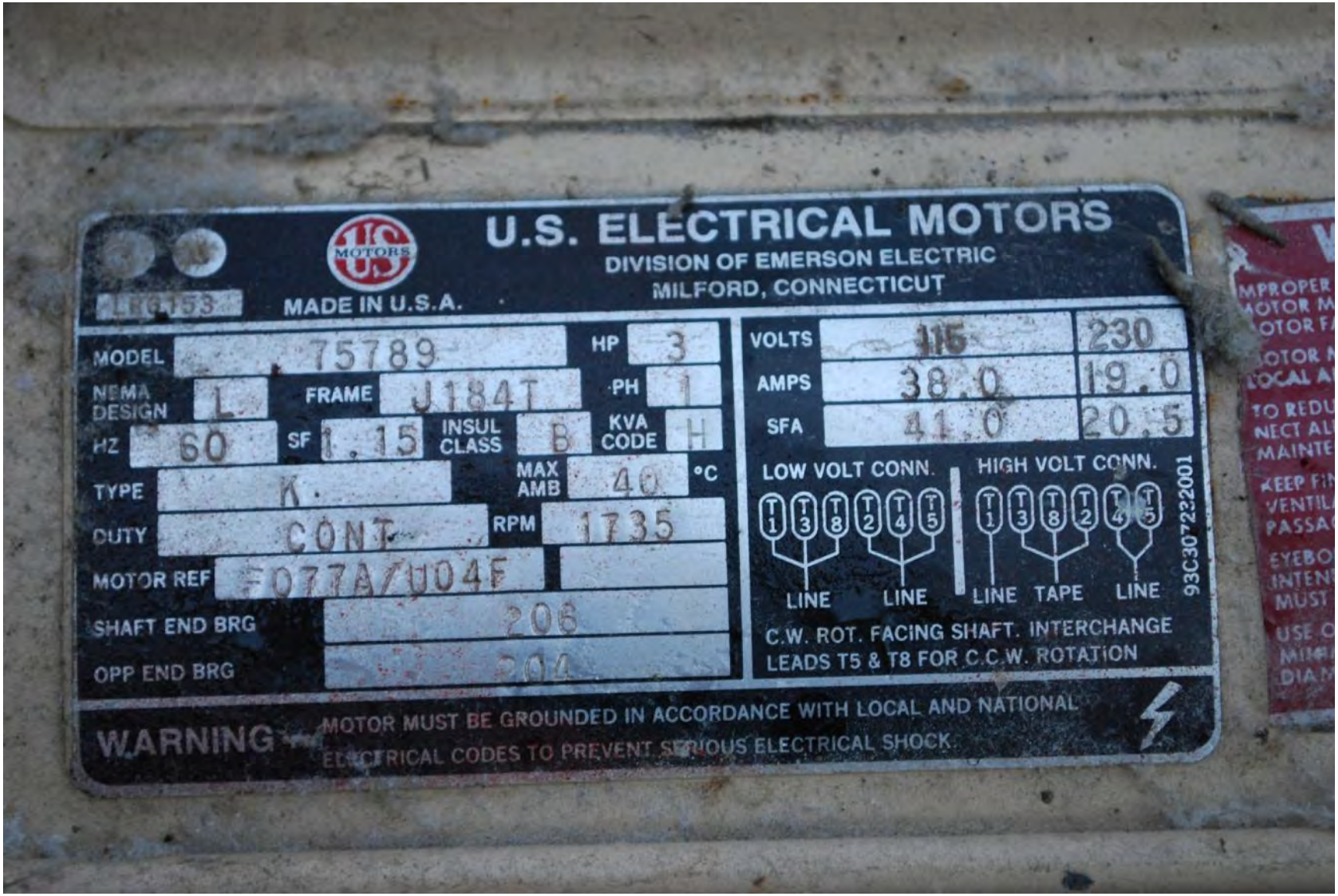
OFF
OFF
15
20
15
ON
ON
ON

MAIN L.S.
40 MP.




L1
L2
230 VOLTS
ON
ON
ON
OFF
OFF
OFF
OFF

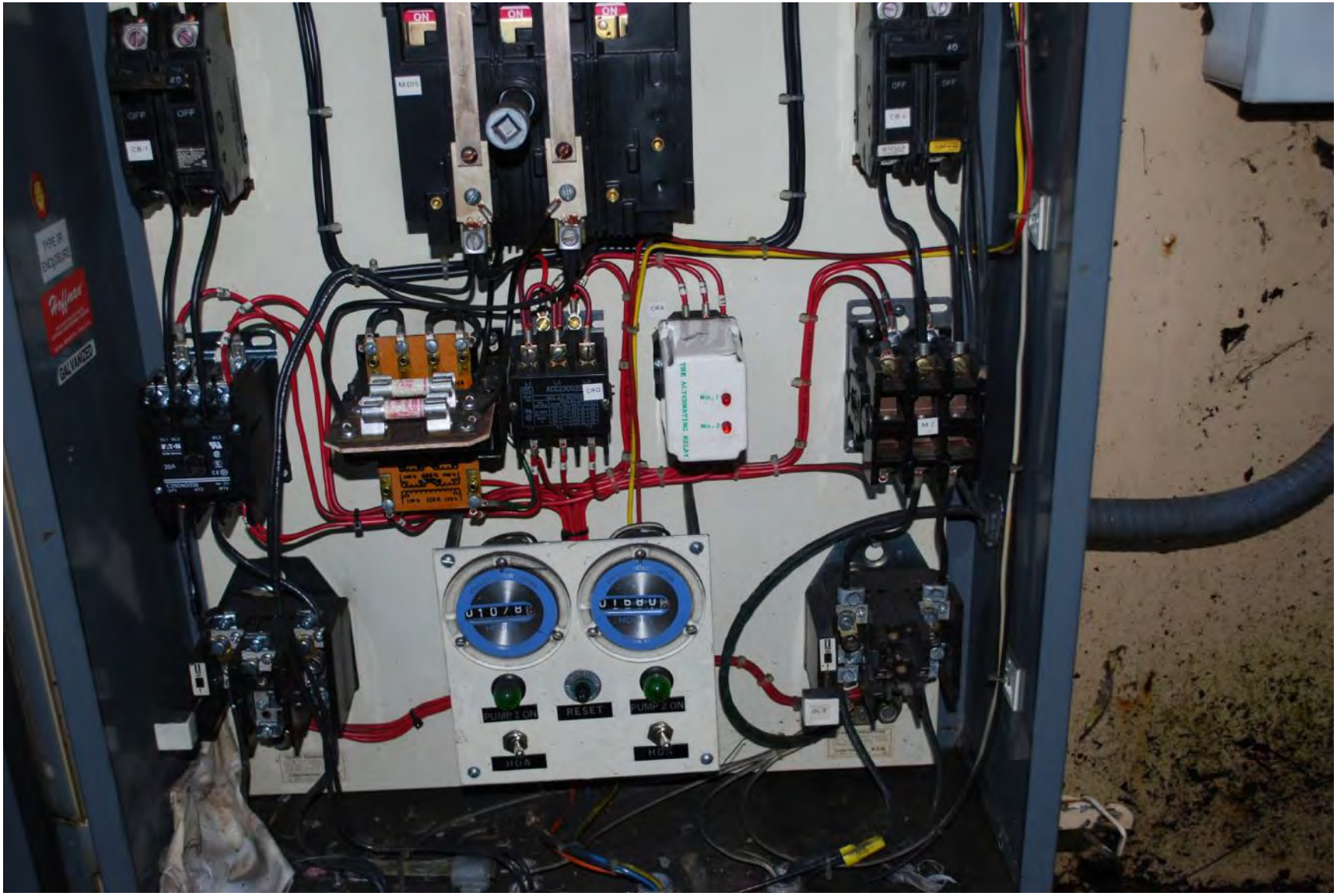

PUMP 1 ON
RESET
PUMP 2 ON
HOA
HOA

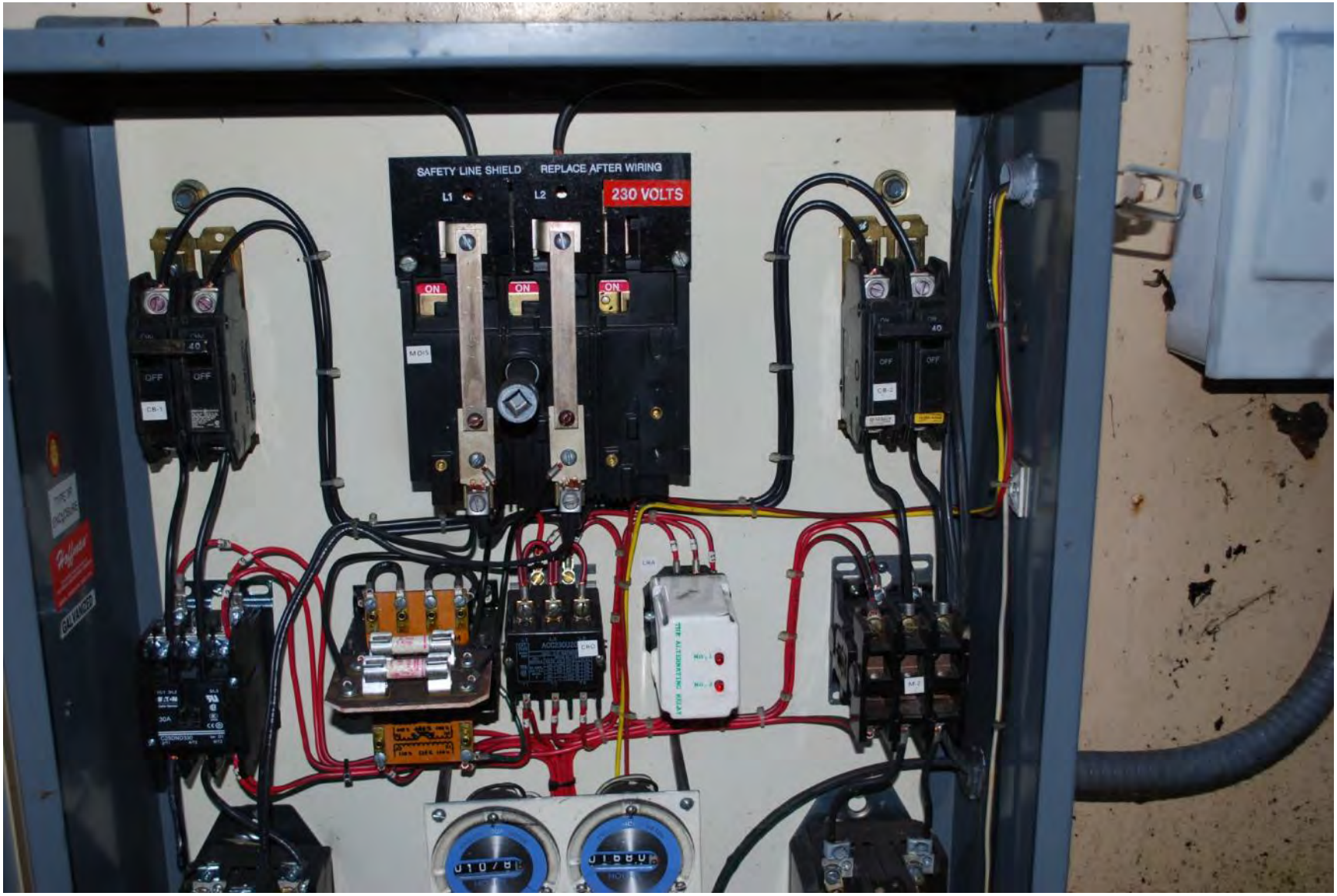

U.S. ELECTRICAL MOTORS
DIVISION OF EMERSON ELECTRIC
MILFORD, CONNECTICUT
MADE IN U.S.A.
MODEL 75789
HP 3
NEMA DESIGN L
FRAME J184T
PH 1
HZ 60
SF 1.15
INSUL CLASS B
KVA CODE H
TYPE K
MAX AMB 40 °C
DUTY CONT
RPM 1735
MOTOR REF F077A/U04F
SHAFT END BRG 206
OPP END BRG 204
VOLTS 115 230
AMPS 38.0 19.0
SFA 41.0 20.5
LOW VOLT CONN.
HIGH VOLT CONN.
T1 T3 T8 T2 T4 T5
LINE LINE
T1 T3 T8 T2 T4 T5
LINE TAPE LINE
C.W. ROT. FACING SHAFT. INTERCHANGE
LEADS T5 & T8 FOR C.C.W. ROTATION
93C307222001
WARNING
MOTOR MUST BE GROUNDED IN ACCORDANCE WITH LOCAL AND NATIONAL
ELECTRICAL CODES TO PREVENT SERIOUS ELECTRICAL SHOCK

Feeder L.S.
#1
30 AP

OFF
ON
15
OFF
ON
20
OFF
ON
15
OFF
ON
15

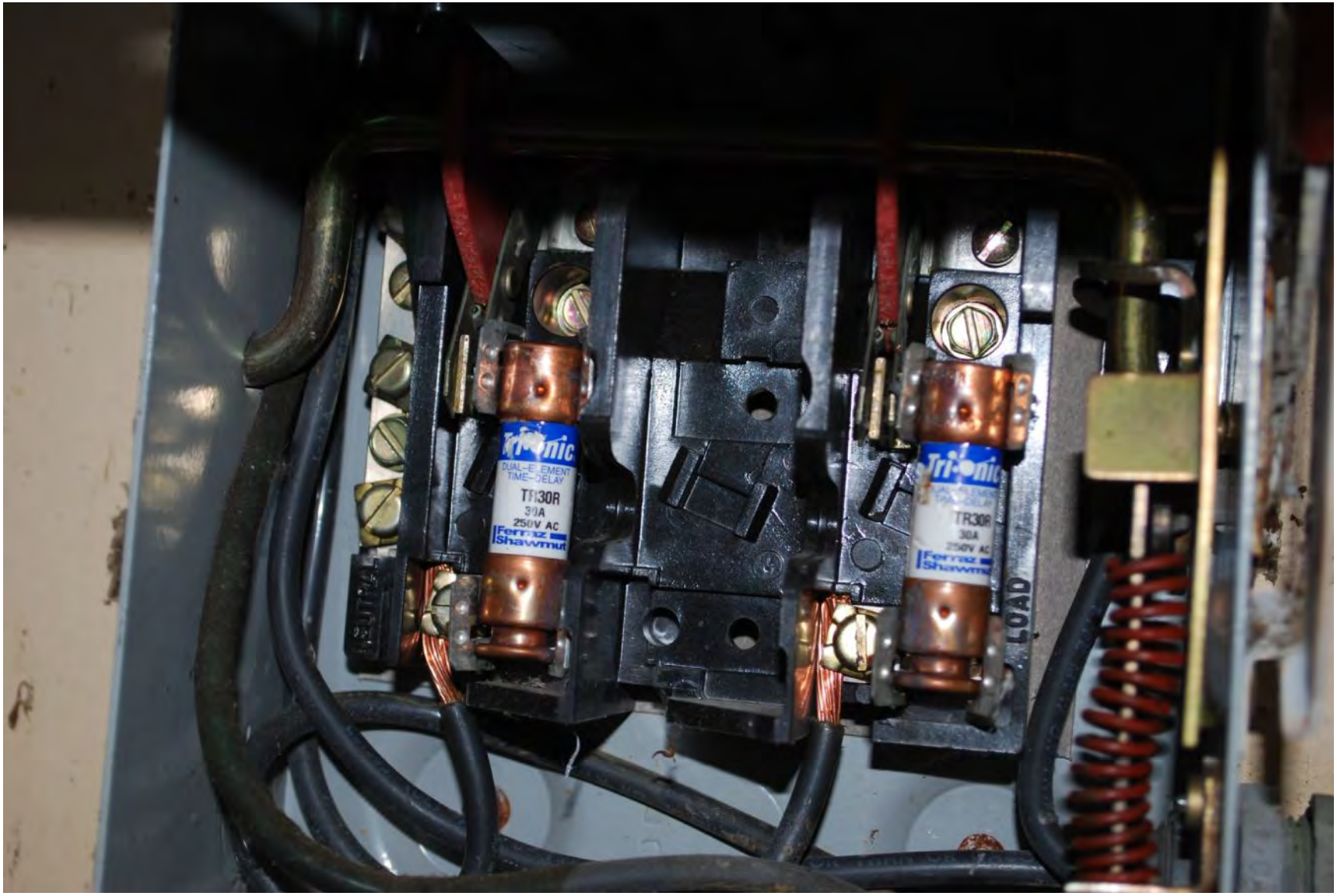
CAUTION
DISCONNECT BEFORE SERVICING
BUSKIRK & OWENS, INC.
Electrical Controls
MODEL
WIRING DIAGRAM
03084-161
SERIAL NUMBER
TIE-991-2850
MOTOR HORSEPOWER
3
PHASE
1
AMPS
18.0
VOLTS
230
HERTZ
60
2245
MANUFACTURED BY
BUSKIRK & OWENS, INC. HAYESVILLE, OHIO 44838


ON
ON
ON
OFF
OFF
PUMP 1 ON
RESET
PUMP 2 ON
HOA
HOA


SAFETY LINE SHIELD
REPLACE AFTER WIRING
L1
L2
230 VOLTS
ON
ON
ON
OFF
OFF
OFF
OFF

Tri-onic
DUAL-ELEMENT
TIME-DELAY
TR30R
30A
250V AC
Tri-onic

Tri-onic
DUAL-ELEMENT
TIME-DELAY
TR30R
30A
250V AC
Ferraz Shawmut
Tri-onic
TR30R
30A
250V AC
LOAD


DUAL-ELEMENT
TIME-DELAY
TR30R
30A
250V AC
Ferraz Shawmut
LOAD

-10 -5 0 5 10 15 20 25 30 34
-15 -20
feet of water
40 60 80 100 120 140
20
feet of water

KOHLER
50

FEET OF WATER
OUTPUTS
A-B-C-D
OUTPUTS
E-F-G-H
+03.3
GORMAN-RUPP
OUTPUT A
OUTPUT B
OUTPUT C
OUTPUT D
OFF
ON
LOW WATER ALARM
LEAD PUMP
LAG PUMP
HIGH WATER ALARM

PUMP NO.1 RUN
CAUTION
Manual operation of pumps overrides all equipment protection devices.
PUMP NO.2 RUN
NO.1 HIGH TEMP
ALARM SILENCE
NO.2 HIGH TEMP
LOW WATER
ALARM SILENCE (RESET)
HIGH WATER

No. 1 PUMP MOTOR
CIRCUIT BREAKER
TRANSFORMER PRIMARY
CIRCUIT BREAKER
No. 2 PUMP MOTOR
CIRCUIT BREAKER
RESET OFF
RESET OFF
RESET OFF

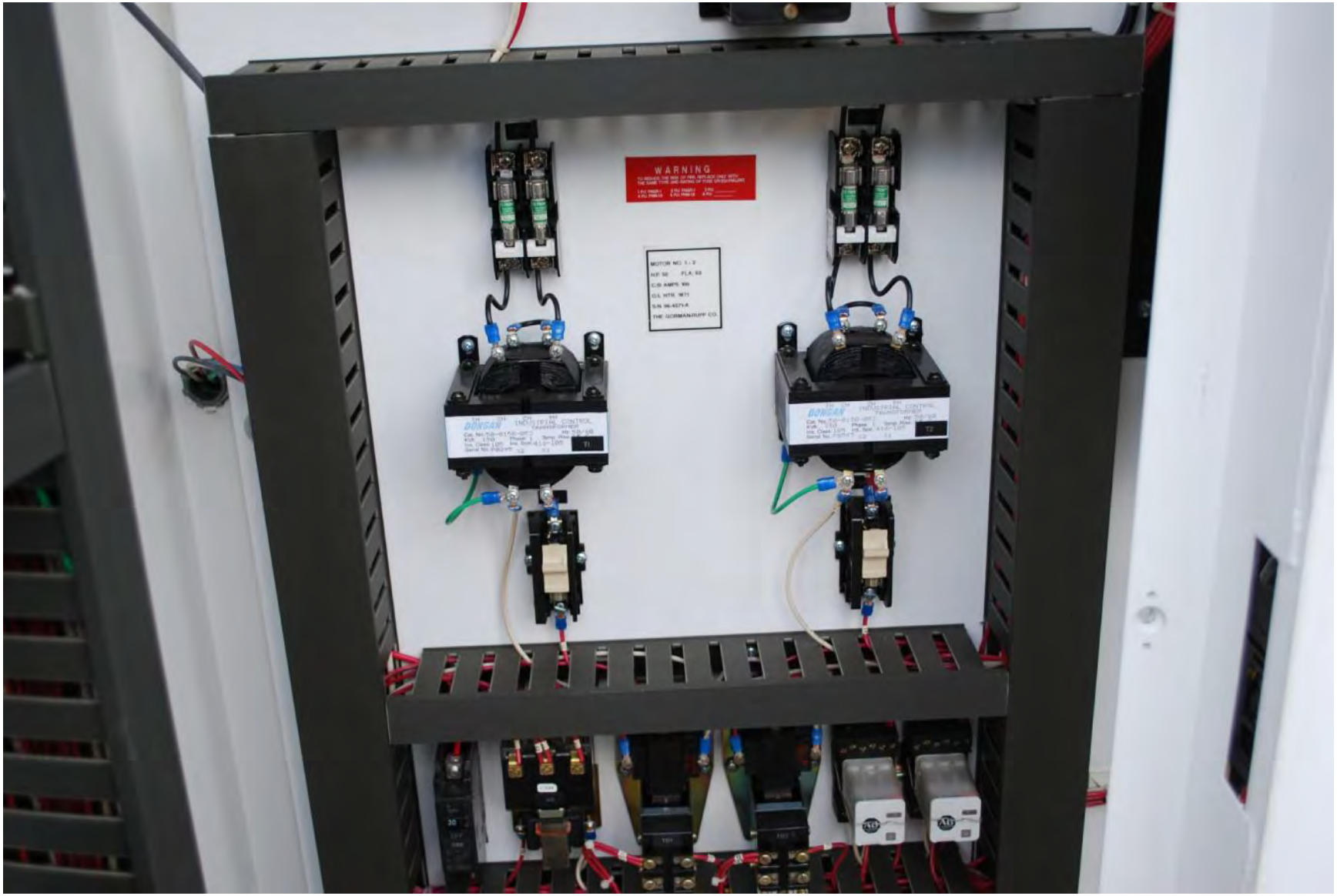
MCB1
CB1
MCB2

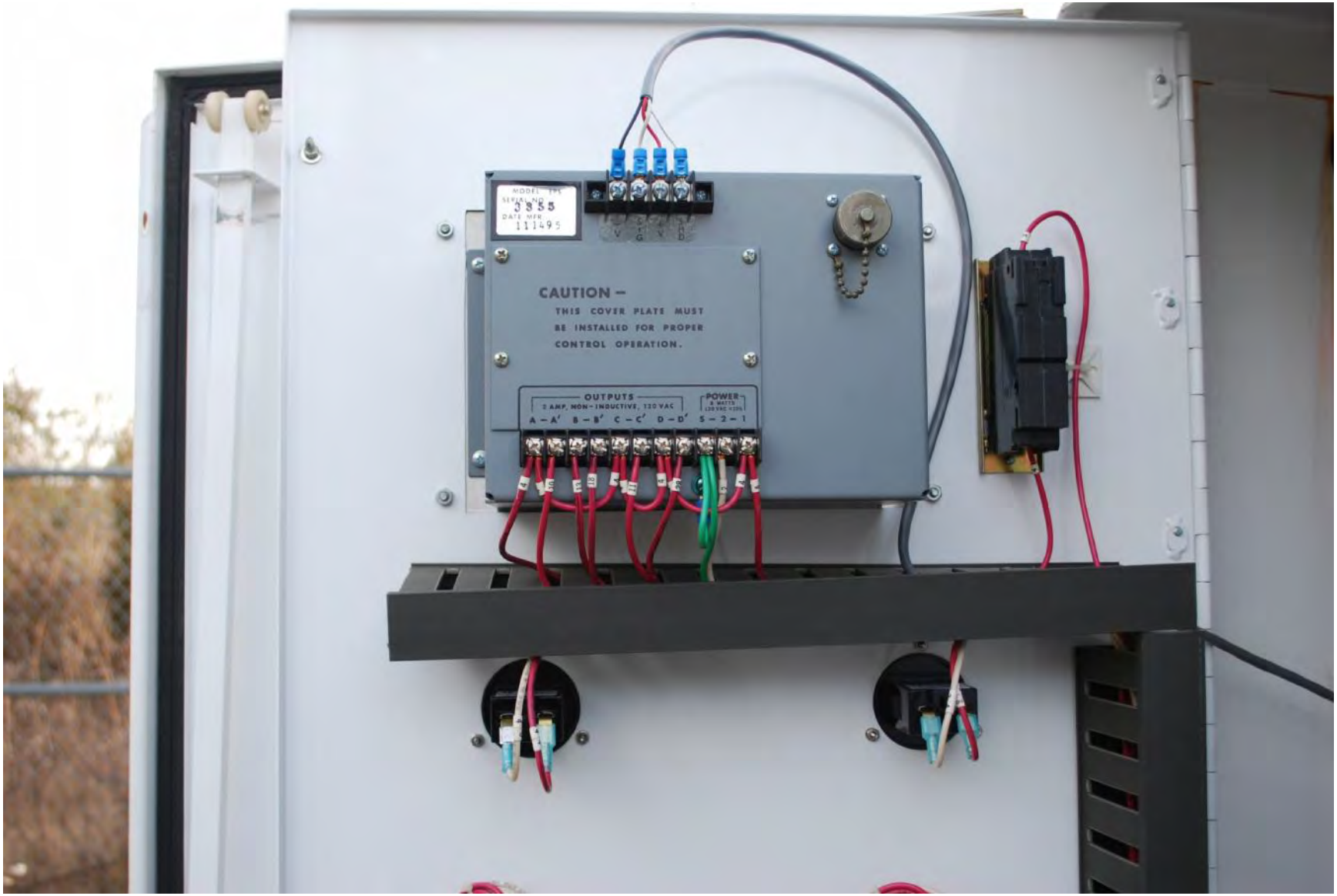
ALLEN-BRADLEY
SMC PLUS™
11M
ALLEN-BRADLEY
SMC PLUS™
21M

L1
L2
L3
ALLEN-BRADLEY
L1
L2
L3
ALLEN-BRADLEY

DO NOT BEND

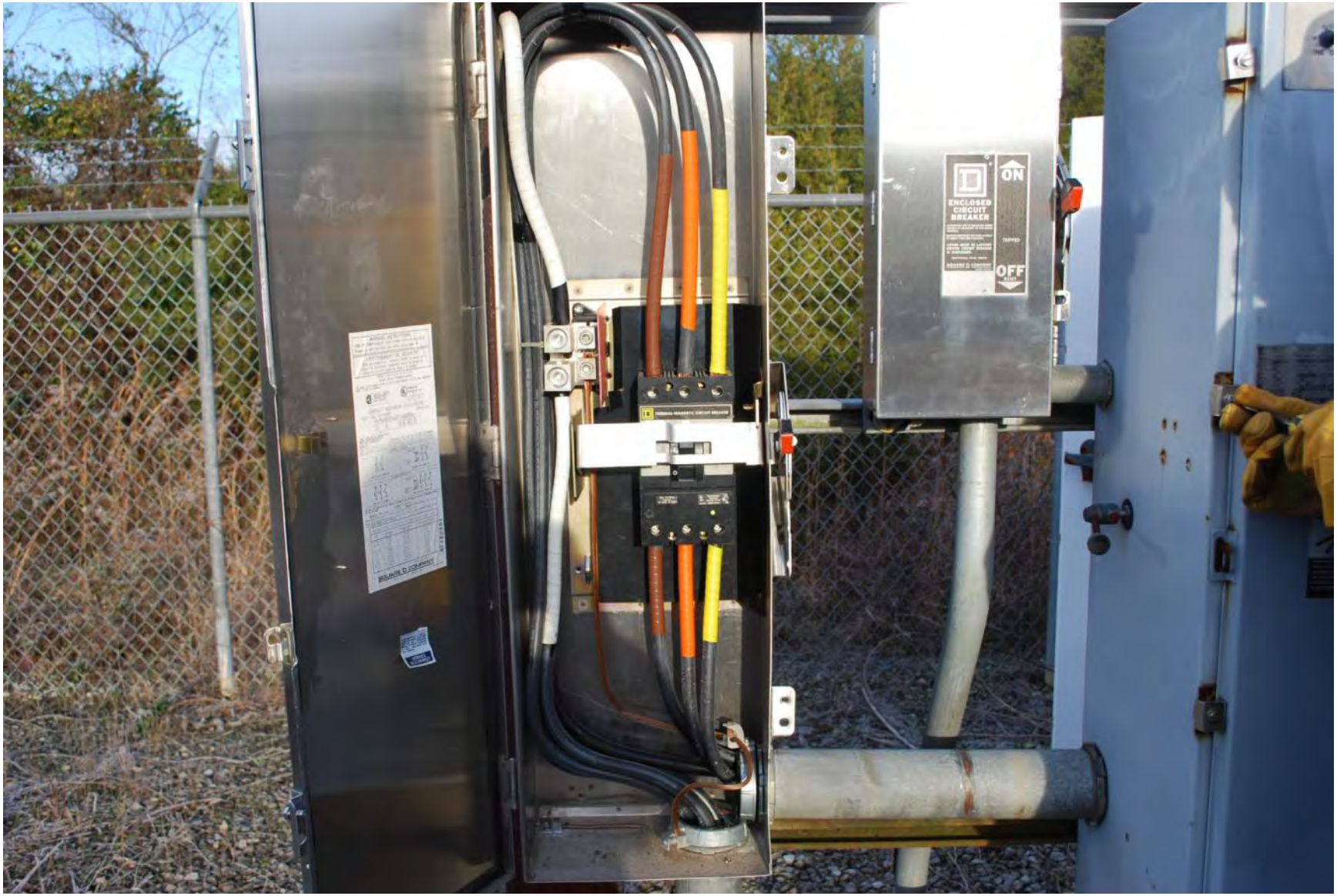
DONGAN
WARNING
Install and operate in accordance with national electrical code and local codes. GROUND unit before applying line potential. Failure to comply can result in serious injury or death.

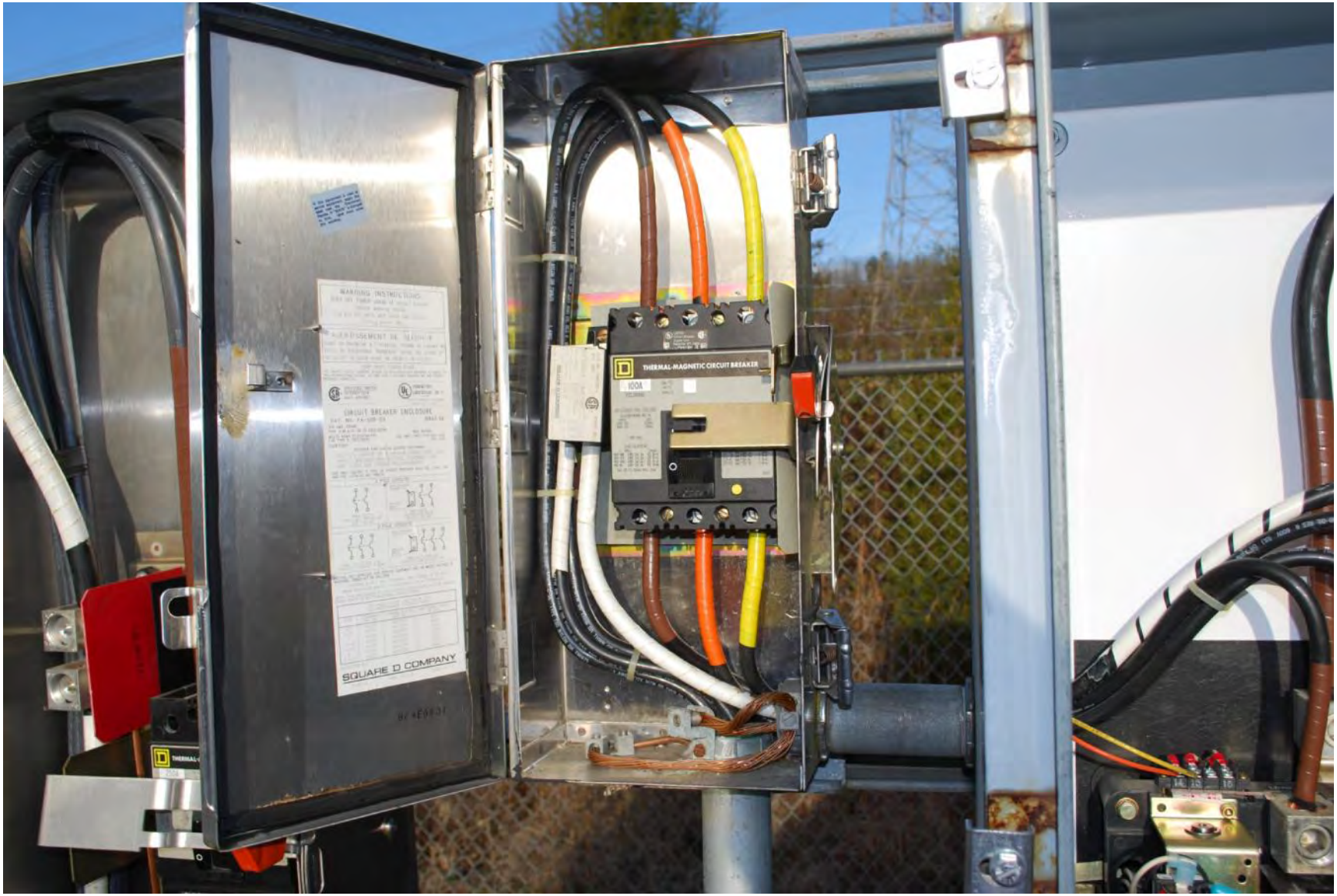

WARNING
DONGAN
DONGAN

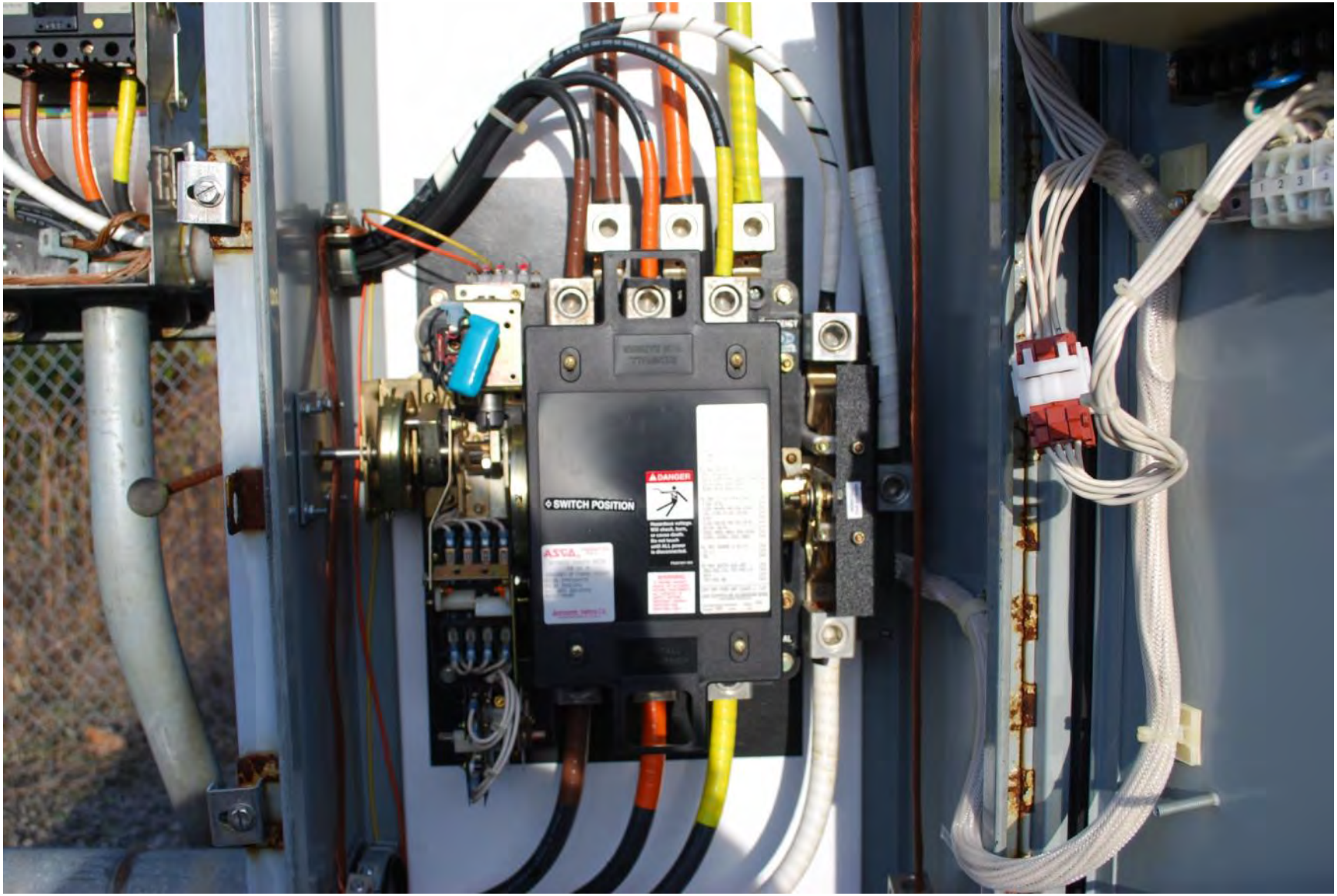

CAUTION –
THIS COVER PLATE MUST
BE INSTALLED FOR PROPER
CONTROL OPERATION.
OUTPUTS
POWER
A – A′ B – B′ C – C′ D – D′ S – 2 – 1

L1
L2
L3
CATALOG NO.
SIZE 3
SERIES
509-DOD
A
MAX. RATINGS
P. PH. 3-5 POLE
200V
230V
460-575V
25 HP
30 HP
50HP
90 AMP MAX. CONTINUOUS-600VAC MAX.
ALLEN-BRADLEY
A-B
MADE IN U.S.A.
115-120V
60 HZ.
110V 50HZ
CD236
37
38
38
2
3
38
34
34

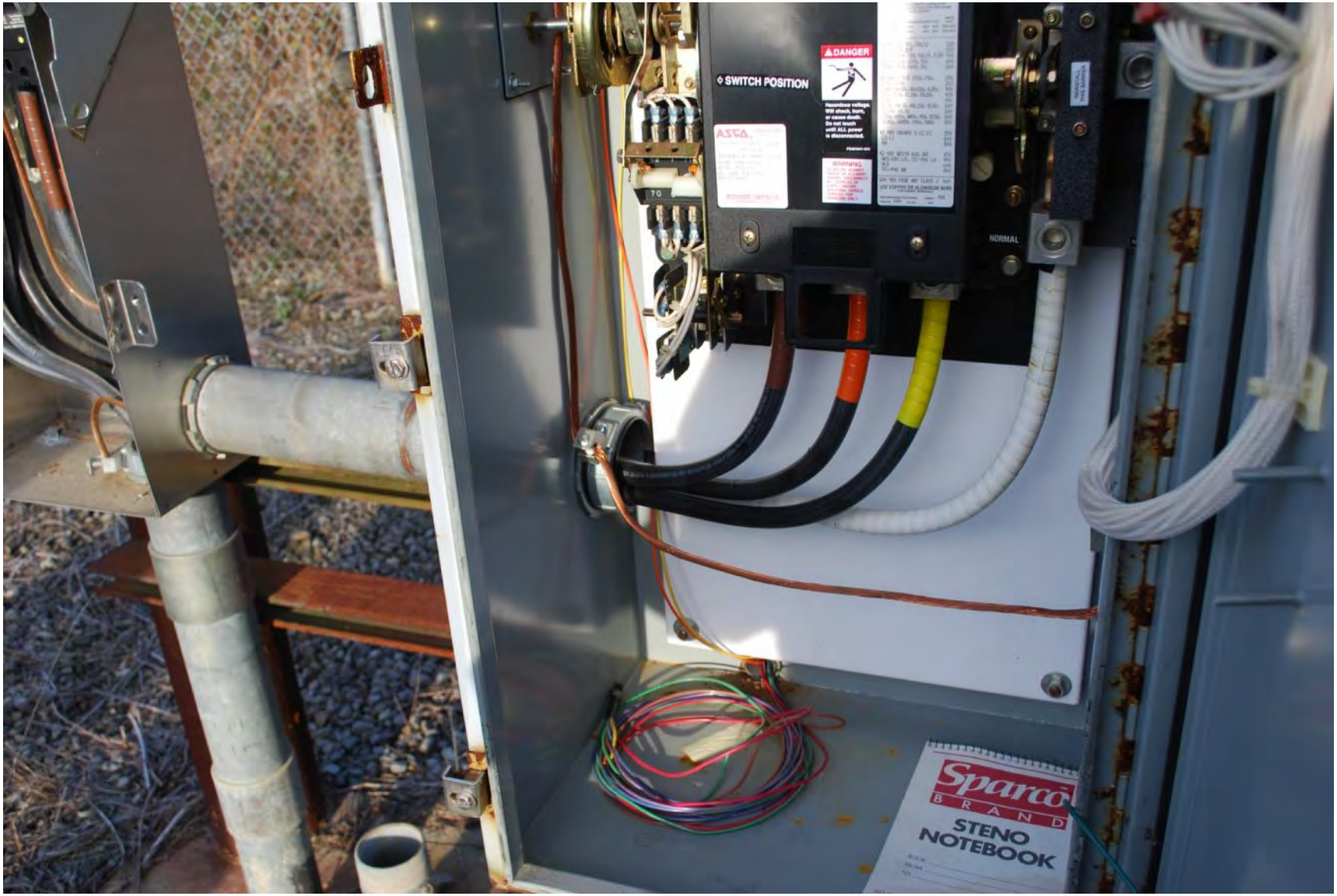
1888
112 5KVA
277 480
WARNING
DOES NOT
WARNING

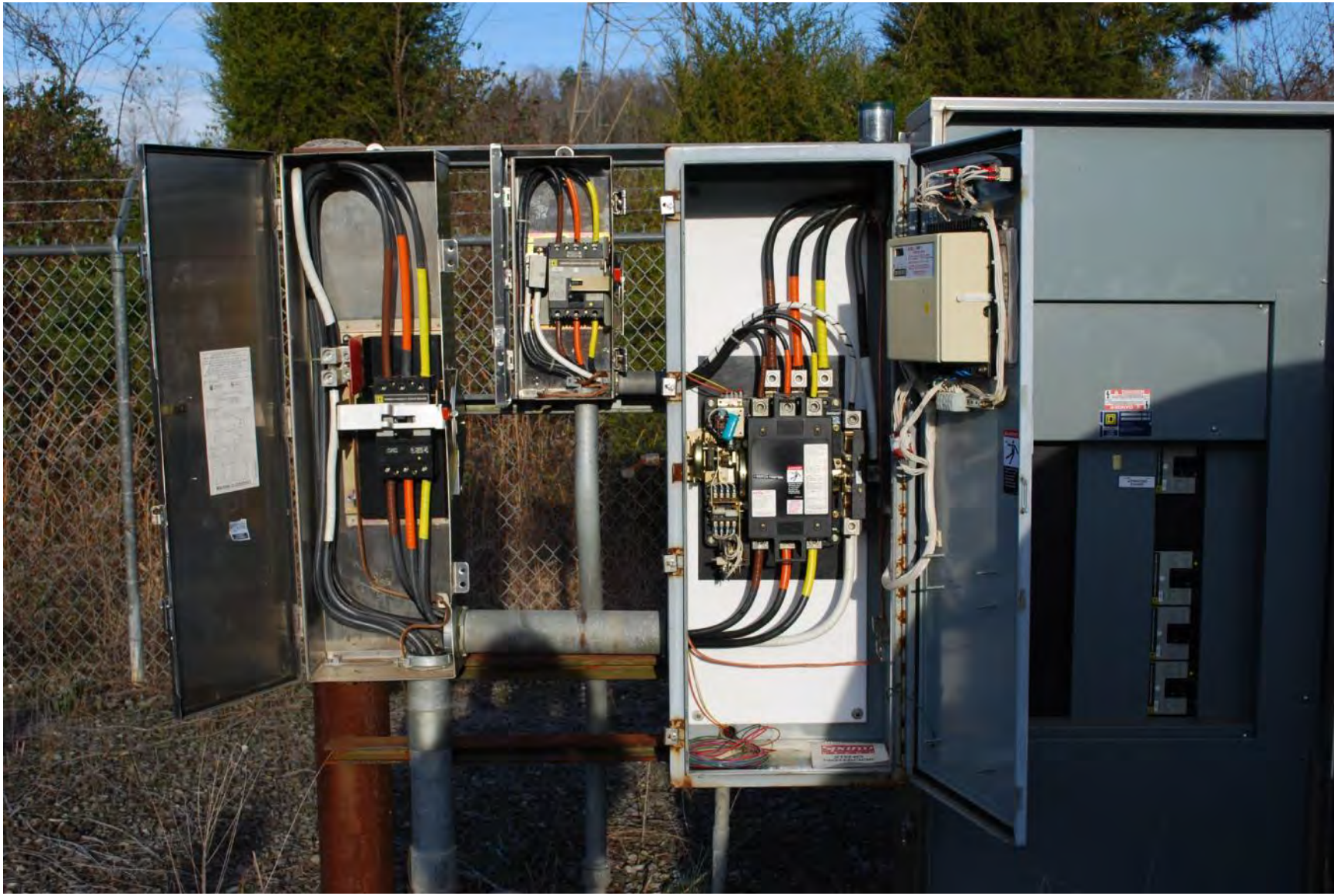

ENCLOSED
CIRCUIT
BREAKER
ON
TRIPPED
OFF


THERMAL-MAGNETIC CIRCUIT BREAKER
100A
SQUARE D COMPANY

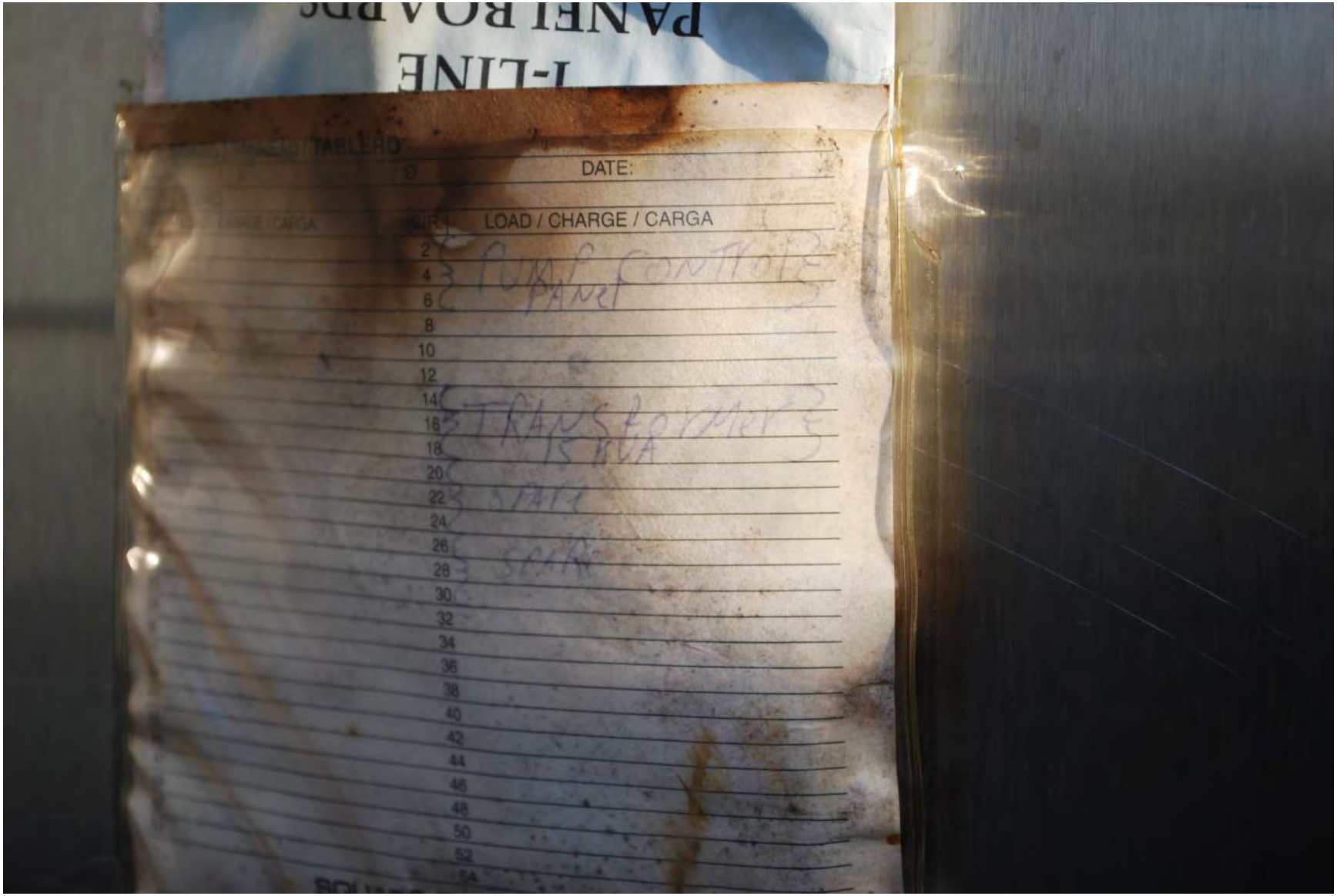

DANGER
SWITCH POSITION

ASCO GROUP 7
CONTROL PANEL
USE WITH AUTOMATIC TRANSFER SWITCH
REFER TO OPERATOR'S MANUAL
FOR PROPER INSTALLATION & OPERATION
REINSTALL THIS COVER AFTER SERVICING
Automatic Switch Co.

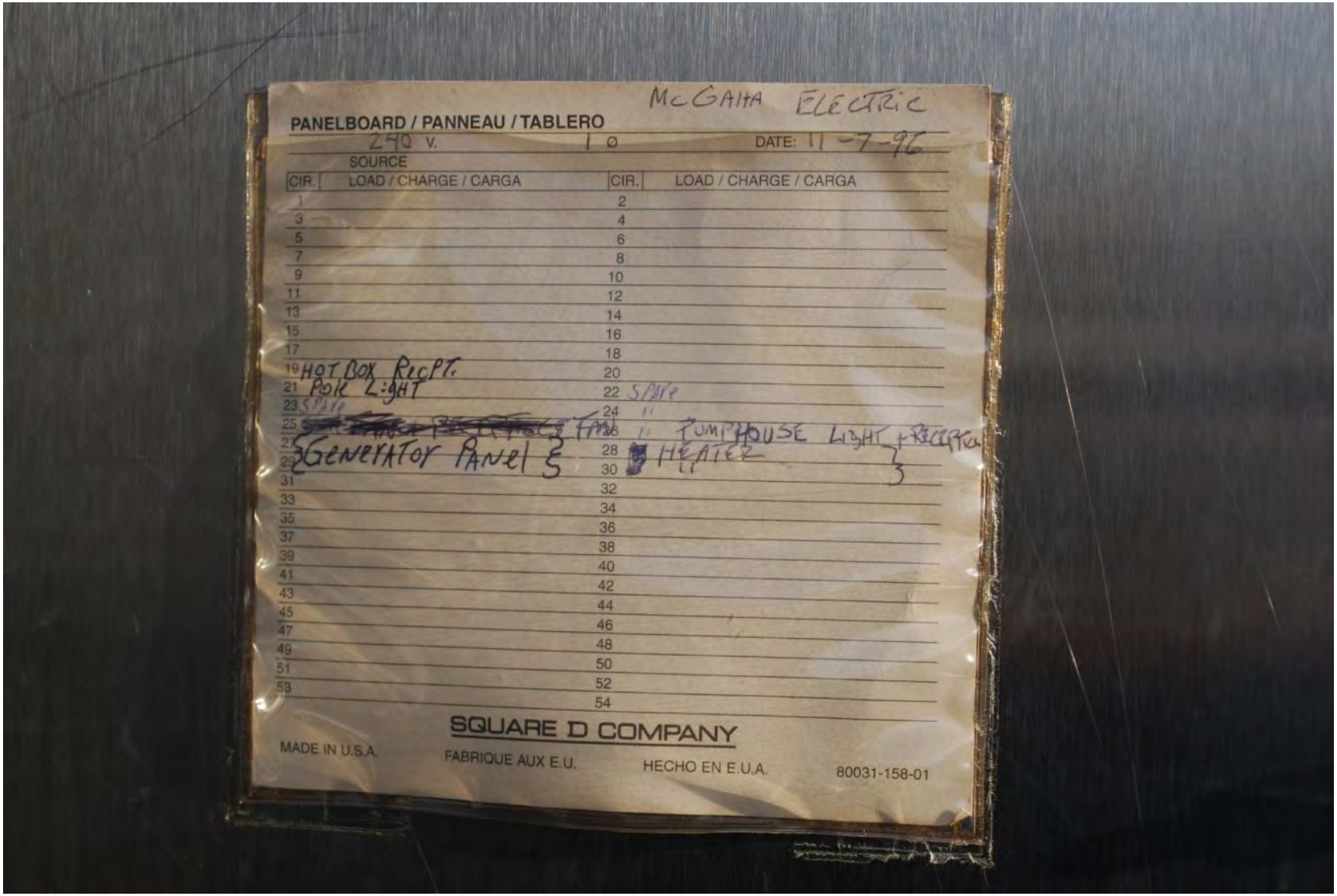

SWITCH POSITION
DANGER
NORMAL
Sparco
BRAND
STENO
NOTEBOOK



SERVICE
DISCONNECT
THERMAL-MAGNETIC CIRCUIT BREAKER
THERMAL-MAGNETIC CIRCUIT BREAKER
THERMAL-MAGNETIC CIRCUIT BREAKER
THERMAL-MAGNETIC CIRCUIT BREAKER


DATE:
LOAD / CHARGE / CARGA

SQUARE D COMPANY
1 3 5 7 9 11 13 15 17 19 21 23 25 27 29
2 4 6 8 10 12 14 16 18 20 22 24 26 28 30
DANGER
WARNING


McGAHA ELECTRIC
PANELBOARD / PANNEAU / TABLERO
240 V.
1 Ø
DATE: 11-7-96
SOURCE
CIR. LOAD / CHARGE / CARGA
CIR. LOAD / CHARGE / CARGA
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19 HOT BOX RECPT.
20
21 POLE LIGHT
22 SPARE
23 SPARE
24
25
26
27
28 HEATER
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
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49
50
51
52
53
54
GENERATOR PANEL
PUMPHOUSE LIGHT + RECEPTACLE
SQUARE D COMPANY
MADE IN U.S.A.
FABRIQUE AUX E.U.
HECHO EN E.U.A.
80031-158-01

GORMAN-RUPP
3-PHASE INDUCTION MOTOR
MODEL NO.
VOLTS
AMP.
TYPE
FRAME
FORM
SERVICE FACTOR
HP
BRG L.S.
POLES
RPM
NO. O.S.
CLASS INS.
MAX. AMB. °C
SER #
DESIGN
TIME RATING
CODE
HZ
USABLE ON 208V NETWORKS AT AMP.
USABLE ON 575V NETWORKS AS HP. AT AMP.
REFER TO CONNECTIONS IN CONDUIT BOX.
THE GORMAN-RUPP COMPANY
MADE IN U.S.A.
38814-047

GORMAN-RUPP
3-PHASE INDUCTION MOTOR
MODEL NO.
VOLTS
TYPE
FORM
RPM
MAX. AMB.
TIME RATING
HP
POLES
CLASS INS.
DESIGN
CODE
HZ
°C
AMP.
FRAME
SERVICE FACTOR
BRG
NO.
L.S.
O.S.
SER #
CONNECTIONS
230 V LINE
460 V LINE
USABLE ON 208V NETWORKS AT
AMP.
USABLE ON 575V NETWORKS AS
HP. AT
AMP.
REFER TO CONNECTIONS IN CONDUIT BOX.
THE GORMAN-RUPP COMPANY
MADE IN U.S.A.
38814-047

HEATER
CIRCUIT BREAKER

HEATER
CIRCUIT BREAKER

WARNING
WARNING
Install and operate in accordance with all national electrical code and local codes. GROUND unit before applying line potential. Failure to comply can result in serious injury or death.
38917-077
FIELD JOB NOTE
LDA

FILL HERE TO PRIME

PUMP CONTROL PANEL
THE GORMAN-RUPP CO.
MANSFIELD, OH ST. THOMAS, ONTARIO
PUMPS
480 VOLT 3 PH 3 W 60 HZ
MIN. MAIN WIRE 85 AMP. ENCL. TYPE 1
SEPARATE CONTROL VOLTAGE SOURCE REQD.
120 VOLT 1 PH 60 HZ MIN MAIN WIRE 30 AMP.
DRAWING NO. D4-07374 S/N 96-4571-A
WARNING – TO REDUCE THE RISK OF FIRE:
DO NOT REMOVE THIS TAG!
OUTLET
LIGHT
ON
OFF
15

WARNING – TO REDUCE THE RISK OF FIRE:
1. Do not place any objects such as furniture, papers, clothes, and curtains closer than 3 feet to the front of the heater and keep them away from the sides and rear when the heater is plugged in.
2. Do not place the heater near a bed because objects such as pillows or blankets can fall off the bed and be ignited by the heater.
3. Always unplug the heater if it is not being used.
4. Avoid the use of an extension cord because the extension cord may overheat and cause a risk of fire. However, if you have to use an extension cord, the cord shall be NO. 14 AWG minimum size and rated not less than 1875 Watts.
DO NOT REMOVE THIS TAG!
OUTLET
FAN
LIGHT
ON
OFF
15

CIRCUIT BREAKER

KW
AC AMPERES
HERTZ
AC VOLTS
UPPER METER SCALES
OFF
AMPS
VOLTS
LOWER METER SCALES
VOLTAGE
ADJUST
SPEED ADJUST
PREALARM HIGH ENGINE TEMPERATURE
HIGH ENGINE TEMPERATURE
AUXILIARY FAULT
AUXILIARY PREALARM
PREALARM LOW OIL PRESSURE
LOW OIL PRESSURE
BATTERY CHARGER FAULT
AIR DAMPER
LOW WATER TEMPERATURE
EMERGENCY STOP
LOW BATTERY VOLTAGE
SYSTEM READY
LOW FUEL
OVERSPEED
OVERCRANK
GENERATOR SWITCH NOT IN AUTO
RUN
OFF / RESET
AUTO
SILENCE
NORMAL
LAMP TEST
KOHLER
NIXON
Power Services Company
the generator people
24 HOUR EMERGENCY REPAIR SERVICE
SALES • SERVICE • PARTS • ALL MAJOR BRANDS

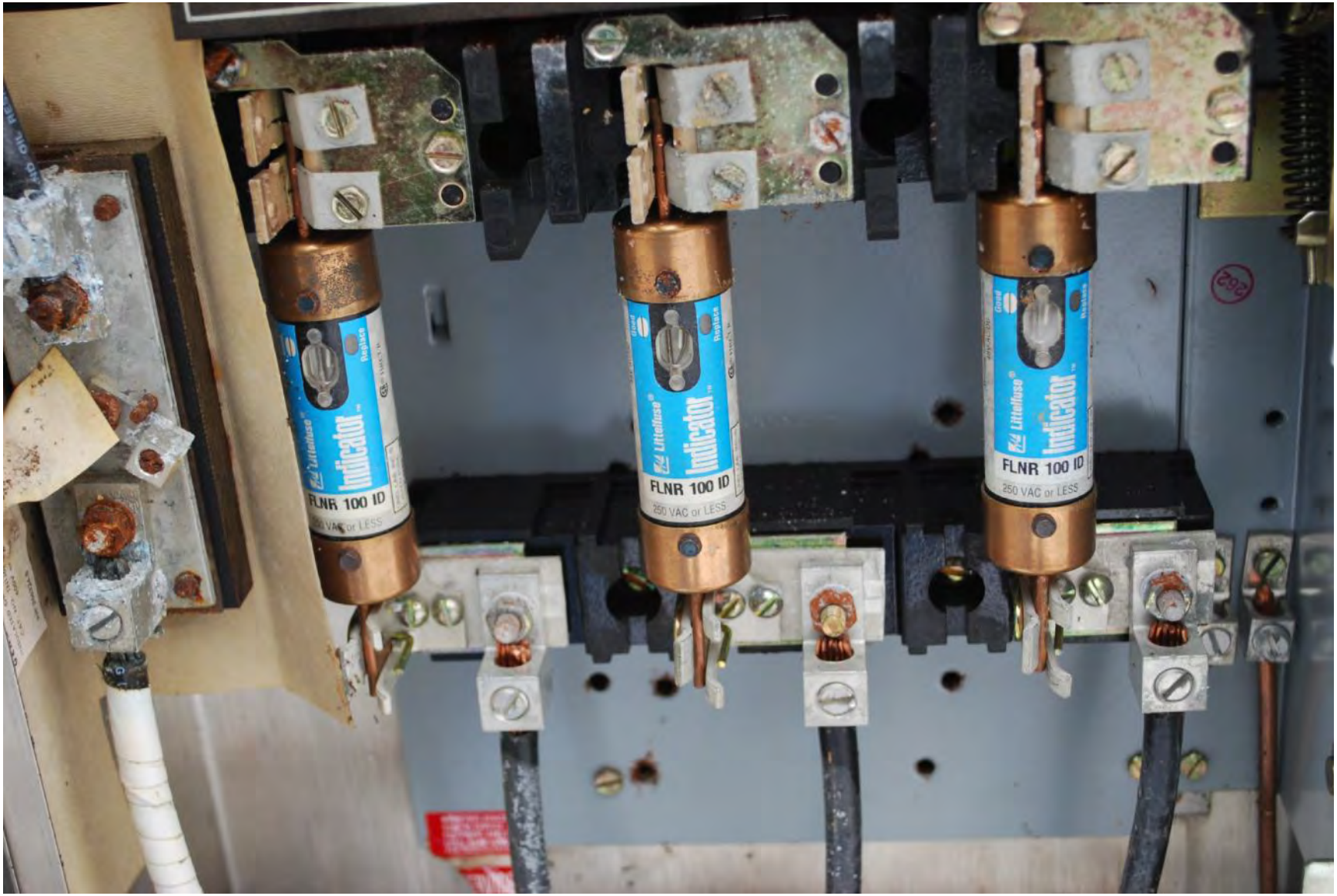
KOHLER
50

City of
Achieving Exc

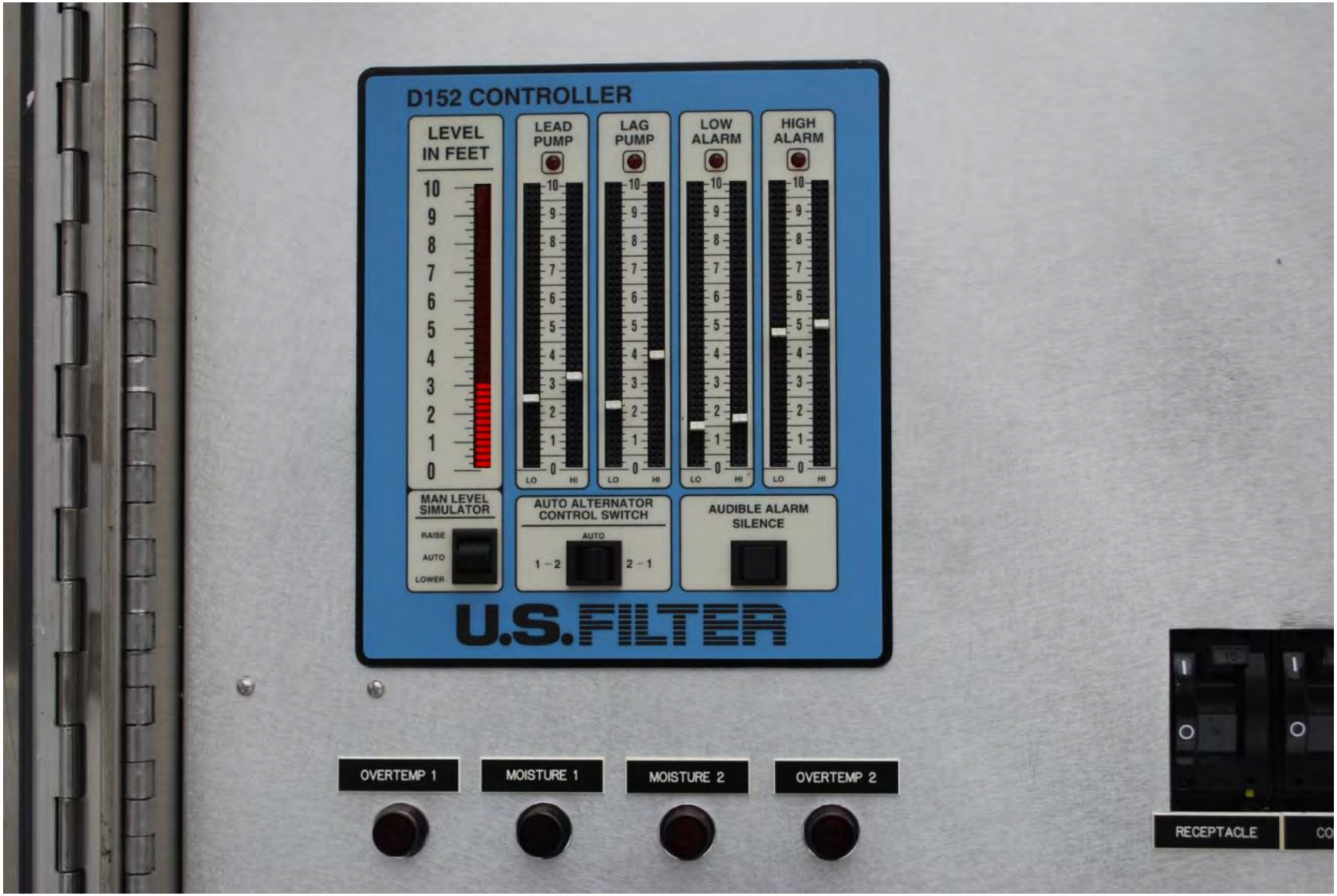
F450

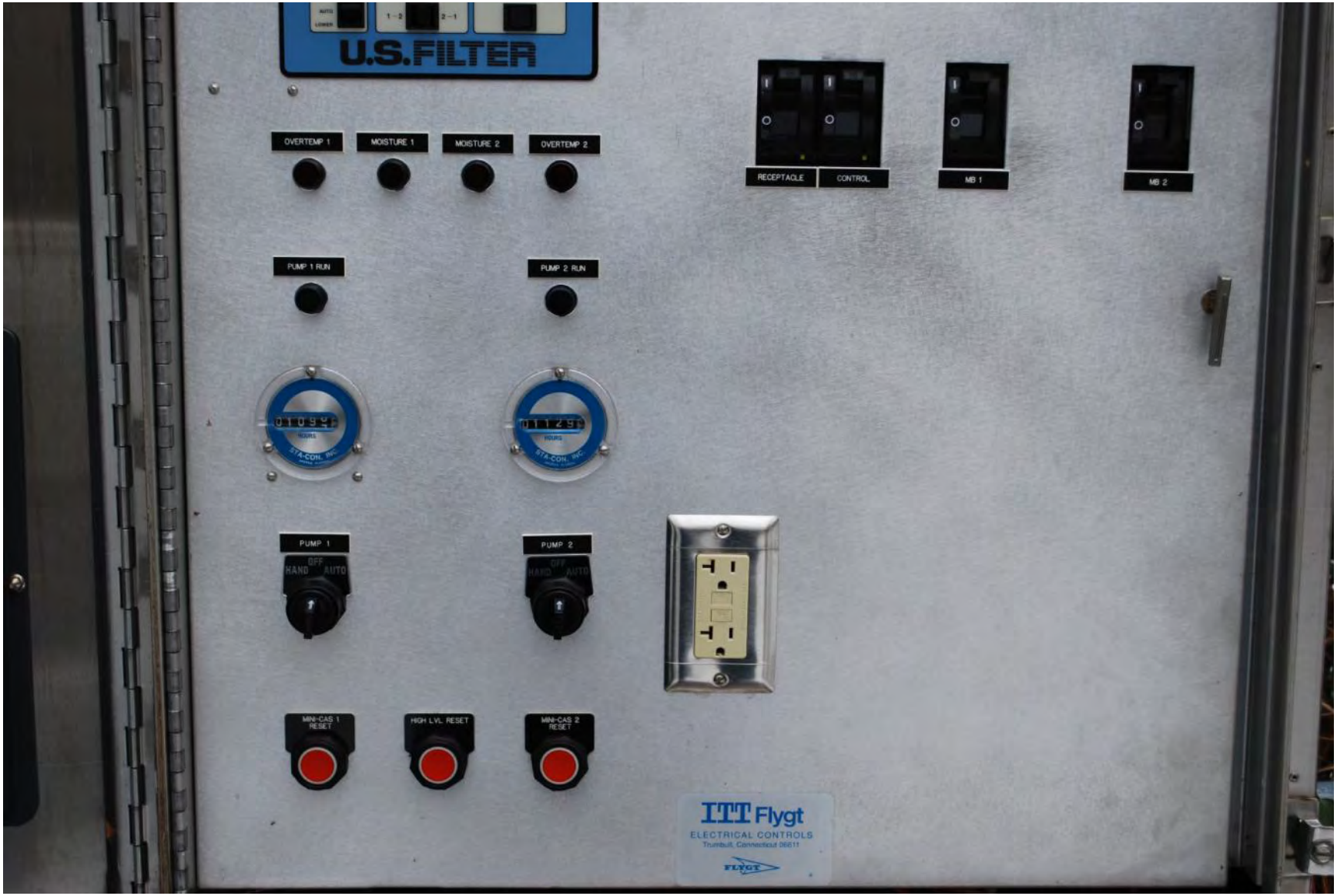
AUTO CRANE

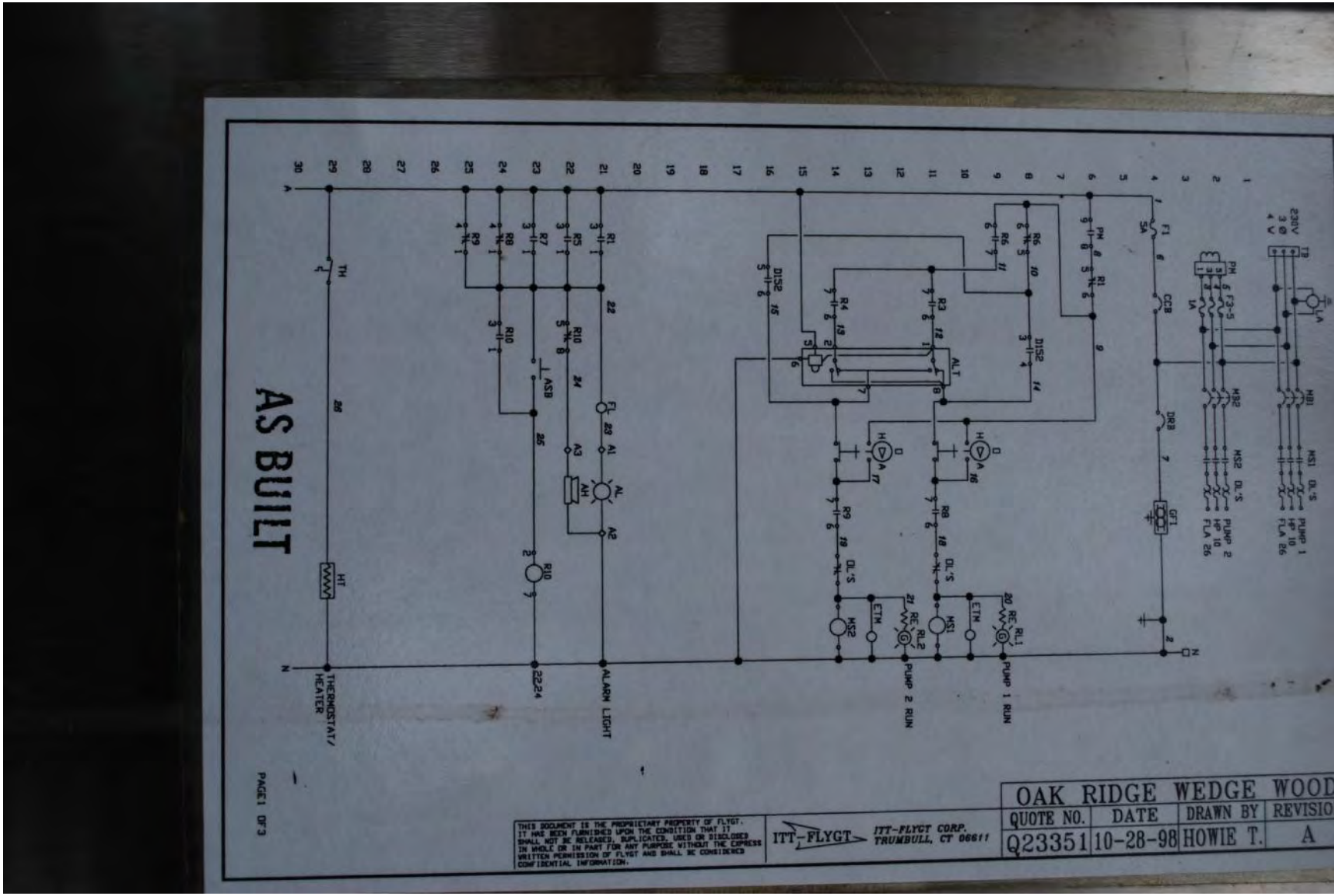
GENERAL ELECTRIC
HEAVY DUTY
L1
L2
L3
LINE
SHIELD
MUST
BE IN PLACE


Littelfuse
Indicator
FLNR 100 ID
250 VAC or LESS

WHEN THIS DEVICE IS
USED AS SERVICE
EQUIPMENT APPLY
LABEL NEAR HANDLE
FOR IDENTIFICATION
LOAD
E841=


D152 CONTROLLER
LEVEL IN FEET
10
9
8
7
6
5
4
3
2
1
0
LEAD PUMP
LAG PUMP
LOW ALARM
HIGH ALARM
LO
HI
MAN LEVEL SIMULATOR
RAISE
AUTO
LOWER
AUTO ALTERNATOR CONTROL SWITCH
AUTO
1 – 2
2 – 1
AUDIBLE ALARM SILENCE
U.S. FILTER
OVERTEMP 1
MOISTURE 1
MOISTURE 2
OVERTEMP 2
RECEPTACLE


U.S.FILTER
OVERTEMP 1
MOISTURE 1
MOISTURE 2
OVERTEMP 2
RECEPTACLE
CONTROL
MB 1
MB 2
PUMP 1 RUN
PUMP 2 RUN
STA-CON, INC.
PUMP 1
OFF
HAND
AUTO
PUMP 2
MINI-CAS 1 RESET
HIGH LVL RESET
MINI-CAS 2 RESET
ITT Flygt
ELECTRICAL CONTROLS


AS BUILT
OAK RIDGE WEDGE WOOD
QUOTE NO. Q23351
DATE 10-28-98
DRAWN BY HOWIE T.
REVISIO A
ITT-FLYGT
ITT-FLYGT CORP.
TRUMBULL, CT 06611
THIS DOCUMENT IS THE PROPRIETARY PROPERTY OF FLYGT. IT HAS BEEN FURNISHED UPON THE CONDITION THAT IT SHALL NOT BE RELEASED, DUPLICATED, USED OR DISCLOSED IN WHOLE OR IN PART FOR ANY PURPOSE WITHOUT THE EXPRESS WRITTEN PERMISSION OF FLYGT AND SHALL BE CONSIDERED CONFIDENTIAL INFORMATION.
PAGE 1 OF 3
THERMOSTAT/ HEATER
ALARM LIGHT
PUMP 2 RUN
PUMP 1 RUN
PUMP 1 HP 10 FLA 26
PUMP 2 HP 10 FLA 26
230V 3 Ø 4 W

AS BUILT
OAK RIDGE WEDGE WOOD
QUOTE NO. Q23351
DATE 10-28-98
DRAWN BY HOWIE T.
REVISION A
ITT-FLYGT
ITT-FLYGT CORP.
TRUMBULL, CT 06611
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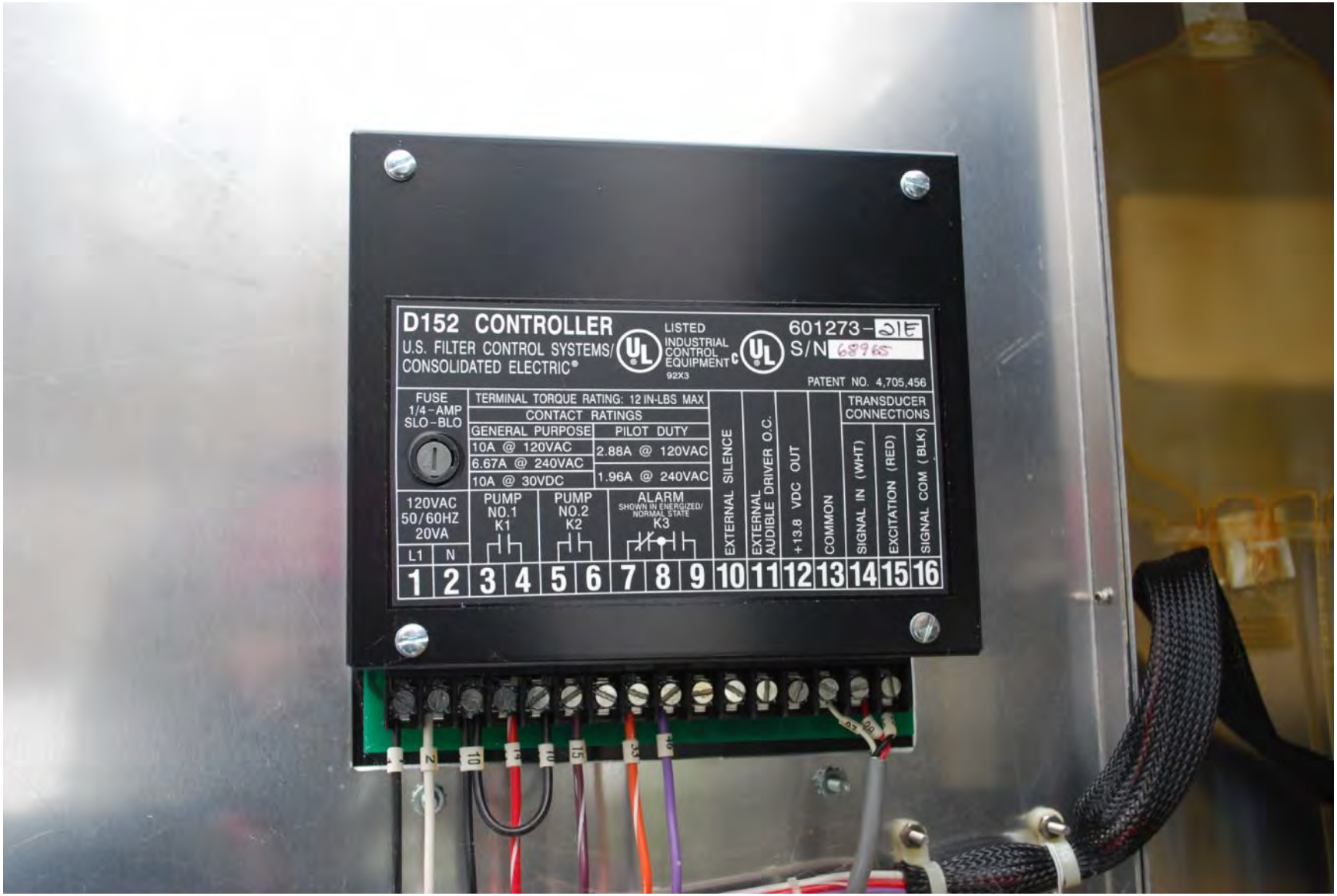
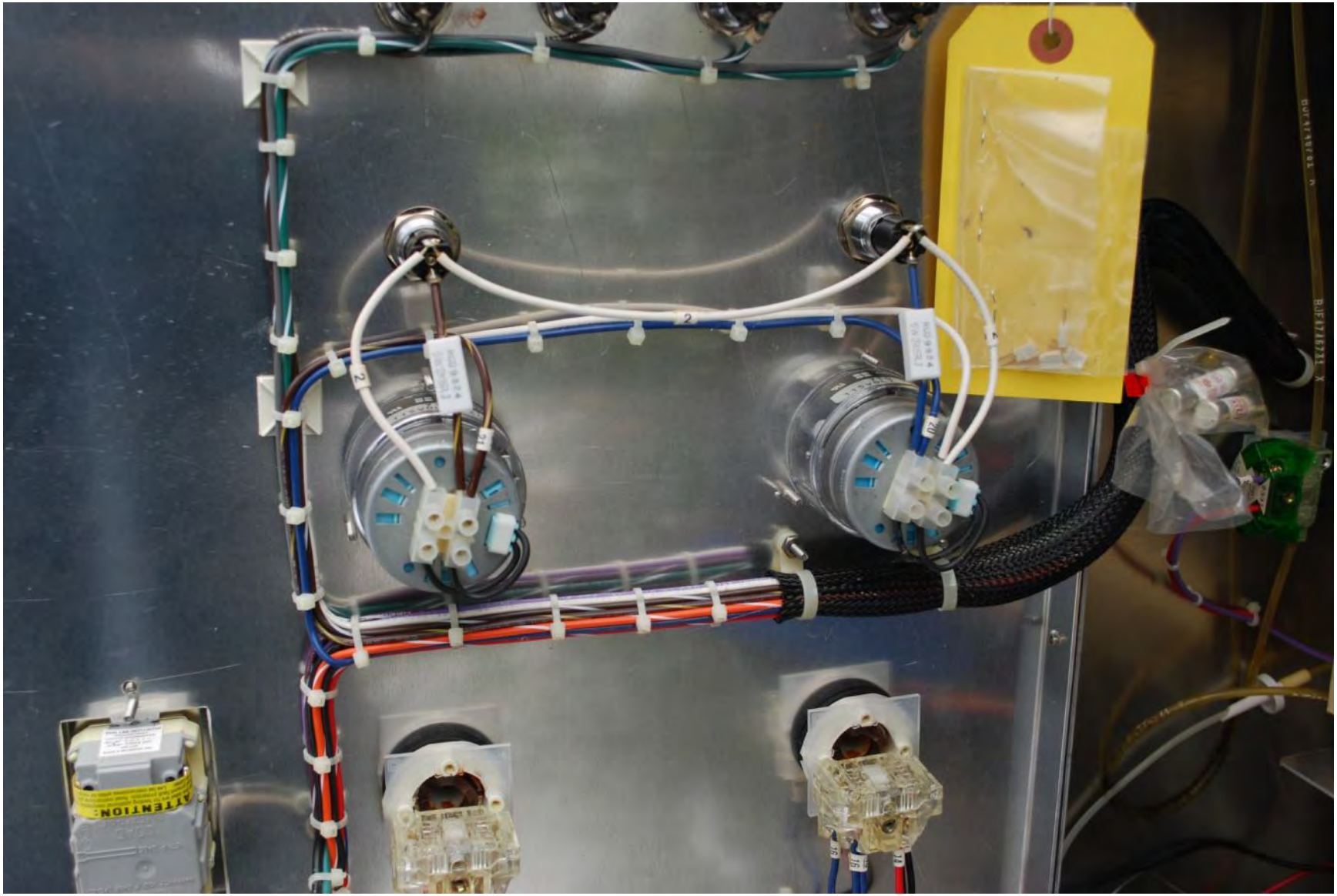
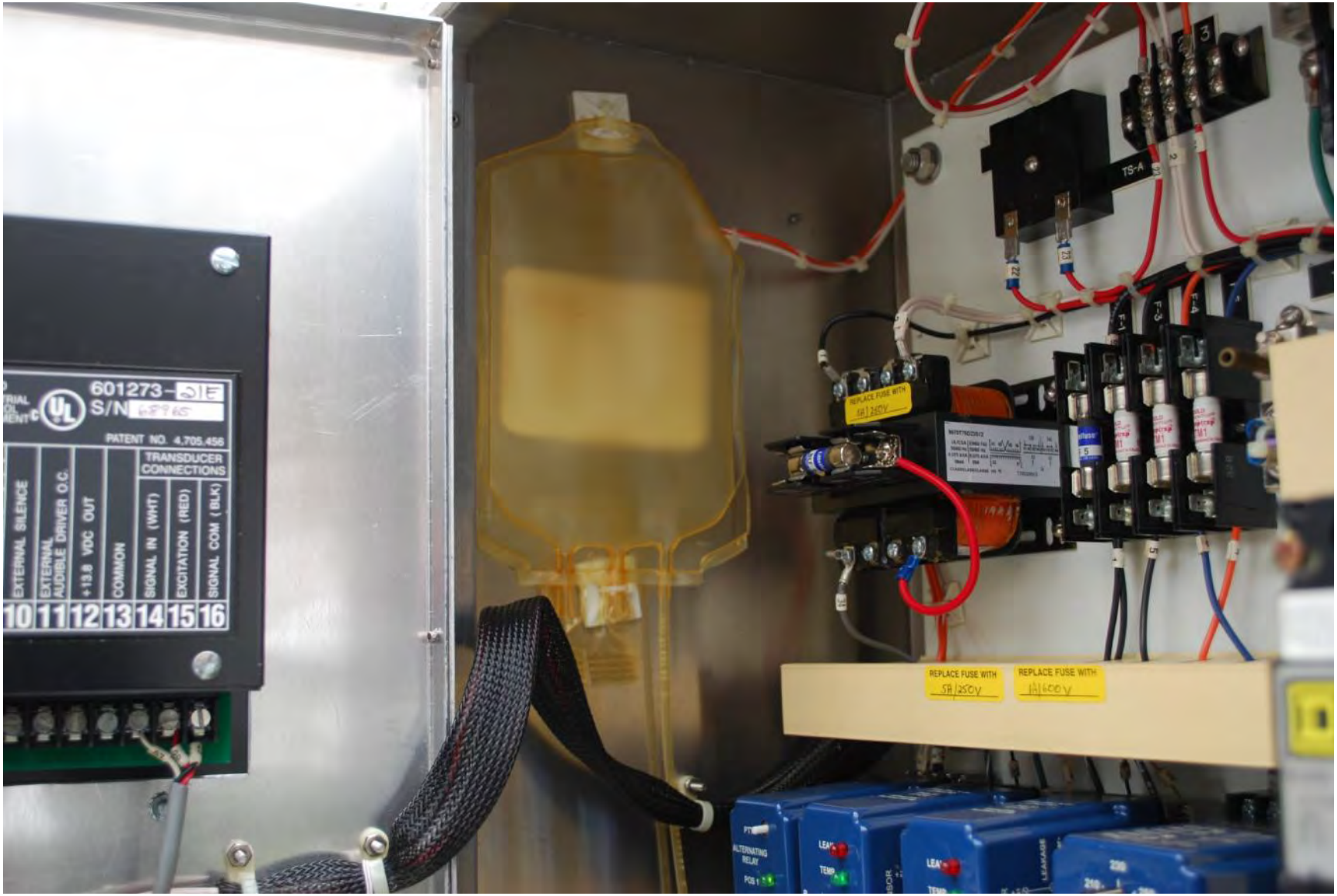
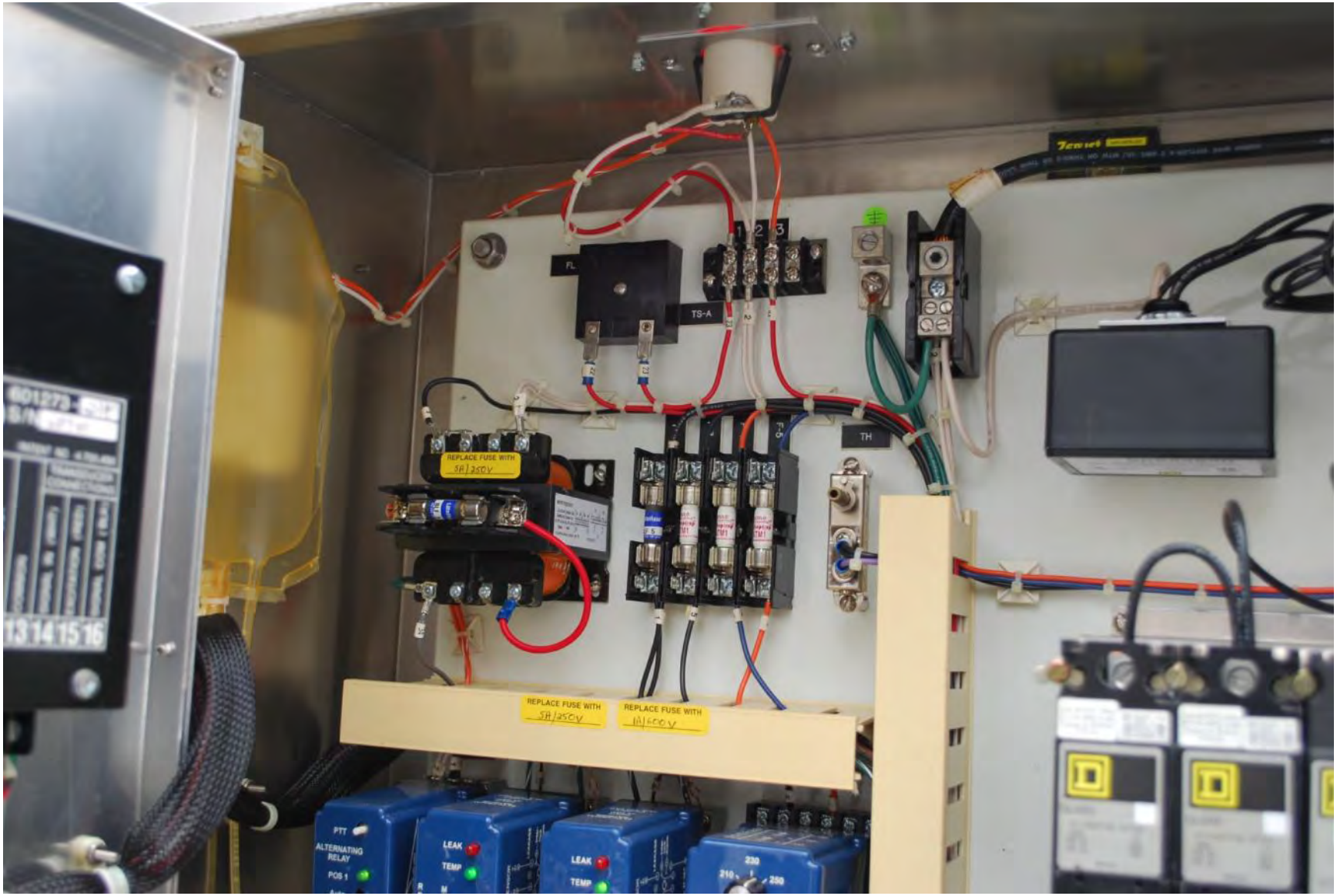
120VAC INPUT
PUMP 1
PUMP 2
ALARM
SIGNAL INPUT (+VDC) (WHT)
EXITATION (+VDC) (RED)
SIGNAL COM (BLK)
D-1502 CONTROLLER
INTRINSICALLY SAFE MODULE 131-3 (60131-453)
SIGNAL
WHITE
EXITATION
RED
COMMON
BLACK
BULLETIN A1000 MOISTURE PROBE SUBMERSIBLE LEVEL TRANSDUCER
CCT
MINICAS 1 (MC1)
MINICAS 2 (MC2)
RESET
THERMALS
SEAL FAIL
OVERTEMP 1
OVERTEMP 2
MOISTURE 1
MOISTURE 2
PAGE 2 OF 3

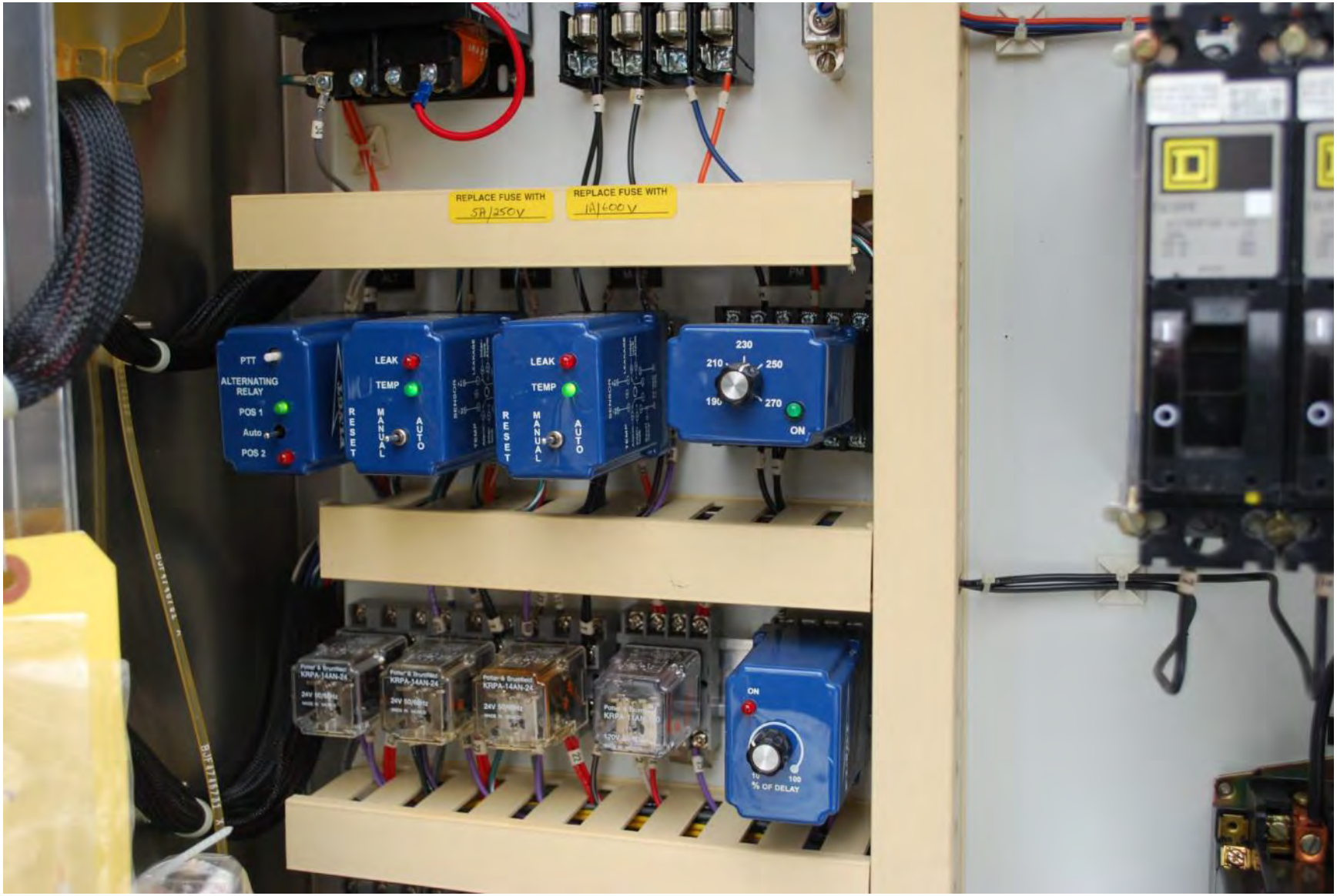
ITT-FLYGT
ITT-FLYGT CORP.
TRUMBULL, CT 06611
QUOTE NO. | DATE | DRAWN BY | REVISION
Q23351 | 10-28-98 | HOWIE T. | A
AS BUILT
REMOTE TO FUTURE SCADA SYSTEM
LAST WIRE 970
OAK RIDGE WEDGE WOOD
QUOTE NO. | DATE | DRAWN BY | REVISION
Q23351 | 10-28-98 | HOWIE T. | A
ITT-FLYGT
ITT-FLYGT CORP.
TRUMBULL, CT 06611
THIS DOCUMENT IS THE PROPRIETARY PROPERTY OF FLYGT. IT HAS BEEN FURNISHED UPON THE CONDITION THAT IT SHALL NOT BE RELEASED, DUPLICATED, USED OR DISCLOSED IN WHOLE OR IN PART FOR ANY PURPOSE WITHOUT THE EXPRESS WRITTEN PERMISSION OF FLYGT AND SHALL BE CONSIDERED CONFIDENTIAL INFORMATION.
PAGE 3 OF 3

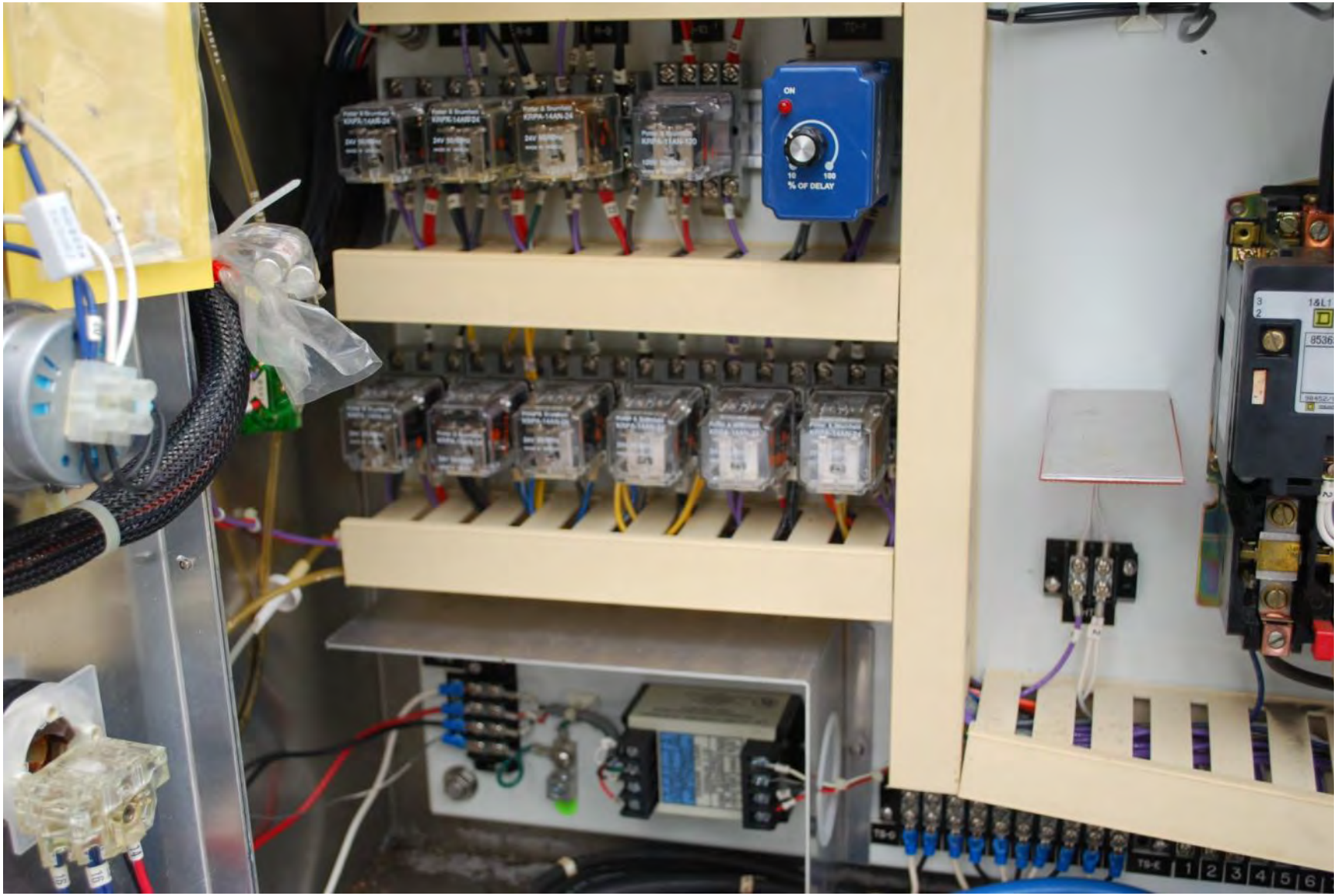

D152 CONTROLLER
U.S. FILTER CONTROL SYSTEMS/
CONSOLIDATED ELECTRIC®
LISTED
INDUSTRIAL
CONTROL
EQUIPMENT
92X3
601273-
S/N
PATENT NO. 4,705,456
FUSE
1/4-AMP
SLO-BLO
TERMINAL TORQUE RATING: 12 IN-LBS MAX
CONTACT RATINGS
GENERAL PURPOSE
PILOT DUTY
10A @ 120VAC
2.88A @ 120VAC
6.67A @ 240VAC
1.96A @ 240VAC
10A @ 30VDC
120VAC
50/60HZ
20VA
L1
N
PUMP
NO.1
K1
PUMP
NO.2
K2
ALARM
SHOWN IN ENERGIZED/
NORMAL STATE
K3
EXTERNAL SILENCE
EXTERNAL AUDIBLE DRIVER O.C.
+13.8 VDC OUT
COMMON
TRANSDUCER
CONNECTIONS
SIGNAL IN (WHT)
EXCITATION (RED)
SIGNAL COM (BLK)
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16

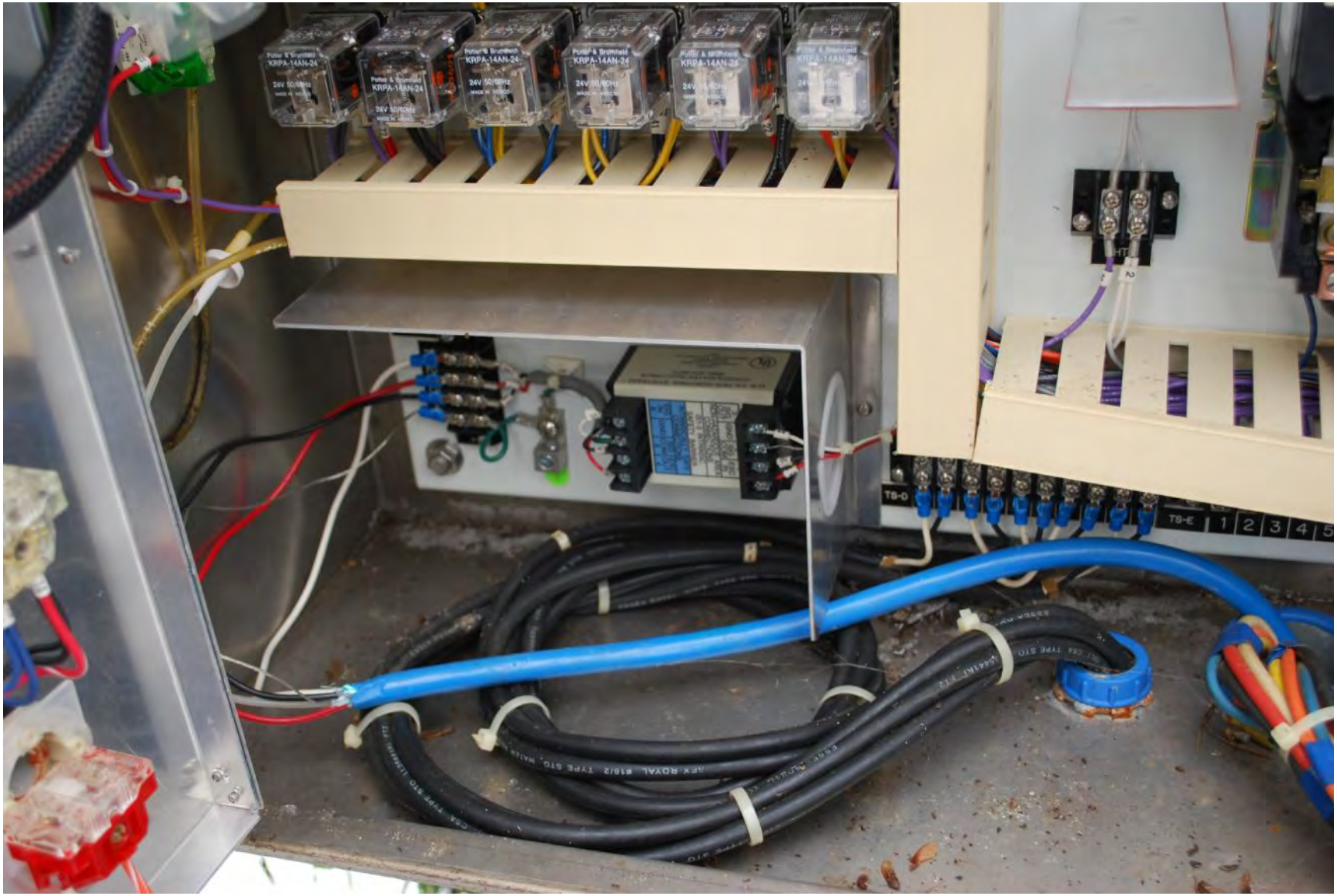

ATTENTION


601273-
S/N
PATENT NO. 4,705,456
TRANSDUCER CONNECTIONS
EXTERNAL SILENCE
EXTERNAL AUDIBLE DRIVER O.C.
+13.8 VDC OUT
COMMON
SIGNAL IN (WHT)
EXCITATION (RED)
SIGNAL COM (BLK)
10 11 12 13 14 15 16
REPLACE FUSE WITH
5A 250V
REPLACE FUSE WITH
1A 600V
TS-A


REPLACE FUSE WITH
5A/250V
REPLACE FUSE WITH
5A/250V
REPLACE FUSE WITH
10A/600V
TS-A
TH
PTT
ALTERNATING RELAY
LEAK
TEMP
LEAK
TEMP


REPLACE FUSE WITH
5A/250V
REPLACE FUSE WITH
1A/600V
PTT
ALTERNATING RELAY
POS 1
Auto
POS 2
LEAK
TEMP
RESET
MANUAL
AUTO
LEAK
TEMP
RESET
MANUAL
AUTO
230
210
250
190
270
ON
ON
% OF DELAY


