set up the DV1000 display

1 _FirstScan SP0
- LDA O2200
- OUT V7624
- LDA O2240
- OUT V7623

DV1000 line 1

2 _FirstScan SP0
- LD K8
- LD K0
- LDLBL K11
- MOVMC DV1000: line 1 V2200

DV1000 line 2

3 _FirstScan SP0
- LD K8
- LD K0
- LDLBL K12
- MOVMC DV1000: line 2 V2210

DV1000 line 3

4 _FirstScan SP0
- LD K8
- LD K0
- LDLBL K13
- MOVMC DV1000: line 3 V2220

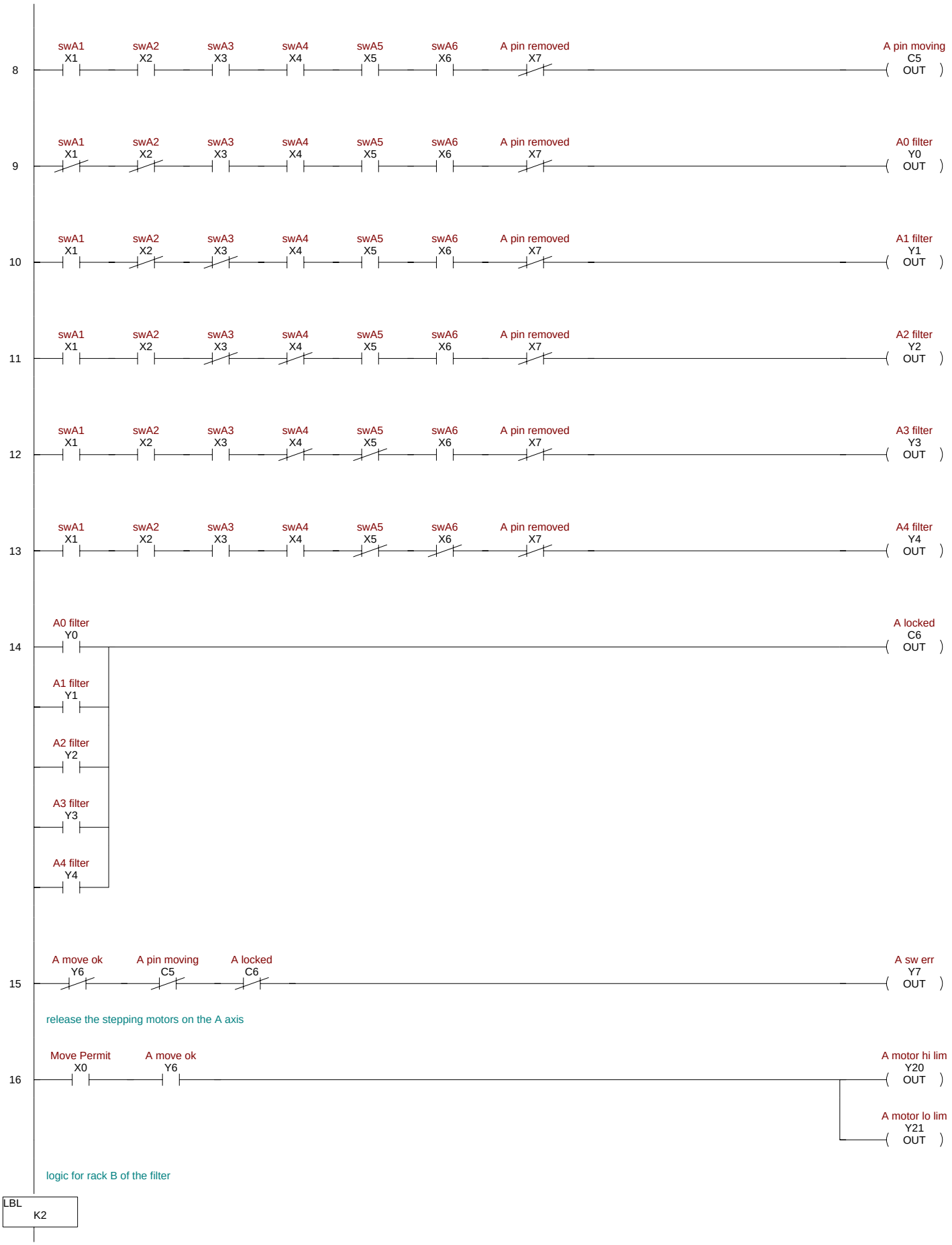
DV1000 line 4

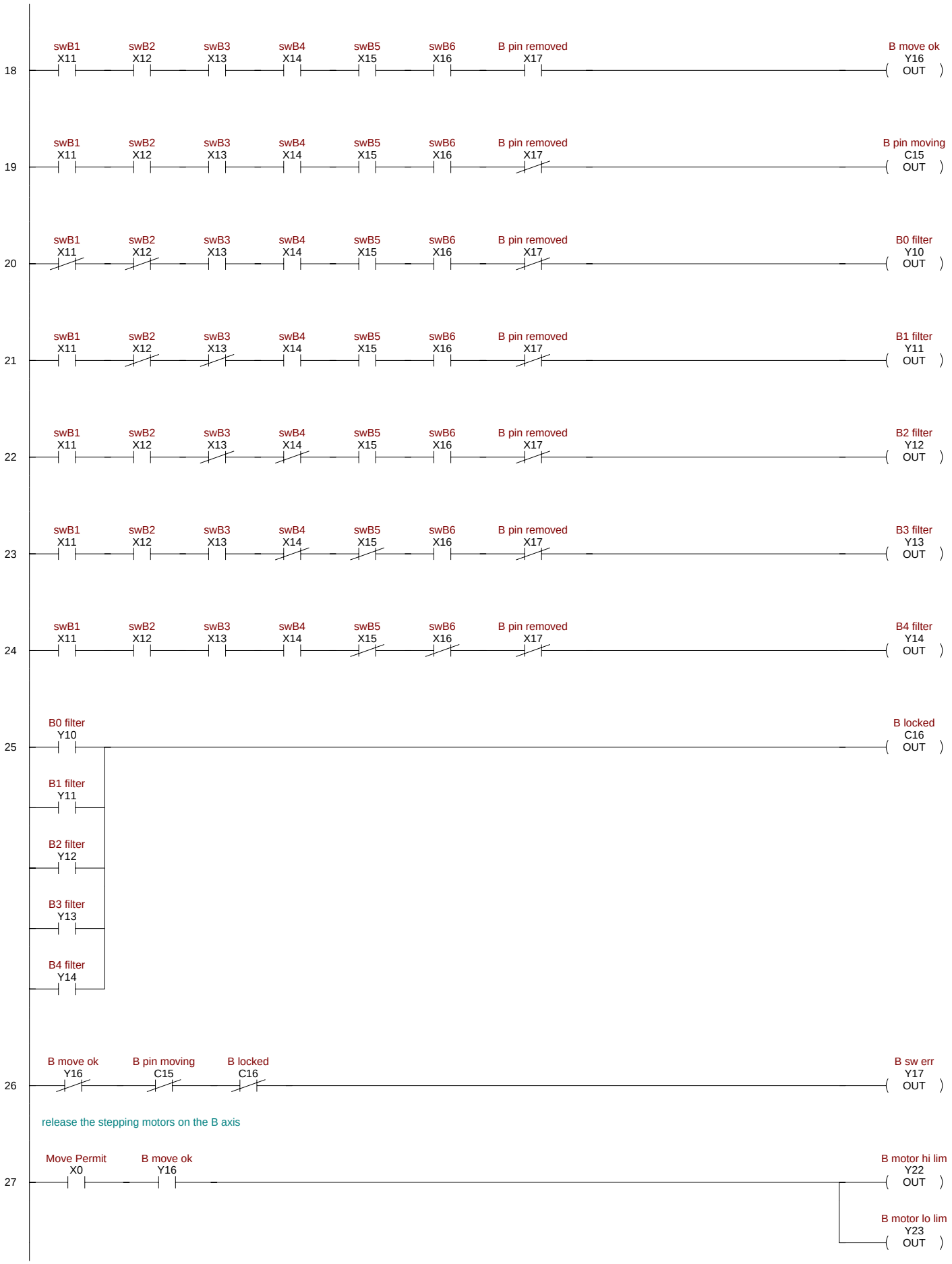
5 _FirstScan SP0
- LD K8
- LD K0
- LDLBL K14
- MOVMC DV1000: line 4 V2230