ON
10
100
% OF DELAY

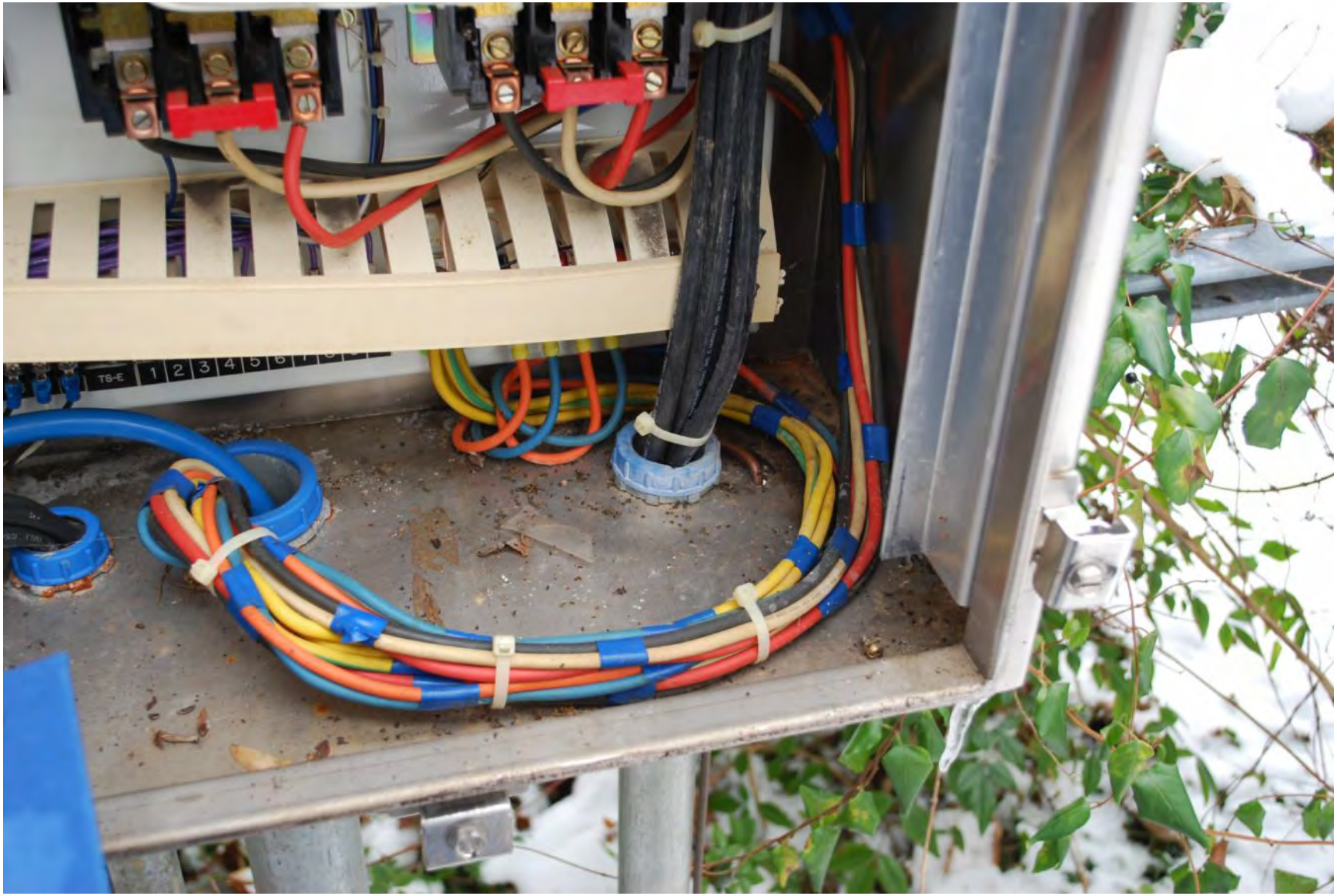

KRPA-14AN-24
TS-0
TS-E
1
2
3
4
5

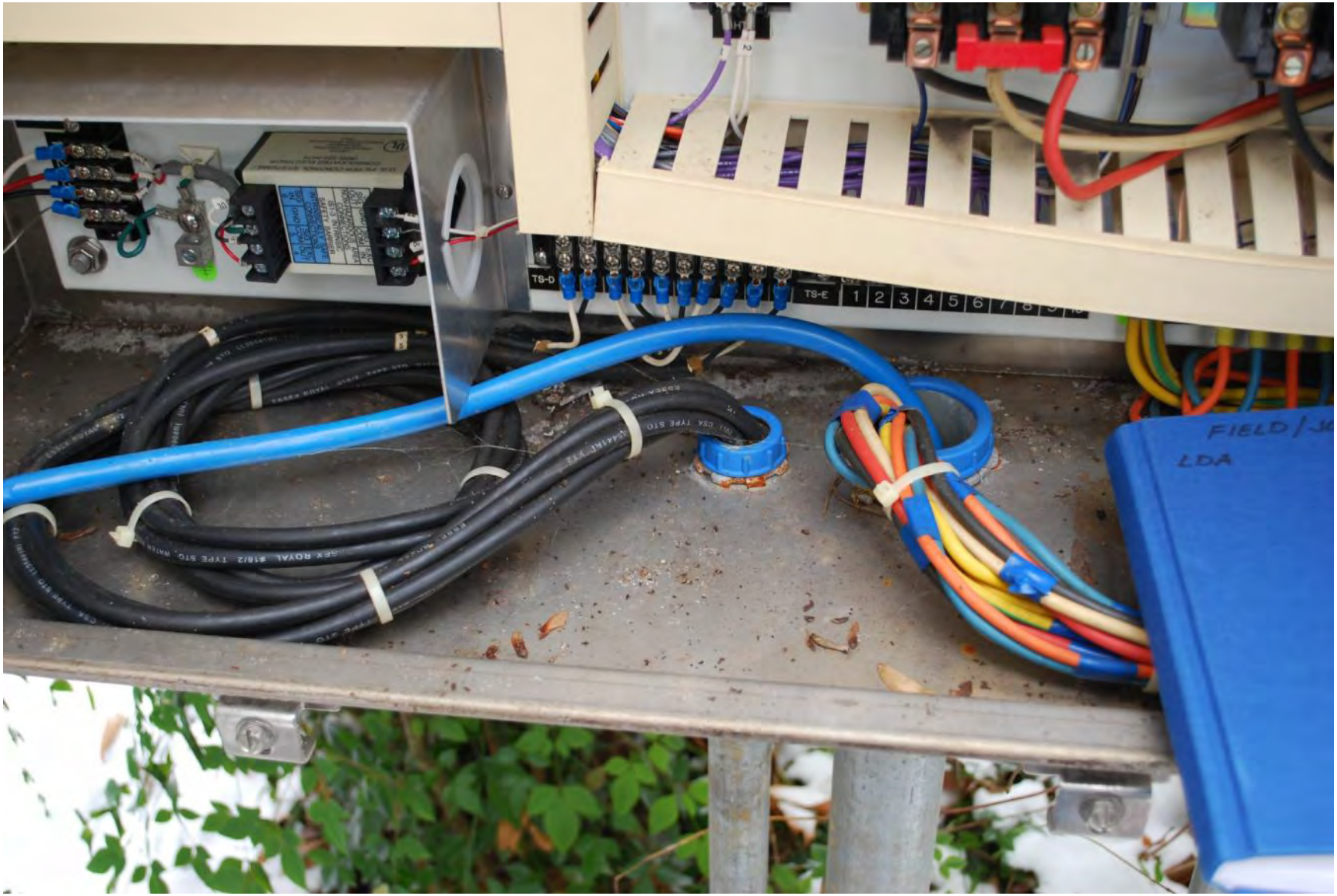
TH
THERMAL-MAGNETIC CIRCUIT BREAKER
THERMAL-MAGNETIC CIRCUIT BREAKER

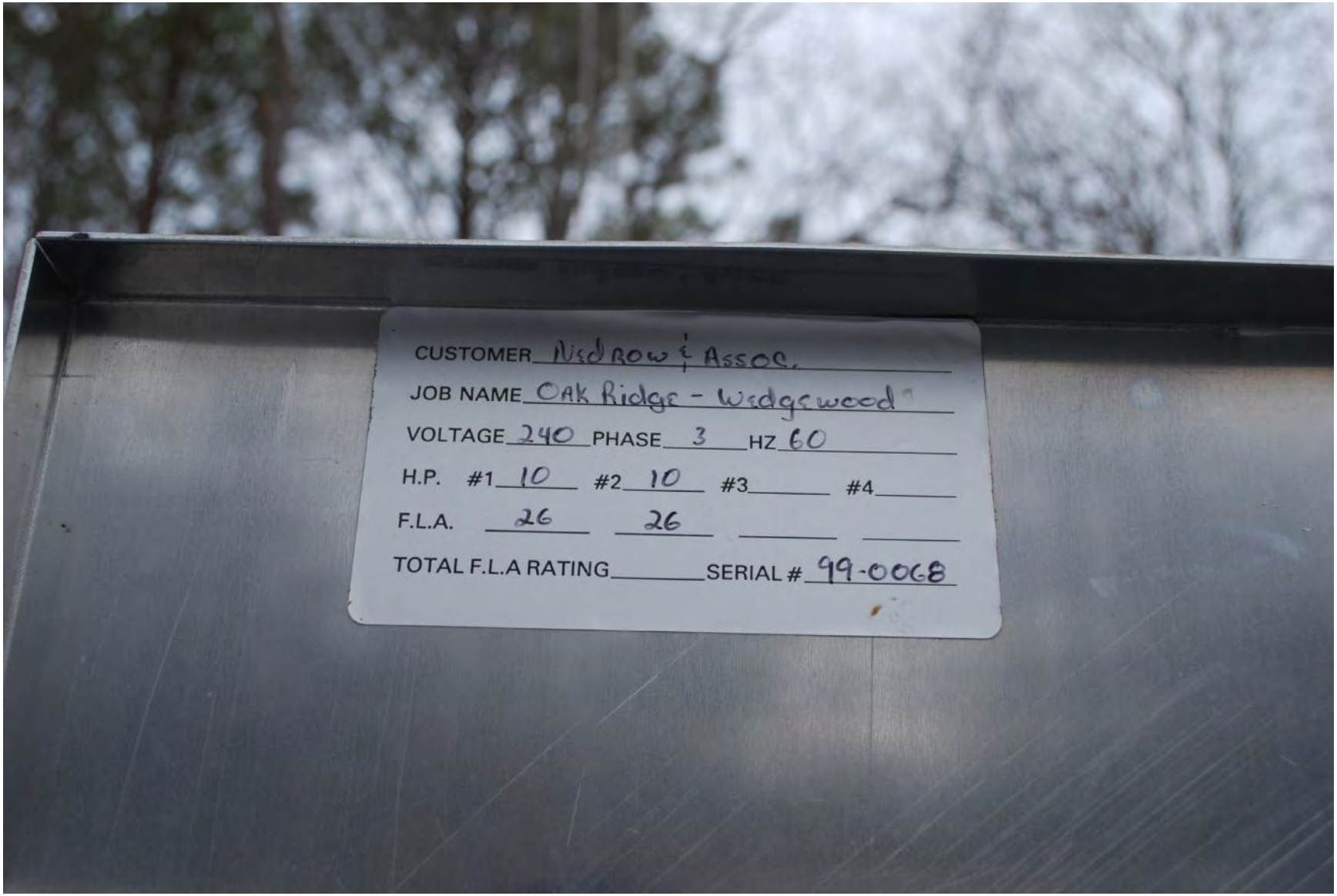
THERMAL-MAGNETIC CIRCUIT BREAKER
THERMAL-MAGNETIC CIRCUIT BREAKER
50A
FAL32050
FAL12015
ON
OFF

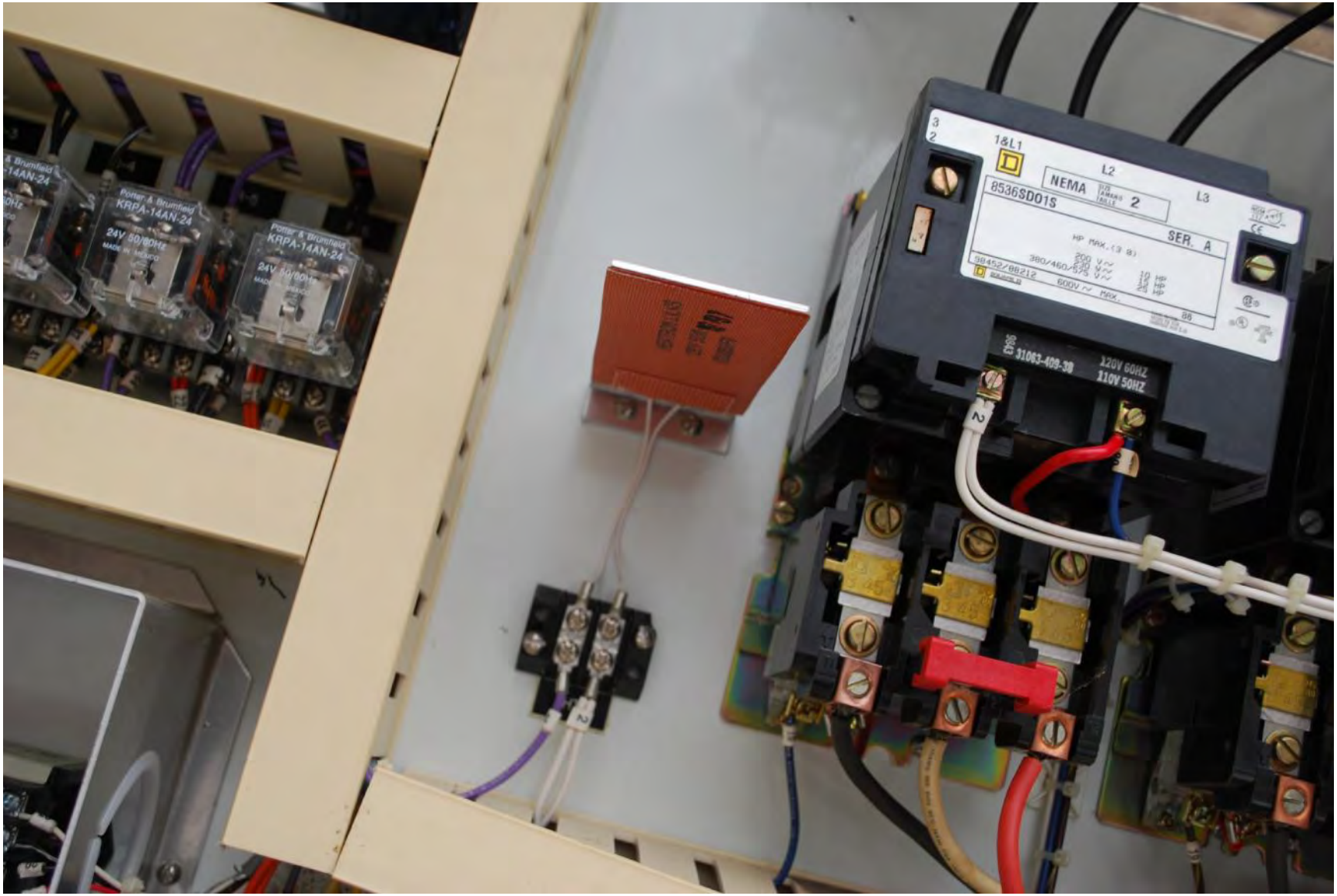
MS-2
NEMA 2
8536SDO1S
SER. A
L1
L2
L3

NEMA 2
8536SD015
SER A
TS-D
TS-E
1 2 3 4 5 6 7 8 9 10

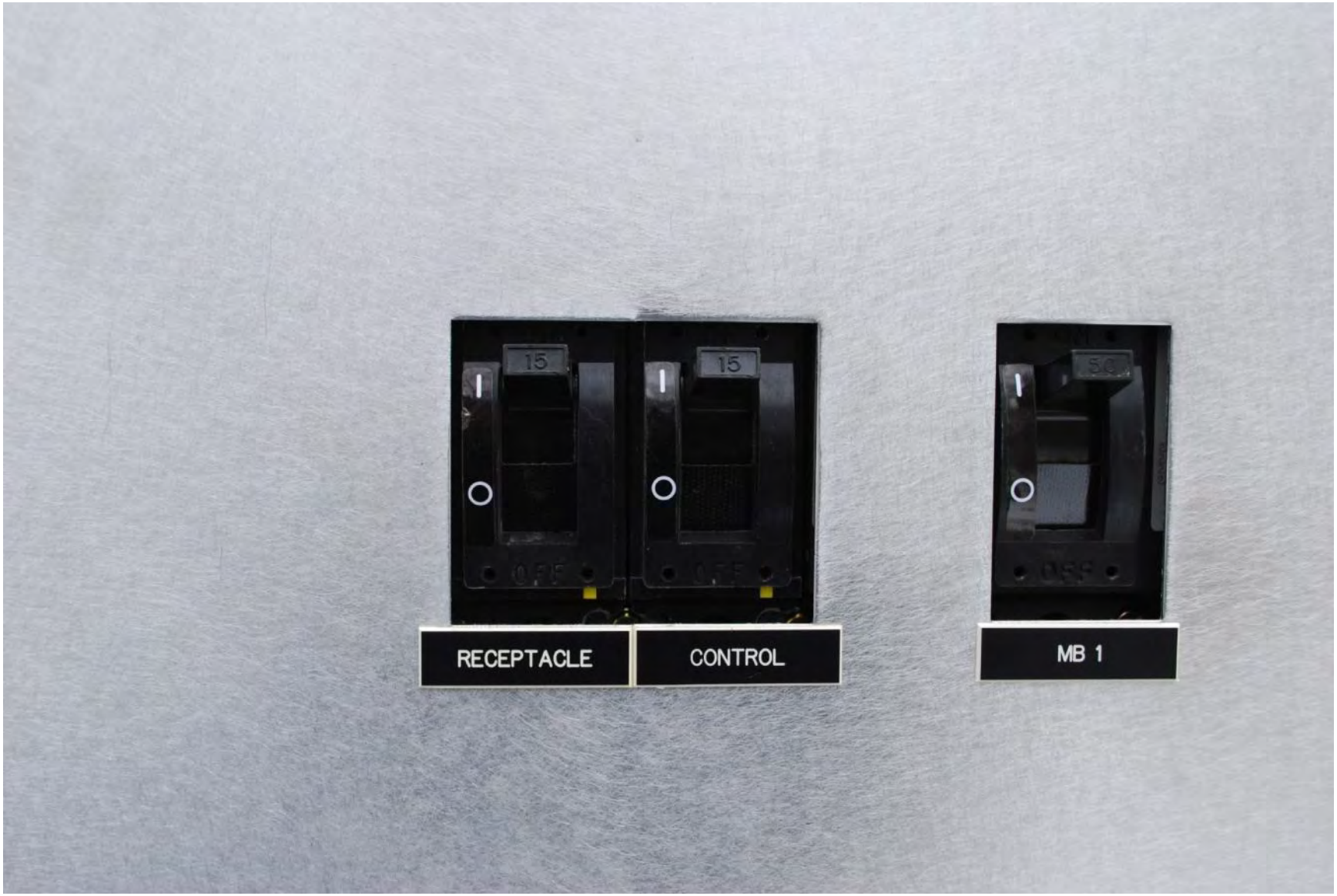

TS-E
1 2 3 4 5


TS-D
TS-E
1 2 3 4 5 6 7
FIELD J
LDA


CUSTOMER Nisbow & Assoc.
JOB NAME Oak Ridge - Wedgewood
VOLTAGE 240 PHASE 3 HZ 60
H.P. #1 10 #2 10 #3 #4
F.L.A. 26 26
TOTAL F.L.A RATING SERIAL # 99-0068


Potter & Brumfield
KRPA-14AN-24
24V 50/60HZ
Potter & Brumfield
KRPA-14AN-24
24V 50/60HZ
1&L1
L2
L3
NEMA
2
8536SD01S
SER. A
600V ~ MAX.
EN60
31063-409-38
120V 60HZ
110V 50HZ

LVL RESET
MINI-CAS 2
RESET
ITT Flygt
ELECTRICAL CONTROLS
Trumbull, Connecticut 06611
FLYGT

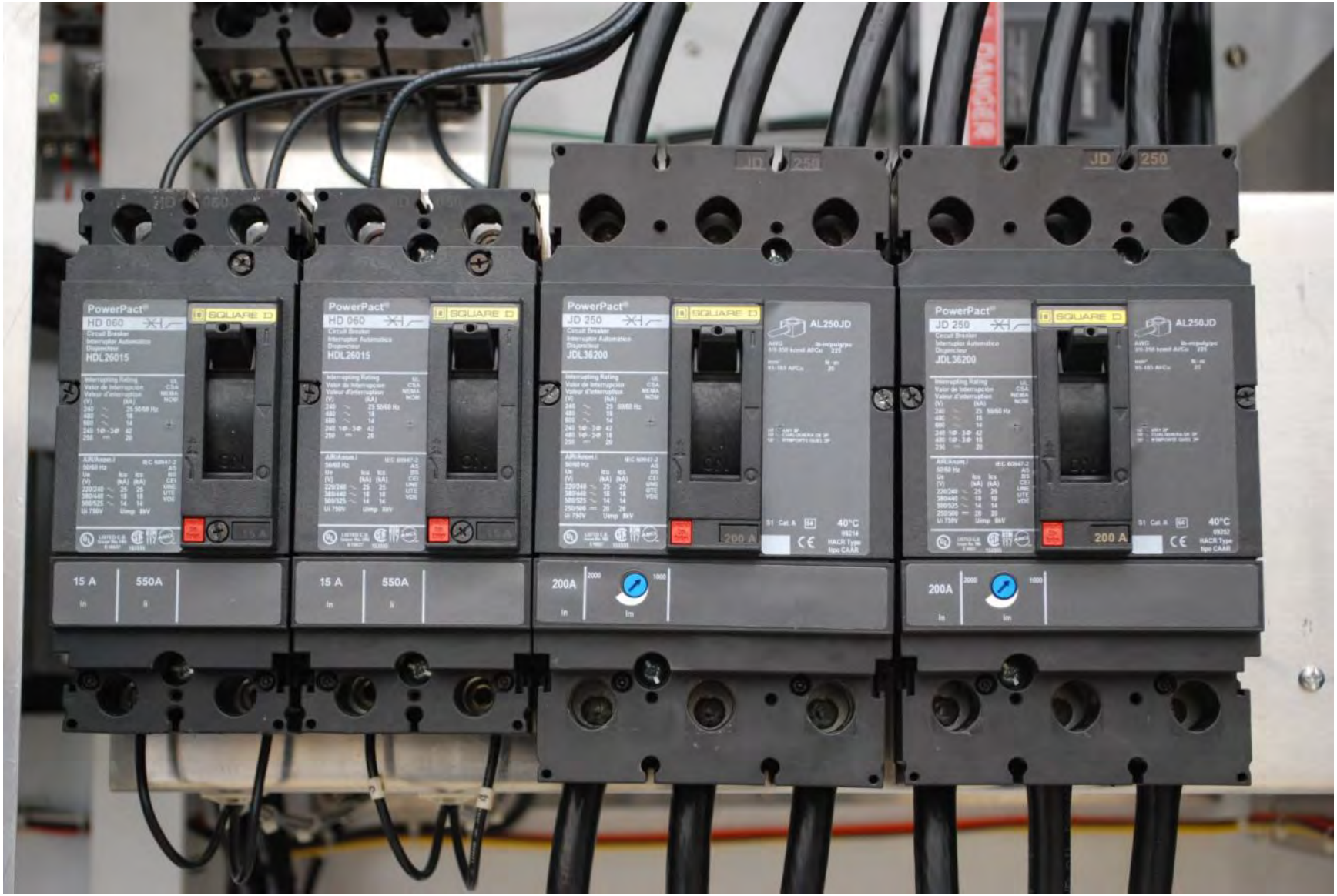

15
15
RECEPTACLE
CONTROL
MB 1

2189
100
240/480
NON PCB

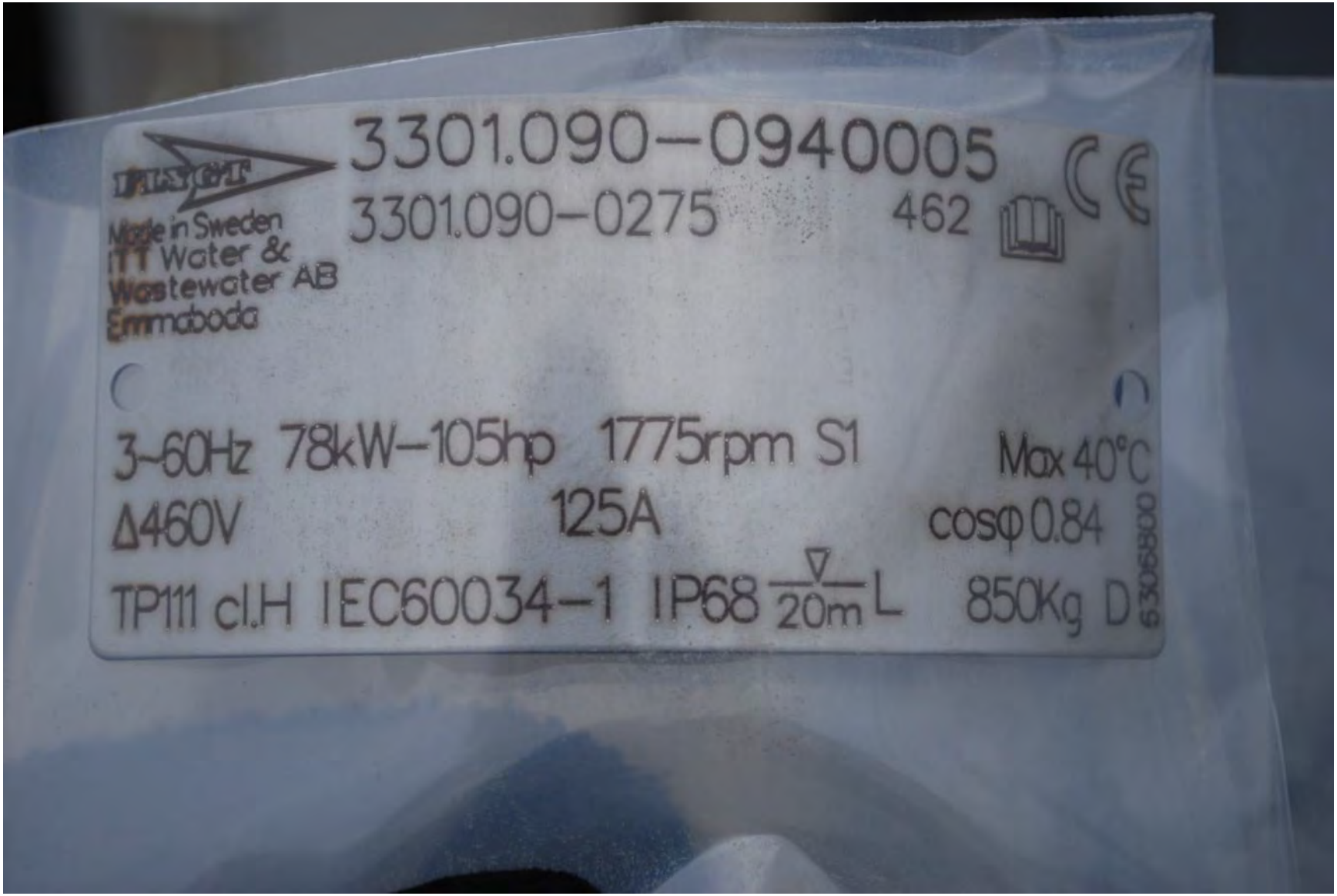
2190
100
240/480
NON-PCB

2096
240/480

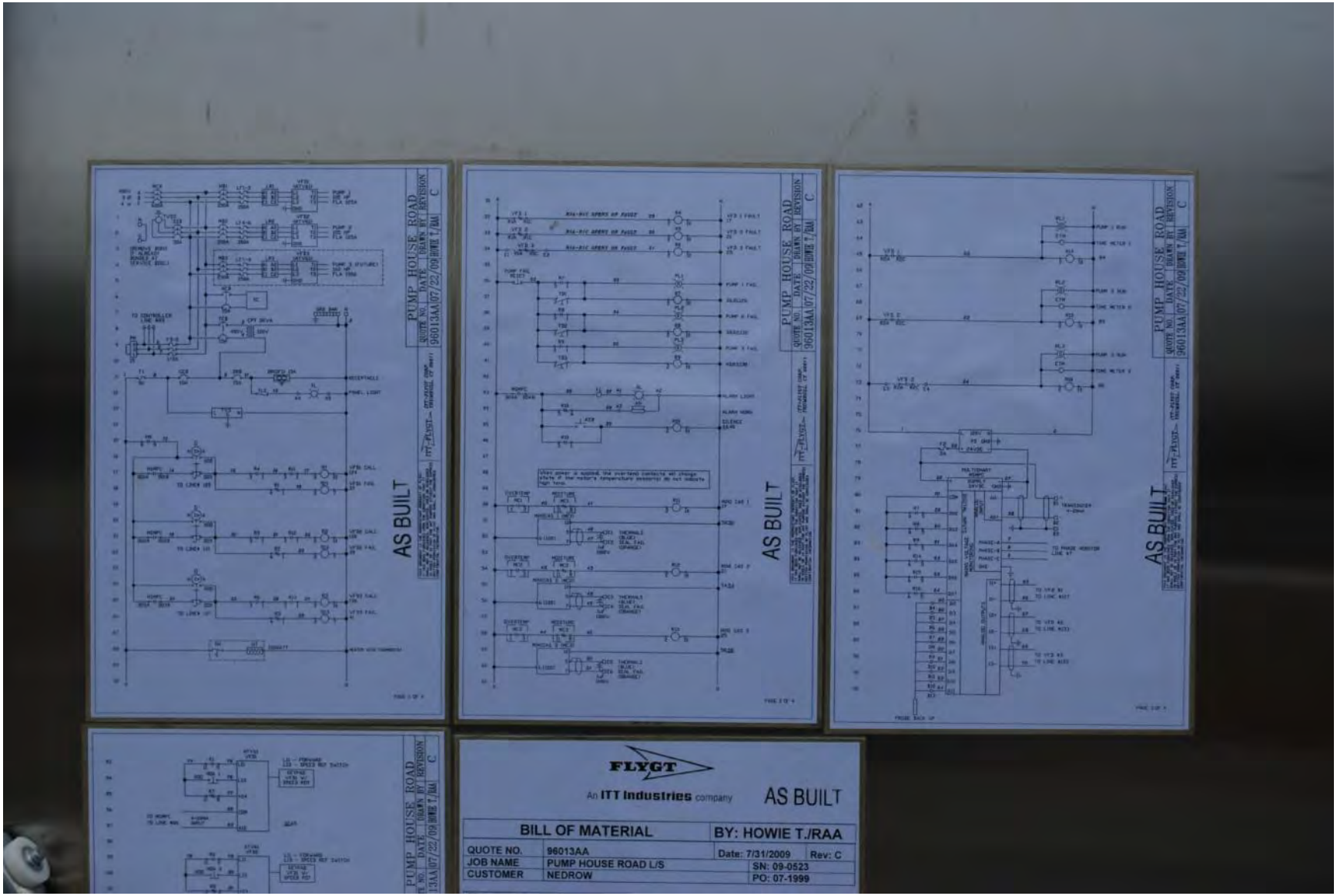
DANGER
OFF

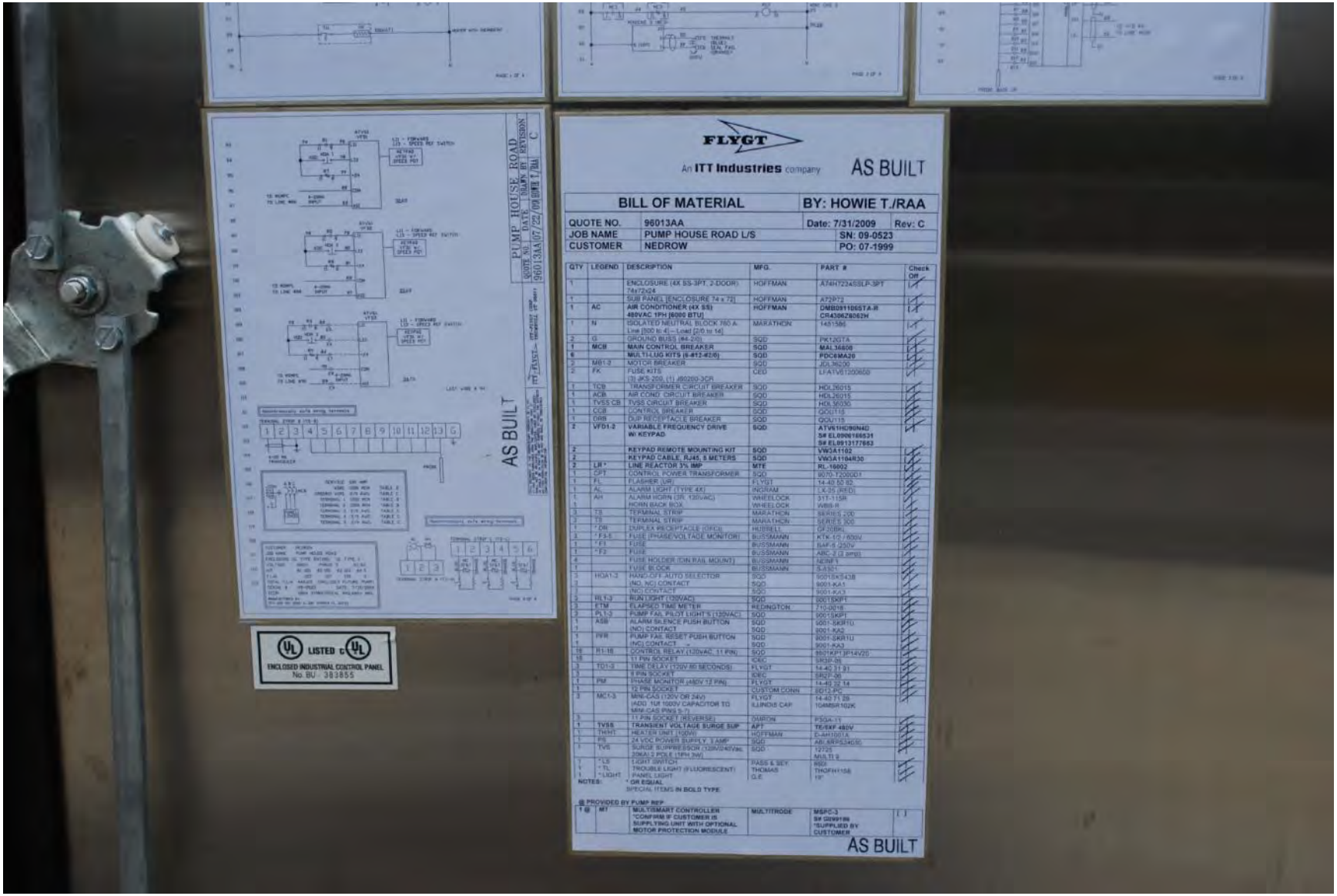

PowerPact
HD 060
HDL26015
SQUARE D
15 A
550A
PowerPact
HD 060
HDL26015
SQUARE D
15 A
550A
PowerPact
JD 250
JDL36200
SQUARE D
AL250JD
200 A
200A
PowerPact
JD 250
JDL36200
SQUARE D
AL250JD
200 A
200A

PowerPact
HD 060
HDL36030
AL150HD
ON
30 A
40°C
30 A
550A
TVSS

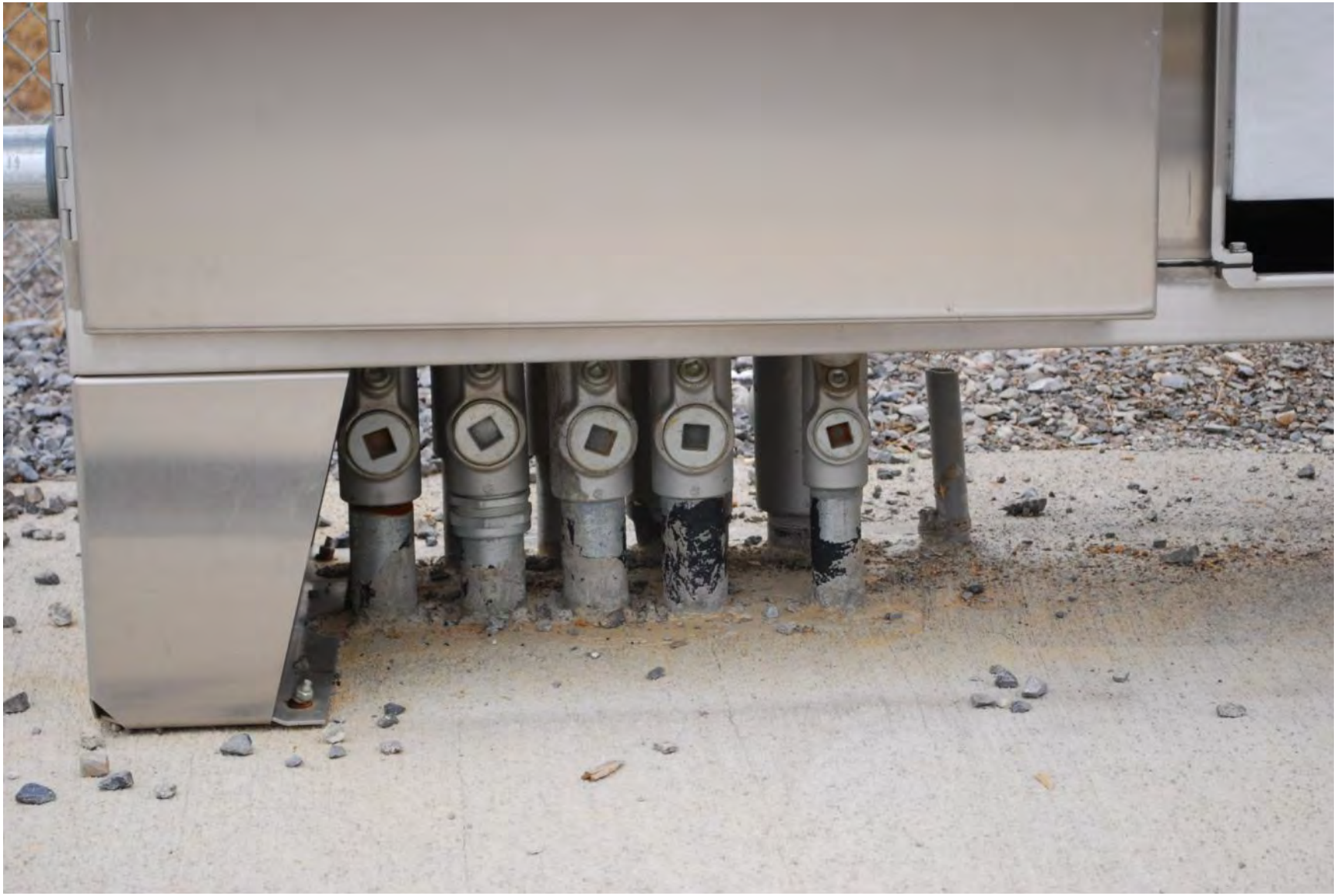

3301.090-0940005
3301.090-0275
462
Made in Sweden
ITT Water & Wastewater AB
Emmaboda
3-60Hz 78kW-105hp 1775rpm S1
Max 40°C
Δ460V
125A
cosφ 0.84
TP111 cl.H IEC60034-1 IP68 20m L
850Kg D
6306800

Max Operating Temp. T3C
Explosion proof for use in
Class I. Div 1. grp C and D
Dust ignition proof for use in
Class II. Div 1. grp E, F and G
FM
APPROVED
Suitable for use in Class III. Div 1. Hazardous Locations
104°F (40°C) Ambient limits
DO NOT OPEN WHILE ENERGIZED
CONNECT THERMAL CONTACTS
6307000


PUMP HOUSE ROAD
AS BUILT
PUMP HOUSE ROAD
AS BUILT
PUMP HOUSE ROAD
AS BUILT
PUMP HOUSE ROAD
FLYGT
An ITT Industries company
AS BUILT
BILL OF MATERIAL
BY: HOWIE T./RAA
QUOTE NO. 96013AA
Date: 7/31/2009
Rev: C
JOB NAME PUMP HOUSE ROAD L/S
SN: 09-0523
CUSTOMER NEDROW
PO: 07-1999


PUMP HOUSE ROAD
AS BUILT
FLYGT
An ITT Industries company
AS BUILT
BILL OF MATERIAL
BY: HOWIE T./RAA
QUOTE NO. 96013AA
Date: 7/31/2009
Rev: C
JOB NAME PUMP HOUSE ROAD L/S
SN: 09-0523
CUSTOMER NEDROW
PO: 07-1999
QTY
LEGEND
DESCRIPTION
MFG.
PART #
Check Off
ENCLOSURE (4X SS-3PT, 2-DOOR) 74x72x24
HOFFMAN
A74H7234SSLP-3PT
SUB PANEL [ENCLOSURE 74 x 72]
HOFFMAN
A72P72
AIR CONDITIONER (4X SS) 460VAC 1PH [6000 BTU]
HOFFMAN
DMID911D6STA-R CR4306Z8062H
ISOLATED NEUTRAL BLOCK 350 A-Link [600 to 4] – Load [2/0 to 14]
MARATHON
1451586
GROUND BUSS (#4-2/0)
SQD
PK12GTA
MAIN CONTROL BREAKER
SQD
MAL36600
MULTI-LUG KITS (6-#12-#2/0)
SQD
PDC6MA20
MOTOR BREAKER
SQD
JDL36200
FUSE KITS (3) JKS 20A, (1) JS02200-3CR
CED
LFATV81200600
TRANSFORMER CIRCUIT BREAKER
SQD
HDL26015
AIR COND. CIRCUIT BREAKER
SQD
HDL26015
TVSS CB
TVSS CIRCUIT BREAKER
SQD
HDL36030
CCB
CONTROL BREAKER
SQD
QOU115
DRB
DUP RECEPTACLE BREAKER
SQD
QOU115
VFD1-2
VARIABLE FREQUENCY DRIVE W/ KEYPAD
SQD
ATV61HC80N4D S# EL0906166531 S# EL0913177863
KEYPAD REMOTE MOUNTING KIT
SQD
VW3A1102
KEYPAD CABLE, RJ45, 5 METERS
SQD
VW3A1104R30
LR *
LINE REACTOR 3% IMP.
MTE
RL-16002
CPT
CONTROL POWER TRANSFORMER
SQD
9070-T2000D1
FL
FLASHER (1PT)
FLYGT
14-40 82 80
AL
ALARM LIGHT (TYPE 4X)
INGRAM
LX-35 (RED)
AH
ALARM HORN (3R, 120VAC) HORN BACK BOX
WHEELOCK
311-115R WB6-R
TS
TERMINAL STRIP
MARATHON
SERIES 200
TB
TERMINAL STRIP
MARATHON
SERIES 300
*DR
DUPLEX RECEPTACLE (GFCI)
HUBBELL
GF20BRA
*F1-5
FUSE (PHASE/VOLTAGE MONITOR)
BUSSMANN
KTK-1/2 / 600V
*F1
FUSE
BUSSMANN
SAF-5 /250V
*F2
FUSE
BUSSMANN
ABC-2 (2 amp)
FUSE HOLDER (DIN RAIL MOUNT)
BUSSMANN
NEMF1
FUSE BLOCK
BUSSMANN
S-4301
HOA1-3
HAND-OFF-AUTO SELECTOR (NO, NC) CONTACT (NO) CONTACT
SQD
9001SK543B 9001-KA1 9001-KA1
RLT-3
RUN LIGHT (120VAC)
SQD
9001SKPT
ETM
ELAPSED TIME METER
REDINGTON
710-0018
PLT-3
PUMP FAIL PILOT LIGHT 5 (120VAC)
SQD
9001SKPT
ASB
ALARM SILENCE PUSH BUTTON (NO) CONTACT
SQD
9001-SKRTU 9001-KA2
PFR
PUMP FAIL RESET PUSH BUTTON (NC) CONTACT
SQD
9001-SKRTU 9001-KA3
R1-16
CONTROL RELAY (120vAC, 11 PIN)
SQD
8501KPT3P14V20
11 PIN SOCKET
IDEC
SR3P-06
TD1-3
TIME DELAY (120V 60 SECONDS)
FLYGT
14-40 31 91
8 PIN SOCKET
IDEC
SR2P-06
PM
PHASE MONITOR (460V 12 PIN)
FLYGT
14-40 32 14
12 PIN SOCKET
CUSTOM CONN
8012-PC
MC1-3
MINI-CAS (120V OR 24V) (ADD .1UF 1000V CAPACITOR TO MINI-CAS (PINS 5-7)
FLYGT ILLINOIS CAP
14-40 71 59 1GMSR102K
11 PIN SOCKET (REVERSE)
OMRON
P3GA-11
TVSS
TRANSIENT VOLTAGE SURGE SUP.
APT
TE/EXF 480V
THM1
HEATER UNIT (120W)
HOFFMAN
D-AH1001A
PS
24 VDC POWER SUPPLY, 3 AMP
SQD
ABL 8RPS24030
TVS
SURGE SUPPRESSOR (120/240Vac 20KA) 2 POLE (1PH 3W)
SQD
12725 MULTI 9
*LS
LIGHT SWITCH
PASS & SEY
8502
*TL
TROUBLE LIGHT (FLUORESCENT)
THOMAS
THOFH115S
*LIGHT
PANEL LIGHT
G.E.
NOTES:
* OR EQUAL
SPECIAL ITEMS IN BOLD TYPE
@ PROVIDED BY PUMP REP
1 @ MT
MULTISMART CONTROLLER *CONFIRM IF CUSTOMER IS SUPPLYING UNIT WITH OPTIONAL MOTOR PROTECTION MODULE
MULTITRODE
MSPC-3 S# G0909186 *SUPPLIED BY CUSTOMER
AS BUILT
LISTED
ENCLOSED INDUSTRIAL CONTROL PANEL
No. BU- 383855

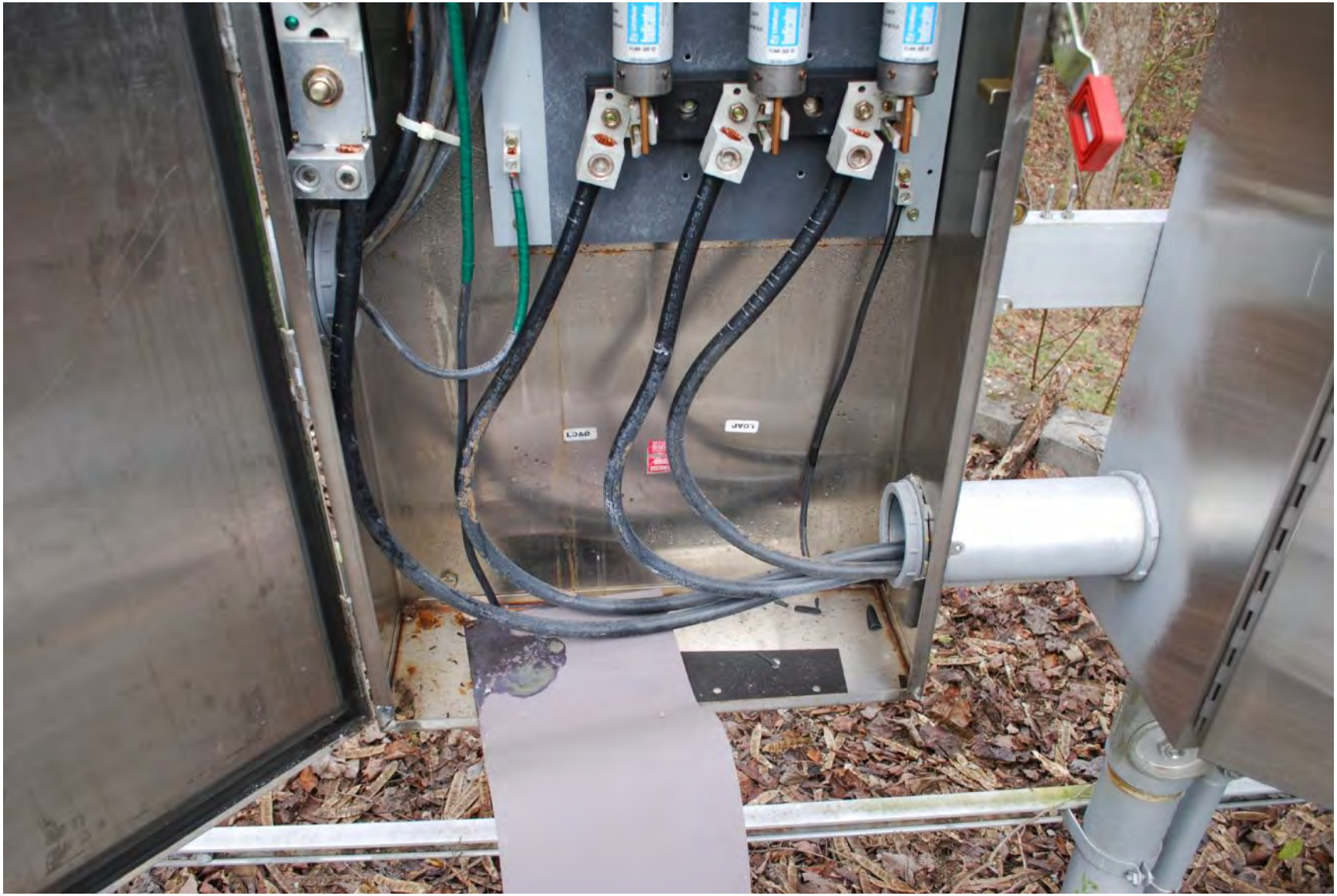
FLYGT

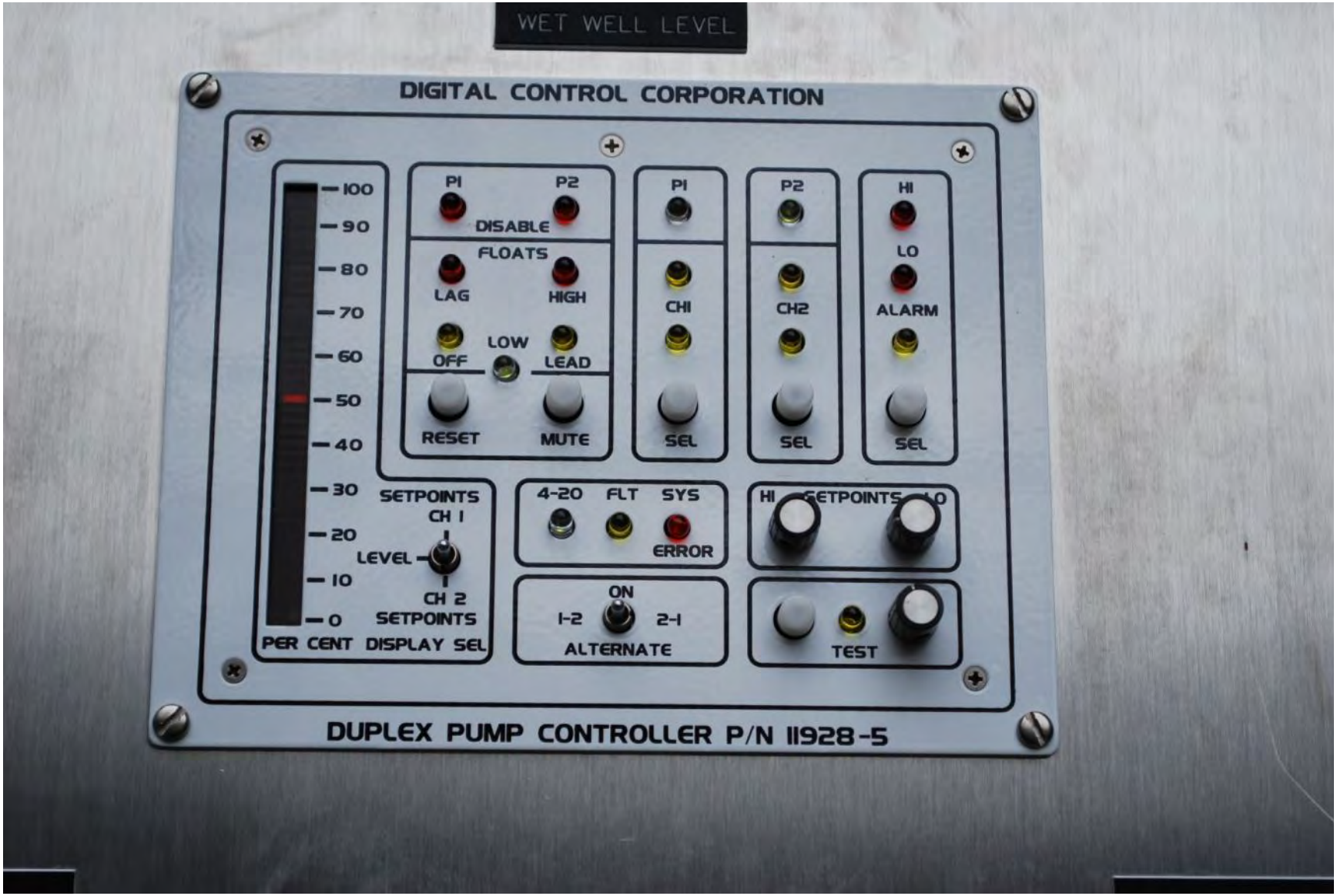


OSHUT
ZURIK

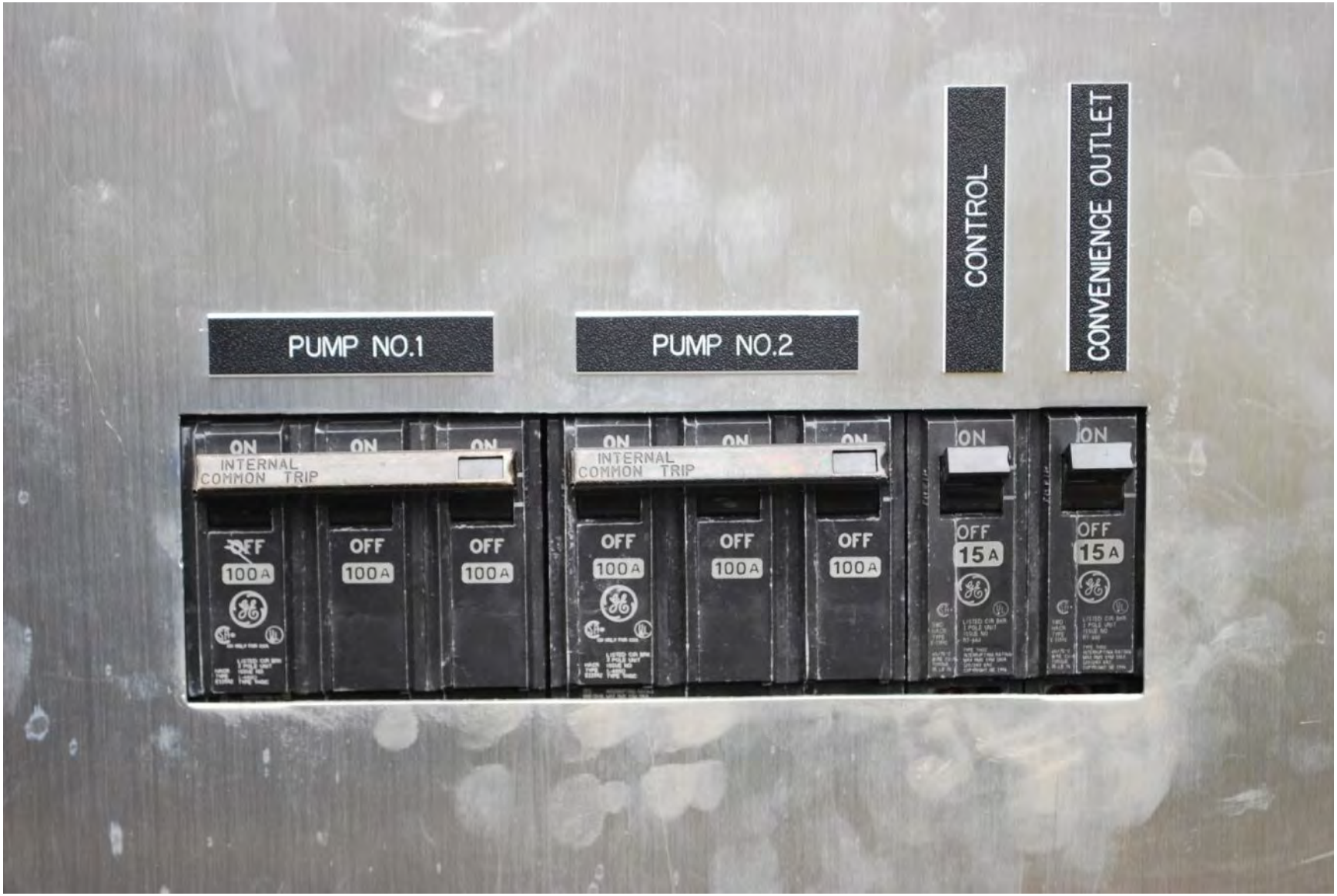
DEZURIK
SHUT

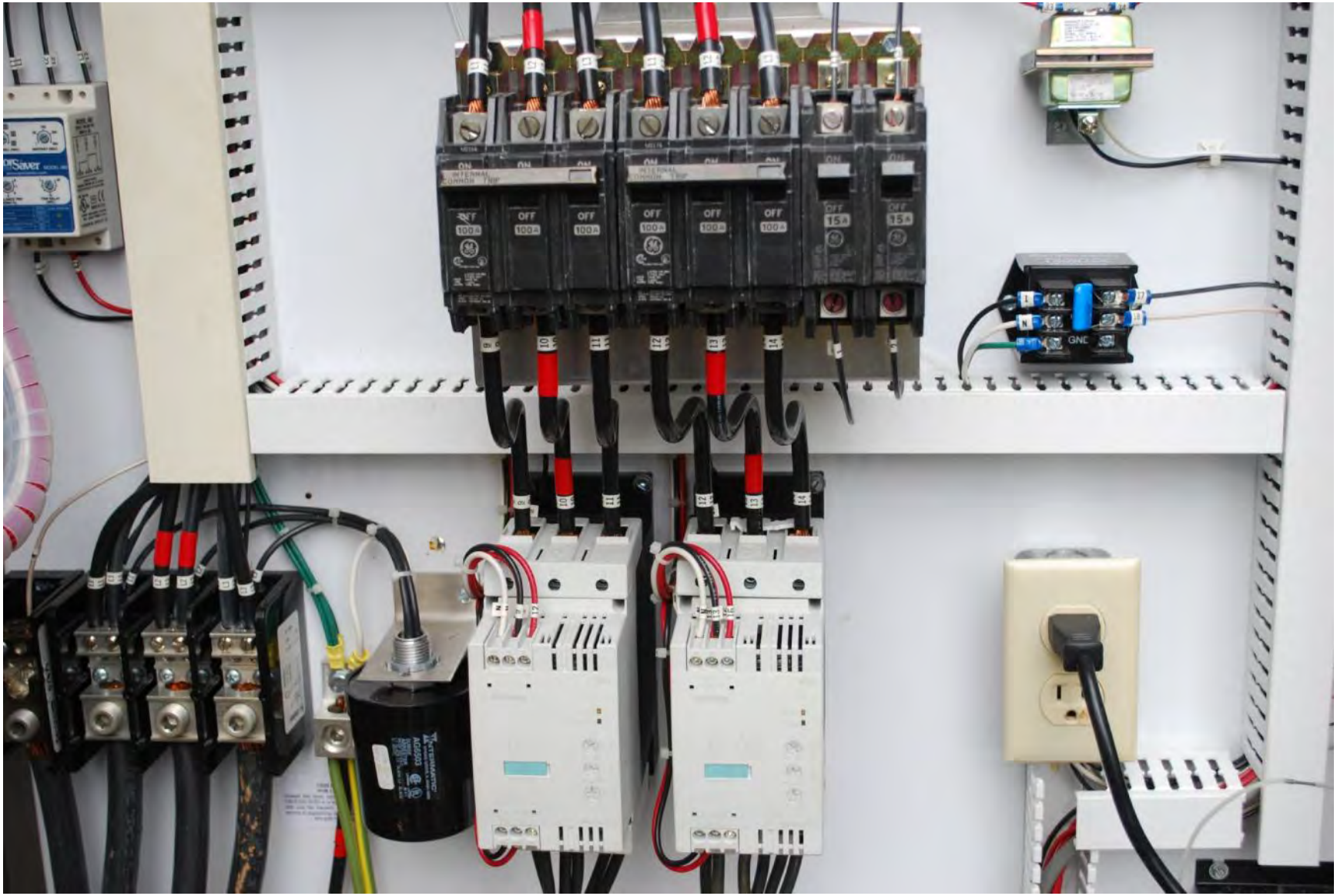
DEZURIK
SHUT




WET WELL LEVEL
DIGITAL CONTROL CORPORATION
100
90
80
70
60
50
40
30
20
10
0
PER CENT
SETPOINTS
CH 1
LEVEL
CH 2
SETPOINTS
DISPLAY SEL
P1
P2
DISABLE
FLOATS
LAG
HIGH
OFF
LOW
LEAD
RESET
MUTE
P1
CH1
SEL
P2
CH2
SEL
HI
LO
ALARM
SEL
4-20
FLT
SYS
ERROR
HI
SETPOINTS
LO
ON
1-2
2-1
ALTERNATE
TEST
DUPLEX PUMP CONTROLLER P/N 11928-5

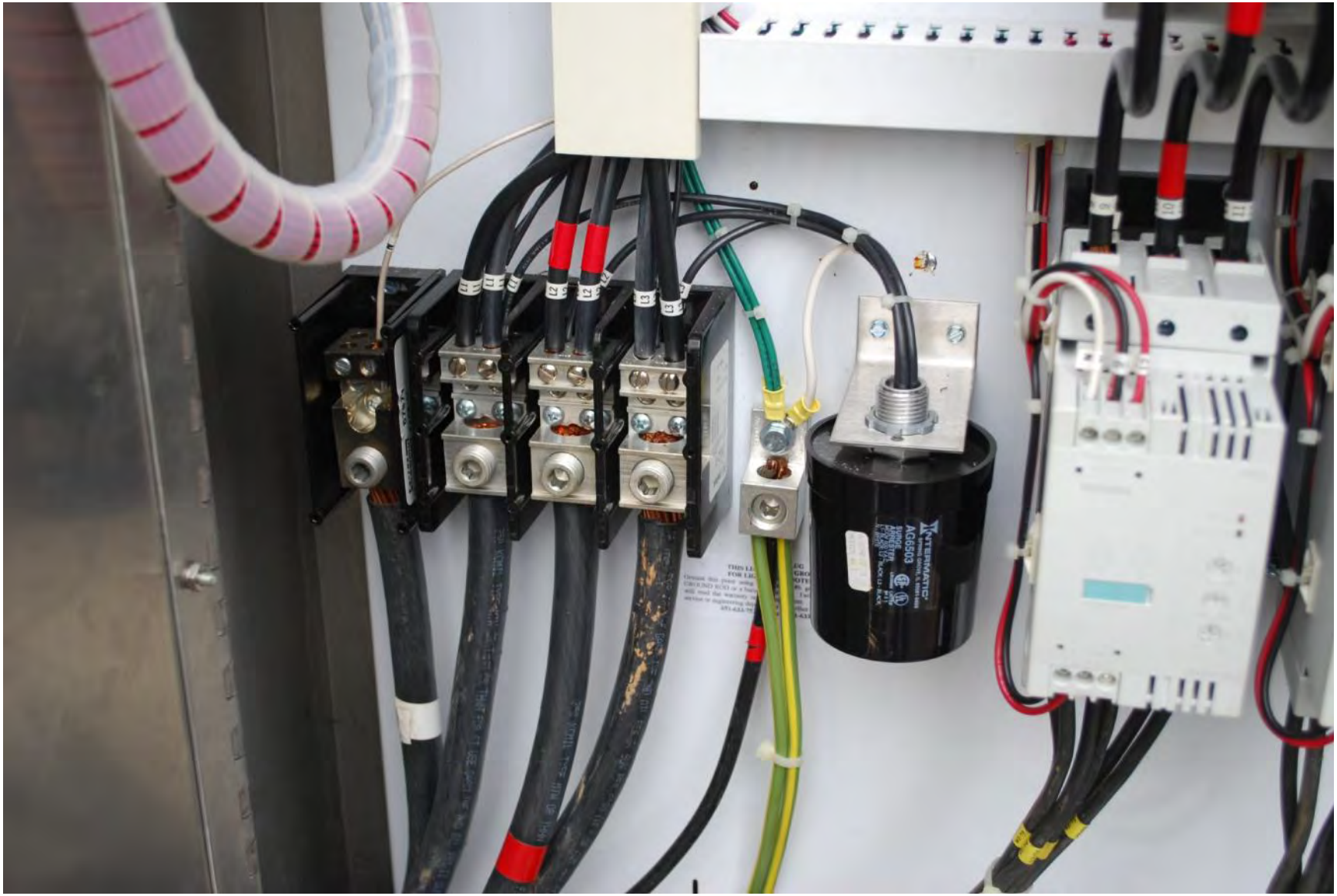
DUPLEX PUMP CONTROLLER P/N 11928-S
PUMP NO.1
RUNNING
SEAL FAIL
OVERTEMP.
HAND OFF AUTO
REDUNDANT FLOAT SYSTEM
OFF - ON
PUMP NO.2
RUNNING
SEAL FAIL
OVERTEMP.
HAND OFF AUTO
CONTROL
VENIENCE OUTLET


PUMP NO.1
PUMP NO.2
CONTROL
CONVENIENCE OUTLET
INTERNAL COMMON TRIP
INTERNAL COMMON TRIP
ON
OFF
100A
15A

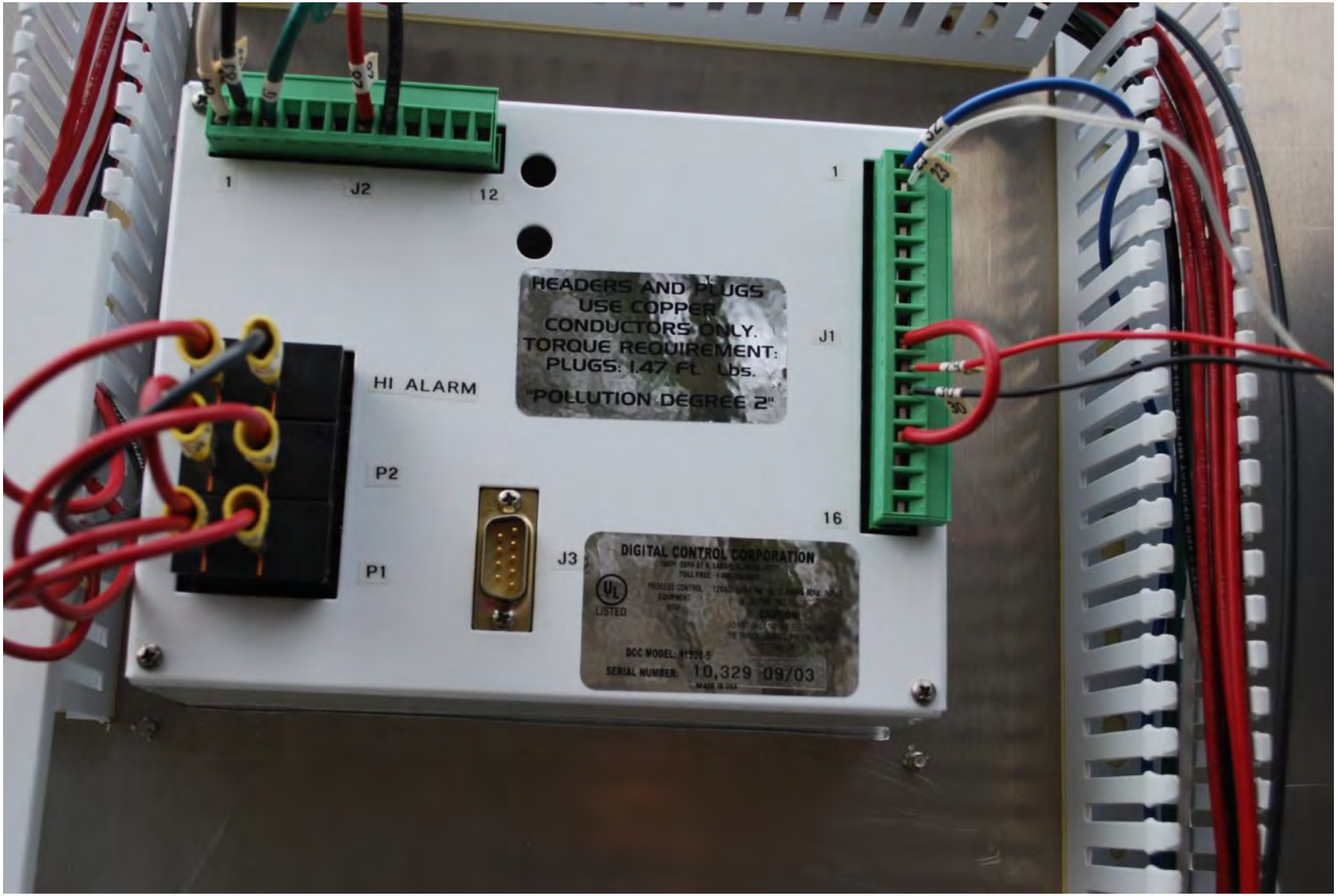

ON
OFF
100A
15A
GNC

HIGH LEVEL "ON"
PUMP 2 CALLED FOR
PUMP 1 CALLED FOR
LOW LEVEL "ON"
ALTERNATOR POSITION
CONNECT BATTERY BEFORE USING EQUIPMENT
STOP

JP 1
1
2 SILENCE
3 HORN OUTPUT
6
7
8
9
10
11
12
13
14
15
Pumpak LTD.
612-633-7522
FLOAT-PAK
P/N 982004-013
90
0
180
SECONDS
LEAD PUMP SHORT CYCLE PREVENTION TIMER
LAG PUMP START DELAY
LEAD PUMP START DELAY
SW 4
SW 3
SW 2
SW 1
ON OFF
PUMP 1 CALLED FOR
LOW LEVEL "ON"
19
LAG
20
21
START LEAD
22
ALTERNATOR POSITION
2-1
1-2


TERMATIC
AC6503

MotorSaver
MODEL 460
www.rymcominc.com
VOLTAGE ADJ. (VAC)
RESTART (SEC)
UNBALANCE TRIP (NEMA %)
TRIP DELAY (SEC)
LED STATUS


1
J2
12
1
HEADERS AND PLUGS
USE COPPER
CONDUCTORS ONLY.
TORQUE REQUIREMENT:
PLUGS: 1.47 Ft. Lbs.
"POLLUTION DEGREE 2"
J1
HI ALARM
P2
16
P1
J3
DIGITAL CONTROL CORPORATION
UL
LISTED
SERIAL NUMBER: 10,329 09/03

Proudly Built By
Engineer
PSD
Layout
GB
Assy./Wiring
BN
Inspection
LWM
Serial No.
86179
Unit
A
Voltage
240 3 PH 4W
Mfg. Date
09 125103
1975 West County Rd. B2, Suite 5
St. Paul MN 55113
(651) 633-7522 Fax (651) 633-2671
Proudly Made in U S A
PUMPAK LTD.
ST. PAUL, MINNESOTA
INSTALLER PLEASE NOTE:
THIS CABINET MUST BE MOUNTED PLUMB AND LEVEL SO DOOR(S) WILL CLOSE PROPERLY. SHIM AS NEEDED IF MOUNTING SURFACE IS NOT PLUMB/LEVEL.
HEALY-RUFF CO. (651) 633-7522 (651) 633-2671 Fax
U.L. LISTED
INDUSTRIAL CONTROL PANEL
240 V 3 PH 60HZ
LARGEST MOTOR 25 HP
200 F.L.A. TOTAL

Aktiengesellschaft
D - 67225 Frankenthal
TYPE KRNE 80-251/164XG-270
2002
No. 5-M87-721 137
Q 180-650 US GPM
H 115-88 FT
M.-No. 085386
KN 160.4-12 AC 3~
V
60 Hz
SF 1.1
HP
230
LIQ. TEMP. 104
Y/CD
LRA 440
RPM FLA 59
PF 0.73
SUBM. (MAX.) 85
FM
APPROVED
Nicht unter Spannung öffnen.
ne pas ouvrir sous tension.
Do not open while energised.
Ident-No. 01 056 820 ZN 3826 - M 15

ktiengesellschaft
D-67225 Frankenthal
TYPE KRTE 80-251/164X6-27C
No. 5-M07-721 137
2002
Q 180-650 US GPM
H 115-68
M.-No.
KN 160 4-12 AC 3~
60 Hz
SF
230 V
LIQ. TEMP.
LRA
RPM
FLA
PF
SUBM. (MAX.)
APPROVED
Ident-No. 01 056 820 ZN 3826 - M 15

Aktiengesellschaft
D - 67225 Frankenthal
TYPE KRTE 80-251/164X6 270
No. 51-M07-721 132
180-650 US GPM H 115-88
DKN 160 4-12 AC 3~ M.-No.
20 HP 230 V 60 Hz SF
EXP/V1/CD LIQ. TEMP.
1765 RPM FLA 59 LRA 440
SUBM. (MAX.) 85 PF 0,73
Nicht unter Spannung öffnen.
Ne pas ouvrir sous tension.
Do not open while energized.
Ident-No. 01 056 820 ZN 3826 - M 15
FM
APPROVED

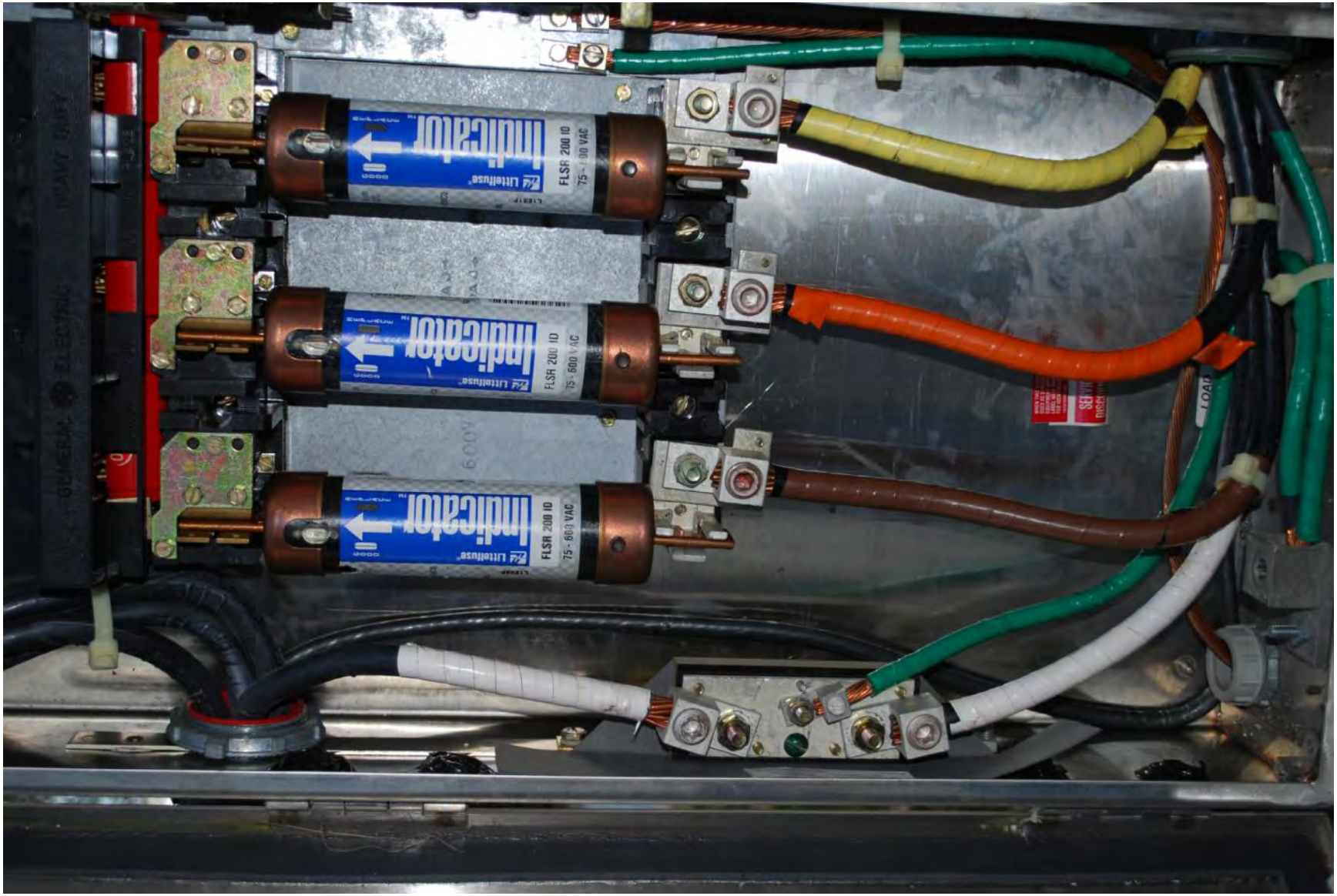
Aktiengesellschaft
D - 67225 Frankenthal
TYPE KRTE 80-251
No. 5-M07-721 13
180-650 US GPM
DKA 180.4-12 AC 3~
P2 20 HP
EXPII/1/CD
1765RPM FLA 59
SUBM. (MAX.) 85
LRA 440
PF 0.73
H 115
M.-No.
60 Hz SF
LIQ. TEMP.
APPROVED
FM
Ident No. 01 056 820 ZN 3826 M 15

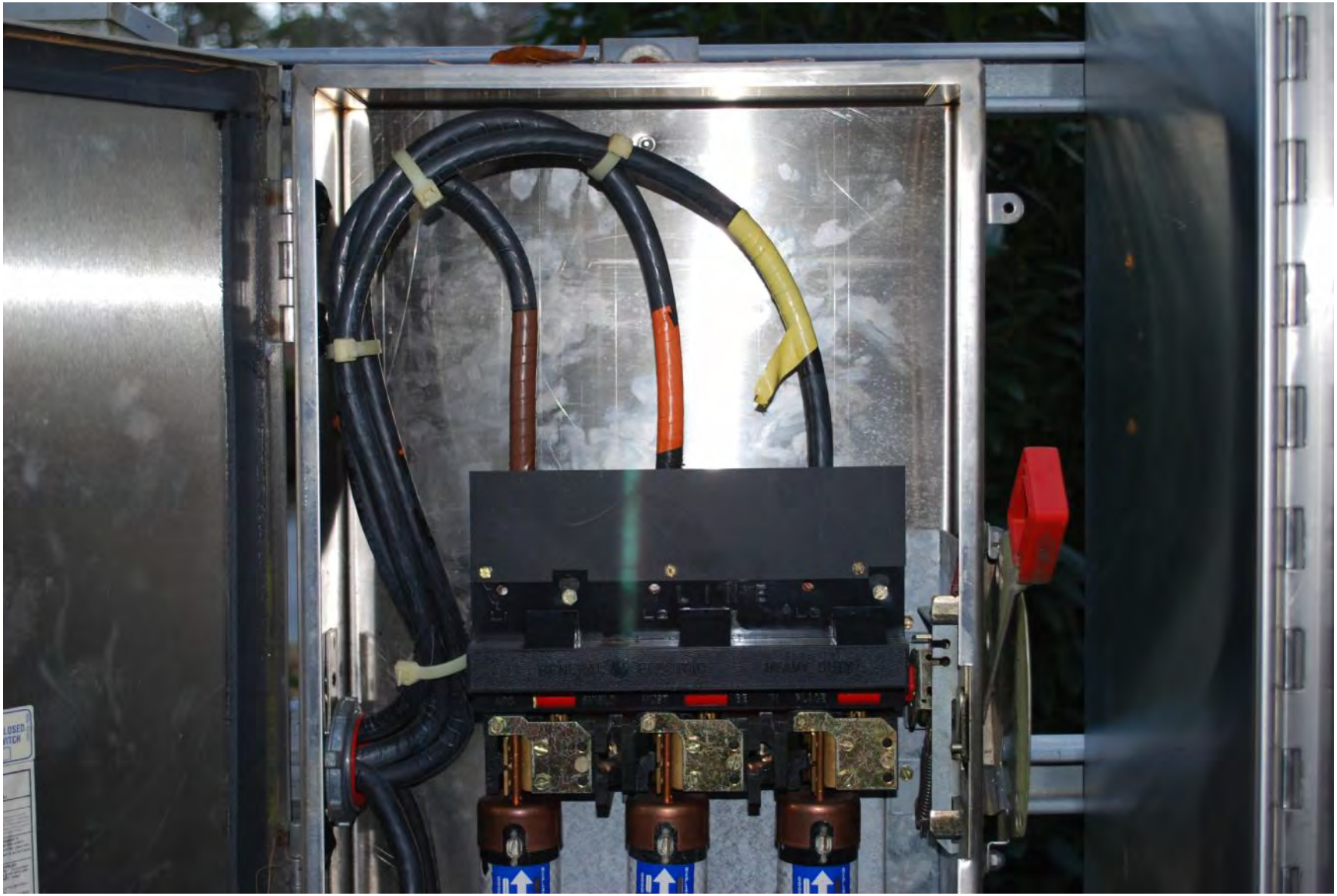
ON
OFF

ON
OFF

ON
OFF

LINE
L1
L2
L3
GENERAL ELECTRIC
HEAVY DUTY
SHIELD MUST BE IN PLACE
Littelfuse
Indicator
FLSR 200 ID
75 - 600 VAC

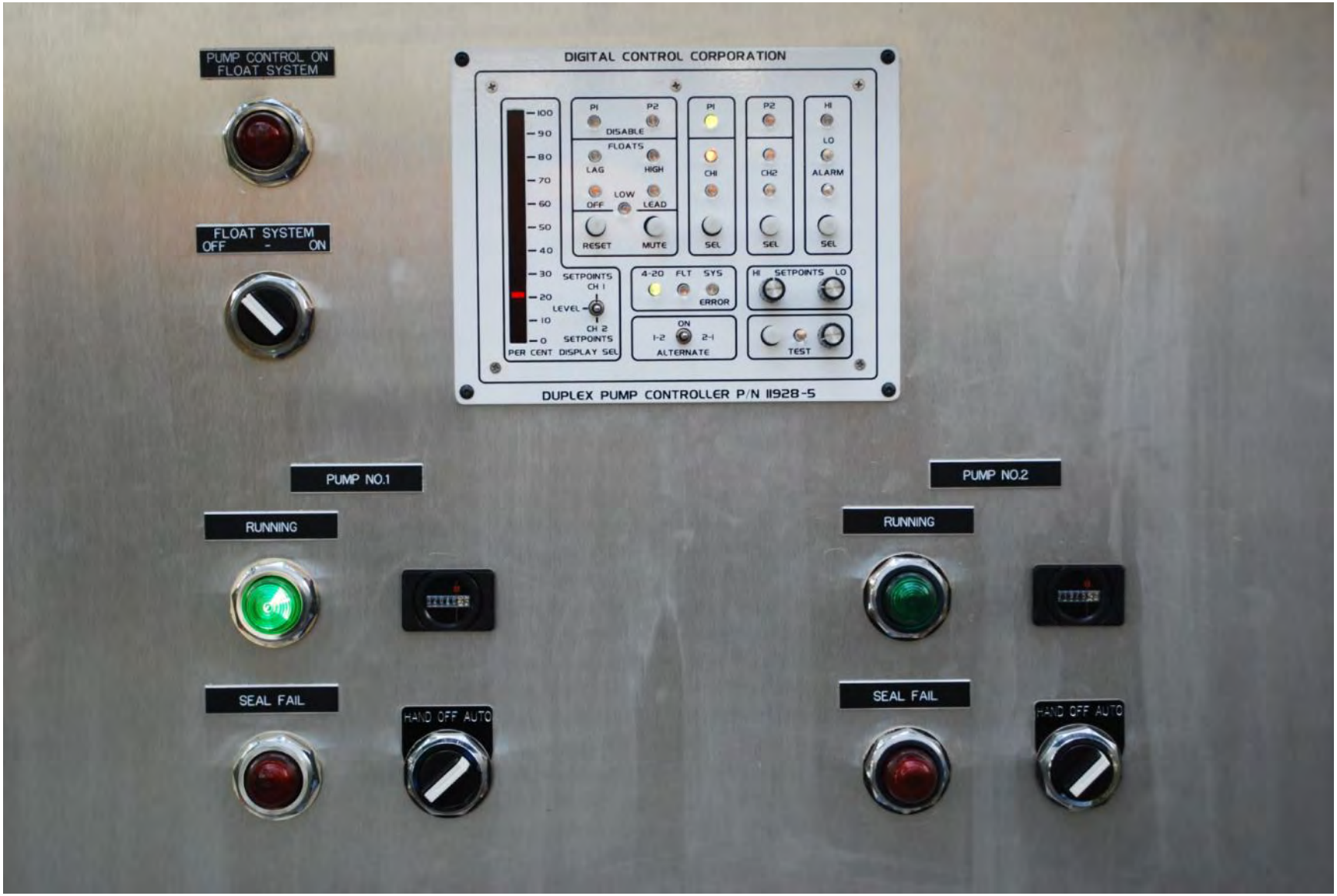

Indicator
Littelfuse
FLSR 200 ID
75 - 600 VAC



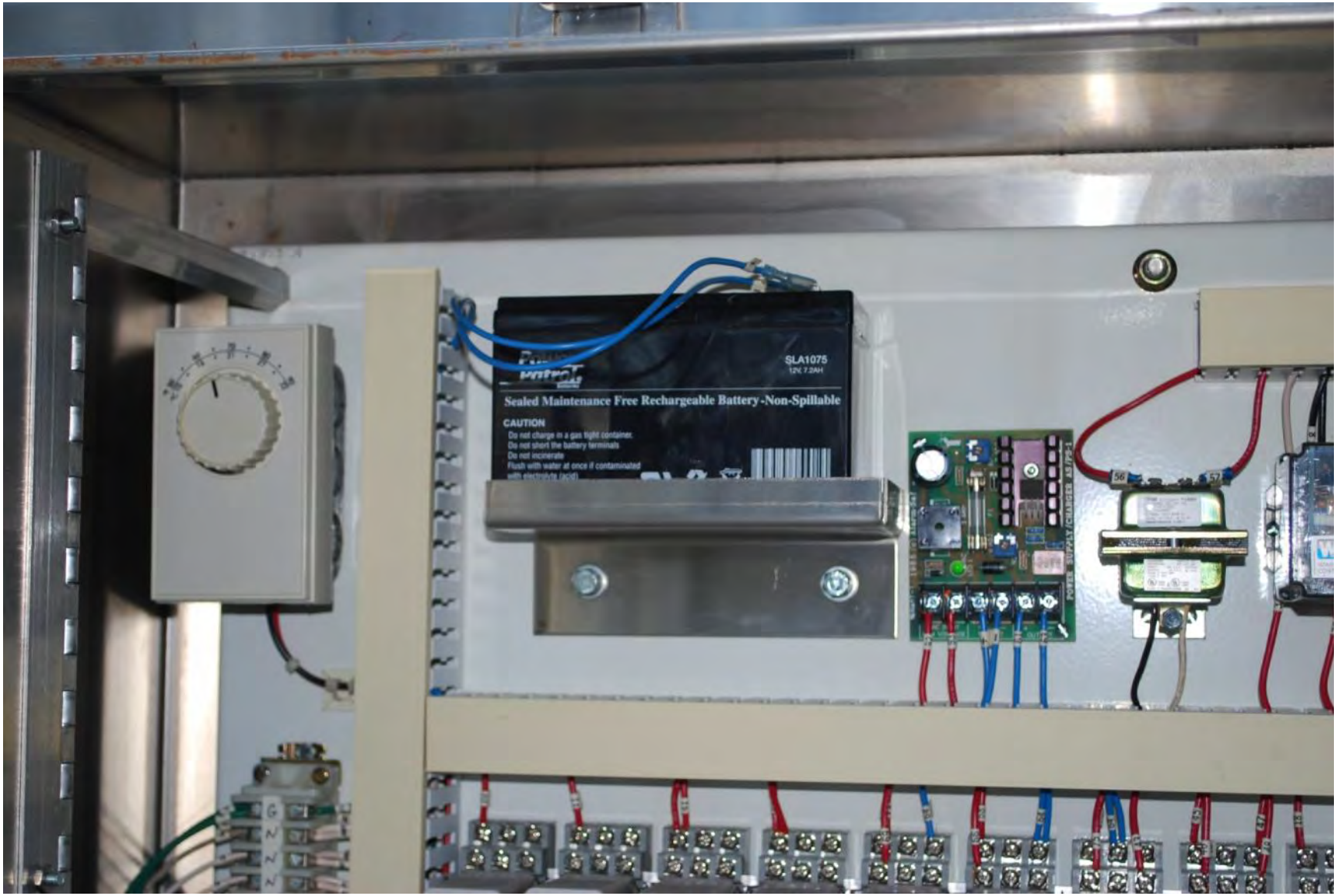
ON
OFF

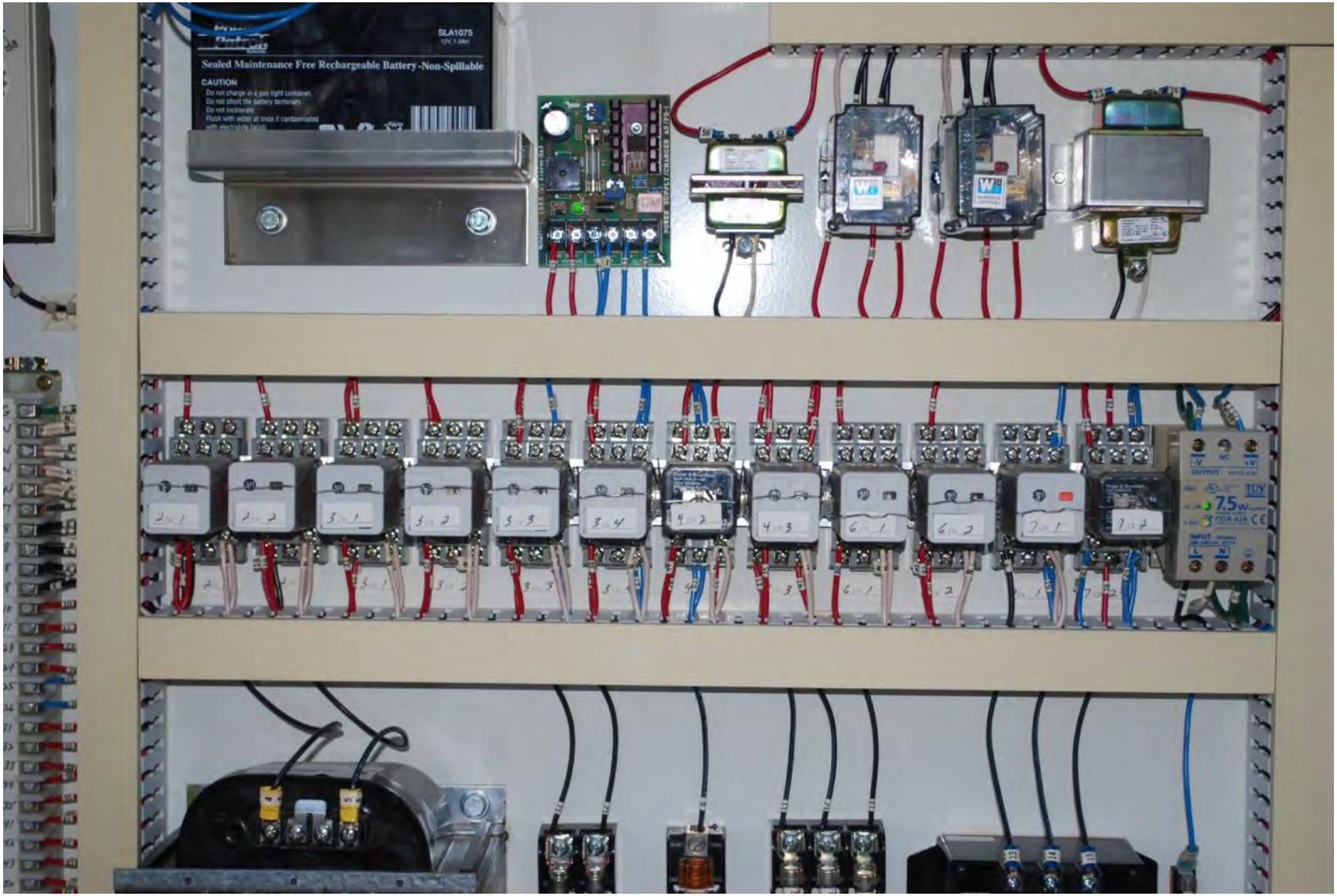
2213
45 KVA
277 480
NON-PCB
WARNING
Keep Out!

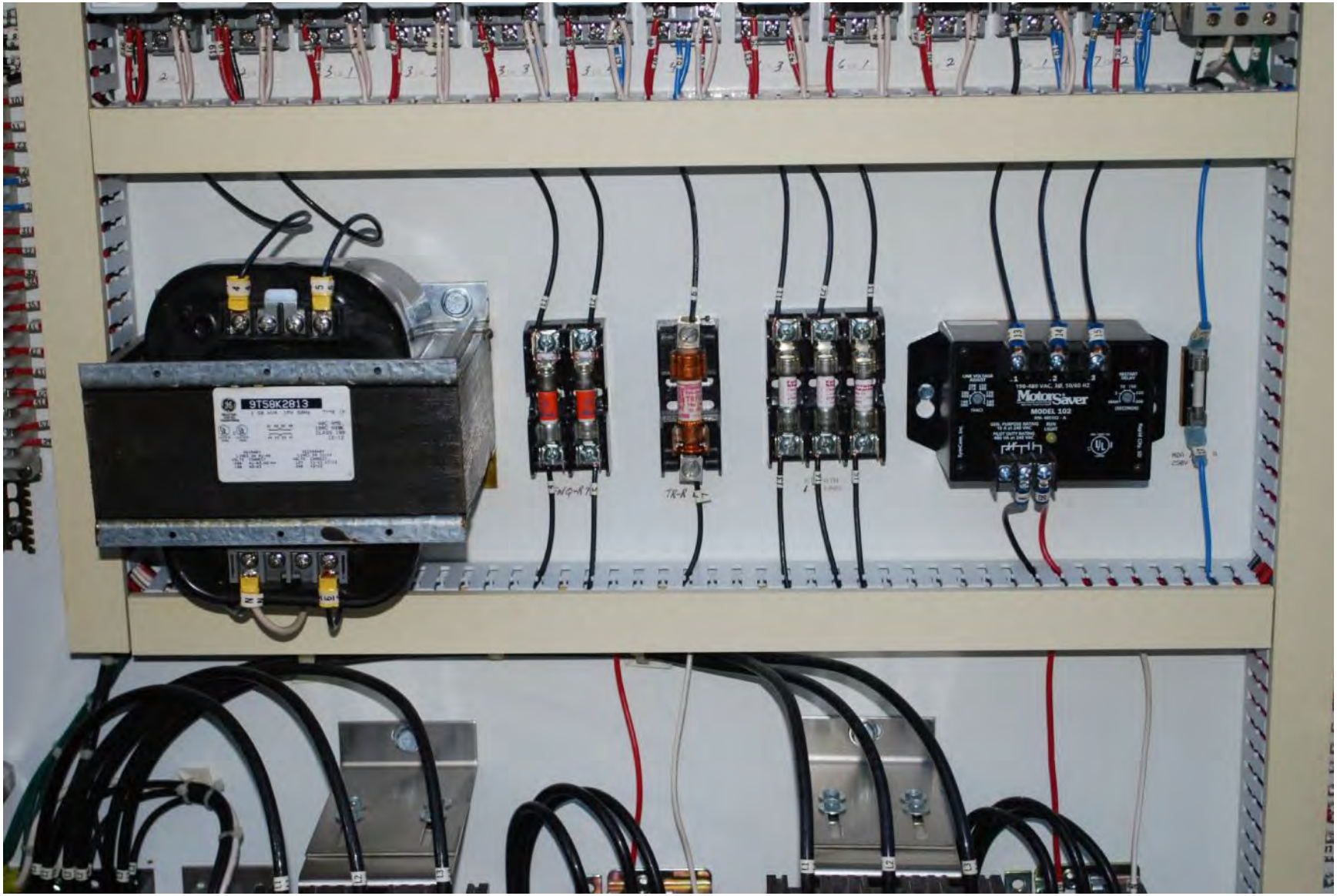
PUMPAK


PUMP CONTROL ON FLOAT SYSTEM
FLOAT SYSTEM OFF - ON
DIGITAL CONTROL CORPORATION
DISABLE
FLOATS
LAG
HIGH
OFF
LOW
LEAD
RESET
MUTE
CH1
CH2
SEL
HI
LO
ALARM
SETPOINTS
CH 1
LEVEL
CH 2
SETPOINTS
PER CENT DISPLAY SEL
4-20
FLT
SYS
ERROR
HI SETPOINTS LO
ON
1-2
2-1
ALTERNATE
TEST
DUPLEX PUMP CONTROLLER P/N 11928-5
PUMP NO.1
RUNNING
SEAL FAIL
HAND OFF AUTO
PUMP NO.2
RUNNING
SEAL FAIL
HAND OFF AUTO

PUMP NO.1
PUMP NO.2
CONTROL
GFI

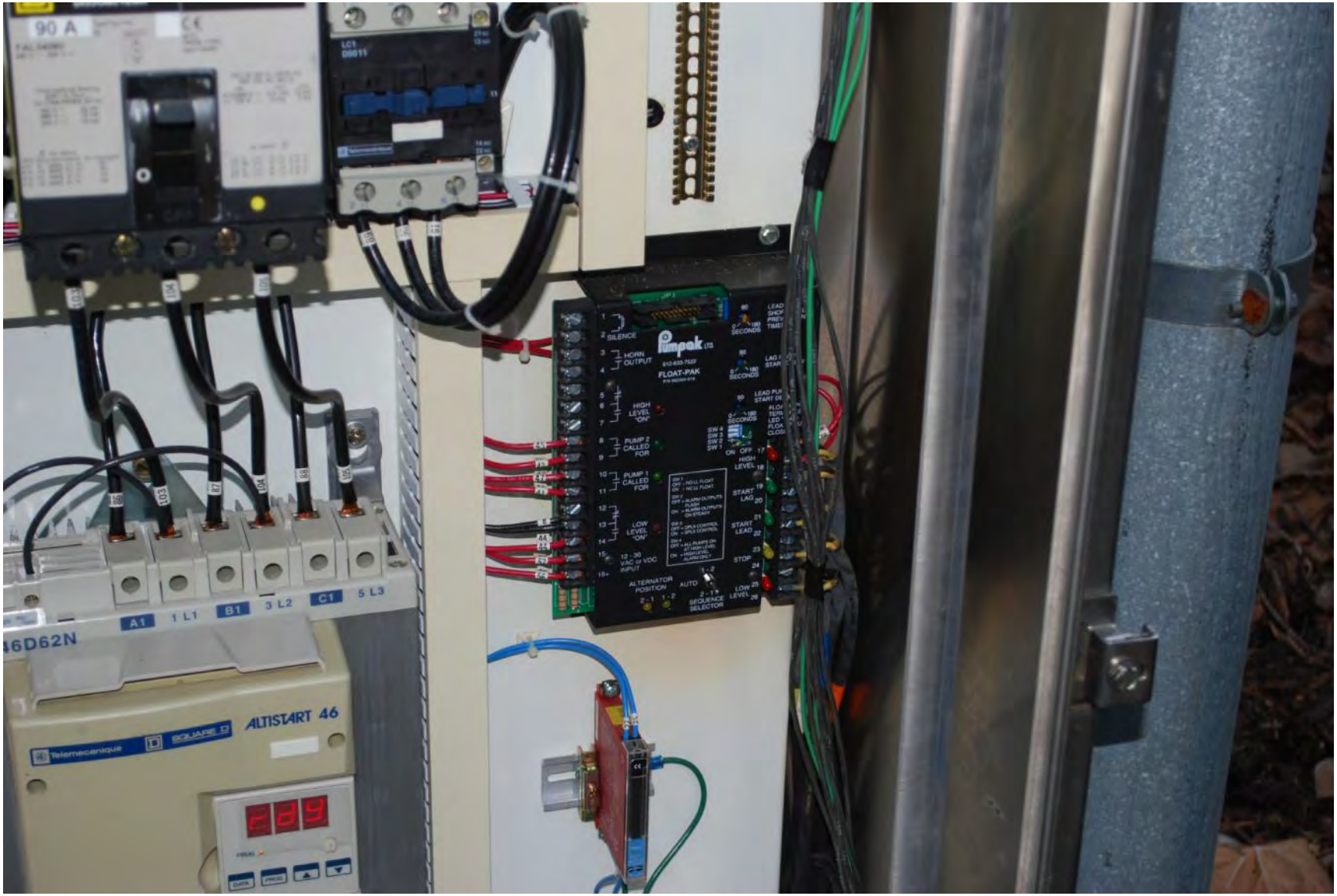

SLA1075
12V 7.2AH
Sealed Maintenance Free Rechargeable Battery-Non-Spillable
CAUTION
Do not charge in a gas tight container.
Do not short the battery terminals
Do not incinerate
Flush with water at once if contaminated

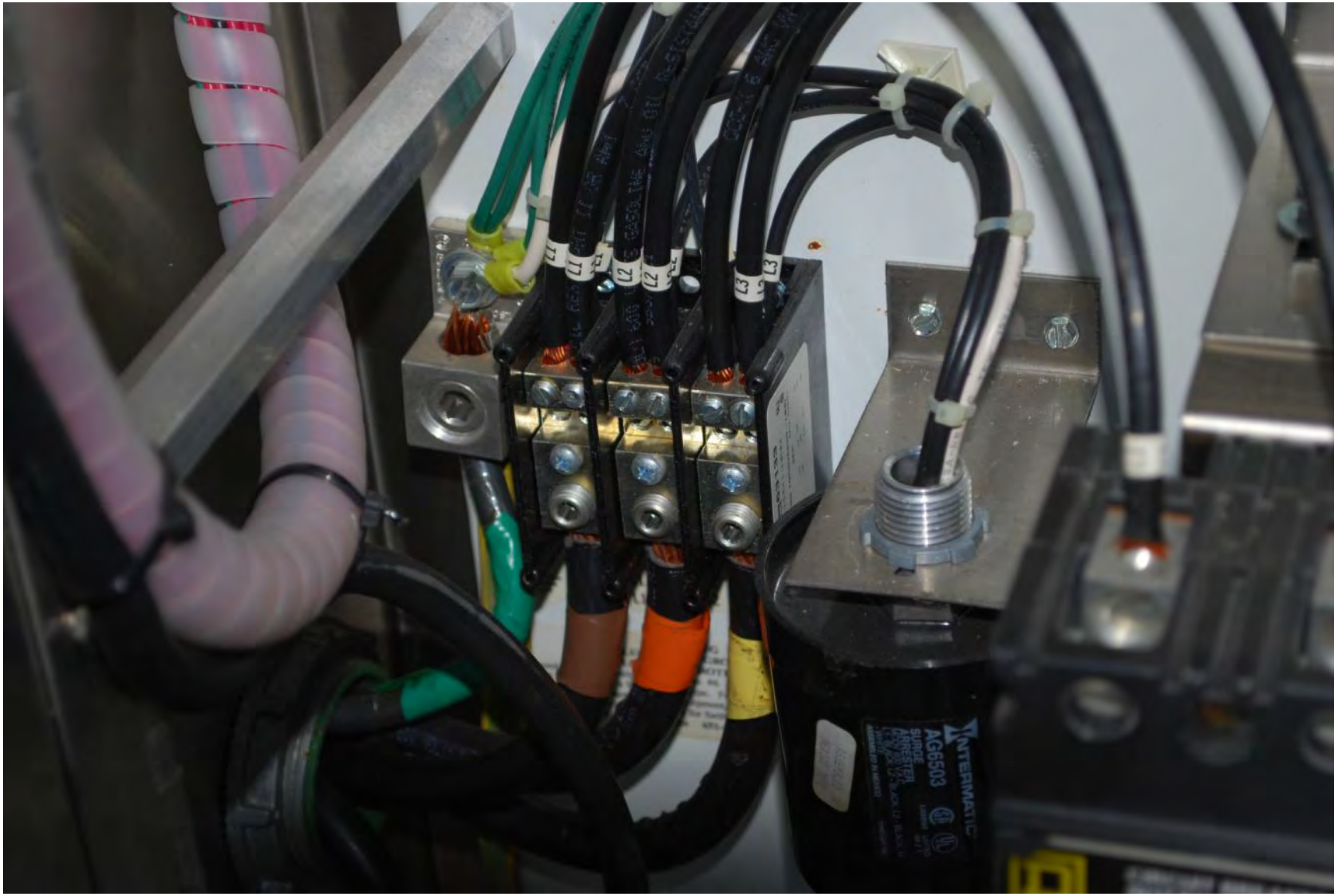

SLA1075
Sealed Maintenance Free Rechargeable Battery-Non-Spillable
CAUTION
7.5W


9T58K2813
MotorSaver
MODEL 102

CIRCUIT BREAKER
INTERRUPTOR AUTOMATICO
DISJONCTEUR
90 A
FAL34090
CIRCUIT BREAKER
INTERRUPTOR AUTOMATICO
DISJONCTEUR
90 A
FAL34090

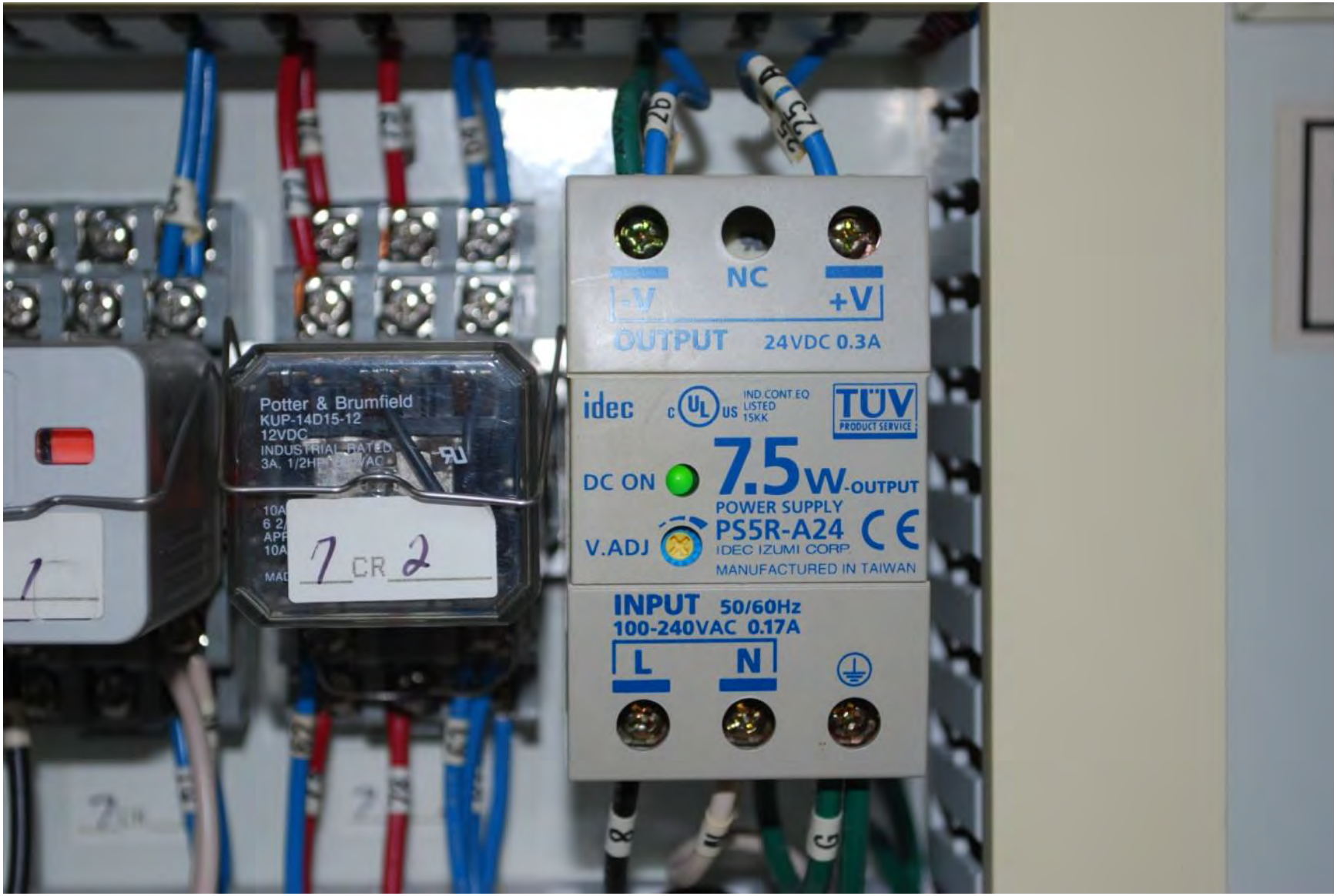
ATS46D62N
A1 1 L1 B1 3 L2 C1 5 L3
ALTISTART 46
Services
24/7 Service
1-888-778-2733
ATS46D62N
A1 1 L1 B1 3 L2 C1 5 L3
ALTISTART 46


90 A
A1
1 L1
B1
3 L2
C1
5 L3
ALTISTART 46
Telemecanique
SQUARE D
Pumpak LTD
FLOAT-PAK
SILENCE
HORN OUTPUT
HIGH LEVEL "ON"
PUMP 2 CALLED FOR
PUMP 1 CALLED FOR
LOW LEVEL "ON"
12 - 30 VAC or VDC INPUT
ALTERNATOR POSITION
AUTO
SEQUENCE SELECTOR
SECONDS
START LAG
START LEAD
STOP
HIGH LEVEL
LOW LEVEL

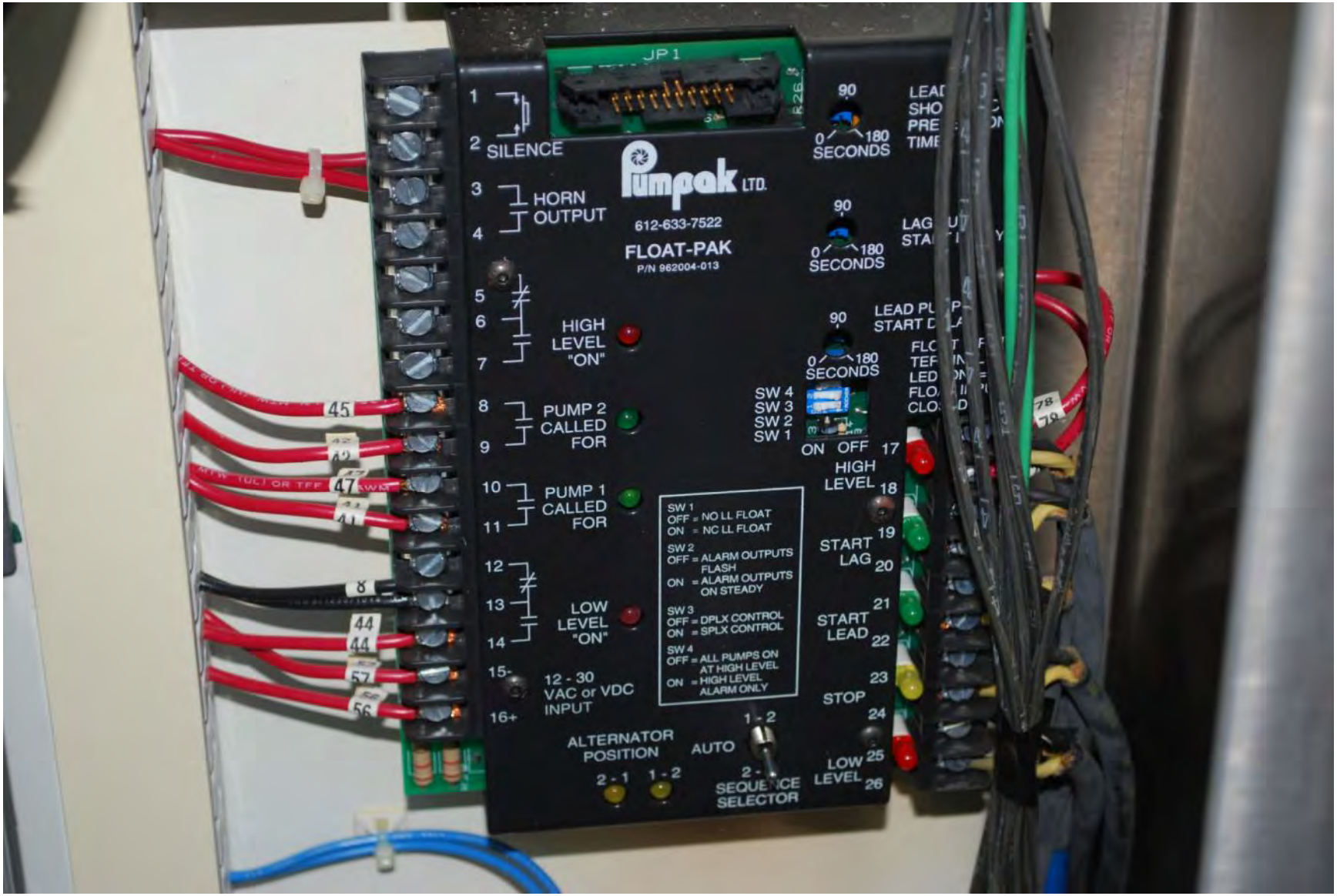

L1
L2
L3
INTERMATIC
AG6503
SURGE
ARRESTER

94
95
82
1 L1
3 L2
5 L3
LC1
D5011
21 NC
13 NO
11
Telemecanique
14 NO
22 NC
2 T1
4 T2
6 T3
83
84
85
85

LISTED
C.B.
Issue No. 186
Made in Ireland
Hecho en Irlanda
Fabrique en Irelande
01031
95
CIRCUIT BREAKER
INTERRUPTOR AUTOMATICO
DISJONCTEUR
90 A
Type/Tipo FAL
S2
FAL34090
480 V ~ 250 V ⎓
250 V ⎓
CE
40°C
HACR TYPE
tipo CAAR
Interrupting Rating
AIR / A nom. I
UL/CSA/NEMA 60 Hz
240 V ~ 25 kA
480 V ~ 18 kA
250 V ⎓ 10 kA
ON
OFF
IEC 60 947-2 50/60 Hz
BS EN 60 947-2
Ue Ics Icu
415/240 V ~ 2,5 kA 10 kA
Ui 750 V ~ Uimp 6 kV
AL100FA
lb-in/pulg/po
#14 10 AWG Cu 80
#14 1/0 AWG Cu 80
#12 10 AWG Al 40
#12 1/0 AWG Al 80
AL100FA
2,5 6 mm² Cu 9 N·m
2,5 50 mm² Cu 9 N·m
2,5 6 mm² Al 5 N·m
2,5 50 mm² Al 9 N·m


NC
-V
+V
OUTPUT 24VDC 0.3A
idec
IND.CONT.EQ
LISTED
15KK
TÜV
PRODUCT SERVICE
DC ON
7.5W-OUTPUT
POWER SUPPLY
V.ADJ
PS5R-A24
IDEC IZUMI CORP.
MANUFACTURED IN TAIWAN
INPUT 50/60Hz
100-240VAC 0.17A
L
N
Potter & Brumfield
KUP-14D15-12
12VDC
INDUSTRIAL RATED
3A, 1/2HP
1 CR 2

ATS46D62N
A1
1 L1
B1
3 L2
C1
5 L3
Telemecanique
SQUARE D
ALTISTART 46

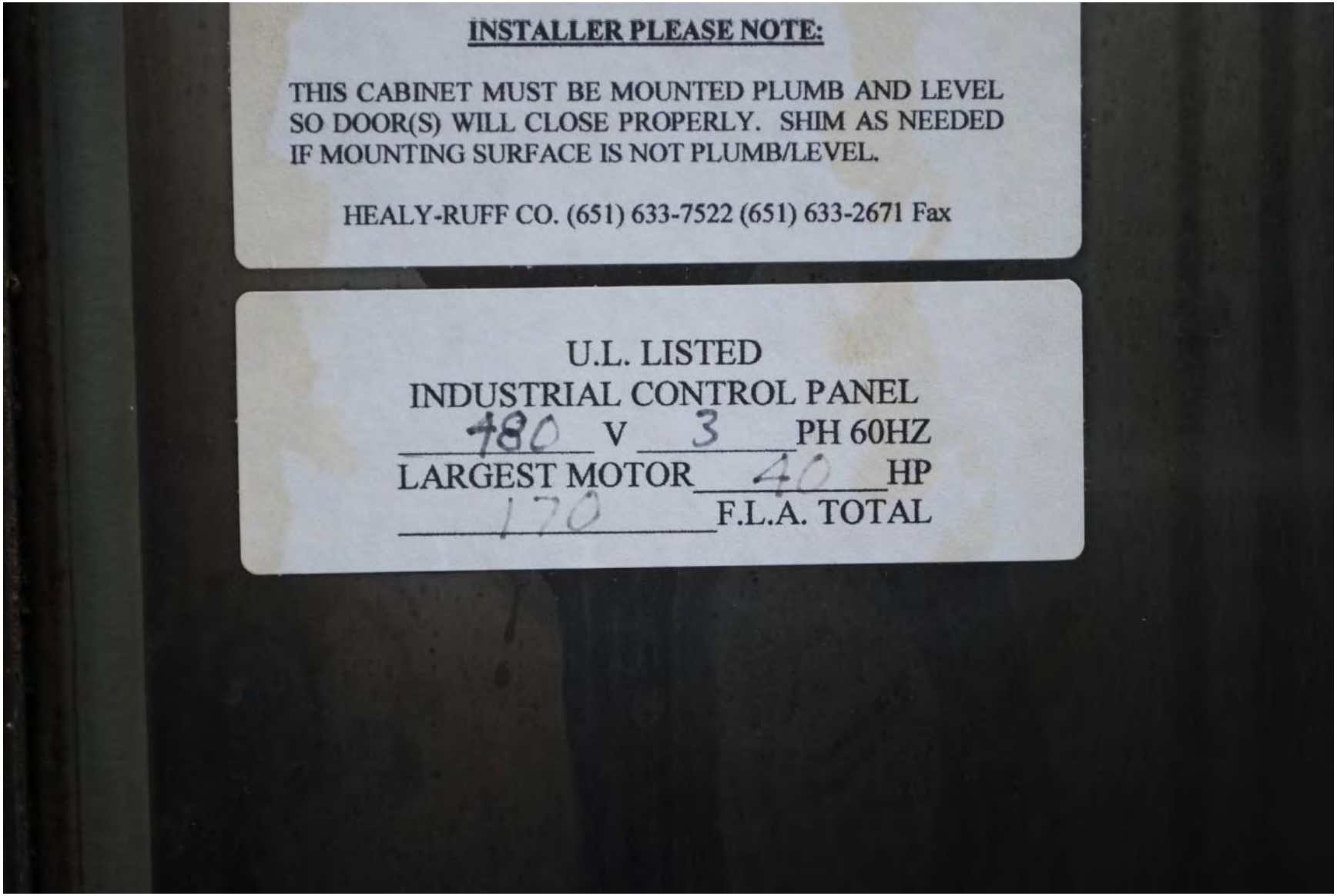

JP 1
1
2 SILENCE
3
4 HORN OUTPUT
Pumpak LTD.
612-633-7522
FLOAT-PAK
P/N 962004-013
90
0 180
SECONDS
LEAD SHO PRE TIME
LAG STA
LEAD PU START D
5
6
7 HIGH LEVEL "ON"
8
9 PUMP 2 CALLED FOR
10
11 PUMP 1 CALLED FOR
12
13
14 LOW LEVEL "ON"
15-
16+ 12 - 30 VAC or VDC INPUT
SW 4
SW 3
SW 2
SW 1
ON OFF
17 HIGH LEVEL 18
19 START LAG 20
21 START LEAD 22
23 STOP 24
25 LOW LEVEL 26
SW 1
OFF = NO LL FLOAT
ON = NC LL FLOAT
SW 2
OFF = ALARM OUTPUTS FLASH
ON = ALARM OUTPUTS ON STEADY
SW 3
OFF = DPLX CONTROL
ON = SPLX CONTROL
SW 4
OFF = ALL PUMPS ON AT HIGH LEVEL
ON = HIGH LEVEL ALARM ONLY
ALTERNATOR POSITION
2 - 1
1 - 2
AUTO
1 - 2
2 -
SEQUENCE SELECTOR
45
47
8
44
44
57
56

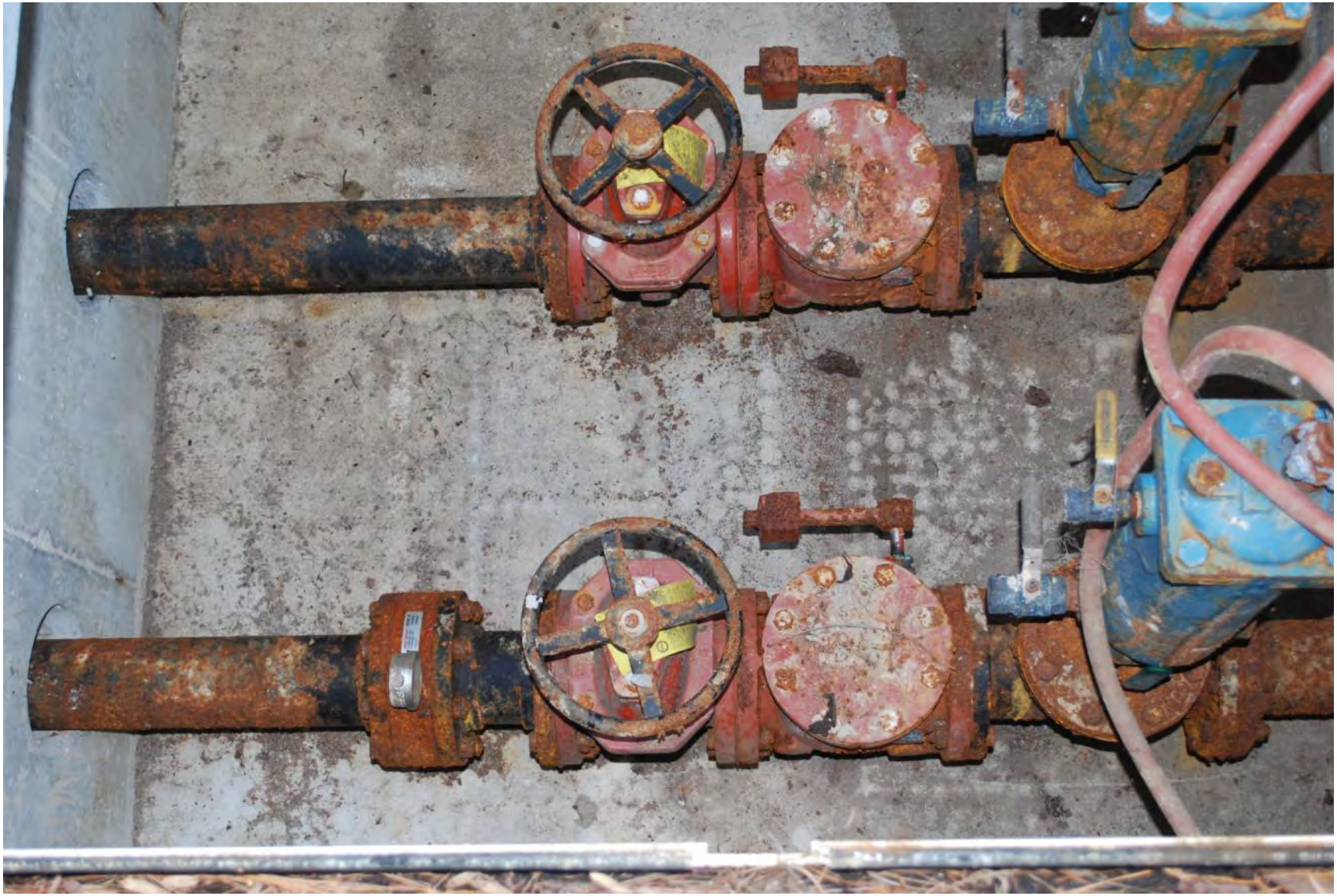
ON
OFF

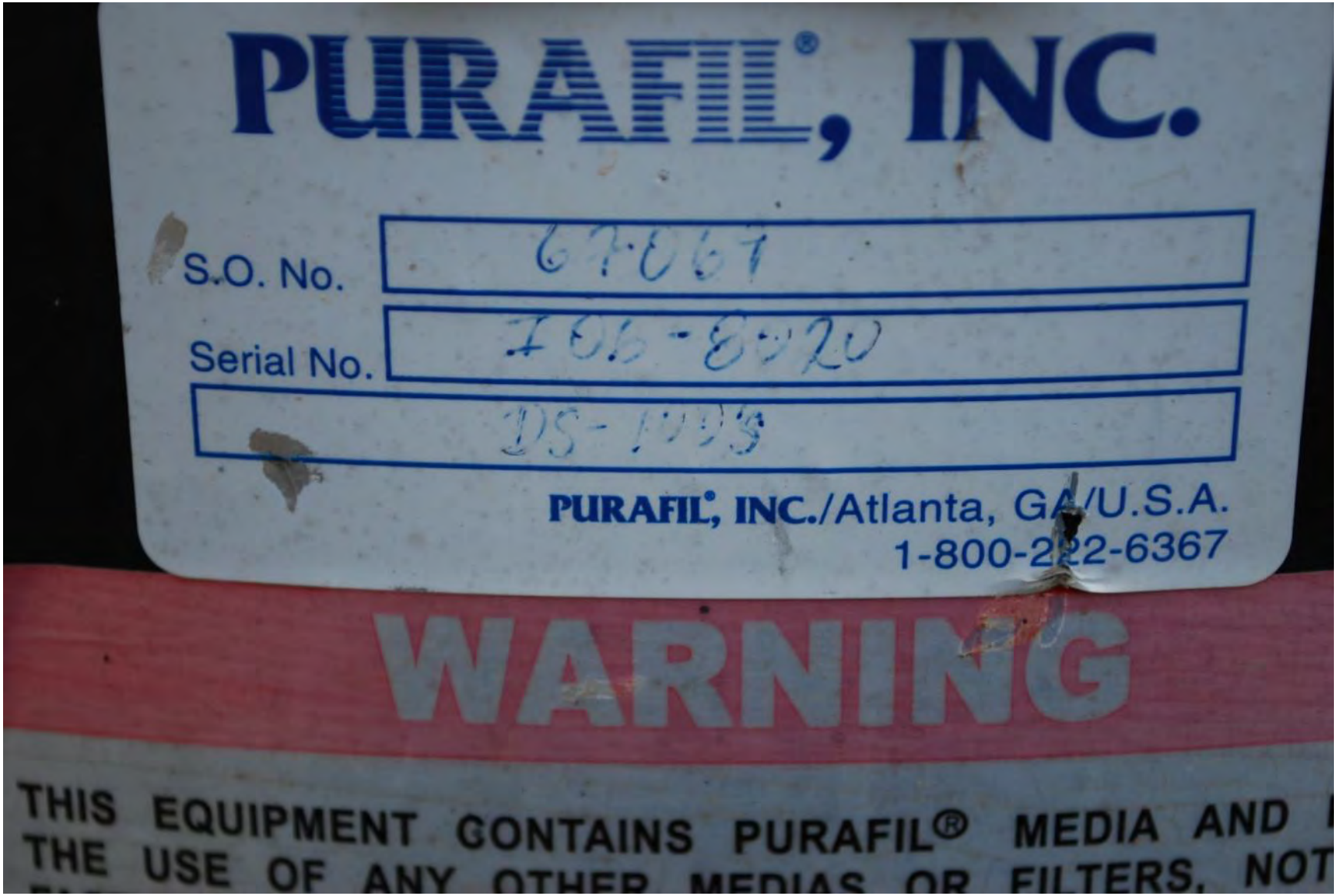
2136

Aktiengesellschaft
D - 67225 Frankenthal
TYPE
No.
RPM
FLA
SUBM. (MAX.)
M.-No.
60 Hz
LIQ. TEMP.
LRA
PF
EXPLOSION PROOF
FM
APPROVED

Proudly Built By
Engineer
PSD
Layout
GB
Assy./Wiring
BN
Inspection
LWM
Serial No.
85813
Unit
A
Voltage
480 3 PH 4 W
Mfg. Date
05/31/01
1975 West County Rd. B2, Suite 5
St. Paul MN 55113
(651) 633-7522 Fax (651) 633-2671
Proudly Made in U S A
PUMPAK LTD.
ST. PAUL, MINNESOTA


INSTALLER PLEASE NOTE:
THIS CABINET MUST BE MOUNTED PLUMB AND LEVEL SO DOOR(S) WILL CLOSE PROPERLY. SHIM AS NEEDED IF MOUNTING SURFACE IS NOT PLUMB/LEVEL.
HEALY-RUFF CO. (651) 633-7522 (651) 633-2671 Fax
U.L. LISTED
INDUSTRIAL CONTROL PANEL
480 V 3 PH 60HZ
LARGEST MOTOR 40 HP
170 F.L.A. TOTAL



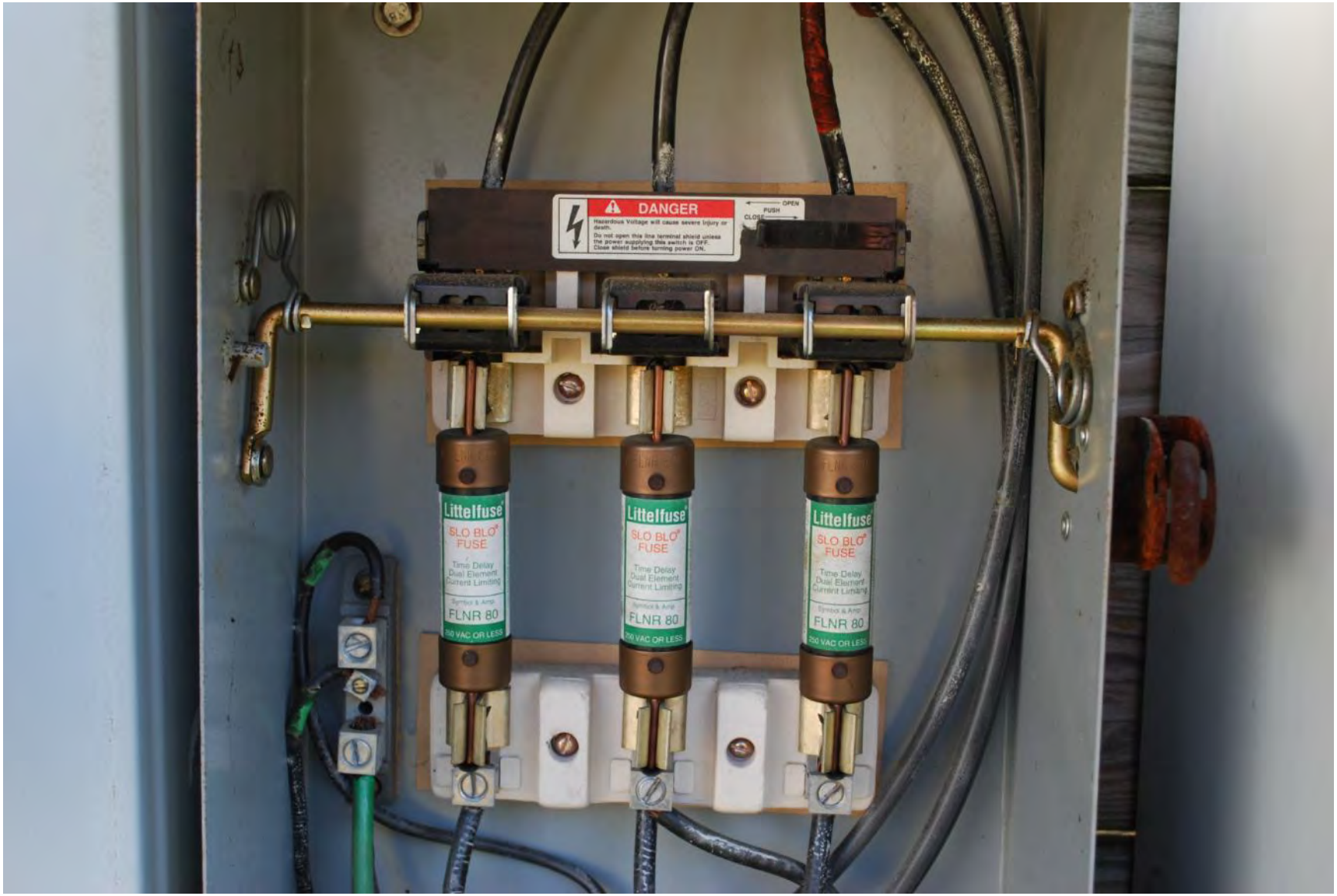

PURAFIL®, INC.
S.O. No.
67067
Serial No.
106-8920
DS-1003
PURAFIL®, INC./Atlanta, GA/U.S.A.
1-800-222-6367
WARNING
THIS EQUIPMENT CONTAINS PURAFIL® MEDIA AND
THE USE OF ANY OTHER MEDIAS OR FILTERS, NOT

PURAFIL

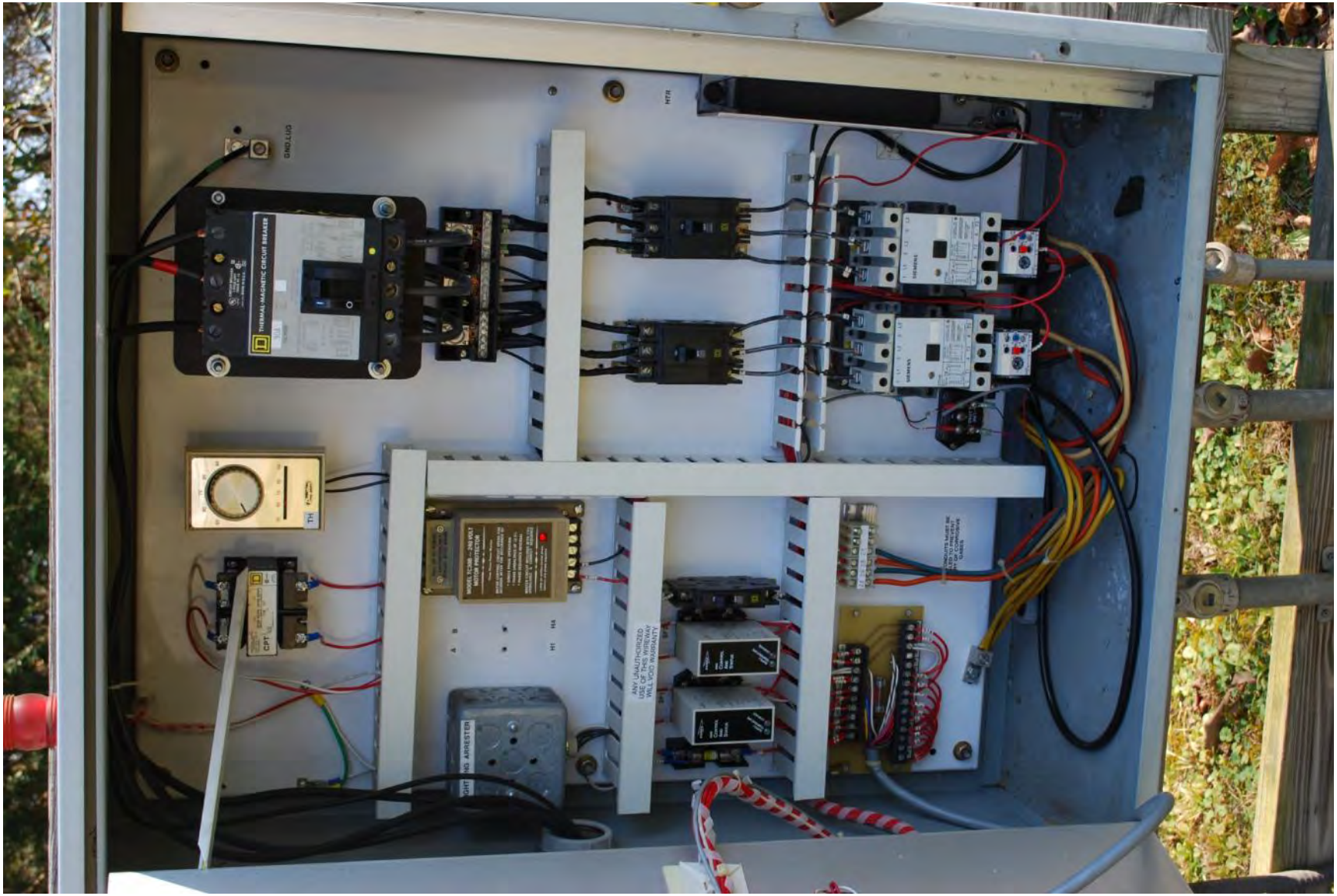
ON
OFF

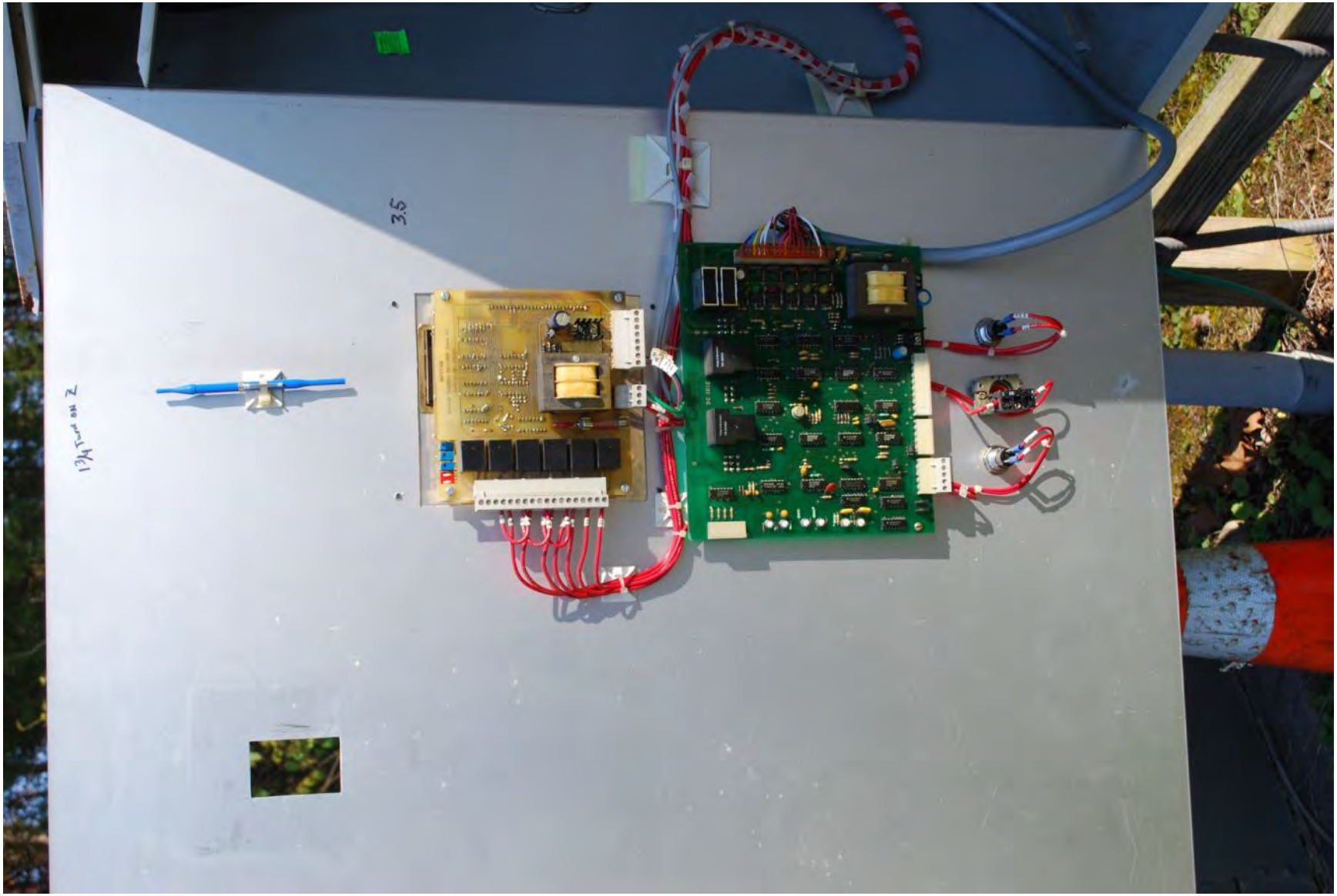
ON
OFF
KEEP OUT
HIGH VOLTAGE

931
25 KVA
120/240
935
25 KVA
120/240


DANGER
Littelfuse
SLO BLO FUSE
FLNR 80

Littelfuse
SLO BLO FUSE
Time Delay Dual Element Current Limiting
FLNR 80
250 VAC OR LESS
Littelfuse
SLO BLO FUSE
Time Delay Dual Element Current Limiting
FLNR 80
250 VAC OR LESS
Littelfuse
SLO BLO FUSE
Time Delay Dual Element Current Limiting
FLNR 80
250 VAC OR LESS


THERMAL MAGNETIC CIRCUIT BREAKER
GND.LUG
MTR
SIEMENS
SIEMENS
TH
CPT
H1
H4
SURGE ARRESTER
ANY UNAUTHORIZED USE OF THIS WIRE MAY WILL VOID WARRANTY

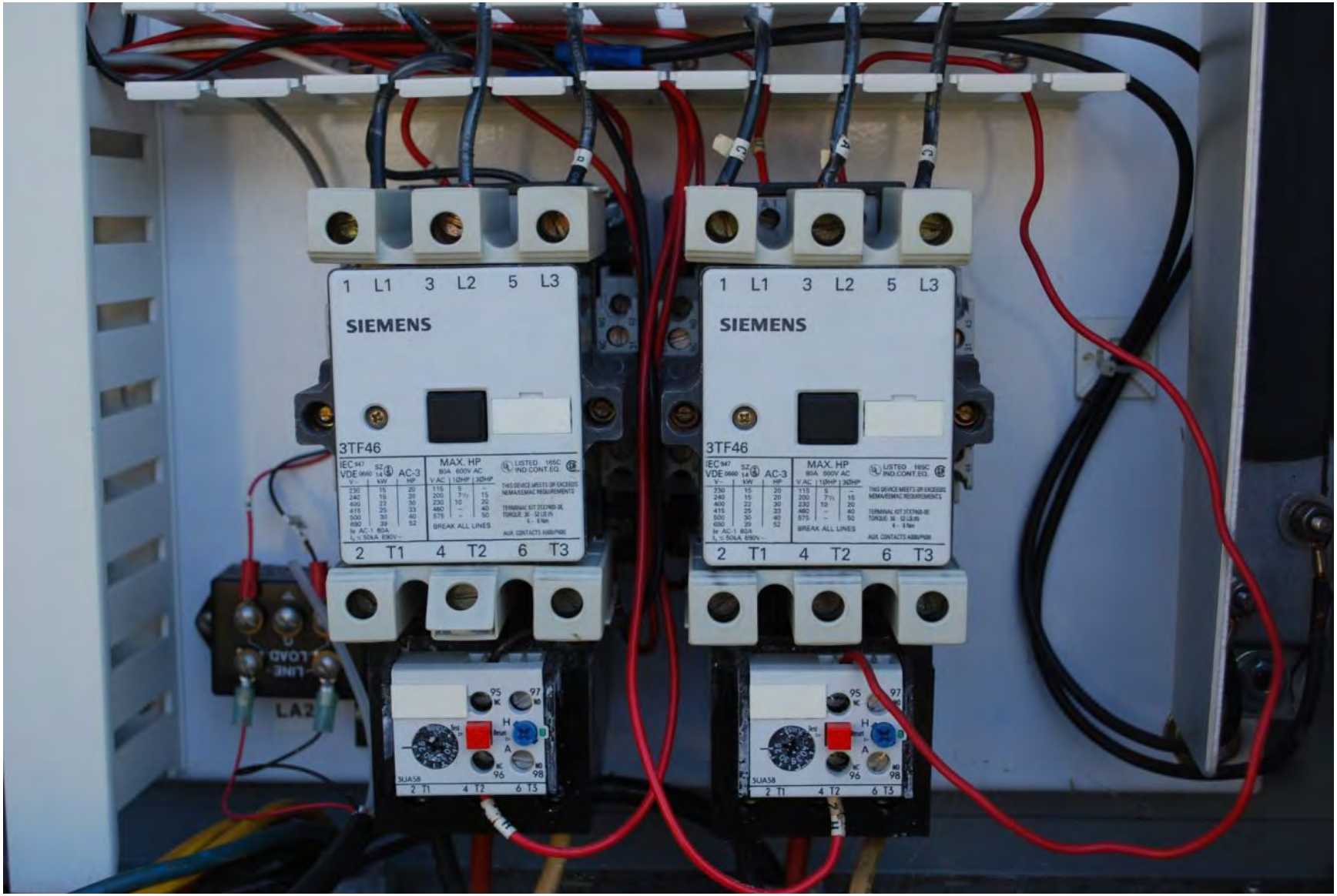

3.5

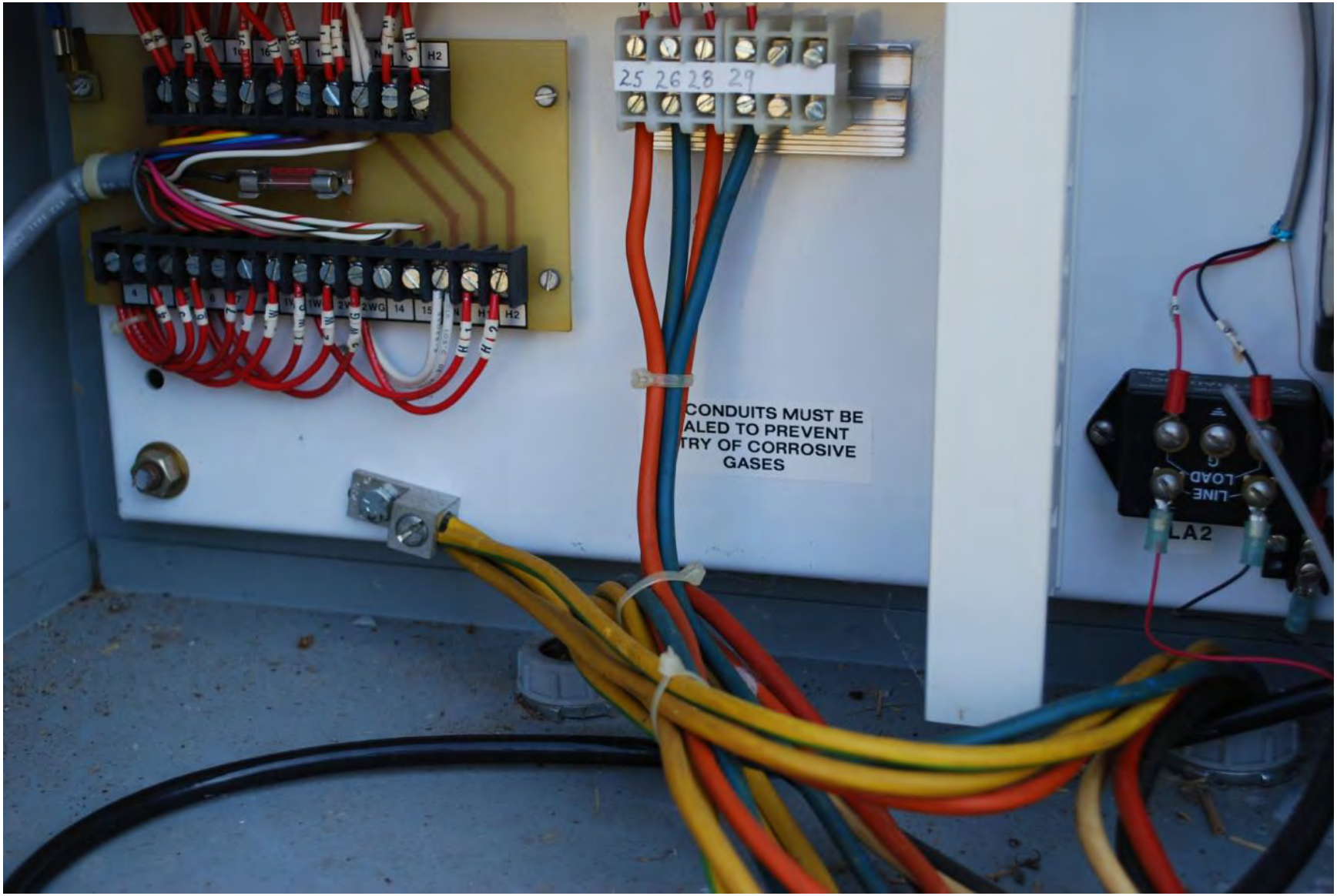
CIRCUIT BREAKER
3 POLE UNIT
ISSUE RT-43
MADE IN U.S.A.
THERMAL-MAGNETIC CIRCUIT BREAKER
90A
FAL34090
ON
OFF
GND.LUG
TH

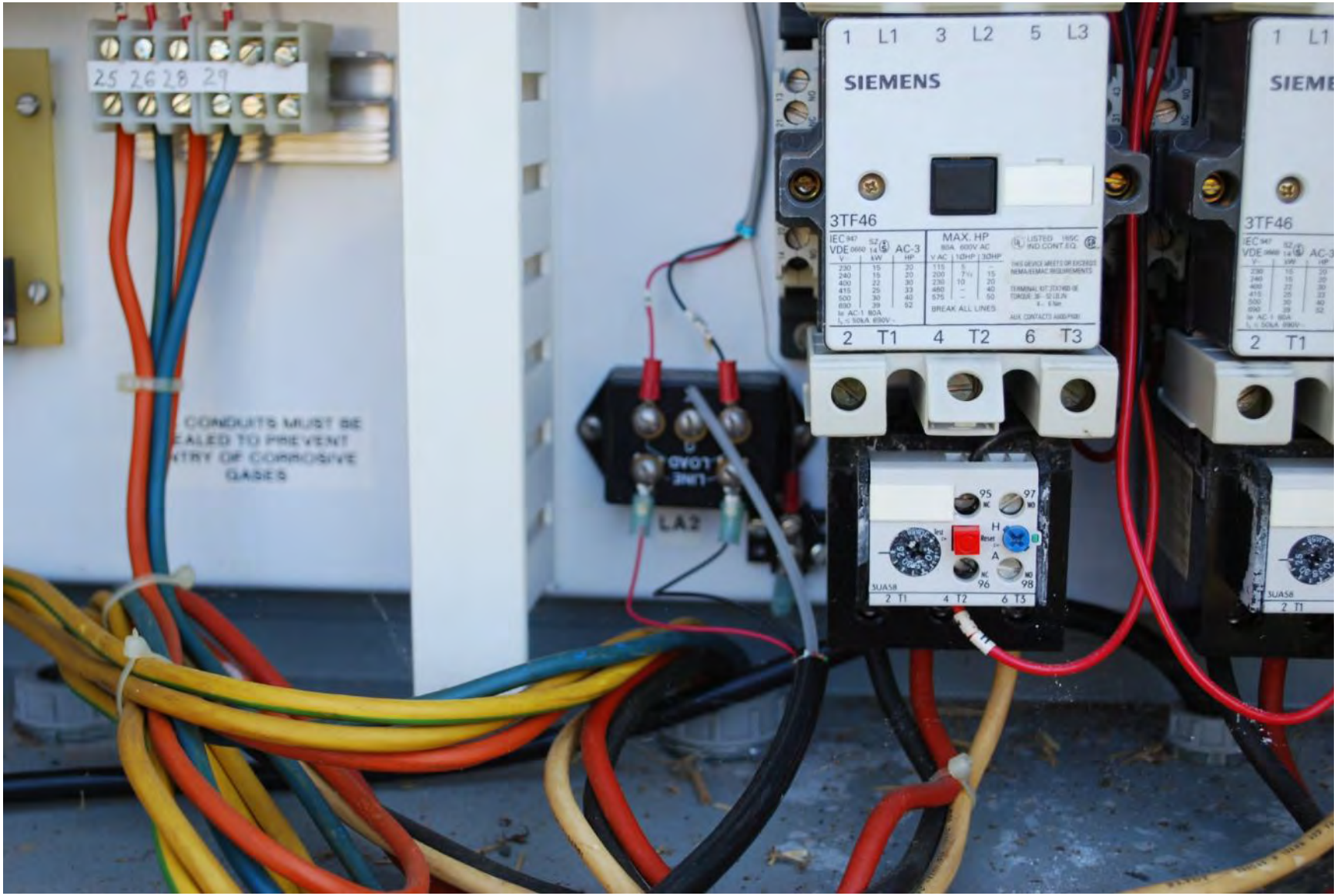
TH
Dayton
GND.LUG
A A
A A
B B
B B
C C
C C

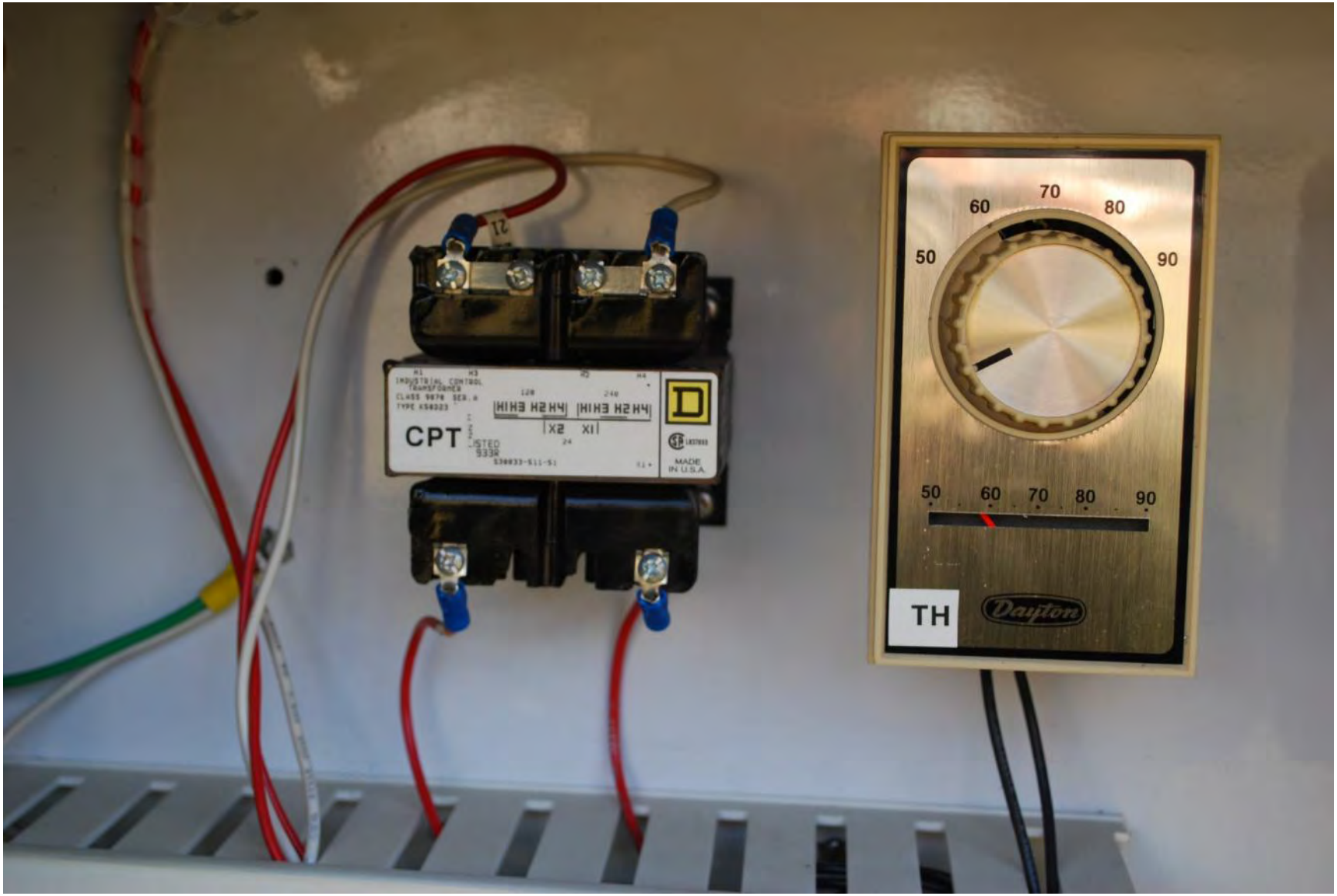
ON
OFF
ON
OFF

ON
OFF
ON
OFF
HTR


1 L1 3 L2 5 L3
SIEMENS
3TF46
AC-3
MAX. HP
2 T1 4 T2 6 T3
1 L1 3 L2 5 L3
SIEMENS
3TF46
AC-3
MAX. HP
2 T1 4 T2 6 T3

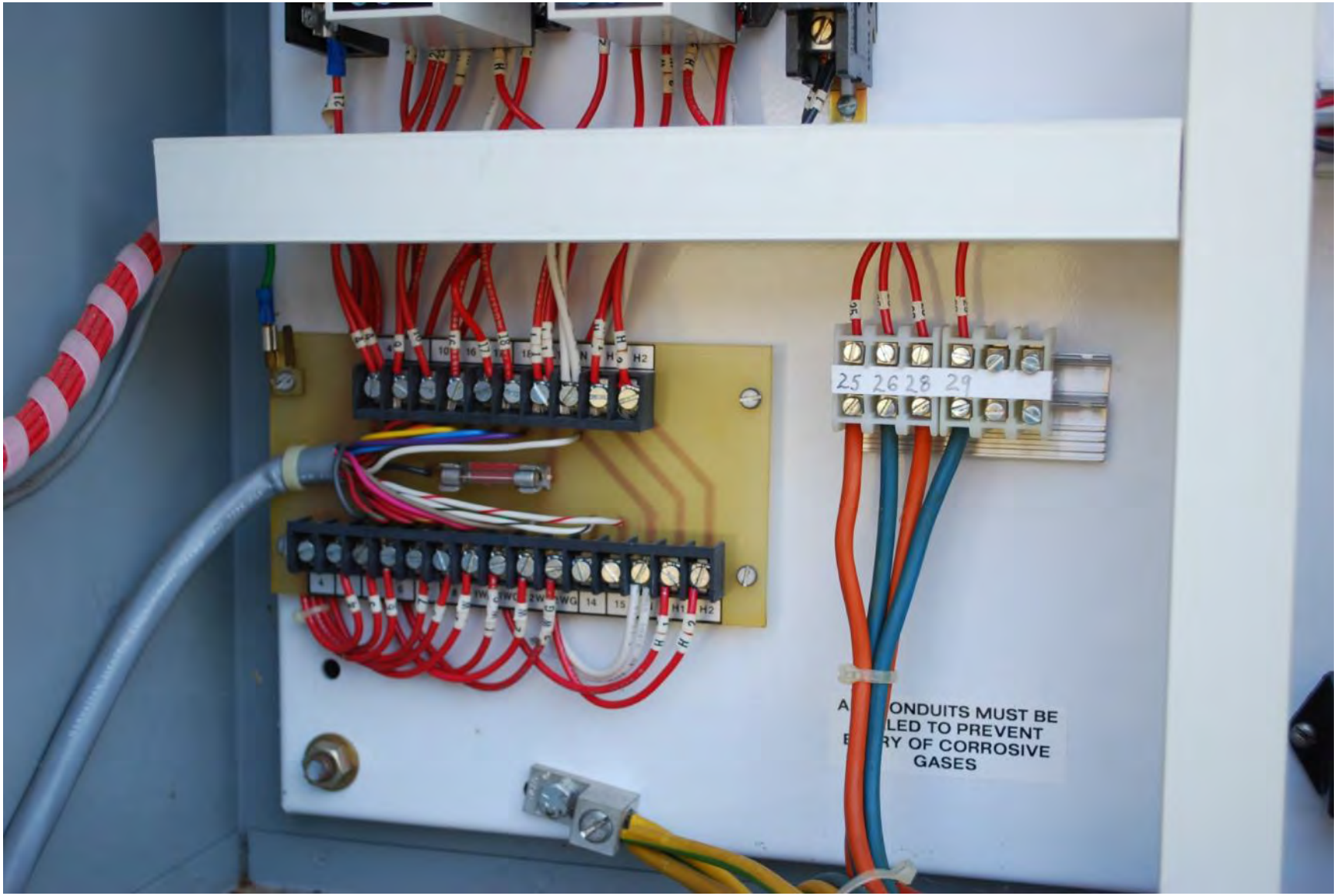

25 26 28 29
H2
CONDUITS MUST BE
ALED TO PREVENT
TRY OF CORROSIVE
GASES
LINE
LOAD
LA2

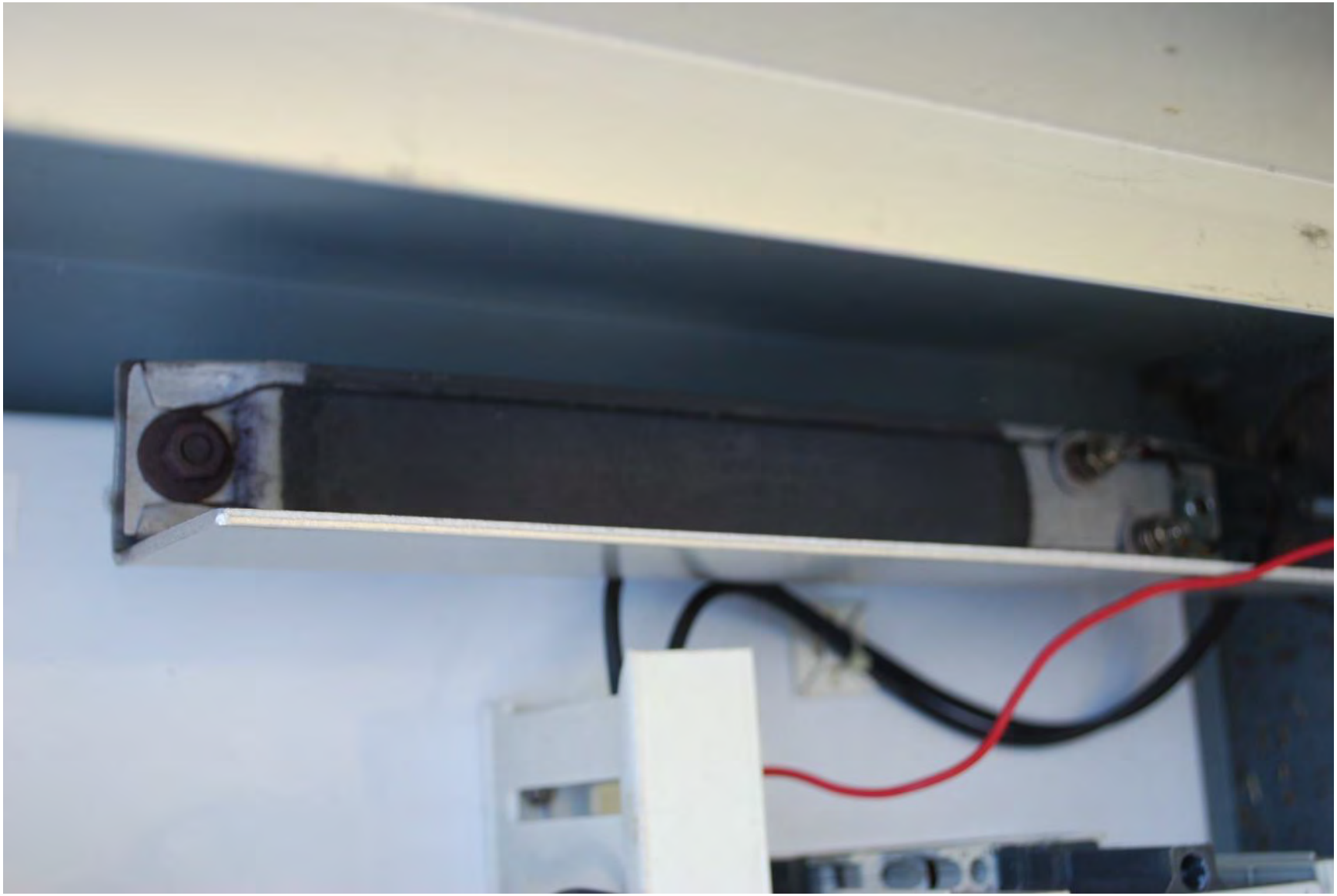

25 26 28 29
1 L1 3 L2 5 L3
SIEMENS
3TF46
MAX. HP
AC-3
2 T1 4 T2 6 T3
LA2
95
97
96
98
3UA58


CPT
MADE IN U.S.A.
50
60
70
80
90
TH
Dayton

PULL UP TO REMOVE
CAUTION: 240 VOLT
REPLACE AFTER WIRING
LIGHTNING ARRESTER
A B
H1 H4
MODEL TC30B — 240 VOLT
MOTOR PROTECTOR
Three Phase Power Monitor
MOTOR CONTROL CIRCUIT OPENS FIVE SECONDS AFTER THE OCCURANCE OF:
* SINGLE PHASE OPERATION
* PHASE UNBALANCE OF 12.5%
* PHASE SEQUENCE REVERSAL
MASTER CIRCUIT RECLOSES WITH 7.5% UNBALANCE & CORRECT SEQUENCE
Lamp on verifies normal phase balance and phase sequence
TURNER CONTROLS

ANY UNAUTHORIZED
USE OF THIS WIREWAY
WILL VOID WARRANTY
SF1
SF2
FLYGT
MINI
CONTROL
AND
STATUS
SUPPLY
TEMPERATURE
LEAKAGE
FLYGT
MINI
CONTROL
AND
STATUS
SUPPLY
TEMPERATURE
LEAKAGE
ON
OFF


25 26 28 29
ONDUITS MUST BE
LED TO PREVENT
RY OF CORROSIVE
GASES

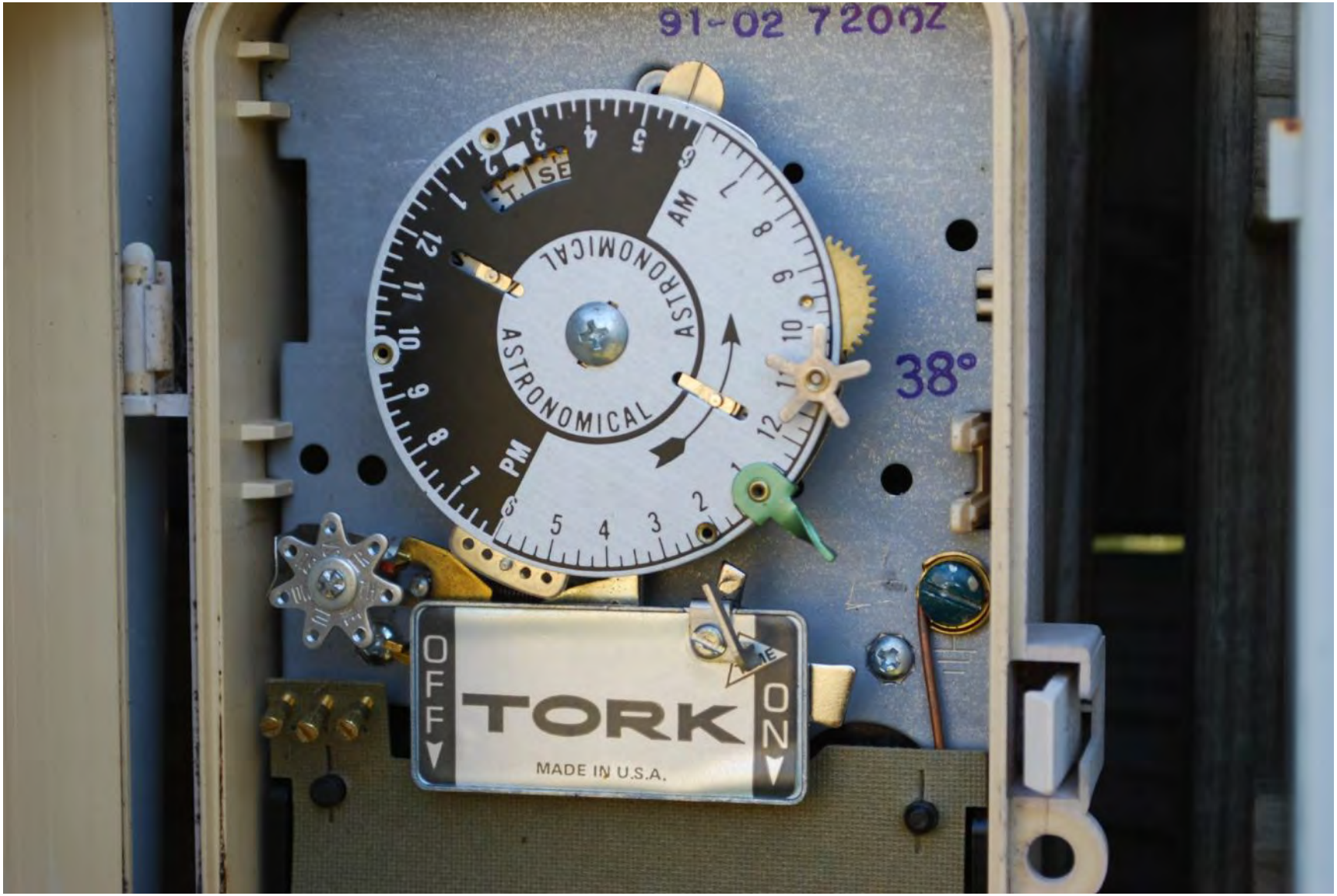


WETWELL DEPTH
SIGNAL INPUT
UP
AUTO
DOWN
DISPLAY SETTING
ON
ADJ.
NO.1
NO.2
HIGH WATER
NO.3
LAG PUMP START
NO.4
LEAD PUMP START
NO.5
STOP
NO.6
SIGNAL ON (FAIL OFF)
CONTROL SYSTEMS, INC.
P.O. BOX 4852, JACKSON, MS 39296 PHONE: (601) 355-8594

PUMP NO. 1
OFF
MAN. AUTO.
LEAD SELECTOR
ALT.
PUMP 1 PUMP 2
PUMP NO. 2
OFF
MAN. AUTO.
RUNNING
RUNNING
FAILED
HIGH
WATER
FAILED
SEAL
FAILURE
SEAL
FAILURE
Pump
Watch
BY CONTROL SYSTEMS, INC.
P.O. BOX 4852, JACKSON, MS 39296 • 601-355-8594

JOB#14982
CONTROL SYSTEMS, Inc.
909 QUINN ST.
P.O. BOX 4852-JACKSON, MISS. 39216
FOR SERVICE CALL 601/355-8594

H1 H3
INDUSTRIAL CONTROL
TRANSFORMER
CLASS 9070 SER. A
TYPE K50D23
CPT
H2 H4
120 240
H1 H3 H2 H4 H1 H3 H2 H4
X2 X1
24
LISTED
933R
S30033-511-51
X1
LR37055
MADE
IN U.S.A.

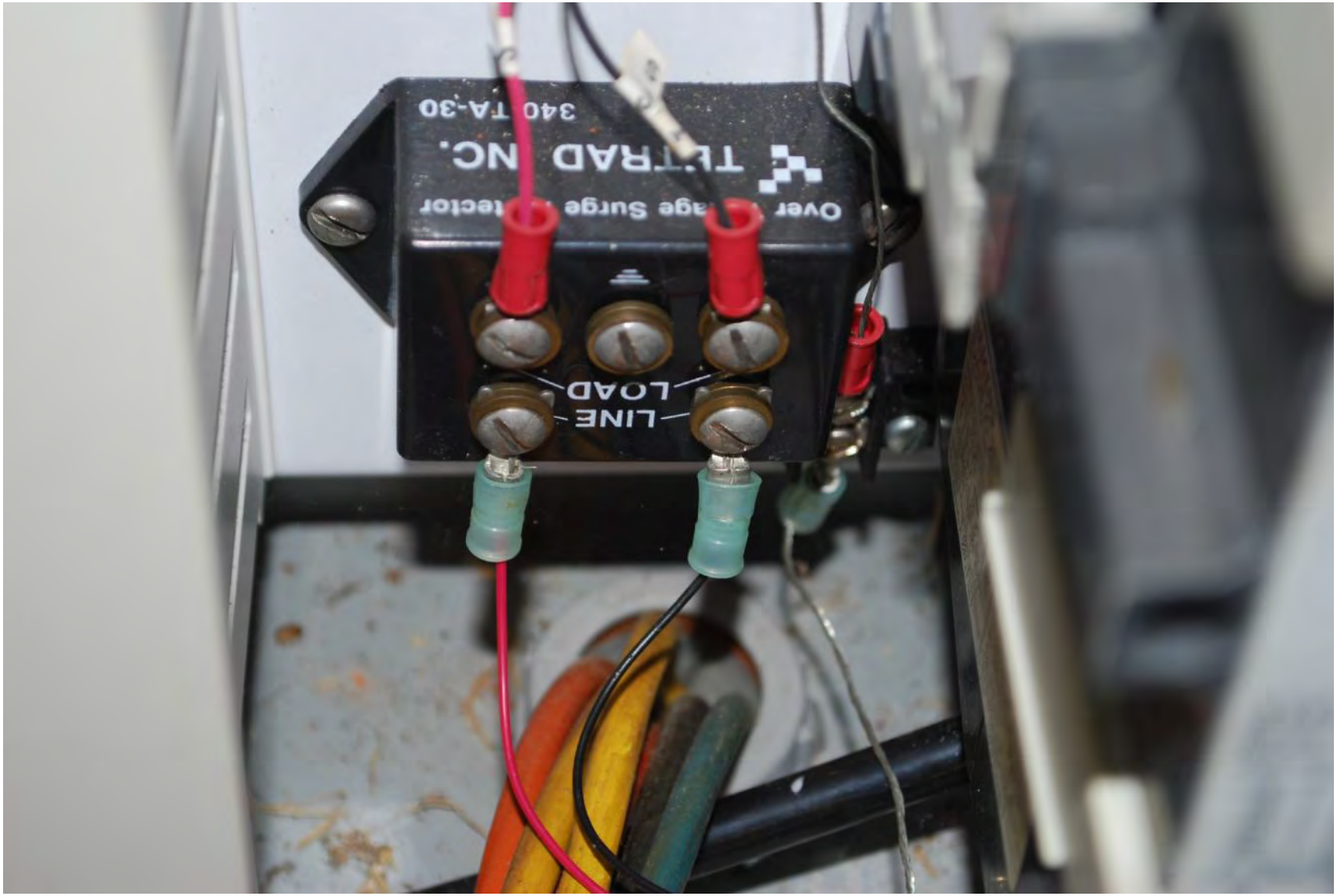

91-02 7200Z
ASTRONOMICAL
ASTRONOMICAL
AM
PM
38°
OFF
TORK
ON
MADE IN U.S.A.

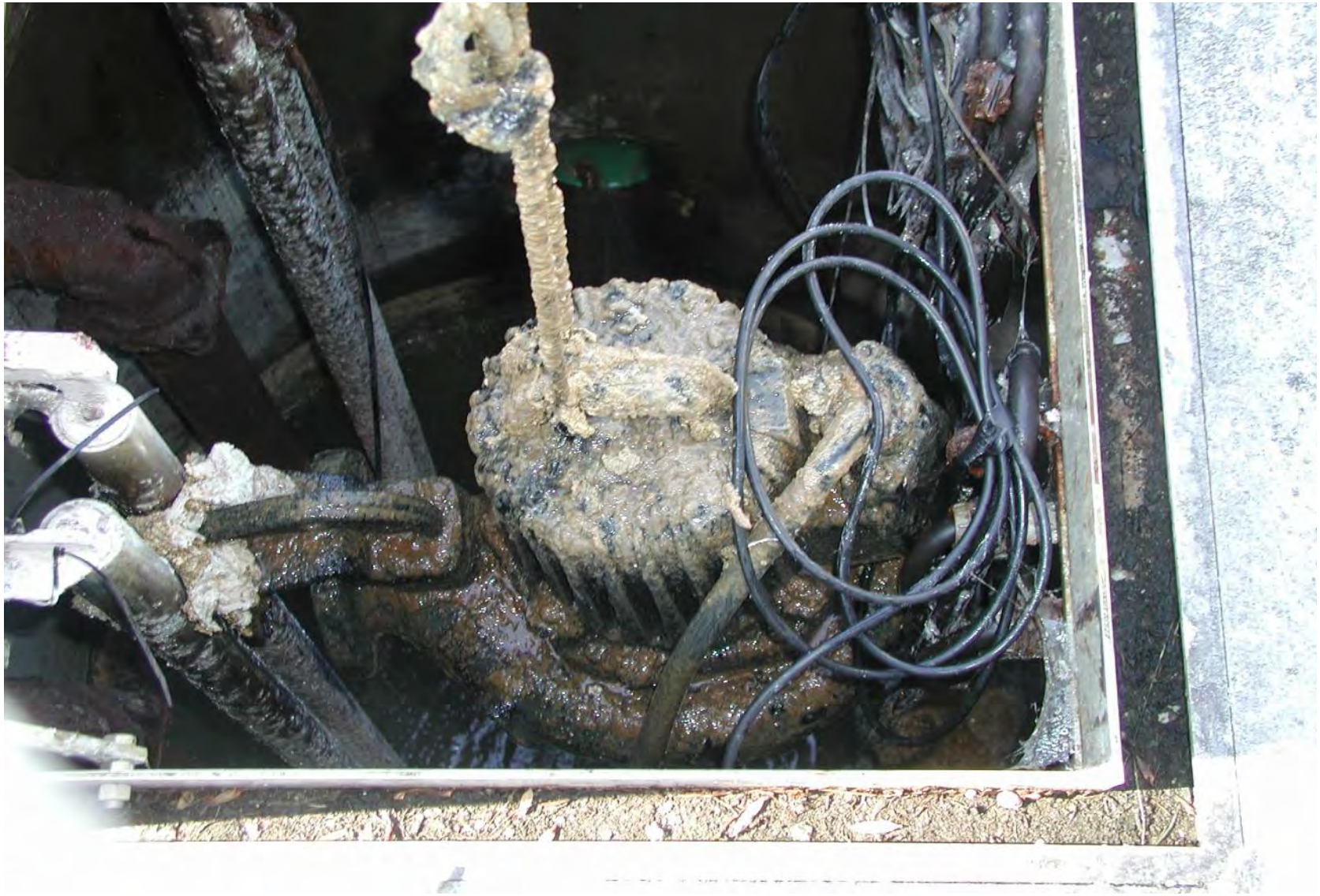
Heat
TAPE

15
15
Heat
TAPE

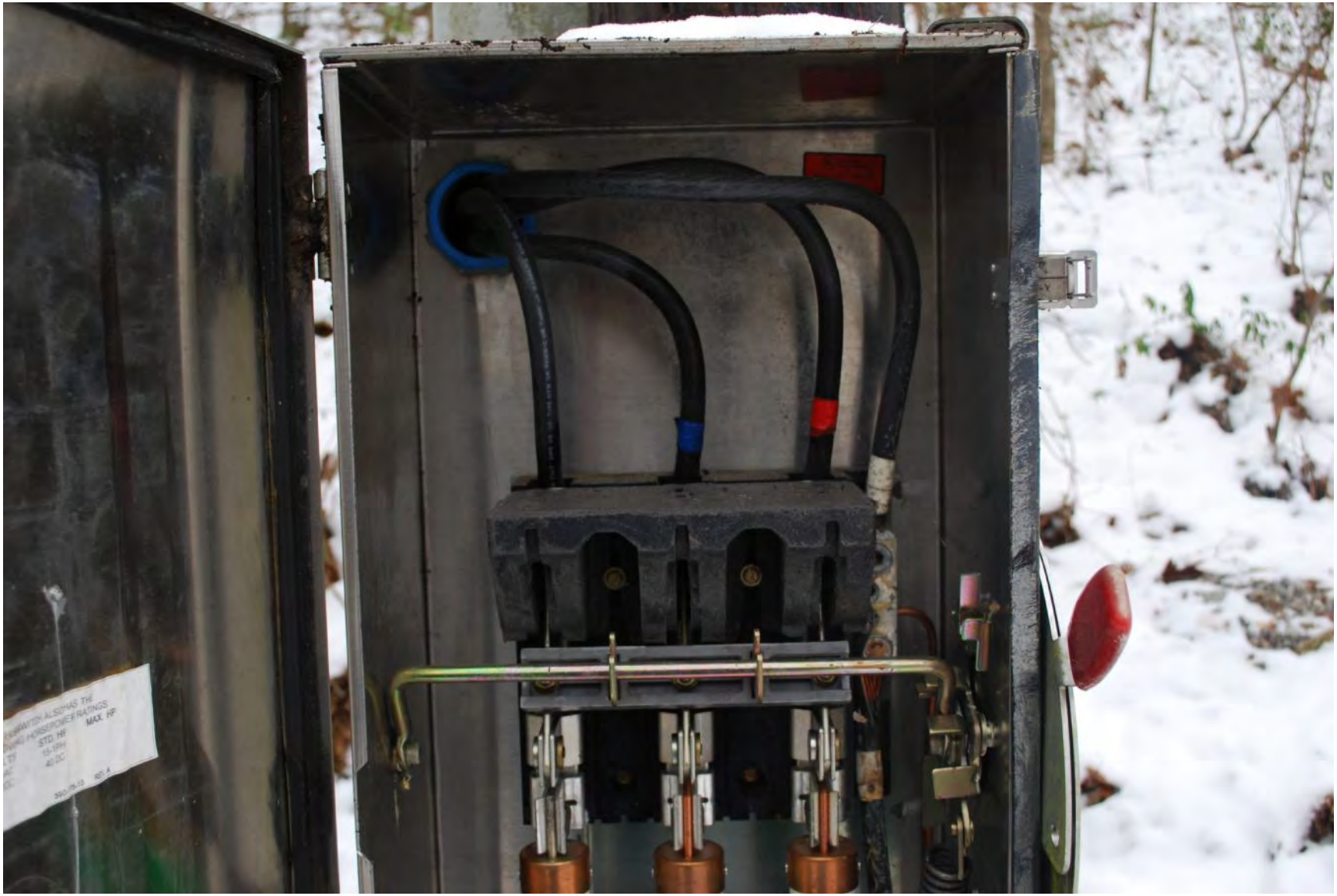
ON
OFF
KEEP OUT
HIGH VOLTAGE

931
25 KVA
120/240
935
25 KVA
120/240


LOAD
LINE



TENNESSEE
GW·6110
·GOV'T SERV.
DANGER



CRN-R200

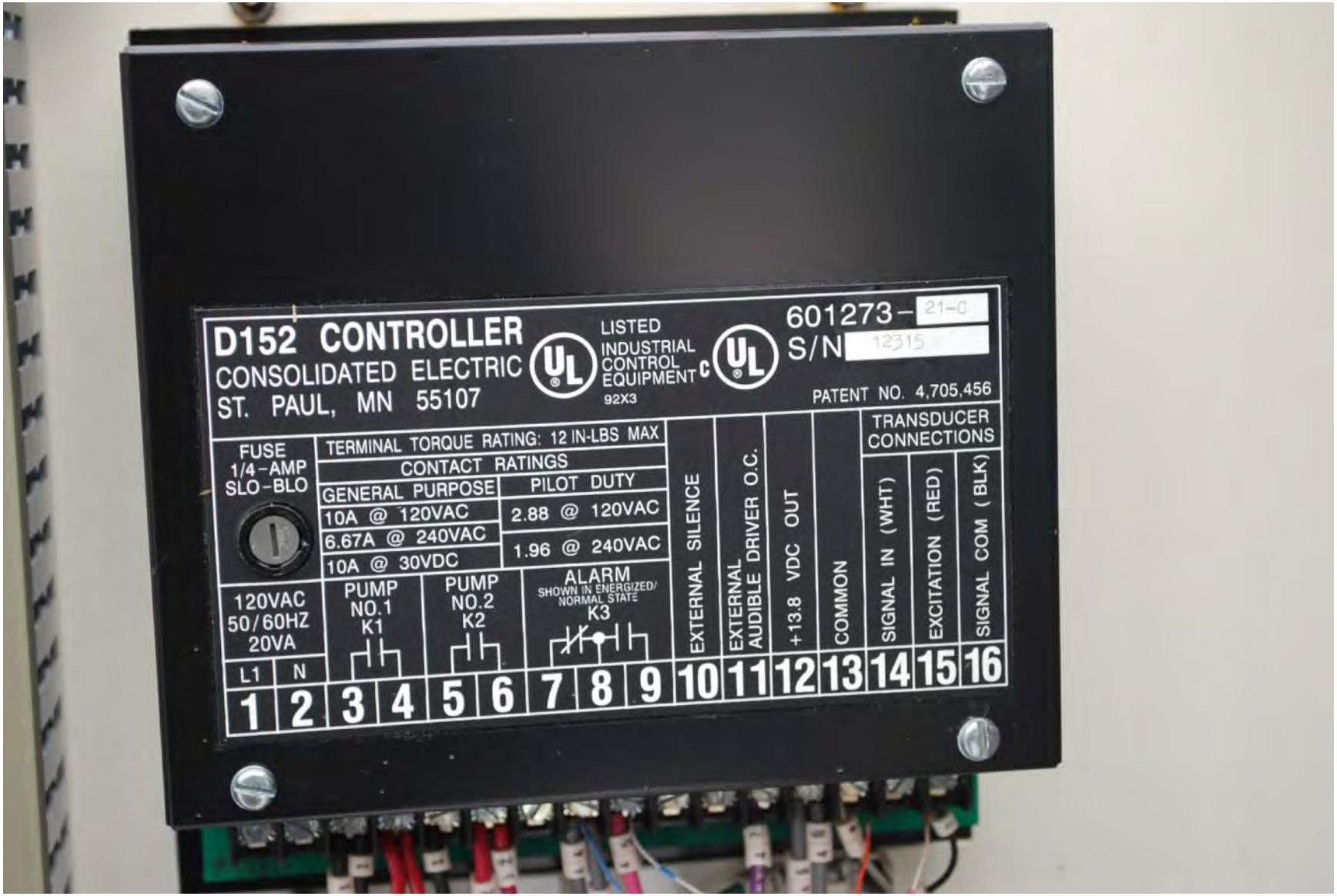
CHALLENGER
Heavy Duty Safety Switch
VOLTS
240AC

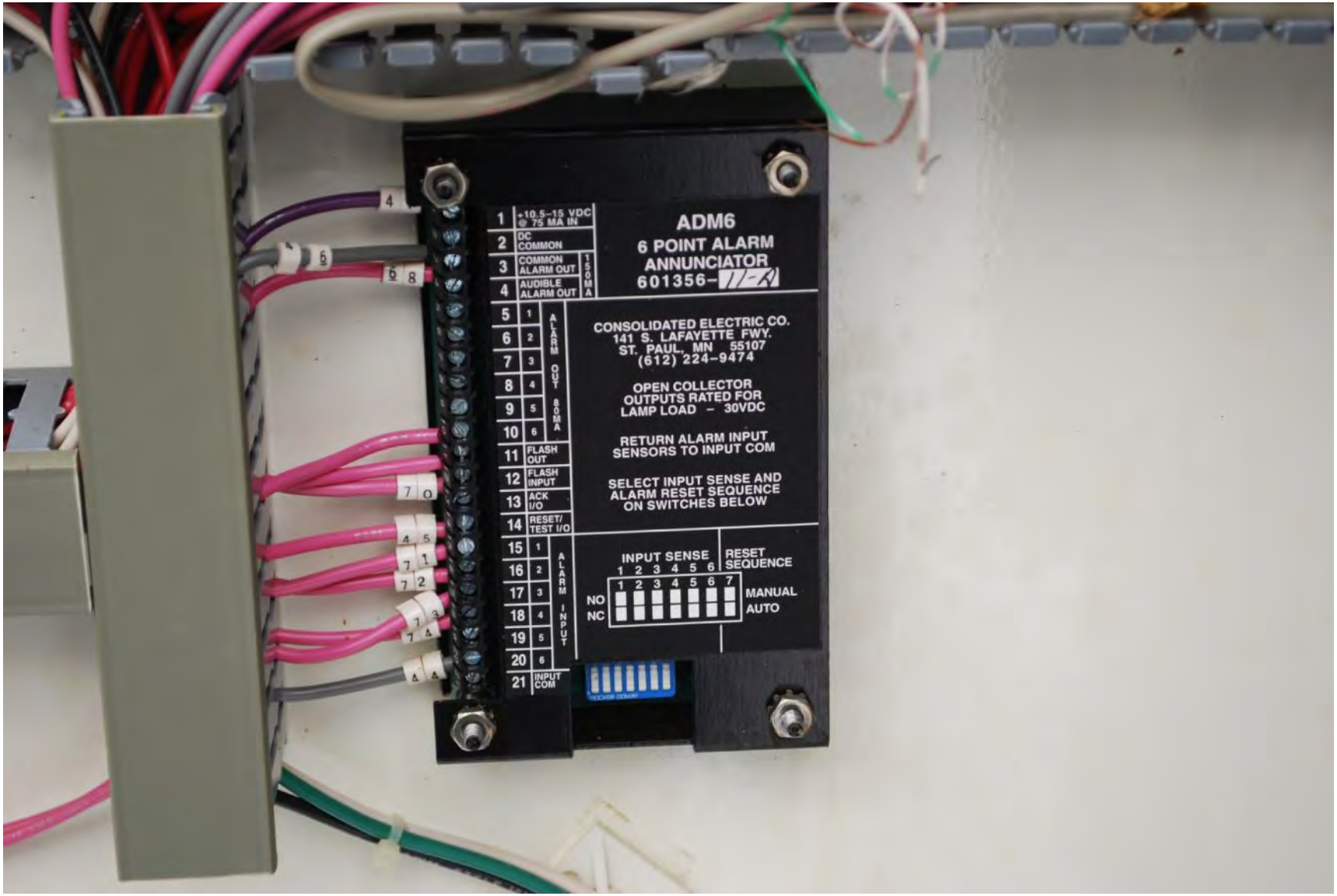
GFI
DUPLEX RECEPTACLE
CONTROL POWER
PUMP NO. 1
D152 CONTROLLER
LEVEL IN FEET
LEAD PUMP
LAG PUMP
LOW ALARM
HIGH ALARM
MAN LEVEL SIMULATOR
RAISE
AUTO
LOWER
AUTO ALTERNATOR CONTROL SWITCH
AUTO
1 – 2
2 – 1
Consolidated Electric

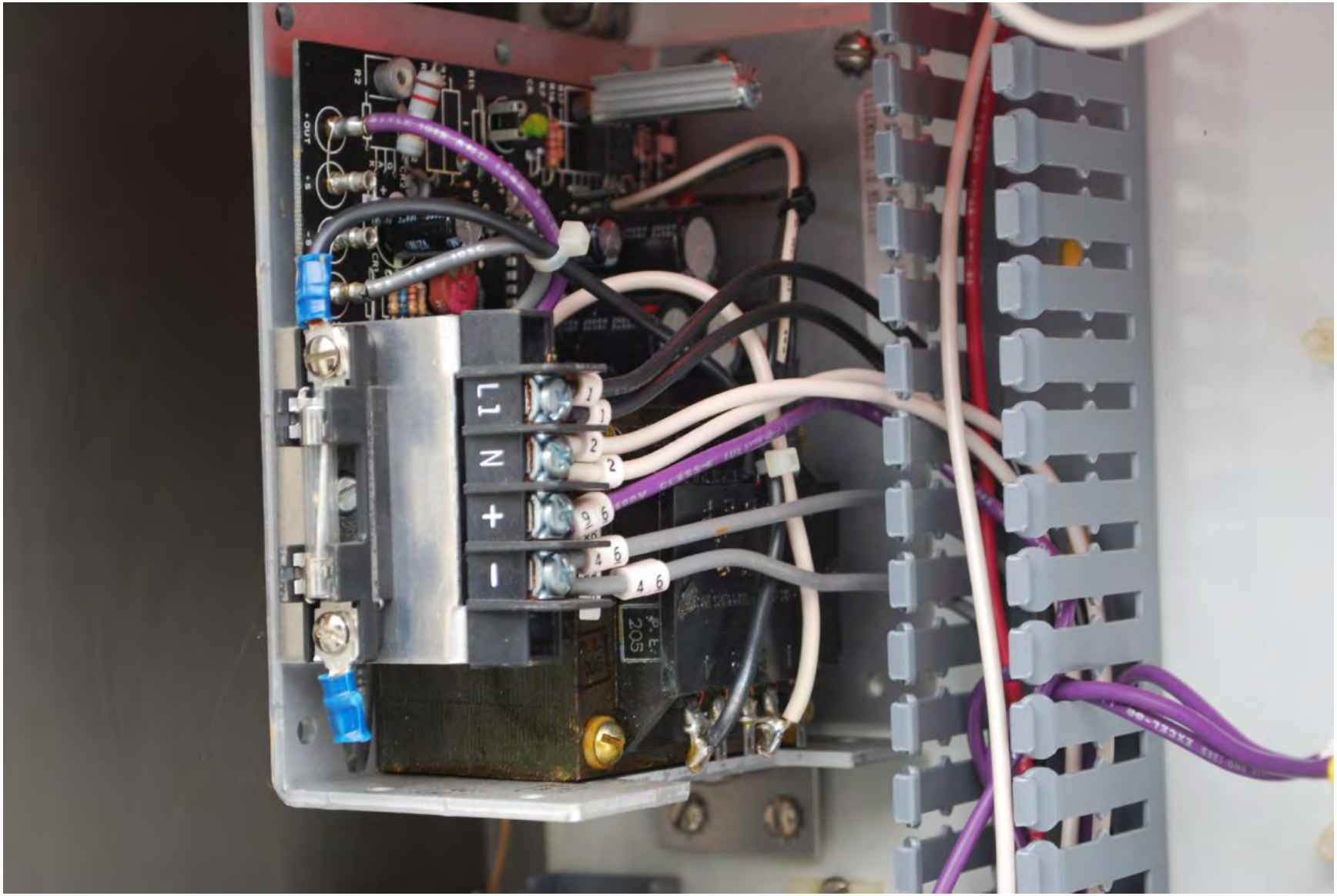
CONTROL POWER
PUMP NO. 1
PUMP NO. 2
LAG PUMP
LOW ALARM
HIGH ALARM
DANGER
Disconnect all sources of power before opening door. (Multiple and/or remote sources of power may be present.)
Hazardous voltages cause severe injury or death.
Consolidated Electric

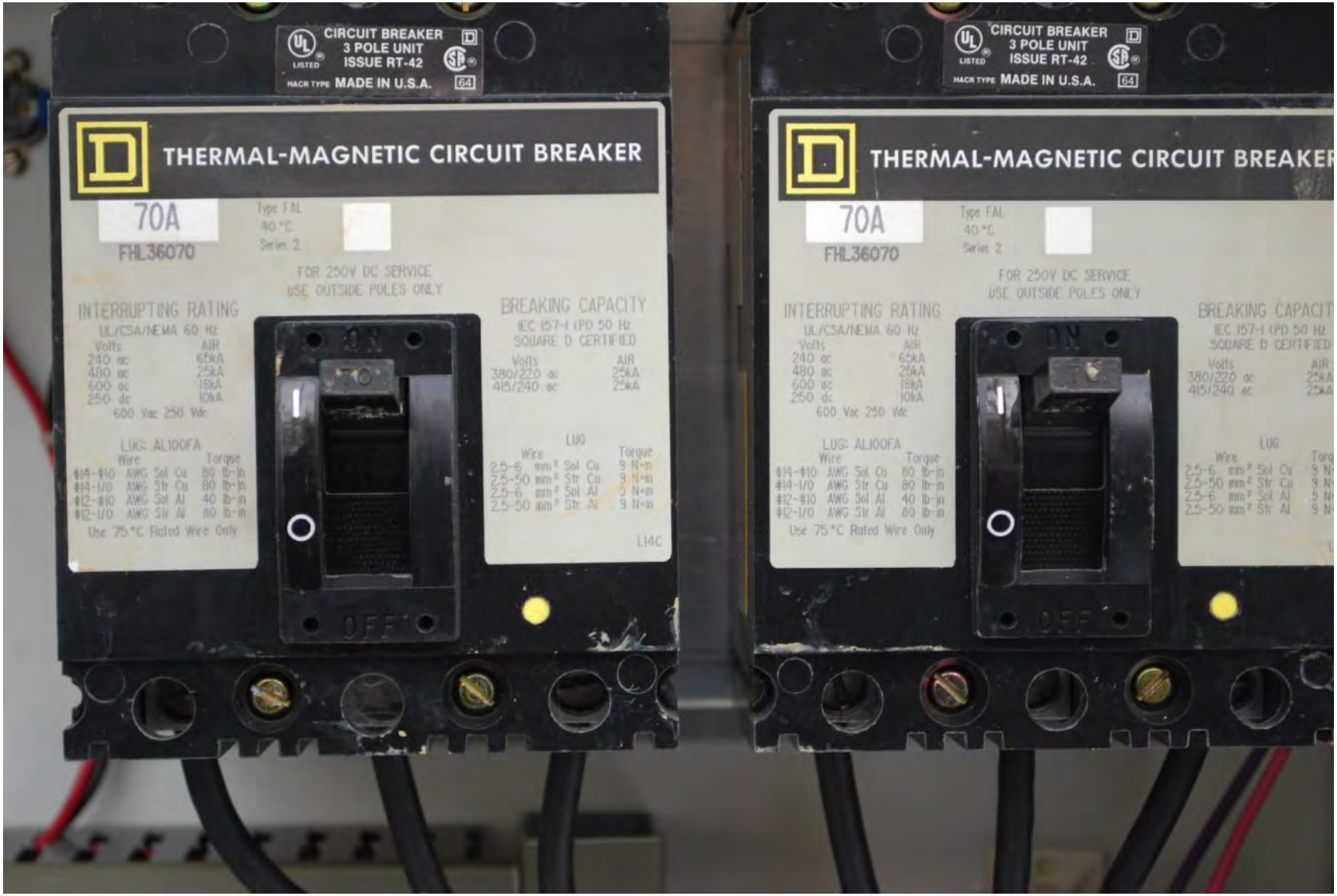
Consolidated Electric
Consolidated Electric
Abnormal Level
Emergency High Level
Pump No. 1 Overtemp
Pump No. 2 Overtemp
Low Level Cutout
ACK
RST TST
RUNNING
SEAL FAILURE
PUMP NO. 1
HAND-OFF-AUTO
RESET
RUNNING
SEAL FAILURE
PUMP NO. 2
HAND-OFF-AUTO
RESET
LOW LEVEL CUTOUT RESET

TYPE 4,4X
NG CONDUIT TO THIS
E C.S.A. CERTIFIED
THAT HAVE THE SAME
TYPE RATING AS THE
ITH INDUSTRIAL
QUIPMENT ONLY
WEST OUTER DRIVE PUMP STATION
SERIAL NO. 53727-C
PROD. CODE CPF1-D152-B3
JOB NAME OAK RIDGE, TN.
VOLTS 240
HERTZ 60
PHASE 3
WIRE 4
MAX. F.L.A. 125
LARGEST MOTOR 14.2 H.P. 33 F.L.A.
DRAWING NO. C913113-01
PRESSURE
CONSOLIDATED ELECTRIC COMPANY
141 SOUTH LAFAYETTE FREEWAY
SAINT PAUL, MINNESOTA 55107
AC 612/224-9474
Underwriters Laboratories Inc.®
LISTED

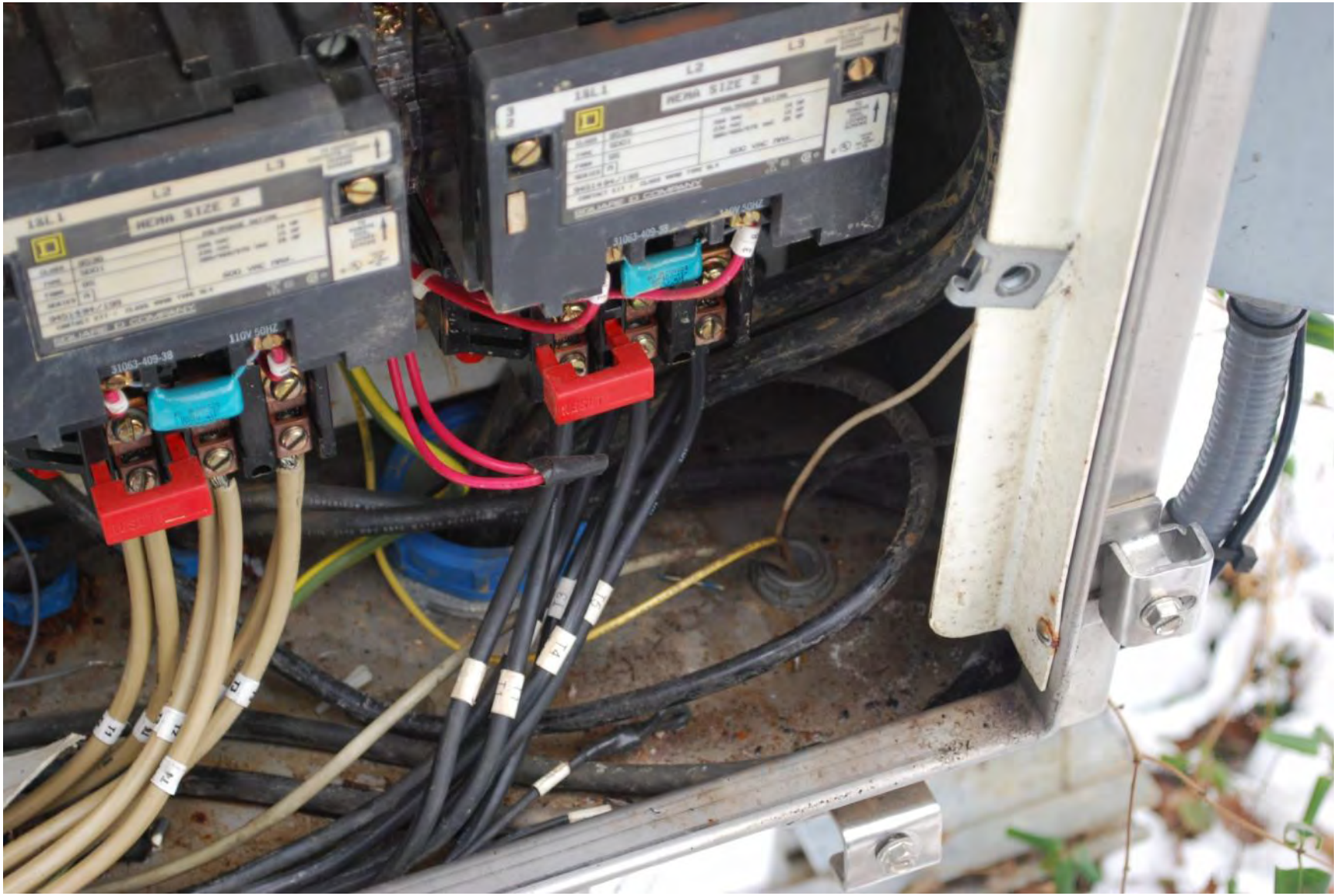

D152 CONTROLLER
CONSOLIDATED ELECTRIC
ST. PAUL, MN 55107
LISTED
INDUSTRIAL
CONTROL
EQUIPMENT
92X3
601273-21-0
S/N 12315
PATENT NO. 4,705,456
FUSE
1/4-AMP
SLO-BLO
TERMINAL TORQUE RATING: 12 IN-LBS MAX
CONTACT RATINGS
GENERAL PURPOSE
10A @ 120VAC
6.67A @ 240VAC
10A @ 30VDC
PILOT DUTY
2.88 @ 120VAC
1.96 @ 240VAC
120VAC
50/60HZ
20VA
PUMP
NO.1
K1
PUMP
NO.2
K2
ALARM
SHOWN IN ENERGIZED/
NORMAL STATE
K3
EXTERNAL SILENCE
EXTERNAL
AUDIBLE DRIVER O.C.
+13.8 VDC OUT
COMMON
TRANSDUCER
CONNECTIONS
SIGNAL IN (WHT)
EXCITATION (RED)
SIGNAL COM (BLK)
L1
N
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16

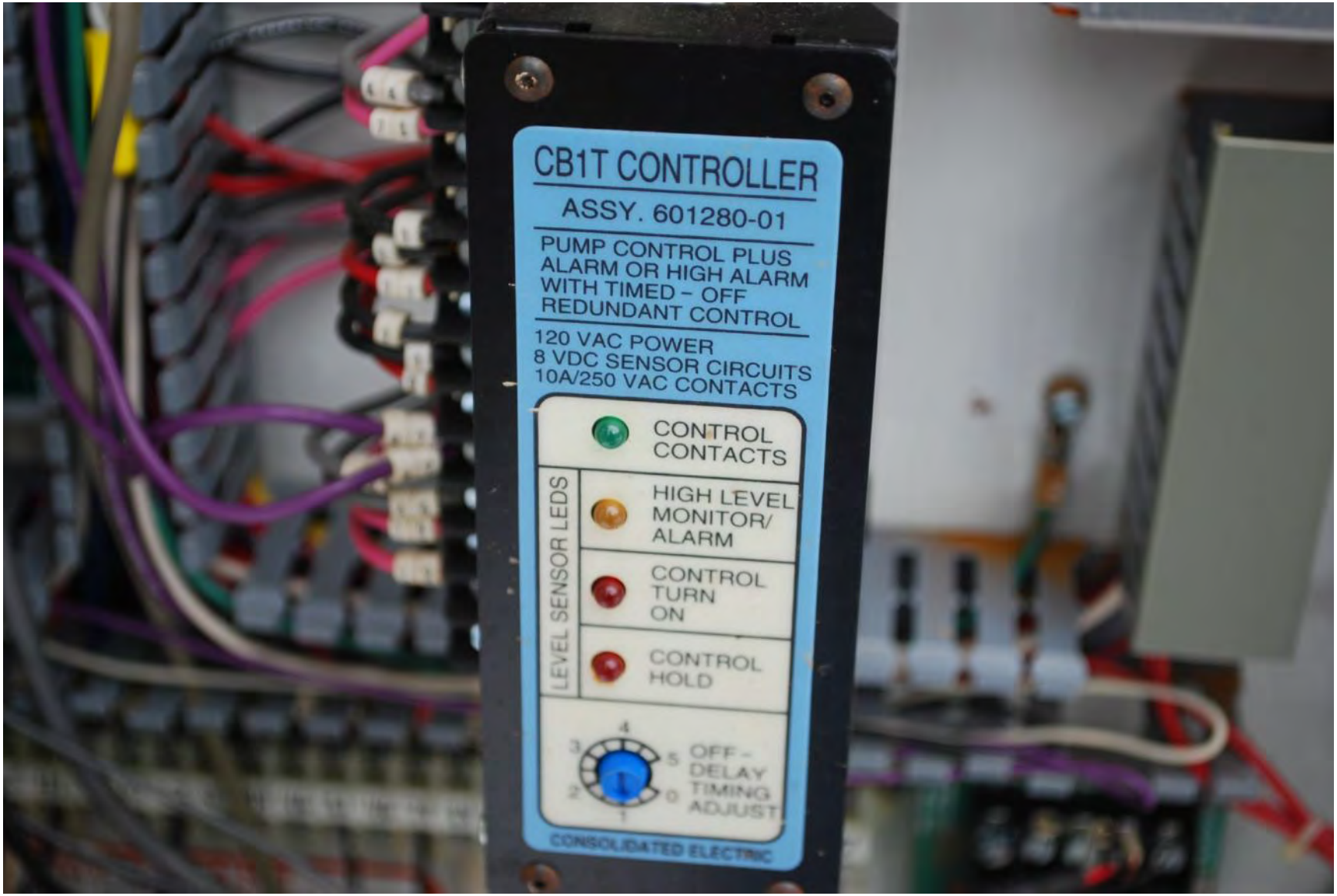

ADM6
6 POINT ALARM
ANNUNCIATOR
601356-11-A
CONSOLIDATED ELECTRIC CO.
141 S. LAFAYETTE FWY.
ST. PAUL, MN 55107
(612) 224-9474
OPEN COLLECTOR
OUTPUTS RATED FOR
LAMP LOAD - 30VDC
RETURN ALARM INPUT
SENSORS TO INPUT COM
SELECT INPUT SENSE AND
ALARM RESET SEQUENCE
ON SWITCHES BELOW
INPUT SENSE
RESET SEQUENCE
MANUAL
AUTO
NO
NC
+10.5-15 VDC @ 75 MA IN
DC COMMON
COMMON ALARM OUT
AUDIBLE ALARM OUT
150 MA
ALARM OUT 80MA
FLASH OUT
FLASH INPUT
ACK I/O
RESET/ TEST I/O
ALARM INPUT
INPUT COM


L1
N
+
-

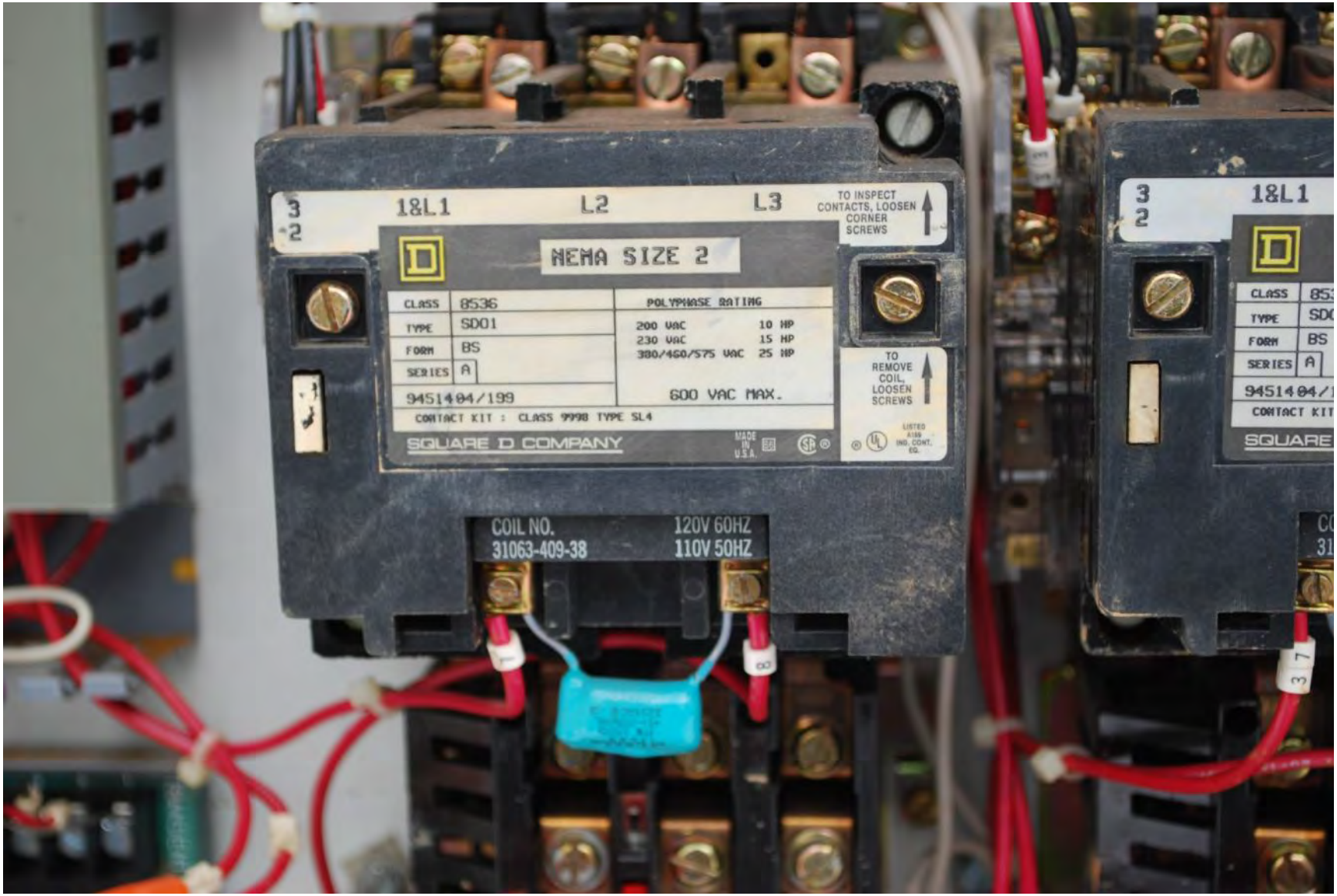

CIRCUIT BREAKER
3 POLE UNIT
ISSUE RT-42
MADE IN U.S.A.
THERMAL-MAGNETIC CIRCUIT BREAKER
70A
FHL36070
Type FAL
40 °C
Series 2
FOR 250V DC SERVICE
USE OUTSIDE POLES ONLY
INTERRUPTING RATING
UL/CSA/NEMA 60 Hz
Volts AIR
240 ac 65kA
480 ac 25kA
600 ac 18kA
250 dc 10kA
600 Vac 250 Vdc
LUG: AL100FA
Wire Torque
#14-#10 AWG Sol Cu 80 lb-in
#14-1/0 AWG Str Cu 80 lb-in
#12-#10 AWG Sol Al 40 lb-in
#12-1/0 AWG Str Al 60 lb-in
Use 75 °C Rated Wire Only
BREAKING CAPACITY
IEC 157-1 (PD 50 Hz
SQUARE D CERTIFIED
Volts AIR
380/220 ac 25kA
415/240 ac 25kA
LUG
Wire Torque
2.5-6 mm² Sol Cu 9 N-m
2.5-50 mm² Str Cu 9 N-m
2.5-6 mm² Sol Al 9 N-m
2.5-50 mm² Str Al 9 N-m
LI4C
ON
OFF

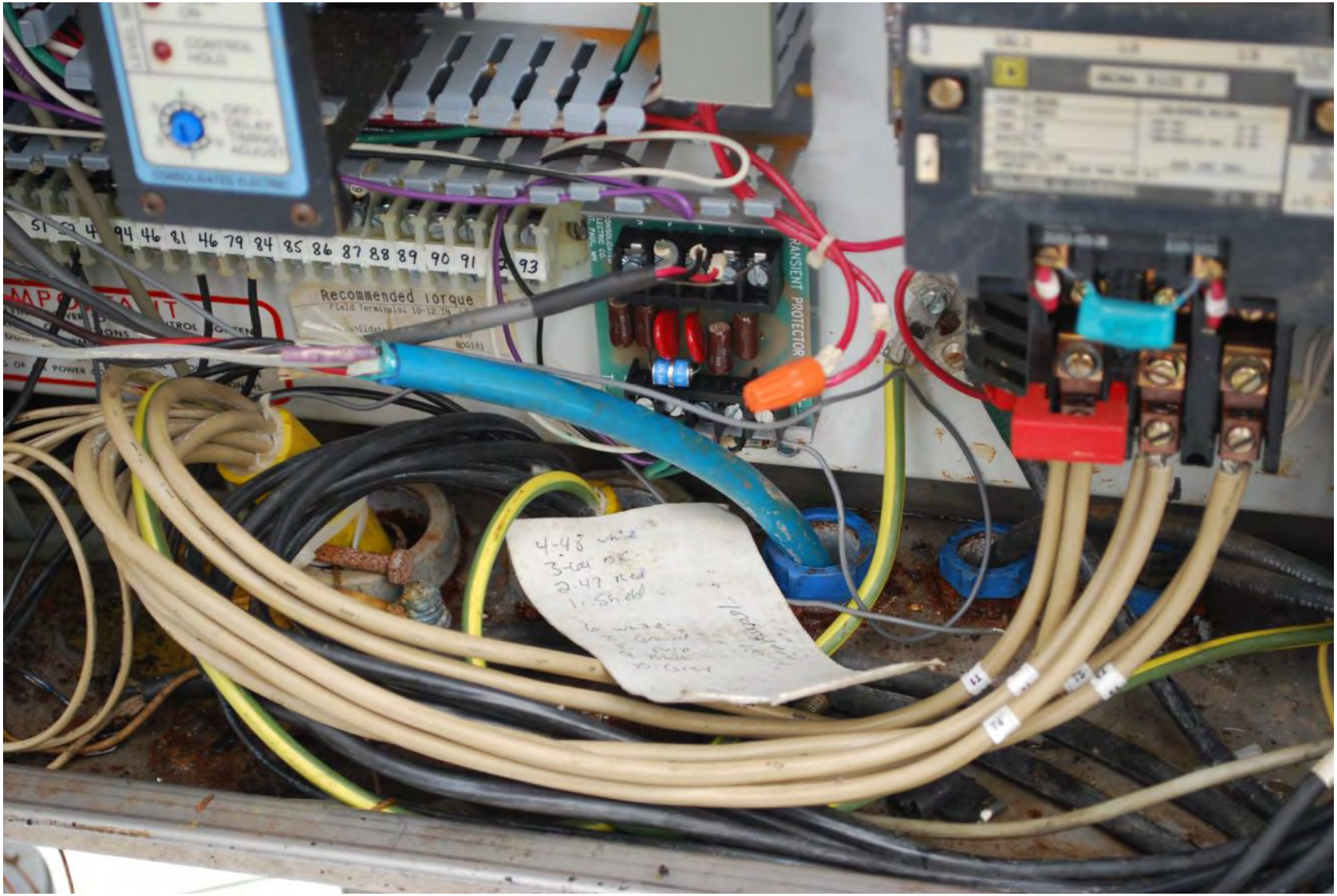
L1
L2
L3
N


NEMA SIZE 2
31063-409-38
110V 50HZ

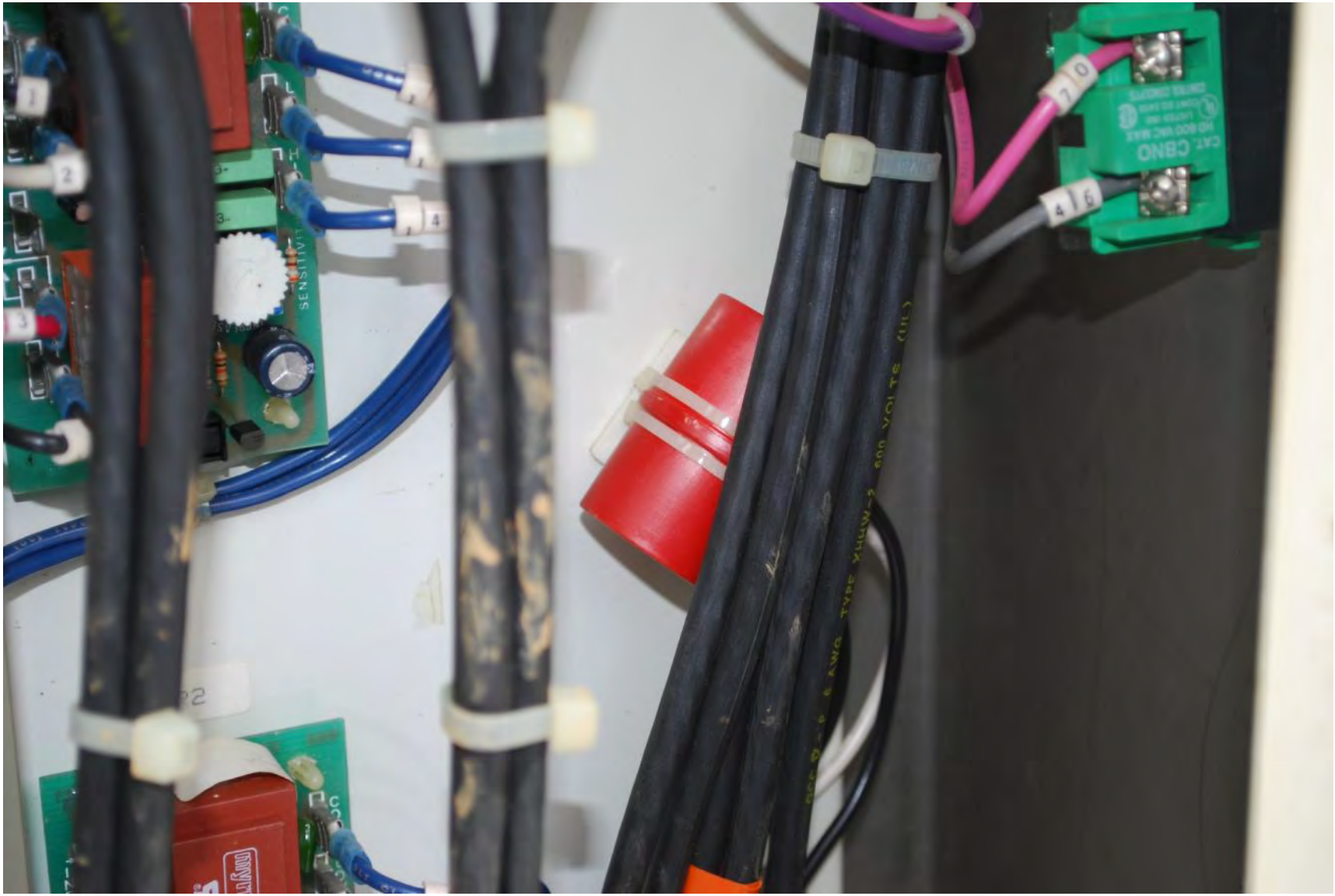

CB1T CONTROLLER
ASSY. 601280-01
PUMP CONTROL PLUS
ALARM OR HIGH ALARM
WITH TIMED – OFF
REDUNDANT CONTROL
120 VAC POWER
8 VDC SENSOR CIRCUITS
10A/250 VAC CONTACTS
CONTROL
CONTACTS
LEVEL SENSOR LEDS
HIGH LEVEL
MONITOR/
ALARM
CONTROL
TURN
ON
CONTROL
HOLD
OFF-
DELAY
TIMING
ADJUST
CONSOLIDATED ELECTRIC

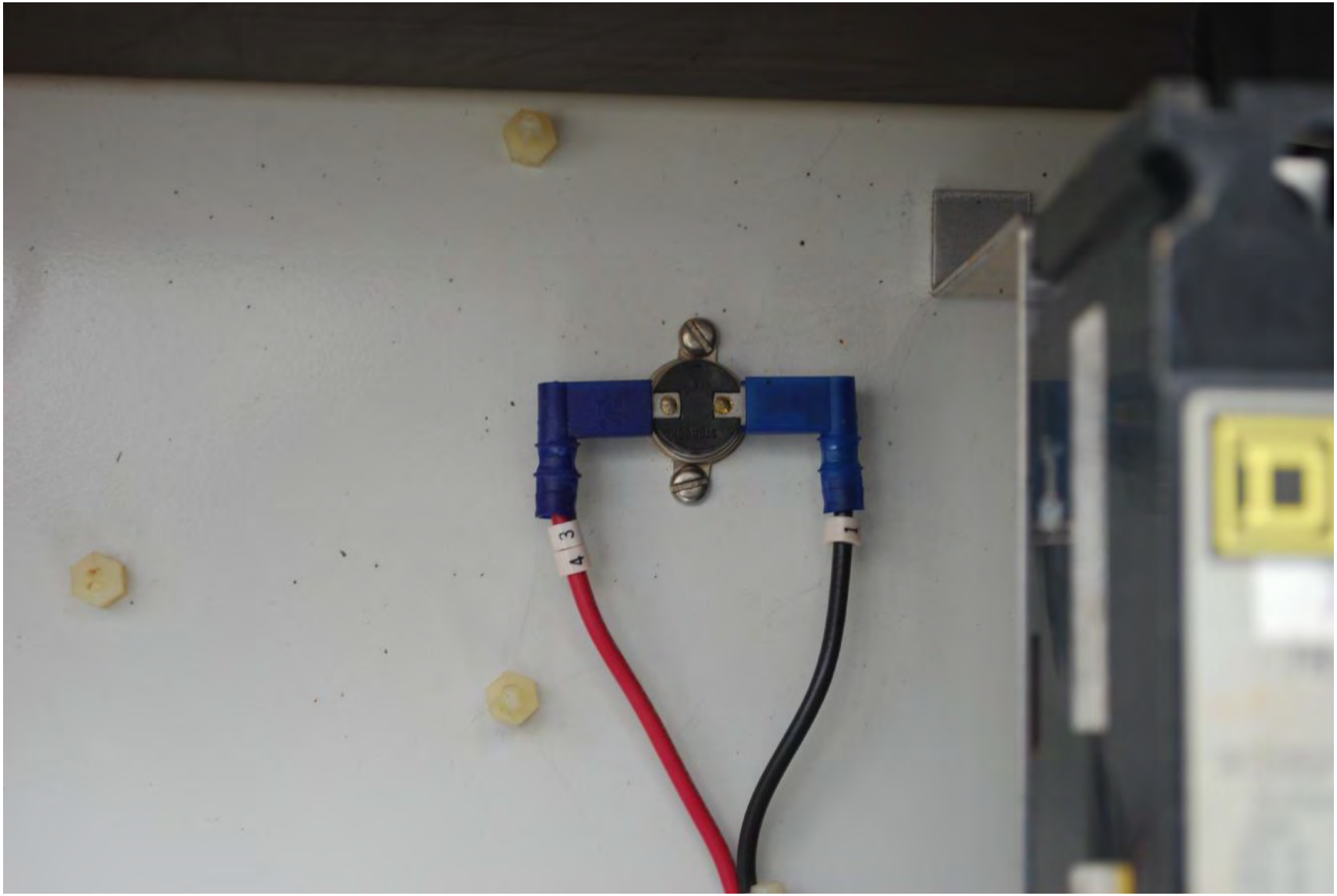
WARNING
BATTERY LEADS MUST NOT BE CONNECTED UNTIL EQUIPMENT IS READY FOR SERVICE. BATTERY POLARITY MUST BE OBSERVED. VIOLET WIRE SHOULD BE CONNECTED TO BATTERY POSITIVE TERMINAL (+) AND GRAY WIRE TO BATTERY NEGATIVE TERMINAL (−). PREMATURE OR IMPROPER CONNECTION MAY DAMAGE BATTERY.
CONSOLIDATED ELECTRIC COMPANY


3
2
1&L1
L2
L3
TO INSPECT CONTACTS, LOOSEN CORNER SCREWS
NEMA SIZE 2
CLASS 8536
TYPE SD01
FORM BS
SERIES A
9451404/199
POLYPHASE RATING
200 VAC 10 HP
230 VAC 15 HP
380/460/575 VAC 25 HP
600 VAC MAX.
CONTACT KIT : CLASS 9998 TYPE SL4
SQUARE D COMPANY
MADE IN U.S.A.
TO REMOVE COIL, LOOSEN SCREWS
COIL NO.
31063-409-38
120V 60HZ
110V 50HZ
3
2
1&L1
CLASS
TYPE
FORM
SERIES
CONTACT KIT
SQUARE


Recommended Torque
TRANSIENT PROTECTOR

96
97
98
47


SENSITIVITY
CAT. CBNO
600 VOLTS


4
3
1

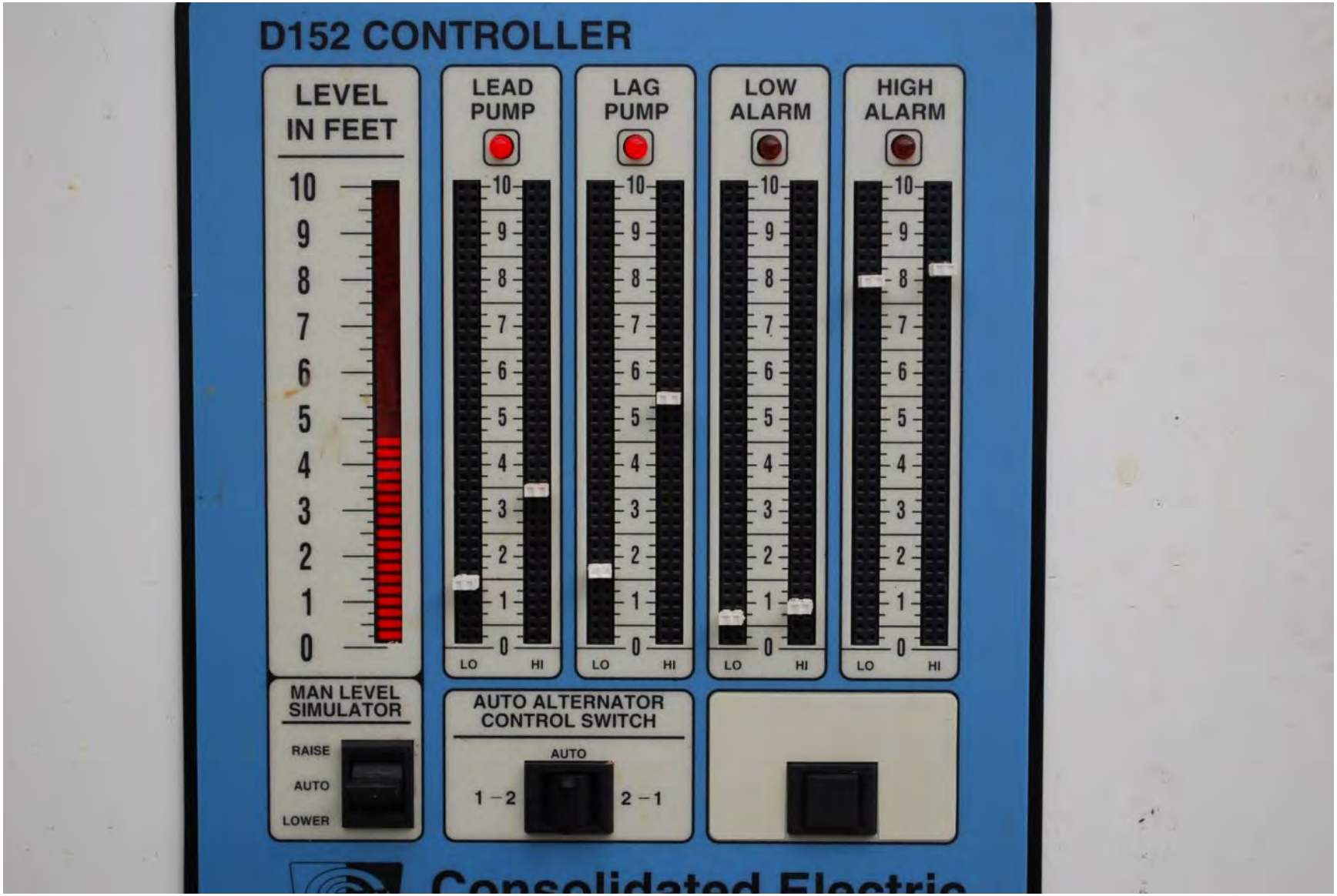
F
O
S
ALARM SILENCE

CIRCUIT BREAKER
3 POLE UNIT
ISSUE RT-42
MADE IN U.S.A.