logic for rack A of the filter

LBL K1

7 swA1 X1 — swA2 X2 — swA3 X3 — swA4 X4 — swA5 X5 — swA6 X6 — A pin removed X7 — A move ok Y6 OUT


8
swA1 X1
swA2 X2
swA3 X3
swA4 X4
swA5 X5
swA6 X6
A pin removed X7
A pin moving C5 OUT
9
swA1 X1
swA2 X2
swA3 X3
swA4 X4
swA5 X5
swA6 X6
A pin removed X7
A0 filter Y0 OUT
10
swA1 X1
swA2 X2
swA3 X3
swA4 X4
swA5 X5
swA6 X6
A pin removed X7
A1 filter Y1 OUT
11
swA1 X1
swA2 X2
swA3 X3
swA4 X4
swA5 X5
swA6 X6
A pin removed X7
A2 filter Y2 OUT
12
swA1 X1
swA2 X2
swA3 X3
swA4 X4
swA5 X5
swA6 X6
A pin removed X7
A3 filter Y3 OUT
13
swA1 X1
swA2 X2
swA3 X3
swA4 X4
swA5 X5
swA6 X6
A pin removed X7
A4 filter Y4 OUT
14
A0 filter Y0
A1 filter Y1
A2 filter Y2
A3 filter Y3
A4 filter Y4
A locked C6 OUT
15
A move ok Y6
A pin moving C5
A locked C6
A sw err Y7 OUT
release the stepping motors on the A axis
16
Move Permit X0
A move ok Y6
A motor hi lim Y20 OUT
A motor lo lim Y21 OUT
logic for rack B of the filter
LBL K2


18
swB1 X11
swB2 X12
swB3 X13
swB4 X14
swB5 X15
swB6 X16
B pin removed X17
B move ok Y16 OUT
19
swB1 X11
swB2 X12
swB3 X13
swB4 X14
swB5 X15
swB6 X16
B pin removed X17
B pin moving C15 OUT
20
swB1 X11
swB2 X12
swB3 X13
swB4 X14
swB5 X15
swB6 X16
B pin removed X17
B0 filter Y10 OUT
21
swB1 X11
swB2 X12
swB3 X13
swB4 X14
swB5 X15
swB6 X16
B pin removed X17
B1 filter Y11 OUT
22
swB1 X11
swB2 X12
swB3 X13
swB4 X14
swB5 X15
swB6 X16
B pin removed X17
B2 filter Y12 OUT
23
swB1 X11
swB2 X12
swB3 X13
swB4 X14
swB5 X15
swB6 X16
B pin removed X17
B3 filter Y13 OUT
24
swB1 X11
swB2 X12
swB3 X13
swB4 X14
swB5 X15
swB6 X16
B pin removed X17
B4 filter Y14 OUT
25
B0 filter Y10
B1 filter Y11
B2 filter Y12
B3 filter Y13
B4 filter Y14
B locked C16 OUT
26
B move ok Y16
B pin moving C15
B locked C16
B sw err Y17 OUT
release the stepping motors on the B axis
27
Move Permit X0
B move ok Y16
B motor hi lim Y22 OUT
B motor lo lim Y23 OUT

outputs for EPS and EPICS

28 A locked C6 — B locked C16 — filters locked Y25 OUT; EPICS F1 Locked Y15 OUT

pass along the enable status to EPICS

29 Move Permit X0 — EPICS F1 enable Y5 OUT

update the remote status monitor area

LBL K3

move the X inputs to V3100

31 _On SP1 — LD K1; LDA O40400; MOV V3100

move the Y outputs to V3101 & V3102

32 _On SP1 — LD K2; LDA O40500; MOV V3101

move the C relays to V3103

33 _On SP1 — LD K1; LDA O40600; MOV V3103

update the DV1000 display with dynamic text

LBL K4

35 _100MilliSeconds SP5 — DV1000 update C0 OUT

status of rack A

36 DV1000 update C0 — LDF A0 filter Y0 K8; ENCO; OUT V2500

status of rack B

37 DV1000 update C0 — LD VY0; SHFR K8; ENCO; OUT V2501

DV1000 line 1

38 DV1000 update C0 — LD K8; LD K0; LDLBL K20; MOVMC DV1000: line 1 V2200

DV1000: line 2

39 DV1000 update C0 — LD K4; LD K0

40 DV1000 update C0, Move Permit X0 — LDLBL K22

41 DV1000 update C0, Move Permit X0 (NC) — LDLBL K23

42 DV1000 update C0 — MOVMC DV1000: line 2 V2210

43 DV1000 update C0 — LD K4; LD K0

44 DV1000 update C0, filters locked Y25 — LDLBL K24

45 DV1000 update C0, filters locked Y25 (NC) — LDLBL K25

46 DV1000 update C0 — MOVMC V2214

DV1000 line 3

47 DV1000 update C0

- LD K4
- LD K0
- LDLBL K26
- MOVMC DV1000: line 3 V2220

DV1000: rack A filter #

48 DV1000 update C0 — A move ok Y6 — V2500 < K5

- LD K3
- LD K0
- LDLBL K27
- MOVMC V2224
- LD V2500
- ORD K2030
- OUT V2227

DV1000: rack A solenoid pin out

49 DV1000 update C0 — A move ok Y6

- LD K4
- LD K0
- LDLBL K29
- MOVMC V2224

DV1000: rack A solenoid pin moving

50 DV1000 update C0 — A pin moving C5

- LD K4
- LD K0
- LDLBL K30
- MOVMC V2224

DV1000: rack A Switch Error

51 DV1000 update C0 — A sw err Y7

- LD K4
- LD K0
- LDLBL K28
- MOVMC V2224

DV1000 line 4 (rack B)

52 — DV1000 update C0
- LD K4
- LD K0
- LDLBL K21
- MOVMC DV1000: line 4 V2230

DV1000: rack B filter #

53 — DV1000 update C0 — B move ok Y16 — V2501 < K5
- LD K3
- LD K0
- LDLBL K27
- MOVMC V2234
- LD V2501
- ORD K2030
- OUT V2237

DV1000: rack B solenoid pin out

54 — DV1000 update C0 — B move ok Y16
- LD K4
- LD K0
- LDLBL K29
- MOVMC V2234

DV1000: rack B solenoid pin moving

55 — DV1000 update C0 — B pin moving C15
- LD K4
- LD K0
- LDLBL K30
- MOVMC V2234

DV1000: rack B Switch Error

56 — DV1000 update C0 — B sw err Y17
- LD K4
- LD K0
- LDLBL K28
- MOVMC V2234

LBL K5

58 (END)