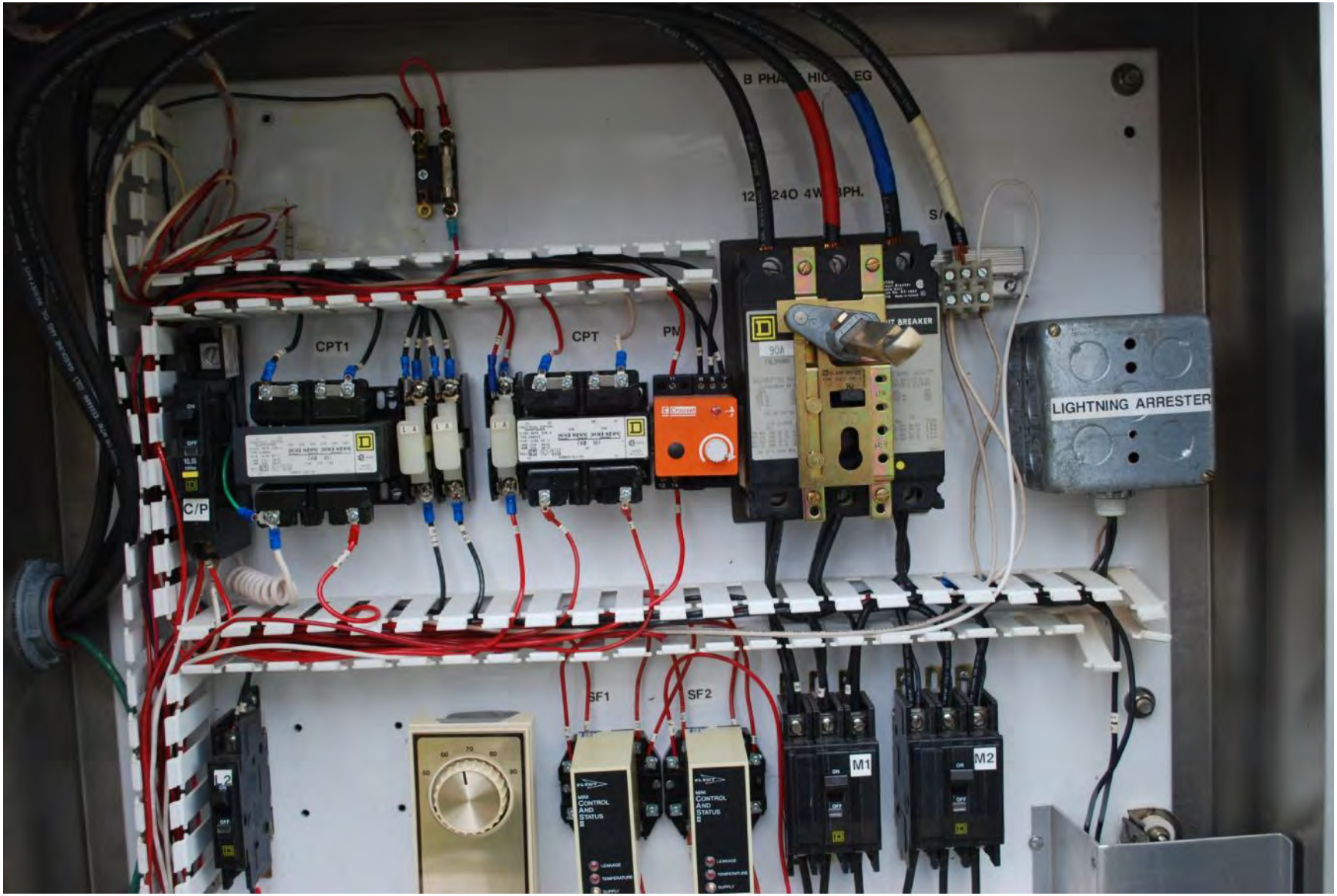
Ksb Bombas Hidráulicas
APPROVED
MADE IN BRAZIL 20
H
3~
M.- No.
V
Hz
SF
P2
A
LRA
PF
EXPLOSIONPROOF CLASS I, DIV.1 GROUPS C&D T3
SUBM. MAX. 100 FT
LIQ. TEMP.
°F
Nicht unter Spannung öffnen.
Ne pas ouvrir sous tension.
Non abrir bajo tensión.
Do not open while energised.
Non aprire con motore sotto tensione.

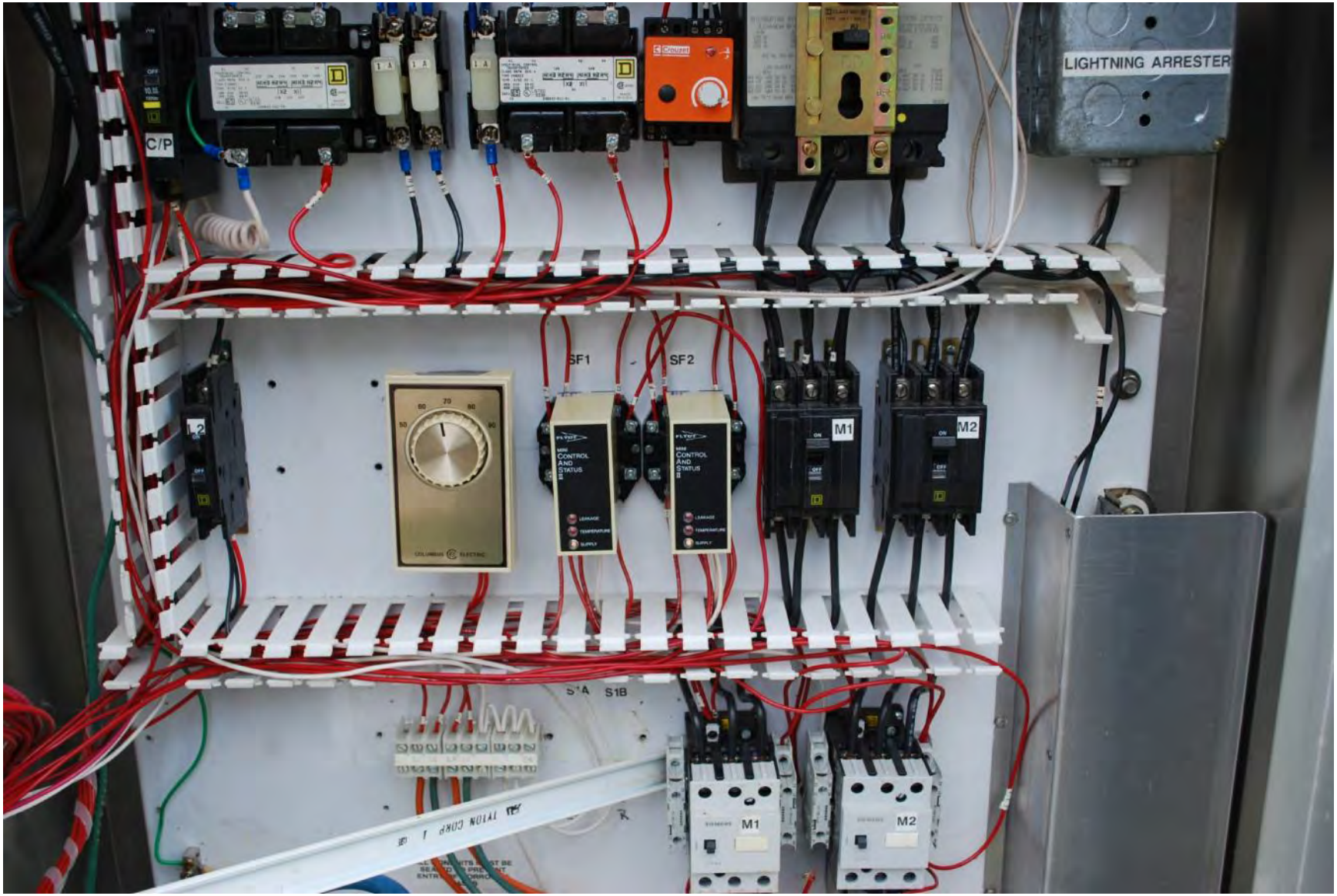
CAUTION !
WIPE FOR 230 V.
Hidráulicas
APPROVED

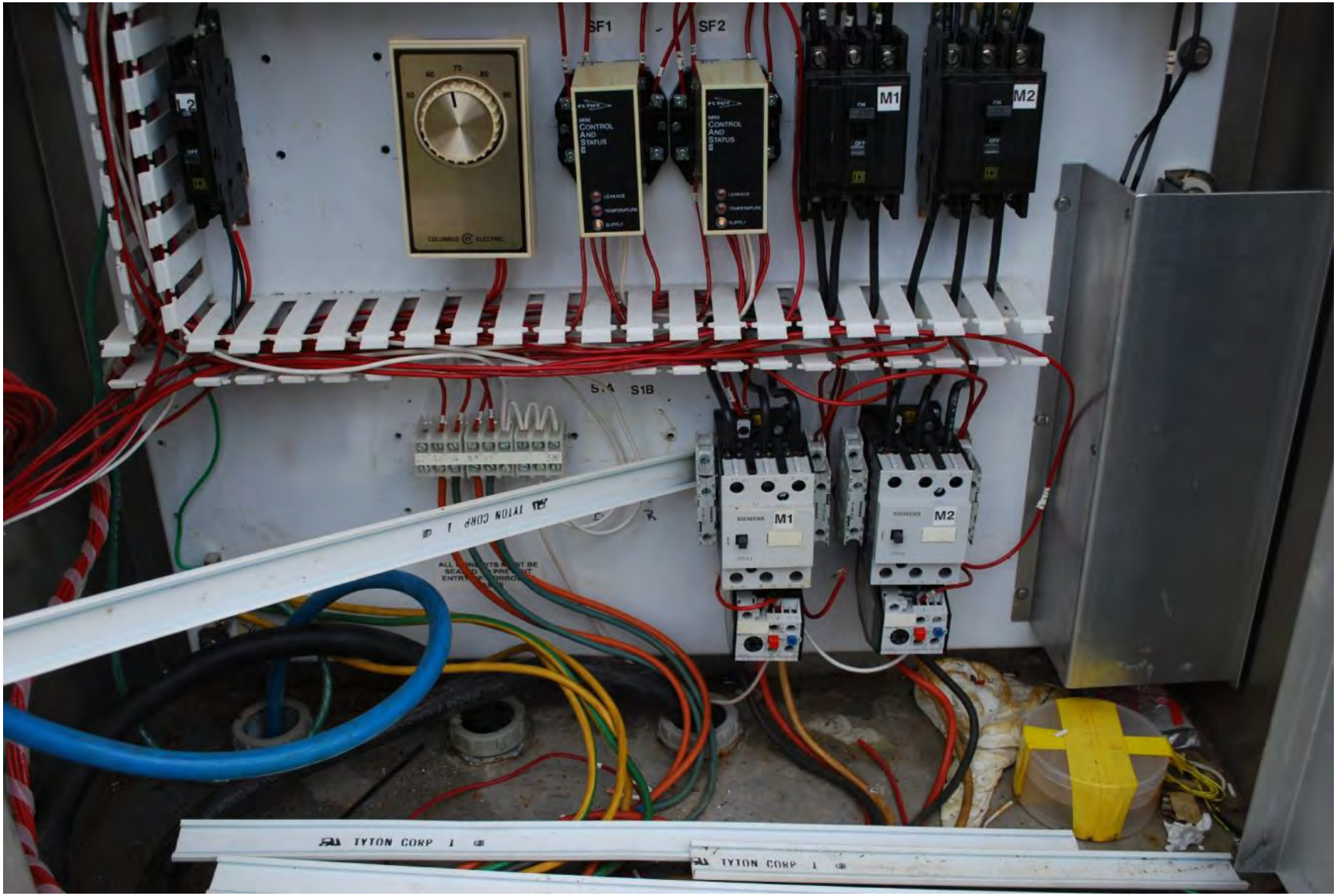
CAUTION !
WIPE FOR 230 V.


D152 CONTROLLER
LEVEL IN FEET
10
9
8
7
6
5
4
3
2
1
0
LEAD PUMP
LAG PUMP
LOW ALARM
HIGH ALARM
LO
HI
MAN LEVEL SIMULATOR
RAISE
AUTO
LOWER
AUTO ALTERNATOR CONTROL SWITCH
AUTO
1 – 2
2 – 1

TENNESSEE
GW·611
·GOV'T SERV·
DANGER


CPT1
CPT
PM
LIGHTNING ARRESTER
C/P
SF1
SF2
M1
M2


LIGHTNING ARRESTER
C/P
SF1
SF2
M1
M2
CONTROL AND STATUS
M1
M2

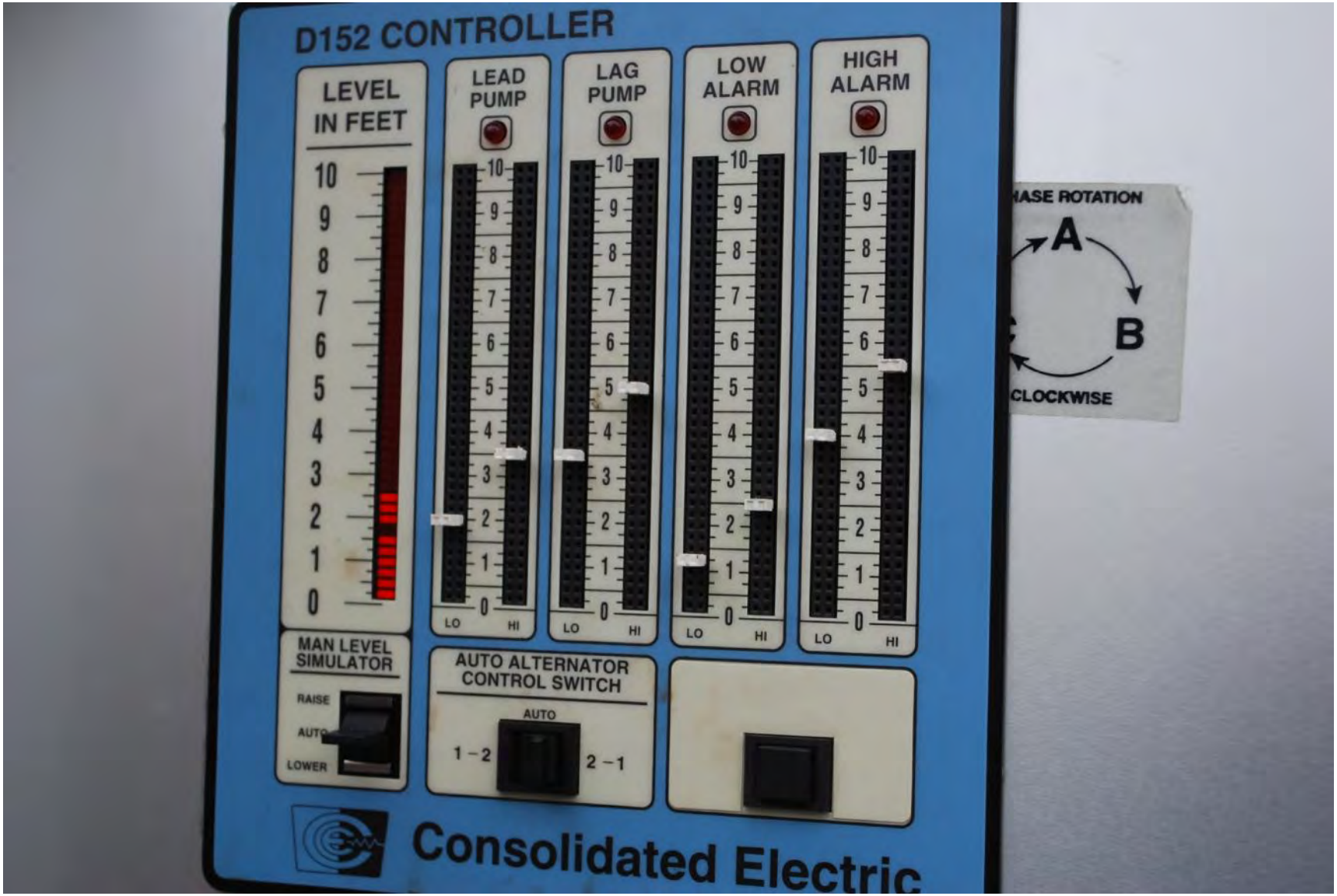

SF1
SF2
M1
M2
CONTROL AND STATUS
TYTON CORP 1
TYTON CORP 1

D152 CONTROLLER
CONSOLIDATED ELECTRIC
ST. PAUL, MN 55107
LISTED
INDUSTRIAL
CONTROL
EQUIPMENT
92X3
601273-21-C
S/N 12313
PATENT NO. 4,705,456
FUSE
1/4-AMP
SLO-BLO
TERMINAL TORQUE RATING: 12 IN-LBS MAX
CONTACT RATINGS
GENERAL PURPOSE
PILOT DUTY
10A @ 120VAC
6.67A @ 240VAC
10A @ 30VDC
2.88 @ 120VAC
1.96 @ 240VAC
120VAC
50/60HZ
20VA
L1
N
PUMP
NO.1
K1
PUMP
NO.2
K2
ALARM
SHOWN IN ENERGIZED/
NORMAL STATE
K3
EXTERNAL SILENCE
EXTERNAL
AUDIBLE DRIVER O.C.
+13.8 VDC OUT
COMMON
TRANSDUCER
CONNECTIONS
SIGNAL IN (WHT)
EXCITATION (RED)
SIGNAL COM (BLK)
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16

240 VOLTS

2284
25
2276
WARNING
KEEP OUT!
25
NON-PCB

2284
WARNING
KEEP OUT!
25
NON-PCB
WARNI
KEEP OUT!


D152 CONTROLLER
LEVEL IN FEET
LEAD PUMP
LAG PUMP
LOW ALARM
HIGH ALARM
LO
HI
MAN LEVEL SIMULATOR
RAISE
LOWER
AUTO ALTERNATOR CONTROL SWITCH
AUTO
1 – 2
2 – 1
Consolidated Electric
ASE ROTATION
A
B
CLOCKWISE

Consolidated Electric
1
2

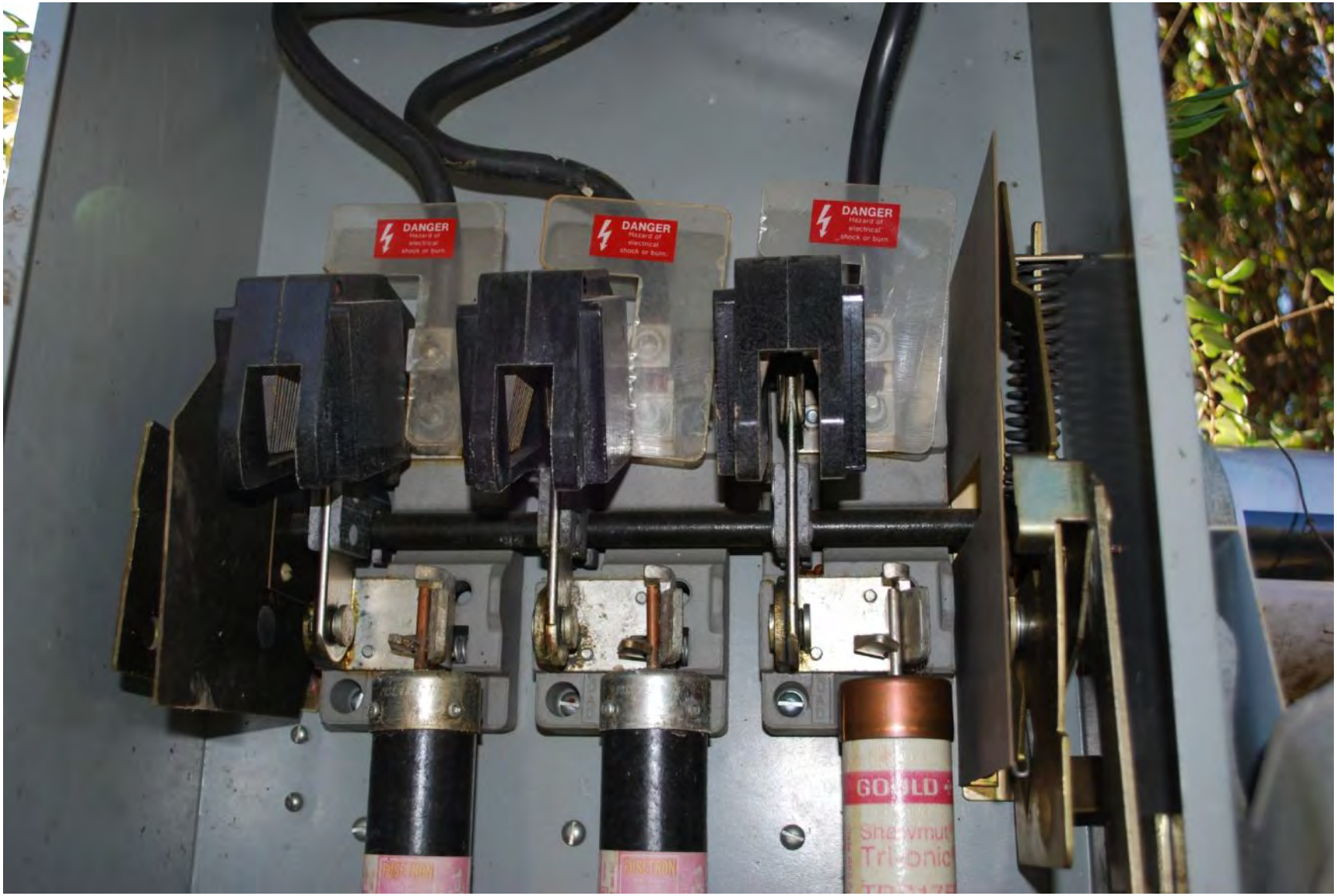
Consolidated Electric
AUTO
OFF
HAND
RUN
RUN TIME
HI TEMP
1
2

CONTROL SYSTEMS, Inc.
909 QUINN ST.
P.O. BOX 4852 - JACKSON, MISS. 39216
FOR SERVICE CALL 601/355-8594
JOB#18044

MADE IN SW

MADE IN SWEDEN

GOULD


DANGER
DANGER
DANGER

ON
HEAVY DUTY SAFETY SWITCH
TYPE 3R RAINPROOF ENCLOSURE
cat. no.
RH1236SN
200 amps 600 vac 150 max. h.p.*
*complete rating inside
Y82616B-1
OFF

D152 CONTROLLER
LEVEL IN FEET
LEAD PUMP
LAG PUMP
LOW ALARM
HIGH ALARM
Consolidated Electric

Sensaphone
Phonetics, Inc.

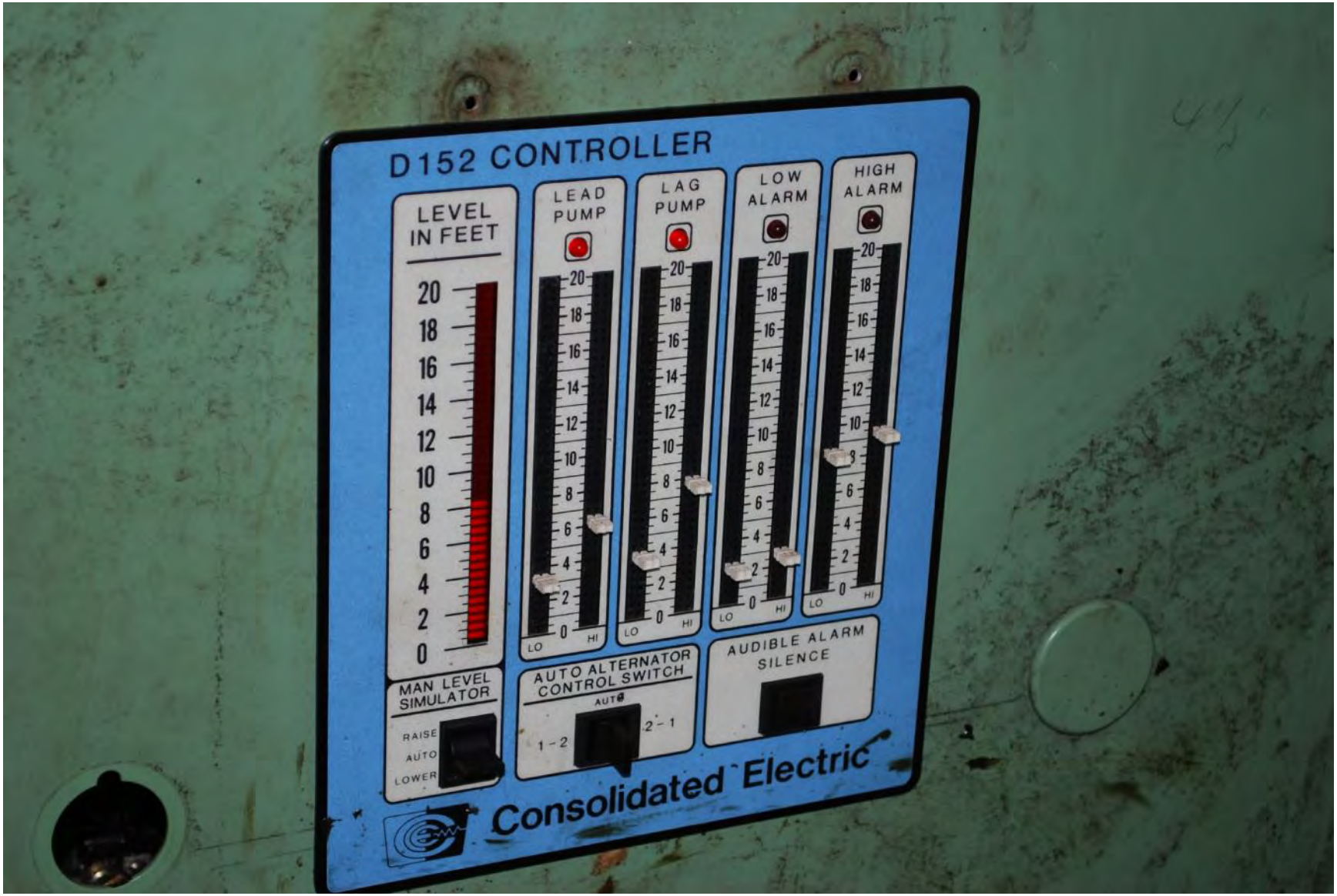
PUMP 1
ALTERNATOR
OFF ON
PUMP 2
HAND-OFF-AUTO
PS2
PS1
Sensaphone Express
Phonetics, Inc.

WAUSAU, WIS
LOW VOLTAGE LINE
HIGH VOLTAGE LINE
3 LEADS
6 LEADS
6 LEADS
6 LEADS

MARATHON
ELECTRIC
WAUSAU, WISCONSIN · 54401
FRAME
ENC
230/460
1760
60
1.15
LOW VOLTAGE LINE
HIGH VOLTAGE
6 LEADS
9 LEADS
6 LEADS
9 LEADS

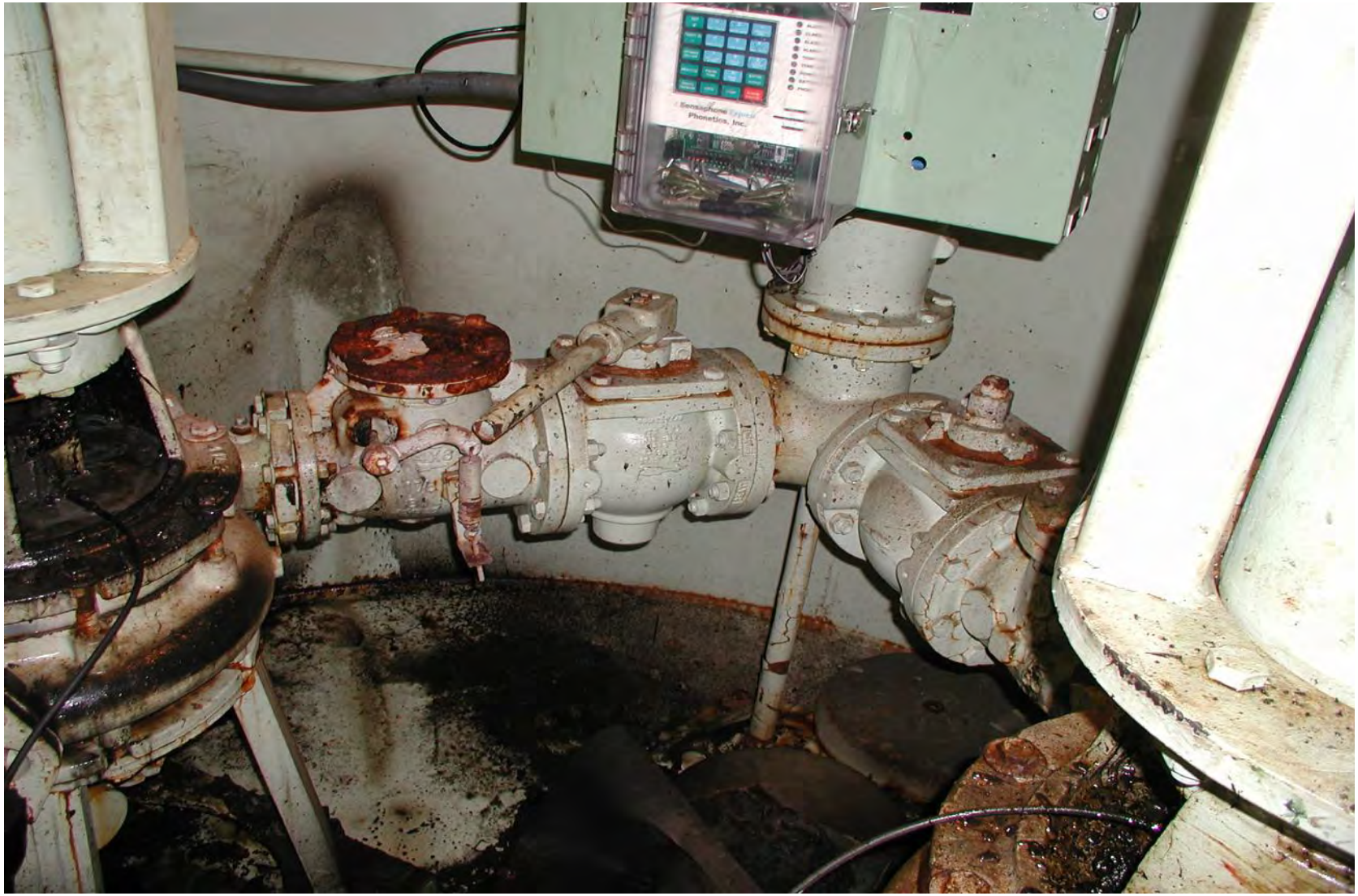
Yeomans ®
Chicago
Corporation
MELROSE PARK, ILLINOIS, U.S.A.
DATE
9/86
HEAD/FT
185
UNIT

UNIT
HEAD/FT
DATE
9/86
ROSE PARK, ILLINOIS, U.S.A.
Corporation

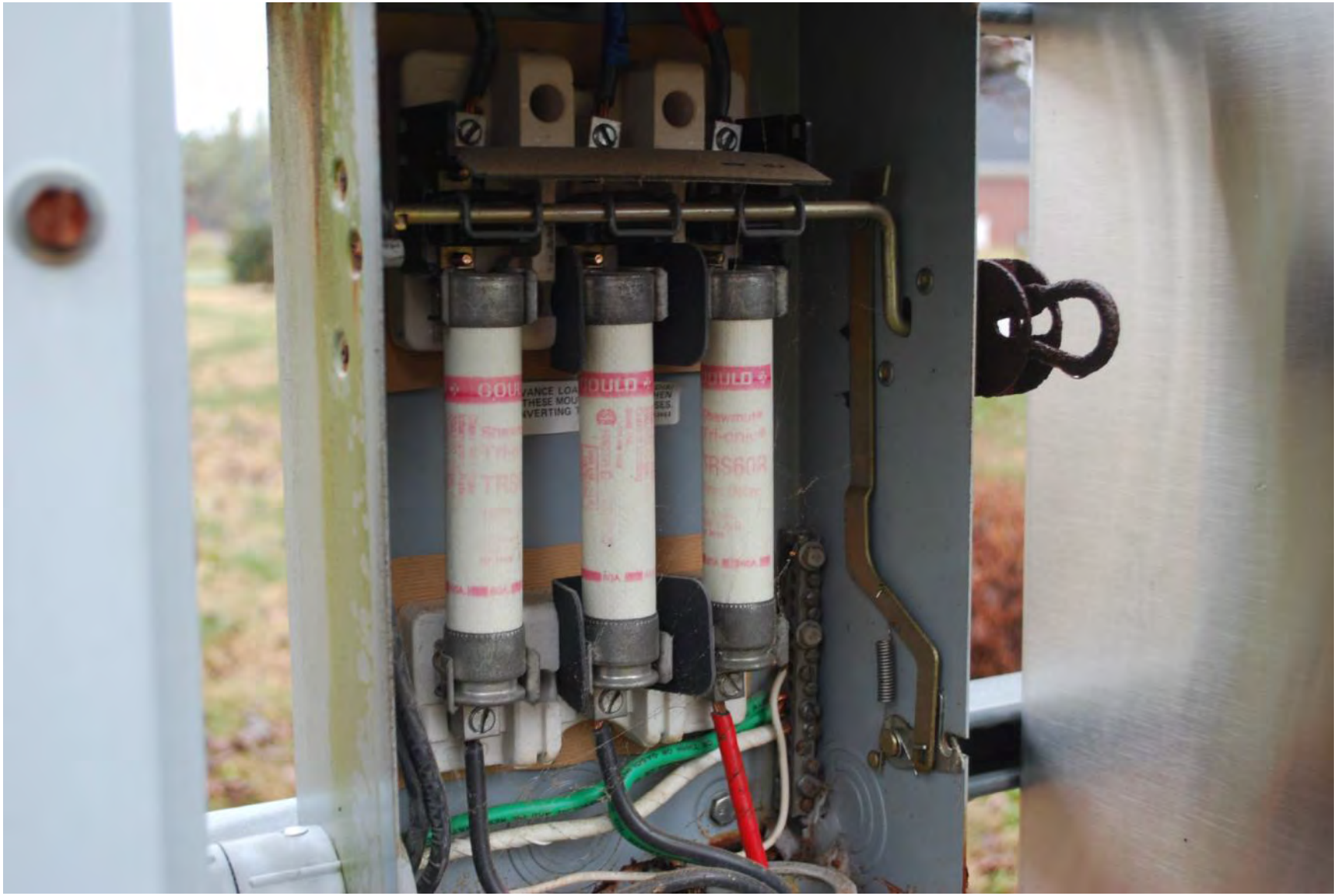

D152 CONTROLLER
LEVEL IN FEET
LEAD PUMP
LAG PUMP
LOW ALARM
HIGH ALARM
MAN LEVEL SIMULATOR
RAISE
AUTO
LOWER
AUTO ALTERNATOR CONTROL SWITCH
AUTO
1-2
2-1
AUDIBLE ALARM SILENCE
Consolidated Electric

ON
OFF

DANGER
CONFINED SPACE
PROCEDURE
ENTERING



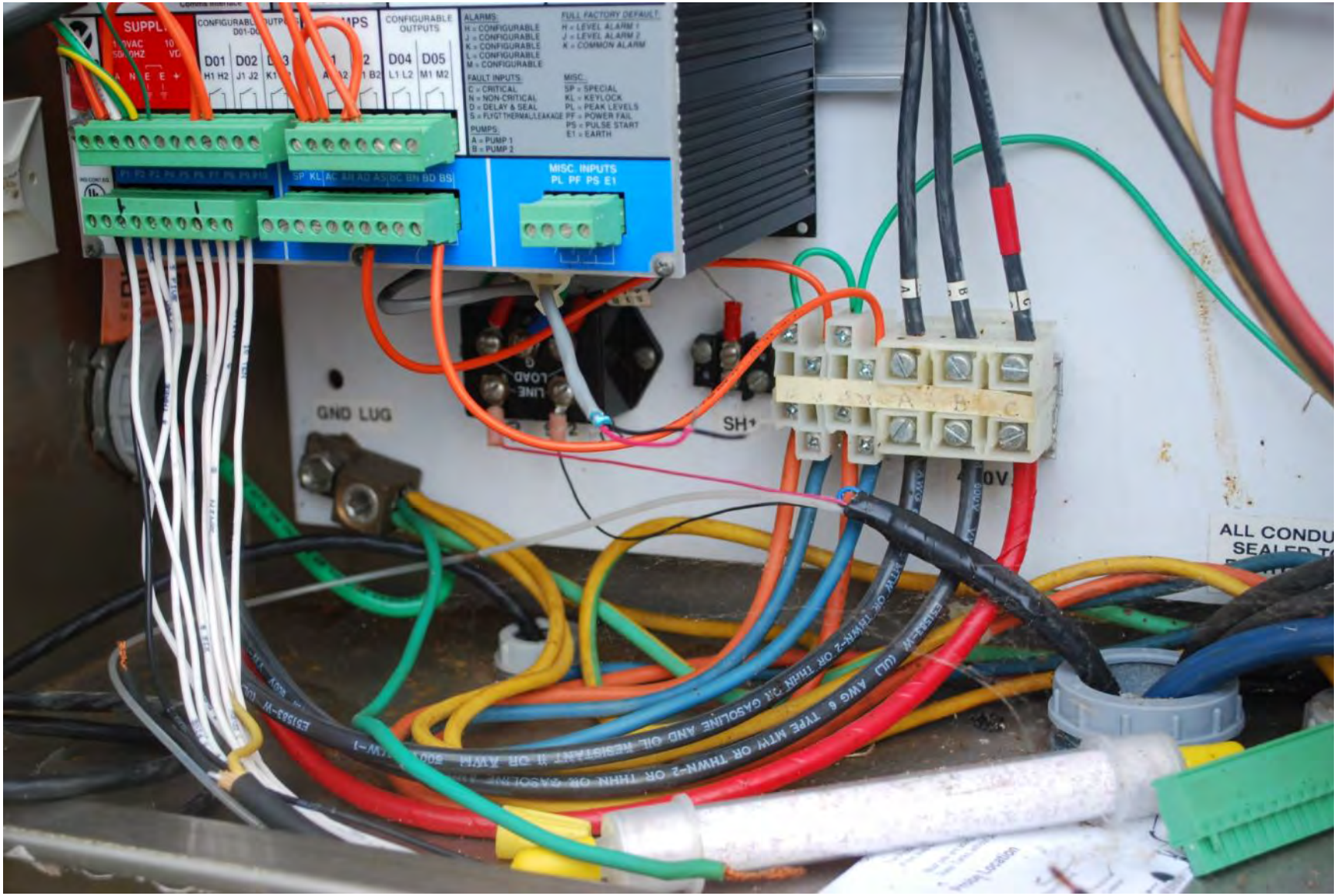
D152 CONTROLLER
LEVEL IN FEET
Consolidated Electric
Sensaphone
Phonetics, Inc.



GOULD
GOULD
GOULD
TRS60R

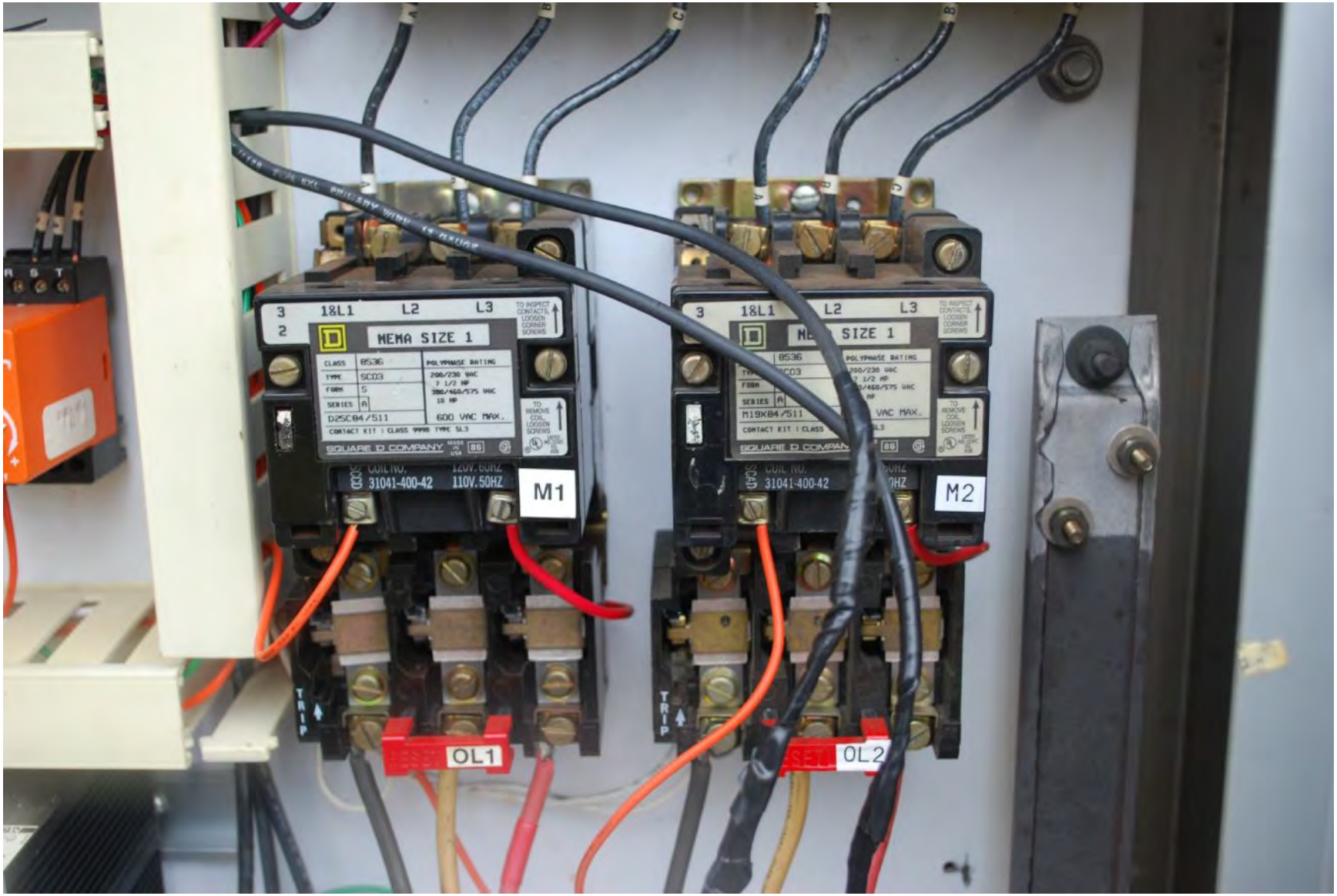
LEVEL
PUMP 1
PUMP 2
ALARMS
SELECT ONE
SELECT TWO
ALARM RESET
RESET ONE
RESET TWO
LEAD SELECT
MT2PC
MULTITRODE
MAIN BREAKER
DANGER
KEEP OUT
HIGH VOLTAGE
480 VOLTS

LEVEL
SETTINGS
DELAY SECONDS
SENS K Ω
MAX Hrs ON/OFF
1 100% 120 120 10
2 90% 80 80 8
3 80% 40 40 6
4 70% 20 30 4
5 60% 10 20 3
6 50% 4 15 2
7 40% 2 10 1.5
8 30% 1 4 1
9 20% 0.5 2 0.5
10 10% 0.25 1 0.25
SWITCH ON PEAK LEVELS
MT 2PC
MULTITRODE DUPLEX PUMP CONTROLLER
PUMP 1
RUNNING
HAND
OFF
AUTO
HI
SELECT ONE
LEAD
SENSITIVITY
SWITCHES
SWITCHES
50 AVAILABLE
40 FAULT (Auto Reset)
30 LOCKOUT (Man. Reset)
20 MOTOR OVERTEMP
10 SEAL FAILURE
LO
RESET ONE
SET LEVELS
PUMP 2
RUNNING
HAND
OFF
AUTO
SELECT TWO
LAG
SWITCHES
AVAILABLE
FAULT (Auto Reset)
LOCKOUT (Man. Reset)
MOTOR OVERTEMP
SEAL FAILURE
TOGGLE
RESET TWO
SET DELAYS
ALARMS
ALARM 1
ALARM 2
SET
ALARM RESET
PUMP 1
PUMP 2
NEXT TO START
ALTERNATE
LEAD SELECT
EXIT
FLYGT
MULTITRODE


CONFIGURABLE OUTPUTS
D01 D02
D04 D05
ALARMS:
FULL FACTORY DEFAULT
FAULT INPUTS:
MISC.
PUMPS:
MISC. INPUTS
PL PF PS E1
GND LUG
SH
ALL CONDU

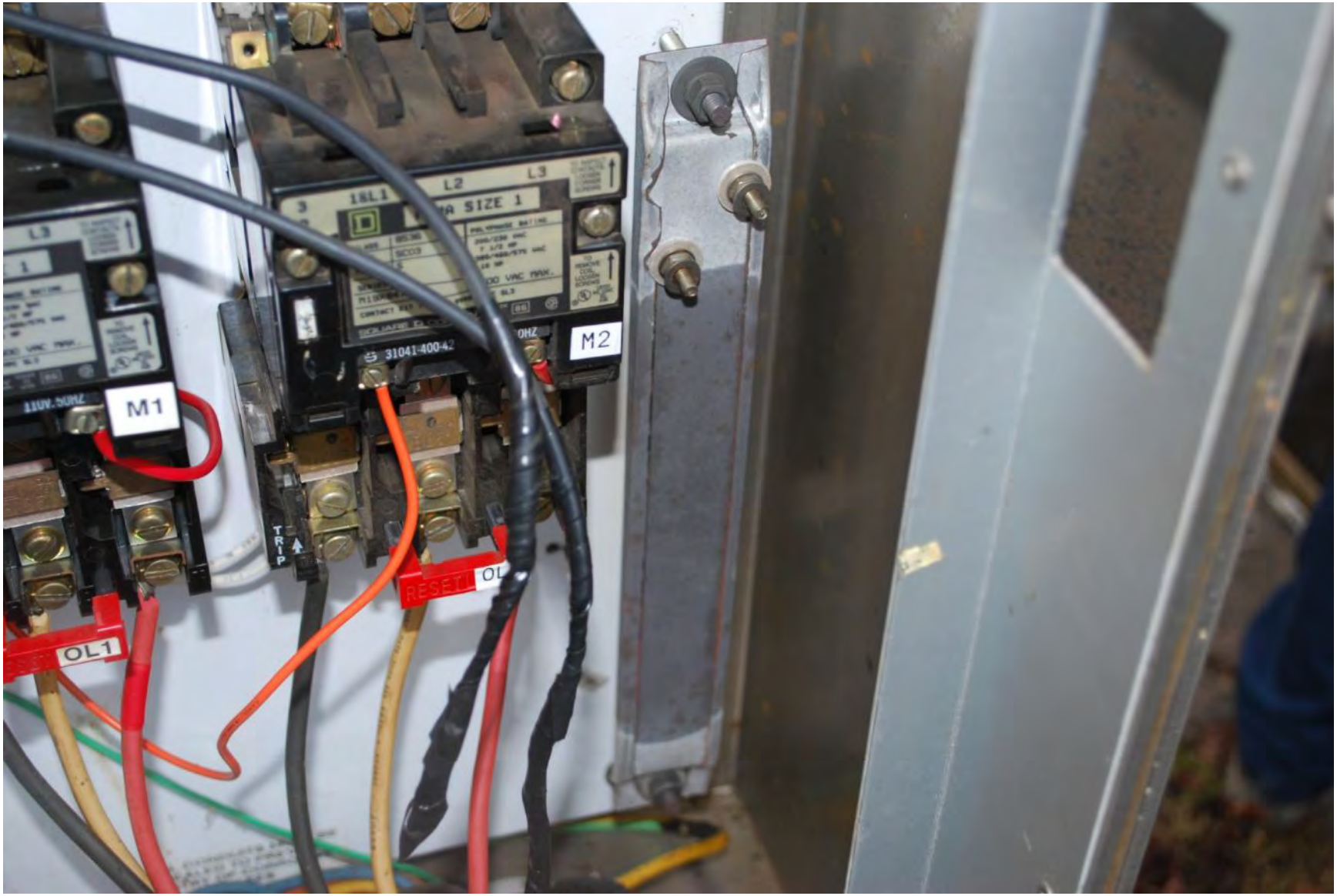
CIRCUIT BREAKER
3 POLE UNIT
ISSUE RT-286
MADE IN IRELAND
THERMAL-MAGNETIC CIRCUIT BREAKER
50 AMP
MODIFICATIONS
CATALOG NO.
FAL34050
SERIES 2
STD LUG DATA
ON
50
OFF

THERMAL-MAGNETIC CIRCUIT BREAKER
30 AMP
M1
MODIFICATIONS
CATALOG NO.
FAL34030
SERIES 2
STD LUG DATA
THERMAL-MAGNETIC CIRCUIT BREAKER
30 AMP
M2
MODIFICATIONS
CATALOG NO.
FAL34030
SERIES 2
STD LUG DATA
ON
OFF
L1


3
2
1&L1
L2
L3
NEMA SIZE 1
SQUARE D COMPANY
31041-400-42
110V.50HZ
M1
M2
OL1
OL2
TRIP

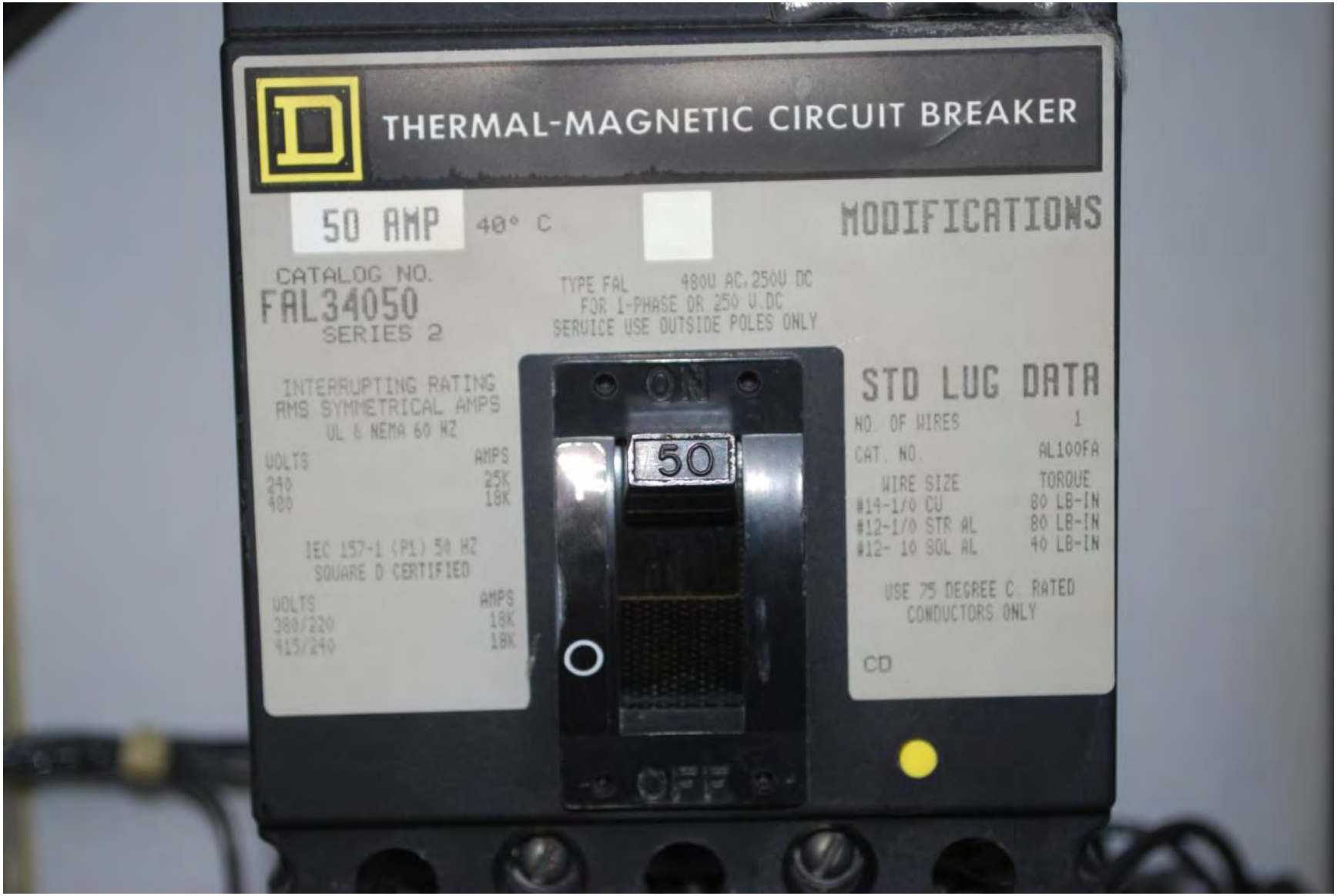
HTR
Long-3
short-8

CPT1
TH
Dayton
ANY UNAUTHORIZED
USE OF THIS WIREWAY
WILL VOID WARRANTY

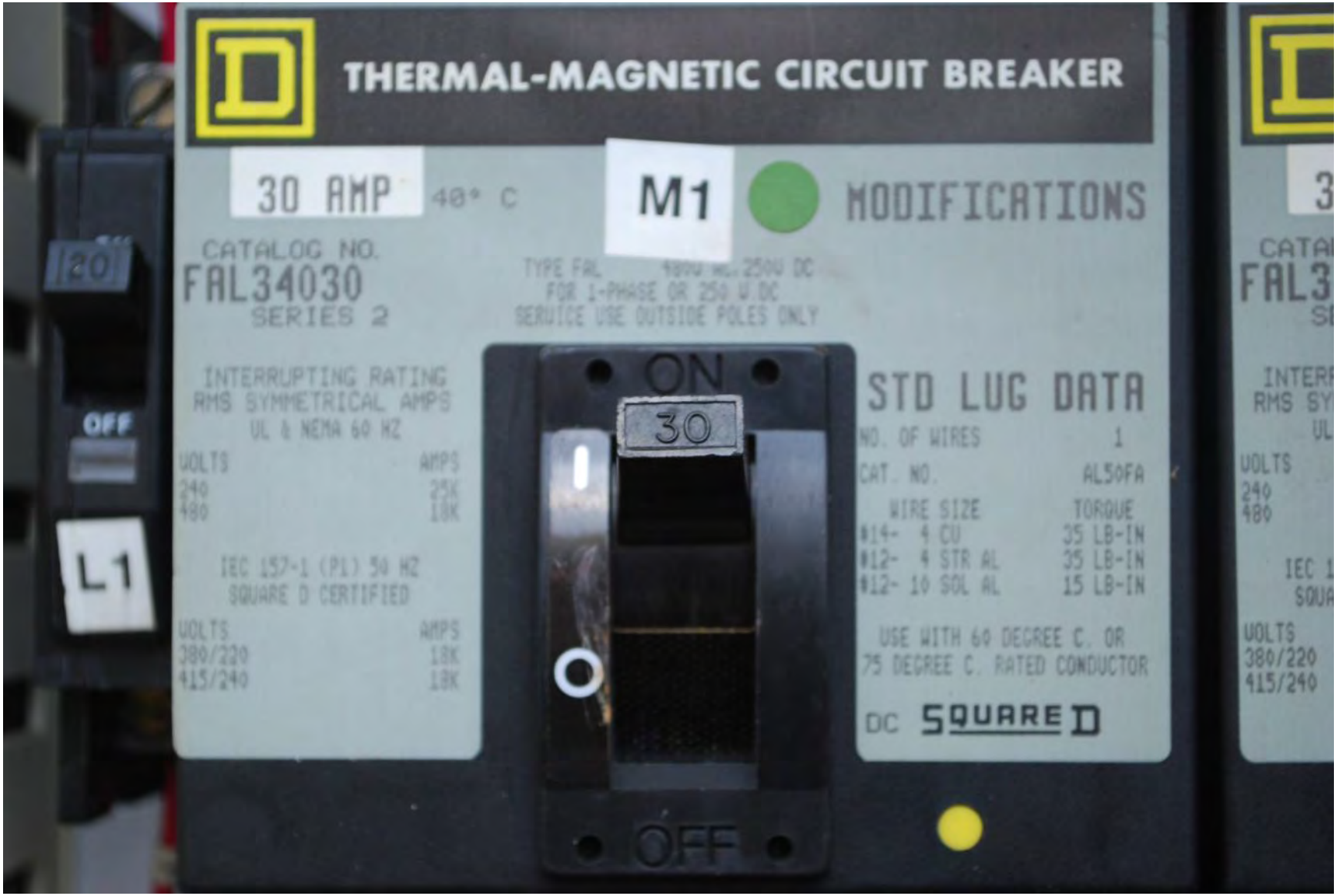

M1
M2
OL1
OL
TRIP
RESET

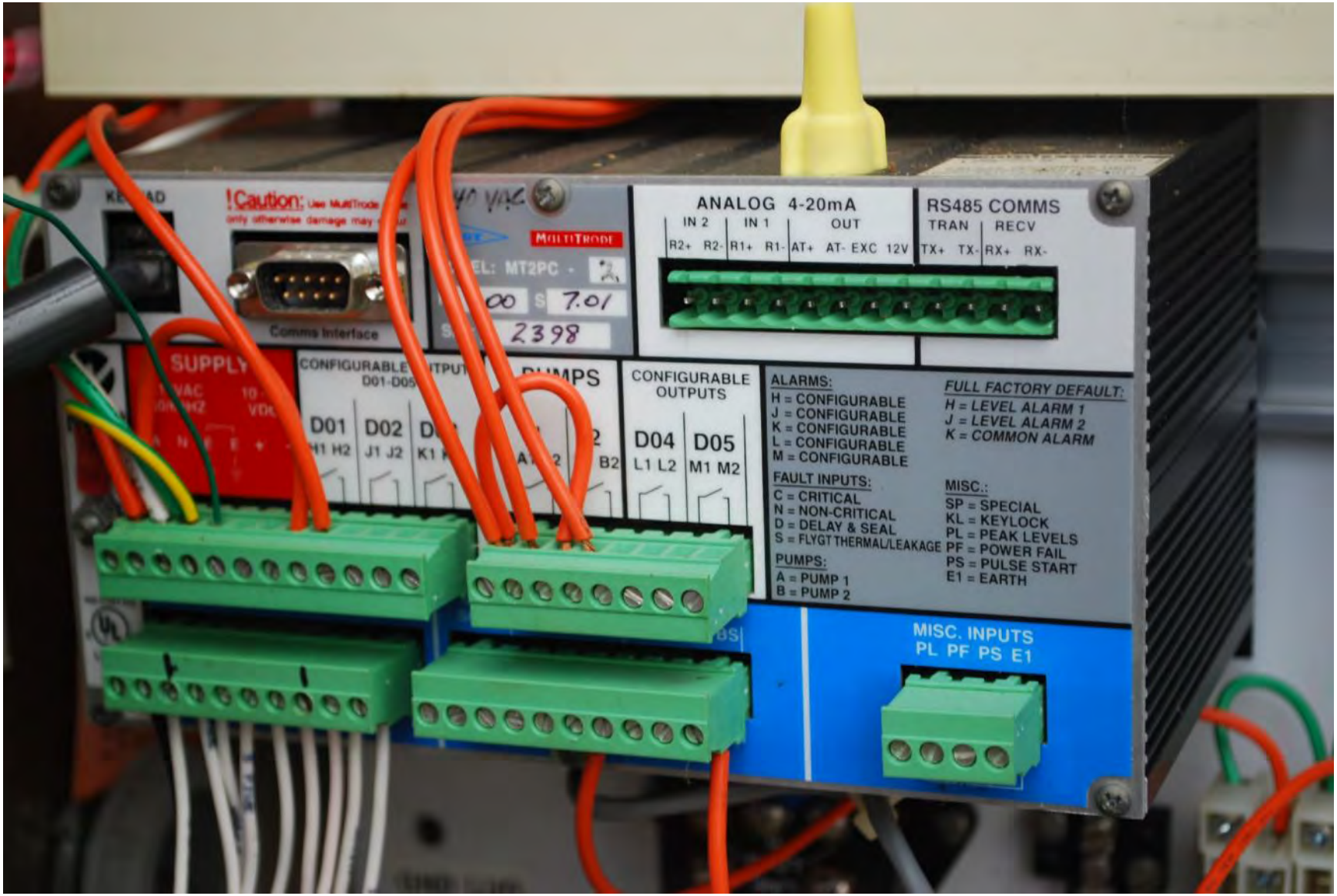
SF2
11
R S T
Syrelec
DALLAS, TEXAS
(214)250-1647
DWRA
440VAC
THREE PHASE
MONITOR
OUTPUT: SPDT
240VAC 10AMP
ASSEMBLED IN MEXICO
PM
Asymmetry

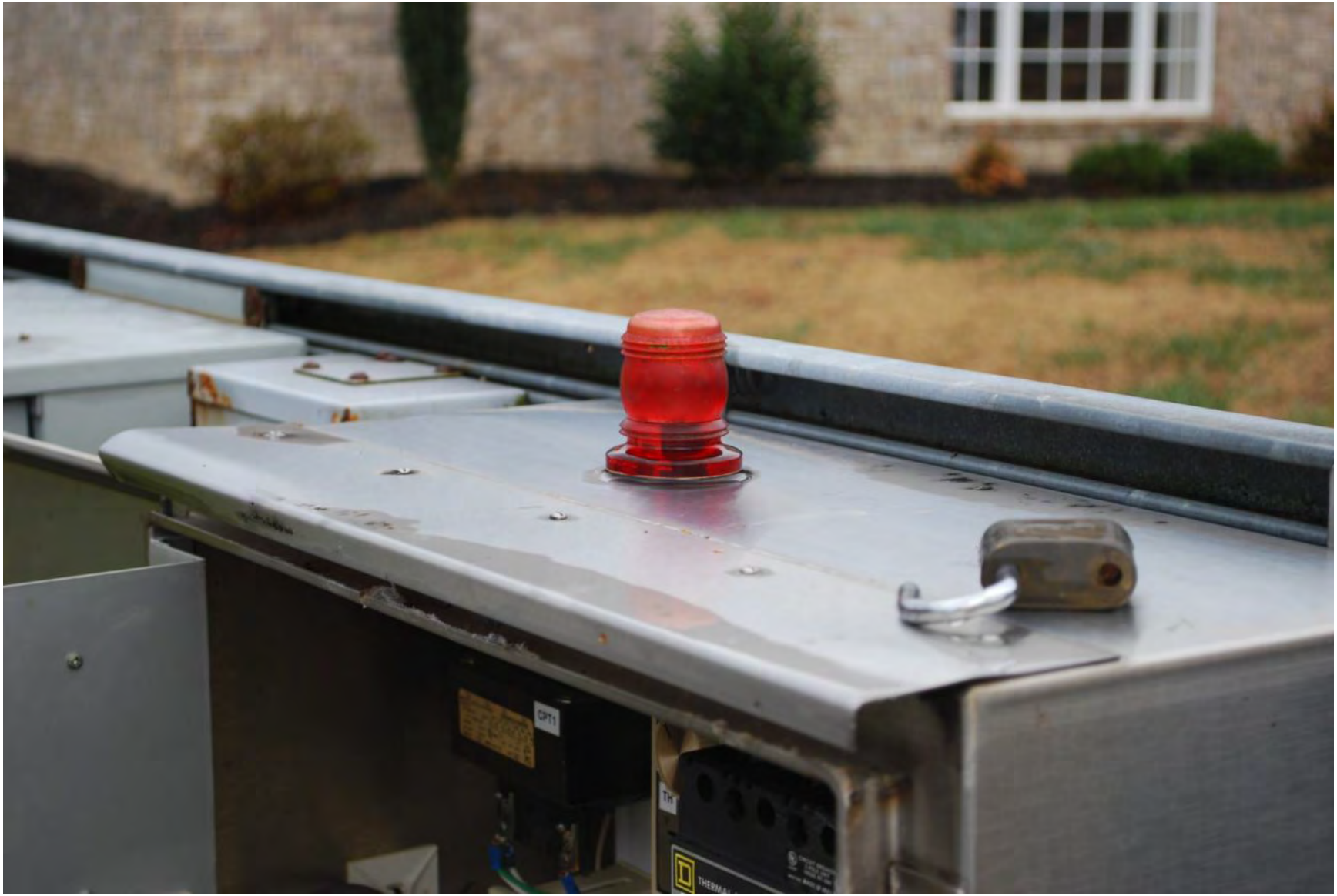
SF2
11
R S T
Syrelec
DALLAS, TEXAS
DWRA
440Vac
THREE PHASE
MONITOR
OUTPUT: SPDT
240VAC 10AMP
ASSEMBLED IN MEXICO
PM
Asymmetry
12 14


THERMAL-MAGNETIC CIRCUIT BREAKER
50 AMP
40° C
MODIFICATIONS
CATALOG NO.
FAL34050
SERIES 2
TYPE FAL 480U AC, 250U DC
FOR 1-PHASE OR 250 U.DC
SERVICE USE OUTSIDE POLES ONLY
INTERRUPTING RATING
RMS SYMMETRICAL AMPS
UL & NEMA 60 HZ
VOLTS AMPS
240 25K
480 18K
IEC 157-1 (PL) 50 HZ
SQUARE D CERTIFIED
VOLTS AMPS
380/220 18K
415/240 18K
ON
50
OFF
STD LUG DATA
NO. OF WIRES 1
CAT. NO. AL100FA
WIRE SIZE TORQUE
#14-1/0 CU 80 LB-IN
#12-1/0 STR AL 80 LB-IN
#12- 10 SOL AL 40 LB-IN
USE 75 DEGREE C. RATED
CONDUCTORS ONLY
CD

3
2
1&L1
L2
L3
TO INSPECT CONTACTS, LOOSEN CORNER SCREWS
NEMA SIZE 1
CLASS 8536
TYPE SC03
FORM S
SERIES A
D25C84/511
POLYPHASE RATING
200/230 VAC
7 1/2 HP
380/460/575 VAC
10 HP
600 VAC MAX.
CONTACT KIT : CLASS 9998 TYPE SL3
TO REMOVE COIL, LOOSEN SCREWS
SQUARE D COMPANY
MADE IN USA
86
LISTED IND. CONT. EQ. A159
SCCD
COIL NO.
31041-400-42
120V. 60HZ
110V. 50HZ
M1


THERMAL-MAGNETIC CIRCUIT BREAKER
30 AMP
40° C
M1
MODIFICATIONS
CATALOG NO.
FAL34030
SERIES 2
TYPE FAL
FOR 1-PHASE OR 250 V DC
SERVICE USE OUTSIDE POLES ONLY
INTERRUPTING RATING
RMS SYMMETRICAL AMPS
UL & NEMA 60 HZ
VOLTS AMPS
240 25K
480 18K
IEC 157-1 (PL) 50 HZ
SQUARE D CERTIFIED
VOLTS AMPS
380/220 18K
415/240 18K
ON
30
OFF
STD LUG DATA
NO. OF WIRES 1
CAT. NO. AL50FA
WIRE SIZE TORQUE
#14- 4 CU 35 LB-IN
#12- 4 STR AL 35 LB-IN
#12- 10 SOL AL 15 LB-IN
USE WITH 60 DEGREE C. OR
75 DEGREE C. RATED CONDUCTOR
DC SQUARE D
OFF
L1


!Caution:
Comms Interface
MULTITRODE
ANALOG 4-20mA
IN 2
IN 1
OUT
R2+ R2- R1+ R1- AT+ AT- EXC 12V
RS485 COMMS
TRAN
RECV
TX+ TX- RX+ RX-
7.01
2398
SUPPLY
CONFIGURABLE OUTPUTS
D01 D02
H1 H2 J1 J2
D04 D05
L1 L2 M1 M2
ALARMS:
H = CONFIGURABLE
J = CONFIGURABLE
K = CONFIGURABLE
L = CONFIGURABLE
M = CONFIGURABLE
FULL FACTORY DEFAULT:
H = LEVEL ALARM 1
J = LEVEL ALARM 2
K = COMMON ALARM
FAULT INPUTS:
C = CRITICAL
N = NON-CRITICAL
D = DELAY & SEAL
S = FLYGT THERMAL/LEAKAGE
MISC.:
SP = SPECIAL
KL = KEYLOCK
PL = PEAK LEVELS
PF = POWER FAIL
PS = PULSE START
E1 = EARTH
PUMPS:
A = PUMP 1
B = PUMP 2
MISC. INPUTS
PL PF PS E1



DANGER
KEEP OUT
HIGH VOLTAGE
480 VOLTS

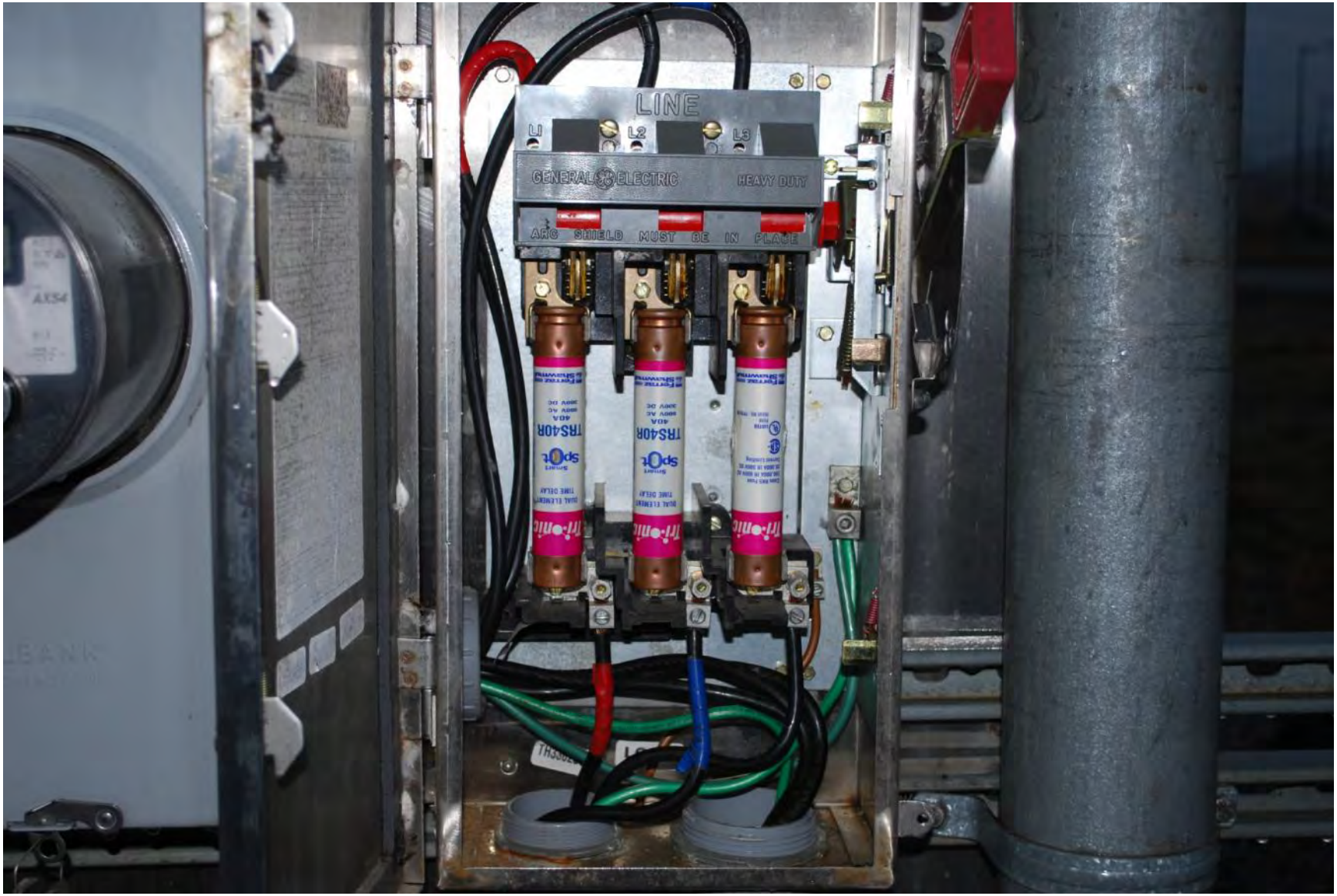
3127.180-6322
9450351
484
FLYGT
M21-12-4AL
FLS
7.5 kW-10
Y/
460/230
13/25
1735 r/min
150 kg
IEC 34-1 1969 cl.F
MADE IN SWEDEN

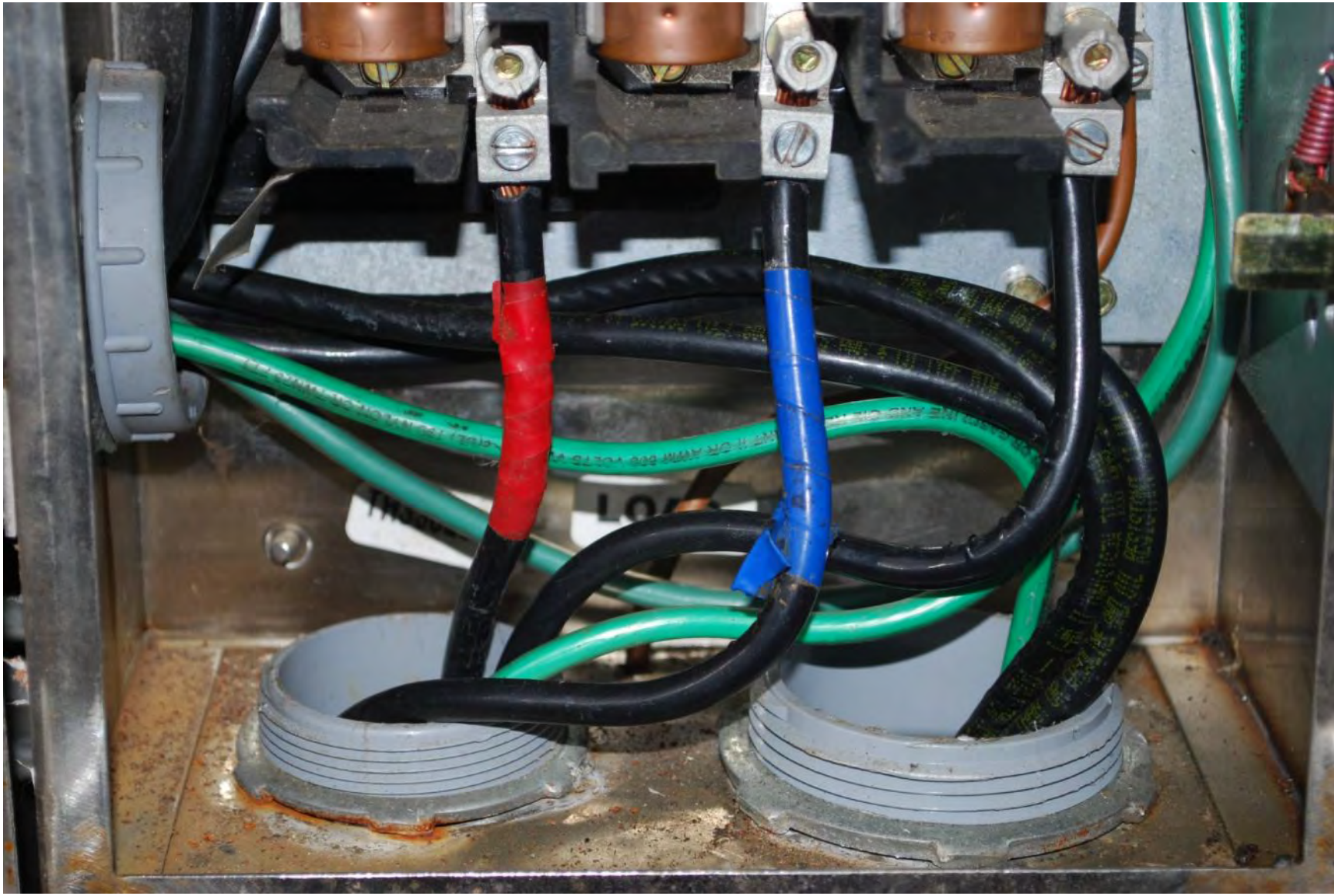
3127.180-6322
9450351
484
M21-12-4AL
FLS
7.5 kW-10 hp
Y//
13/25
460/230
150

DUNCAN
4:1
ON
OFF

1903
75 KVA
277 480

ON
OFF

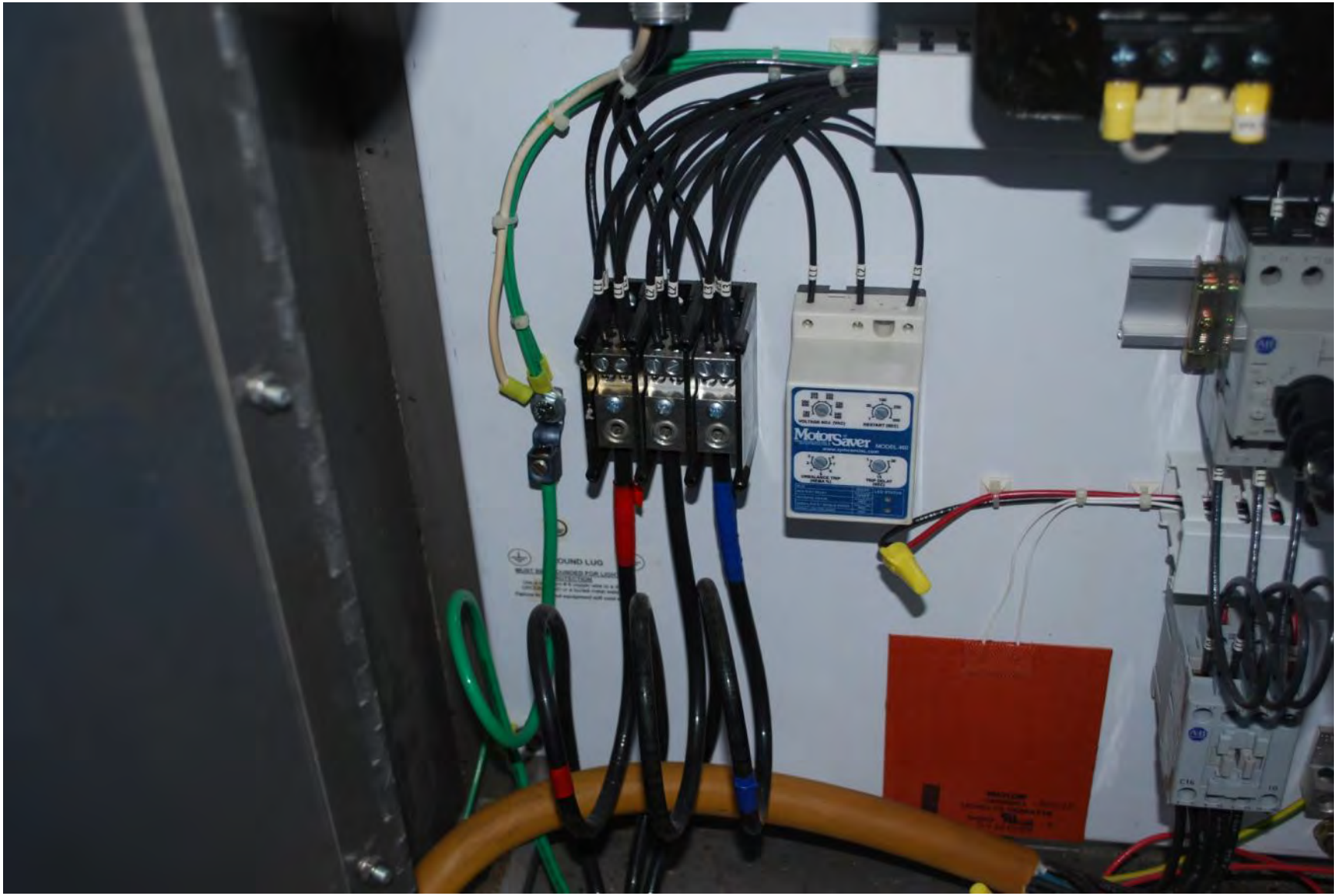

LINE
L1
L2
L3
GENERAL ELECTRIC
HEAVY DUTY
ARC SHIELD MUST BE IN PLACE
TRS40R
TRS40R
Tri-onic

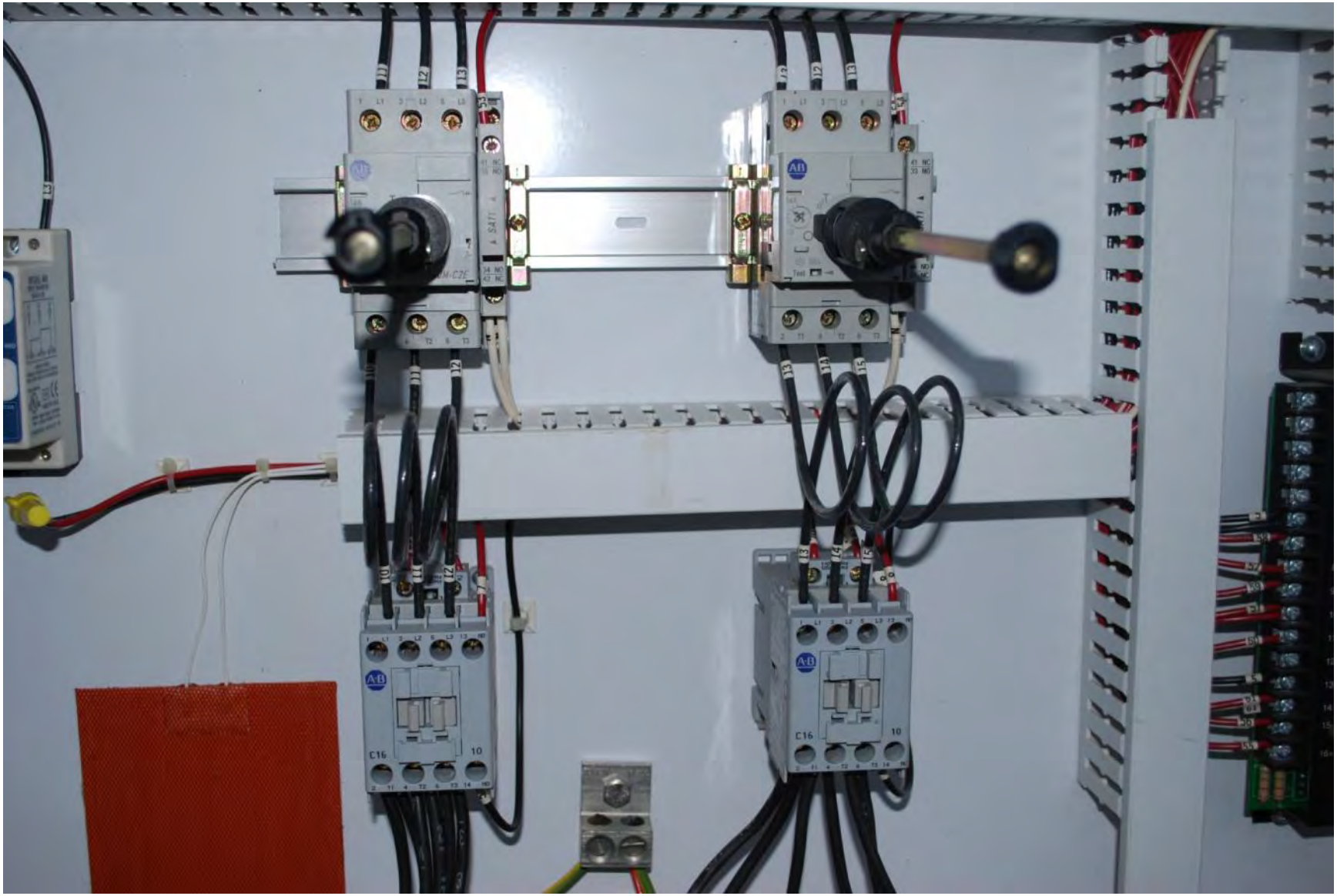


WET WELL LEVEL
DIGITAL CONTROL CORPORATION
DUPLEX PUMP CONTROLLER P/N 11928-5
PUMP NO. 1
PUMP NO. 2
RUNNING
RUNNING
SEAL FAIL
OVERTEMP
BACKUP CONTROLLER OPERATING
SEAL FAIL
OVERTEMP
OVERTEMP RESET
OVERTEMP RESET
HAND OFF AUTO
HAND OFF AUTO

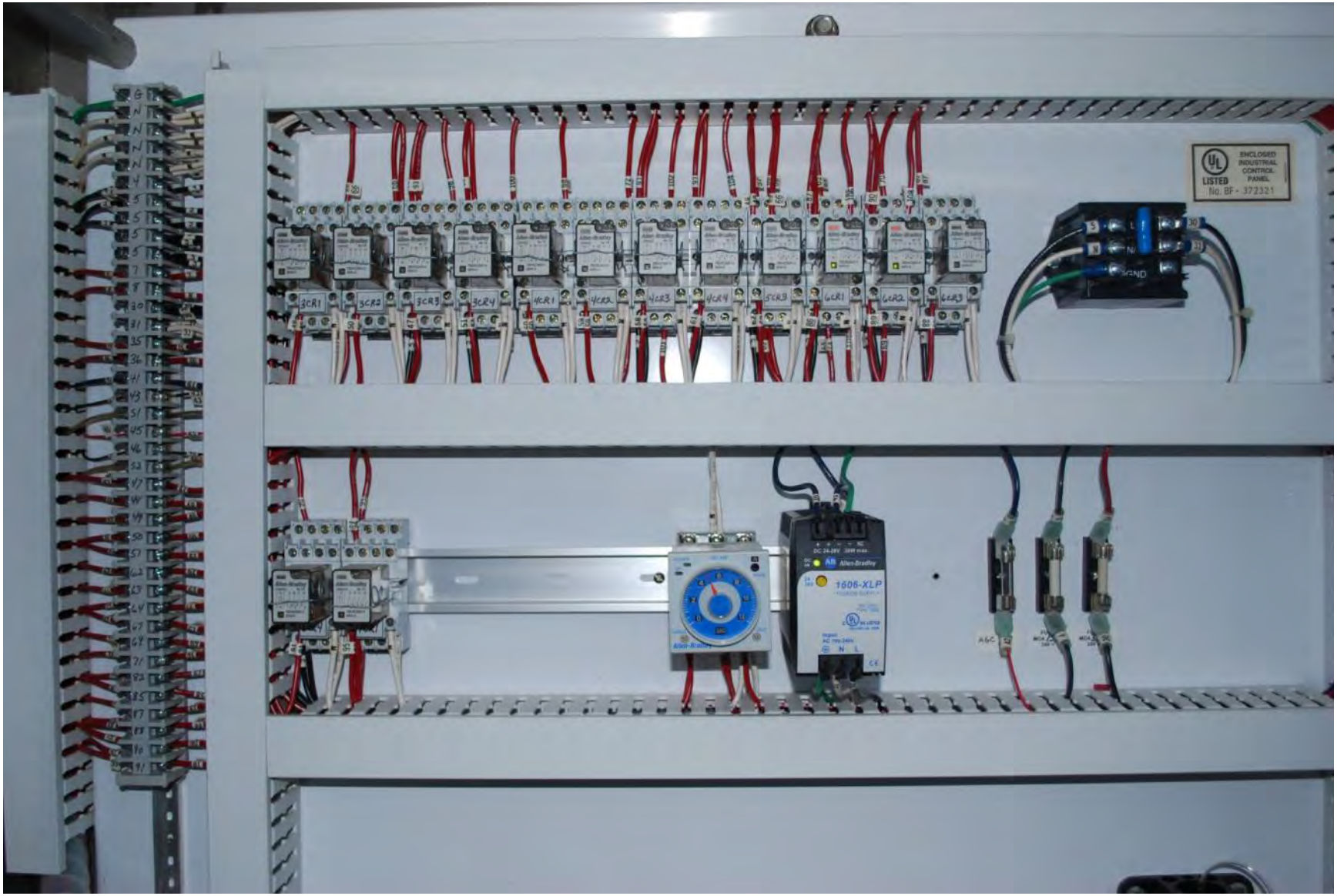
PUMP NO. 1
PUMP NO. 2
CONTROL
GFI
CONVENIENCE OUTLET

WET WELL LEVEL
DIGITAL CONTROL CORPORATION
DISABLE
FLOATS
LAG
HIGH
OFF
LOW
LEAD
RESET
MUTE
SEL
ALARM
SETPOINTS
CH 1
LEVEL
CH 2
SETPOINTS
PER CENT
DISPLAY SEL
4-20
FLT
SYS
ERROR
ON
ALTERNATE
TEST
DUPLEX PUMP CONTROLLER P/N 1928-5
PUMP NO. 1
PUMP NO. 2
RUNNING
RUNNING
SEAL FAIL
OVERTEMP
BACKUP CONTROLLER OPERATING
SEAL FAIL
OVERTEMP
OVERTEMP RESET
HAND OFF AUTO
HAND OFF AUTO
OVERTEMP RESET

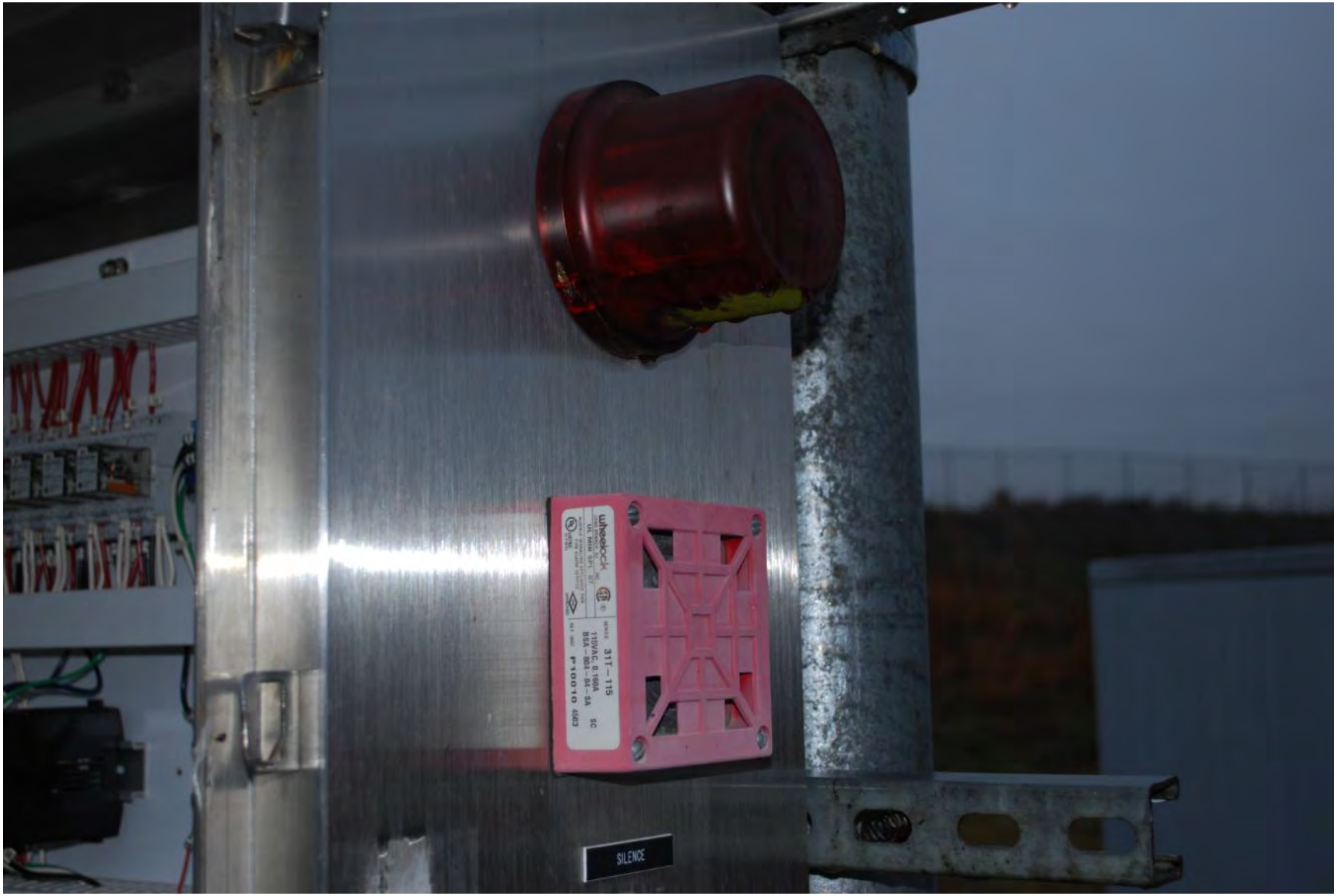

MotorSaver


A-B
C16
10

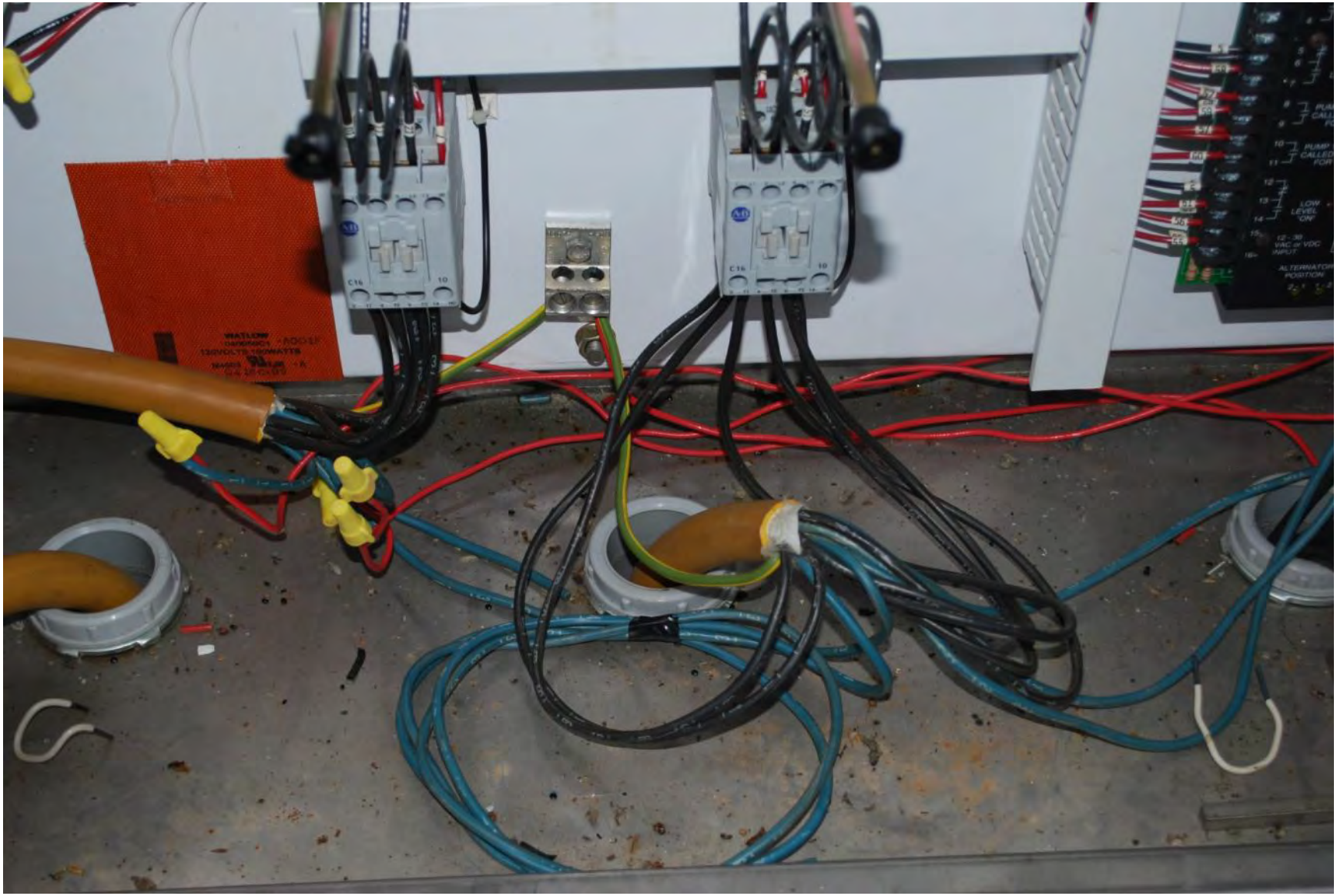
JP1
SILENCE
HORN OUTPUT
Pumpak LTD.
612-633-7522
FLOAT-PAK
P/N 962004-013
LEAD PUMP SHORT CYCLE PREVENTION TIMER
LAG PUMP START DELAY
LEAD PUMP START DELAY
SECONDS
HIGH LEVEL "ON"
PUMP 2 CALLED FOR
PUMP 1 CALLED FOR
LOW LEVEL "ON"
12 - 30 VAC or VDC INPUT
FLOAT INPUT TERMINALS LED "ON" = FLOAT INPUT CLOSED
SW 4
SW 3
SW 2
SW 1
ON OFF
HIGH LEVEL
START LAG
START LEAD
STOP
LOW LEVEL
SW 1 OFF = NO LL FLOAT ON = NC LL FLOAT
SW 2 OFF = ALARM OUTPUTS FLASH ON = ALARM OUTPUTS ON STEADY
SW 3 OFF = DPLX CONTROL ON = SPLX CONTROL
SW 4 OFF = ALL PUMPS ON AT HIGH LEVEL ON = HIGH LEVEL ALARM ONLY
ALTERNATOR POSITION
2 - 1
1 - 2
AUTO
SEQUENCE SELECTOR

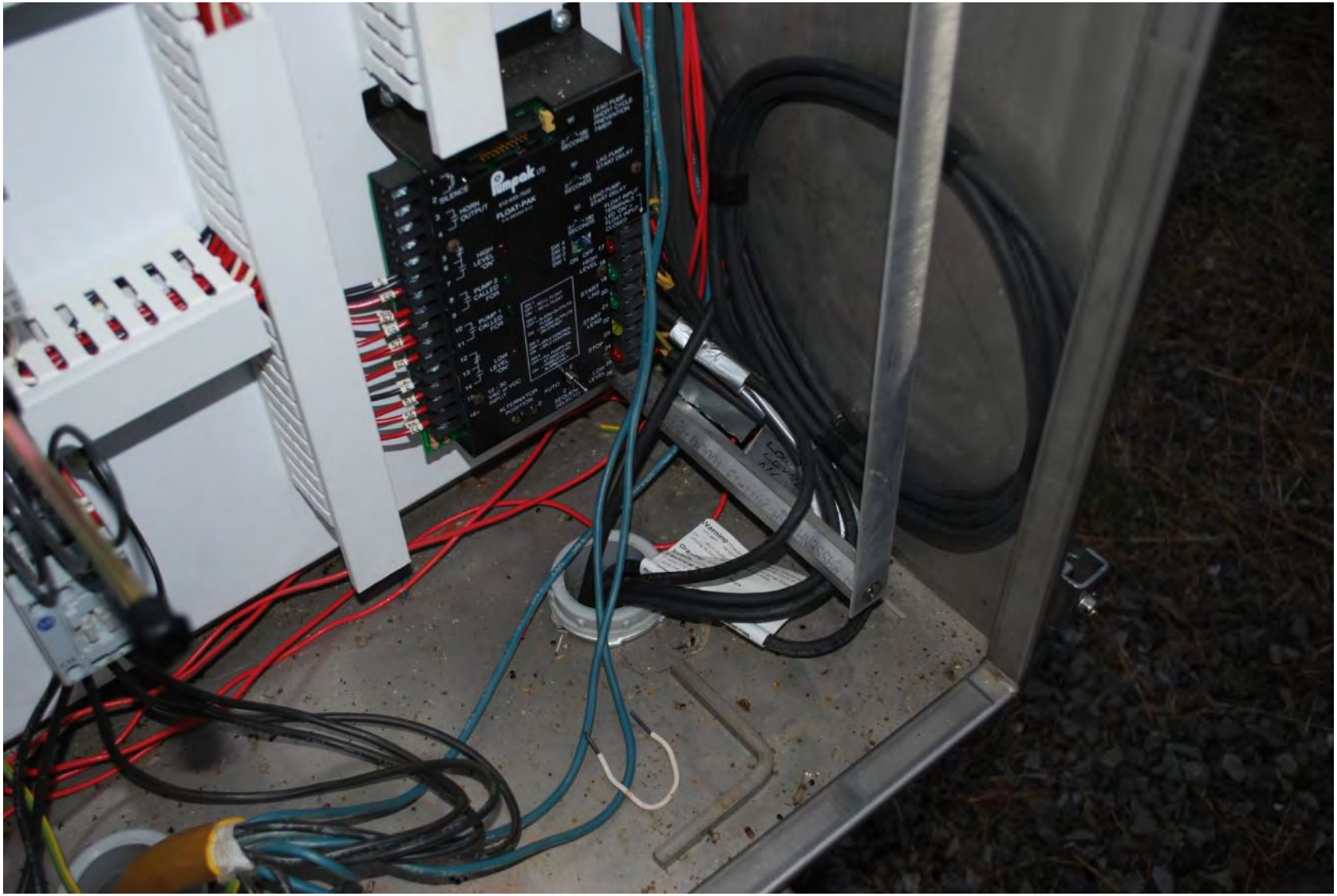

ENCLOSED INDUSTRIAL CONTROL PANEL
No. 8F - 372321
3CR1
3CR2
3CR3
3CR4
4CR1
4CR2
4CR3
4CR4
5CR3
6CR1
6CR2
6CR3
1606-XLP

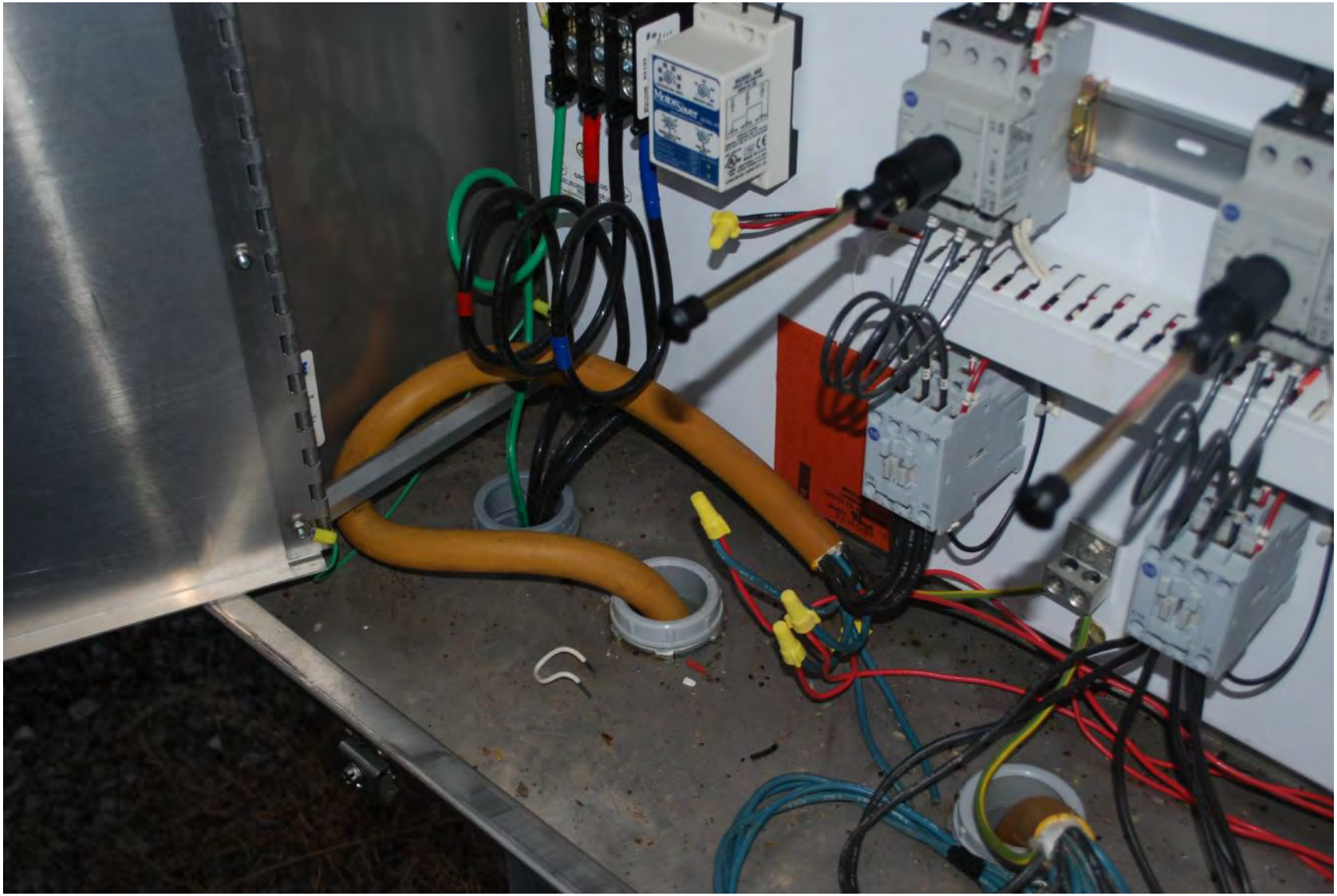
34
31
55
56
5
5
80
81
83
84
86
89
97
98
99
100
101
102
103
104
105
106

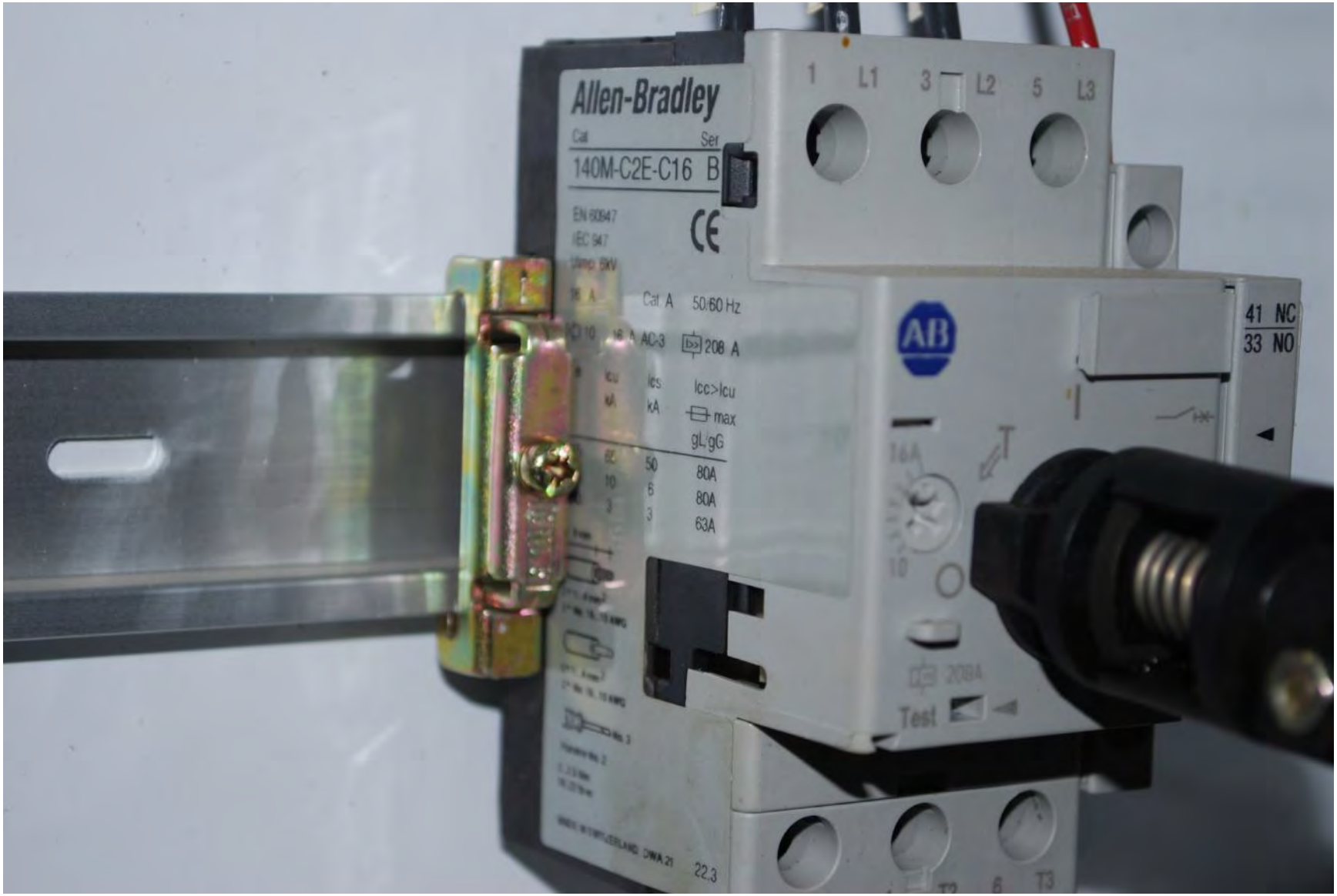

wheelock
317-115
SILENCE

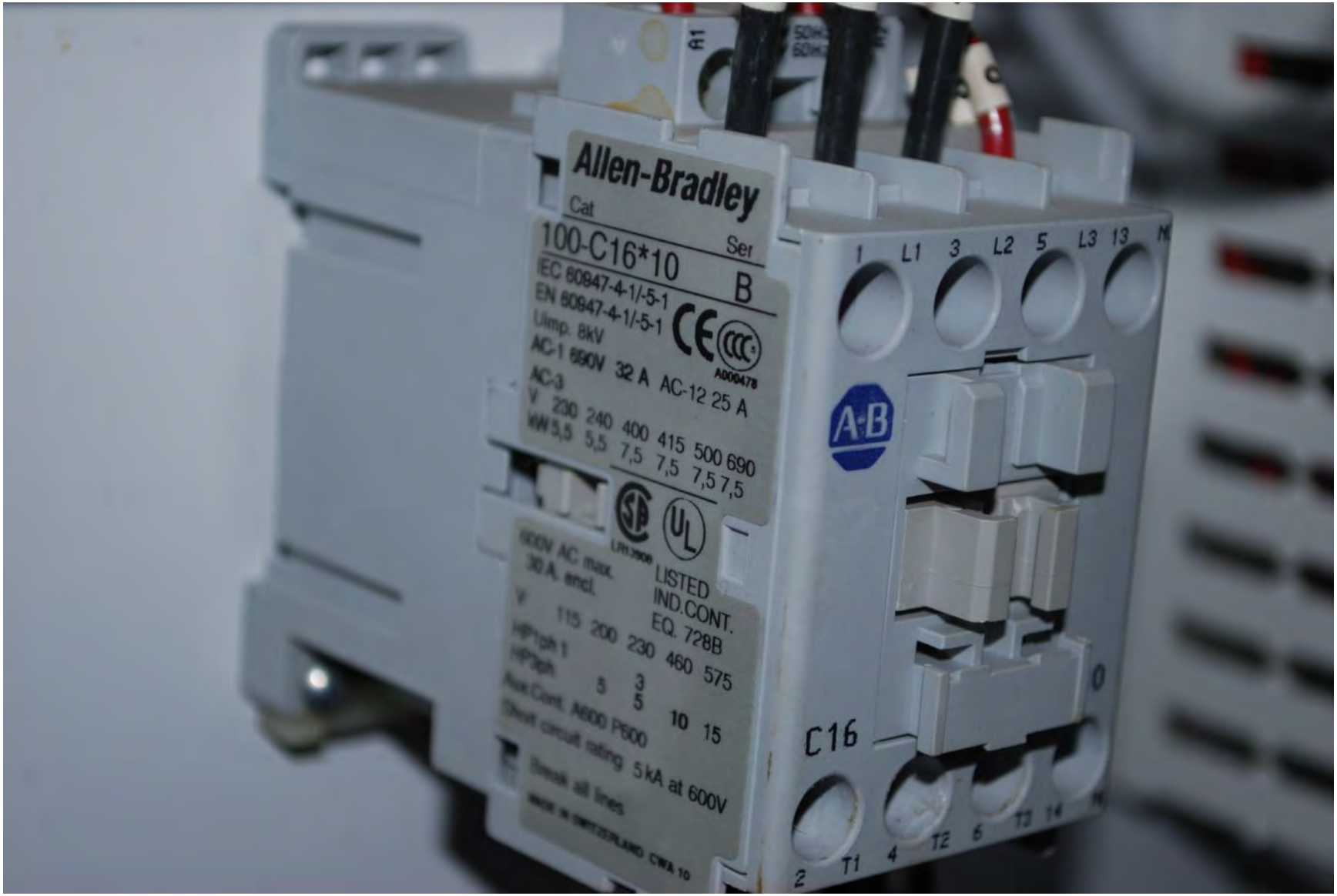
HEADERS AND PLUGS
USE COPPER
CONDUCTORS ONLY.
TORQUE REQUIREMENT:
PLUGS: 1.47 Ft. Lbs.
"POLLUTION DEGREE 2"
HI ALARM
P2
P1
J1
J2
J3
1
12
16
DIGITAL CONTROL CORPORATION
10,366 05/04
43
45
46
K38
K36
K34




Pumpak
FLOAT-PAK

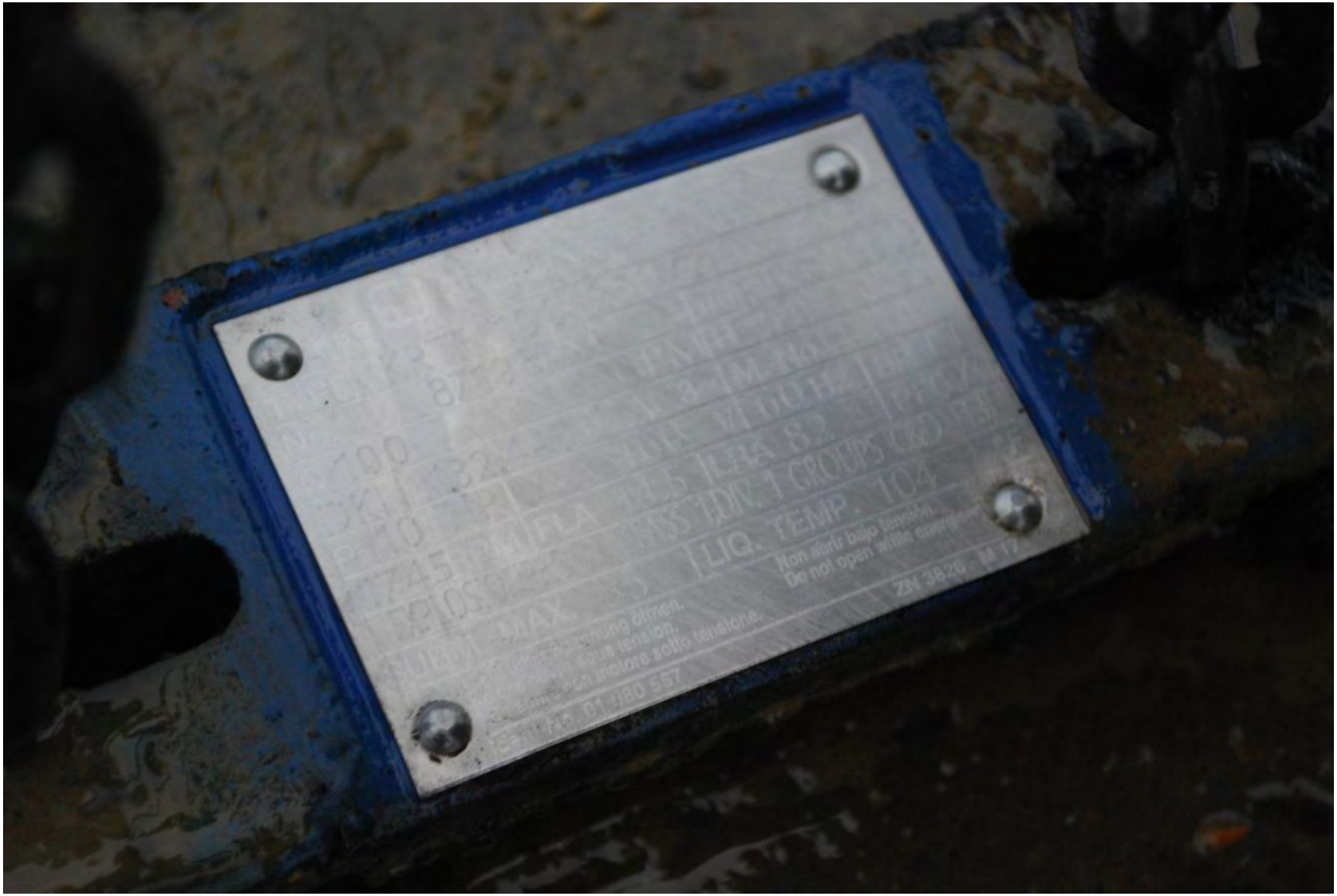



Allen-Bradley
Cat
Ser
140M-C2E-C16 B
1 L1
3 L2
5 L3
41 NC
33 NO
Cat A
50/60 Hz
AC-3
208 A
Icc>Icu
max
gL/gG
80A
80A
63A
16A
Test
T2
6
T3

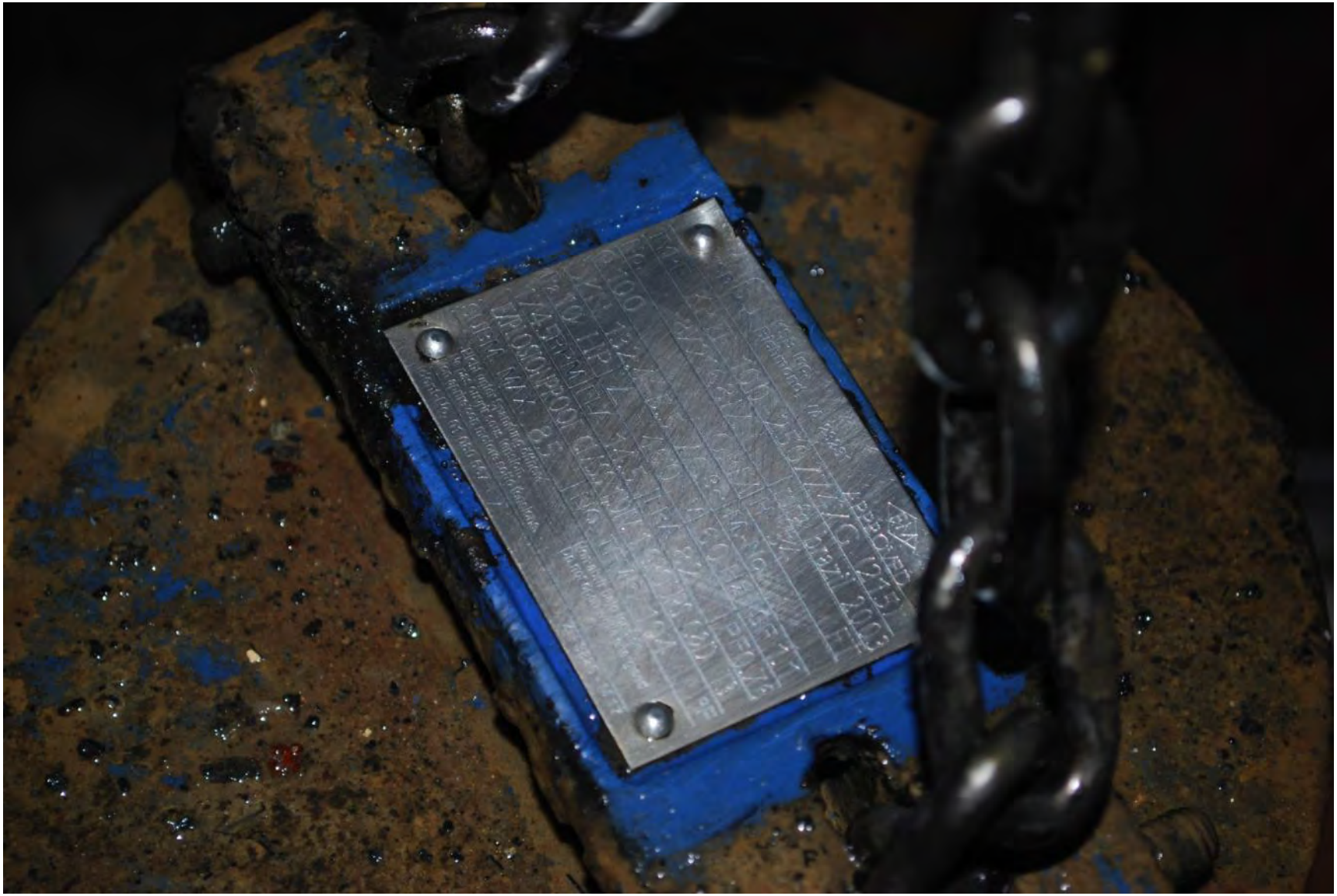

Allen-Bradley
Cat
Ser
100-C16*10
B
IEC 60947-4-1/-5-1
EN 60947-4-1/-5-1
Uimp. 8kV
AC-1 690V 32 A AC-12 25 A
AC-3
V 230 240 400 415 500 690
kW 5,5 5,5 7,5 7,5 7,5 7,5
LISTED
IND.CONT.
EQ. 728B
600V AC max.
30 A. encl.
V 115 200 230 460 575
HP1ph 1
HP3ph 5 3 5 10 15
Aux.Cont. A600 P600
Short circuit rating 5 kA at 600V
Break all lines
C16
A1
1 L1 3 L2 5 L3 13 N
2 T1 4 T2 6 T3 14 N

Stop

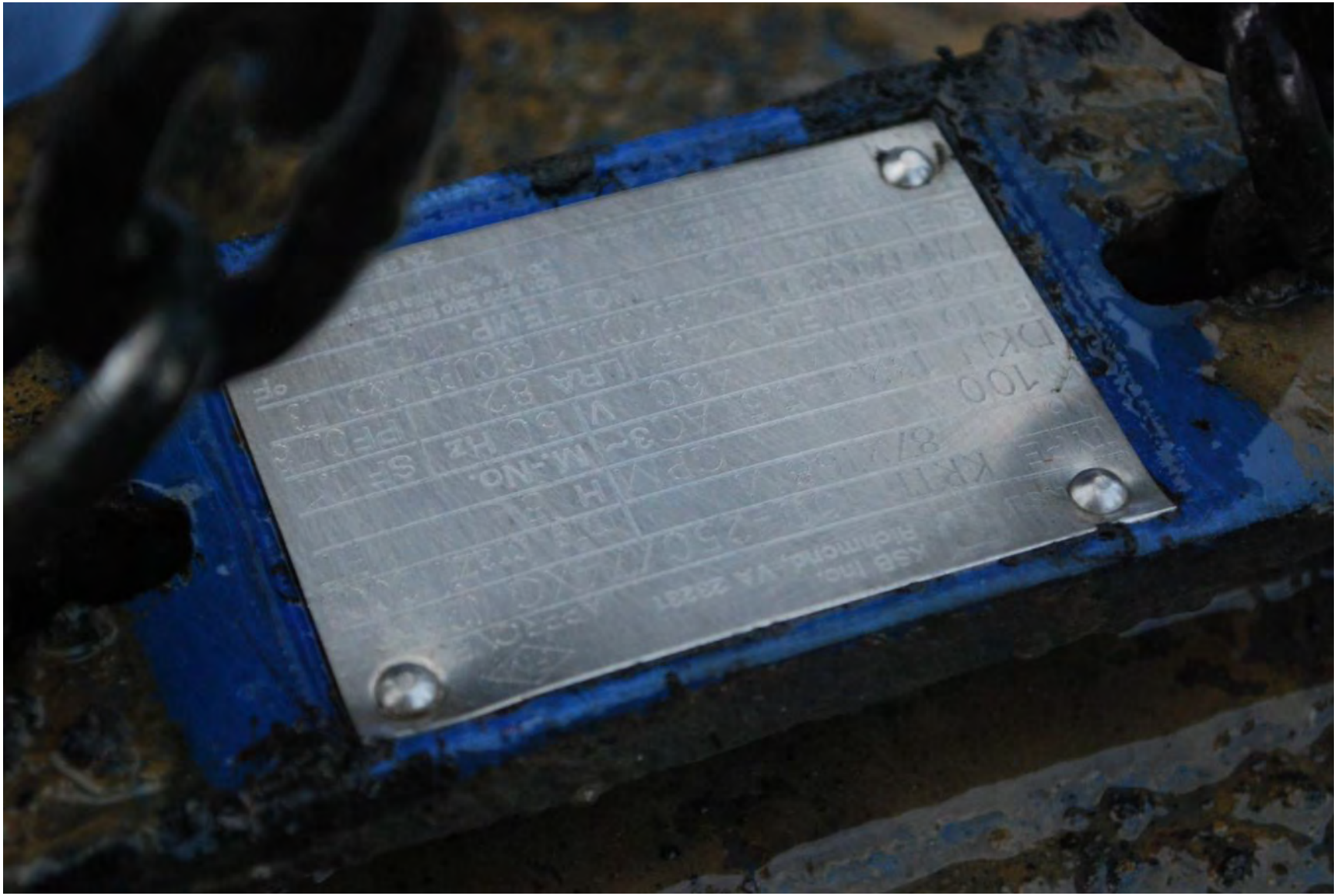
Proudly Built By
Engineer
TJC
Layout
BN
Assy./Wiring
BN
Inspection
LWA
Serial No.
86297
Unit
A
Voltage
480/3 PH 3 W
Mfg. Date
05/27/04
1975 West County Rd. B2, Suite 5
St. Paul MN 55113
(651) 633-7522 Fax (651) 633-2671
Proudly Made in USA
HEALY-RUFF CO.
ST. PAUL, MINNESOTA
INSTALLER PLEASE NOTE:


LIQ. TEMP.
Non aprir bajo tensión.
Do not open while energized.

NSF

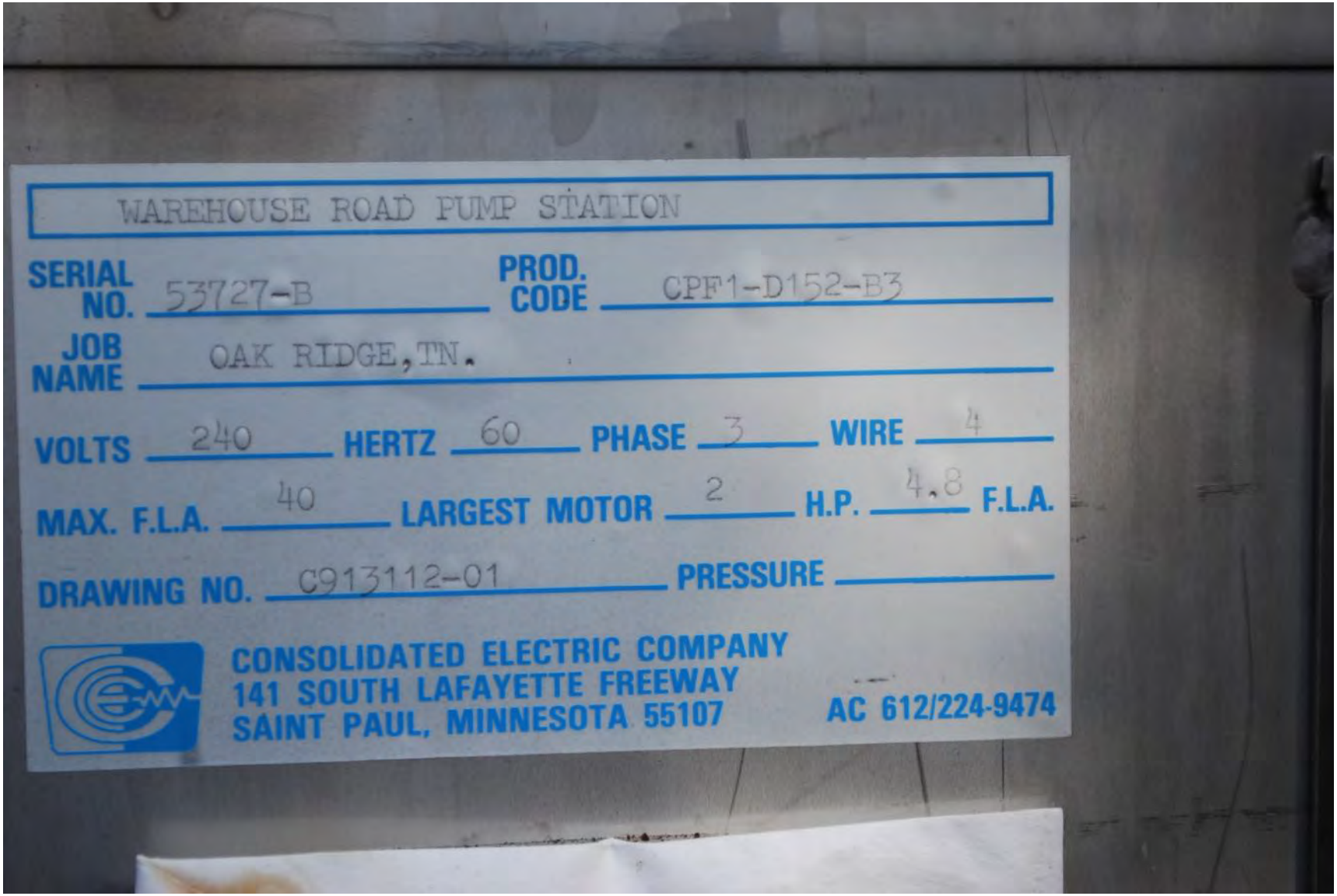


AMB. TEMP.



ASB Inc.
KRTW400
87216BM
LRA 82
FLA 14.5
85
TEMP.
Non abrir bajo tensión.
Do not open while energised
ZN 3826 - M 17

Hughes
& Sons, Inc.
Knoxville, Tn
800-949-8864


WAREHOUSE ROAD PUMP STATION
SERIAL NO. 53727-B
PROD. CODE CPF1-D152-B3
JOB NAME OAK RIDGE, TN.
VOLTS 240 HERTZ 60 PHASE 3 WIRE 4
MAX. F.L.A. 40 LARGEST MOTOR 2 H.P. 4.8 F.L.A.
DRAWING NO. C913112-01 PRESSURE
CONSOLIDATED ELECTRIC COMPANY
141 SOUTH LAFAYETTE FREEWAY
SAINT PAUL, MINNESOTA 55107
AC 612/224-9474

DANGER

LEVEL SETTINGS
1 100%
2 90%
3 80%
4 70%
5 60%
6 50%
7 40%
8 30%
9 20%
10 10%
PEAK LEVELS
MT2PC
MULTITRODE DUPLEX PUMP CONTROLLER
PUMP 1
RUNNING
MANUAL
OFF
AUTO
SELECT ONE
AVAILABLE
FAULT (Auto Reset)
LOCKOUT (Man. Reset)
MOTOR OVERTEMP
SEAL FAILURE
RESET ONE
PUMP 2
RUNNING
MANUAL
OFF
AUTO
SELECT TWO
AVAILABLE
FAULT (Auto Reset)
LOCKOUT (Man. Reset)
MOTOR OVERTEMP
SEAL FAILURE
RESET TWO
ALARMS
ALARM 1
ALARM 2
ALARM RESET
PUMP 1
PUMP 2
NEXT TO START
ALTERNATE
DUTY SELECT
MULTITRODE

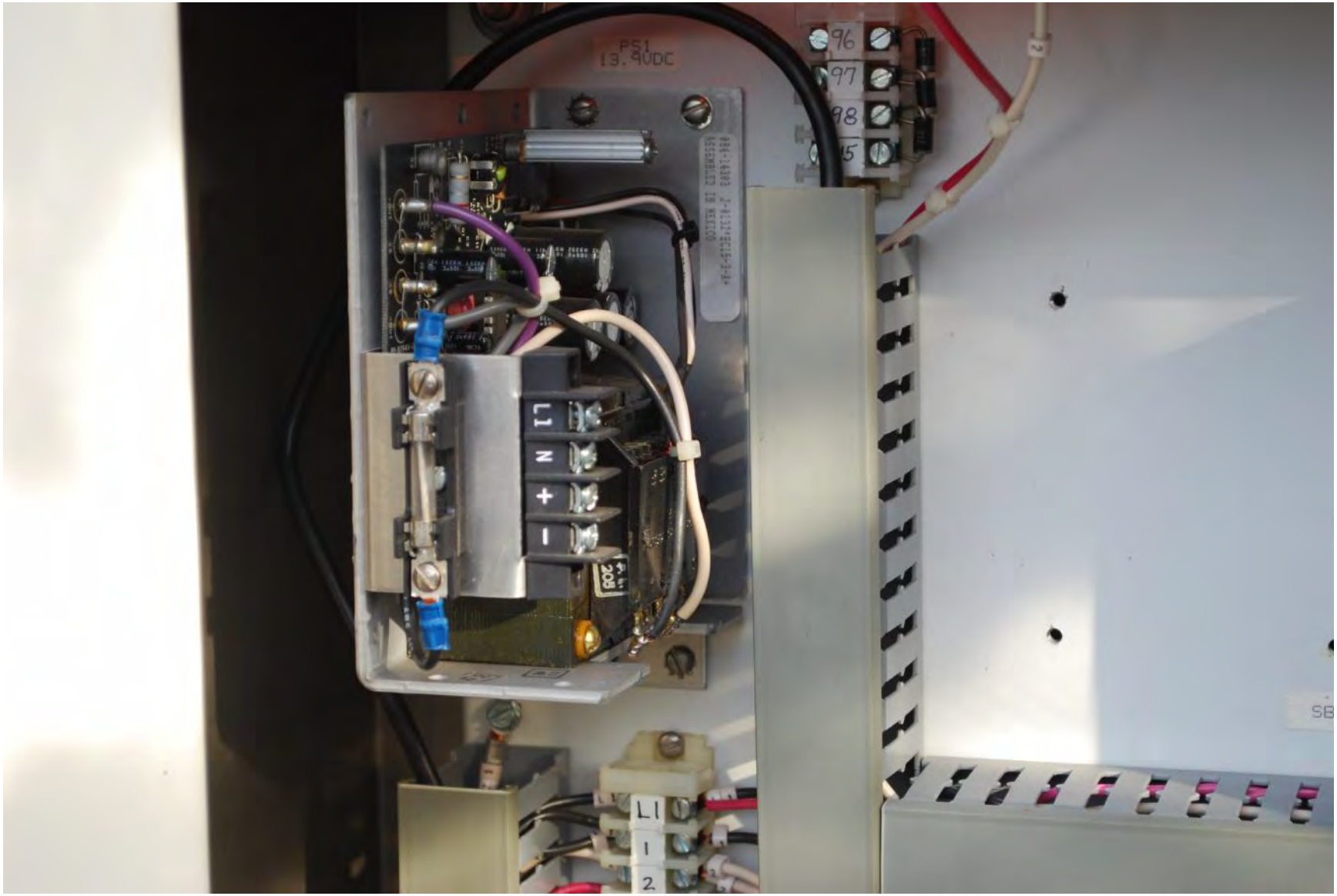
PUMP NO. 1
PUMP NO. 2
DANGER
Disconnect all sources of power before opening door. (Multiple and/or remote sources of power may be present.)
Hazardous voltages cause severe injury or death.
Consolidated Electric Co.
AW00120-A

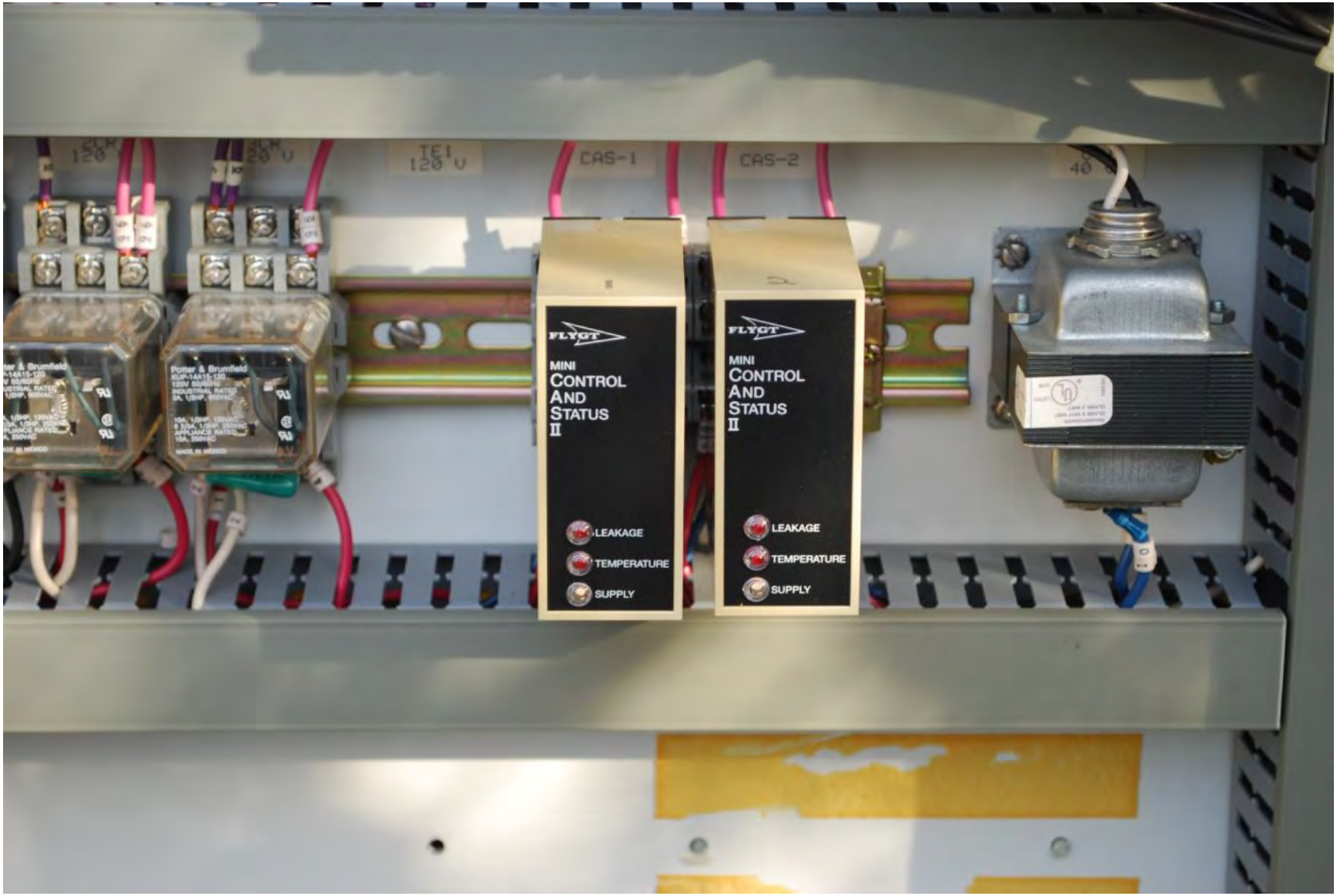
HOURS
Consolidated Electric
HOURS
Consolidated Electric
RUNNING
SEAL FAILURE
PUMP NO. 1
HAND-OFF-AUTO
RESET
RUNNING
SEAL FAILURE
PUMP NO. 2
HAND-OFF-AUTO
RESET
LOW LEVEL
CUTOUT

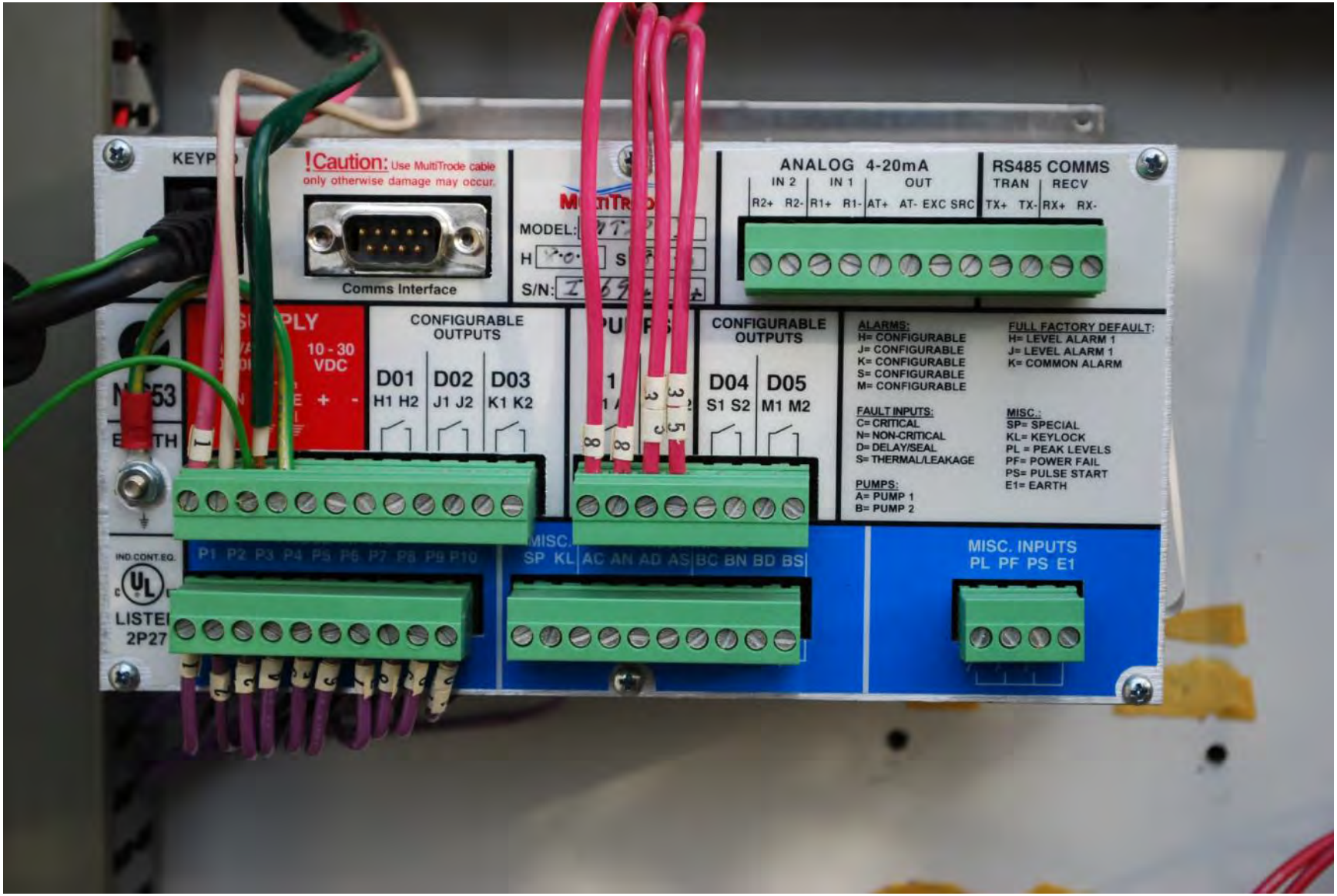
RUNNING
SEAL FAILURE
PUMP NO. 1
HAND-OFF-AUTO
RESET
RUNNING
SEAL FAILURE
PUMP NO. 2
HAND-OFF-AUTO
RESET
LOW LEVEL
CUTOUT
RESET

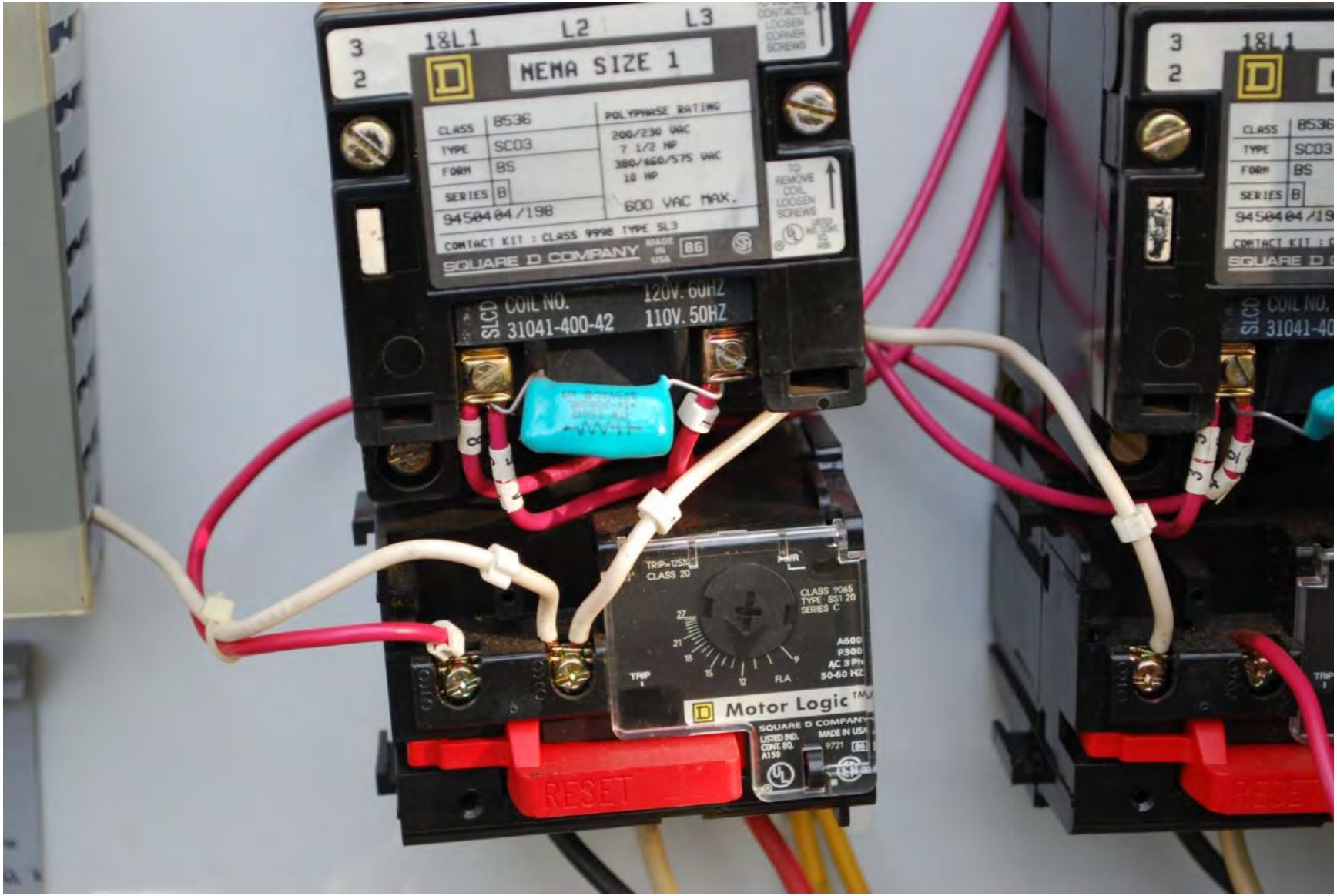
RUNNING
HAND-OFF-AUTO
PUMP NO. 1
O.L. RESET

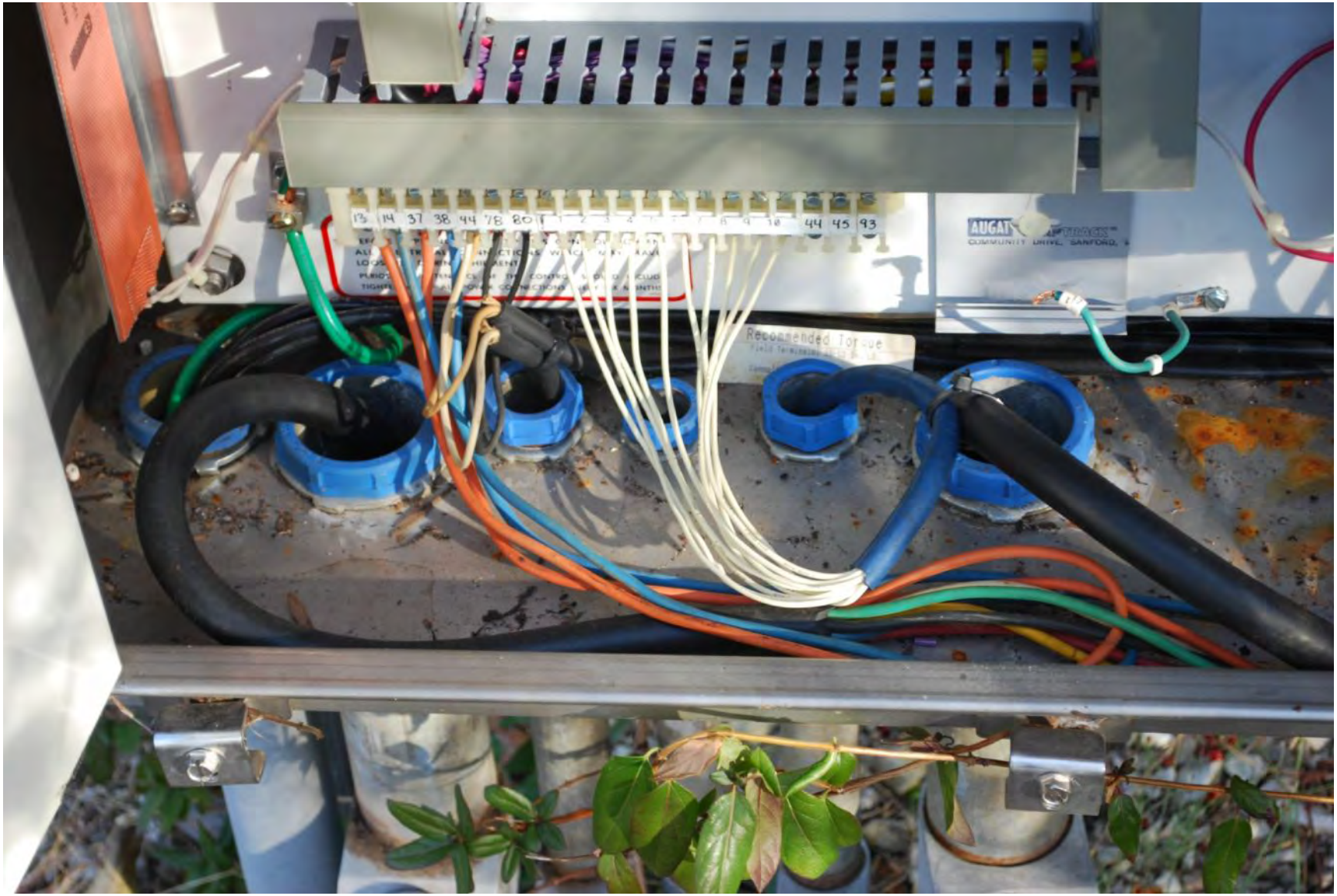
CIRCUIT BREAKER
3 POLE UNIT
ISSUE RT-42
MADE IN U.S.A.
THERMAL-MAGNETIC CIRCUIT BREAKER
15A
FHL36015
ON
OFF
CIRCUIT BREAKER
THERMAL-MAGNETIC CIRCUIT BREAKER
15A
FHL36015
ON
OFF

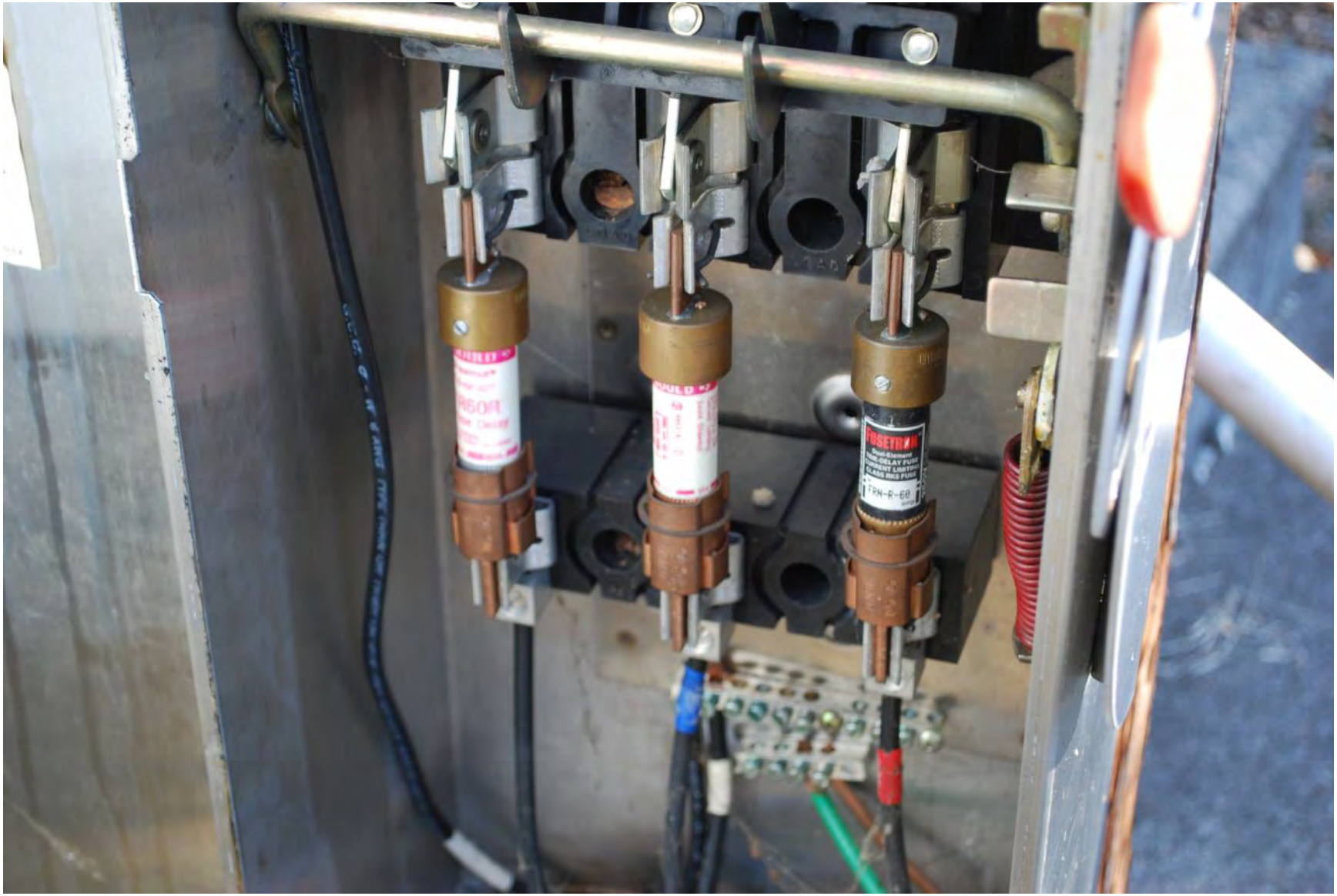

PSI
13.8VDC
96
97
98
L1
N
+
-
L1
1
2

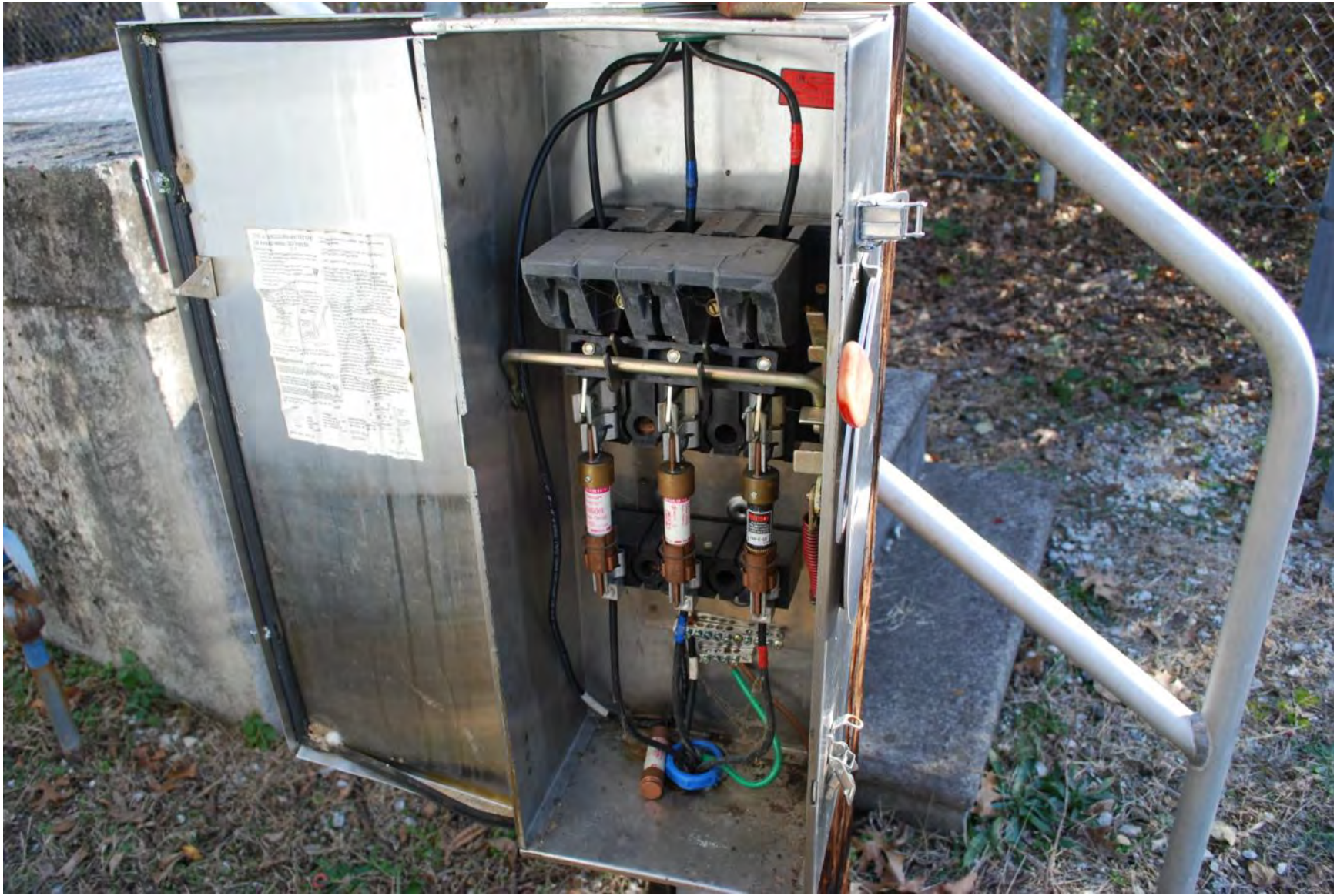

CAS-1
CAS-2
FLYGT
MINI
CONTROL
AND
STATUS
II
LEAKAGE
TEMPERATURE
SUPPLY
FLYGT
MINI
CONTROL
AND
STATUS
II
LEAKAGE
TEMPERATURE
SUPPLY

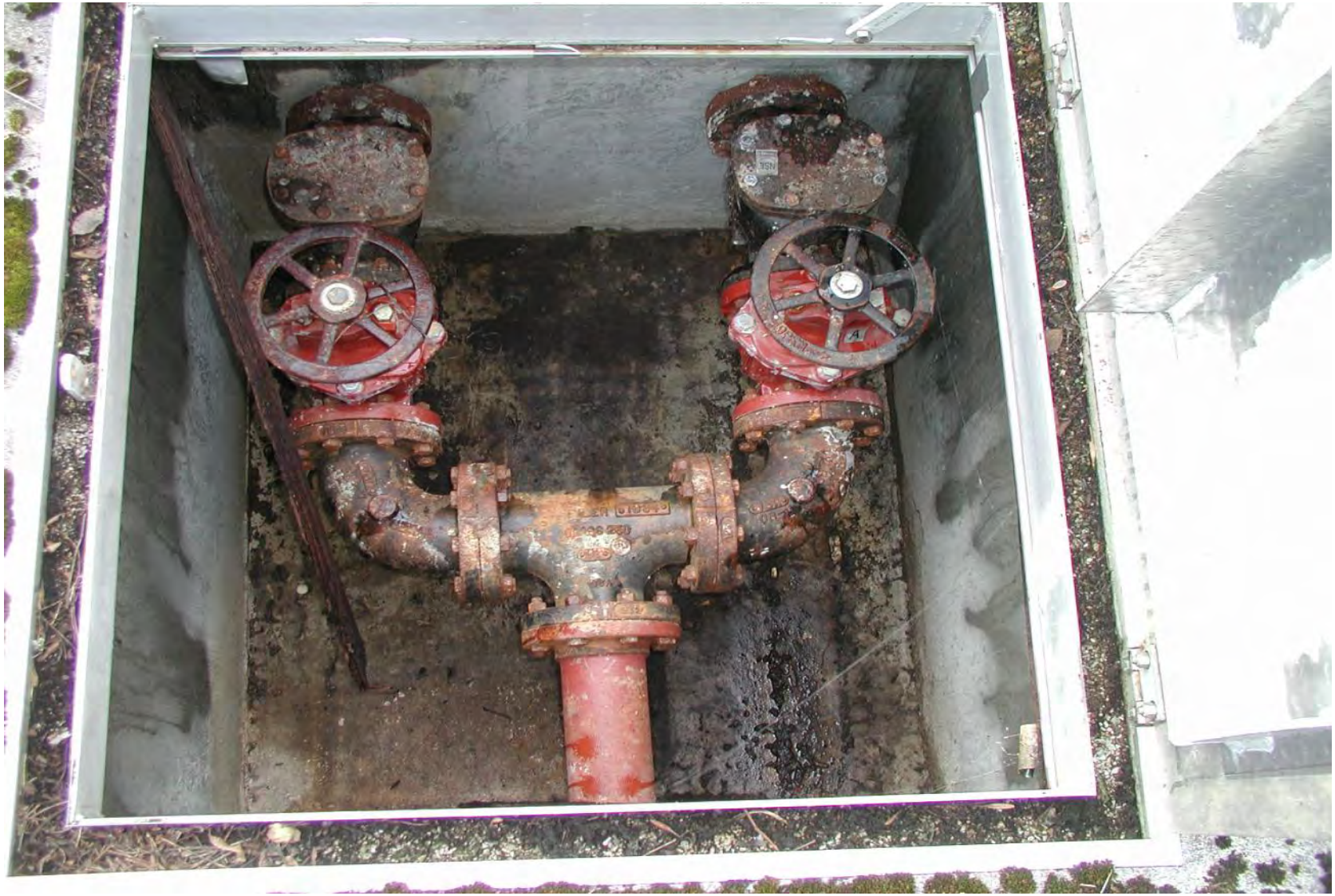

!Caution: Use MultiTrode cable only otherwise damage may occur.
Comms Interface
MODEL:
S/N:
ANALOG 4-20mA
IN 2
IN 1
OUT
R2+ R2- R1+ R1- AT+ AT- EXC SRC
RS485 COMMS
TRAN
RECV
TX+ TX- RX+ RX-
10 - 30 VDC
CONFIGURABLE OUTPUTS
D01 D02 D03
H1 H2 J1 J2 K1 K2
CONFIGURABLE OUTPUTS
D04 D05
S1 S2 M1 M2
ALARMS:
H= CONFIGURABLE
J= CONFIGURABLE
K= CONFIGURABLE
S= CONFIGURABLE
M= CONFIGURABLE
FULL FACTORY DEFAULT:
H= LEVEL ALARM 1
J= LEVEL ALARM 1
K= COMMON ALARM
FAULT INPUTS:
C= CRITICAL
N= NON-CRITICAL
D= DELAY/SEAL
S= THERMAL/LEAKAGE
MISC.:
SP= SPECIAL
KL= KEYLOCK
PL = PEAK LEVELS
PF= POWER FAIL
PS= PULSE START
E1= EARTH
PUMPS:
A= PUMP 1
B= PUMP 2
P1 P2 P3 P4 P5 P6 P7 P8 P9 P10
SP KL AC AN AD AS BC BN BD BS
MISC. INPUTS
PL PF PS E1
IND.CONT.EQ.
LISTE
2P27


3
2
1&L1
L2
L3
NEMA SIZE 1
CLASS 8536
TYPE SC03
FORM BS
SERIES B
600 VAC MAX.
SQUARE D COMPANY
SLCD
COIL NO.
31041-400-42
120V. 60HZ
110V. 50HZ
Motor Logic
RESET


13 14 37 38 44 78 80
44 45 93


FUSETRON
FRN-R-60



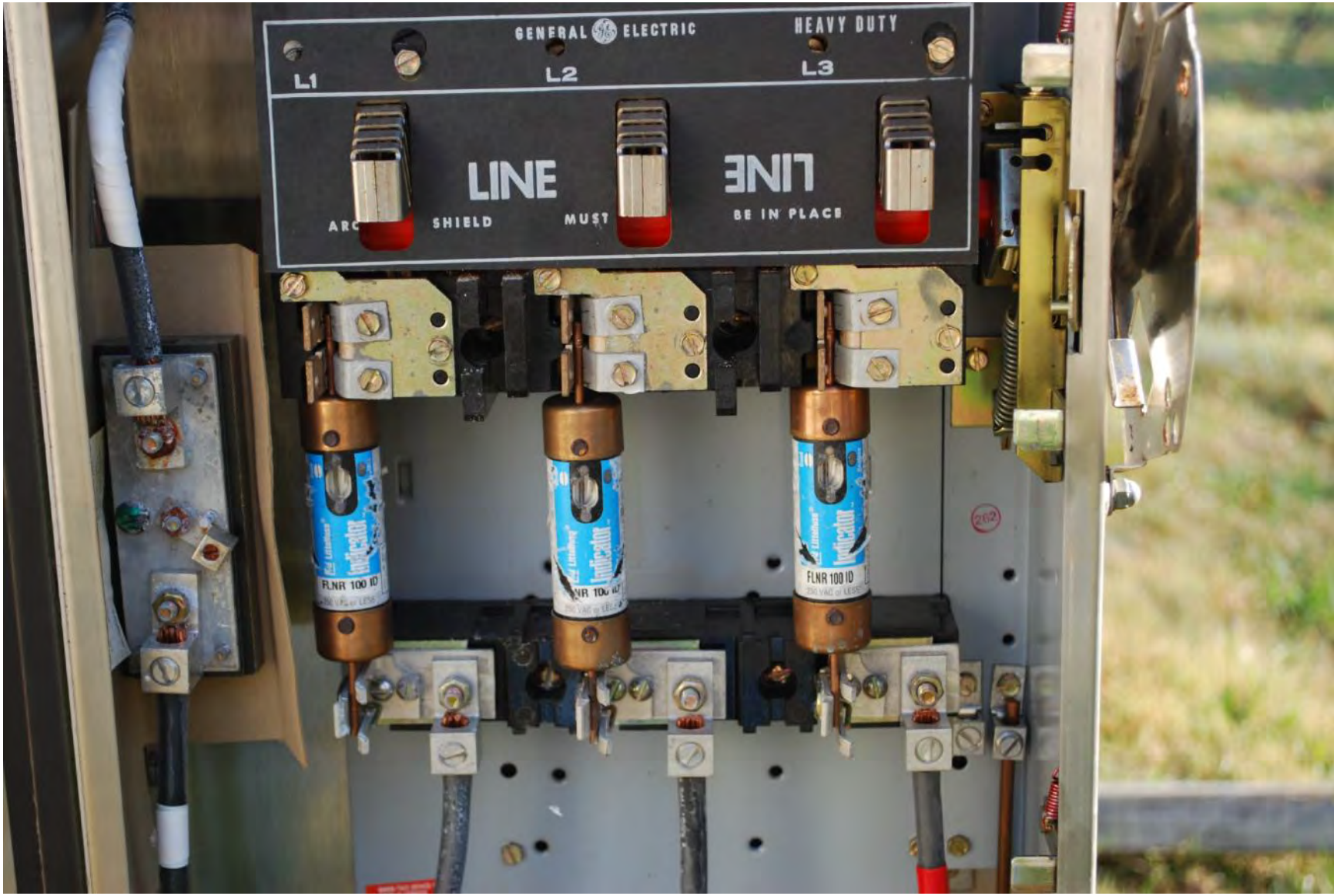


BLAZE

WATO

00611

ON
OFF

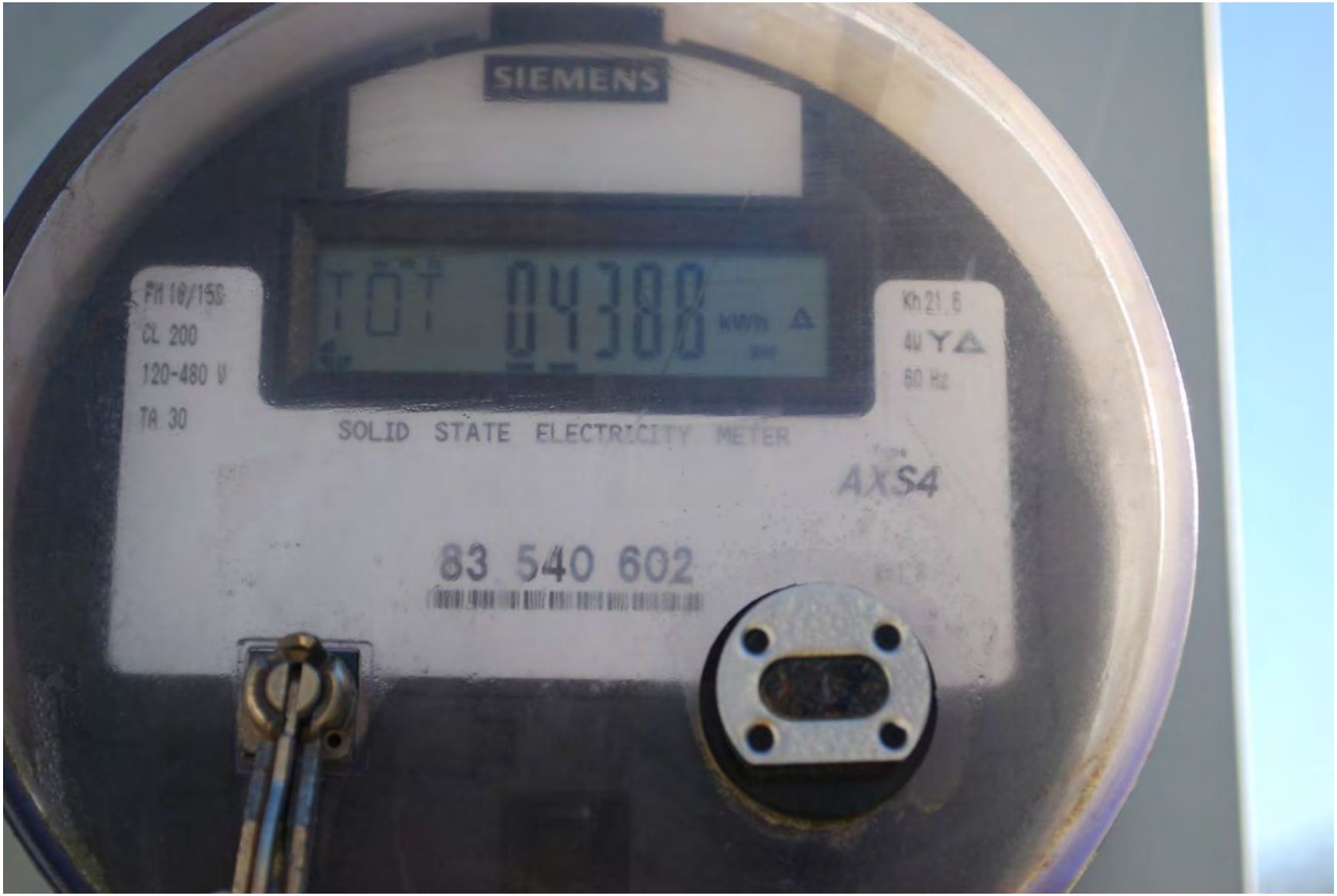

GENERAL ELECTRIC
HEAVY DUTY
L1
L2
L3
LINE
LINE
SHIELD
MUST
BE IN PLACE
FLNR 100 ID
FLNR 100 ID

GENERAL ELECTRIC
HEAVY DUTY
L1
L2
L3
LINE
SHIELD
MUST
BE IN PLACE

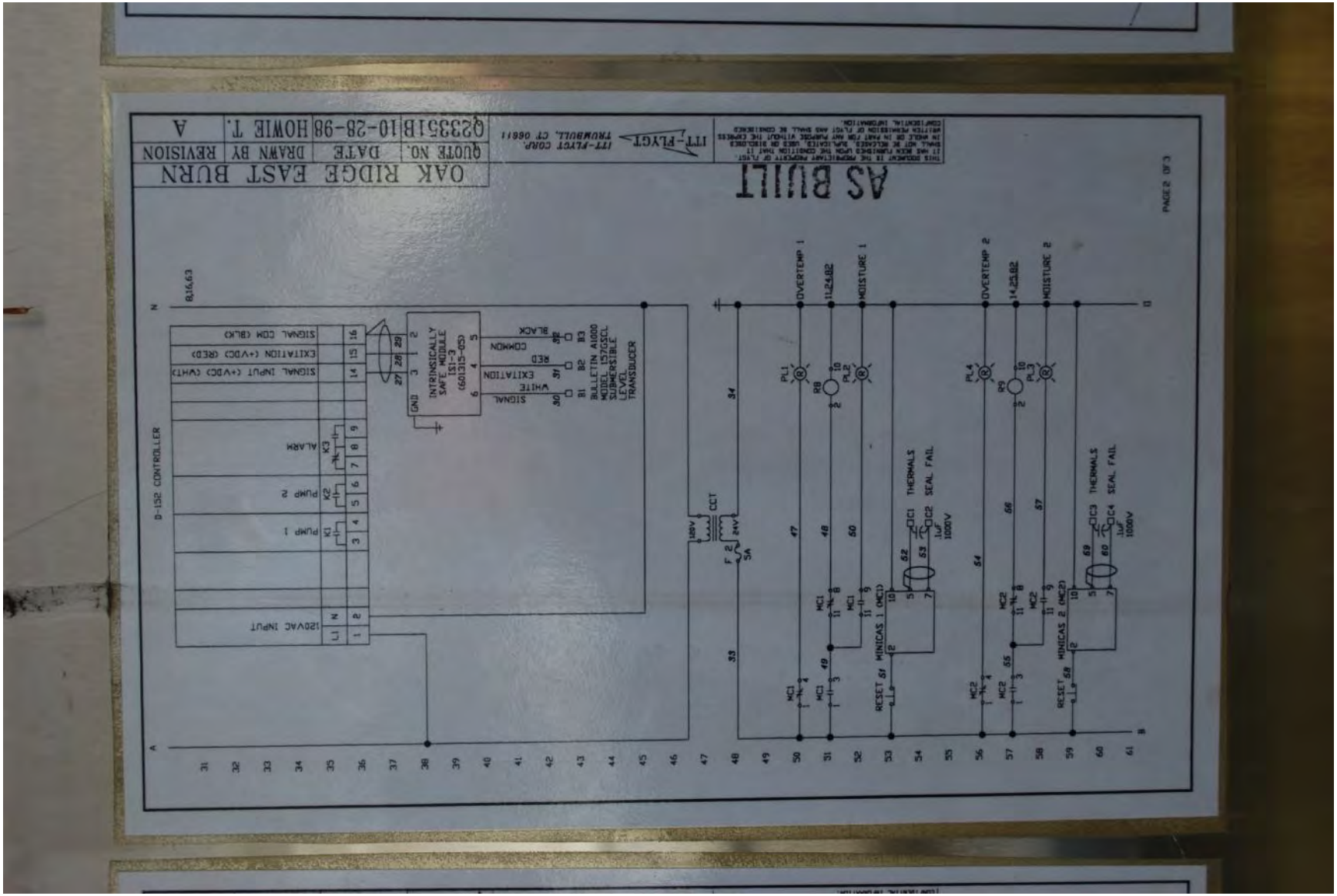
FLNR 100 ID
FLNR 100 ID
262
LOAD

LOAD

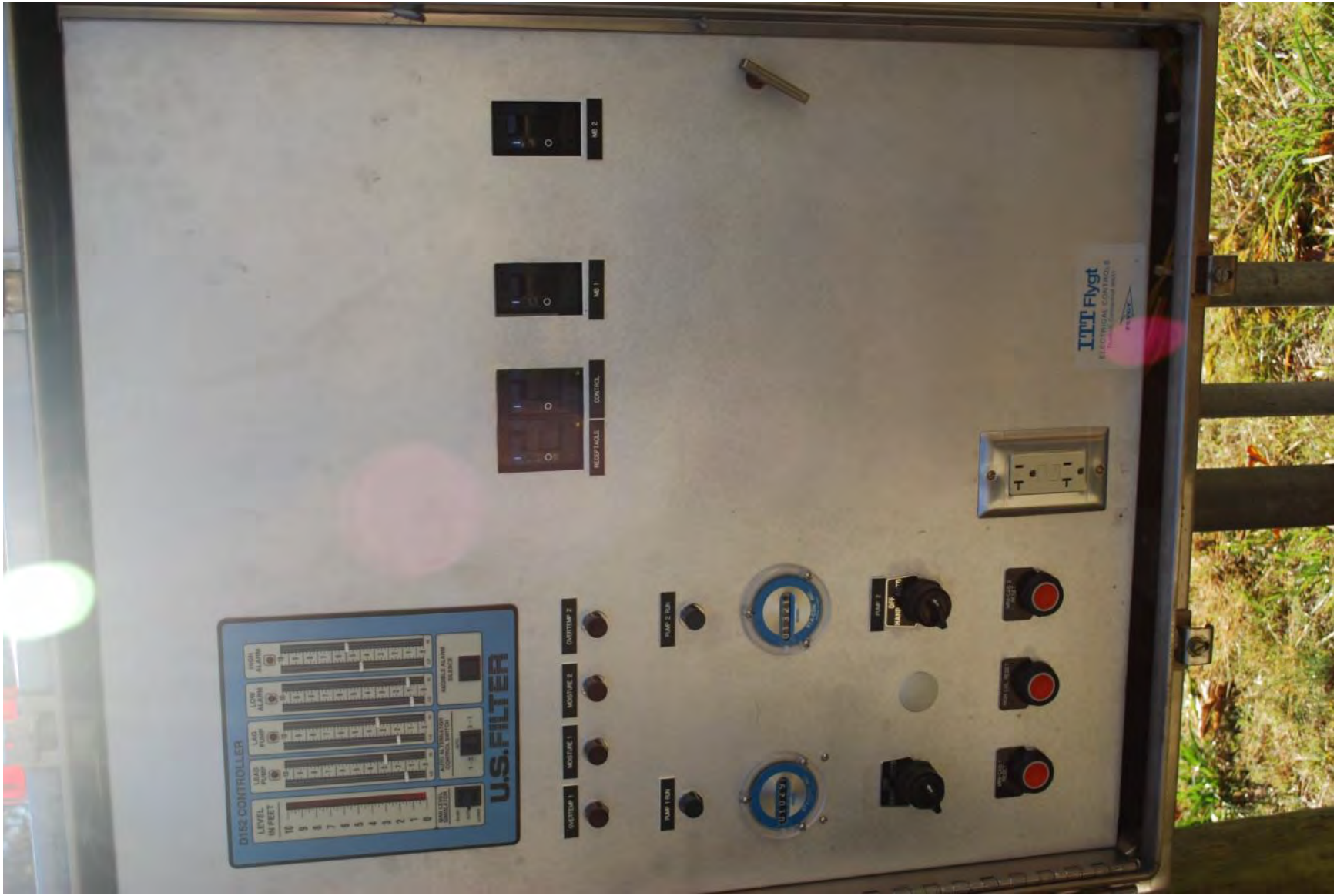
L1
L2
LINE
SHIELD
MUST
Indicator
FLNR 100 ID

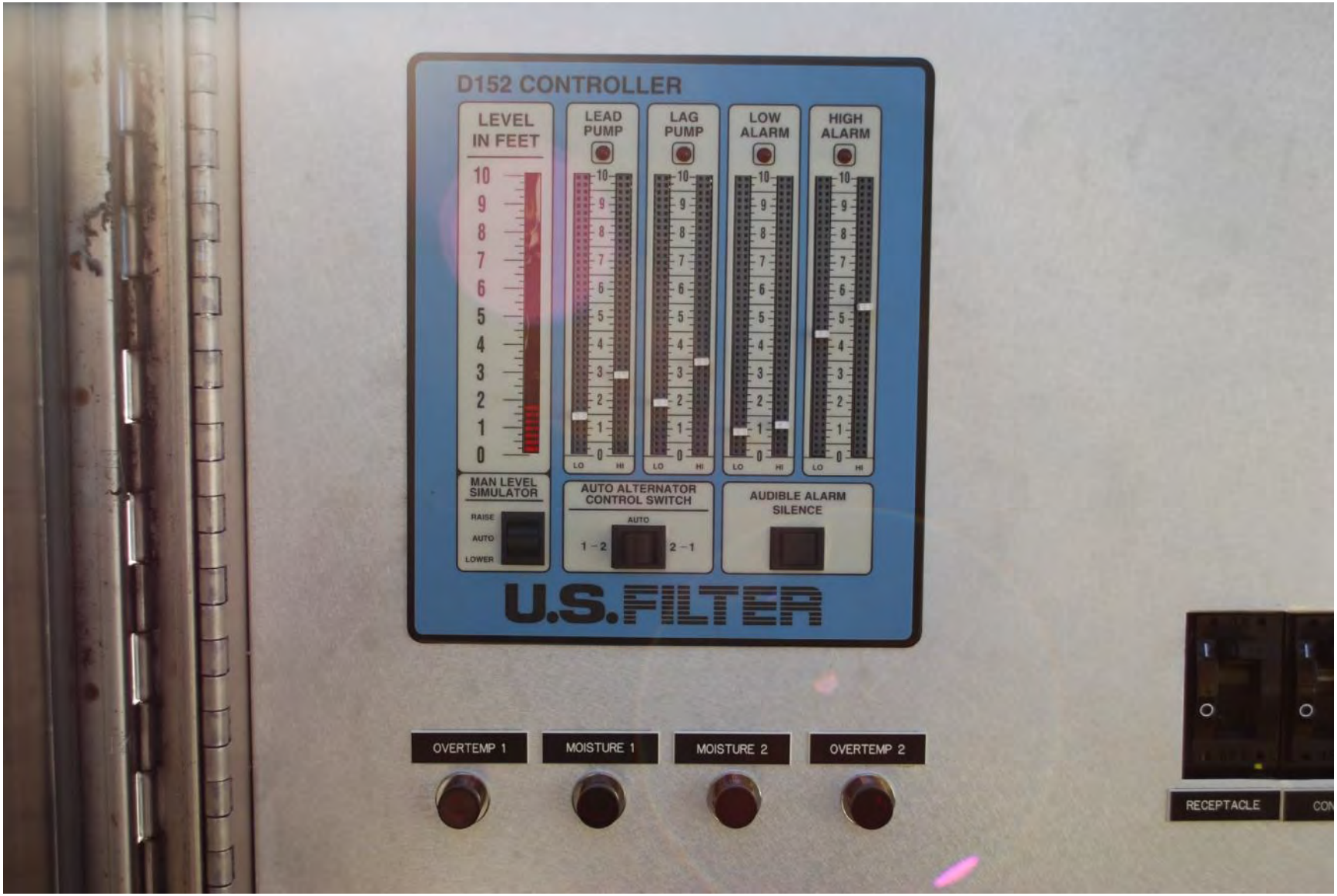

SIEMENS
TOT 04388 kWh
FM 10/15S
CL 200
120-480 V
TA 30
Kh 21.6
4W Y
60 Hz
SOLID STATE ELECTRICITY METER
AXS4
83 540 602

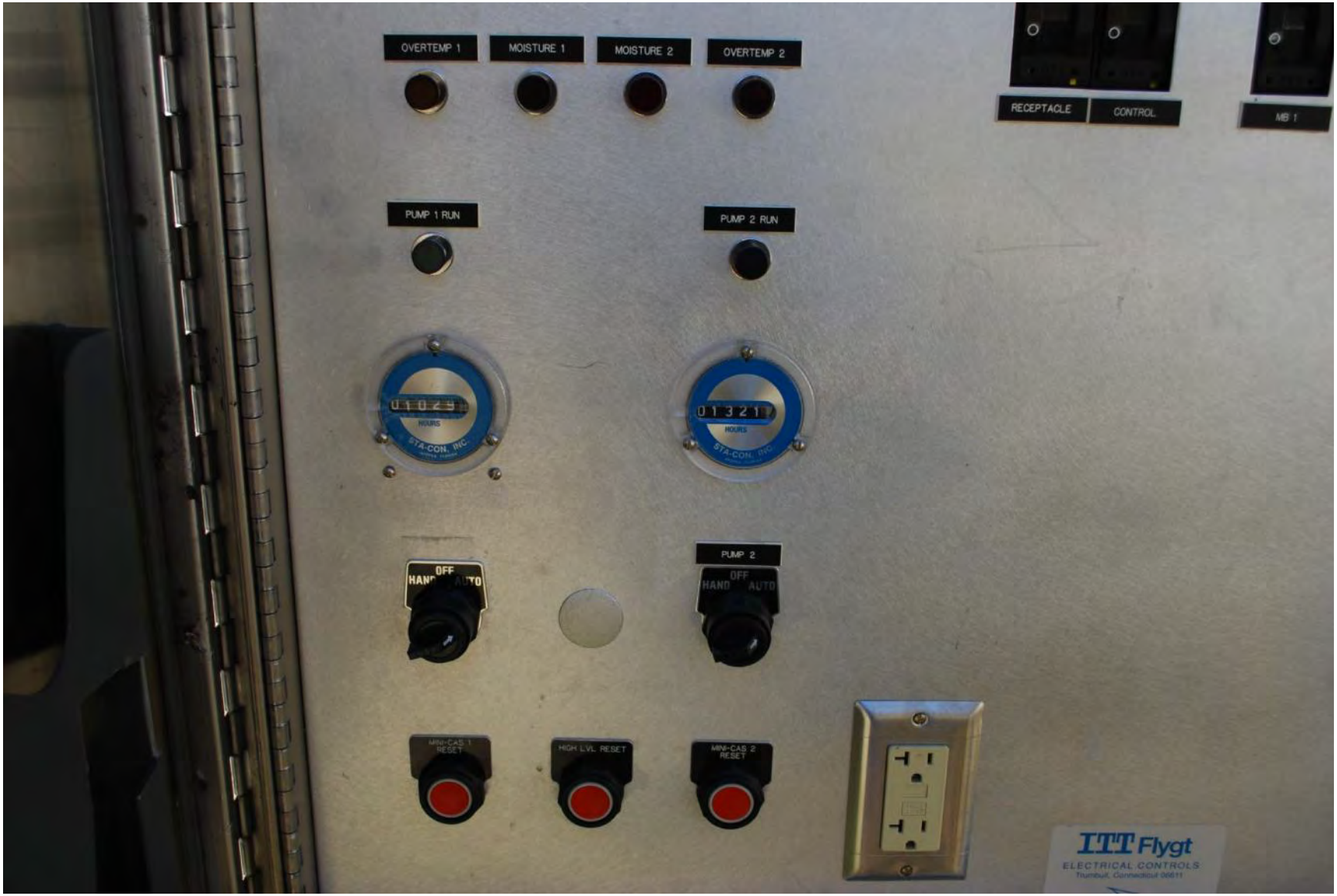
AS BUILT
OAK RIDGE EAST BURN
A
HOWIE T.
10-28-98
Q2351B
ITT-FLYGT
TRUMBULL, CT 06611
ALARM LIGHT
THERMOSTAT/ HEATER
PUMP 1 RUN
PUMP 2 RUN
PUMP 1 HP 3 FLA 9
PUMP 2 HP 3 FLA 9
230V 3 Ø 4 W

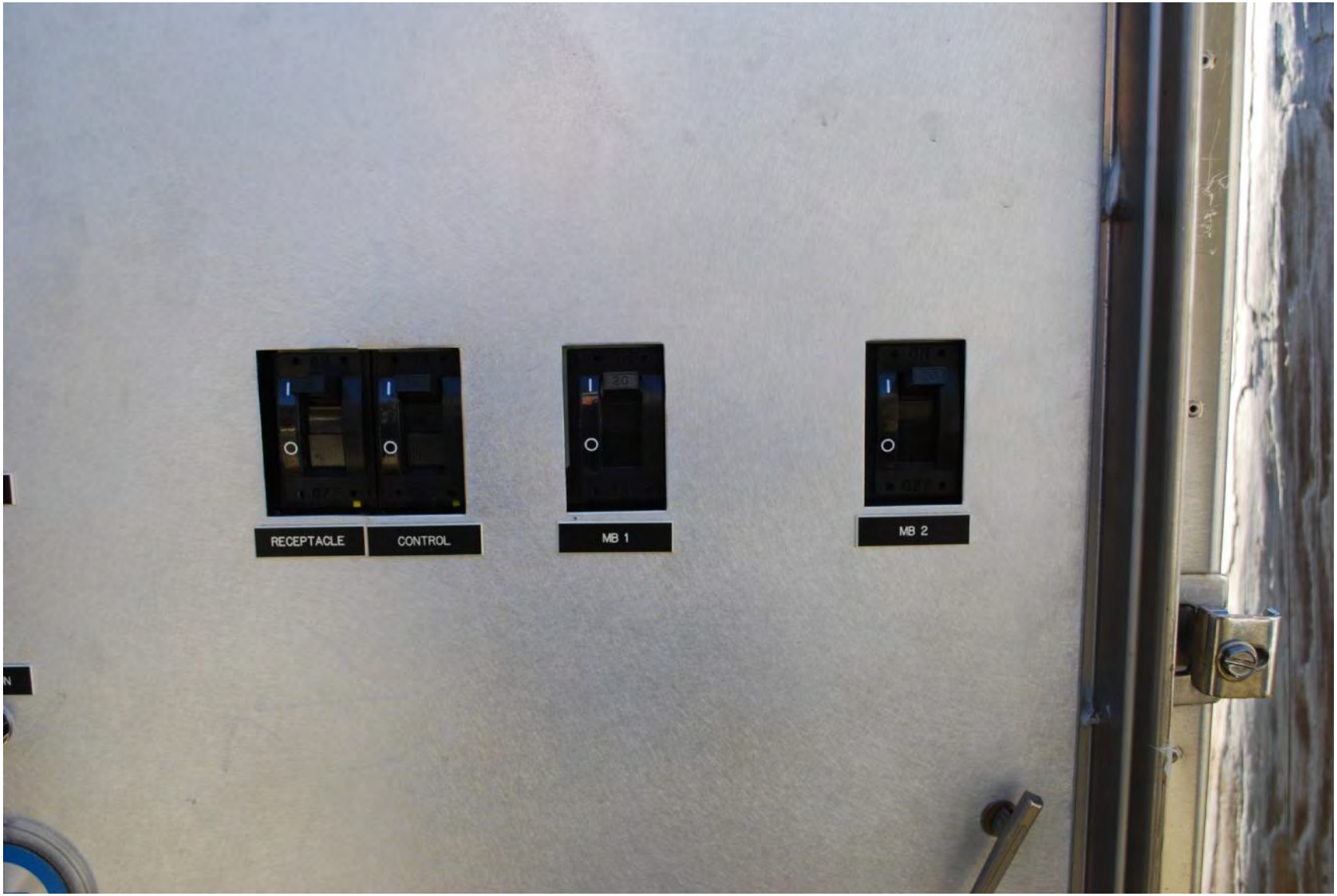

AS BUILT
OAK RIDGE EAST BURN
ITT-FLYGT
ITT-FLYGT CORP.
TRUMBULL, CT 06611
Q2335IB
10-28-98
HOWIE T.
A
QUOTE NO.
DATE
DRAWN BY
REVISION
PAGE 2 OF 3
D-152 CONTROLLER
120VAC INPUT
PUMP 1
PUMP 2
ALARM
SIGNAL INPUT (+VDC) (WHT)
EXITATION (+VDC) (RED)
SIGNAL COM (BLK)
INTRINSICALLY SAFE MODULE IS1-3 (60315-05)
BULLETIN A1000 MODEL 157GSCL SUBMERSIBLE LEVEL TRANSDUCER
BLACK
COMMON
RED
EXITATION
WHITE
SIGNAL
OVERTEMP 1
MOISTURE 1
OVERTEMP 2
MOISTURE 2
THERMALS
SEAL FAIL
MINICAS 1 (MC1)
MINICAS 2 (MC2)
RESET
CCT
F 2
5A
24V
105V

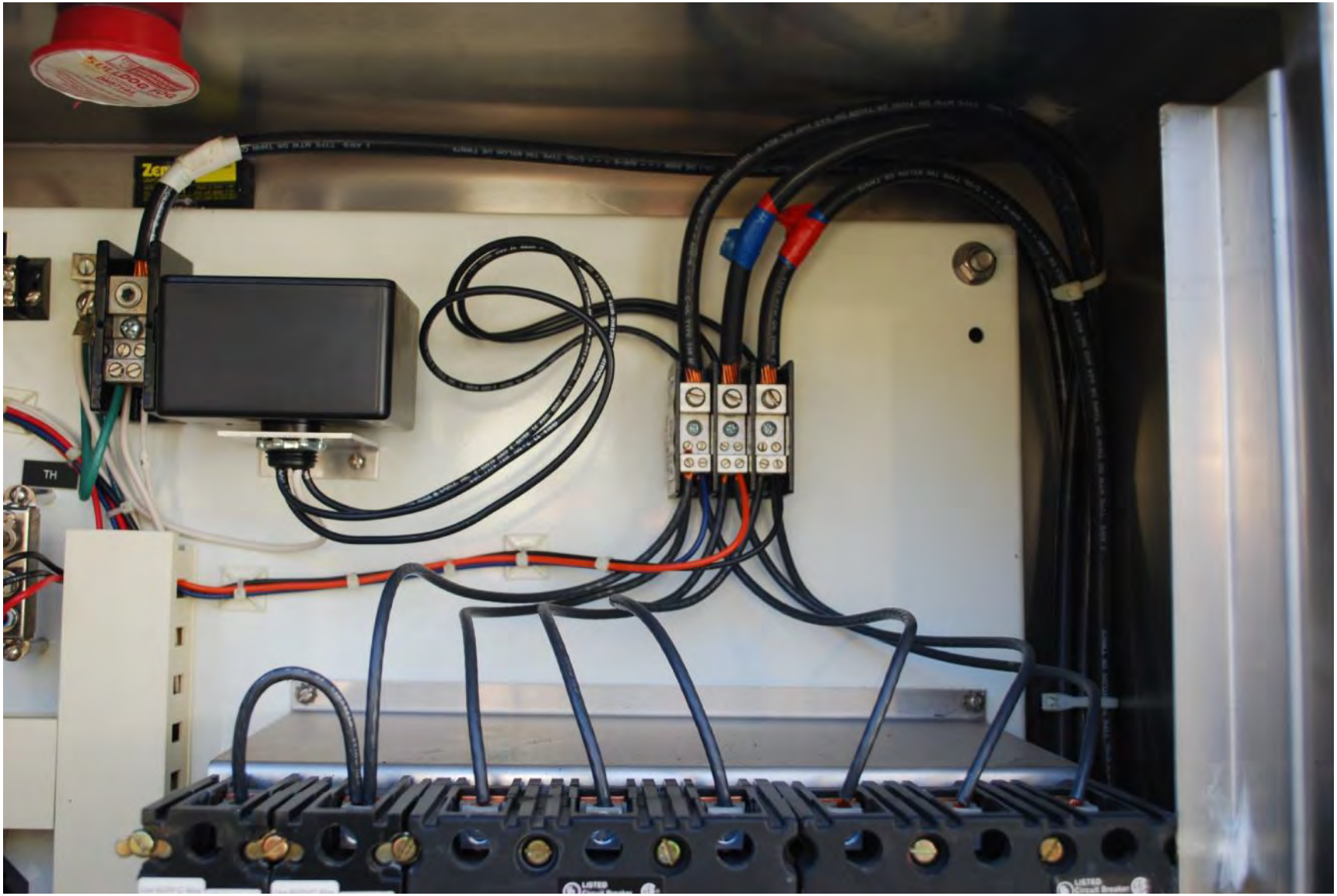
OAK RIDGE EAST BURN
QUOTE NO. 023351B
DATE 10-28-98
DRAWN BY HOWIE T.
REVISION A
ITT-FLYGT TRUMBULL, CT 06611
AS BUILT
REMOTE TO FUTURE SCADA SYSTEM
LAST WIRE #70
LOW LEVEL
HIGH LEVEL
D132 ALARM
OVERTEMP 1 MOISTURE 1
OVERTEMP 2 MOISTURE 2
RESET
HI LEVEL
LAG
LEAD
OFF
LOW
(NC)
PAGE 3 OF 3

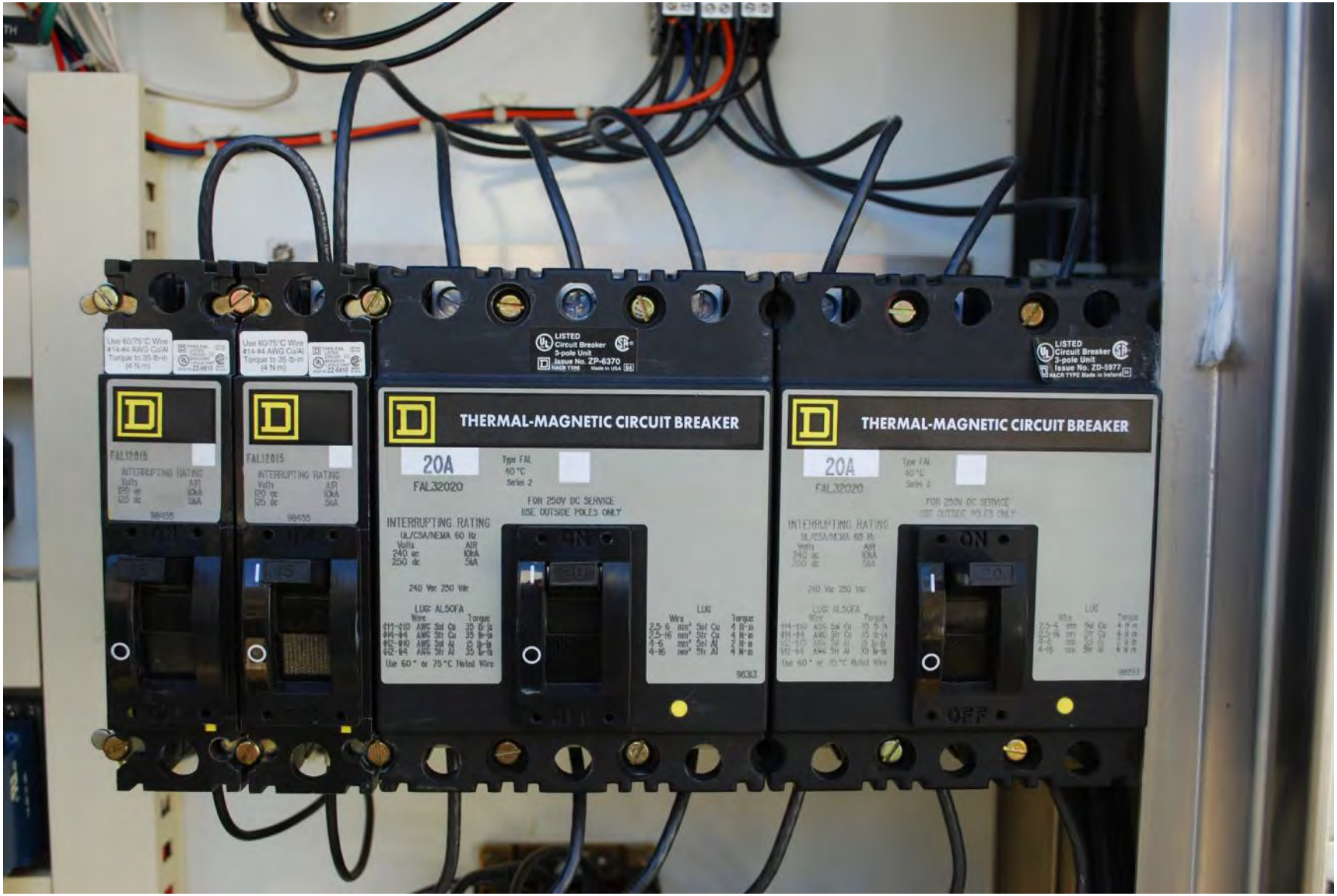

U.S.FILTER
D152 CONTROLLER
ITT Flygt


D152 CONTROLLER
LEVEL IN FEET
LEAD PUMP
LAG PUMP
LOW ALARM
HIGH ALARM
MAN LEVEL SIMULATOR
RAISE
AUTO
LOWER
AUTO ALTERNATOR CONTROL SWITCH
AUTO
1 - 2
2 - 1
AUDIBLE ALARM SILENCE
U.S. FILTER
OVERTEMP 1
MOISTURE 1
MOISTURE 2
OVERTEMP 2
RECEPTACLE

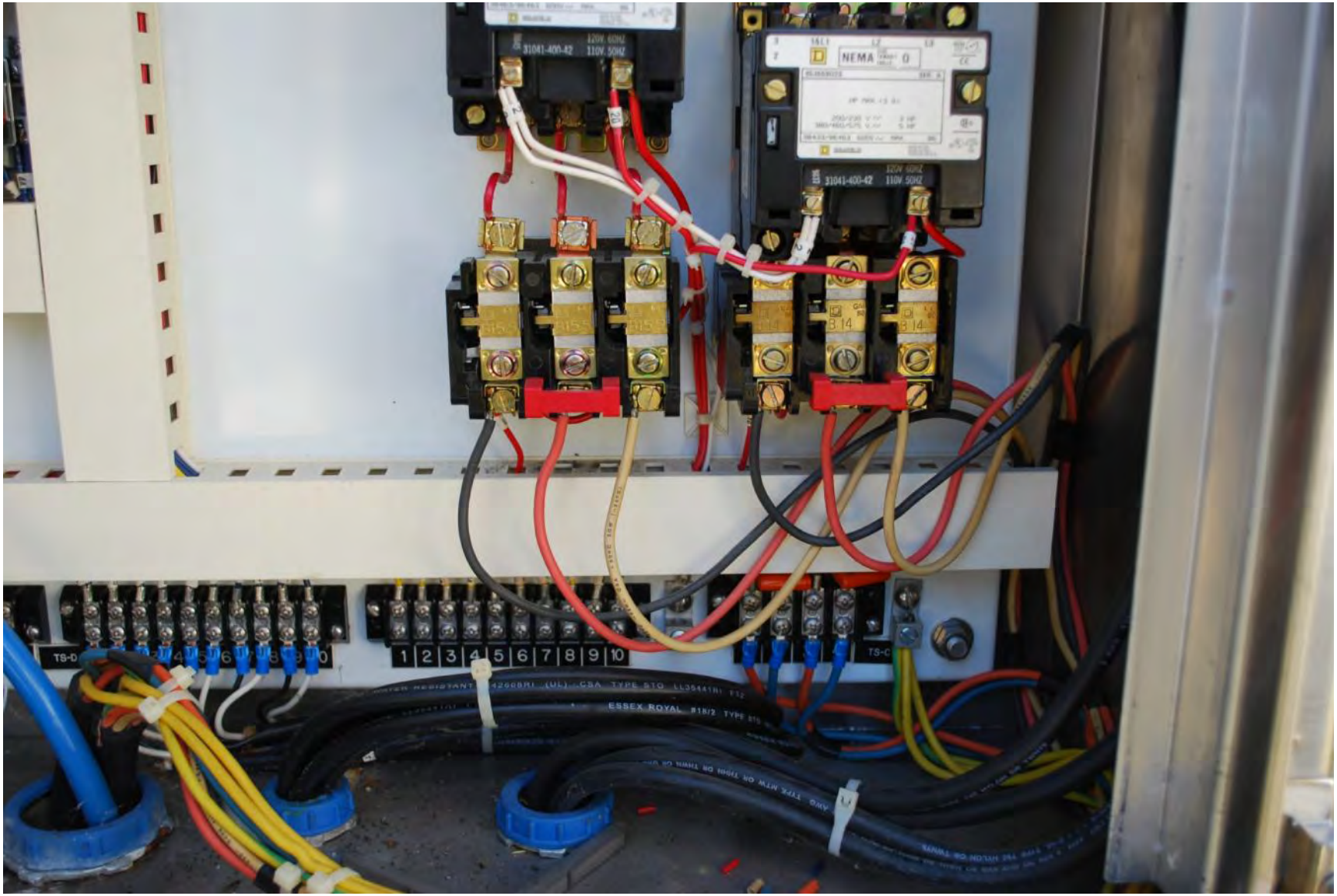

OVERTEMP 1
MOISTURE 1
MOISTURE 2
OVERTEMP 2
RECEPTACLE
CONTROL
MB 1
PUMP 1 RUN
PUMP 2 RUN
HOURS
STA-CON. INC.
PUMP 2
OFF
HAND
AUTO
MINI-CAS 1 RESET
HIGH LVL RESET
MINI-CAS 2 RESET
ITT Flygt
ELECTRICAL CONTROLS