DLBL K11

60 ACON Beamline 33ID-A

DLBL K12

62 ACON F1 Filter

DLBL K13

64 ACON Switch Monitor

DLBL K14

66 ACON 97-Mar-10: PRJ

DLBL K20

68 ACON 33ID-A F1 Filter

DLBL K21

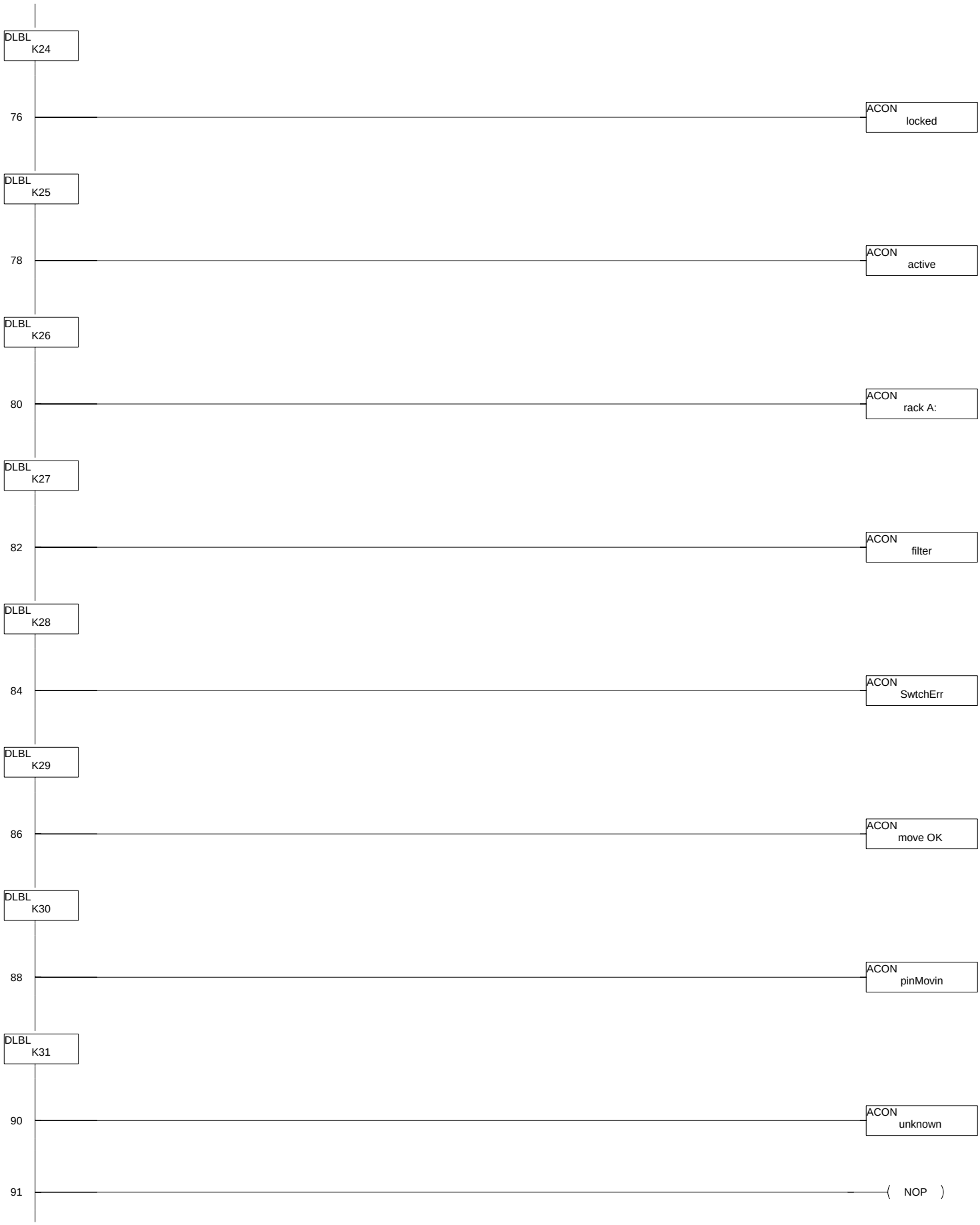
70 ACON rack B:

DLBL K22

72 ACON move OK,

DLBL K23

74 ACON move NO,


DLBL
K24
76
ACON
locked
DLBL
K25
78
ACON
active
DLBL
K26
80
ACON
rack A:
DLBL
K27
82
ACON
filter
DLBL
K28
84
ACON
SwtchErr
DLBL
K29
86
ACON
move OK
DLBL
K30
88
ACON
pinMovin
DLBL
K31
90
ACON
unknown
91
NOP