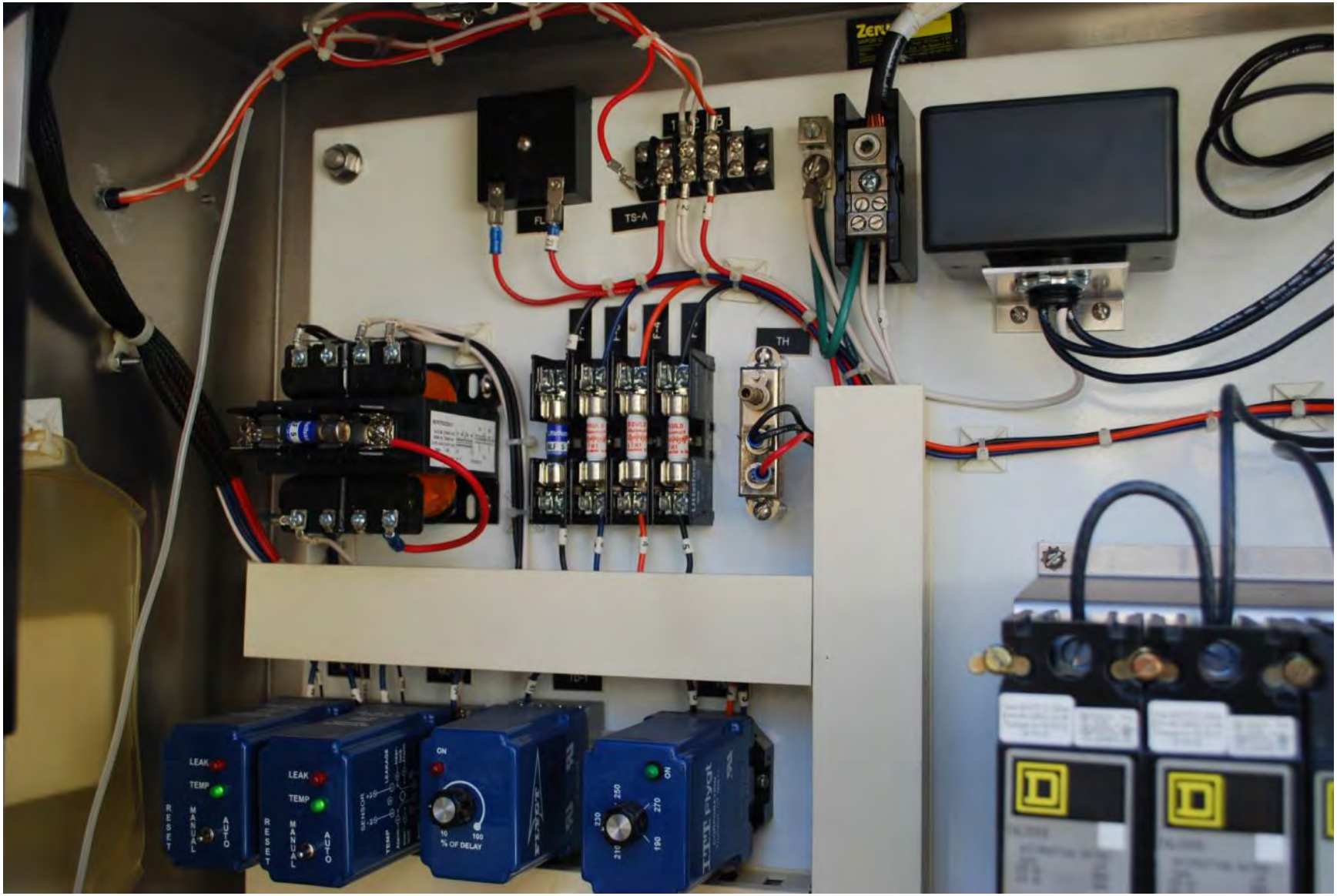

RECEPTACLE
CONTROL
MB 1
MB 2


TH


THERMAL-MAGNETIC CIRCUIT BREAKER
20A
FAL32020
FOR 250V DC SERVICE
USE OUTSIDE POLES ONLY
INTERRUPTING RATING
ON
OFF
THERMAL-MAGNETIC CIRCUIT BREAKER
20A
FAL32020
ON
OFF

NEMA 0
31041-400-42
110V, 50HZ
NEMA 0
31041-400-42
110V, 50HZ


31041-400-42
120V. 60HZ
110V. 50HZ
NEMA 0
TS-D
1 2 3 4 5 6 7 8 9 10
TS-C
ESSEX ROYAL #18/2


FL
TS-A
TH
LEAK
TEMP
RESET
MANUAL
AUTO
ON
% OF DELAY

LEAK
TEMP
RESET
MANUAL
AUTO
ON
10
100
% OF DELAY
TD-1
PTT
ALTERNATING
RELAY
POS 1
Auto
POS 2

PTT
ALTERNATING
RELAY
POS 1
Auto
POS 2

KRPA-14AN-24
24V 50/60Hz

BULLDOG FOG

SCH.
40S

25

25

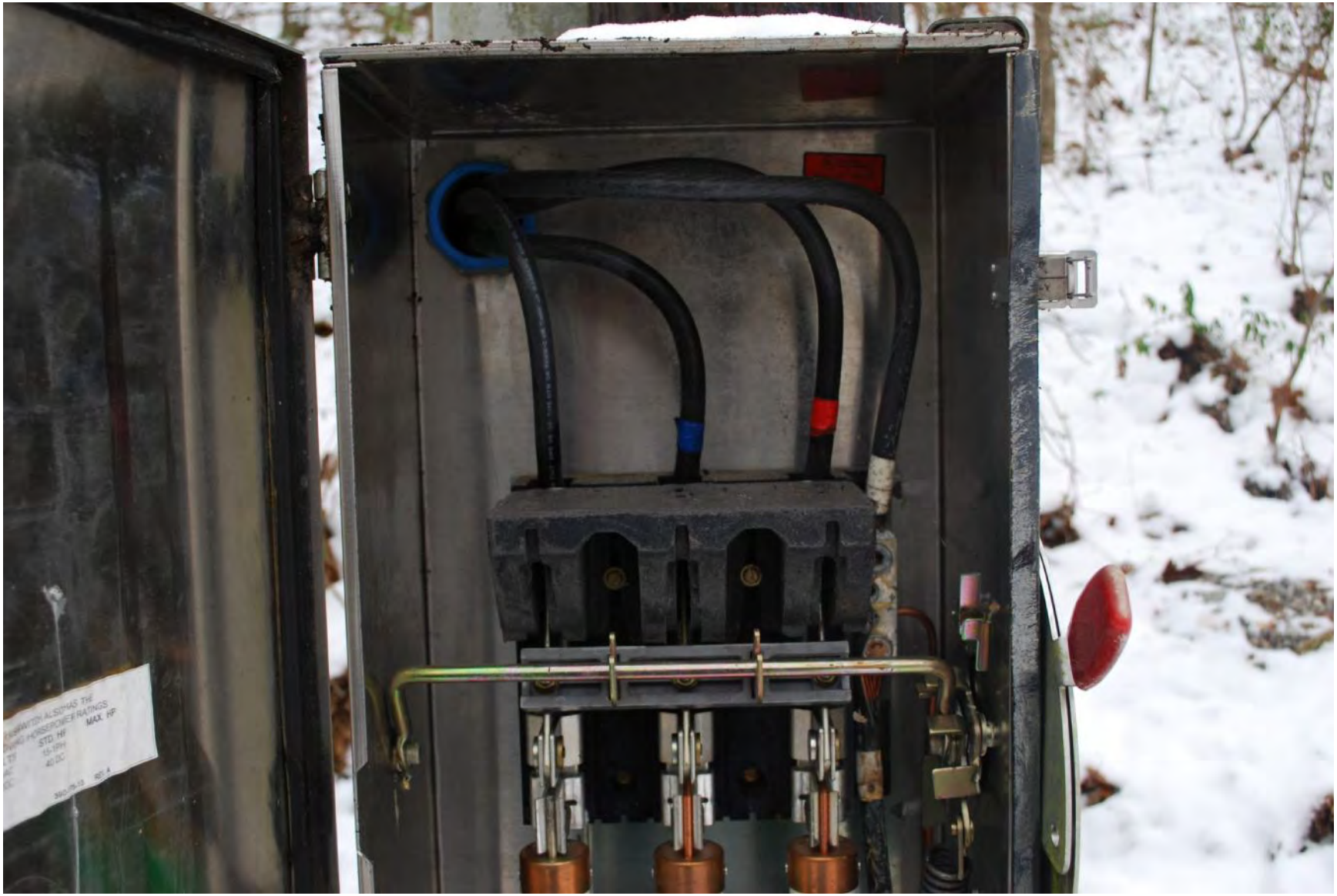
25

PSI
kPa x100
Reed Valve
5
10
15
20
25
30
0.5
1
1.5
2

PSI
KPa
100
5
10
15
20
25
30
0.5
1
1.5
2

ON
OFF

TENNESSEE
GW·6110
·GOV'T SERV.
DANGER



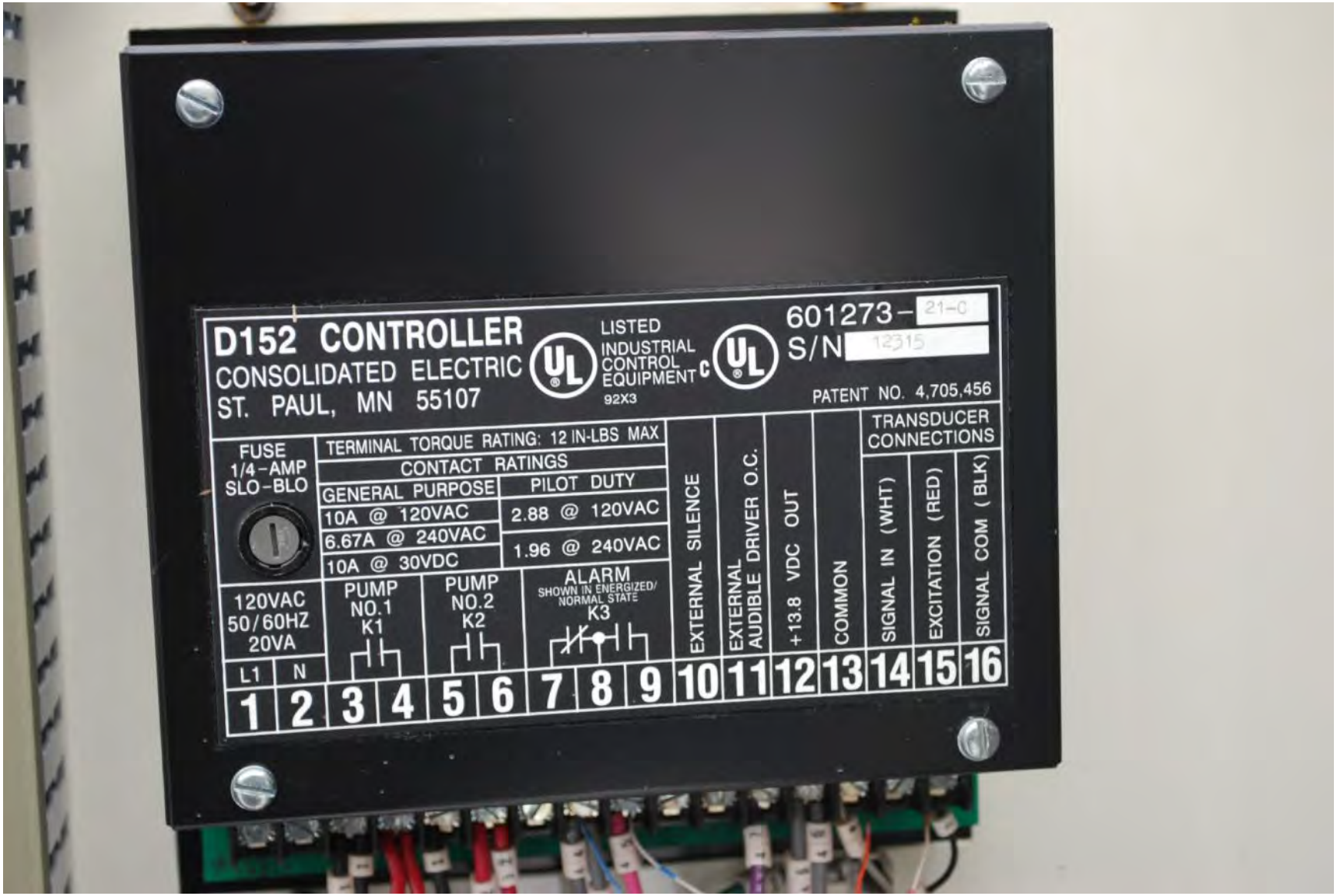
CHALLENGER
Heavy Duty Safety Switch
240AC

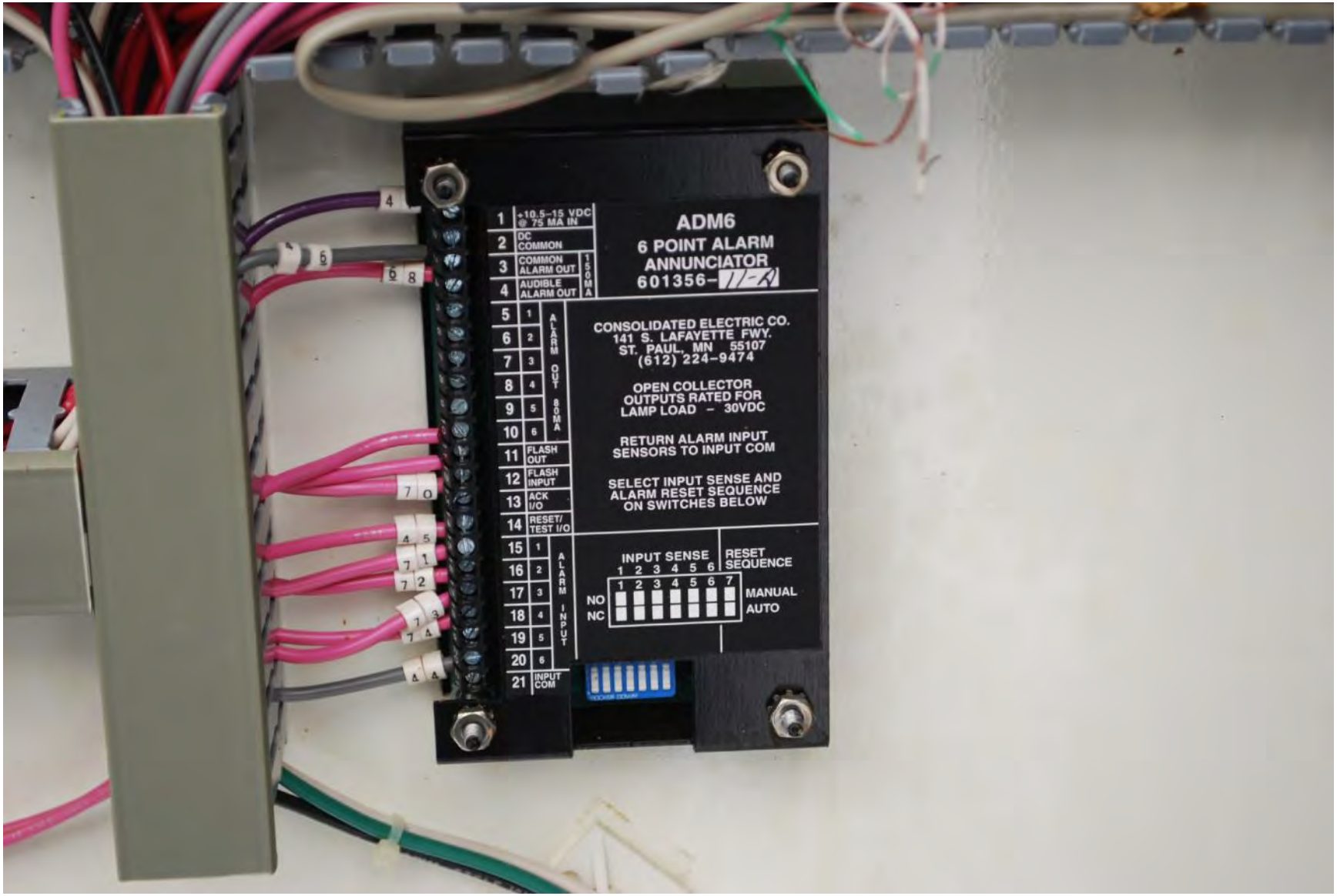
GFI
DUPLEX RECEPTACLE
CONTROL POWER
PUMP NO. 1
D152 CONTROLLER
LEVEL
IN FEET
LEAD
PUMP
LAG
PUMP
LOW
ALARM
HIGH
ALARM
MAN LEVEL
SIMULATOR
AUTO ALTERNATOR
CONTROL SWITCH
Consolidated Electric

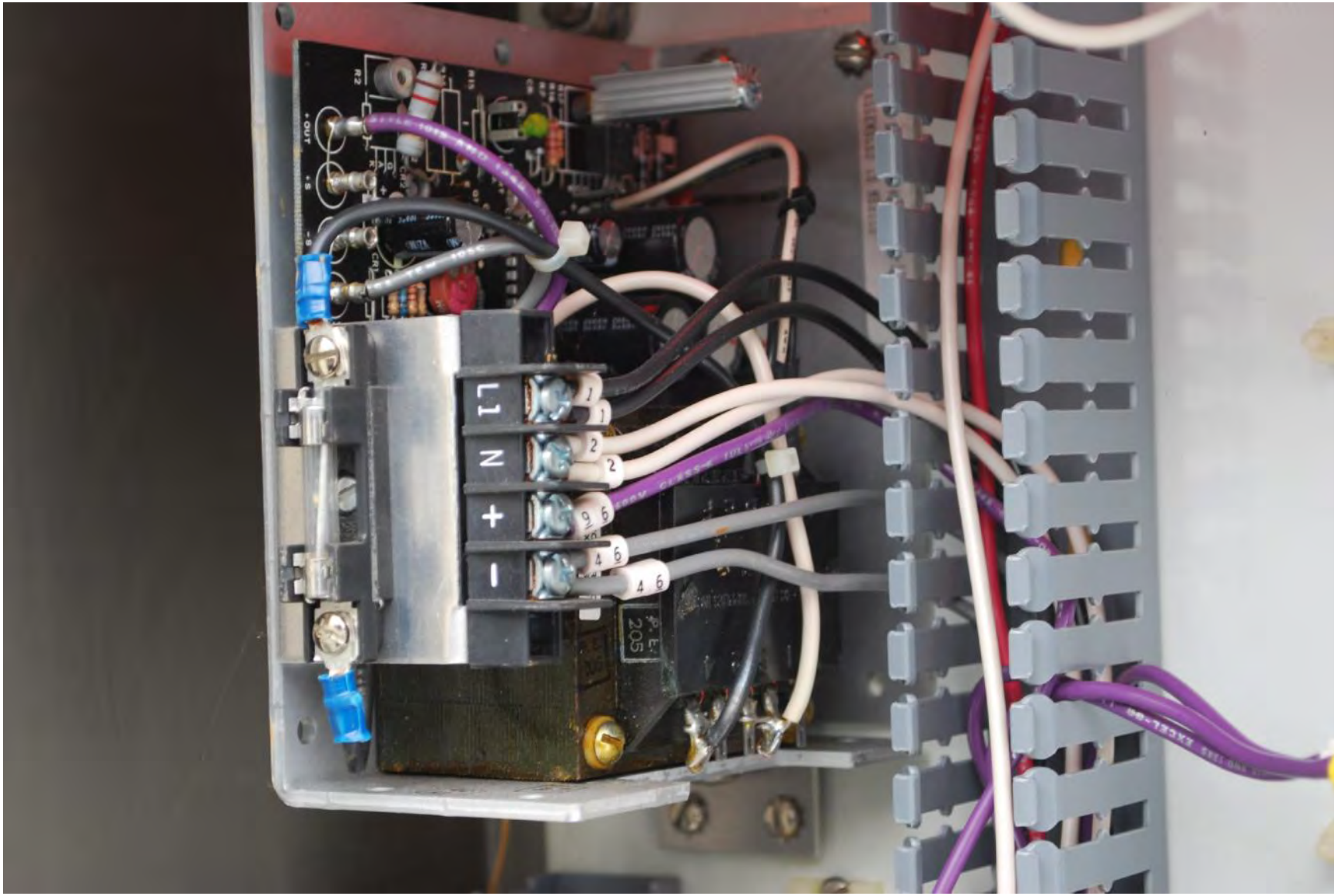
CONTROL POWER
PUMP NO. 1
PUMP NO. 2
LAG PUMP
LOW ALARM
HIGH ALARM
DANGER
Disconnect all sources of power before opening door. (Multiple and/or remote sources of power may be present.)
Hazardous voltages cause severe injury or death.
Consolidated Electric

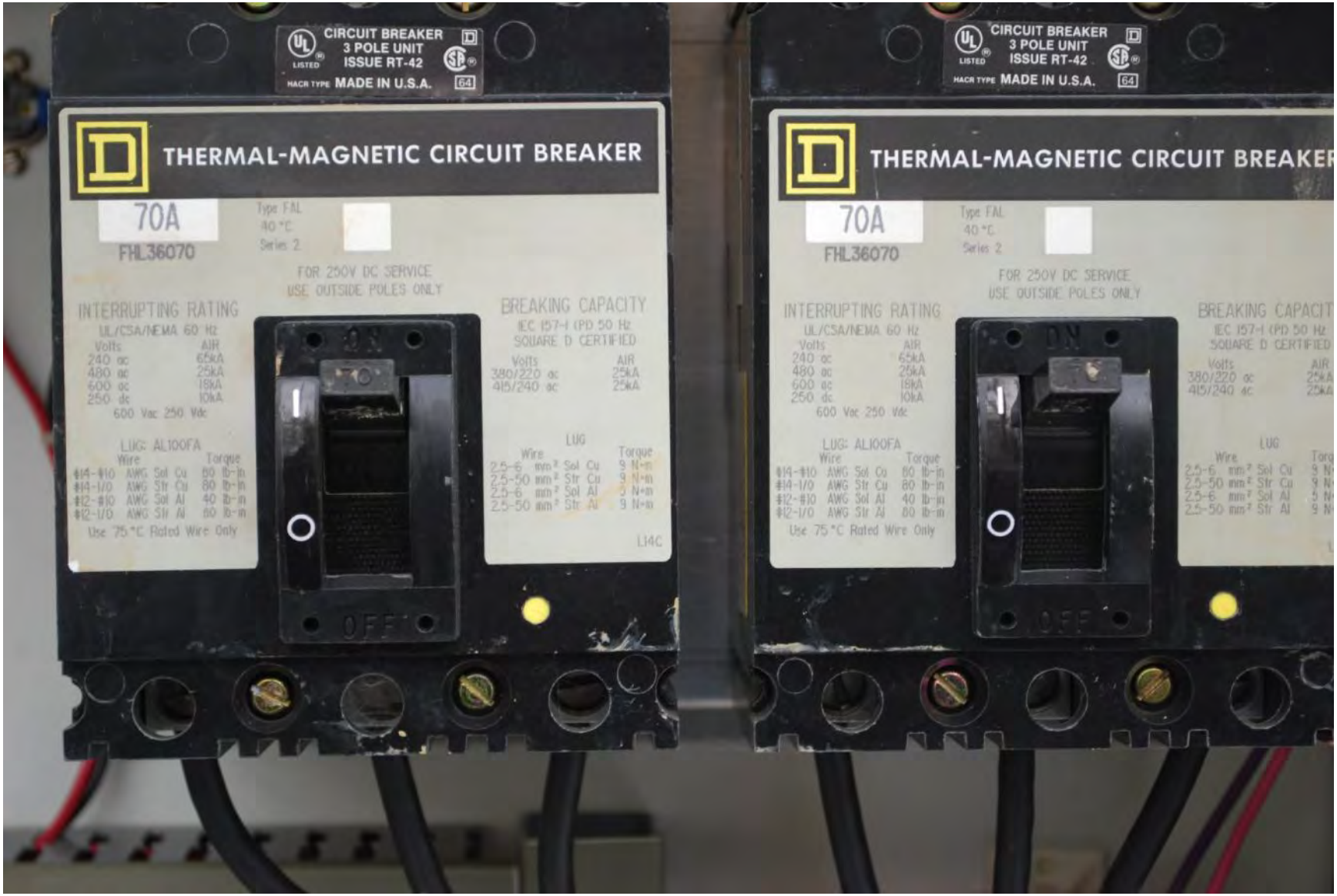
Consolidated Electric
Consolidated Electric
Abnormal Level
Emergency High Level
Pump No. 1 Overtemp
Pump No. 2 Overtemp
Low Level Cutout
ACK
RST TST
RUNNING
SEAL FAILURE
PUMP NO. 1
HAND-OFF-AUTO
RESET
RUNNING
SEAL FAILURE
PUMP NO. 2
HAND-OFF-AUTO
RESET
LOW LEVEL CUTOUT RESET

TYPE 4,4X
NG CONDUIT TO THIS
E C.S.A. CERTIFIED
THAT HAVE THE SAME
TYPE RATING AS THE
ITH INDUSTRIAL
QUIPMENT ONLY
WEST OUTER DRIVE PUMP STATION
SERIAL NO. 53727-C
PROD. CODE CPF1-D152-B3
JOB NAME OAK RIDGE, TN.
VOLTS 240
HERTZ 60
PHASE 3
WIRE 4
MAX. F.L.A. 125
LARGEST MOTOR 14.2 H.P. 33 F.L.A.
DRAWING NO. C913113-01
PRESSURE
CONSOLIDATED ELECTRIC COMPANY
141 SOUTH LAFAYETTE FREEWAY
SAINT PAUL, MINNESOTA 55107
AC 612/224-9474
Underwriters Laboratories Inc.®
LISTED

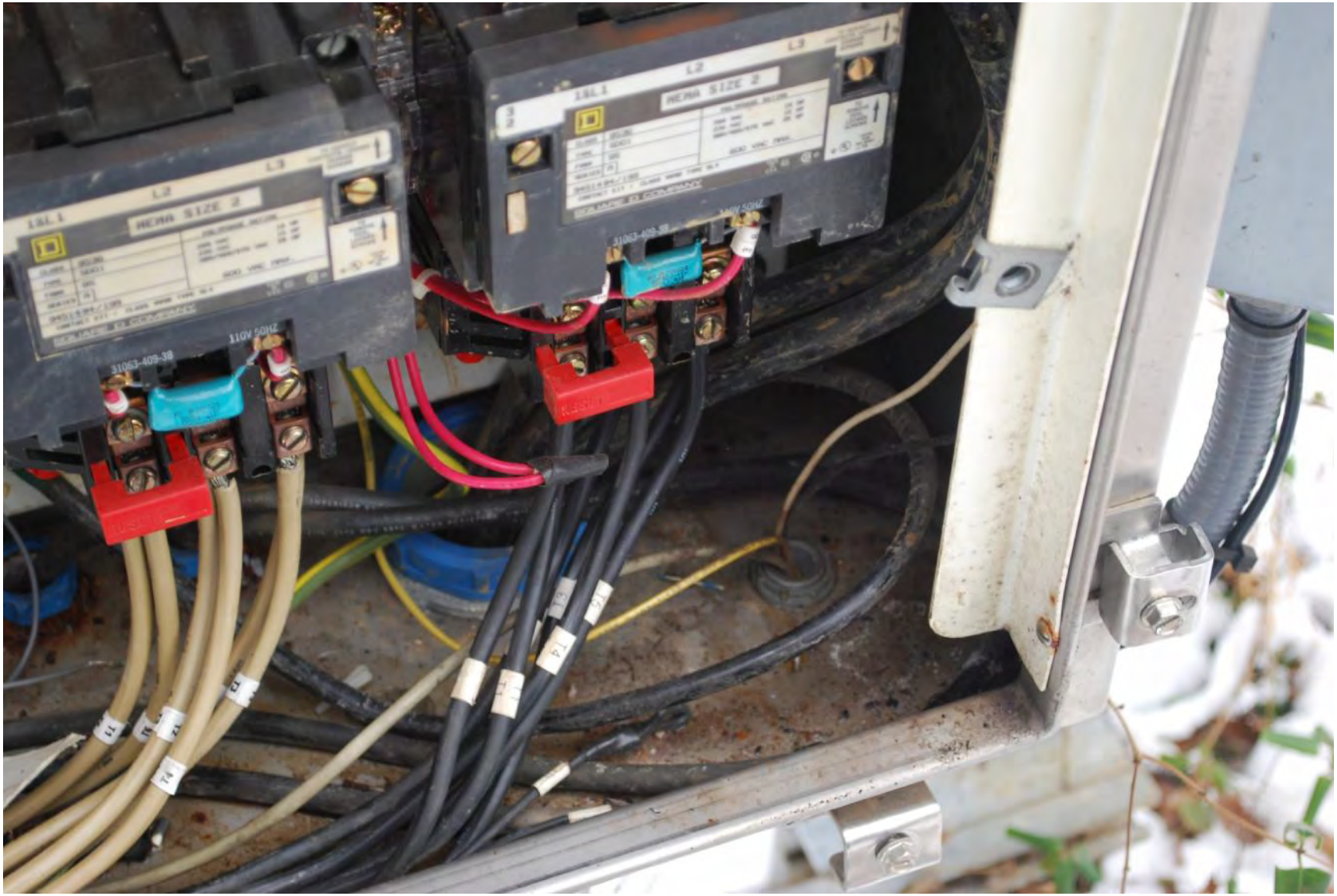

D152 CONTROLLER
CONSOLIDATED ELECTRIC
ST. PAUL, MN 55107
LISTED
INDUSTRIAL
CONTROL
EQUIPMENT
92X3
601273-21-0
S/N 12315
PATENT NO. 4,705,456
FUSE
1/4-AMP
SLO-BLO
TERMINAL TORQUE RATING: 12 IN-LBS MAX
CONTACT RATINGS
GENERAL PURPOSE
10A @ 120VAC
6.67A @ 240VAC
10A @ 30VDC
PILOT DUTY
2.88 @ 120VAC
1.96 @ 240VAC
120VAC
50/60HZ
20VA
PUMP
NO.1
K1
PUMP
NO.2
K2
ALARM
SHOWN IN ENERGIZED/
NORMAL STATE
K3
EXTERNAL SILENCE
EXTERNAL
AUDIBLE DRIVER O.C.
+13.8 VDC OUT
COMMON
TRANSDUCER
CONNECTIONS
SIGNAL IN (WHT)
EXCITATION (RED)
SIGNAL COM (BLK)
L1
N
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16

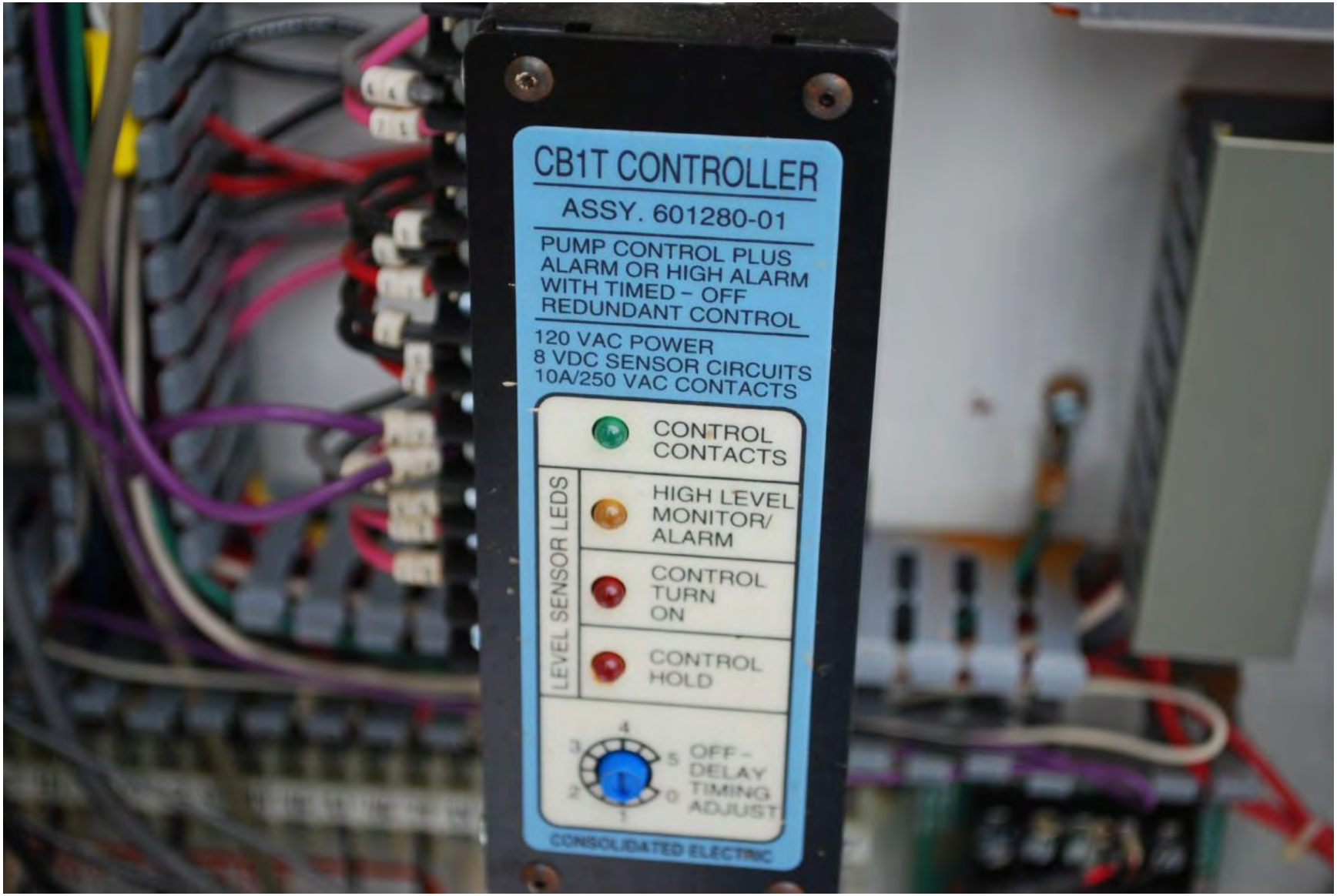

ADM6
6 POINT ALARM
ANNUNCIATOR
601356-11-A
CONSOLIDATED ELECTRIC CO.
141 S. LAFAYETTE FWY.
ST. PAUL, MN 55107
(612) 224-9474
OPEN COLLECTOR
OUTPUTS RATED FOR
LAMP LOAD - 30VDC
RETURN ALARM INPUT
SENSORS TO INPUT COM
SELECT INPUT SENSE AND
ALARM RESET SEQUENCE
ON SWITCHES BELOW
INPUT SENSE
RESET SEQUENCE
NO
NC
MANUAL
AUTO
+10.5-15 VDC @ 75 MA IN
DC COMMON
COMMON ALARM OUT
AUDIBLE ALARM OUT
150 MA
ALARM OUT 80MA
FLASH OUT
FLASH INPUT
ACK I/O
RESET/ TEST I/O
ALARM INPUT
INPUT COM


L1
N
+
-

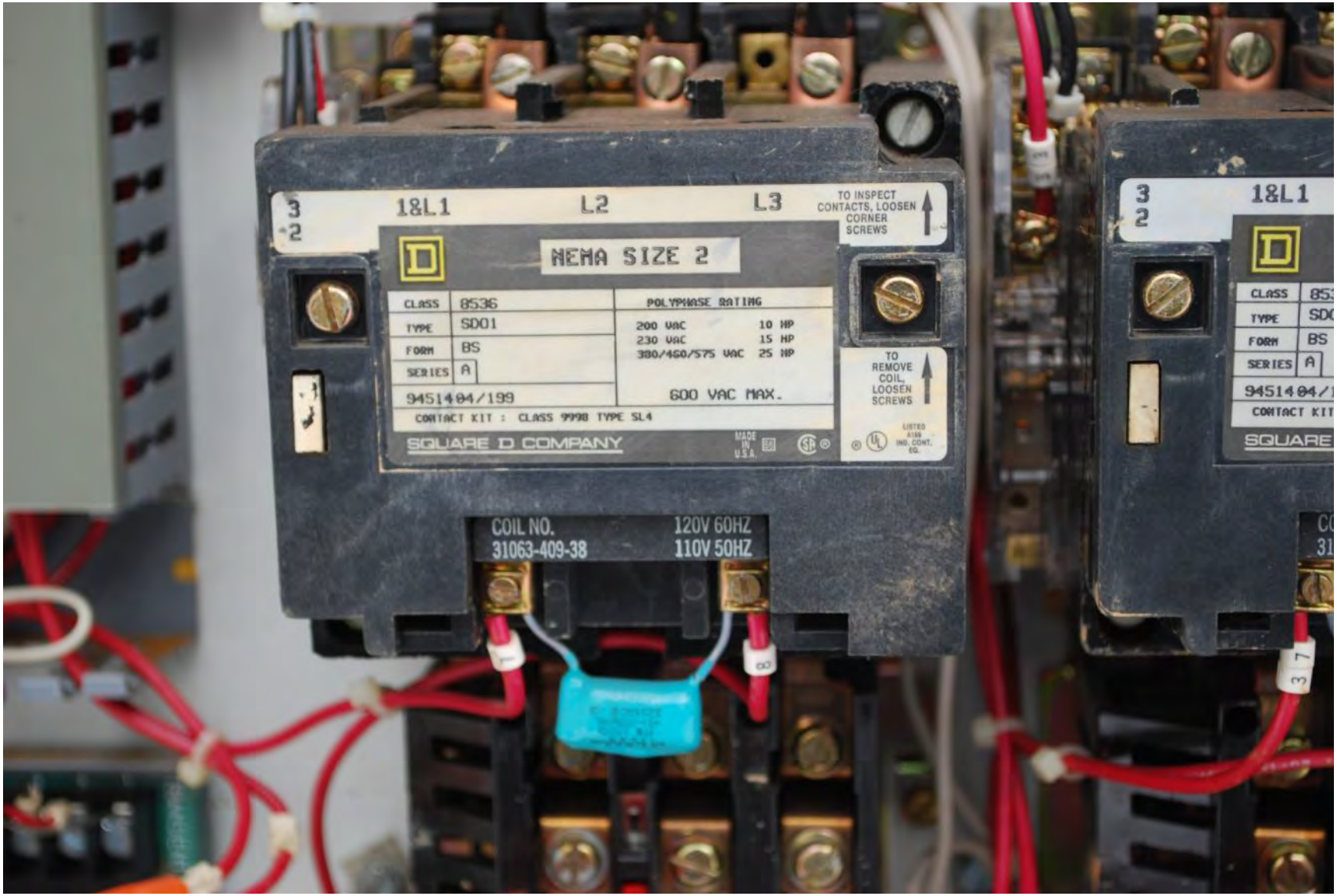

CIRCUIT BREAKER
3 POLE UNIT
ISSUE RT-42
MADE IN U.S.A.
THERMAL-MAGNETIC CIRCUIT BREAKER
70A
FHL36070
Type FAL
40 °C
Series 2
FOR 250V DC SERVICE
USE OUTSIDE POLES ONLY
INTERRUPTING RATING
UL/CSA/NEMA 60 Hz
Volts AIR
240 ac 65kA
480 ac 25kA
600 ac 18kA
250 dc 10kA
600 Vac 250 Vdc
LUG: AL100FA
Wire Torque
#14-#10 AWG Sol Cu 80 lb-in
#14-1/0 AWG Str Cu 80 lb-in
#12-#10 AWG Sol Al 40 lb-in
#12-1/0 AWG Str Al 80 lb-in
Use 75 °C Rated Wire Only
BREAKING CAPACITY
IEC 157-1 (PD 50 Hz
SQUARE D CERTIFIED
Volts AIR
380/220 ac 25kA
415/240 ac 25kA
LUG
Wire Torque
2.5-6 mm² Sol Cu 9 N-m
2.5-50 mm² Str Cu 9 N-m
2.5-6 mm² Sol Al 9 N-m
2.5-50 mm² Str Al 9 N-m
LI4C
ON
OFF

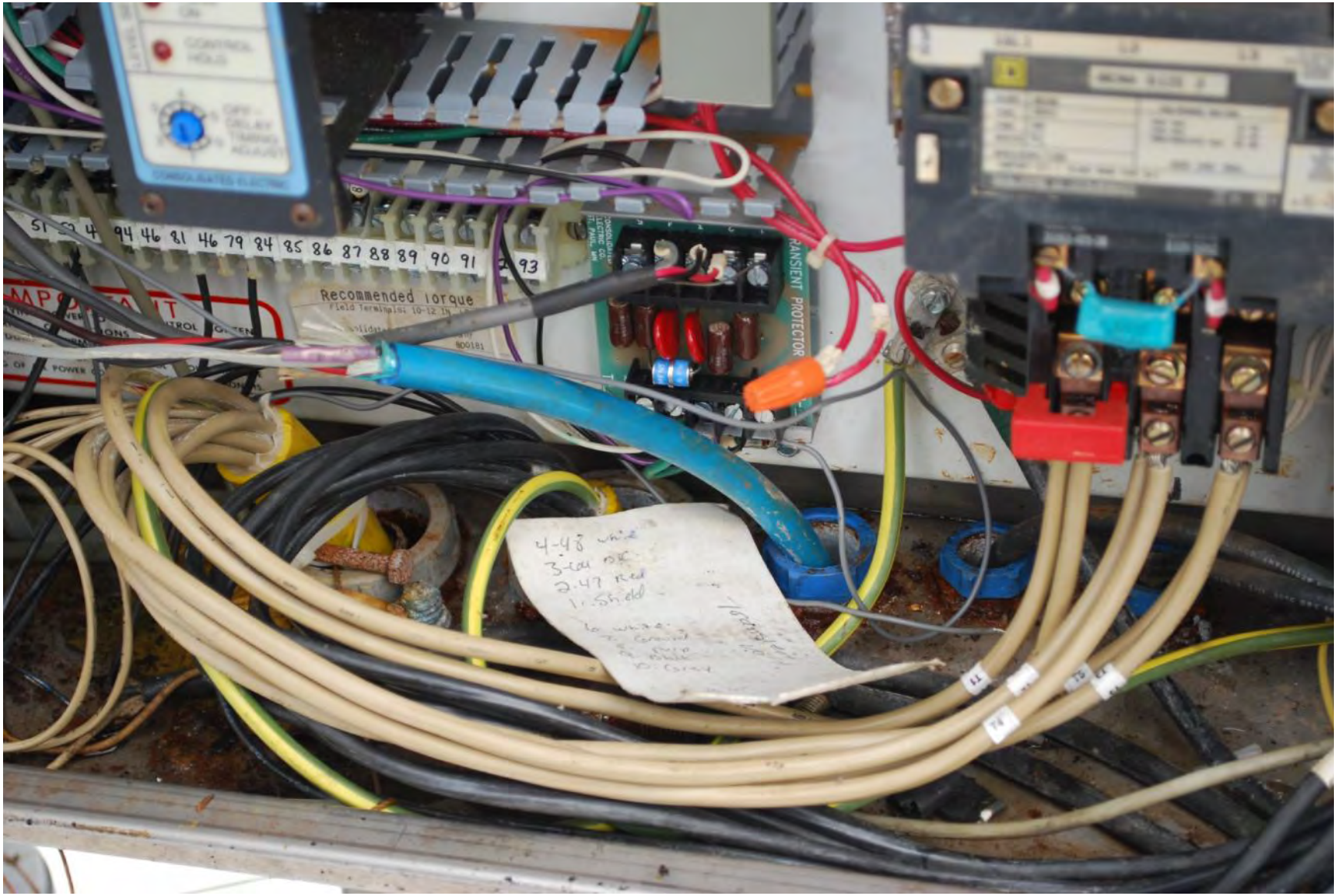
L1
L2
L3
N


NEMA SIZE 2
110V 50HZ
31063-409-38

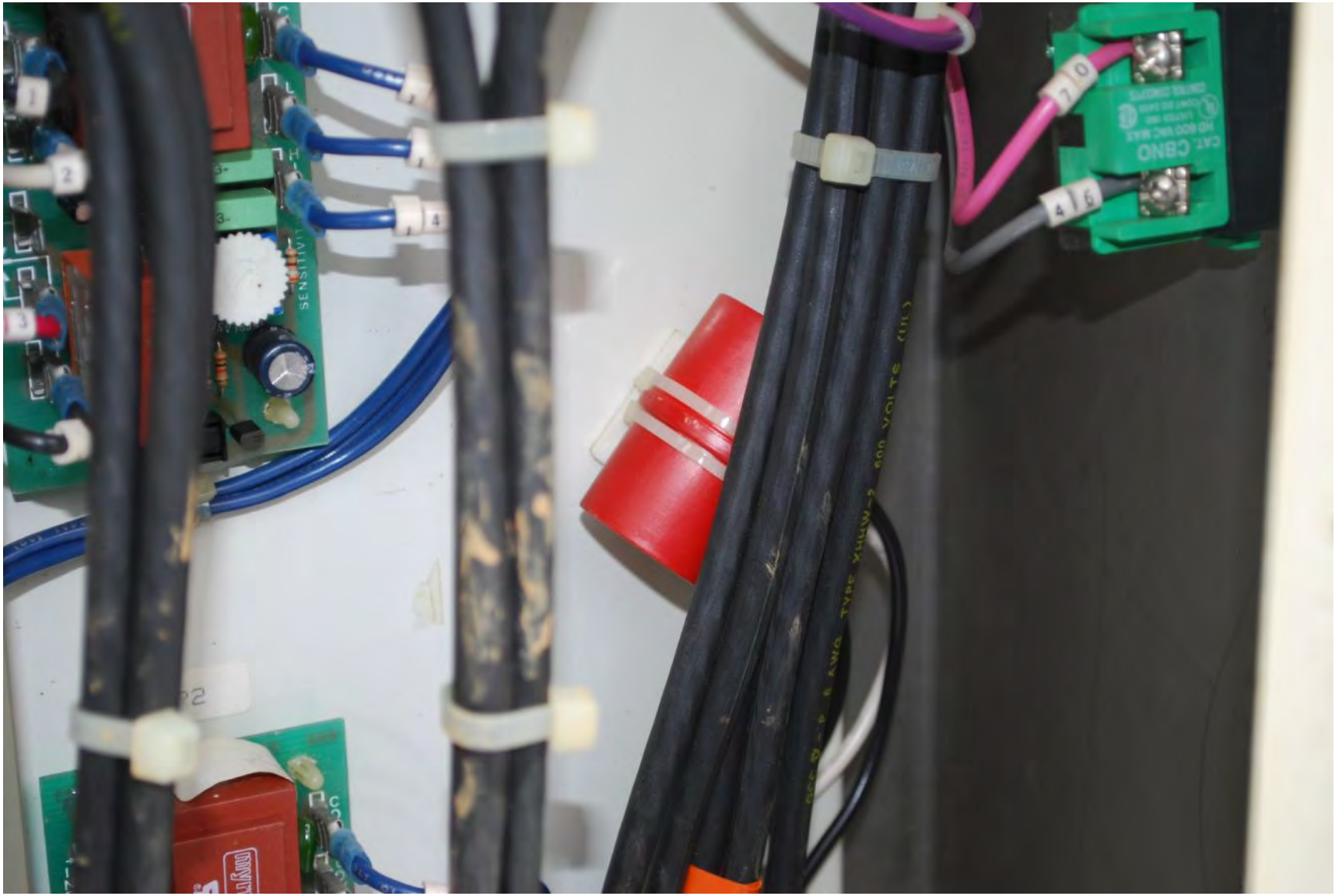

CB1T CONTROLLER
ASSY. 601280-01
PUMP CONTROL PLUS
ALARM OR HIGH ALARM
WITH TIMED – OFF
REDUNDANT CONTROL
120 VAC POWER
8 VDC SENSOR CIRCUITS
10A/250 VAC CONTACTS
CONTROL
CONTACTS
LEVEL SENSOR LEDS
HIGH LEVEL
MONITOR/
ALARM
CONTROL
TURN
ON
CONTROL
HOLD
OFF-
DELAY
TIMING
ADJUST
CONSOLIDATED ELECTRIC

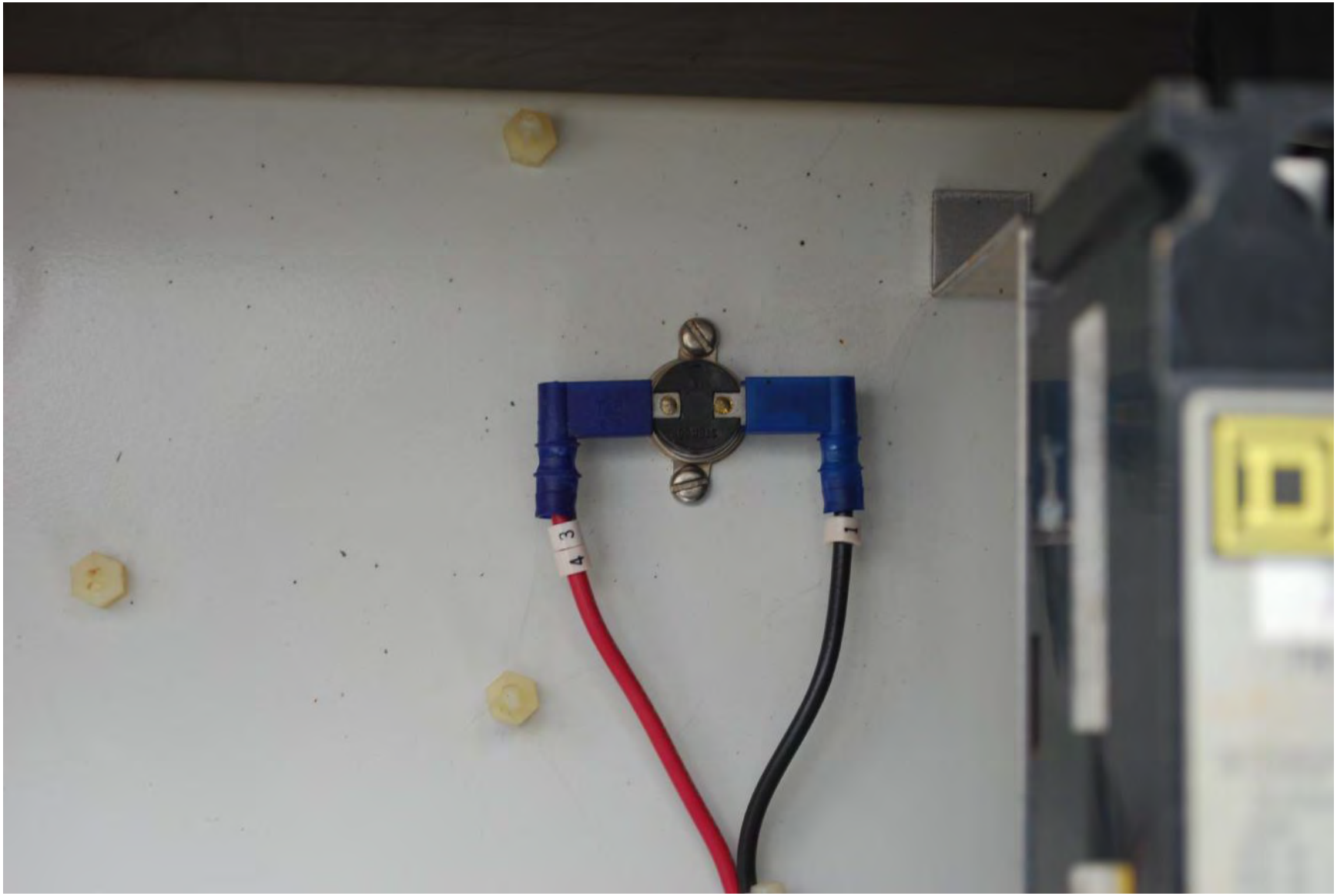
WARNING
BATTERY LEADS MUST NOT BE CONNECTED UNTIL EQUIPMENT IS READY FOR SERVICE. BATTERY POLARITY MUST BE OBSERVED. VIOLET WIRE SHOULD BE CONNECTED TO BATTERY POSITIVE TERMINAL (+) AND GRAY WIRE TO BATTERY NEGATIVE TERMINAL (−). PREMATURE OR IMPROPER CONNECTION MAY DAMAGE BATTERY.
CONSOLIDATED ELECTRIC COMPANY


3
2
1&L1
L2
L3
TO INSPECT CONTACTS, LOOSEN CORNER SCREWS
NEMA SIZE 2
CLASS 8536
TYPE SD01
FORM BS
SERIES A
9451404/199
POLYPHASE RATING
200 VAC 10 HP
230 VAC 15 HP
380/460/575 VAC 25 HP
600 VAC MAX.
CONTACT KIT : CLASS 9998 TYPE SL4
SQUARE D COMPANY
MADE IN U.S.A.
TO REMOVE COIL, LOOSEN SCREWS
COIL NO.
31063-409-38
120V 60HZ
110V 50HZ
3
2
1&L1
CLASS
TYPE
FORM
SERIES
CONTACT KIT
SQUARE


Recommended Torque
TRANSIENT PROTECTOR

96
97
98
47




4
3
1

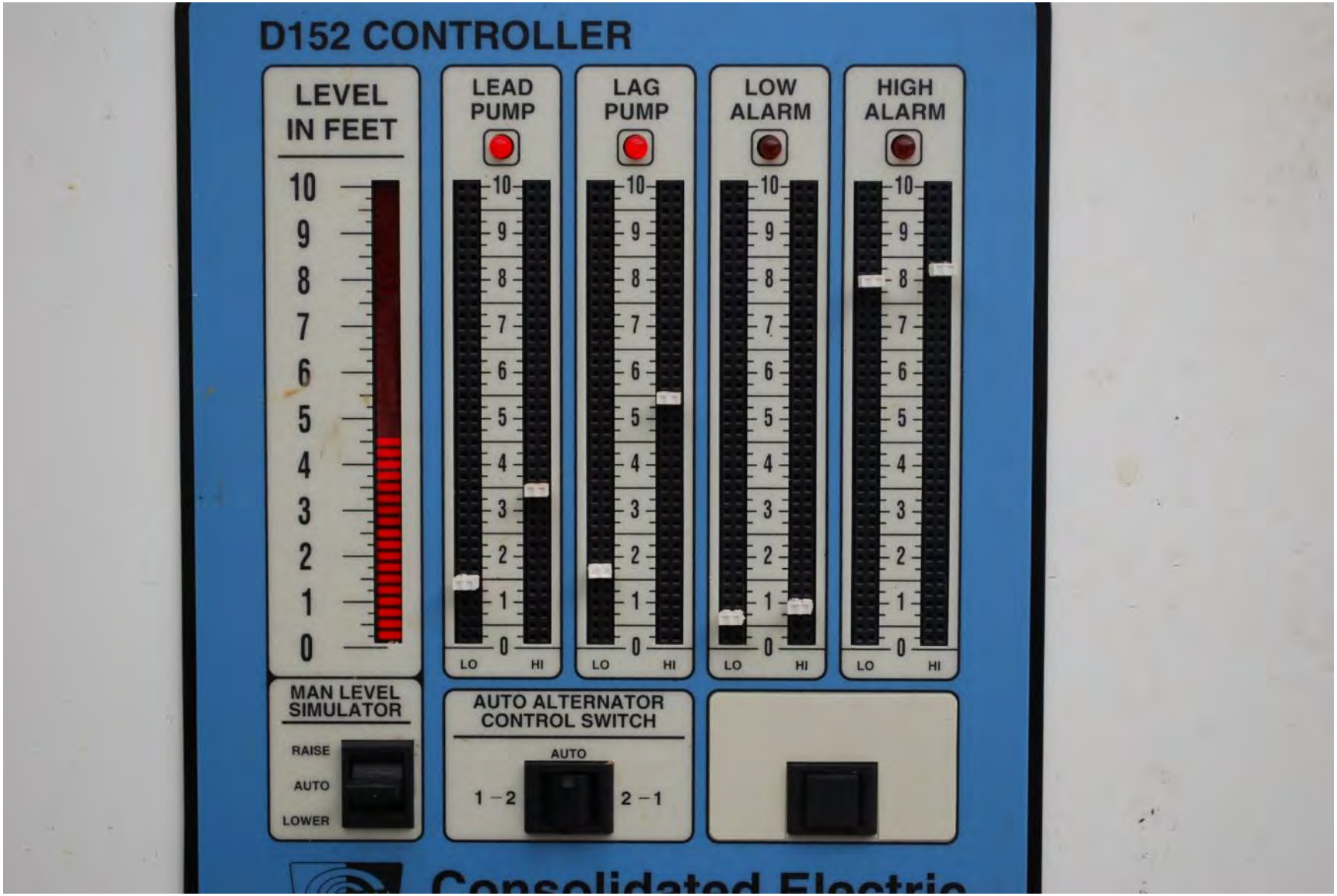
F
O
S
ALARM SILENCE

CIRCUIT BREAKER
3 POLE UNIT
ISSUE RT-42
MADE IN U.S.A.

Ksb Bombas Hidráulicas
APPROVED
MADE IN BRAZIL 20
H
3~ M.- No.
V Hz SF
A LRA PF
EXPLOSIONPROOF CLASS I, DIV.1 GROUPS C&D T3
SUBM. MAX. 100 FT LIQ. TEMP. °F
Nicht unter Spannung öffnen.
Ne pas ouvrir sous tension.
Non abrir bajo tensión.
Do not open while energised.
Non aprire con motore sotto tensione.

CAUTION !
WIPE FOR 230 V.

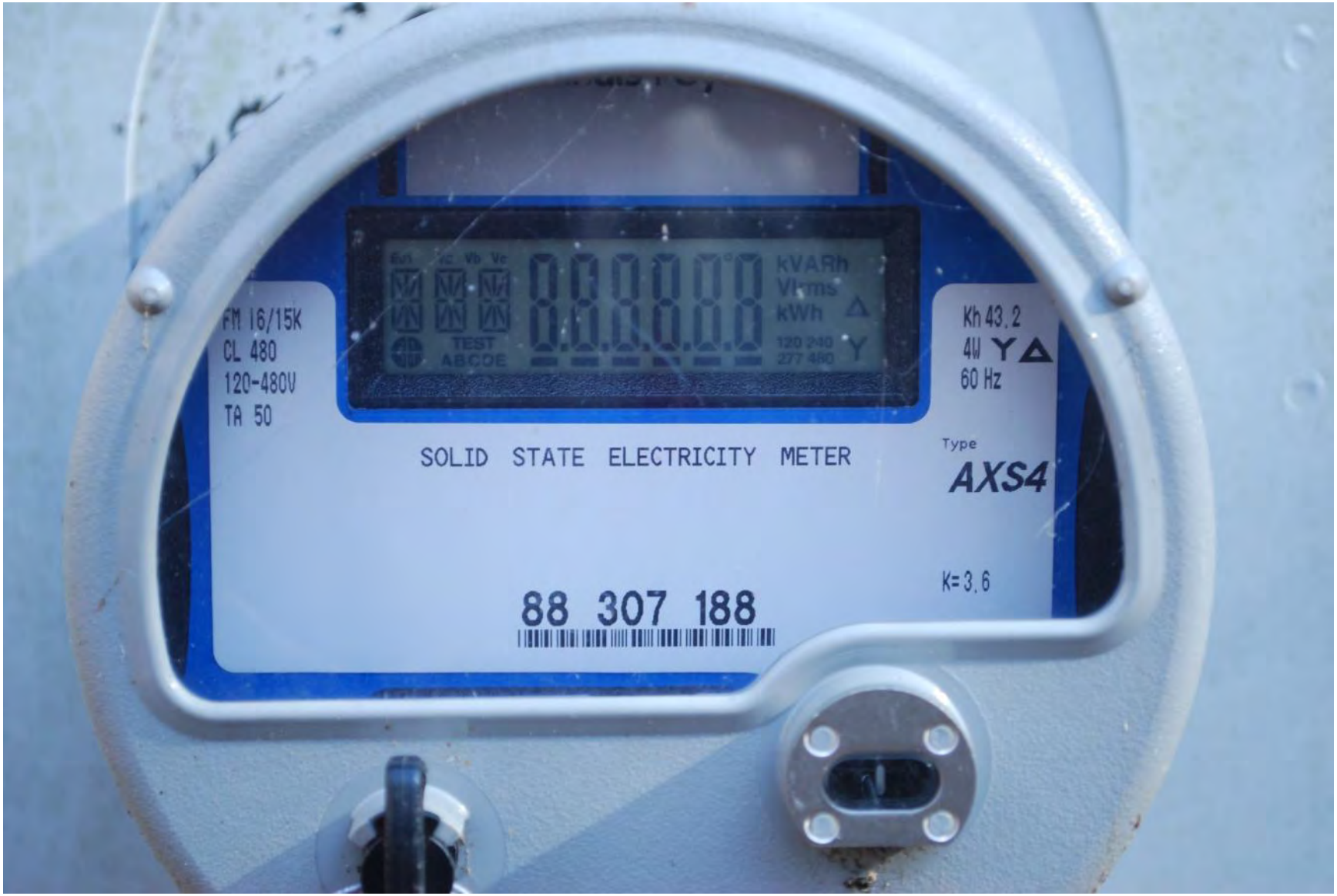
CAUTION !
WIPE FOR 230 V.


D152 CONTROLLER
LEVEL IN FEET
10
9
8
7
6
5
4
3
2
1
0
LEAD PUMP
LAG PUMP
LOW ALARM
HIGH ALARM
LO
HI
MAN LEVEL SIMULATOR
RAISE
AUTO
LOWER
AUTO ALTERNATOR CONTROL SWITCH
AUTO
1 – 2
2 – 1

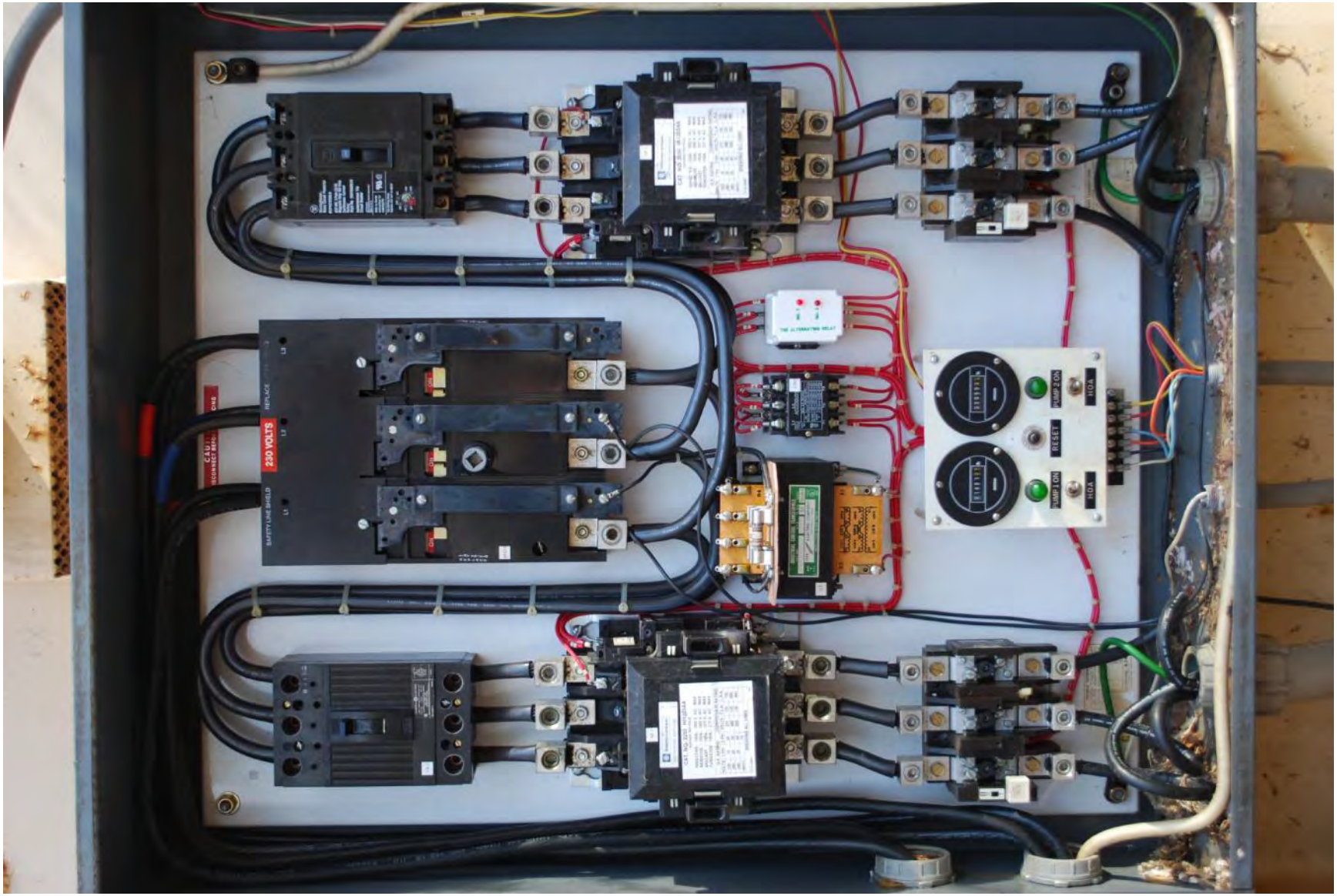
TENNESSEE
GW · 611
GOV'T SERV
DANGER

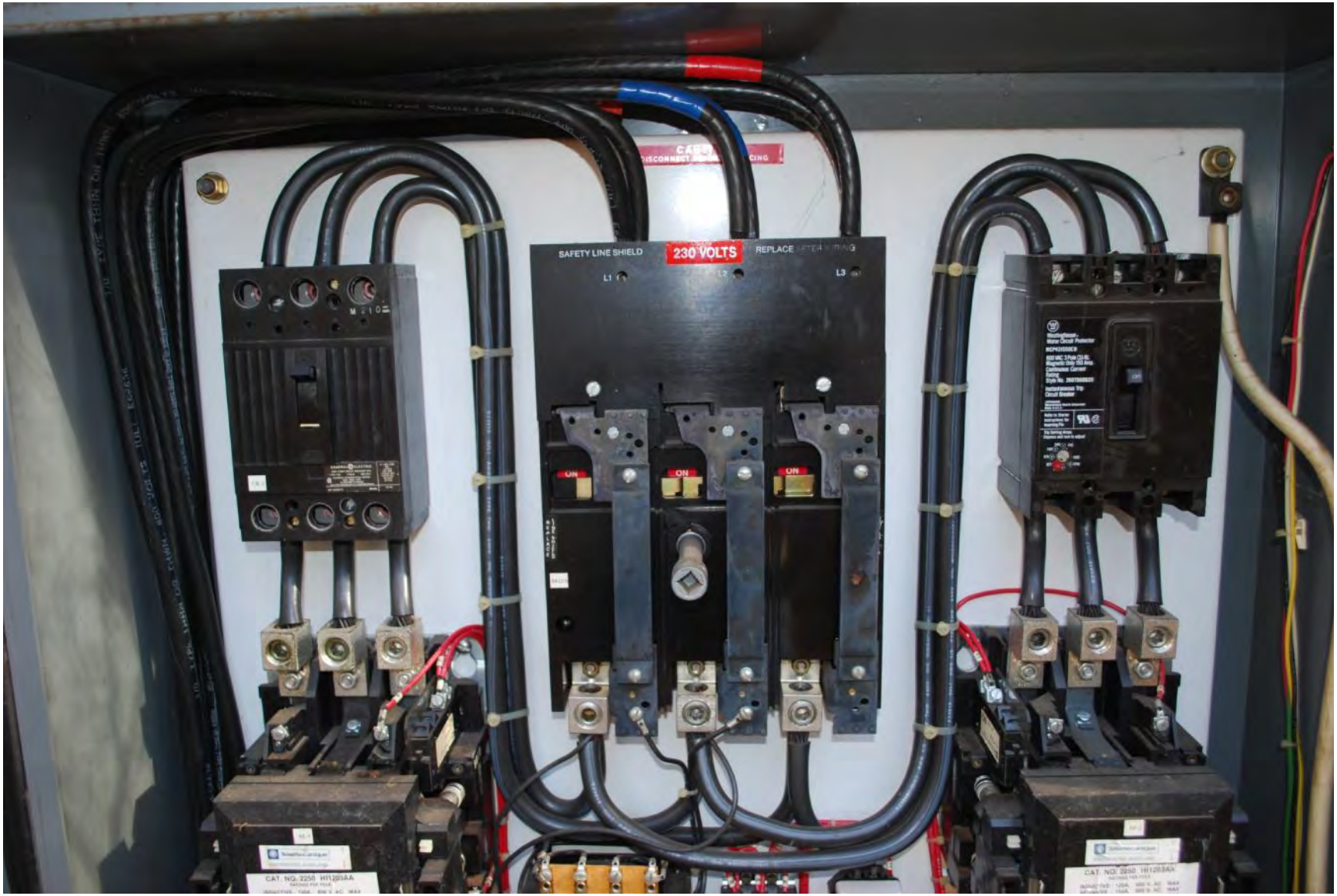
942
50 KVA
120/240

947
50 KVA
120/240

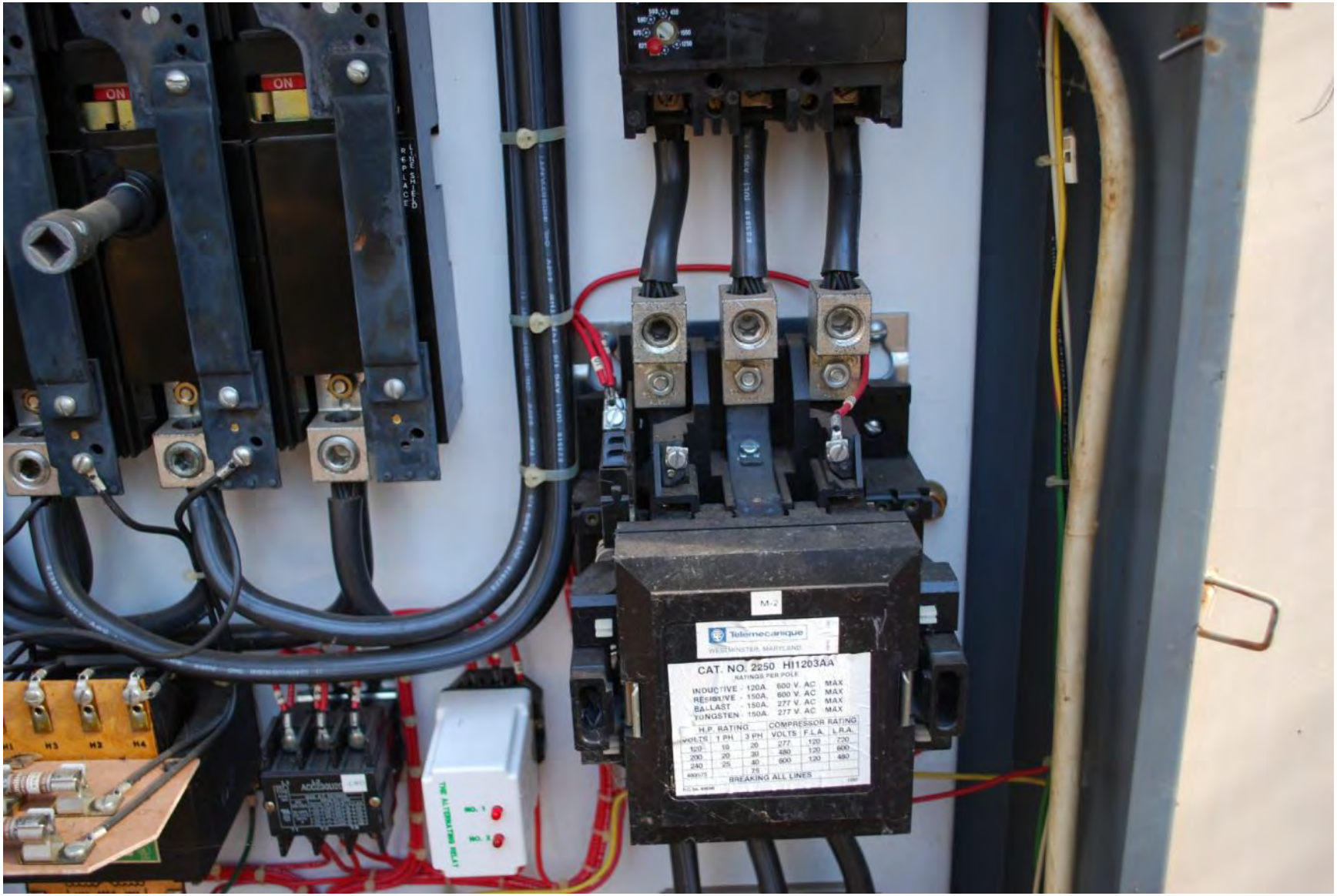

FM 16/15K
CL 480
120-480V
TA 50
kVARh
Vrms
kWh
TEST
ABCDE
120 240
277 480
Kh 43.2
4W Y Δ
60 Hz
SOLID STATE ELECTRICITY METER
Type
AXS4
K=3.6
88 307 188

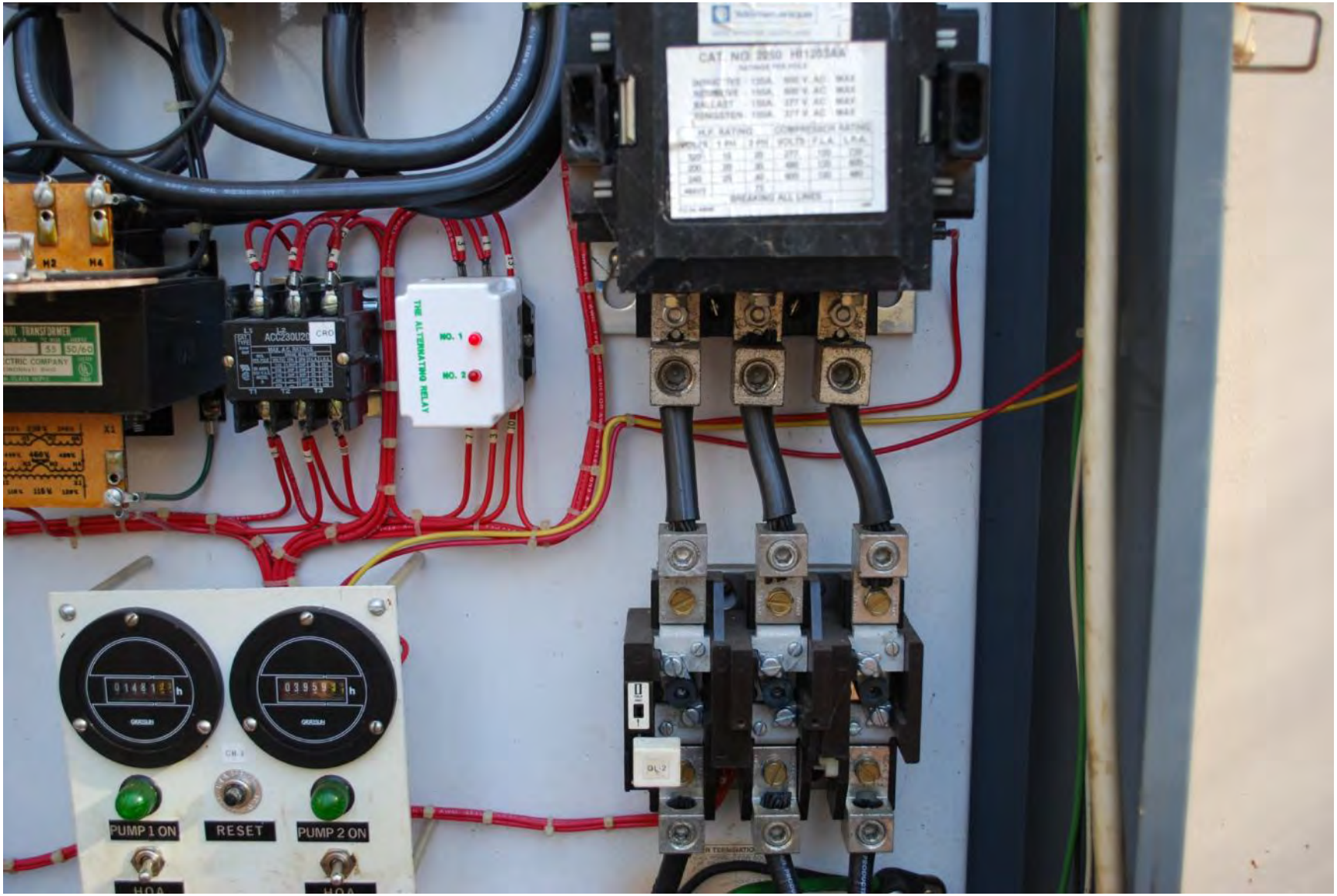
PUSH TO TEST
CAUTION

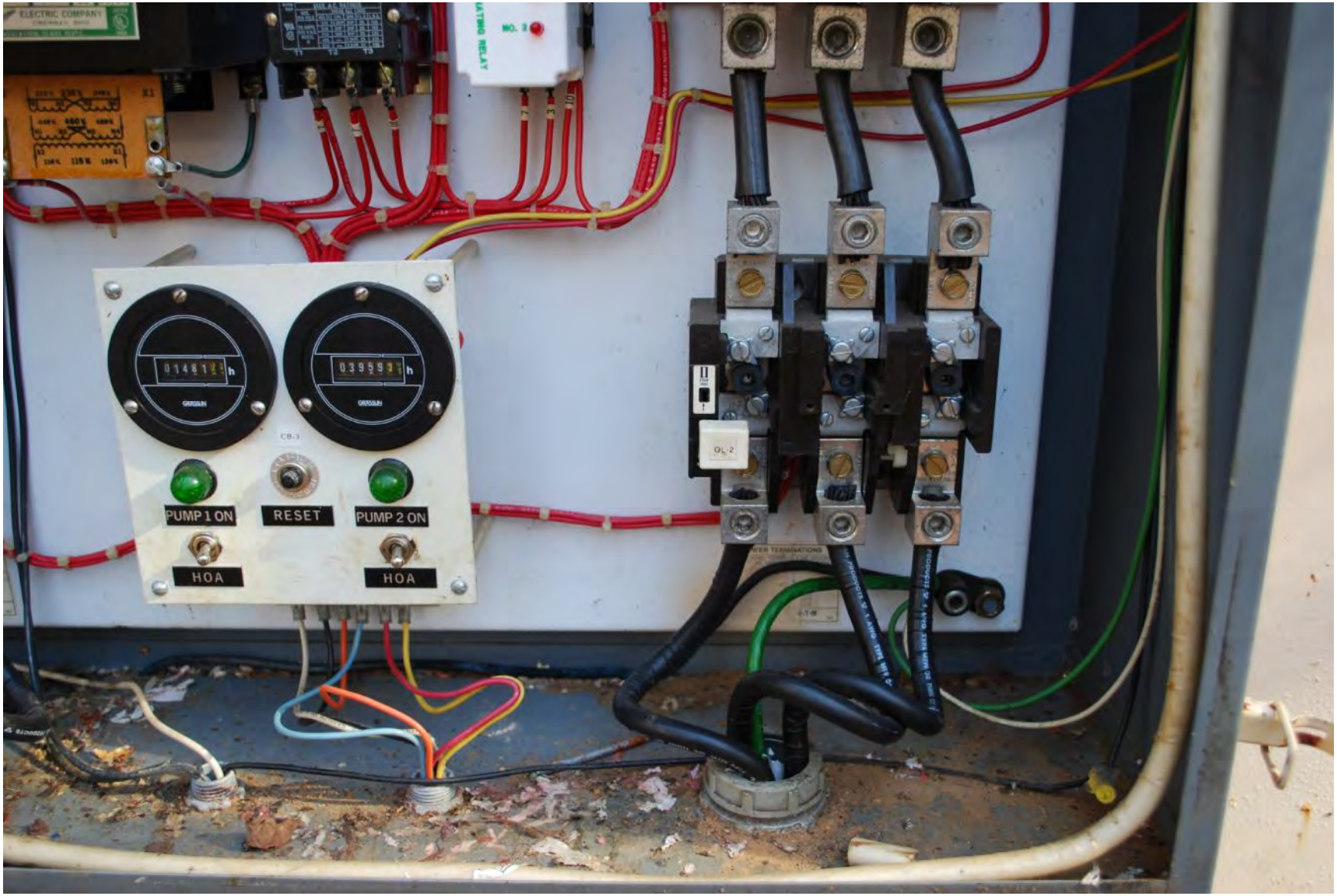

230 VOLTS
PUMP 2 ON
H-O-A
RESET
PUMP 1 ON
H-O-A

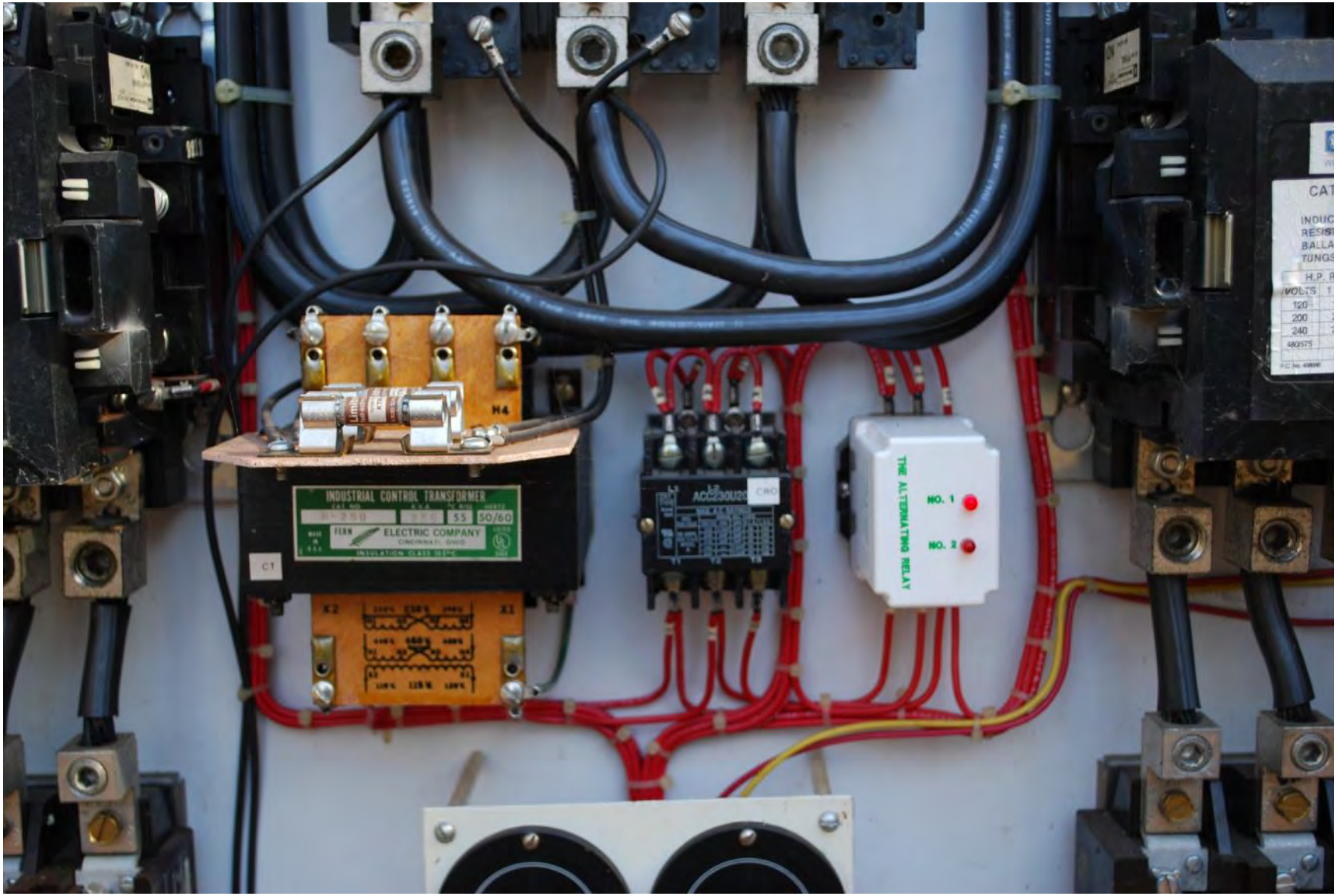

SAFETY LINE SHIELD
230 VOLTS
L1
L2
L3
ON
ON
ON

REPLACE AFTER WIRING
L2
L3
Westinghouse
Motor Circuit Protector
MCP431550CR
600 VAC 3 Pole CU/AL
Magnetic Only 150 Amp.
Continuous Current
Rating
Style No. 2607B80G09
Instantaneous Trip
Circuit Breaker


ON
ON
M-2
Telemecanique
WESTMINSTER, MARYLAND
CAT. NO. 2250 HI1203AA
RATINGS PER POLE
INDUCTIVE - 120A. 600 V. AC MAX
RESISTIVE - 150A. 600 V. AC MAX
BALLAST - 150A. 277 V. AC MAX
TUNGSTEN - 150A. 277 V. AC MAX
H.P. RATING
VOLTS 1 PH. 3 PH
120 10 20
200 20 30
240 25 40
75
COMPRESSOR RATING
VOLTS F.L.A. L.R.A.
277 120 720
480 120 600
600 120 480
BREAKING ALL LINES


PUMP 1 ON
RESET
PUMP 2 ON
THE ALTERNATING RELAY
NO. 1
NO. 2

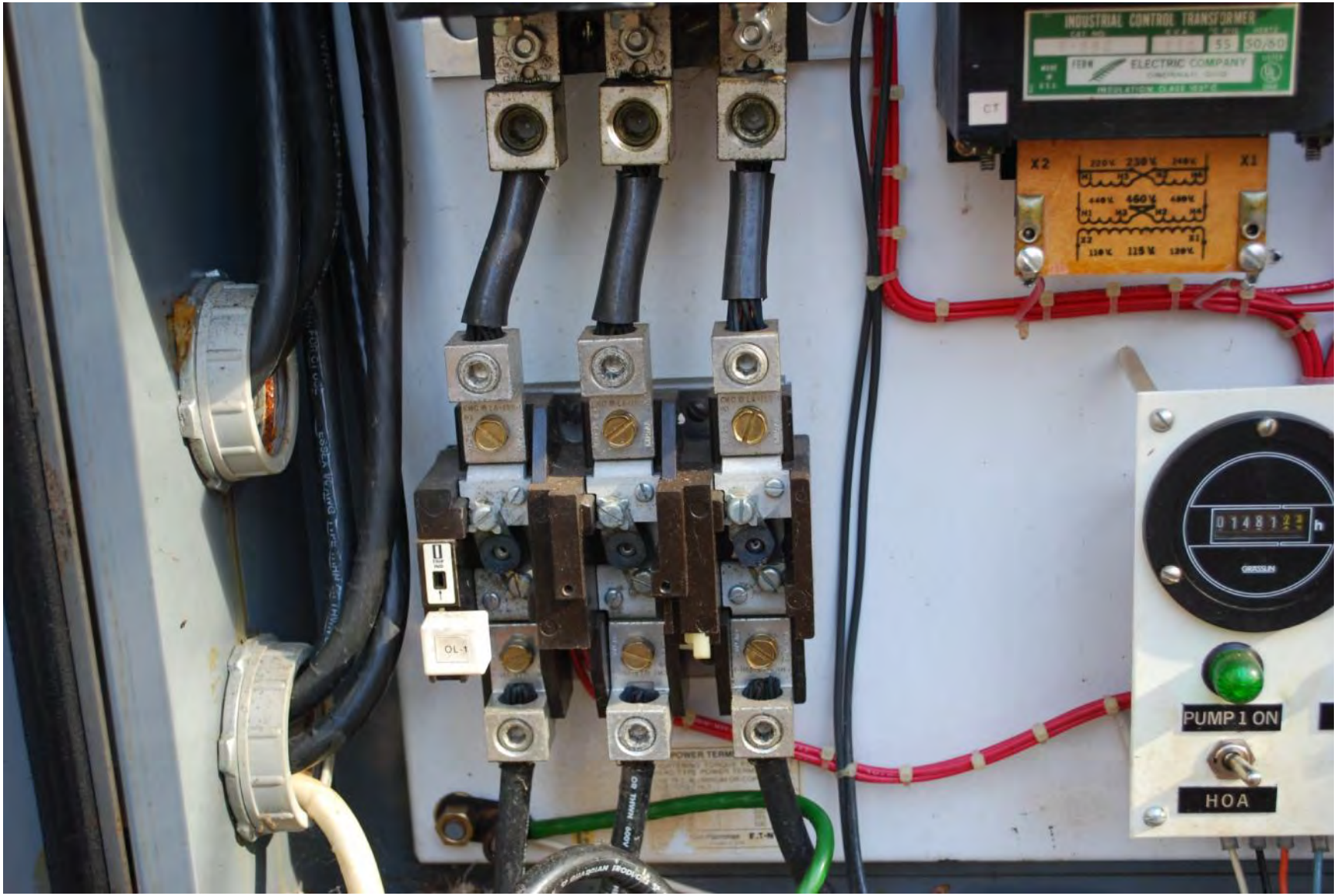

PUMP 1 ON
RESET
PUMP 2 ON
HOA
HOA

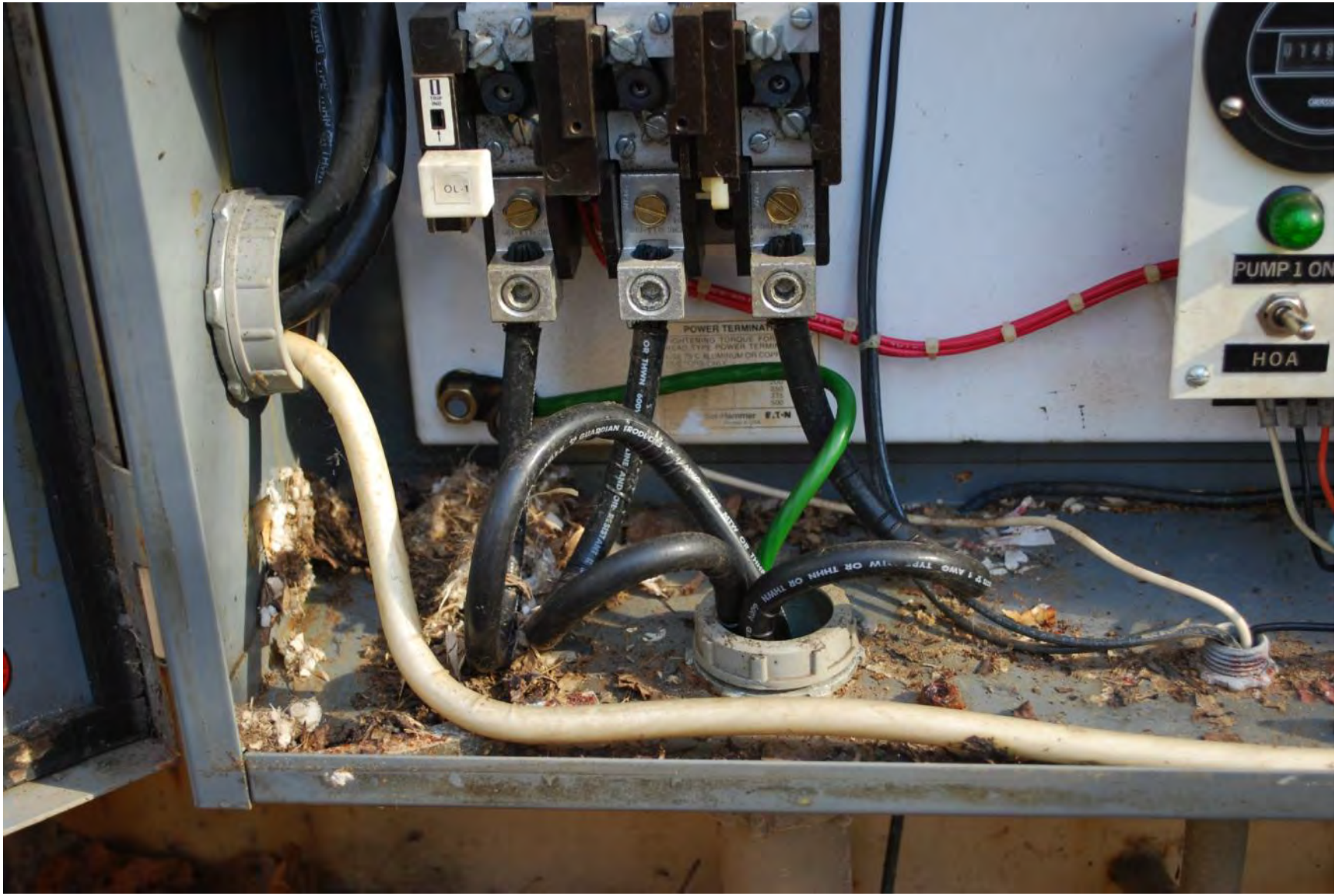

INDUSTRIAL CONTROL TRANSFORMER
ELECTRIC COMPANY
CINCINNATI, OHIO
55
50/60
H4
X2
X1
CT
THE ALTERNATING RELAY
NO. 1
NO. 2

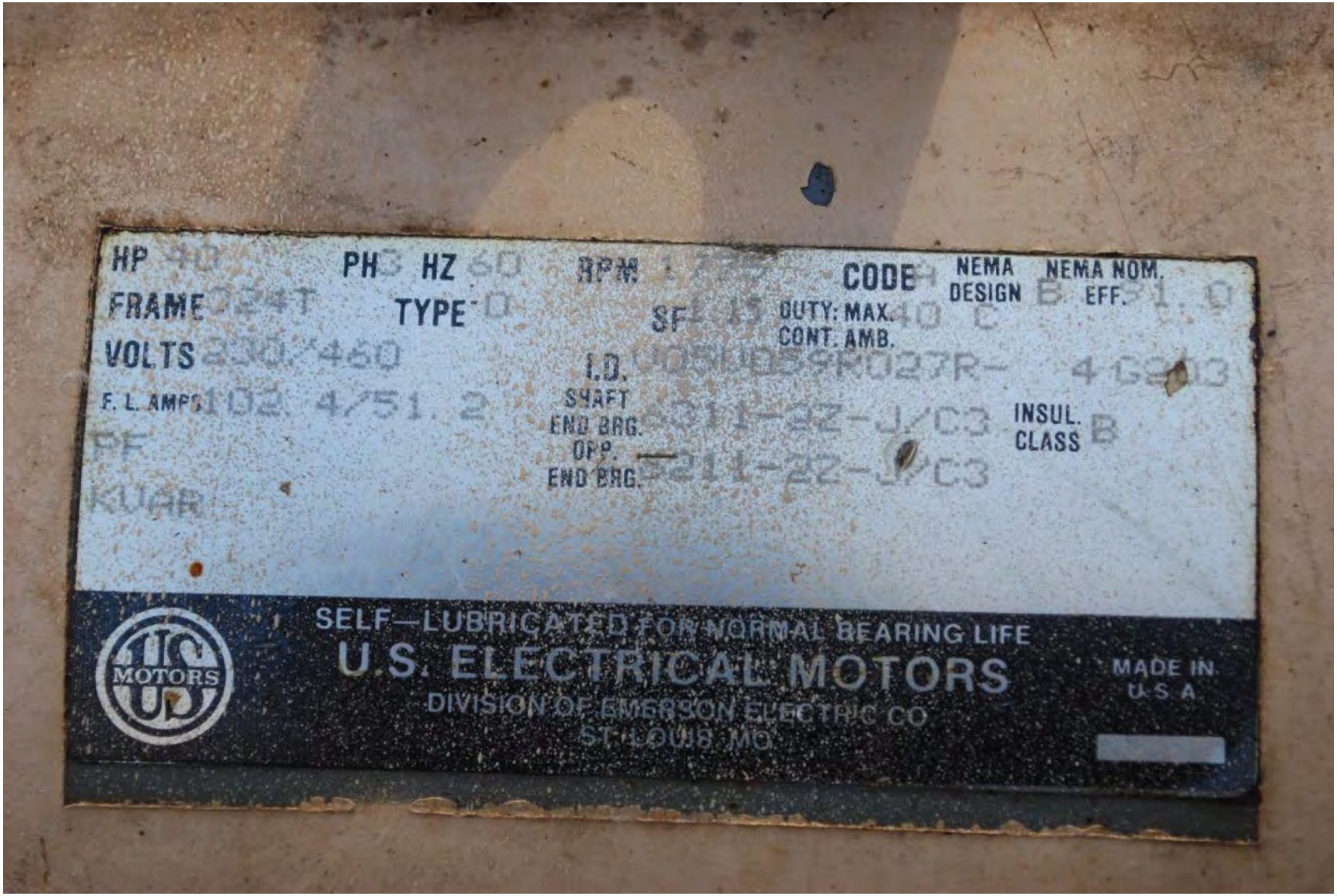
PUMP 1 ON
RESET
PUMP 2 ON
HOA
HOA
CB-3
GRASSLIN
GRASSLIN

SAFETY LINE SHIELD
L1
ON
OFF
CB-2
GENERAL ELECTRIC
M 210
REPLACE LINE SHIELD

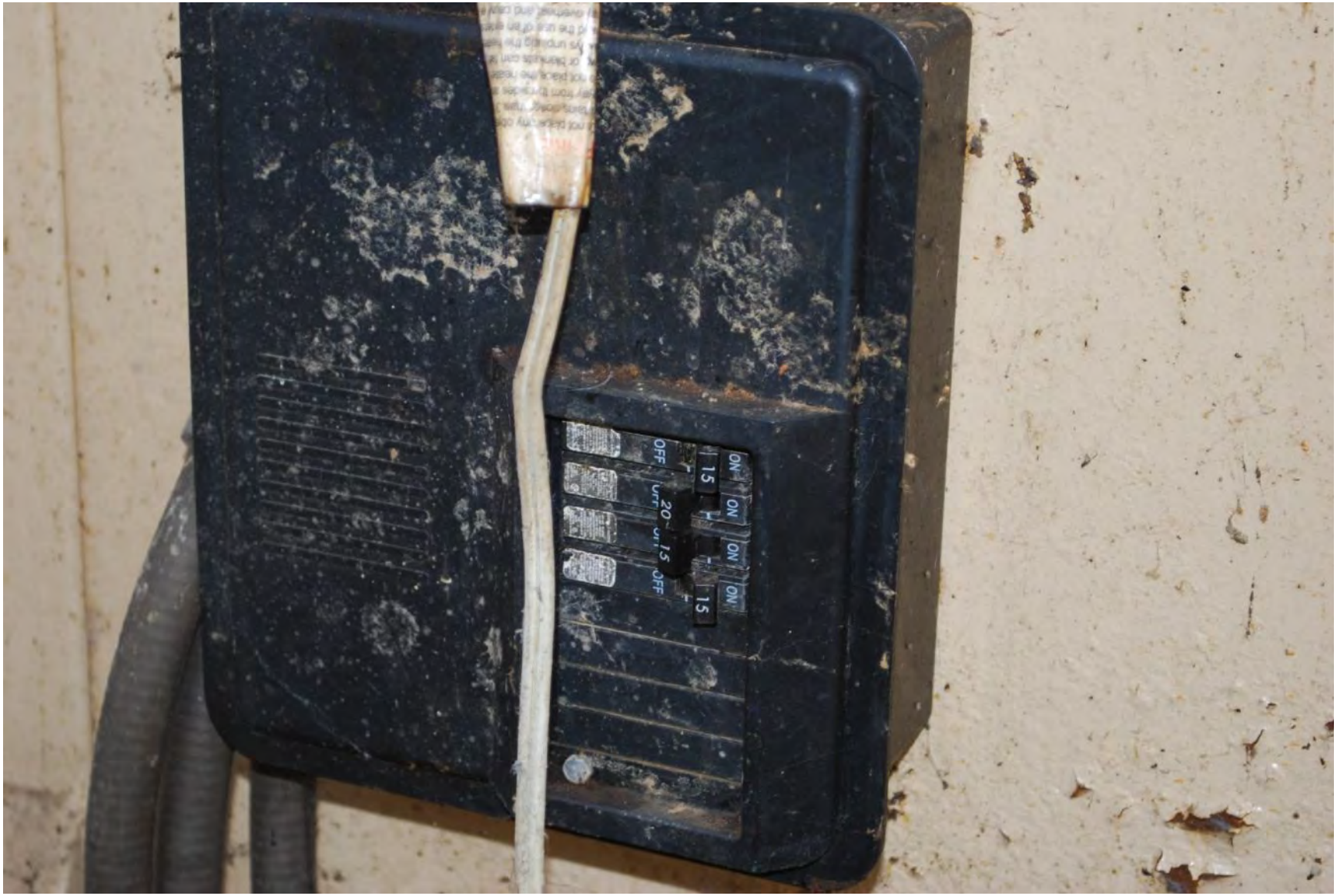
M-1
Telemecanique
WESTMINSTER, MARYLAND
CAT. NO. 2250 HI1203AA
RATINGS PER POLE
INDUCTIVE 120A. 600 V. AC MAX
RESISTIVE 150A. 600 V. AC MAX
BALLAST 150A. 277 V. AC MAX
TUNGSTEN 150A. 277 V. AC MAX
H.P. RATING
VOLTS 1 PH 3 PH
120 10 20
200 20 30
240 25 40
480/575 75
COMPRESSOR RATING
VOLTS F.L.A. L.R.A.
277 120 720
480 120 600
600 120 480
BREAKING ALL LINES
H1
INDUSTRIAL CONTROL TRANSFORMER
55
50/60
ELECTRIC COMPANY
CT
X2

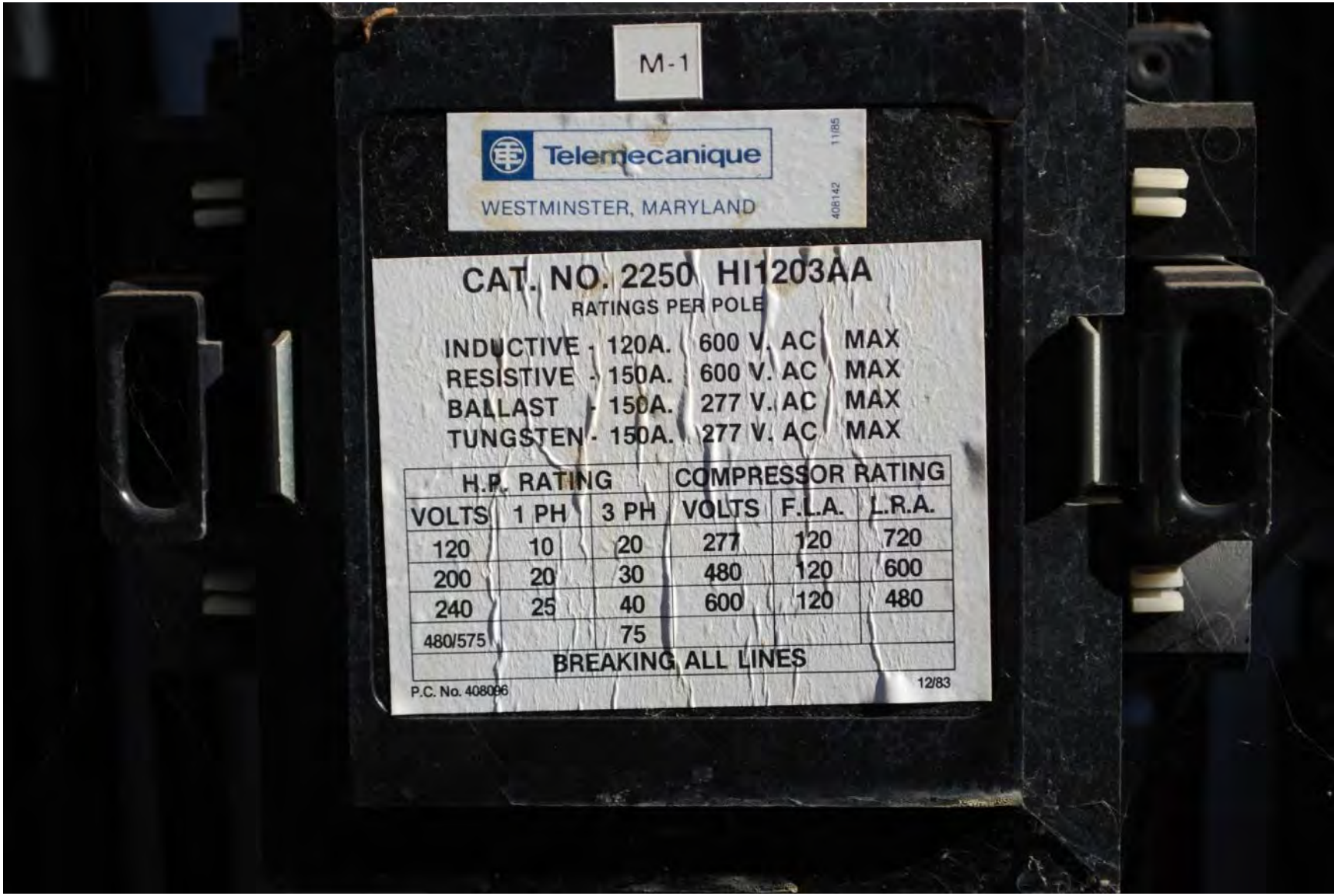

INDUSTRIAL CONTROL TRANSFORMER
55
50/60
ELECTRIC COMPANY
CT
X2
X1
PUMP 1 ON
HOA
OL-1

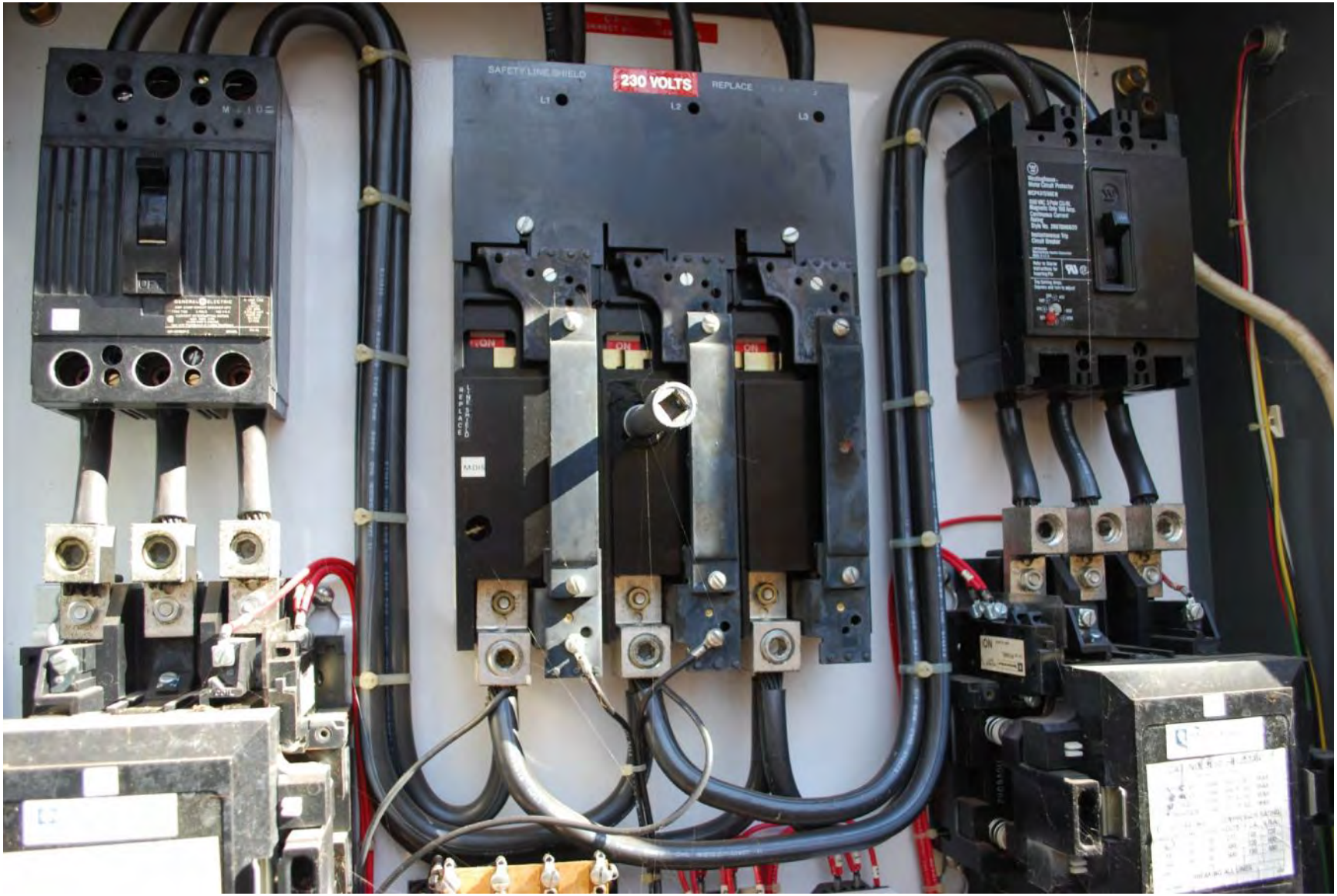

PUMP 1 ON
HOA


HP
PH 3 HZ 60
RPM
CODE
NEMA DESIGN
NEMA NOM. EFF.
FRAME
TYPE
SF
DUTY: MAX. CONT. AMB.
VOLTS 230/460
I.D.
F. L. AMPS 102. 4/51. 2
SHAFT END BRG.
INSUL. CLASS B
OPP. END BRG.
PF
KVAR
SELF—LUBRICATED FOR NORMAL BEARING LIFE
U.S. ELECTRICAL MOTORS
DIVISION OF EMERSON ELECTRIC CO
ST. LOUIS, MO
MADE IN U.S.A.

US
MOTORS


ON
15
ON
ON
ON
15
OFF
OFF

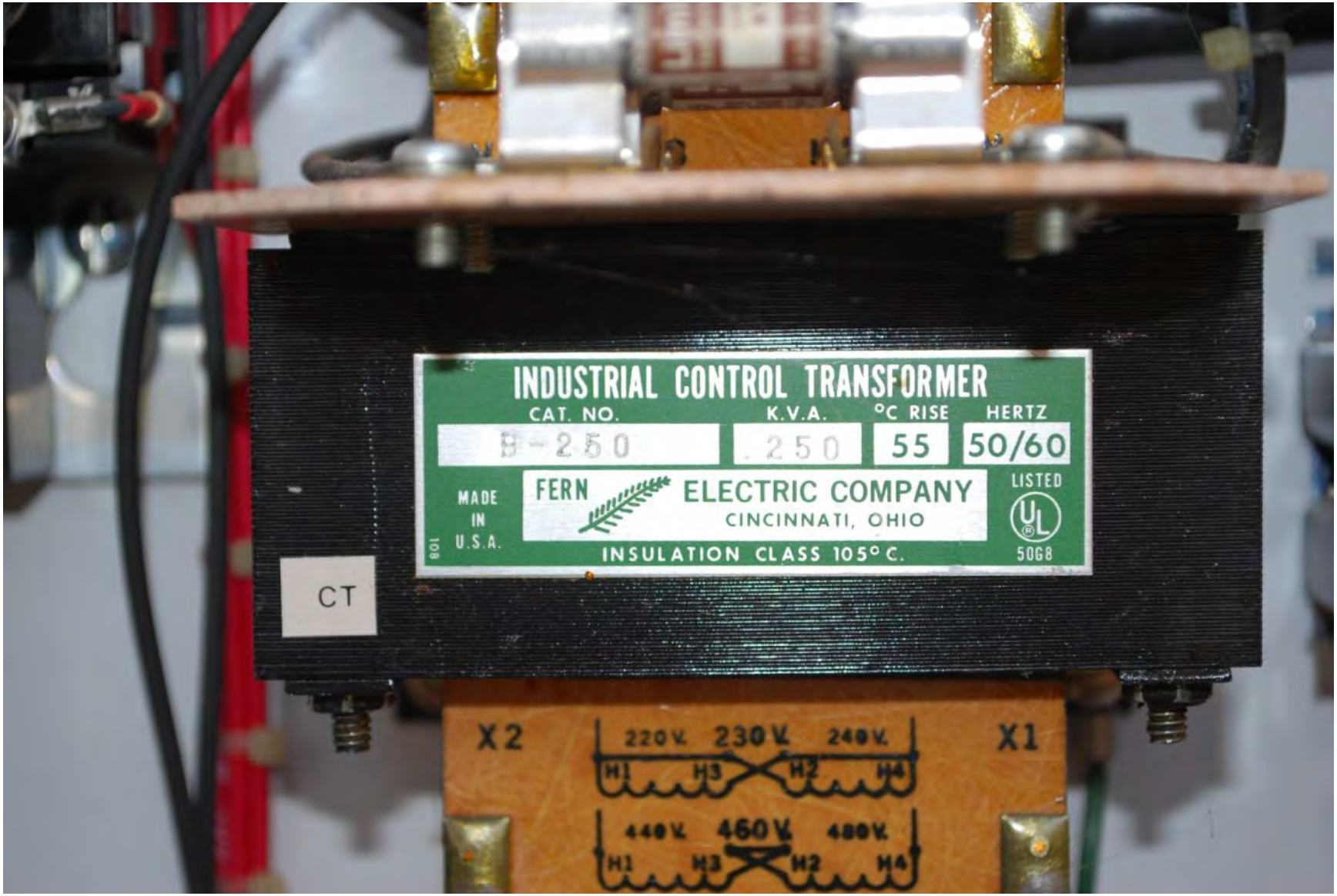

M-1
Telemecanique
WESTMINSTER, MARYLAND
11/85
4061142
CAT. NO. 2250 HI1203AA
RATINGS PER POLE
INDUCTIVE - 120A. 600 V. AC MAX
RESISTIVE - 150A. 600 V. AC MAX
BALLAST - 150A. 277 V. AC MAX
TUNGSTEN - 150A. 277 V. AC MAX
H.P. RATING
COMPRESSOR RATING
VOLTS 1 PH 3 PH VOLTS F.L.A. L.R.A.
120 10 20 277 120 720
200 20 30 480 120 600
240 25 40 600 120 480
480/575 75
BREAKING ALL LINES
P.C. No. 408096
12/83


SAFETY LINE SHIELD
230 VOLTS
REPLACE
L1
L2
L3

CB-2

GENERAL CABLE
GUARDIAN

PRODUCTS ☆ 1 AWG TYPE MTW OR THHN OR
AN PRODUCTS ☆ 1 AWG TYPE MTW OR


INDUSTRIAL CONTROL TRANSFORMER
CAT. NO.
K.V.A.
°C RISE
HERTZ
B-250
.250
55
50/60
MADE IN U.S.A.
FERN ELECTRIC COMPANY
CINCINNATI, OHIO
LISTED
INSULATION CLASS 105° C.
5068
CT
X2
X1
220V. 230V. 240V.
H1 H3 H2 H4
440V. 460V. 480V.
H1 H3 H2 H4

TRIP IND
OL 1

CAUTION
DISCONNECT BEFORE SERVICING
BUSKIRK & OWENS, INC.
Electrical Controls
MODEL
WIRING DIAGRAM
03081-161
SERIAL NUMBER
MOTOR HORSEPOWER
40
PHASE
3
AMPS
VOLTS
230
HERTZ
60
2245
MANUFACTURED BY
BUSKIRK & OWENS, INC. HAYESVILLE, OHIO 44838

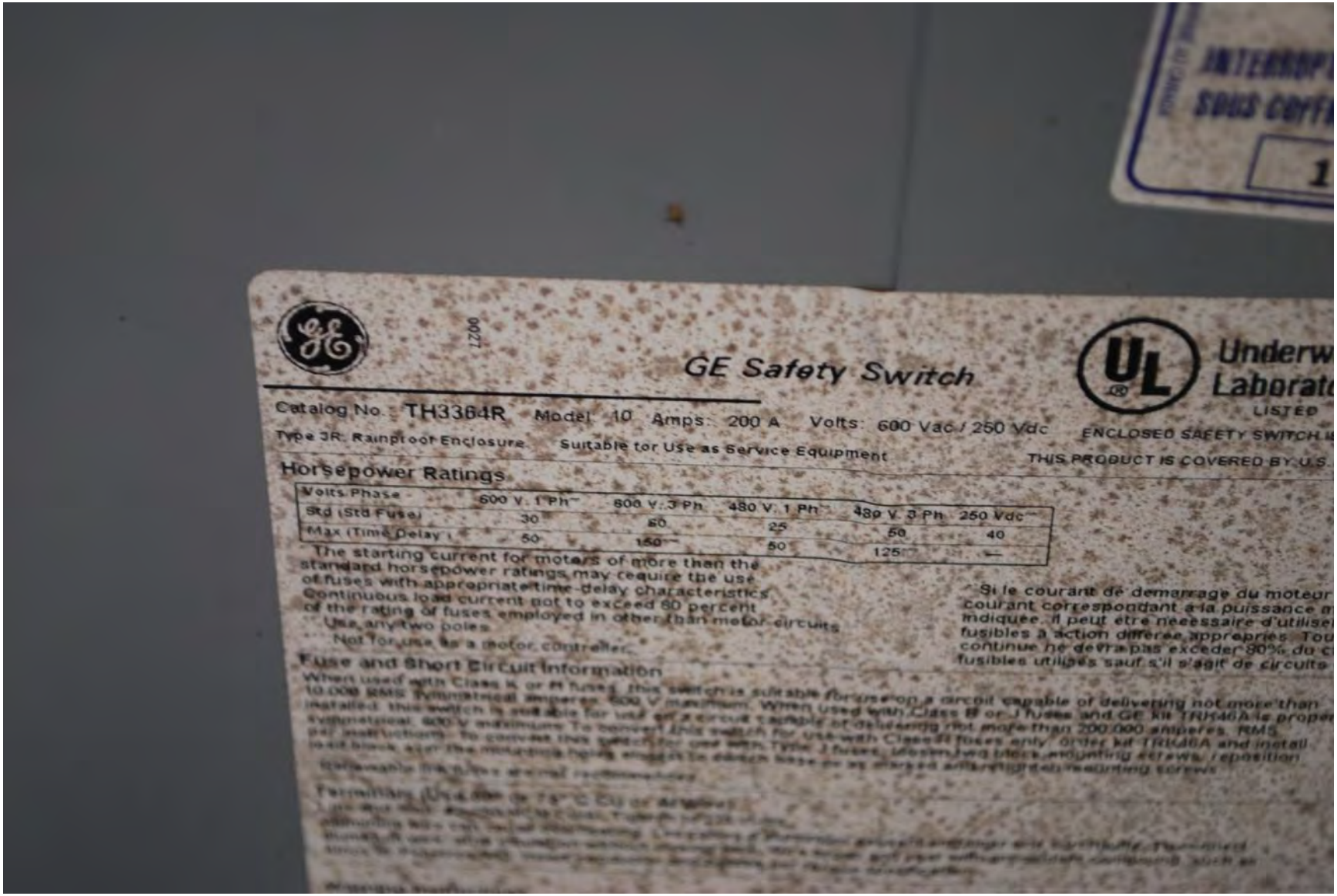
1897
45 KVA
277 480

1897
45 KVA
277 480

LINE
L1
L2
L3
GENERAL ELECTRIC
HEAVY DUTY
ARC SHIELD MUST BE IN PLACE

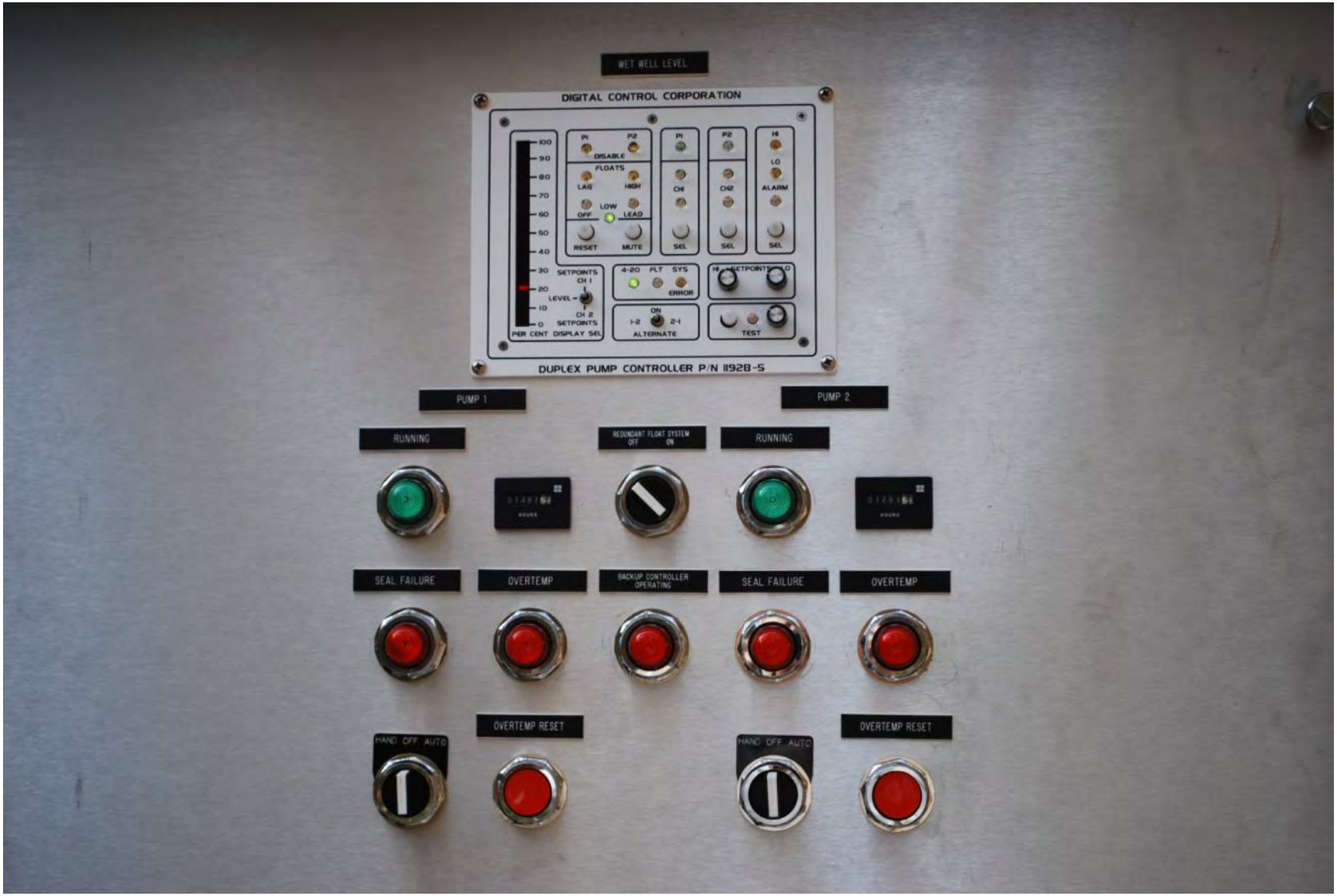
LINE
L1
L2
L3
GENERAL ELECTRIC
HEAVY DUTY
Littelfuse
Indicator
FLSR 200 ID
75 - 600 VAC

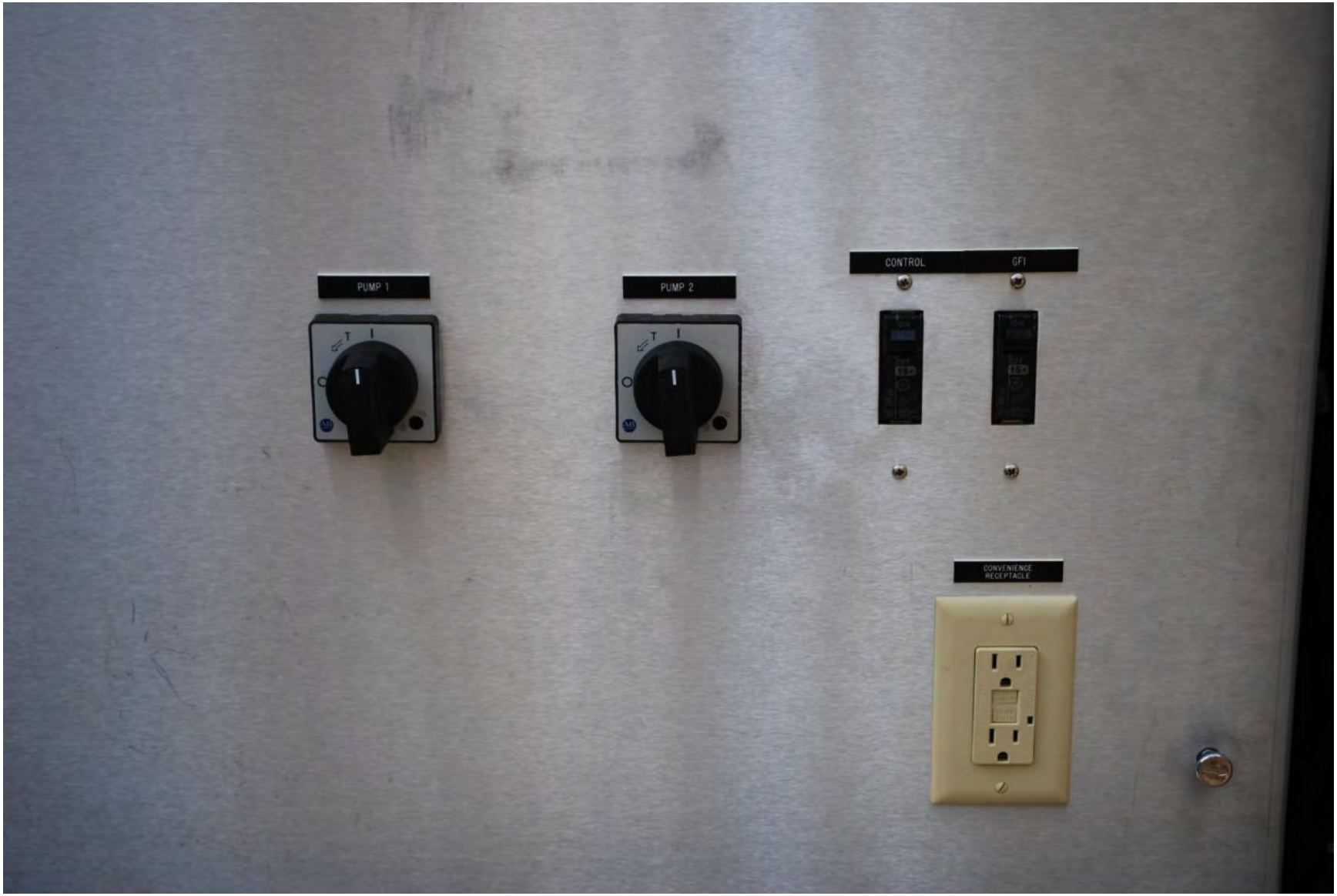
FLSR 200 ID
75 - 600 VAC
FLSR 200 ID
75 - 600 VAC
FLSR 200 ID
75 - 600 VAC
LOAD/CHARGE
K504&

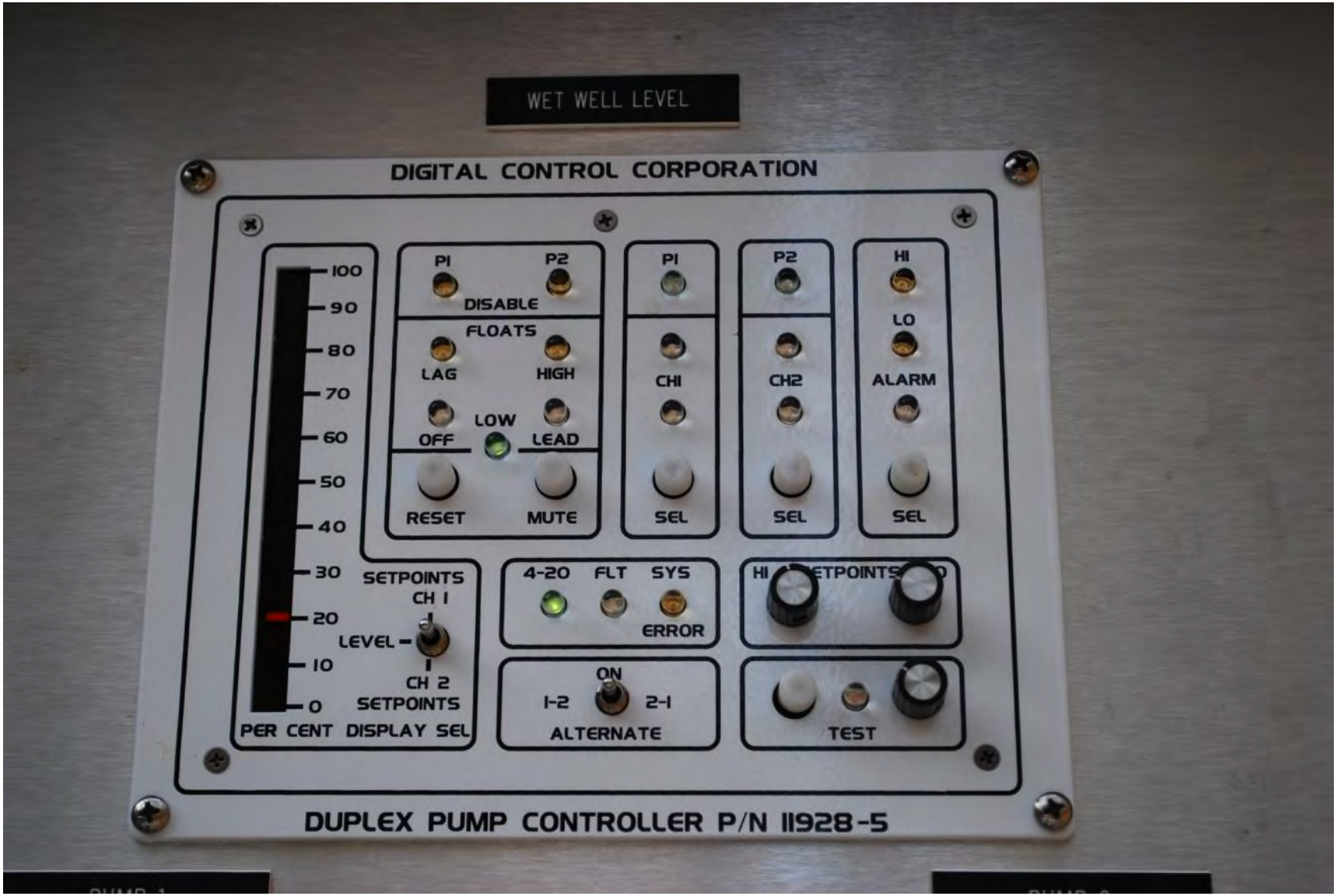

GE Safety Switch
Catalog No. TH3364R Model 10 Amps: 200 A Volts: 600 Vac / 250 Vdc
Type 3R: Raintight Enclosure Suitable for Use as Service Equipment
Horsepower Ratings
Volts Phase 600 V. 1 Ph~ 600 V. 3 Ph 480 V. 1 Ph~ 480 V. 3 Ph 250 Vdc~
Std (Std Fuse) 30 50 25 50 40
Max (Time Delay) 50 150~ 50 125~ —
The starting current for motors of more than the standard horsepower ratings may require the use of fuses with appropriate time-delay characteristics.
Continuous load current not to exceed 80 percent of the rating of fuses employed in other than motor circuits.
Use any two poles.
Not for use as a motor controller.
Fuse and Short Circuit Information
THIS PRODUCT IS COVERED BY U.S.
LISTED
ENCLOSED SAFETY SWITCH

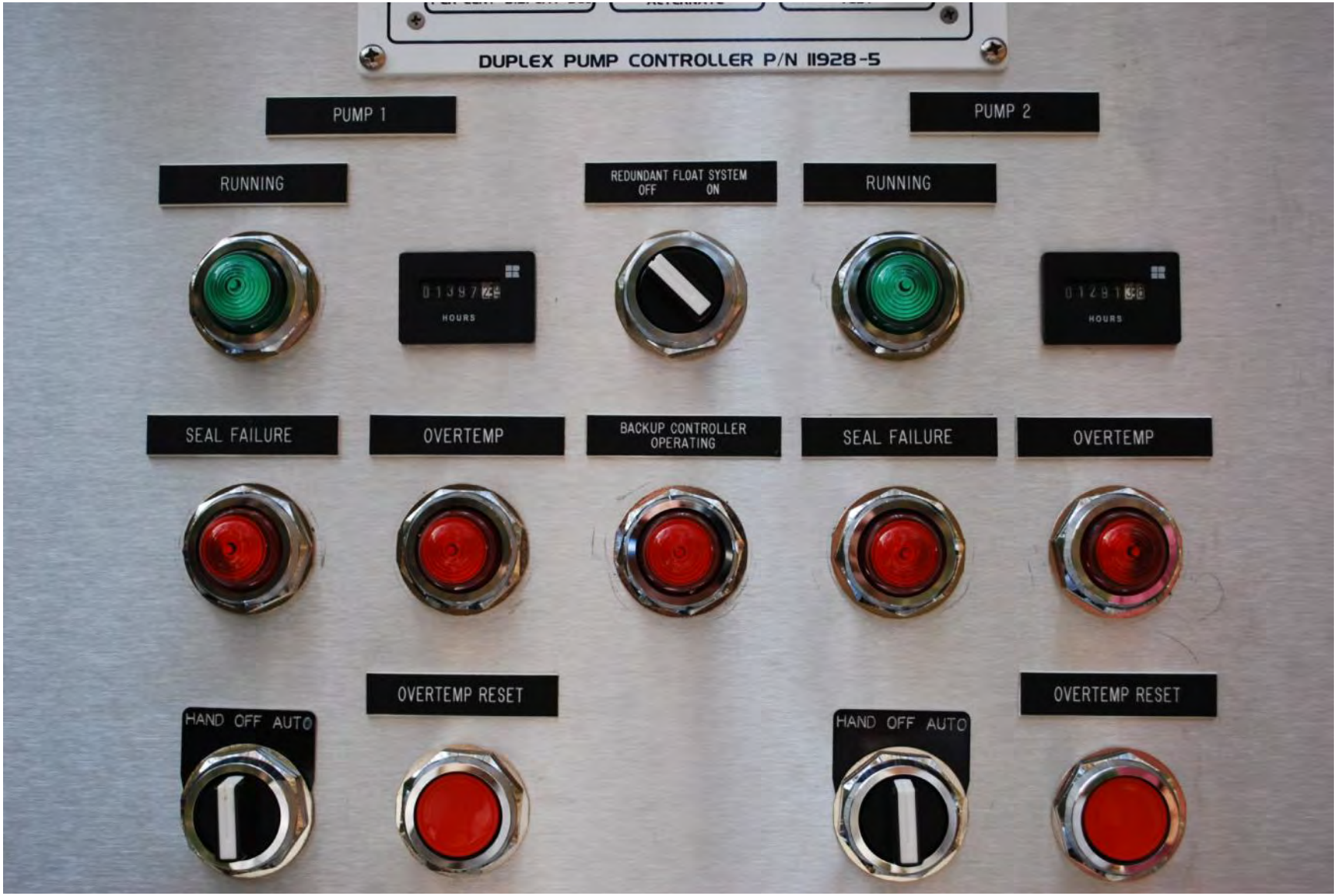
ON
GE HEAVY DUTY SAFETY SWITCH
DANGER
OFF
PELIGRO

ON
GE HEAVY DUTY SAFETY SWITCH
DANGER
OFF


WET WELL LEVEL
DIGITAL CONTROL CORPORATION
DISABLE
FLOATS
LAG
HIGH
OFF
LOW
LEAD
RESET
MUTE
SEL
ALARM
SETPOINTS CH 1
LEVEL
CH 2 SETPOINTS
PER CENT
DISPLAY SEL
4-20
FLT
SYS
ERROR
ON
1-2
2-1
ALTERNATE
TEST
DUPLEX PUMP CONTROLLER P/N 11928-5
PUMP 1
PUMP 2
RUNNING
REDUNDANT FLOAT SYSTEM
OFF
ON
RUNNING
SEAL FAILURE
OVERTEMP
BACKUP CONTROLLER OPERATING
SEAL FAILURE
OVERTEMP
OVERTEMP RESET
HAND OFF AUTO
HAND OFF AUTO
OVERTEMP RESET

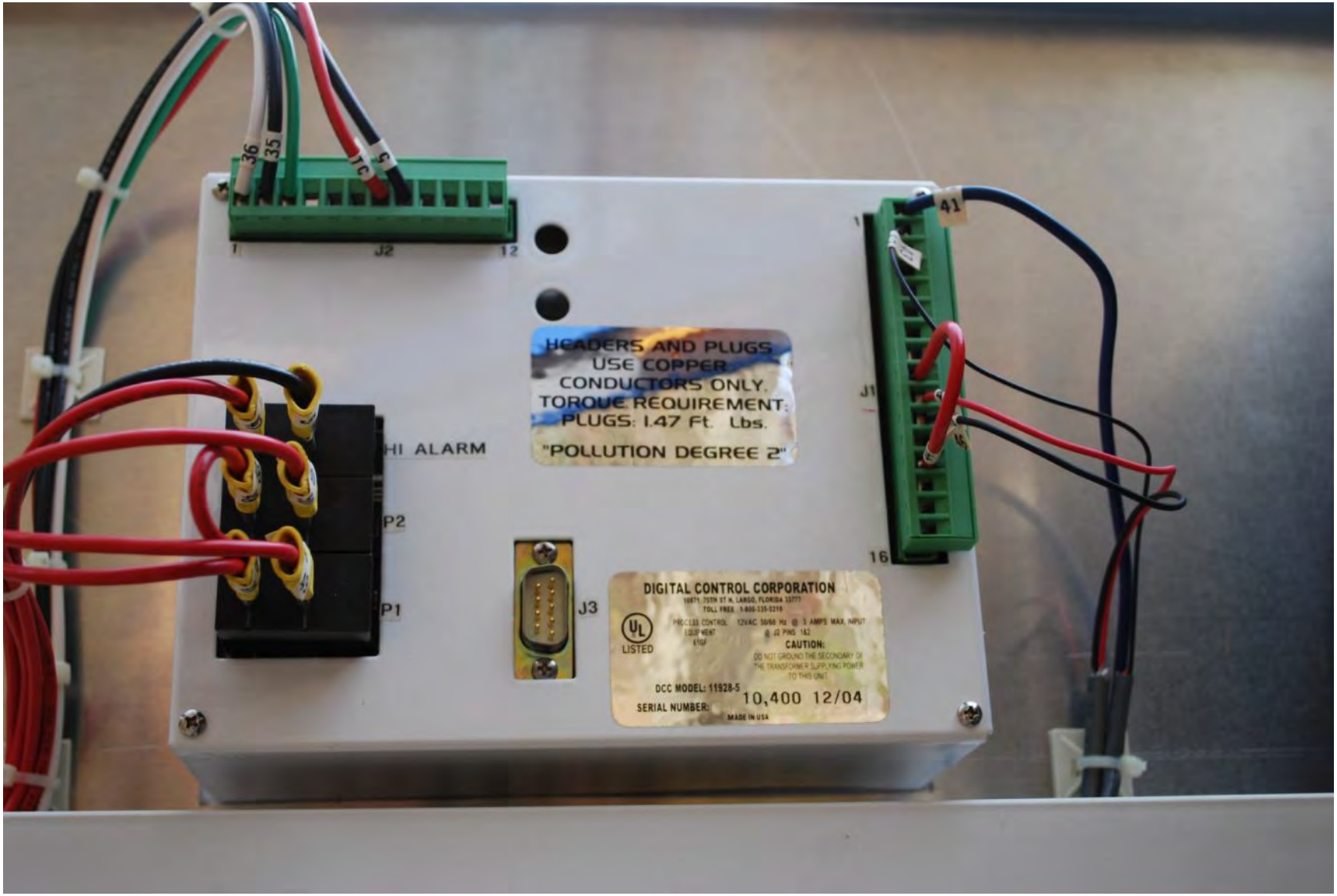

PUMP 1
PUMP 2
CONTROL
GFI
CONVENIENCE RECEPTACLE

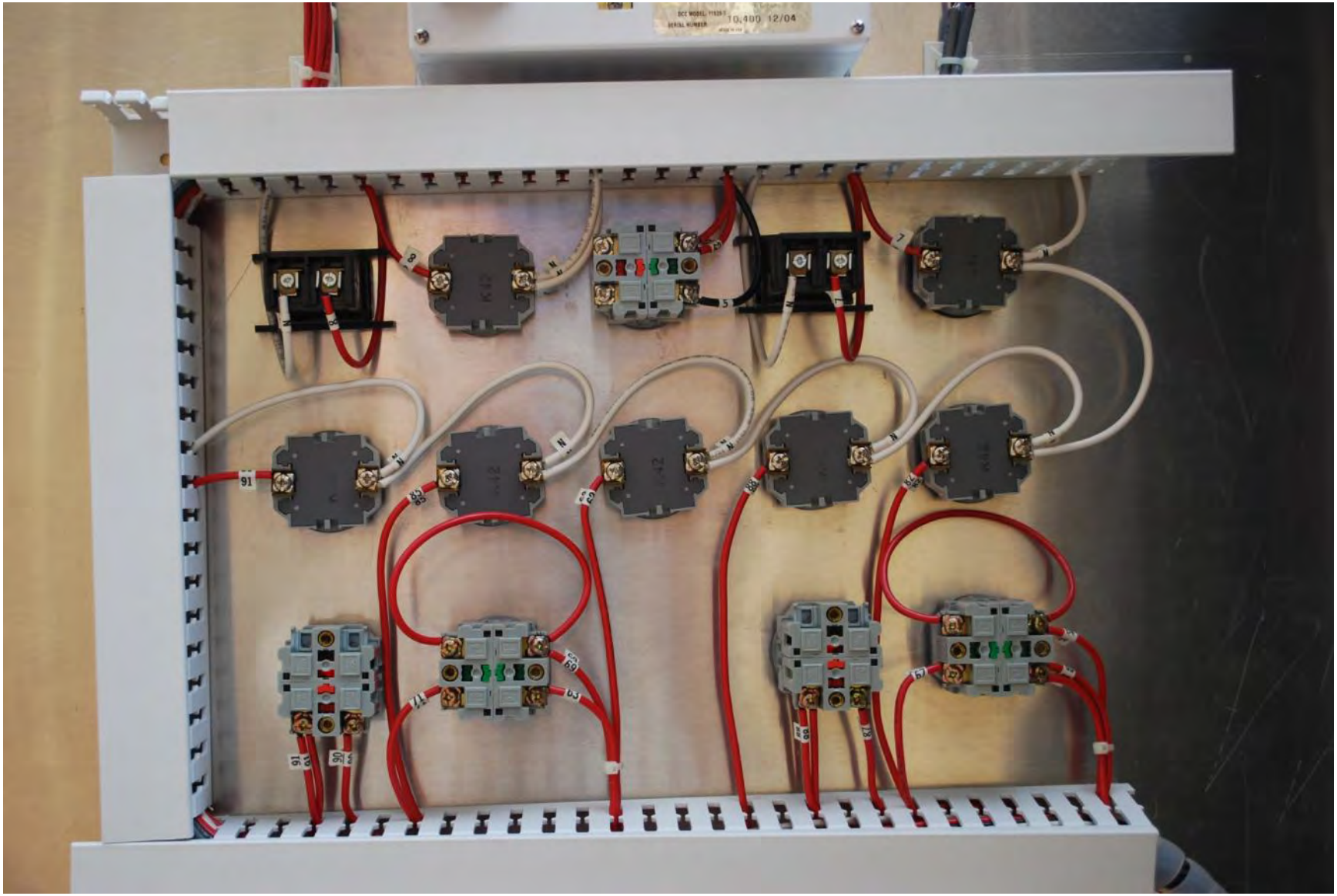

WET WELL LEVEL
DIGITAL CONTROL CORPORATION
100
90
80
70
60
50
40
30
20
10
0
PER CENT
P1
P2
DISABLE
FLOATS
LAG
HIGH
LOW
OFF
LEAD
RESET
MUTE
P1
CH1
SEL
P2
CH2
SEL
HI
LO
ALARM
SEL
SETPOINTS
CH 1
LEVEL
CH 2
SETPOINTS
DISPLAY SEL
4-20
FLT
SYS
ERROR
HI
SETPOINTS
ON
1-2
2-1
ALTERNATE
TEST
DUPLEX PUMP CONTROLLER P/N 11928-5

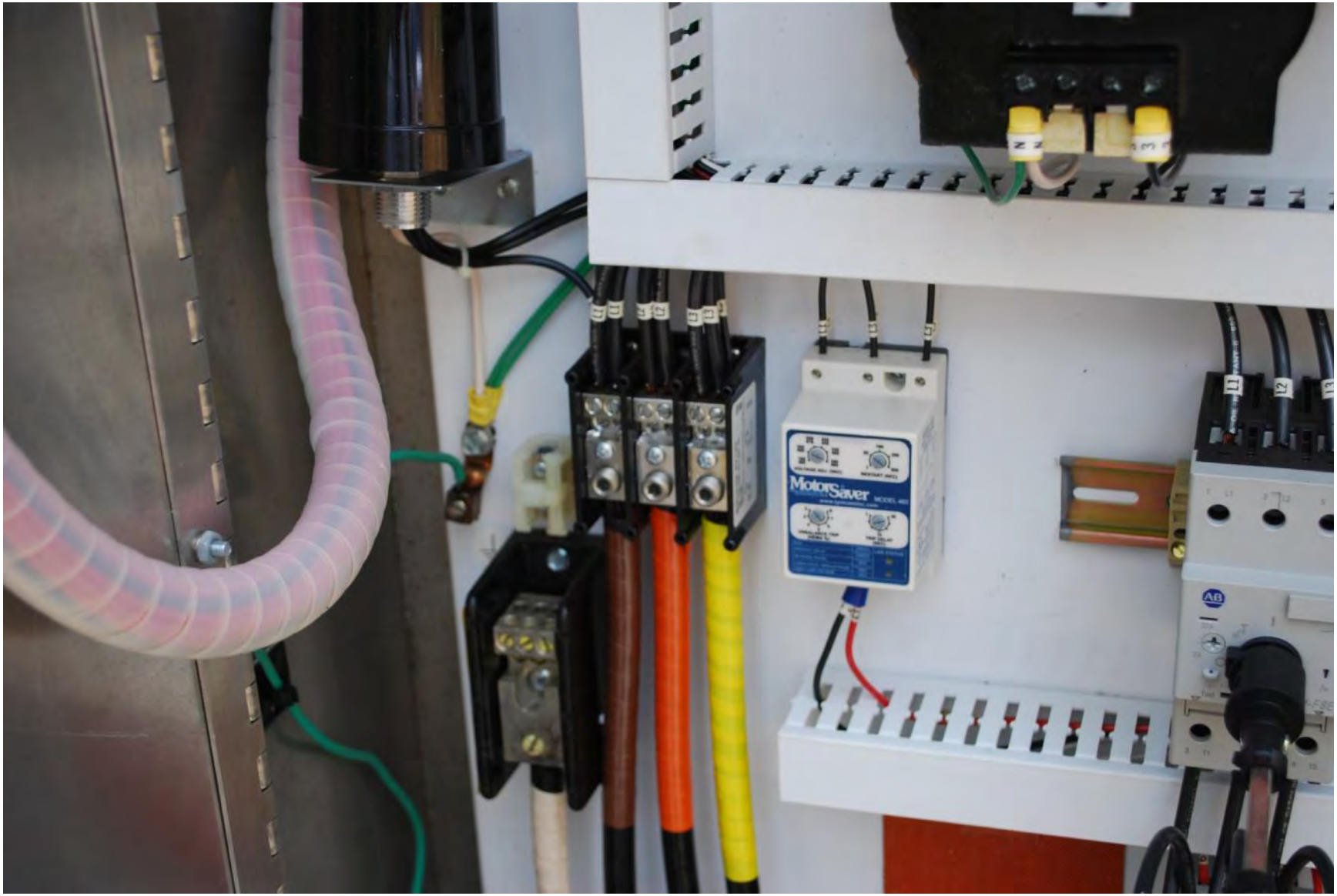

DUPLEX PUMP CONTROLLER P/N 11928-5
PUMP 1
PUMP 2
RUNNING
REDUNDANT FLOAT SYSTEM
OFF ON
RUNNING
HOURS
HOURS
SEAL FAILURE
OVERTEMP
BACKUP CONTROLLER
OPERATING
SEAL FAILURE
OVERTEMP
OVERTEMP RESET
OVERTEMP RESET
HAND OFF AUTO
HAND OFF AUTO

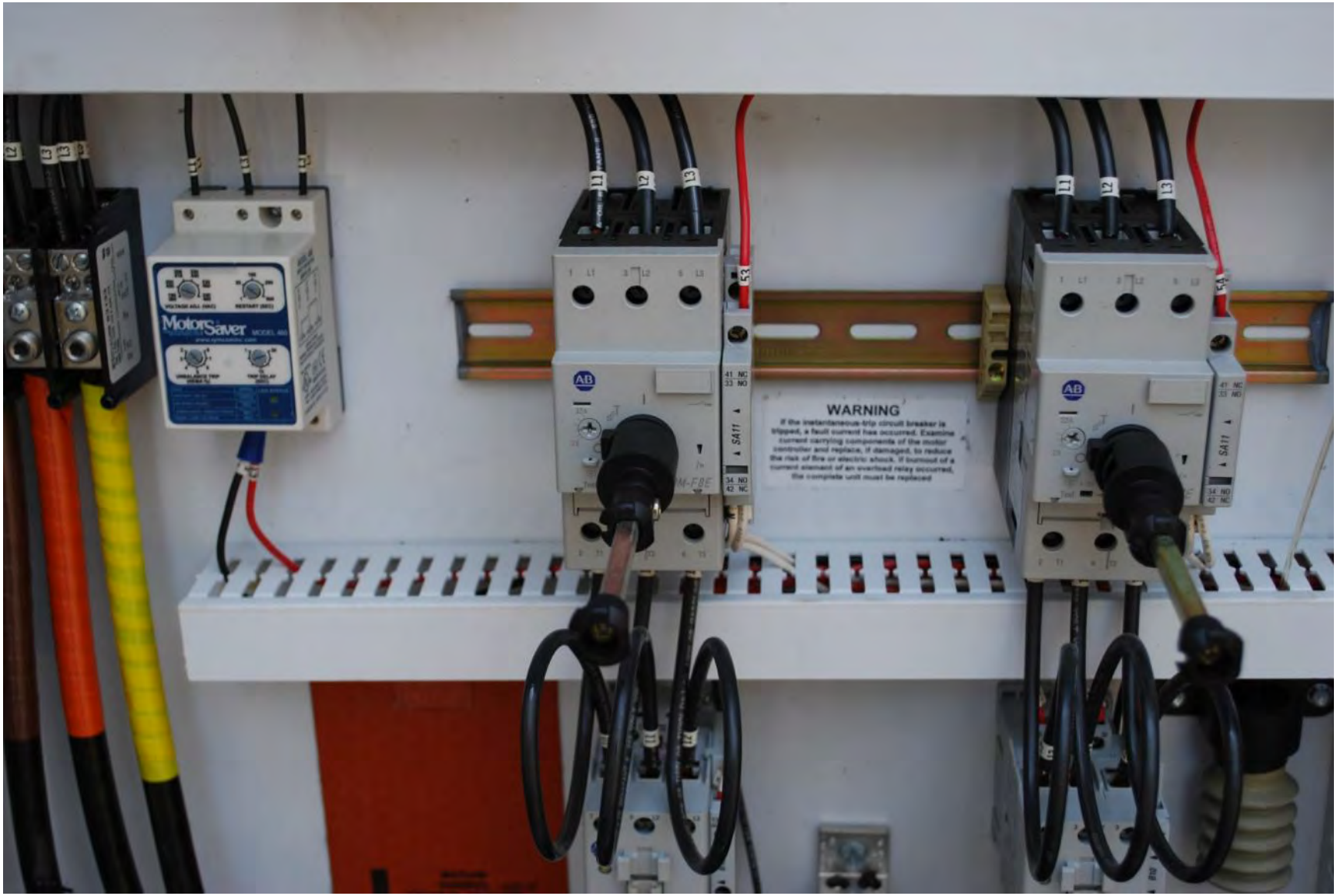
Proudly Built By
GLR
Layout
BD
BD
Inspection
MP
Serial No.
86376
Unit
B
Voltage
480 3PH 3W
Mfg. Date
1 / 20 / 05
1975 West County Rd. B2, Suite 5
St. Paul MN 55113
(651) 633-7522 Fax (651) 633-2671
Proudly
Made in
U S A

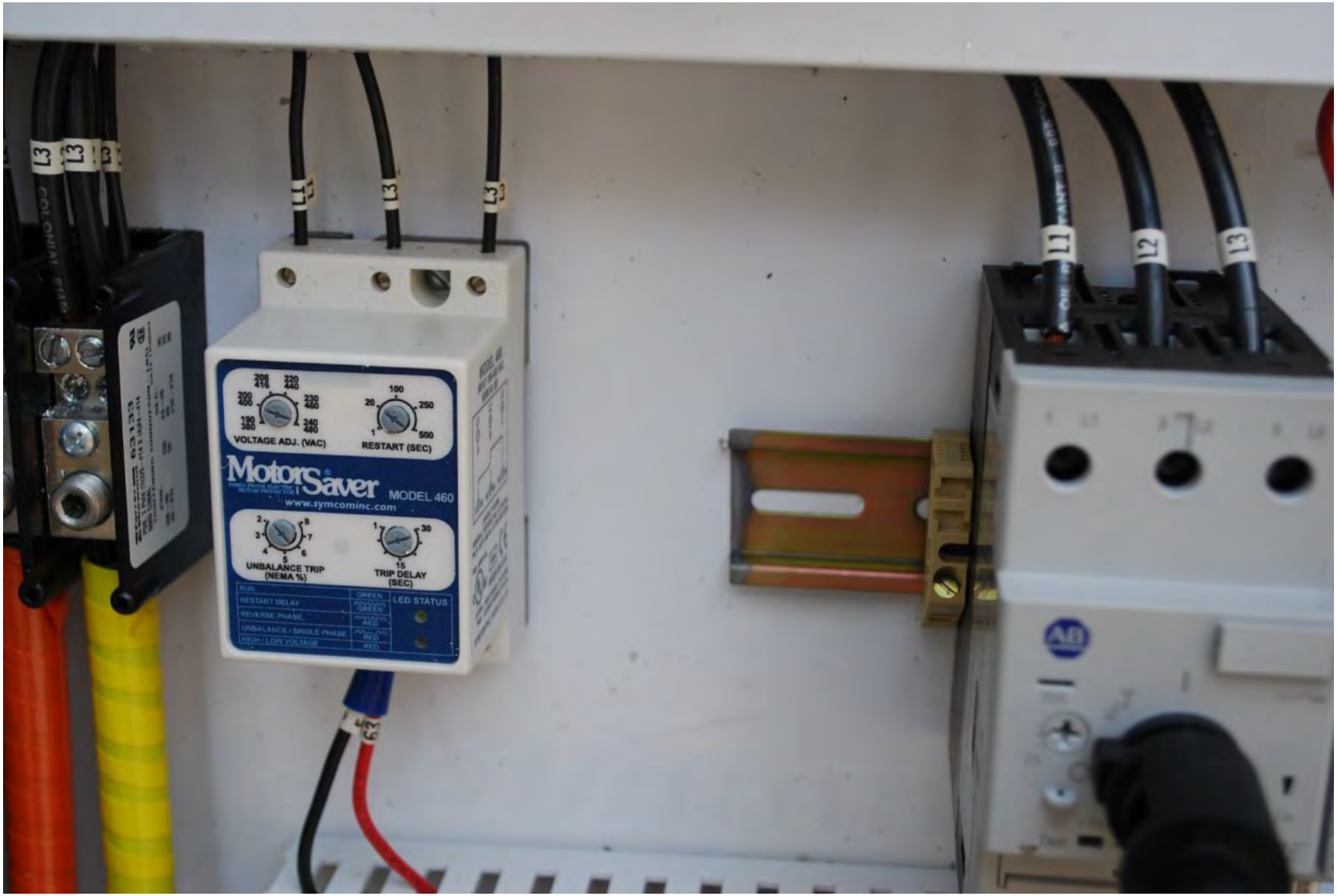
PH 3W
Mfg. Date
1/2005
975 West County Rd. B2, Suite 5
St. Paul MN 55113
(651) 633-7522 Fax (651) 633-2671
Proudly
Made in
U S A
HEALY-RUFF CO.
ST. PAUL, MINNESOTA
U. L. LISTED
INDUSTRIAL CONTROL PANEL
VOLTAGE
460
PHASE
3
HZ
60
H. P.
20
F. L. A.
90
ENC. TYPE
4X

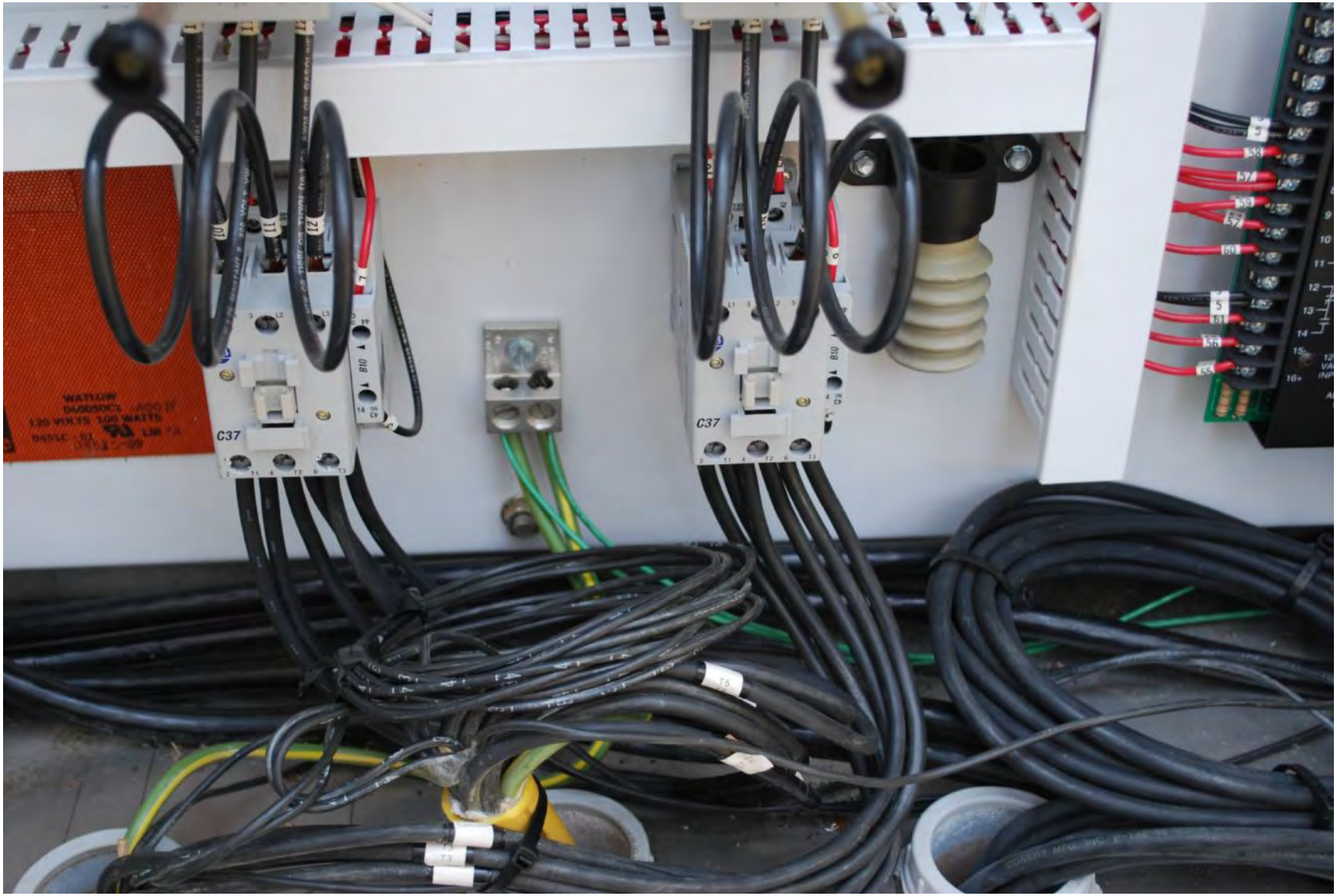

36
35
1
J2
12
HEADERS AND PLUGS
USE COPPER
CONDUCTORS ONLY.
TORQUE REQUIREMENT:
PLUGS: 1.47 Ft. Lbs.
"POLLUTION DEGREE 2"
41
J1
16
HI ALARM
P2
P1
J3
DIGITAL CONTROL CORPORATION
LISTED
CAUTION:
DCC MODEL: 11928-5
SERIAL NUMBER:
10,400 12/04
MADE IN USA

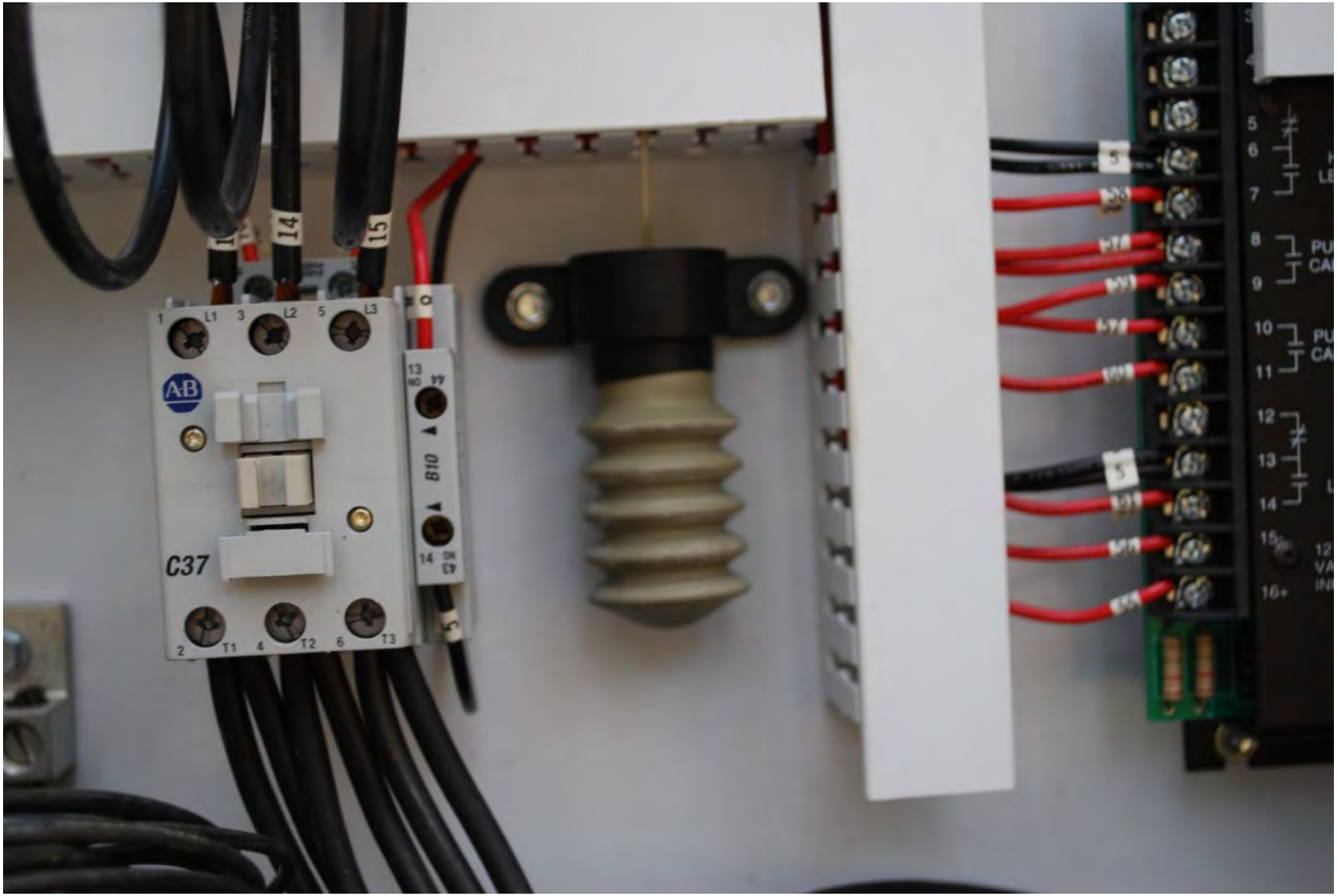


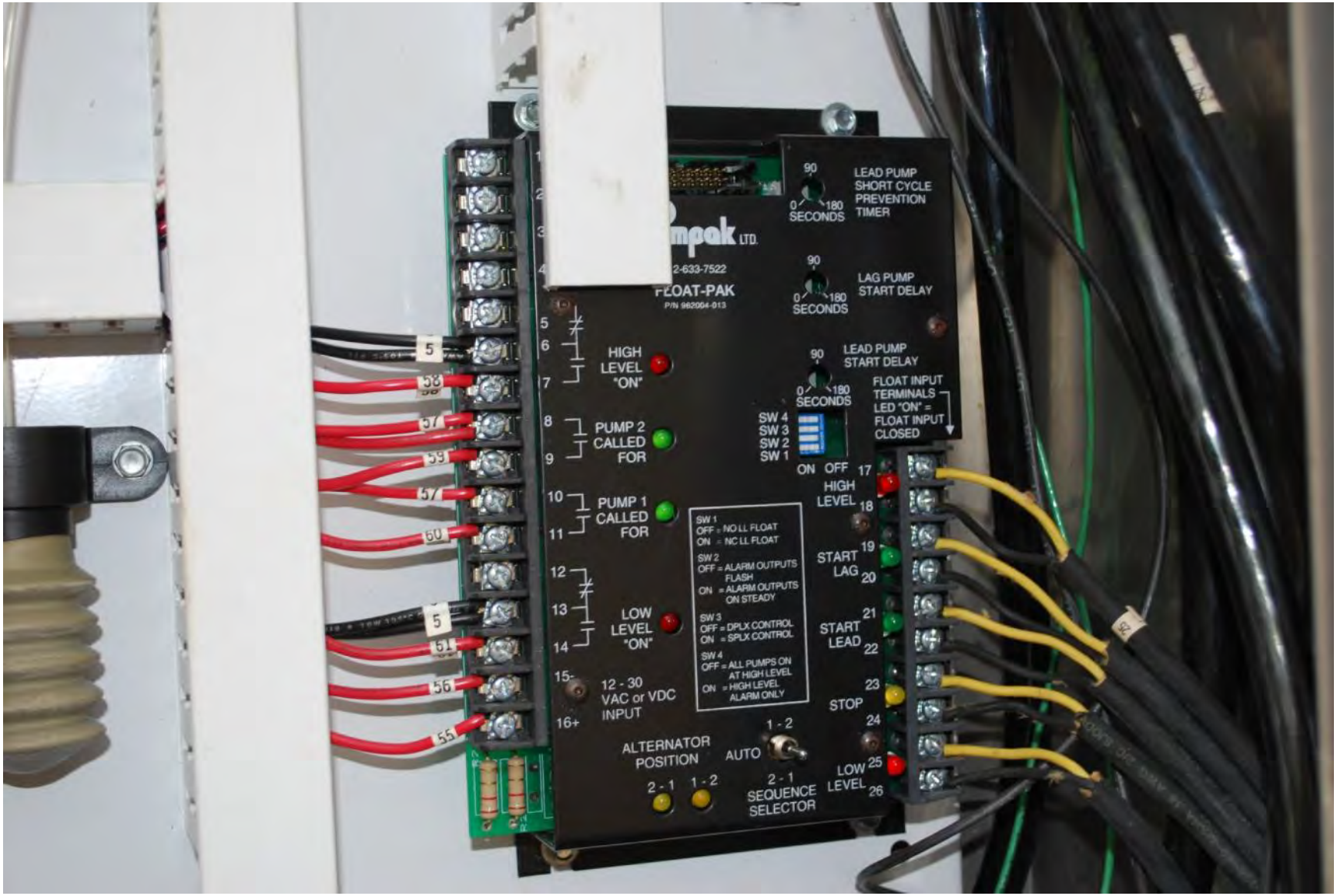

MotorSaver


MotorSaver
WARNING

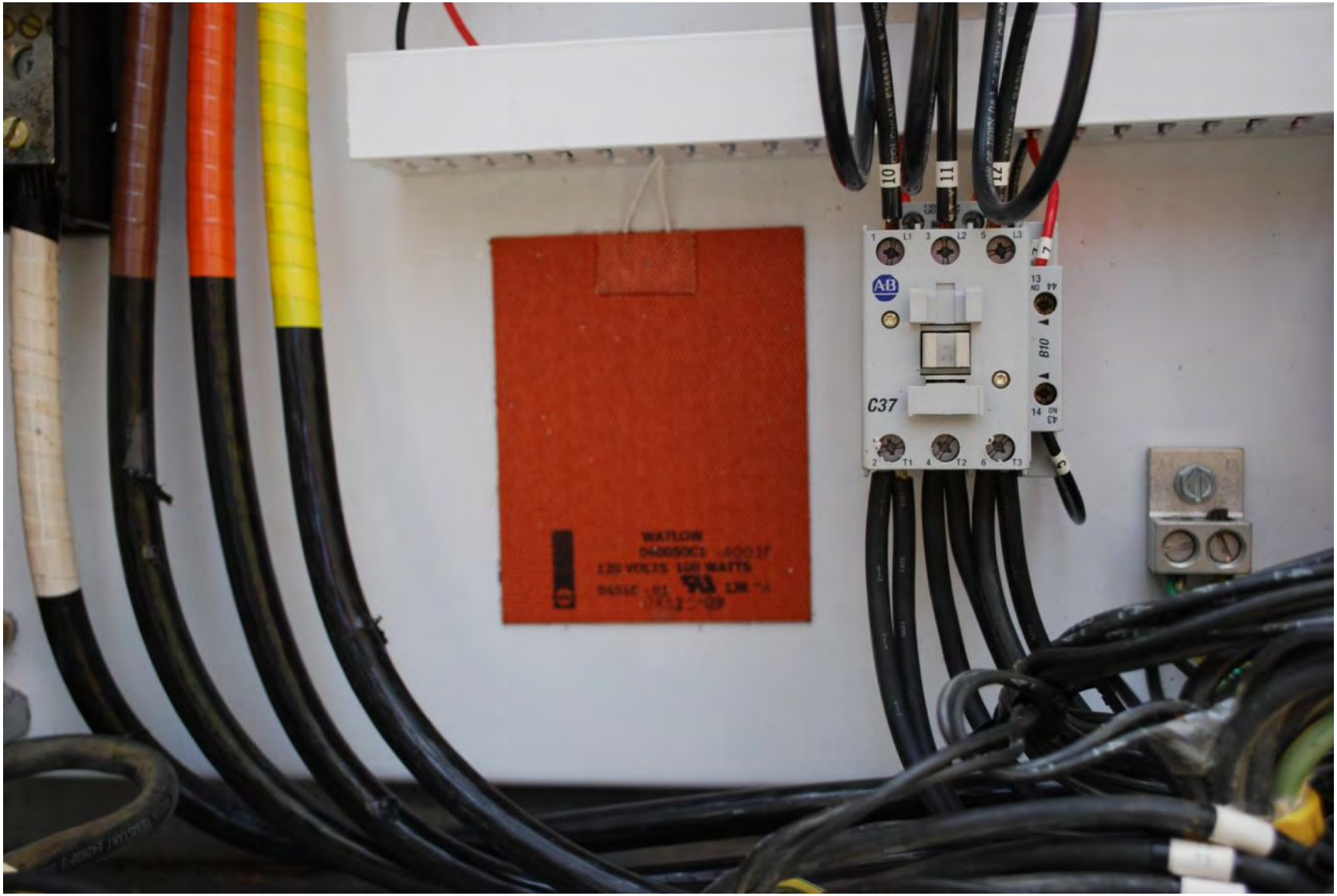

L3
L1
L2
VOLTAGE ADJ. (VAC)
RESTART (SEC)
MotorSaver
MODEL 460
www.symcominc.com
UNBALANCE TRIP (NEMA %)
TRIP DELAY (SEC)
LED STATUS

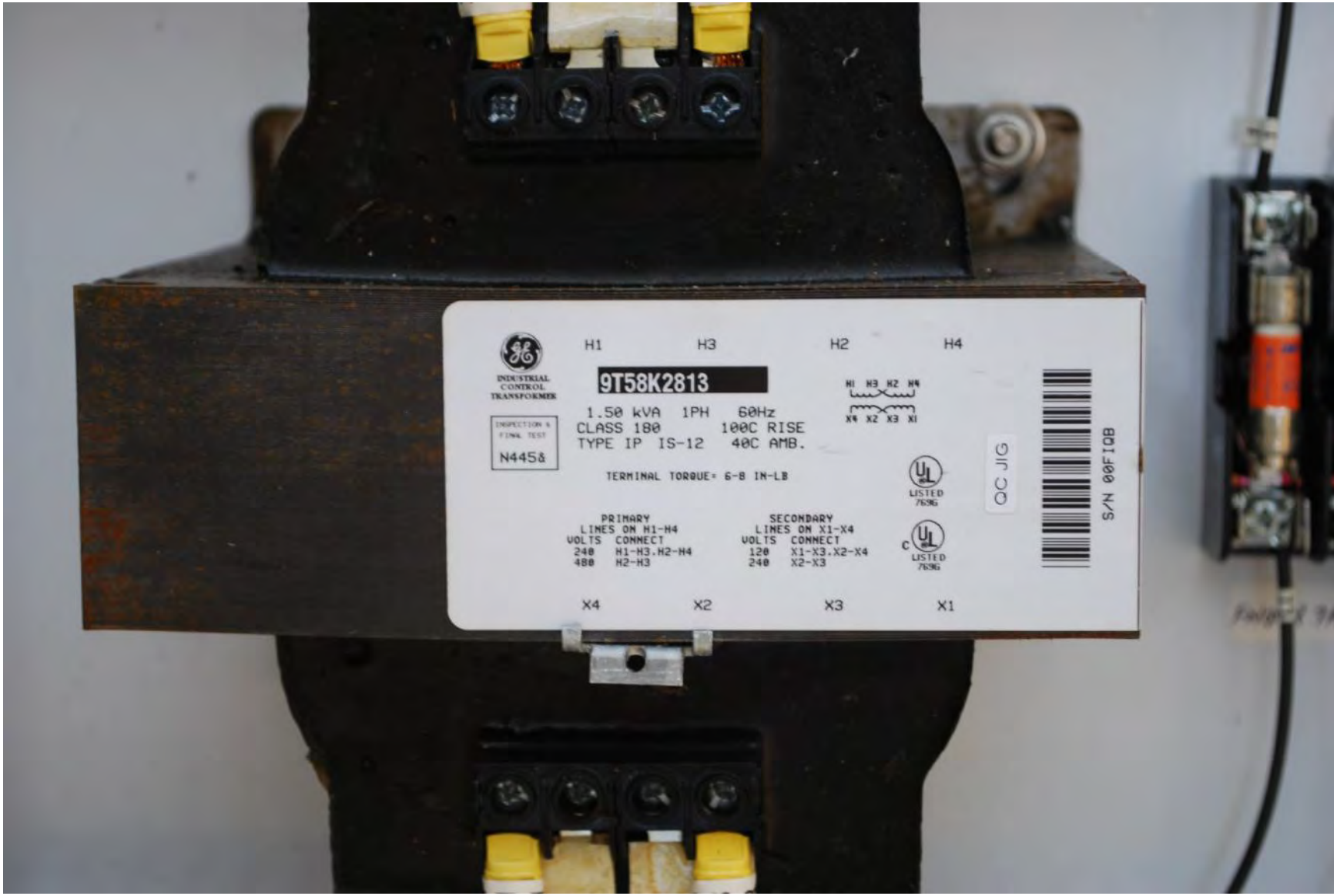

C37
C37

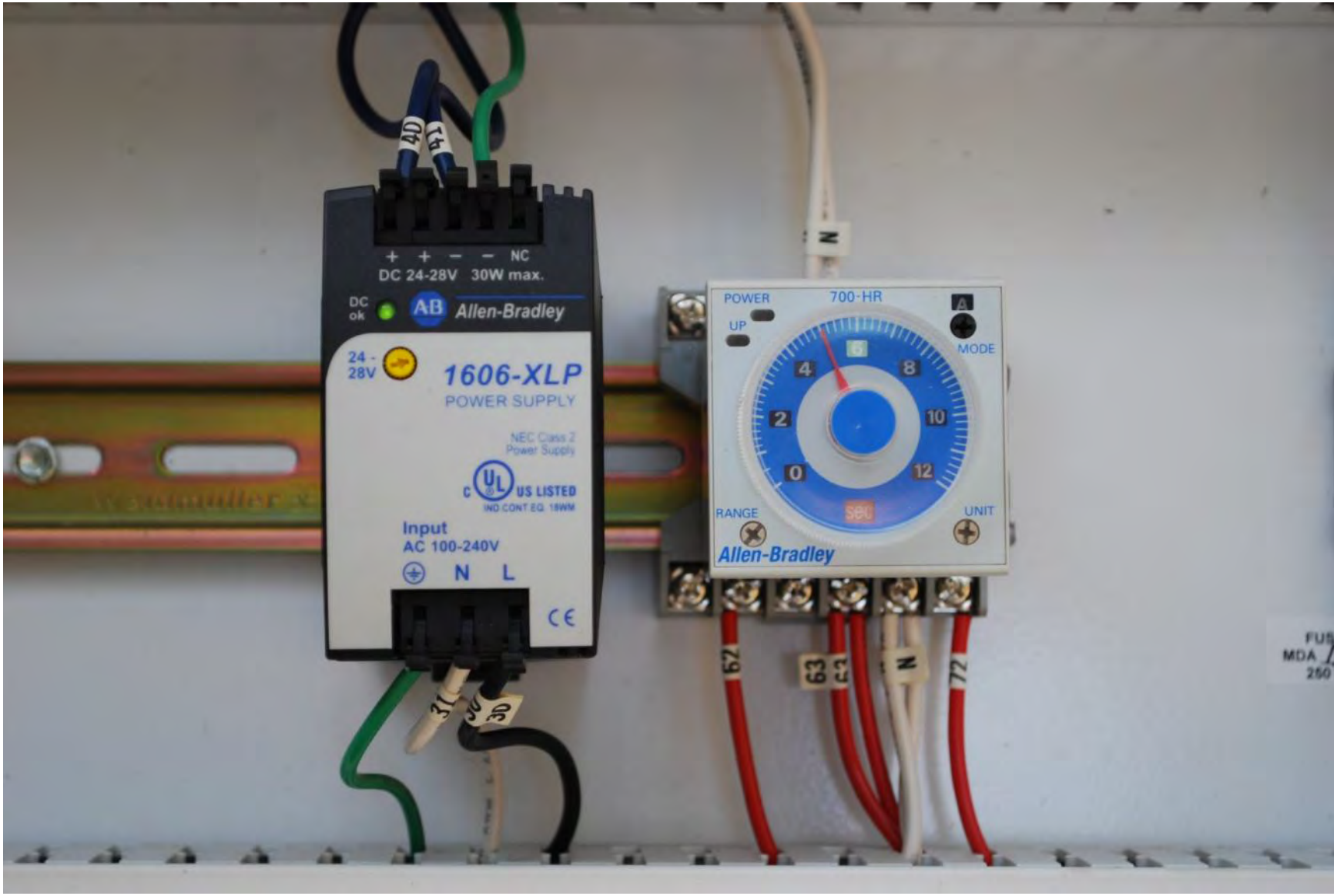

14
15
1
L1
3
L2
5
L3
AB
C37
2
T1
4
T2
6
T3
13
14
B10

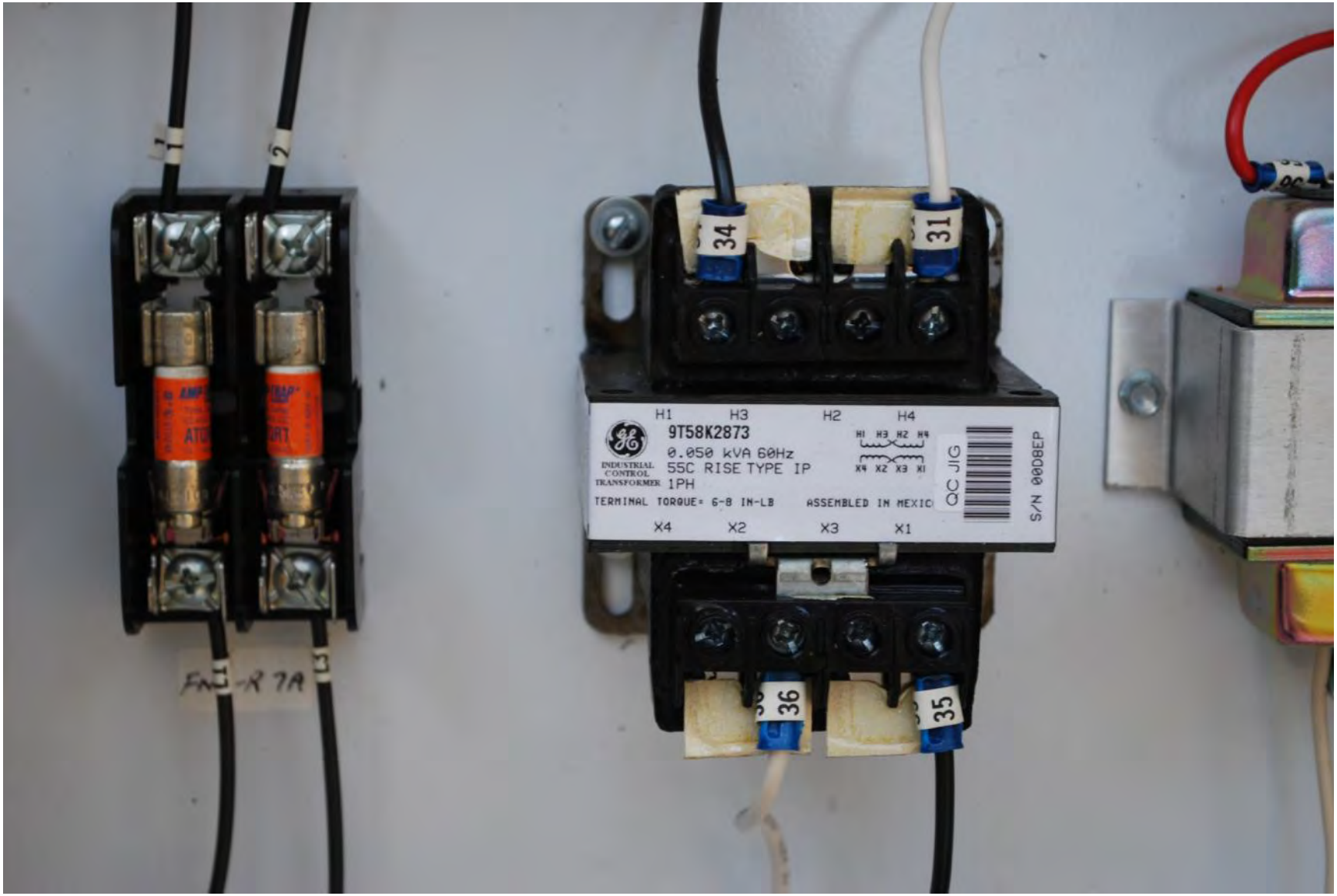

LEAD PUMP
SHORT CYCLE
PREVENTION
TIMER
90
0
180
SECONDS
LAG PUMP
START DELAY
LEAD PUMP
START DELAY
FLOAT INPUT
TERMINALS
LED "ON" =
FLOAT INPUT
CLOSED
FLOAT-PAK
P/N 982004-013
HIGH
LEVEL
"ON"
PUMP 2
CALLED
FOR
PUMP 1
CALLED
FOR
LOW
LEVEL
"ON"
12 - 30
VAC or VDC
INPUT
SW 4
SW 3
SW 2
SW 1
ON OFF
HIGH
LEVEL
START
LAG
START
LEAD
STOP
LOW
LEVEL
ALTERNATOR
POSITION
AUTO
1 - 2
2 - 1
SEQUENCE
SELECTOR
SW 1
OFF = NO LL FLOAT
ON = NC LL FLOAT
SW 2
OFF = ALARM OUTPUTS FLASH
ON = ALARM OUTPUTS ON STEADY
SW 3
OFF = DPLX CONTROL
ON = SPLX CONTROL
SW 4
OFF = ALL PUMPS ON AT HIGH LEVEL
ON = HIGH LEVEL ALARM ONLY

SILENCE


C37
B10


H1
H3
H2
H4
INDUSTRIAL CONTROL TRANSFORMER
9T58K2813
1.50 kVA 1PH 60Hz
CLASS 180 100C RISE
TYPE IP IS-12 40C AMB.
N445&
TERMINAL TORQUE= 6-8 IN-LB
PRIMARY
LINES ON H1-H4
VOLTS CONNECT
240 H1-H3.H2-H4
480 H2-H3
SECONDARY
LINES ON X1-X4
VOLTS CONNECT
120 X1-X3.X2-X4
240 X2-X3
LISTED
7659
QC JIG
S/N 00F1QB
X4
X2
X3
X1


+ + − − NC
DC 24-28V 30W max.
DC ok
Allen-Bradley
24 - 28V
1606-XLP
POWER SUPPLY
NEC Class 2 Power Supply
US LISTED
Input
AC 100-240V
N L
POWER
700-HR
UP
MODE
RANGE
UNIT
Allen-Bradley
4D
42
N
31
30
62
63
N
72


H1 H3 H2 H4
9T58K2873
0.050 kVA 60Hz
55C RISE TYPE IP
1PH
INDUSTRIAL CONTROL TRANSFORMER
TERMINAL TORQUE= 6-8 IN-LB
ASSEMBLED IN MEXIC
QC JIG
S/N 0008EP
X4 X2 X3 X1
34
31
36
35

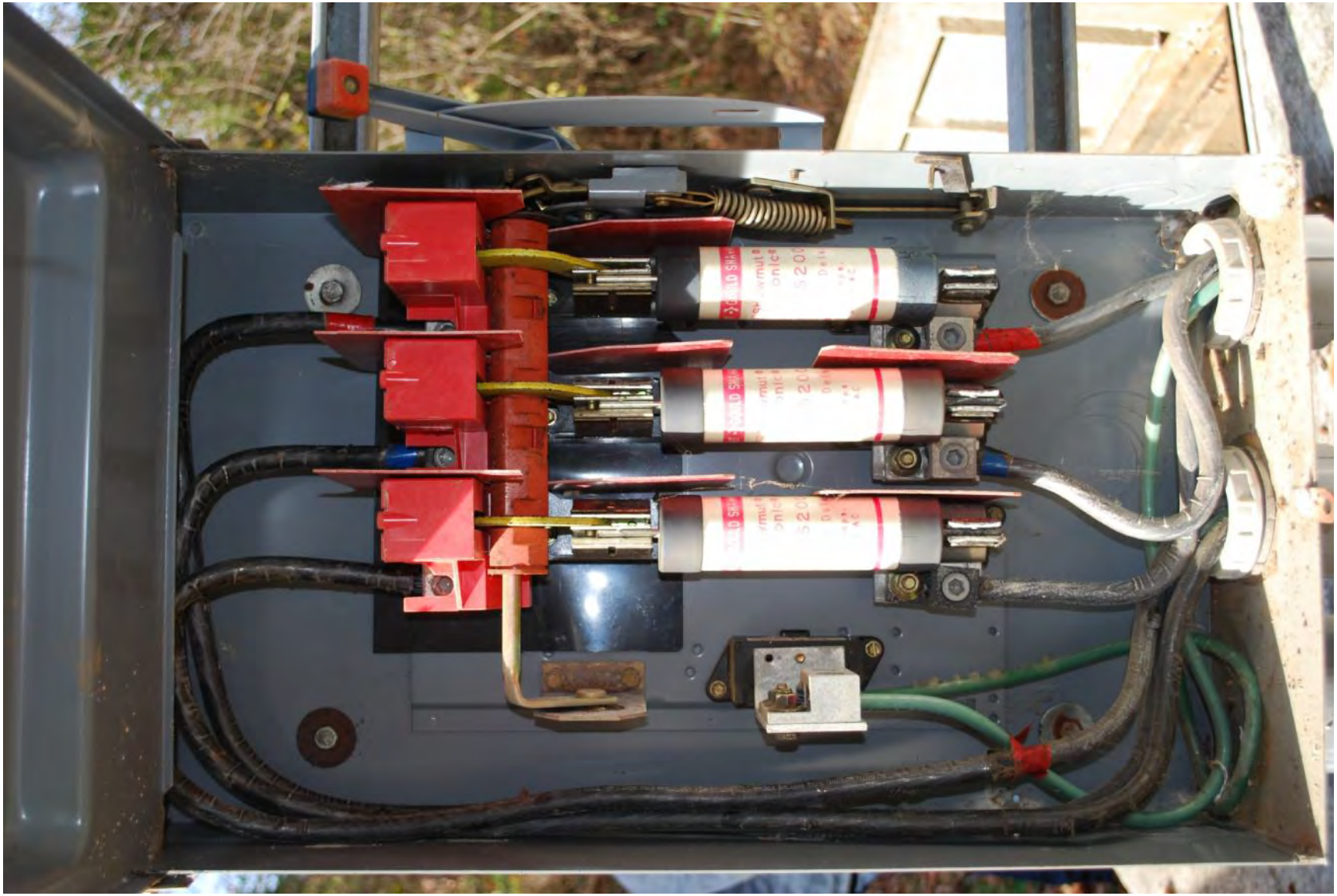
Red Valve
Company, Inc.
412-279-0044

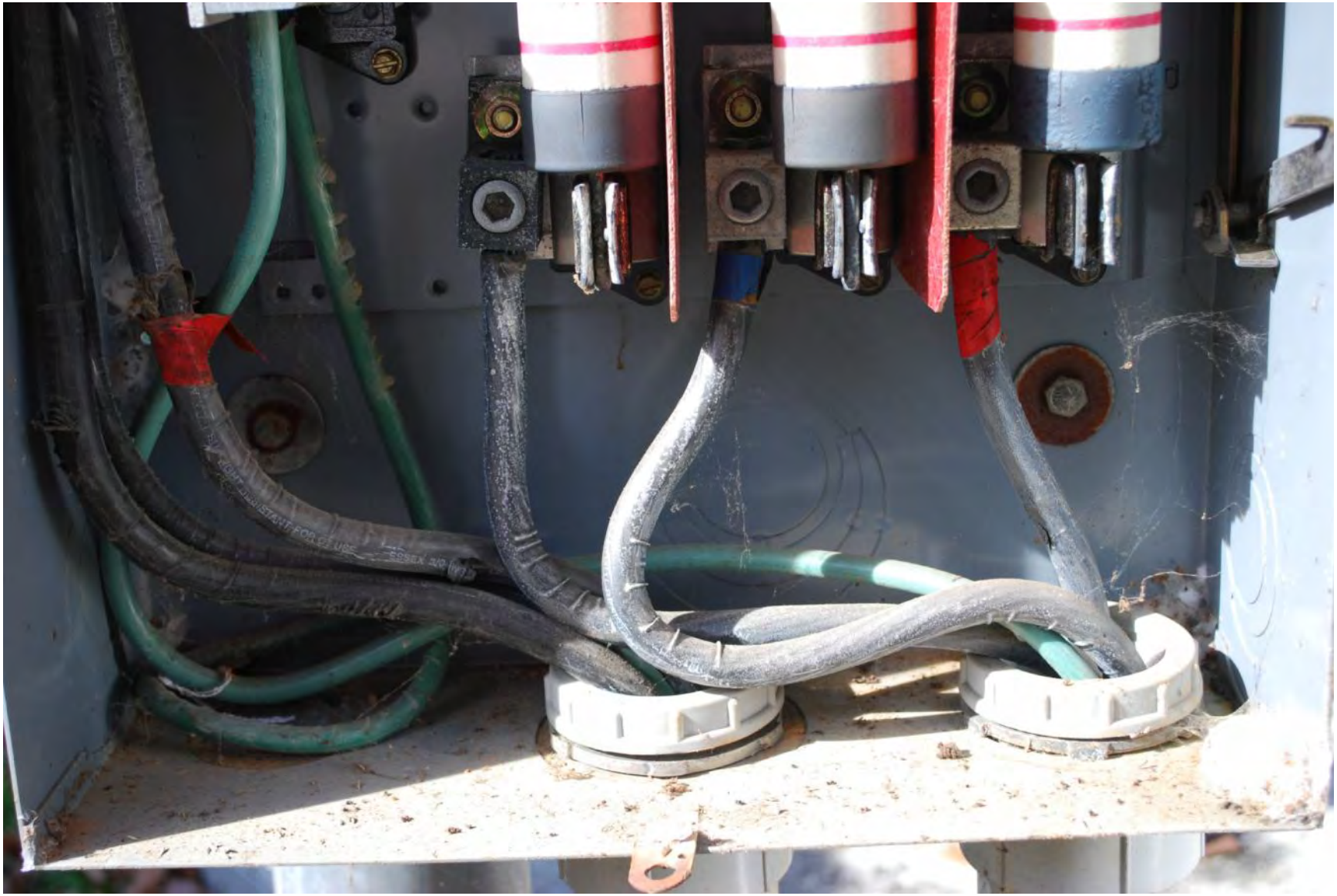
NOTICE
TO INSTALLERS

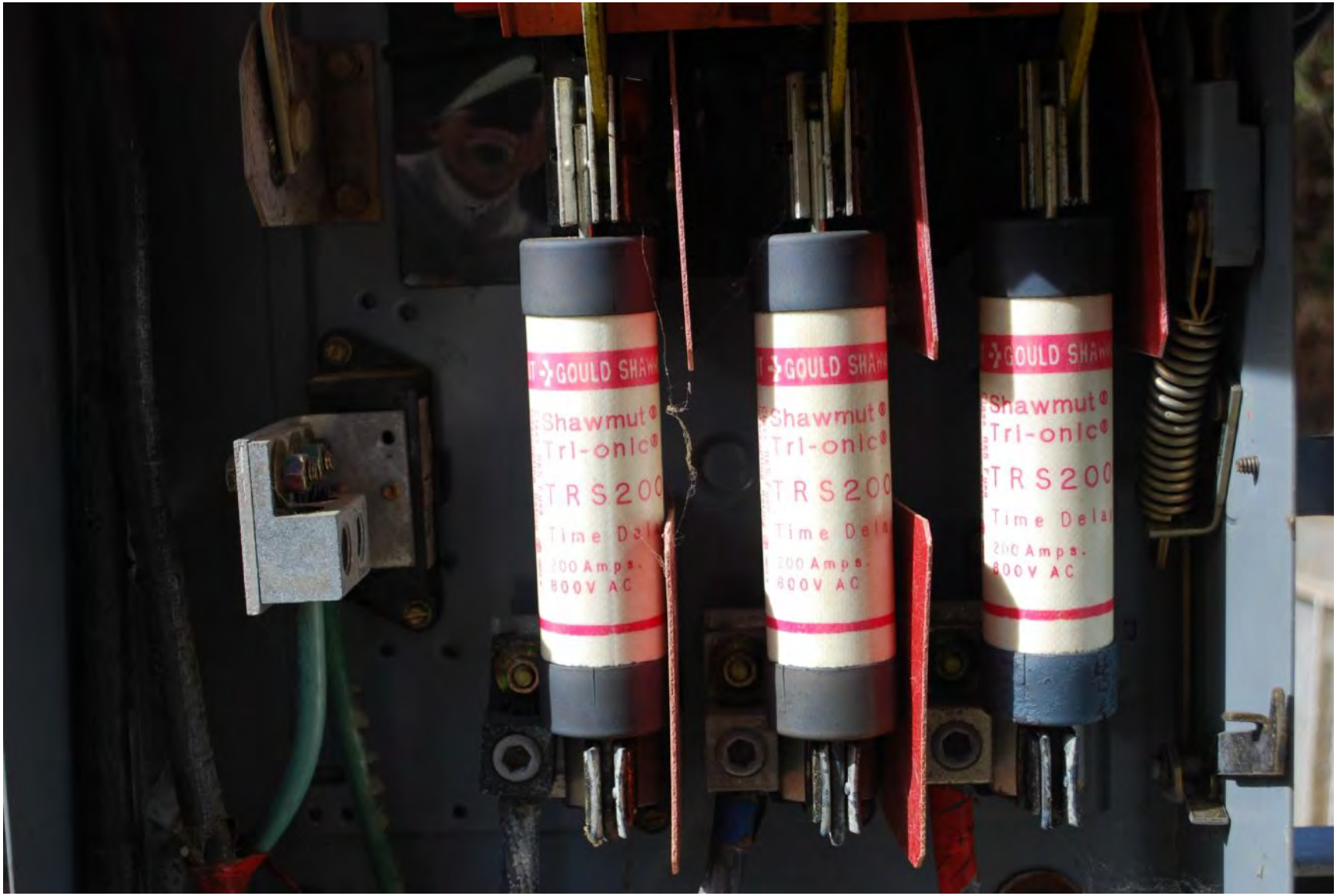
1860
75 KVA
277 480
WARNING

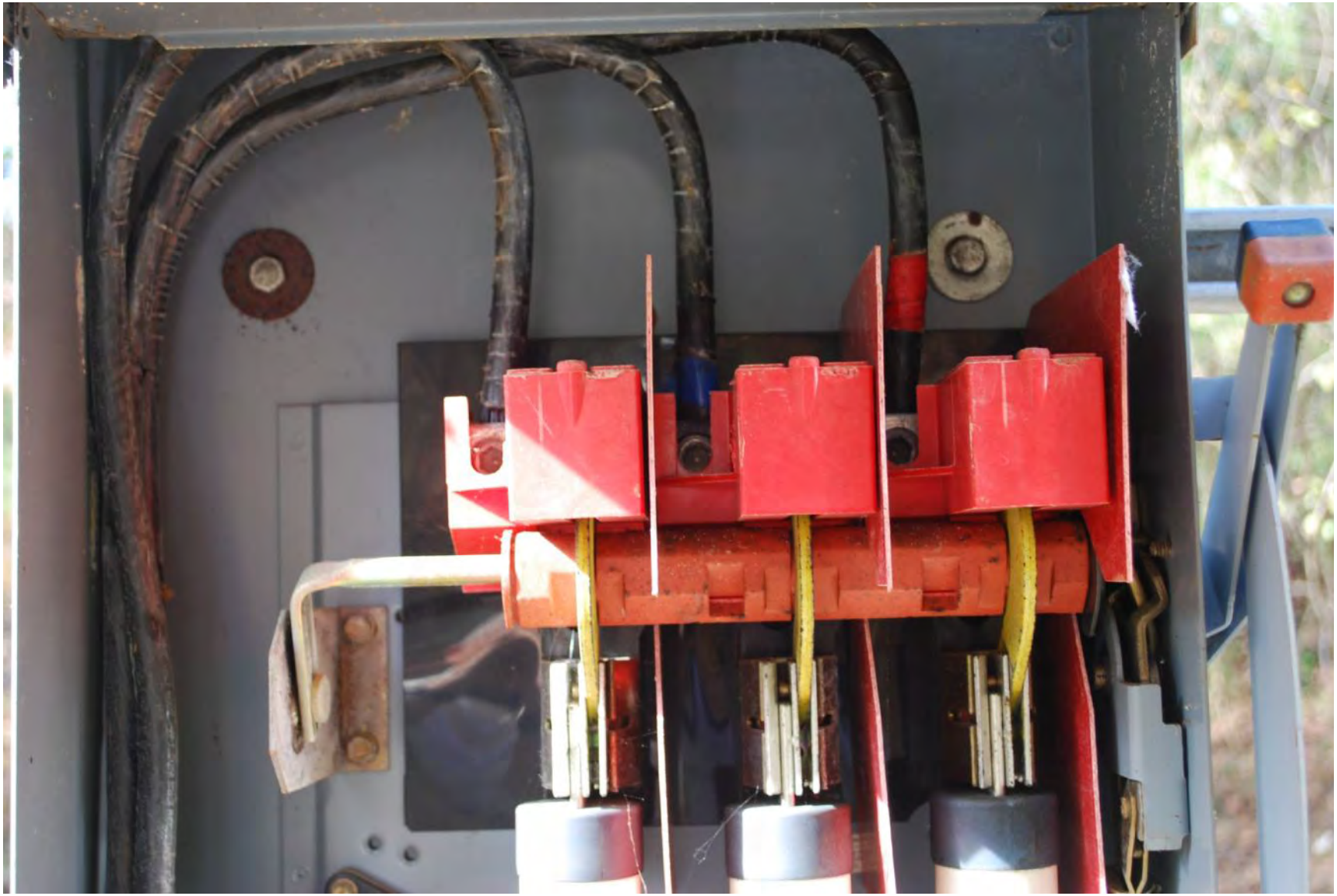
KILOWATT HOURS
TYPE DR-5
MULTIPLY BOTH READINGS BY
50
S4DA
55119570
/120
2.5
1.8
SANGAMO

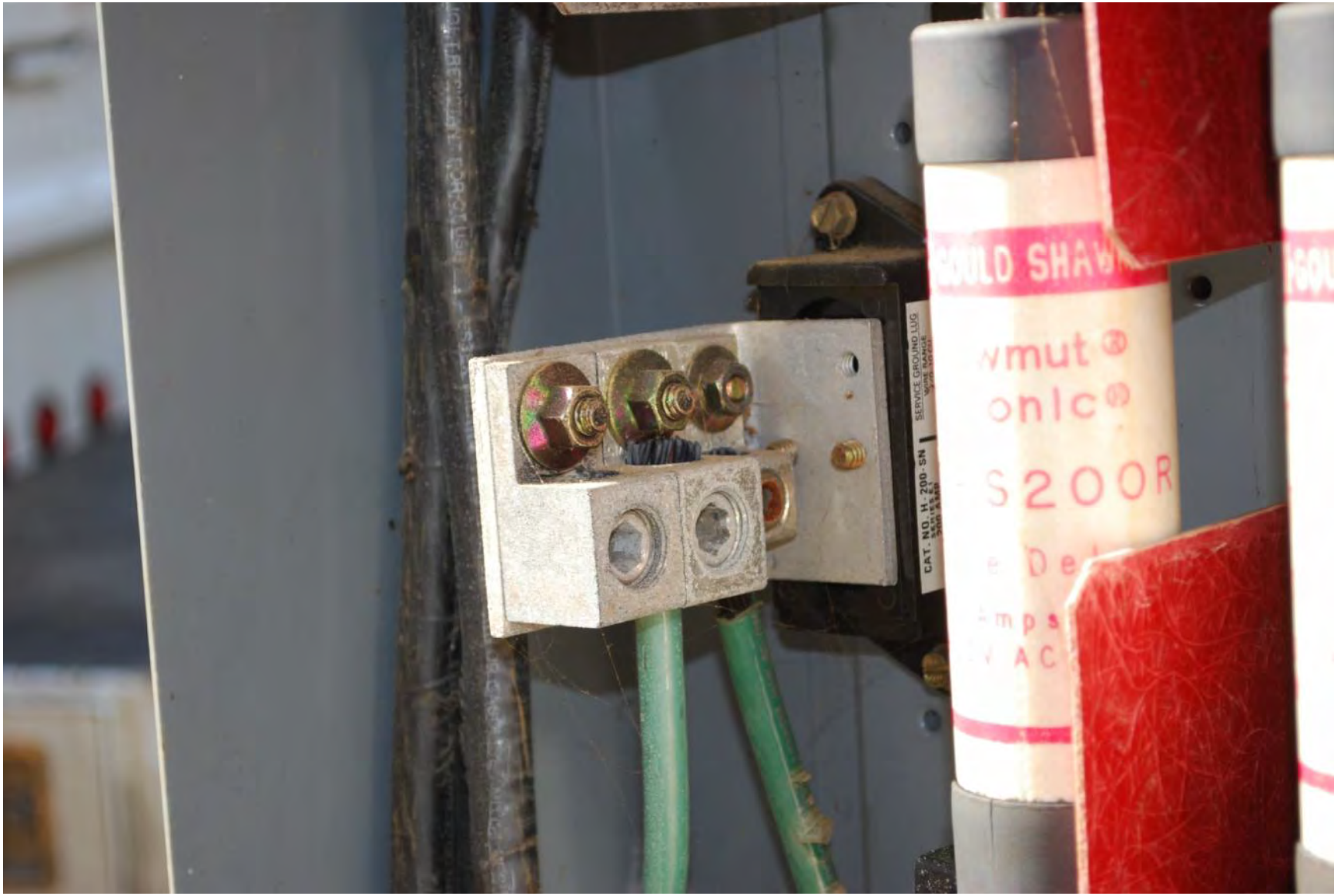
1860
75 KVA
277 430

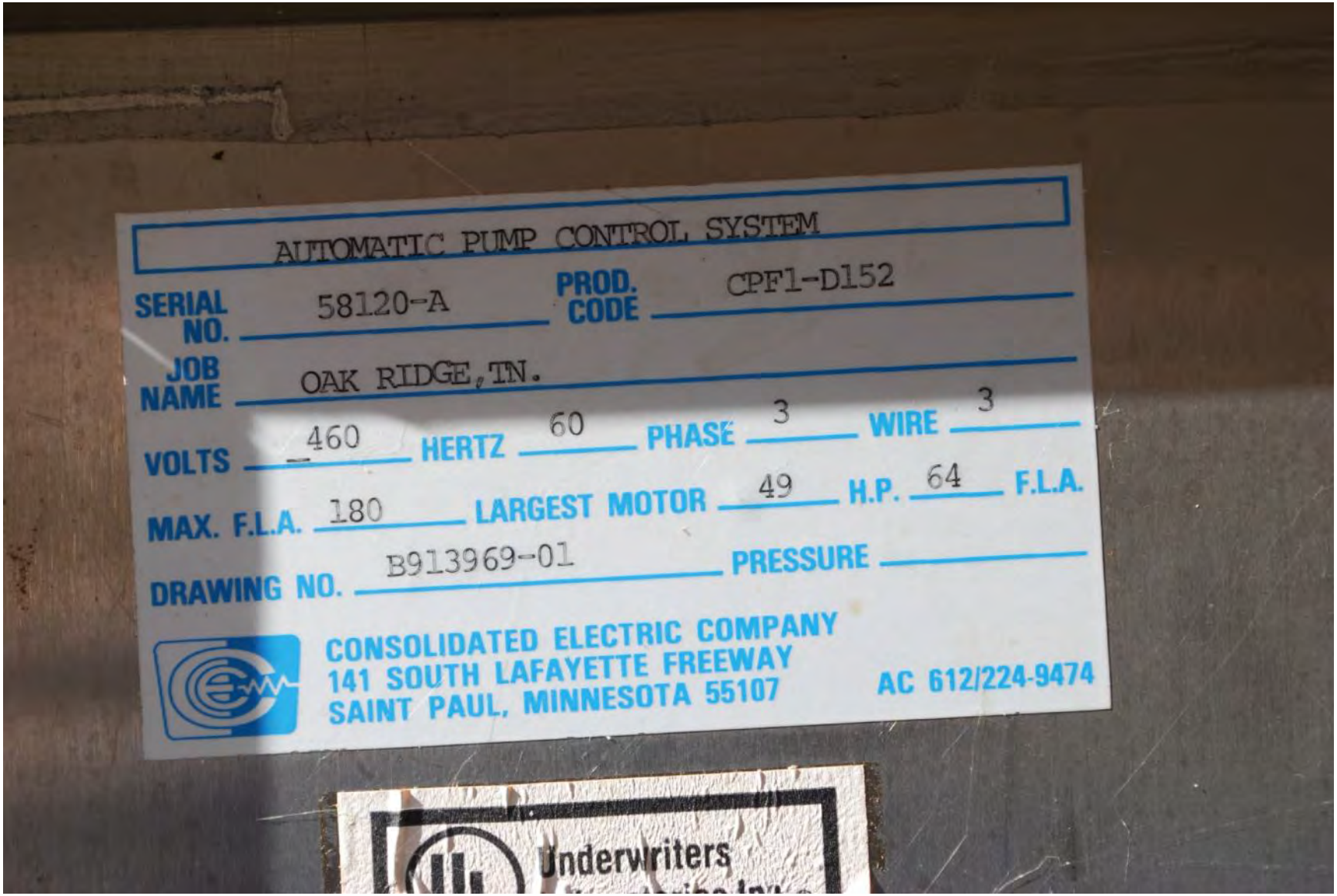





GOULD
Shawmut
Tri-onic
TRS200
200 Amps.
600V AC



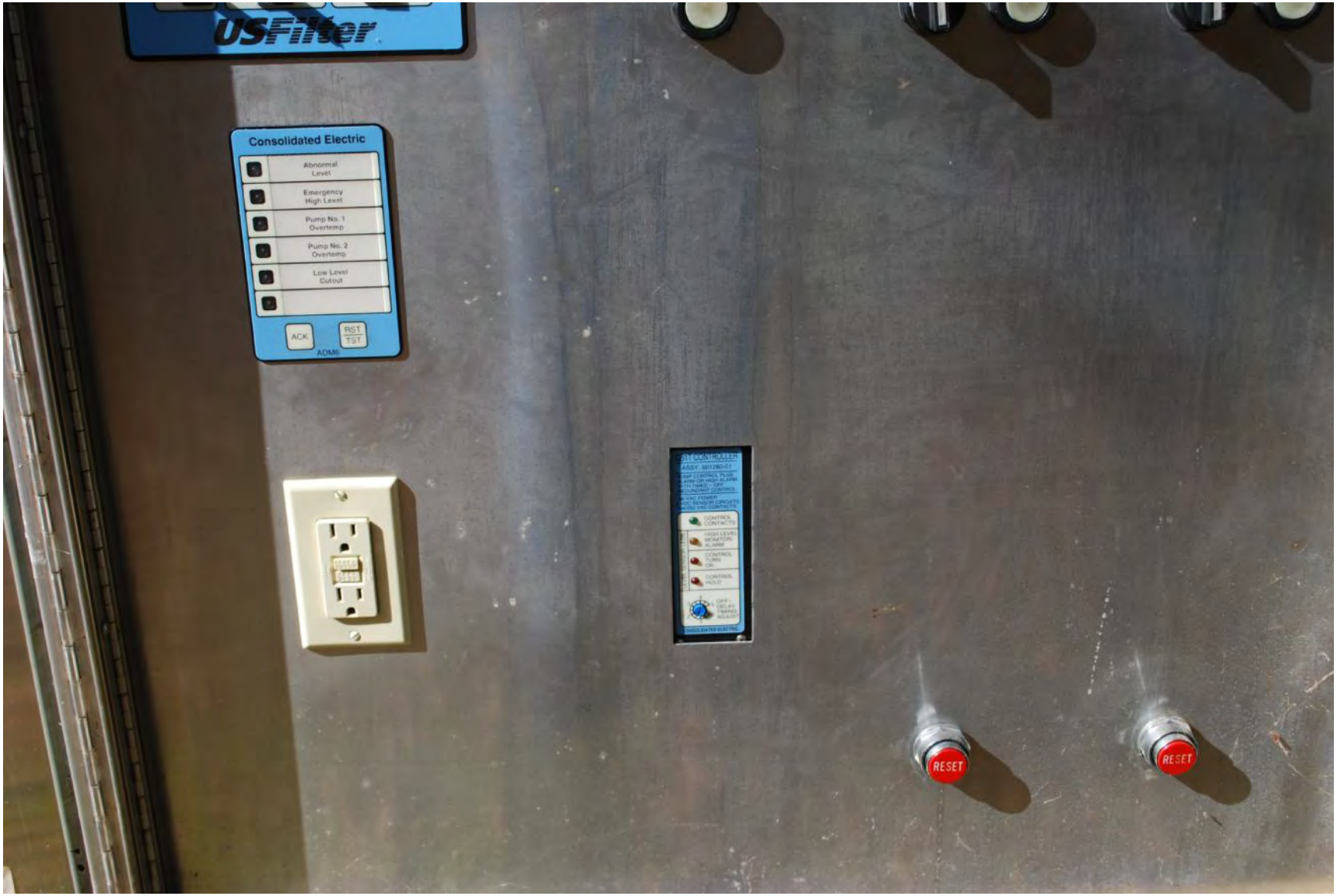

S200R


AUTOMATIC PUMP CONTROL SYSTEM
SERIAL NO. 58120-A
PROD. CODE CPF1-D152
JOB NAME OAK RIDGE, TN.
VOLTS 460
HERTZ 60
PHASE 3
WIRE 3
MAX. F.L.A. 180
LARGEST MOTOR 49
H.P. 64
F.L.A.
DRAWING NO. B913969-01
PRESSURE
CONSOLIDATED ELECTRIC COMPANY
141 SOUTH LAFAYETTE FREEWAY
SAINT PAUL, MINNESOTA 55107
AC 612/224-9474
Underwriters

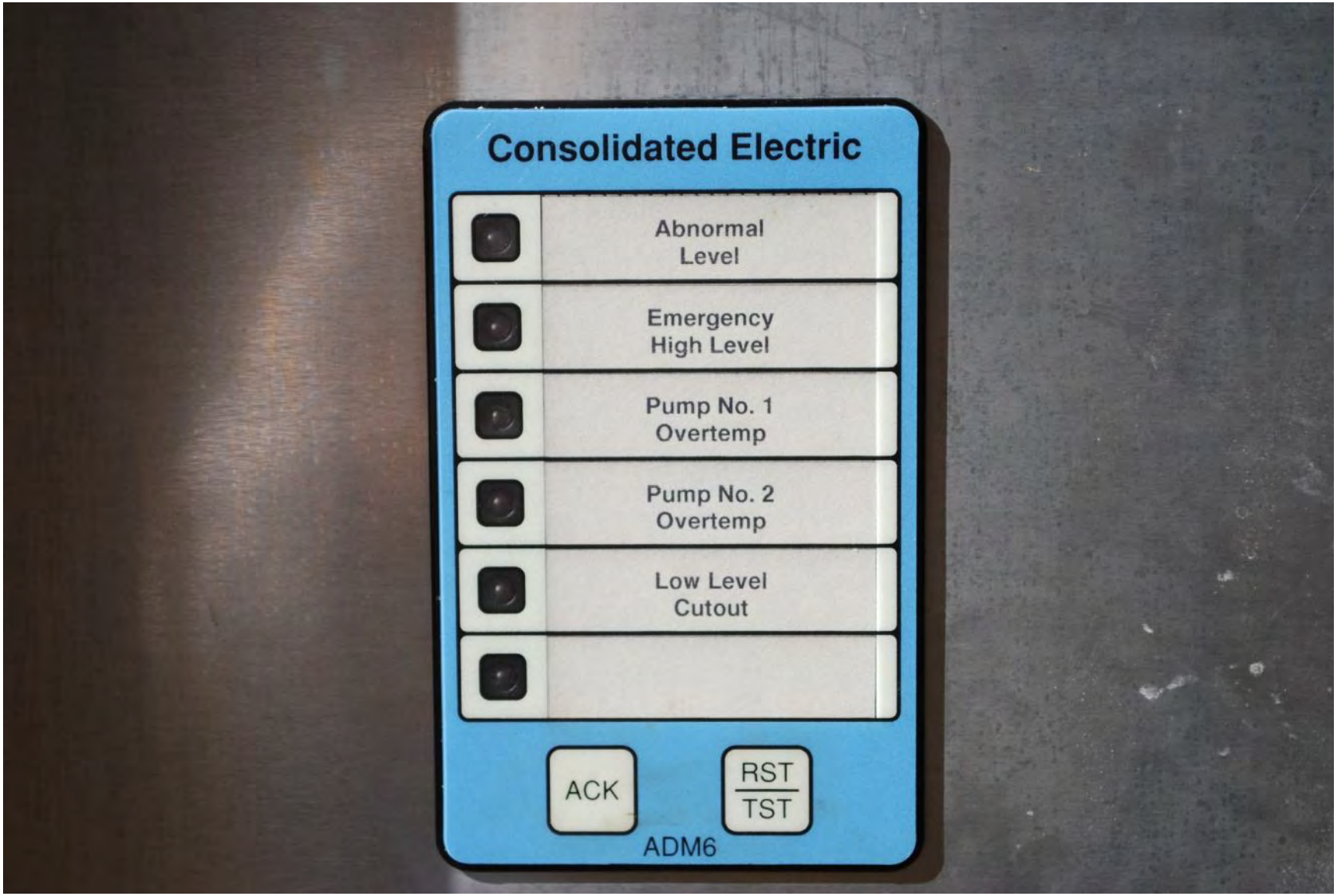
DANGER
CONTROL POWER
CONTROL POWER TRANSFORMER
CONTROLLER
OSFiber
RESET
RESET

DANGER
Disconnect all sources of power before opening door. (Multiple and/or remote sources of power may be present.)
Hazardous voltages cause severe injury or death.
CONTROL POWER TRANSFORMER
PUMP NO. 1
PUMP NO. 2
CONTROL POWER
ON
OFF
D152 CONTROLLER
LEVEL IN FEET
LEAD PUMP
LAG PUMP
LOW ALARM
HIGH ALARM
Consolidated Electric

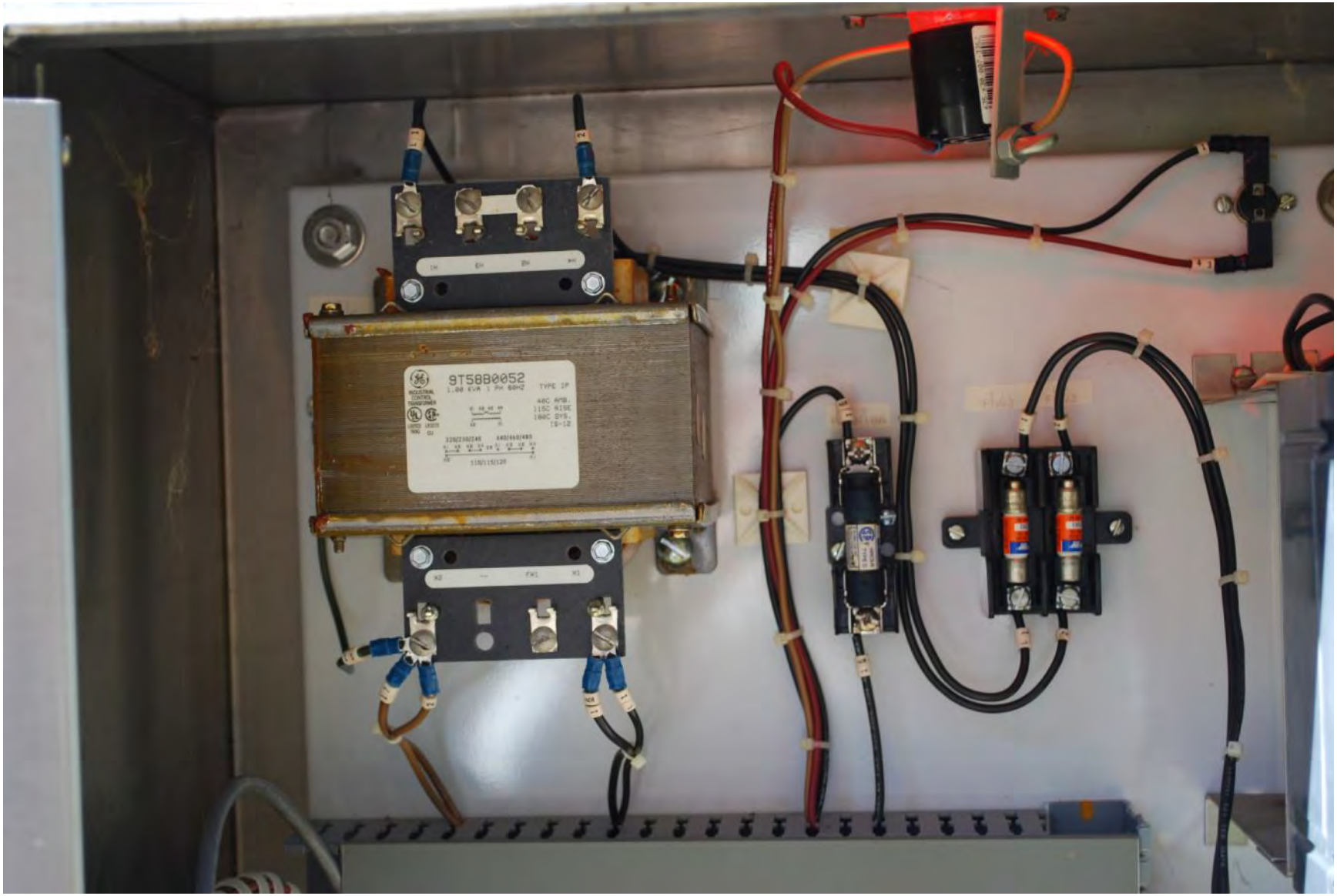
D152 CONTROLLER
LEVEL IN FEET
LEAD PUMP
LAG PUMP
LOW ALARM
HIGH ALARM
MAN LEVEL SIMULATOR
AUTO ALTERNATOR CONTROL SWITCH
AUDIBLE ALARM SILENCE
USFilter
Consolidated Electric
LOW LEVEL CUTOUT RESTORE
RUNNING
SEAL FAILURE
PUMP NO. 1
HAND-OFF-AUTO
O.T. RESET
RUNNING
SEAL FAILURE
PUMP NO. 2
HAND-OFF-AUTO
O.T. RESET

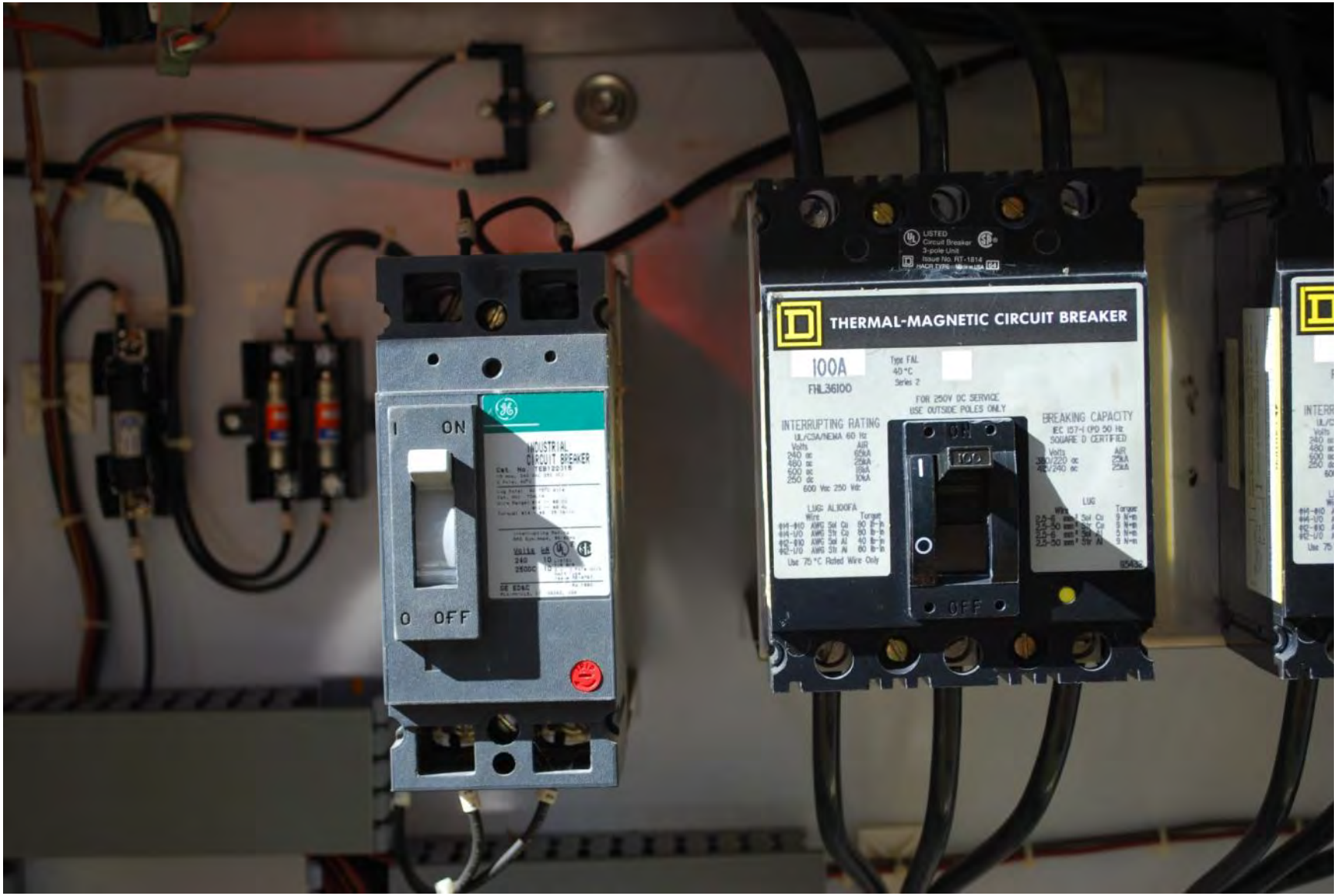

USFilter
Consolidated Electric
Abnormal Level
Emergency High Level
Pump No. 1 Overtemp
Pump No. 2 Overtemp
Low Level Cutout
ACK
RST TST
ADM6
RESET
RESET

CB1T CONTROLLER
ASSY. 601280-01
PUMP CONTROL PLUS
ALARM OR HIGH ALARM
WITH TIMED – OFF
REDUNDANT CONTROL
120 VAC POWER
8 VDC SENSOR CIRCUITS
10A/250 VAC CONTACTS
CONTROL
CONTACTS
LEVEL SENSOR LEDS
HIGH LEVEL
MONITOR/
ALARM
CONTROL
TURN
ON
CONTROL
HOLD
4
3
5
2
0
1
OFF –
DELAY
TIMING
ADJUST
CONSOLIDATED ELECTRIC

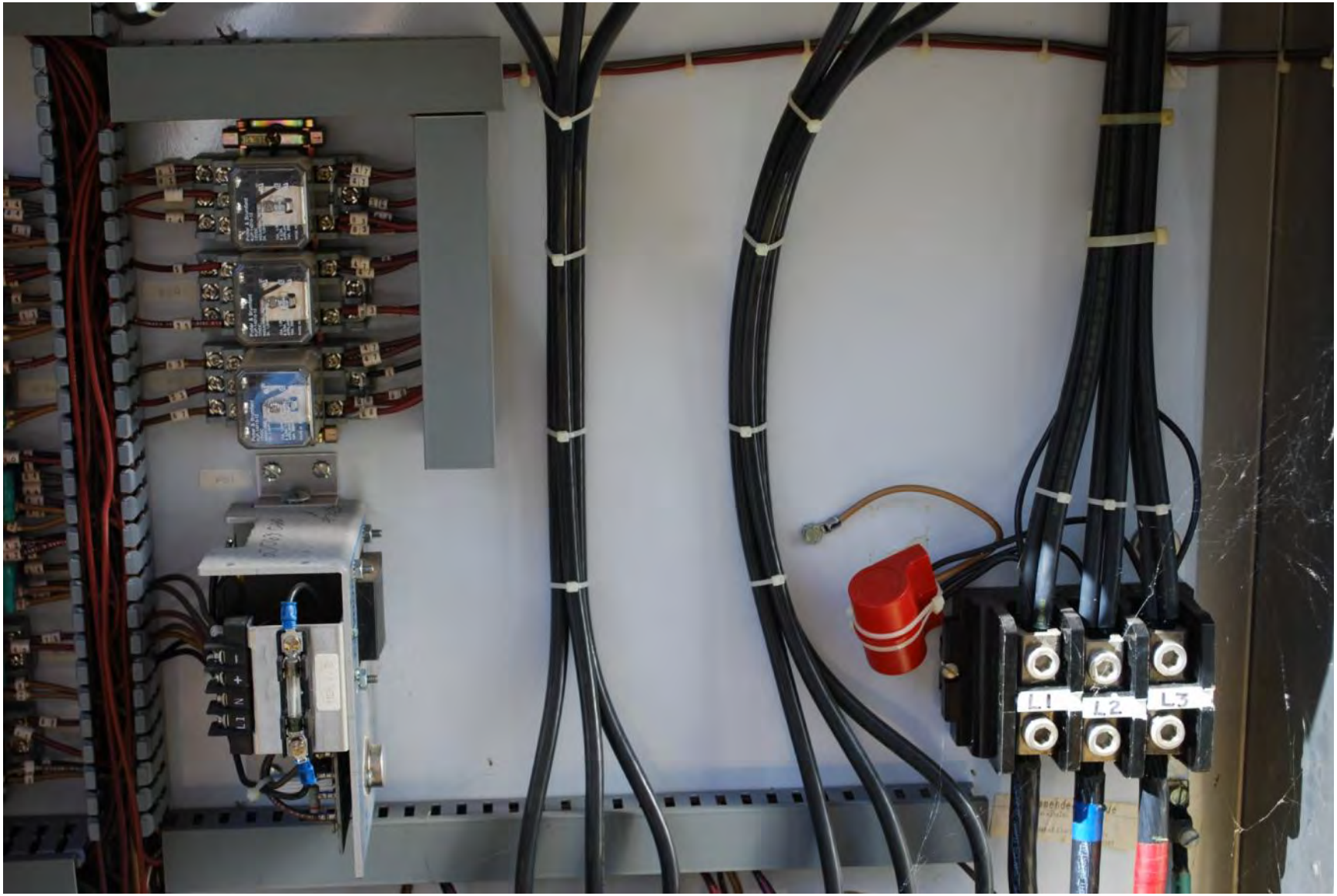

Consolidated Electric
Abnormal Level
Emergency High Level
Pump No. 1 Overtemp
Pump No. 2 Overtemp
Low Level Cutout
ACK
RST
TST
ADM6

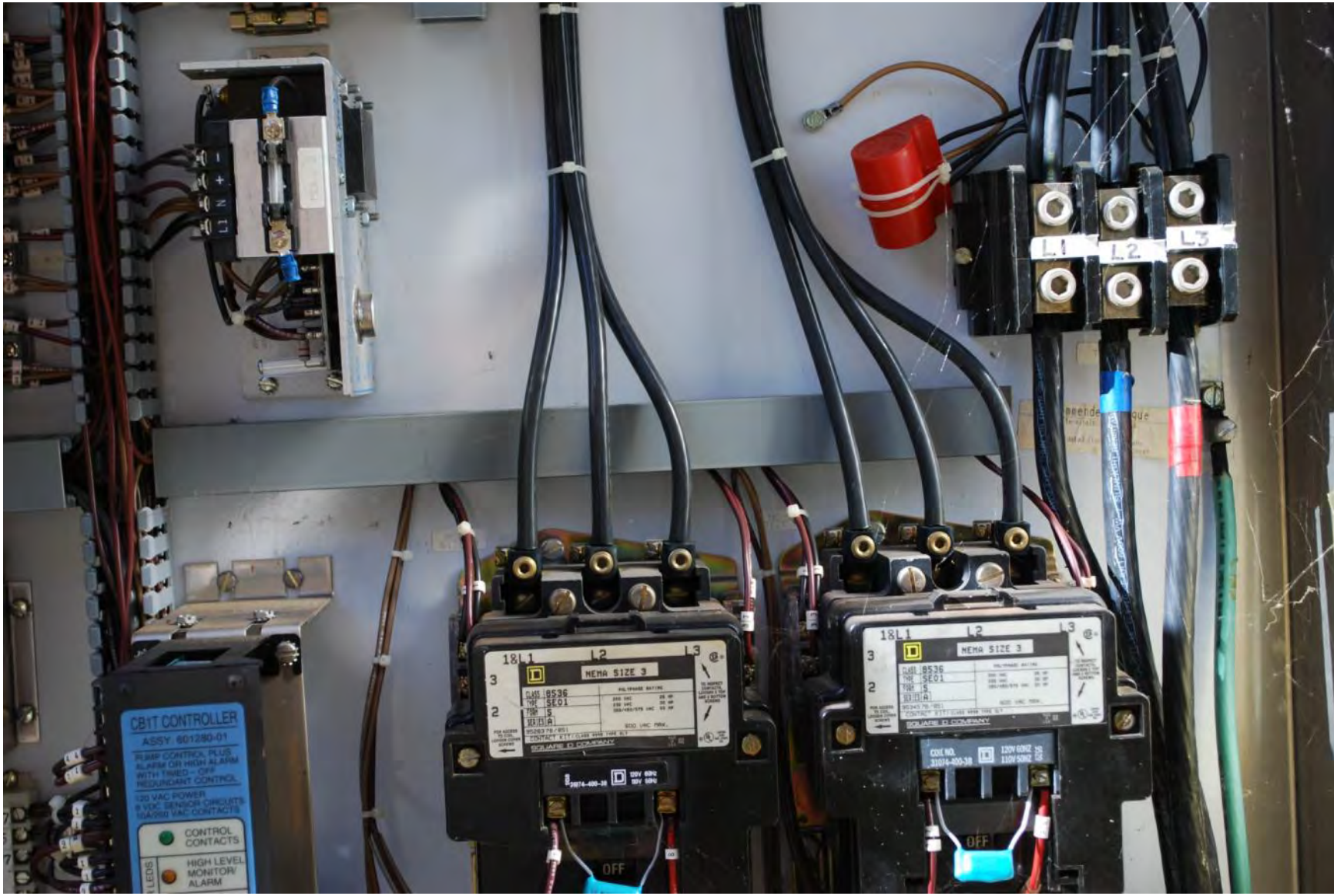
D152 CONTROLLER
LEVEL IN FEET
10
9
8
7
6
5
4
3
2
1
0
LEAD PUMP
LAG PUMP
LOW ALARM
HIGH ALARM
LO
HI
MAN LEVEL SIMULATOR
RAISE
AUTO
LOWER
AUTO ALTERNATOR CONTROL SWITCH
AUTO
1 – 2
2 – 1
AUDIBLE ALARM SILENCE
USFilter

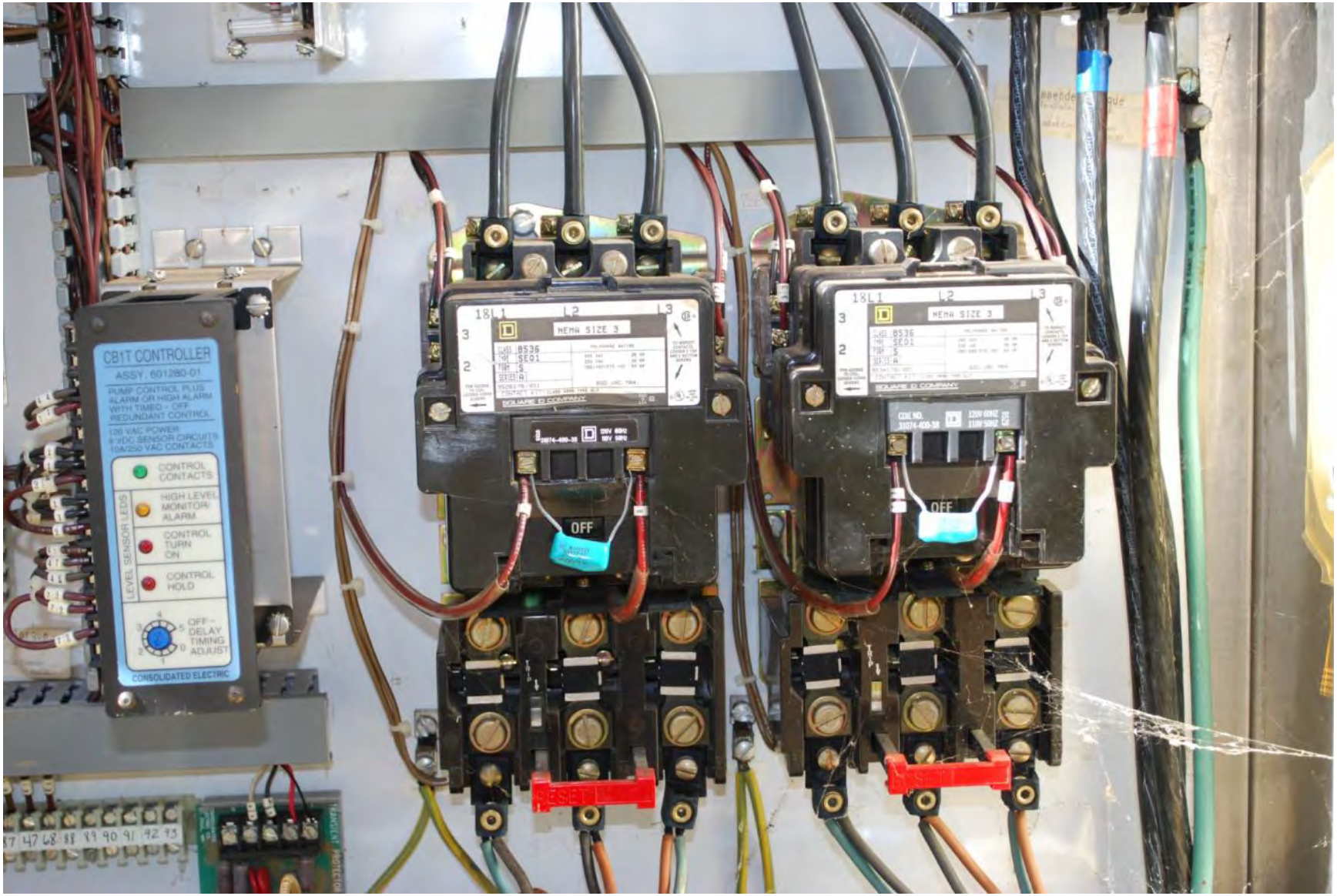

9T58B0052


THERMAL-MAGNETIC CIRCUIT BREAKER
100A
FHL36100
INTERRUPTING RATING
BREAKING CAPACITY
I ON
O OFF
INDUSTRIAL
CIRCUIT BREAKER

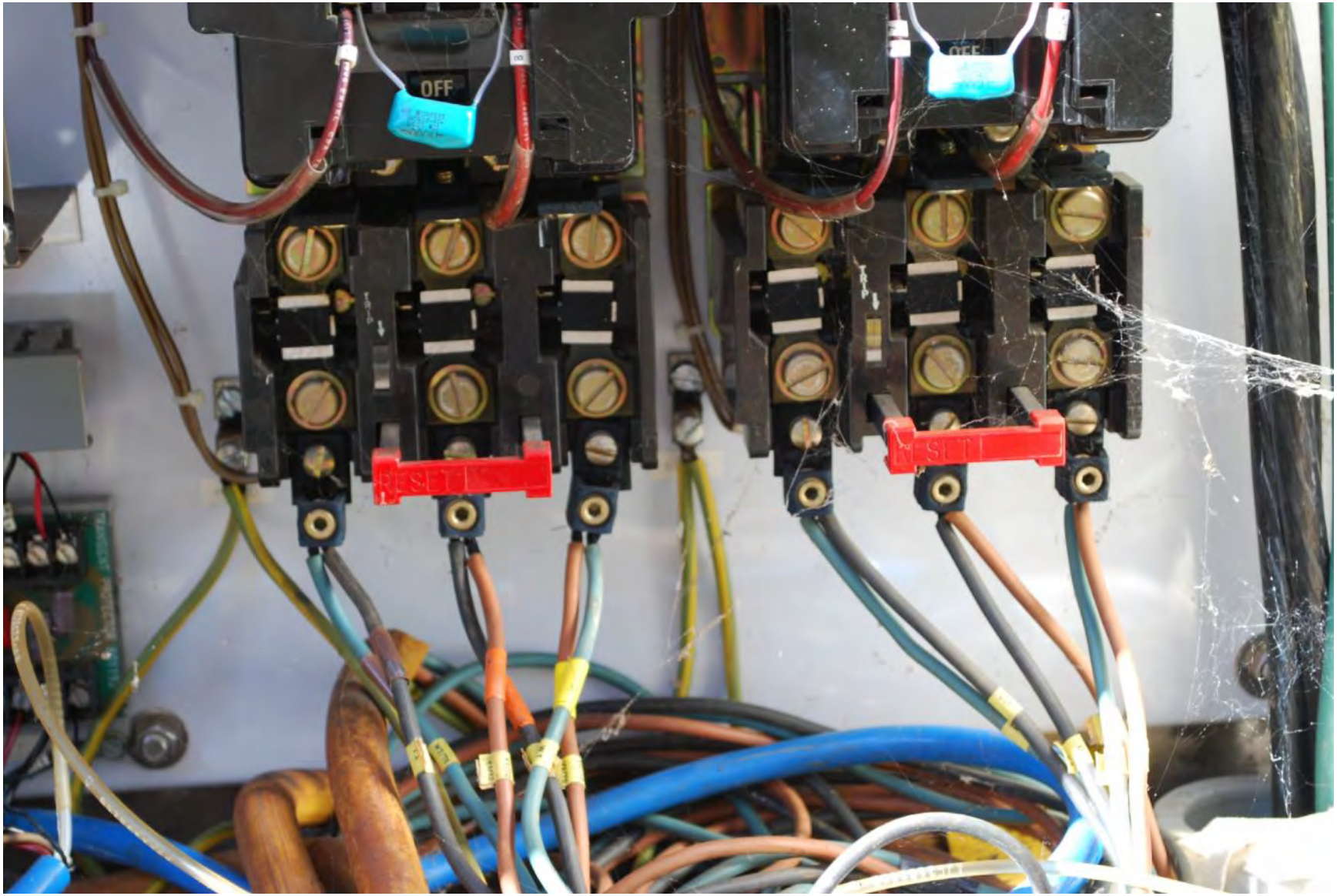
THERMAL-MAGNETIC CIRCUIT BREAKER
100A
FHL36100
INTERRUPTING RATING
BREAKING CAPACITY
ON
OFF
THERMAL-MAGNETIC CIRCUIT BREAKER
100A
FHL36100
INTERRUPTING RATING
BREAKING CAPACITY
ON
OFF

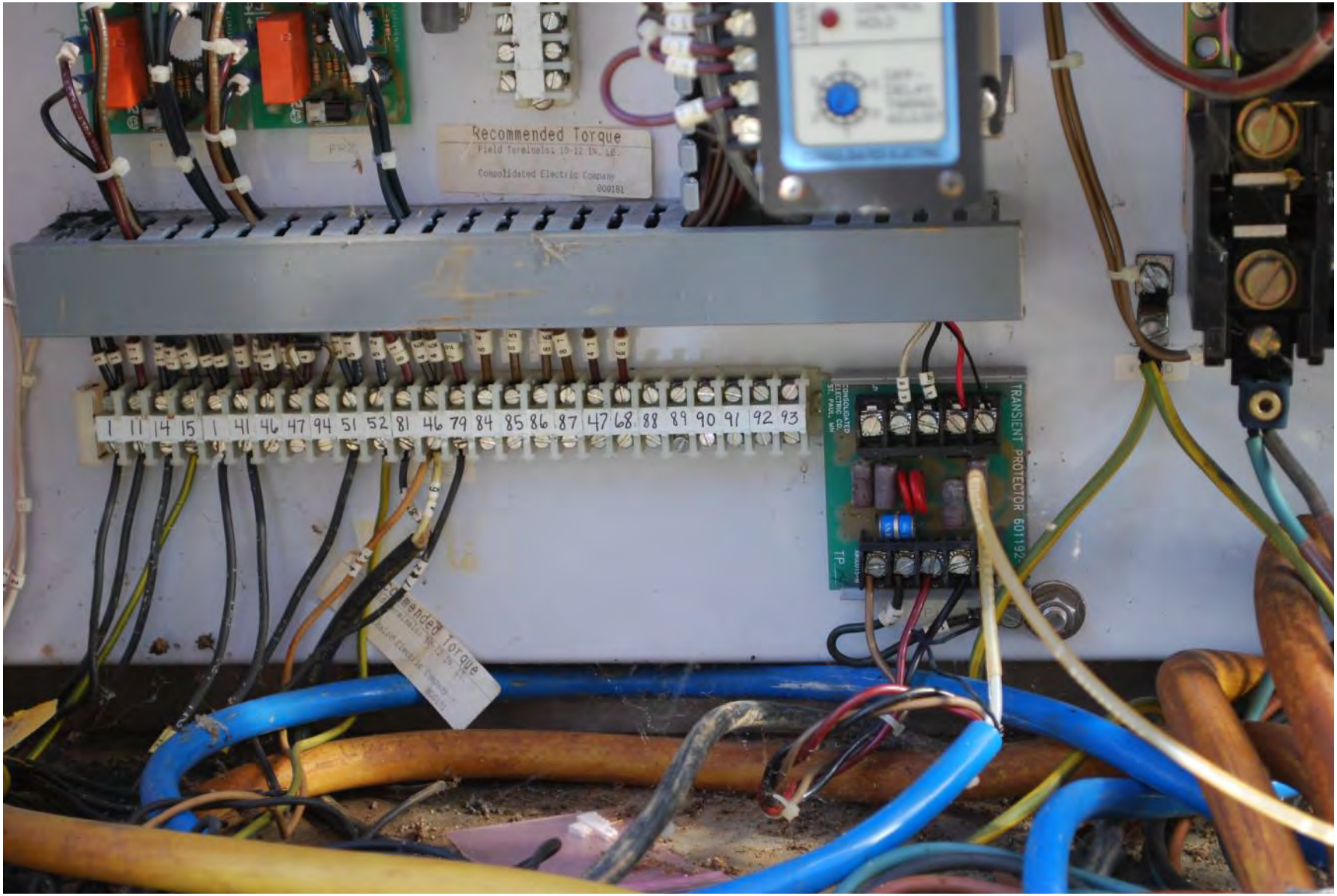

L1
L2
L3


CB1T CONTROLLER
ASSY. 601280-01
CONTROL CONTACTS
HIGH LEVEL MONITOR/ ALARM
L1
L2
L3
NEMA SIZE 3
OFF

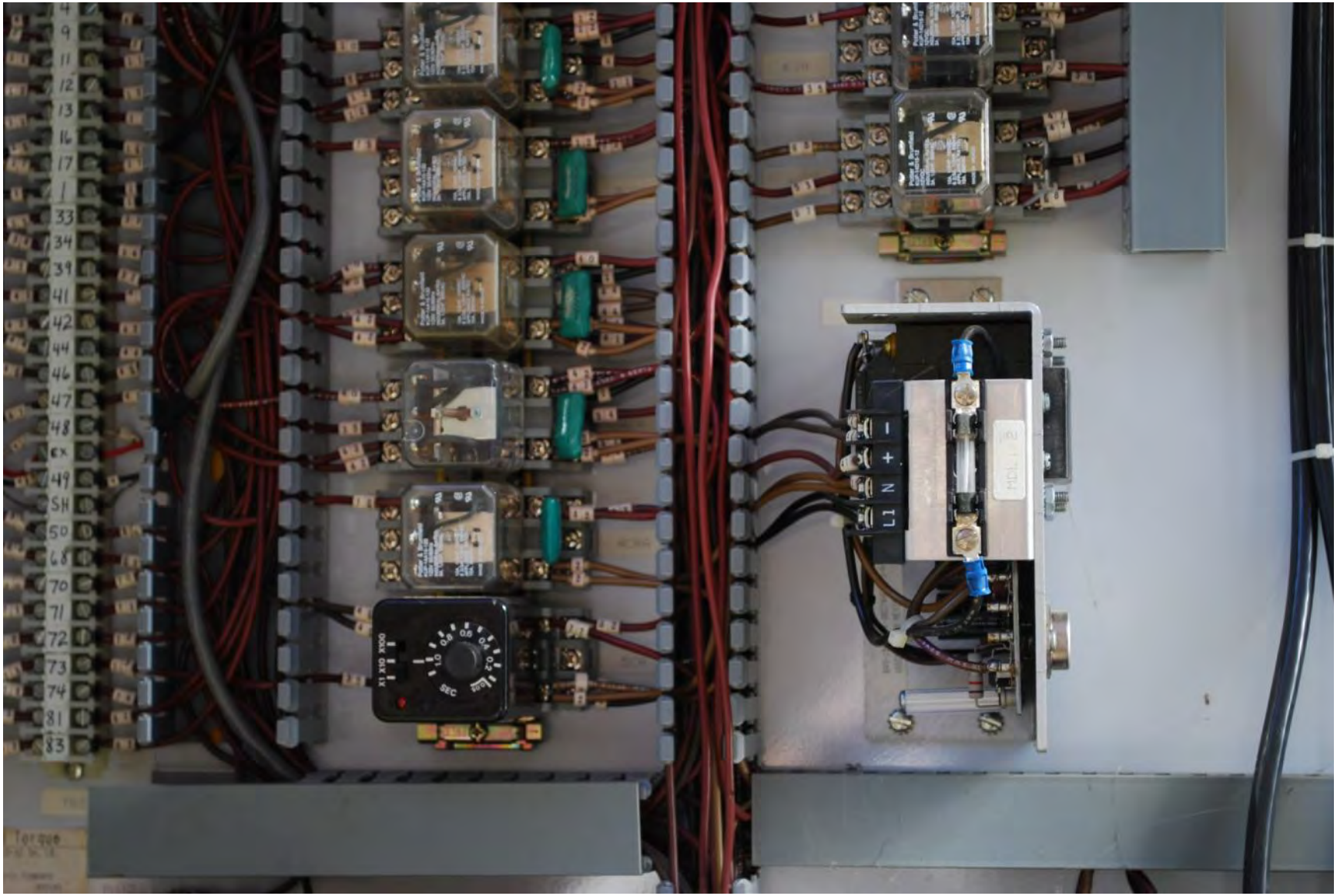

CB1T CONTROLLER
ASSY. 601280-01
PUMP CONTROL PLUS ALARM OR HIGH ALARM WITH TIMED - OFF REDUNDANT CONTROL
120 VAC POWER
24 VDC SENSOR CIRCUITS
10A/250 VAC CONTACTS
CONTROL CONTACTS
LEVEL SENSOR LEDS
HIGH LEVEL MONITOR/ ALARM
CONTROL TURN ON
CONTROL HOLD
OFF - DELAY TIMING ADJUST
CONSOLIDATED ELECTRIC
NEMA SIZE 3
OFF
RESET

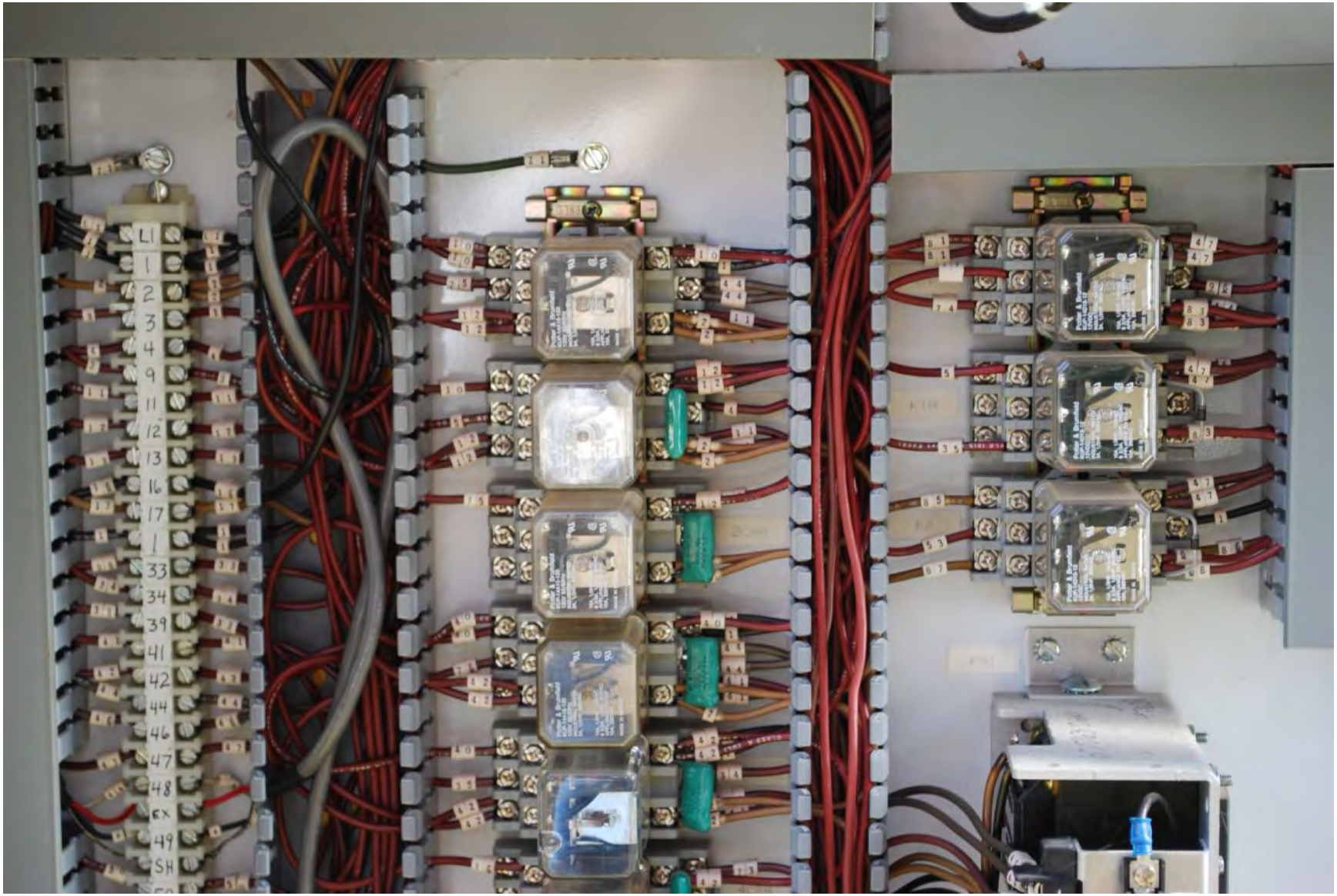
CB1T CONTROLLER
ASSY. 601280-01
PUMP CONTROL PLUS ALARM OR HIGH ALARM WITH TIMED - OFF REDUNDANT CONTROL
120 VAC POWER
8 VDC SENSOR CIRCUITS
10A/250 VAC CONTACTS
CONTROL CONTACTS
LEVEL SENSOR LEDS
HIGH LEVEL MONITOR/ ALARM
CONTROL TURN ON
CONTROL HOLD
OFF - DELAY TIMING ADJUST
CONSOLIDATED ELECTRIC
NEMA SIZE 3
CLASS 8536
TYPE SE01
FORM S
SERIES A
600 VAC MAX.
SQUARE D COMPANY
OFF
COIL NO. 31074-400-38
120V 60HZ
110V 50HZ


OFF
RESET
OFF
RESET

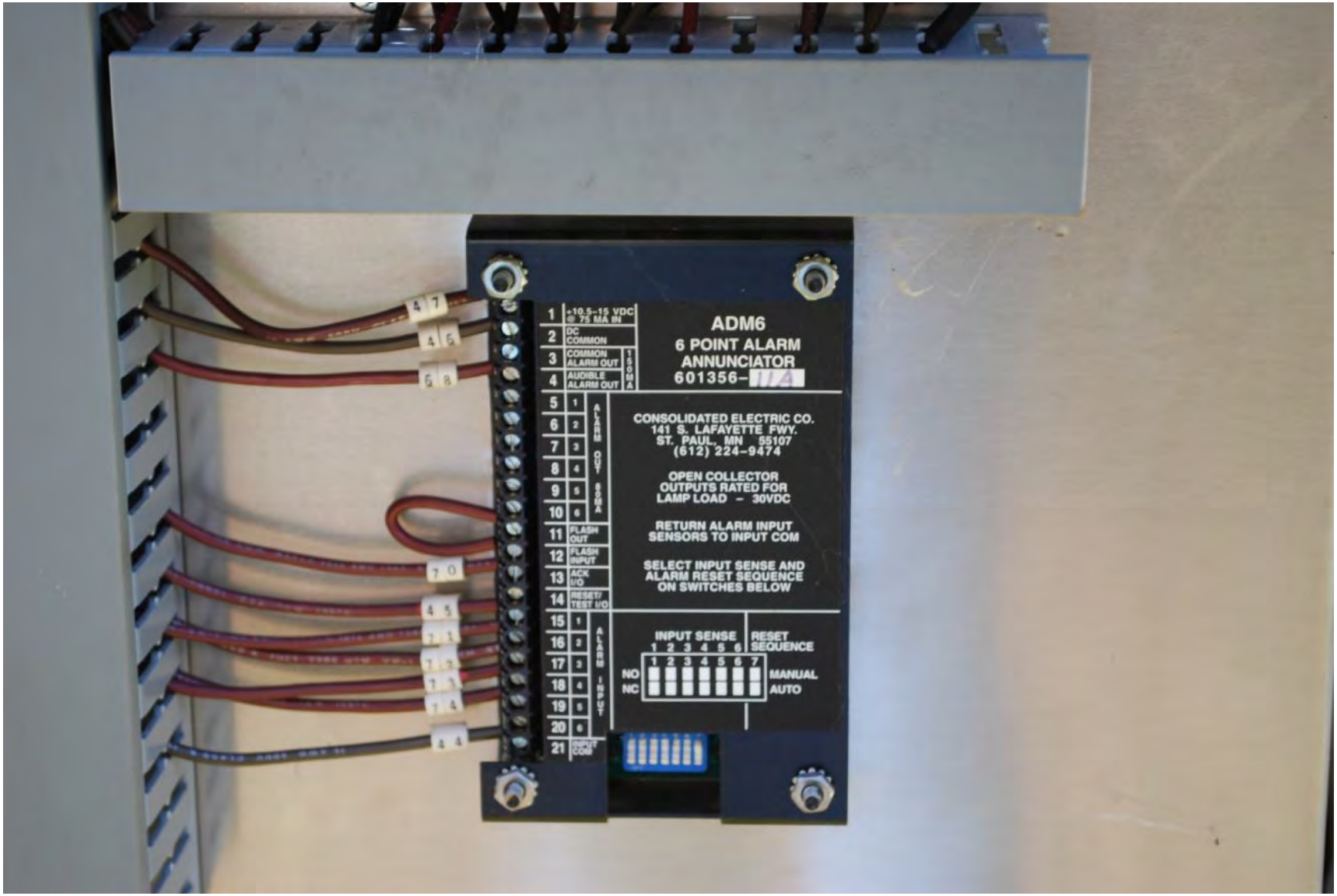

Recommended Torque
Field Terminals: 10-12 IN. LB.
Consolidated Electric Company
1 11 14 15 1 41 46 47 94 51 52 81 46 79 84 85 86 87 47 68 88 89 90 91 92 93
TRANSIENT PROTECTOR 60119

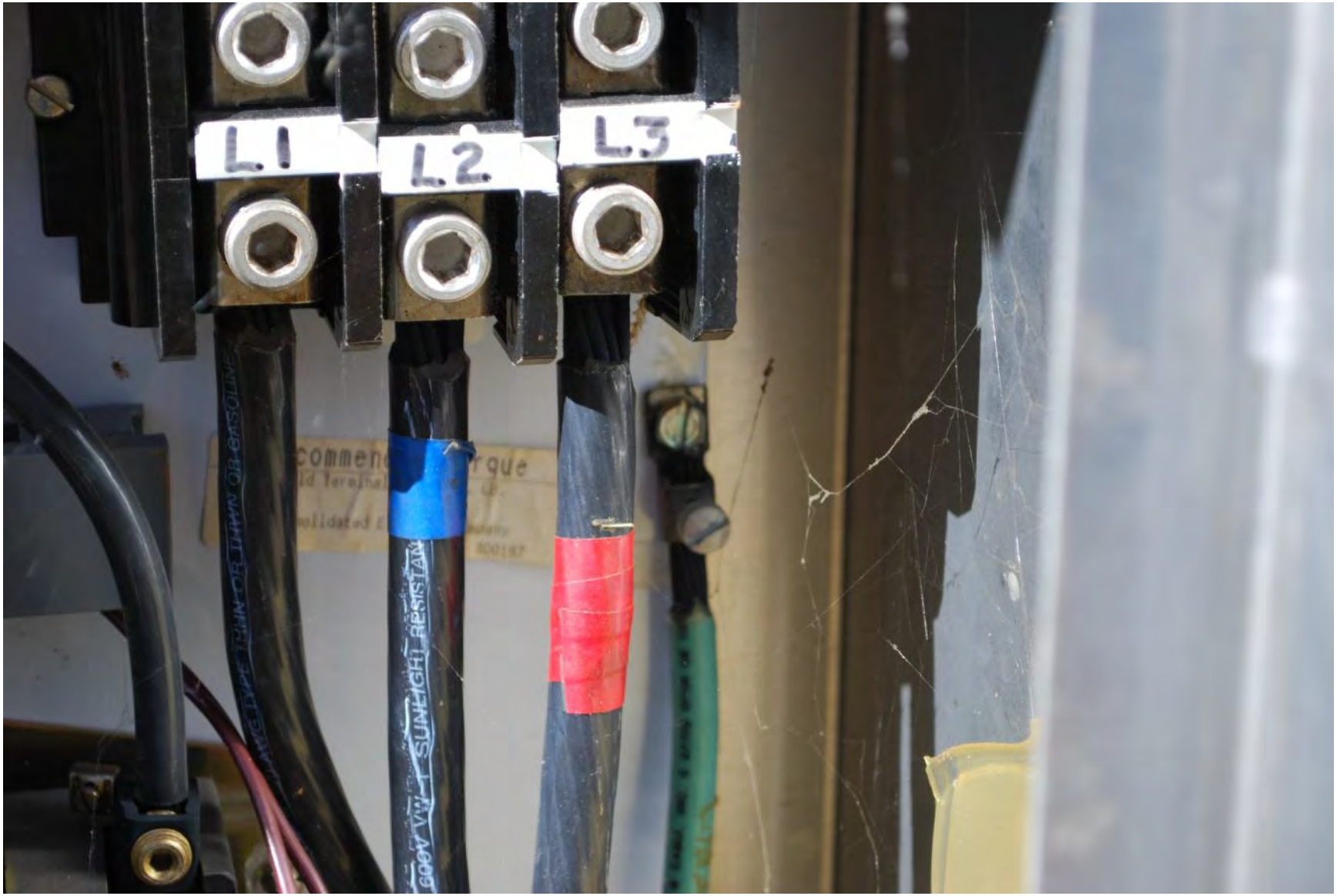
WARNING
CB1T CONTROLLER
ASSY. 601280-01
PUMP CONTROL PLUS
ALARM OR HIGH ALARM
WITH TIMED – OFF
REDUNDANT CONTROL
120 VAC POWER
8 VDC SENSOR CIRCUITS
10A/250 VAC CONTACTS
CONTROL
CONTACTS
LEVEL SENSOR LEDS
HIGH LEVEL
MONITOR/
ALARM
CONTROL
TURN
ON
CONTROL
HOLD
OFF –
DELAY
TIMING
ADJUST
CONSOLIDATED ELECTRIC

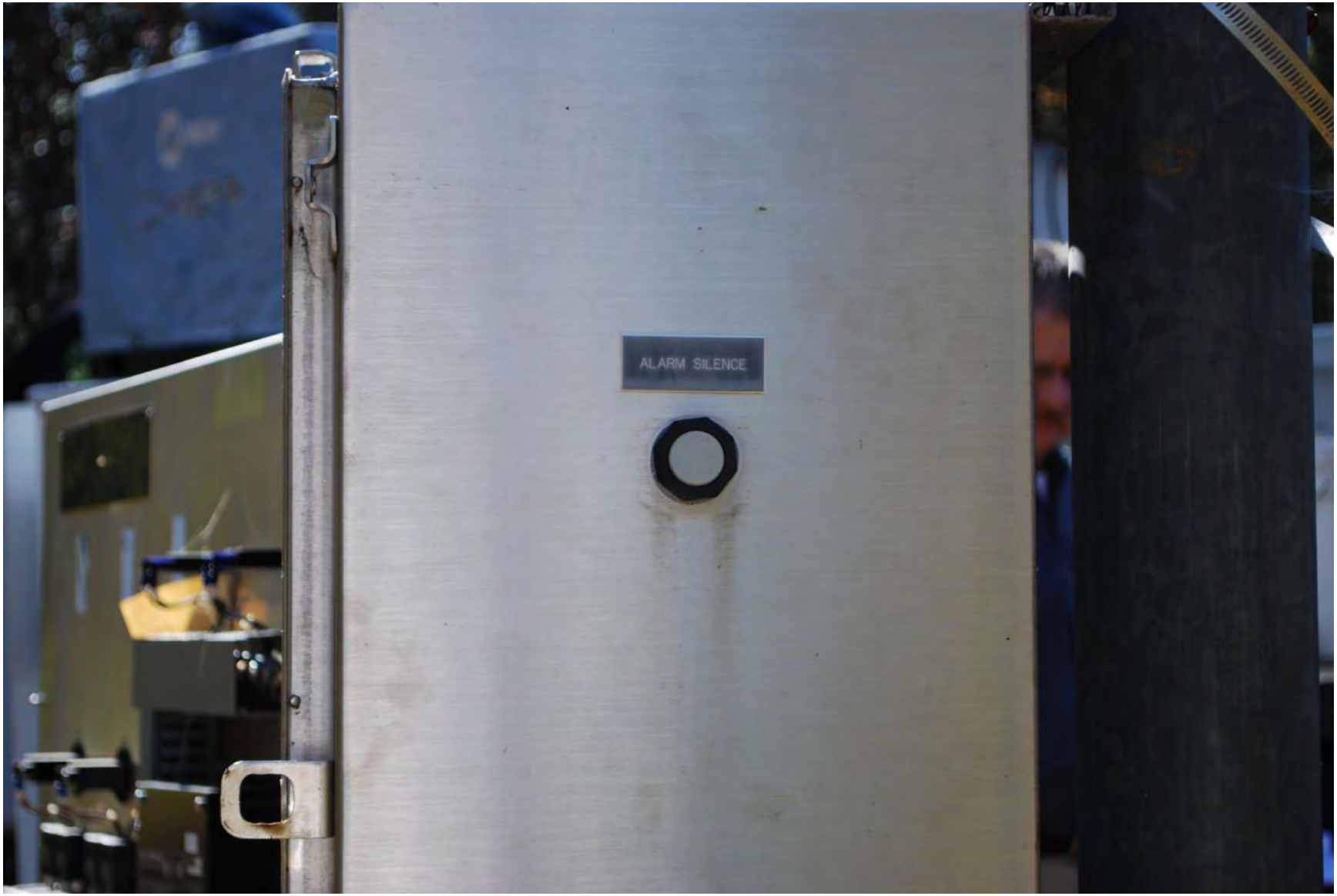

L1
N
+
-

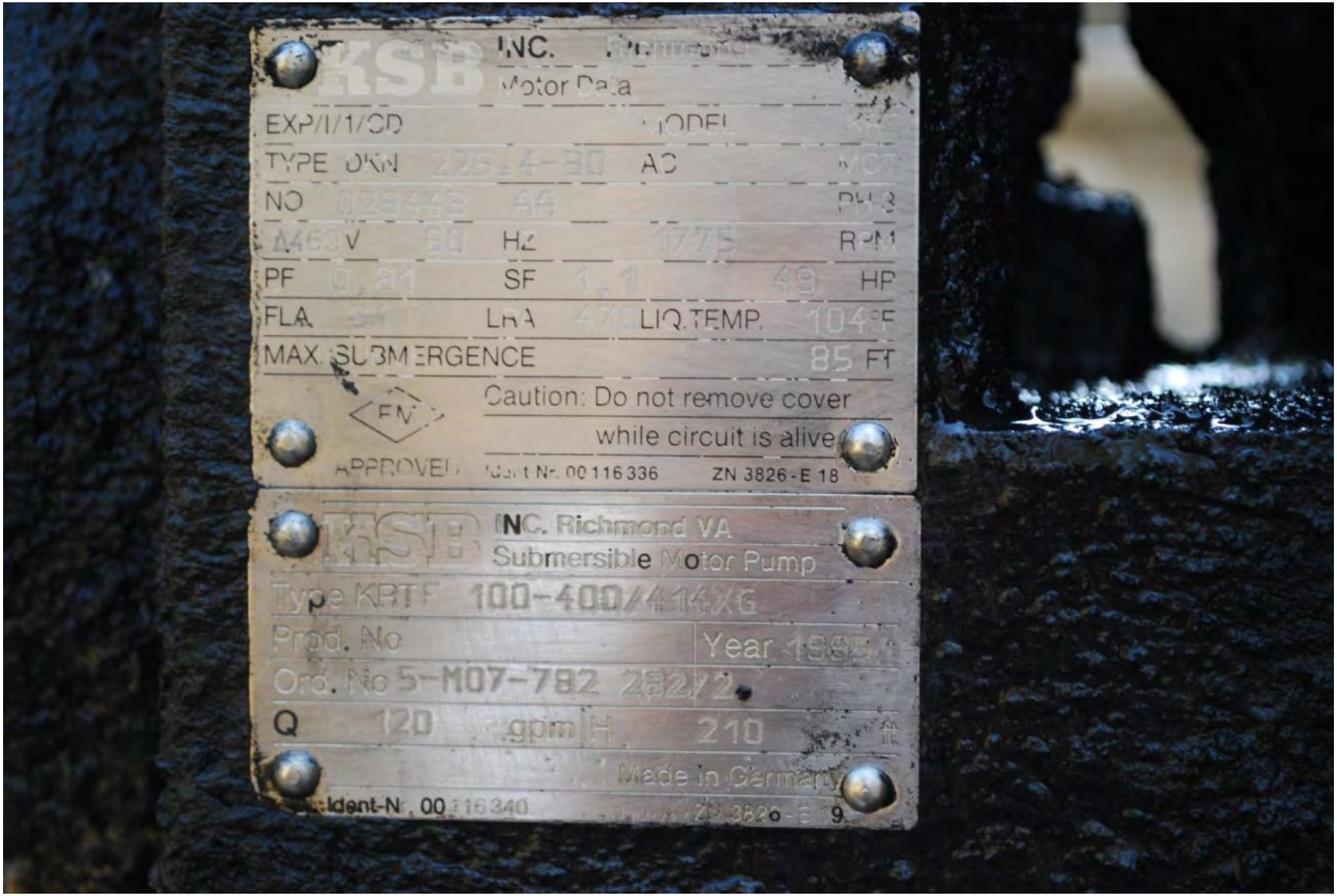

LI
1
2
3
4
9
11
12
13
16
17
1
33
34
39
41
42
44
46
47
48
EX
49
SH

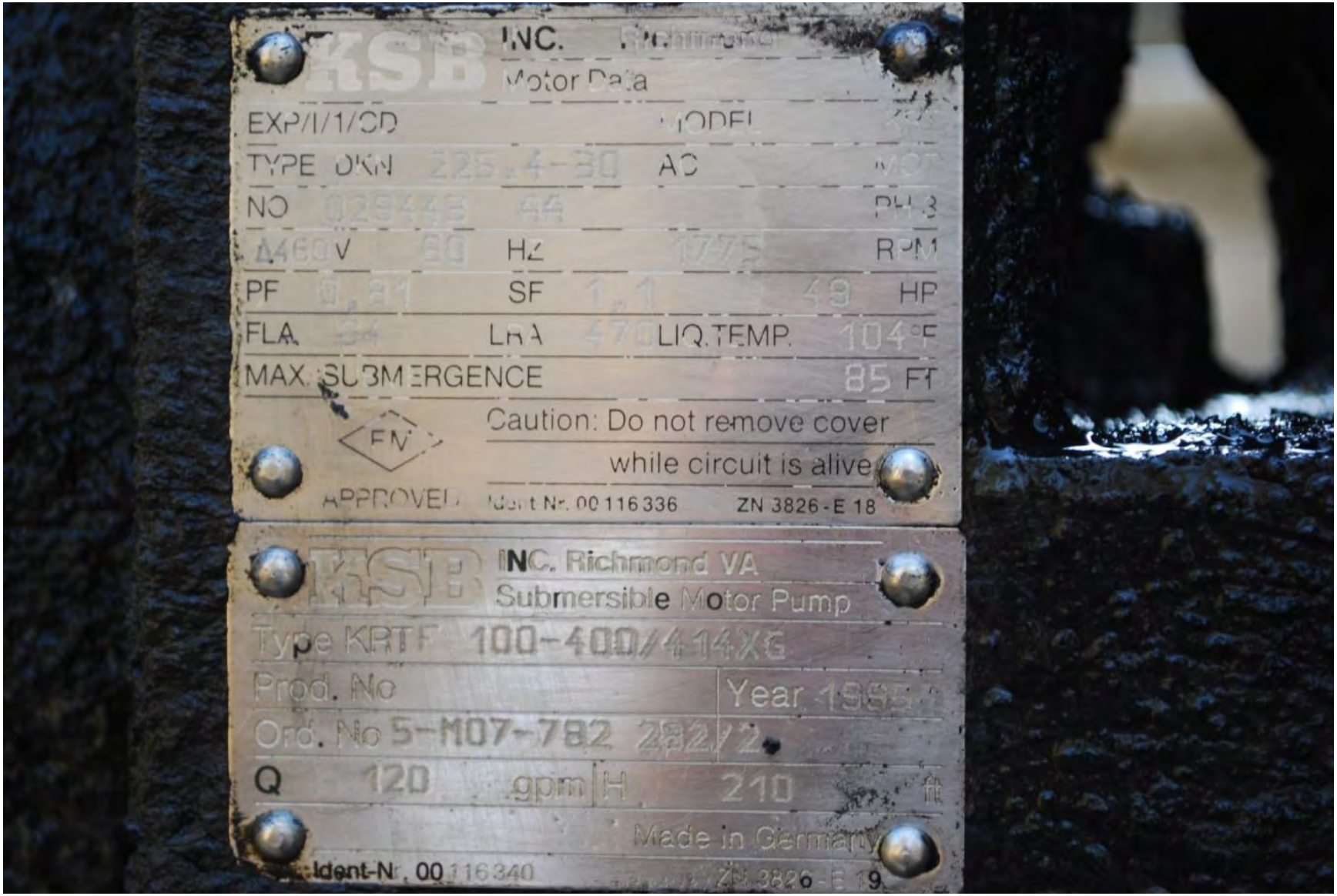
D152 CONTROLLER
USFILTER CONTROL SYSTEMS
LISTED
INDUSTRIAL
CONTROL
EQUIPMENT
92X3
601273-21
S/N S/N 11337
PATENT NO. 4,705,456
FUSE
1/4-AMP
SLO-BLO
TERMINAL TORQUE RATING: 12 IN-LBS MAX
CONTACT RATINGS
GENERAL PURPOSE
PILOT DUTY
10A @ 120VAC
2.88A @ 120VAC
6.67A @ 240VAC
1.96A @ 240VAC
10A @ 30VDC
120VAC
50/60HZ
20VA
PUMP
NO.1
K1
PUMP
NO.2
K2
ALARM
SHOWN IN ENERGIZED/
NORMAL STATE
K3
EXTERNAL SILENCE
EXTERNAL
AUDIBLE DRIVER O.C.
+13.8 VDC OUT
COMMON
TRANSDUCER
CONNECTIONS
SIGNAL IN (WHT)
EXCITATION (RED)
SIGNAL COM (BLK)
L1
N
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16


ADM6
6 POINT ALARM
ANNUNCIATOR
601356-
CONSOLIDATED ELECTRIC CO.
141 S. LAFAYETTE FWY.
ST. PAUL, MN 55107
(612) 224-9474
OPEN COLLECTOR
OUTPUTS RATED FOR
LAMP LOAD - 30VDC
RETURN ALARM INPUT
SENSORS TO INPUT COM
SELECT INPUT SENSE AND
ALARM RESET SEQUENCE
ON SWITCHES BELOW
INPUT SENSE
RESET
SEQUENCE
NO
NC
MANUAL
AUTO


L1
L2
L3


ALARM SILENCE


INC.
Motor Data
EXP/I/1/CD
TYPE
NO
V
Hz
PF
SF
HP
FLA
LRA
LIQ.TEMP.
MAX. SUBMERGENCE
85 FT
Caution: Do not remove cover
while circuit is alive
APPROVED
ZN 3826-E 18
INC. Richmond VA
Submersible Motor Pump
Type KRTF 100-400/414X6
Prod. No
Year
Ord. No 5-M07-782
Q 120 gpm
H 210
Made in Germany
ZN 3826-E 9


INC.
Motor Data
EXP/I/1/CD
TYPE DKN
NO
V
Hz
PF
SF
HP
FLA
LRA
LIQ.TEMP.
MAX. SUBMERGENCE
85 FT
Caution: Do not remove cover
while circuit is alive
APPROVED
Ident Nr. 00 116 336
ZN 3826 - E 18
INC. Richmond VA
Submersible Motor Pump
Type KRTF 100-400/414XG
Prod. No
Year
Ord. No 5-M07-782
Q 120 gpm
H 210
Made in Germany
Ident-Nr. 00 116 340
ZN 3826 - E 19

Caution Do not remove cover
while circuit is alive
Richmond VA
Submersible Motor Pump
Year 1995
210
Made in Germany

INC.
Motor Data
MODEL
TYPE DKW 225.4-30 AC
NO 029443 AA
460V 60 Hz 1775 RPM
PF 0,81 SF 1,1 49 HP
FLA 64 LRA 470 LIQ.TEMP. 104 F
MAX SUBMERGENCE 85 FT
Caution: Do not remove cover
while circuit is alive
APPROVED Ident-Nr. 00116336 ZN 3826 - E 18
KSB
INC. Richmond VA
Submersible Motor Pump
Type KRTF 100-400/414XG
Prod. No
Year 1985
Ord. No 5-M07-782 282/2
Q 120 gpm H 210 ft
Made in Germany
Ident-Nr. 00116340
ZN 3826 - E 19

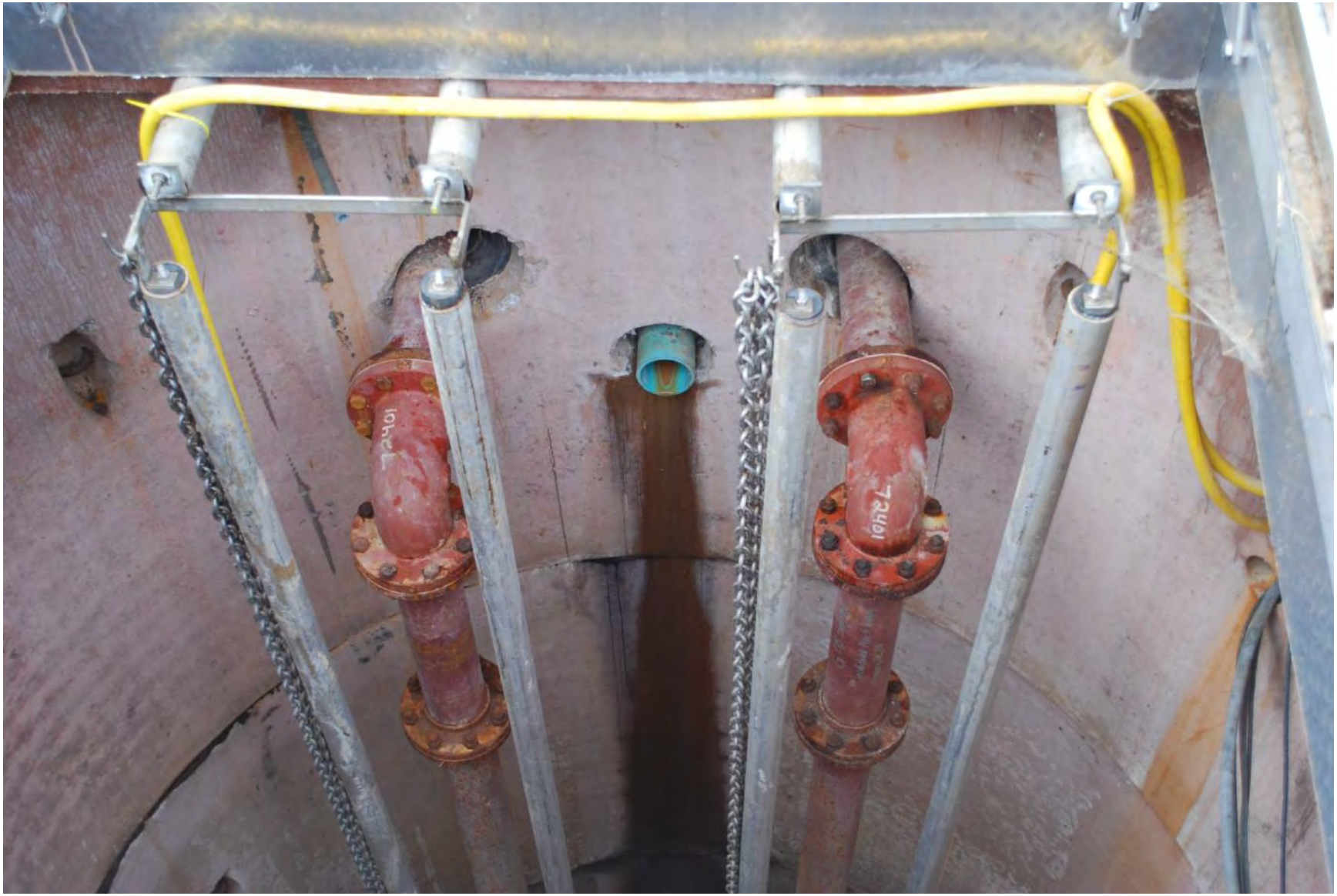
INC.
Motor Data
MODEL
AC
HZ
SF 1,1
1775
RPM
LHA 470
LIQ.TEMP. 49
HP
104 F
85 Ft
Caution: Do not remove cover
while circuit is alive
ZN 3826-E 18

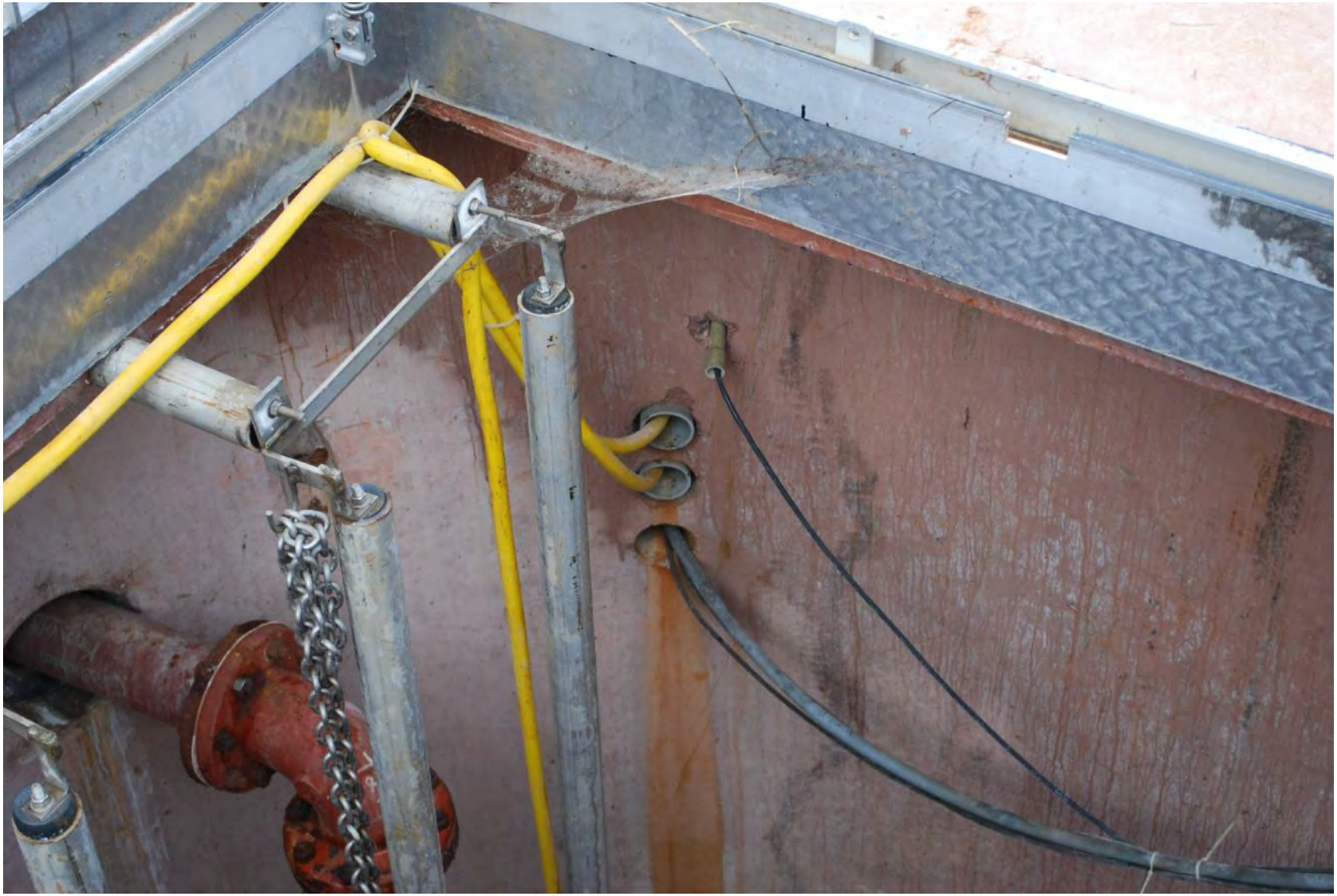
KSB
INC.
Motor Date
TYPE DKN 225.4-30
NO 029442 A9
460 V 60 HZ 1775
PF SF
FLA LRA
MAX SUBMERGENCE 85
Caution: Do not remove cover
APPROVED
KSB
INC. Richmond VA
Submersible Motor Pump
Type KRTF 100-100/414XG
Prod. No
1995
210

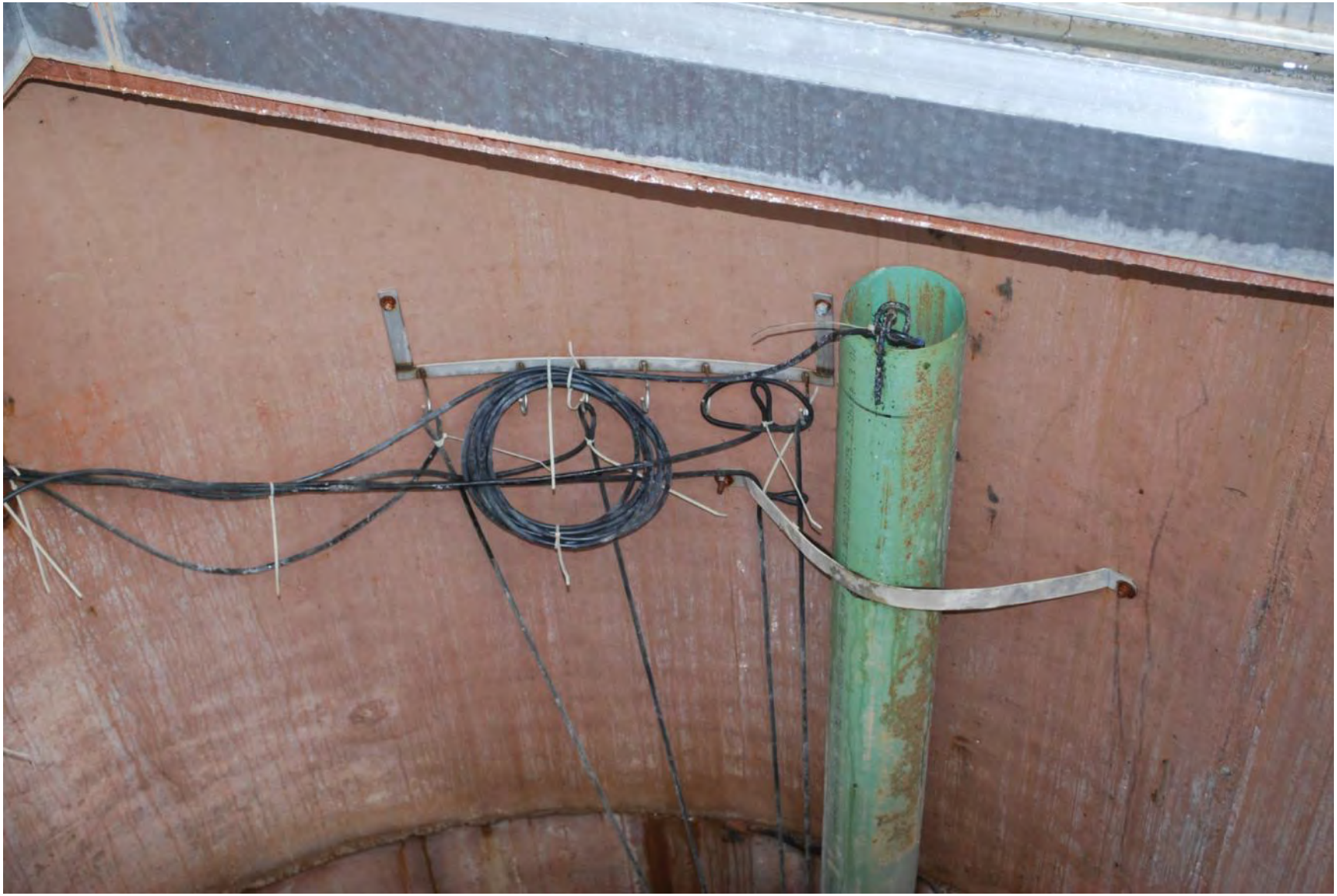
ON
100
TRIPPED
RESET
OFF

DANGER
MILBANK

40
35
30
25
AIRFLOW
AIRFLOW
PURAFIL, INC.
S.O. No.
Serial No.
PURAFIL, INC./Atlanta, GA/U.S.A.
1-800-222-6367
WARNING
THIS EQUIPMENT CONTAINS PURAFIL® MEDIA AND FILTERS. THE USE OF ANY OTHER MEDIAS OR FILTERS, NOT MANUFACTURED OR SOLD BY PURAFIL, INC. WILL ADVERSELY AFFECT THE PERFORMANCE OF THIS EQUIPMENT, AND WILL NULLIFY ALL WARRANTIES EXPRESSED OR IMPLIED BY THE MANUFACTURER.
PURAFIL, INC.
Atlanta, GA 30091
1-800-222-6367
DO NOT REMOVE LABEL FROM THIS EQUIPMENT



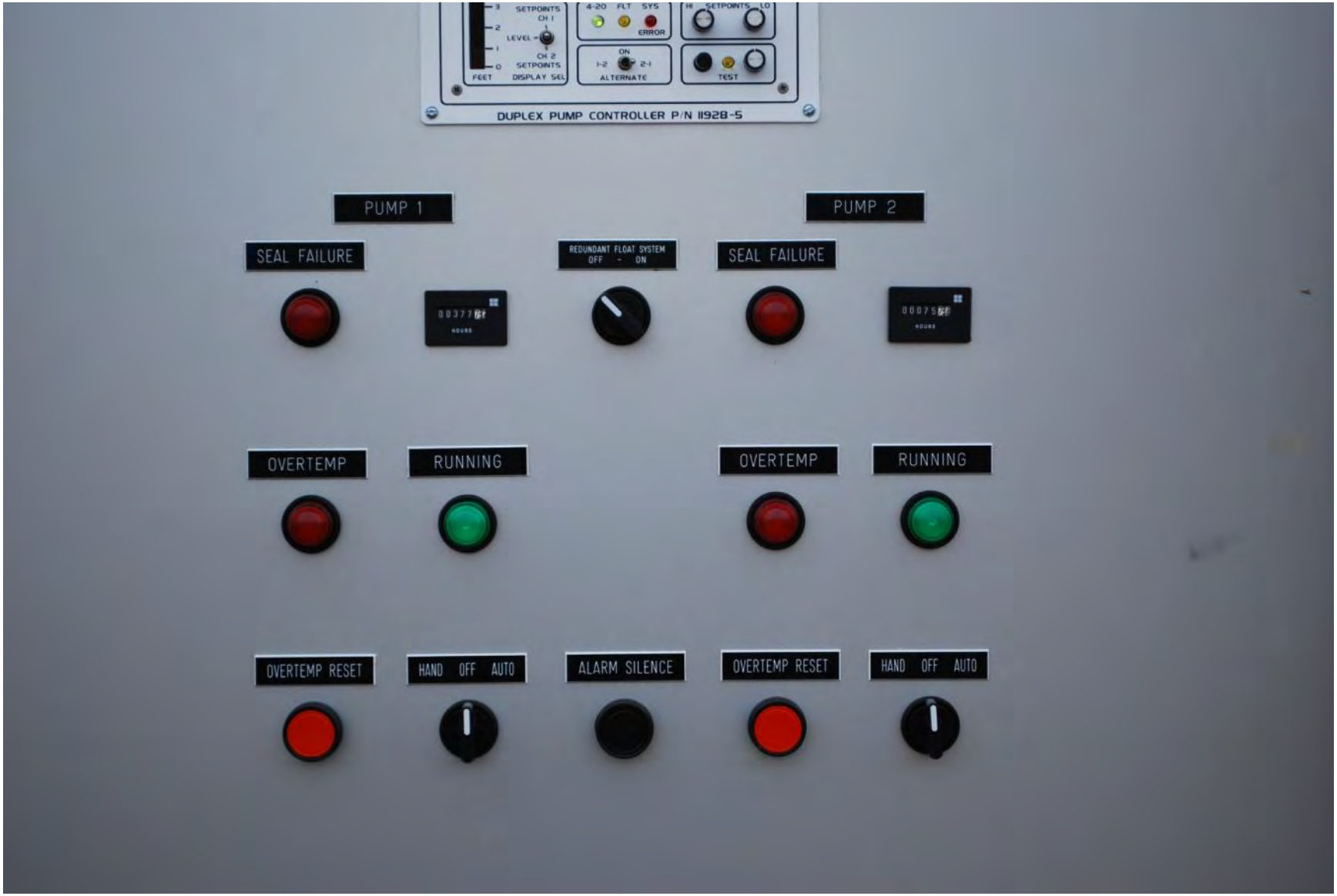




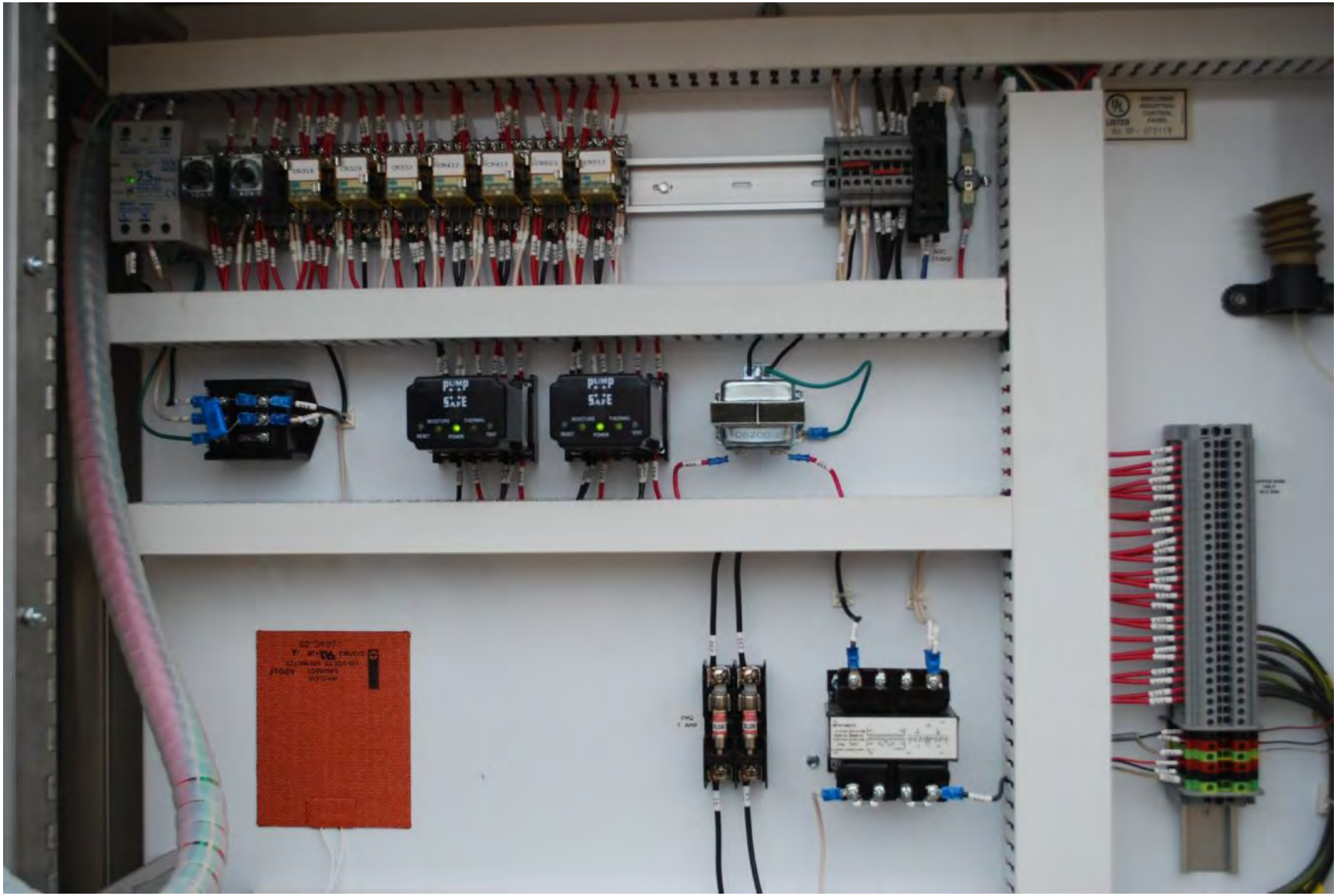
HEALY-RUFF

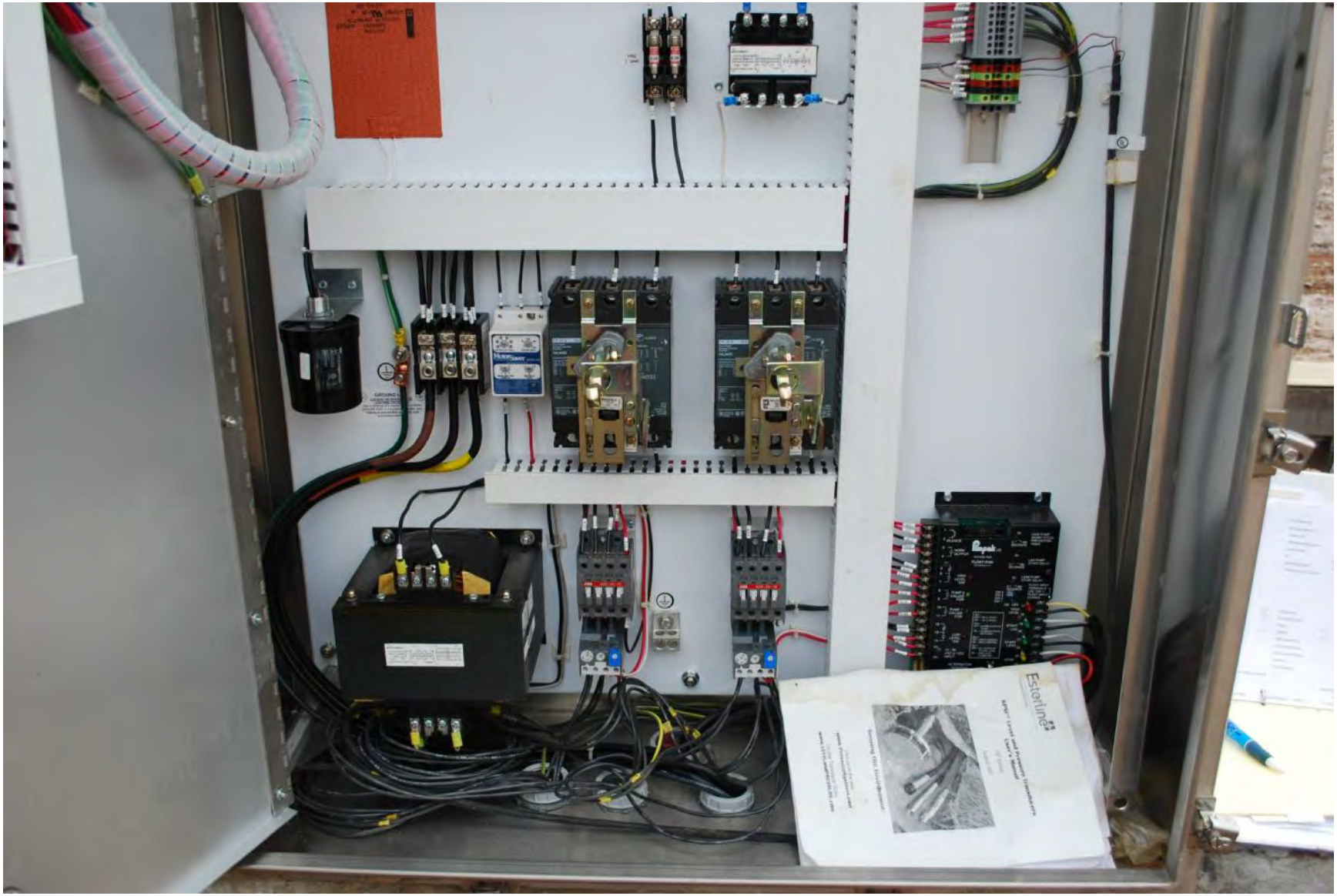
HEALY-RUFF

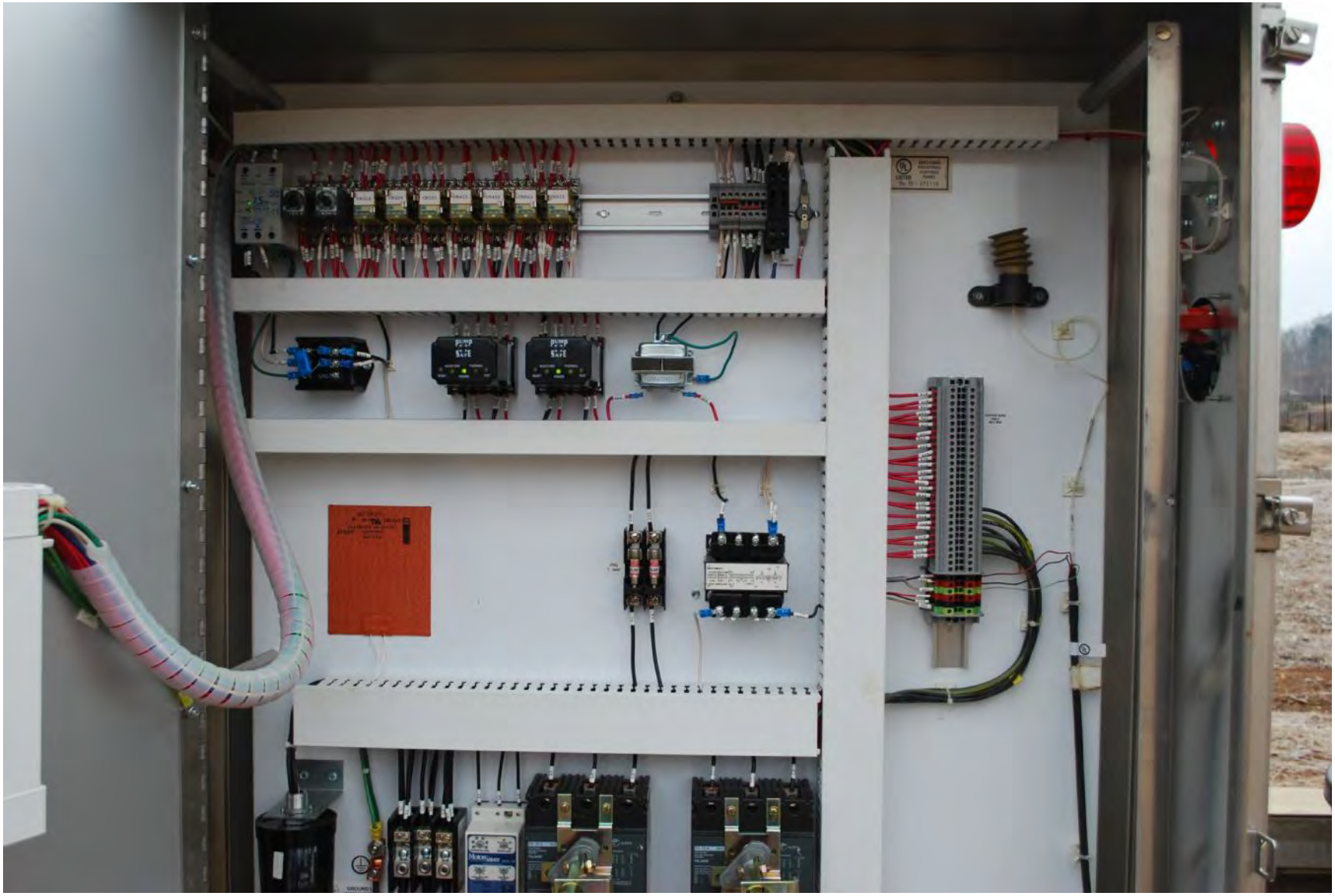
DIGITAL CONTROL CORPORATION
P1
P2
DISABLE
FLOATS
LAG
HIGH
OFF
LOW
LEAD
RESET
MUTE
SEL
CH1
CH2
HI
LO
ALARM
10
9
8
7
6
5
4
3
2
1
0
FEET
SETPOINTS
CH 1
LEVEL
CH 2
SETPOINTS
DISPLAY SEL
4-20
FLT
SYS
ERROR
ON
1-2
2-1
ALTERNATE
SETPOINTS
TEST
DUPLEX PUMP CONTROLLER P/N 11928-5
PUMP 1
PUMP 2
SEAL FAILURE
REDUNDANT FLOAT SYSTEM
OFF - ON
SEAL FAILURE

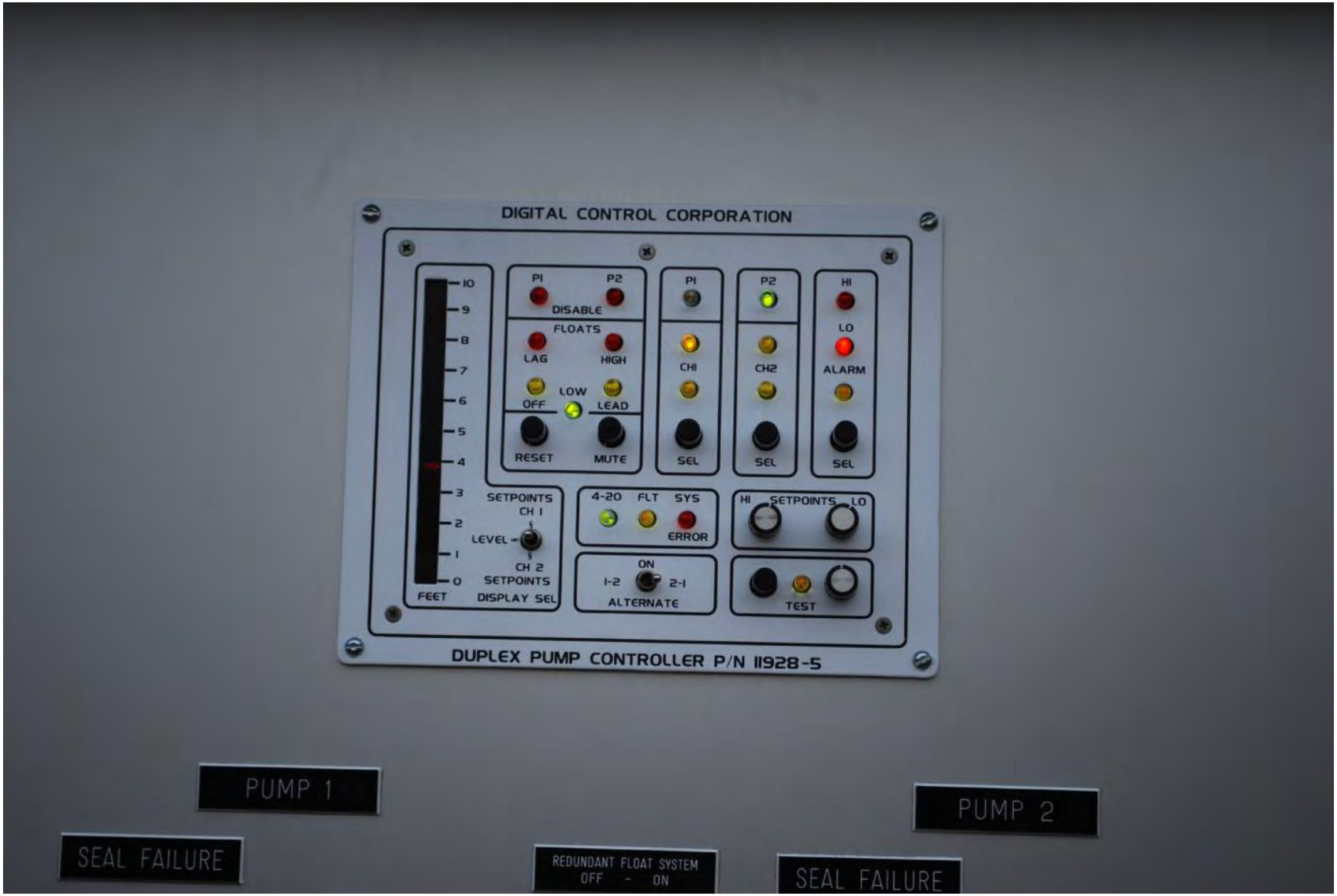

DUPLEX PUMP CONTROLLER P/N 11928-5
PUMP 1
PUMP 2
SEAL FAILURE
REDUNDANT FLOAT SYSTEM
OFF - ON
SEAL FAILURE
OVERTEMP
RUNNING
OVERTEMP
RUNNING
OVERTEMP RESET
HAND OFF AUTO
ALARM SILENCE
OVERTEMP RESET
HAND OFF AUTO

OVERTEMP RESET
HAND OFF AUTO
ALARM SILENCE
OVERTEMP RESET
HAND OFF AUTO
PUMP 1
PUMP 2
CONTROL POWER
GFI POWER
15A CONVENIENCE RECEPTACLE


pump
SAFE
pump
SAFE

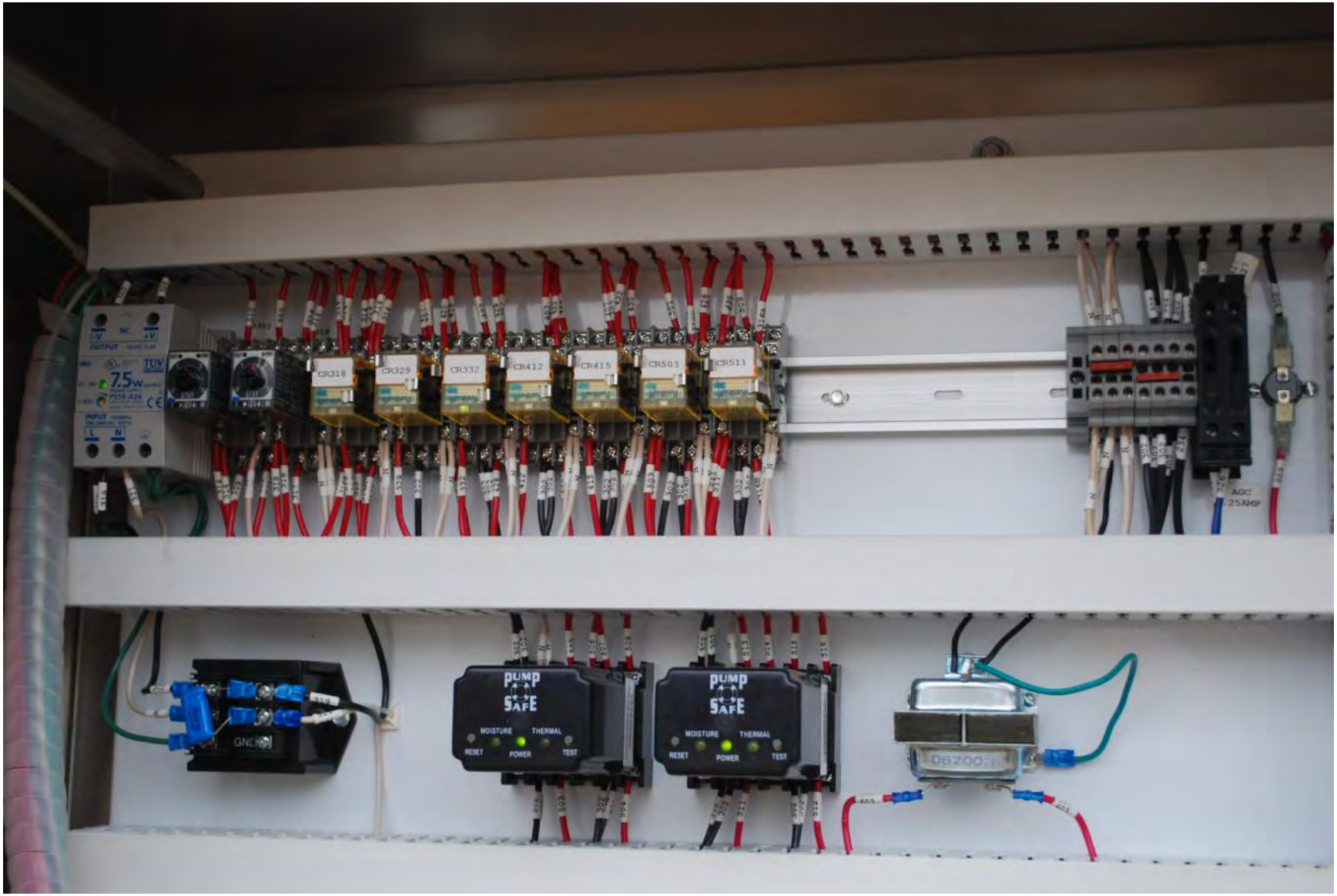

Esterline

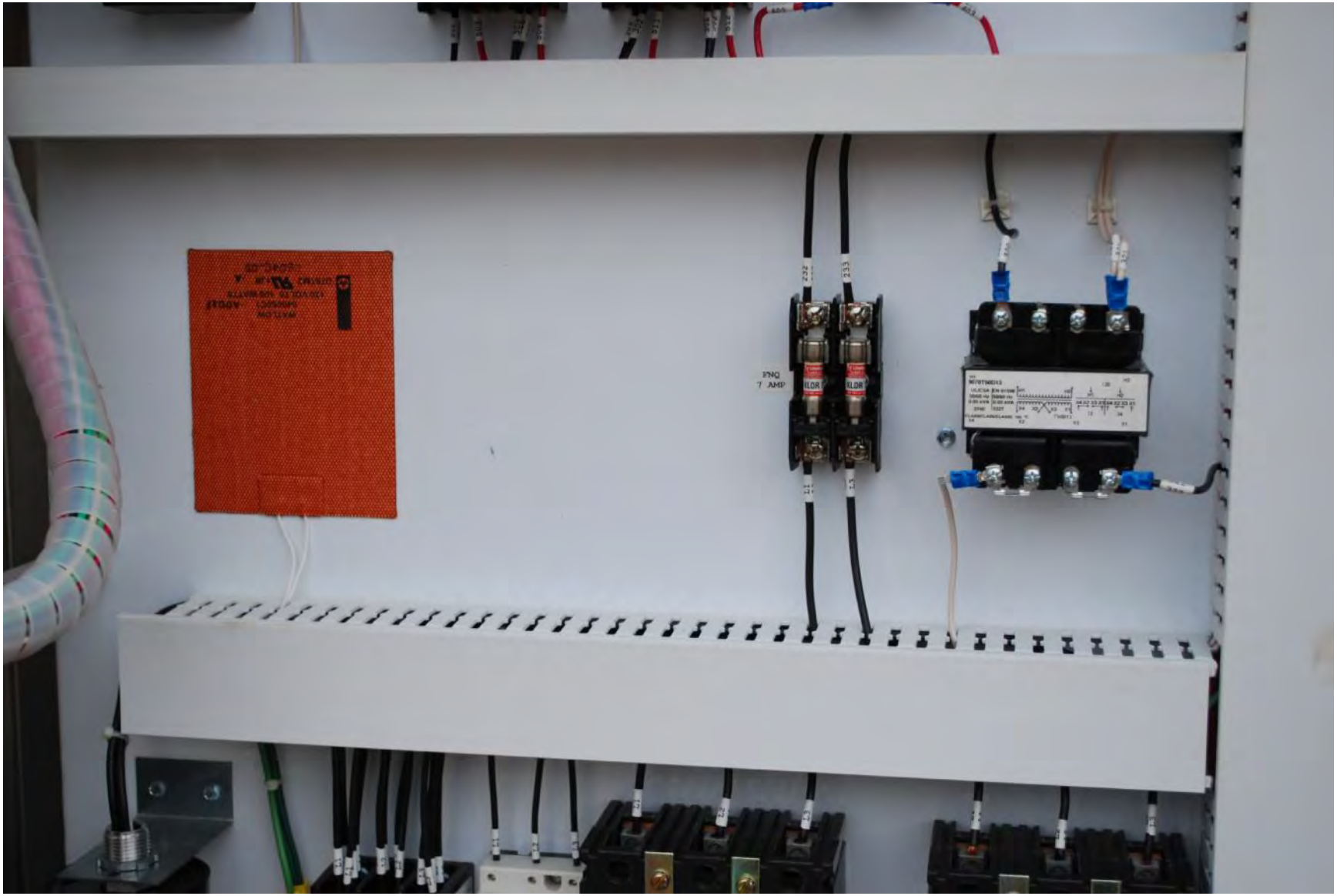


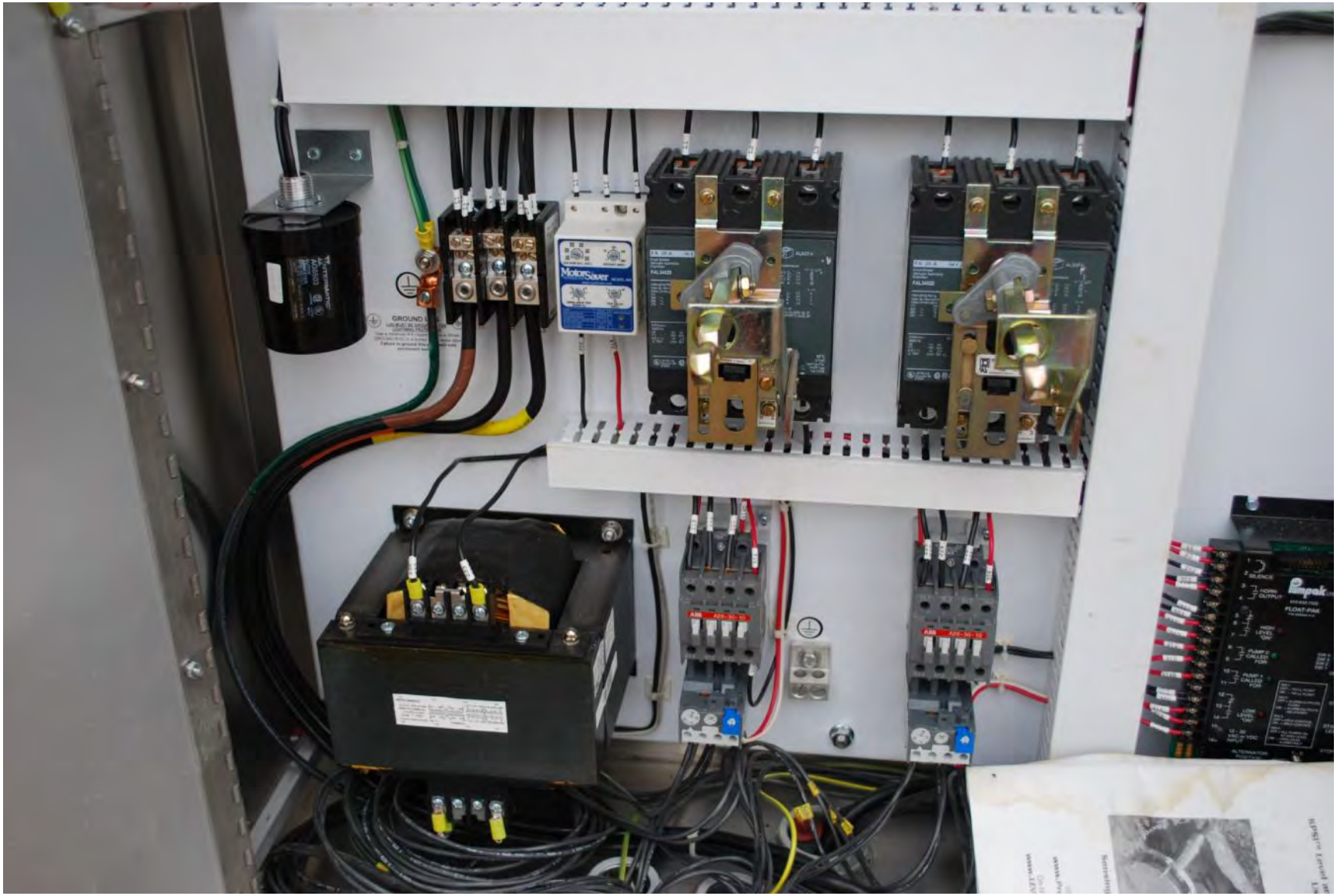

DIGITAL CONTROL CORPORATION
10
9
8
7
6
5
4
3
2
1
0
FEET
P1
P2
DISABLE
FLOATS
LAG
HIGH
OFF
LOW
LEAD
RESET
MUTE
SETPOINTS
CH 1
LEVEL
CH 2
SETPOINTS
DISPLAY SEL
P1
CH1
SEL
P2
CH2
SEL
HI
LO
ALARM
SEL
4-20
FLT
SYS
ERROR
HI
SETPOINTS
LO
ON
1-2
2-1
ALTERNATE
TEST
DUPLEX PUMP CONTROLLER P/N 11928-5
PUMP 1
SEAL FAILURE
REDUNDANT FLOAT SYSTEM
OFF - ON
PUMP 2
SEAL FAILURE

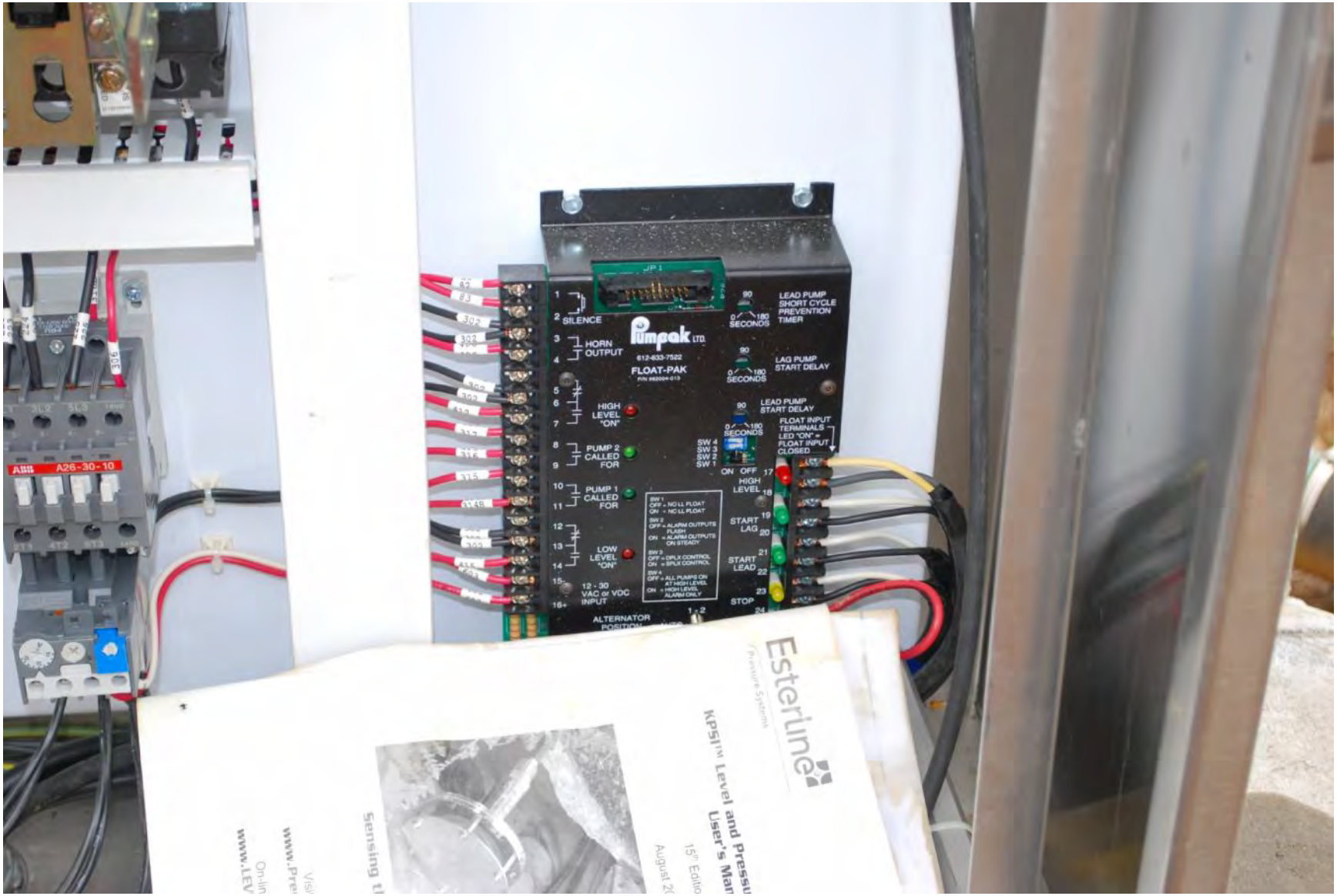
OVERTEMP RESET
HAND OFF AUTO
ALARM SILENCE
OVERTEMP RESET
HAND OFF AUTO
PUMP 1
PUMP 2
CONTROL POWER
GFI POWER
15A CONVENIENCE RECEPTACLE

DIGITAL CONTROL CORPORATION
DUPLEX PUMP CONTROLLER P/N 8928-5
PUMP 1
SEAL FAILURE
REDUNDANT FLOAT SYSTEM
OFF - ON
PUMP 2
SEAL FAILURE
OVERTEMP
RUNNING
OVERTEMP
RUNNING
OVERTEMP RESET
HAND OFF AUTO
ALARM SILENCE
OVERTEMP RESET
HAND OFF AUTO
PUMP 1
PUMP 2
CONTROL POWER
GFI POWER


CR318
CR329
CR332
CR412
CR415
CR503
CR511
7.5W
PUMP SAFE
MOISTURE
THERMAL
RESET
POWER
TEST
PUMP SAFE
MOISTURE
THERMAL
RESET
POWER
TEST




MotorSaver
Pumpex


SILENCE
HORN OUTPUT
HIGH LEVEL "ON"
PUMP 2 CALLED FOR
PUMP 1 CALLED FOR
LOW LEVEL "ON"
12 - 30 VAC or VDC INPUT
ALTERNATOR POSITION
LEAD PUMP SHORT CYCLE PREVENTION TIMER
LAG PUMP START DELAY
LEAD PUMP START DELAY
FLOAT INPUT TERMINALS LED "ON" = FLOAT INPUT CLOSED
SECONDS
ON OFF
HIGH LEVEL
START LAG
START LEAD
STOP
612-633-7522
FLOAT-PAK
A26-30-10
Esterline

HEADERS AND PLUGS
USE COPPER
CONDUCTORS ONLY.
TORQUE REQUIREMENT:
PLUGS: 1.47 Ft. Lbs.
"POLLUTION DEGREE 2"
HI ALARM
P2
P1
J1
J2
S/W DPCD5G
DIGITAL CONTROL CORPORATION
4620 114TH TERRACE NORTH, CLEARWATER, FL 33762
TOLL FREE 1-800-335-5219
LISTED
CAUTION:
DO NOT GROUND THE SECONDARY OF
THE TRANSFORMER SUPPLYING POWER
TO THIS UNIT.
DCC MODEL: 11928-5
SERIAL NUMBER: 10,591 04/08
MADE IN USA

HEALY-RUFF

PURAFIL

Kroger