Lampiran 1 Program PLC

Program Level Inlet

[Program Name : NewProgram1]

[Section Name : Inlet]

000000 (000000)
CF113 P_On Always ON Flag
MOV (021) I: 2005 D10
[OP1] RAW SINYAL INLET
[OP2] Motor Command <cD00010> c13

000001 (000002)
CF113 P_On Always ON Flag
MOV (021) #0 D90
[OP1]
[OP2] <cD00090> c04

BCD (024) D90 D91
[OP1] <cD00090> c03
[OP2] <cD00091> c08

MOV (021) #FA0 D92
[OP1]
[OP2] span range <cD00092> c06

BCD (024) D92 D93
[OP1] span range <cD00092> c05
[OP2] <cD00093> c10

000002 (000007)
CF113 P_On Always ON Flag
MOV (021) D91 D100
[OP1] <cD00091> c04
[OP2] <cD00100> c13

MOV (021) #0 D101
[OP1]
[OP2]

MOV (021) D93 D102
[OP1] <cD00093> c06
[OP2]

MOV (021) #0F9A D103
[OP1]
[OP2]

000003 (000012)
CF113 P_On Always ON Flag
SCL (194) D10 D100 D50
[OP1] Motor Command <cD00010> c01
[OP2] <cD00100> c08
[OP3] In Scaling Result <cD00050> c22 c54

000004
(000014)

CF113
P_On
Always
ON Flag

+BL (405)
D700
D30
D710

[OP1]
in_2nd word1
<cD00700>
c22
[OP2]
in_2nd word
<cD00030>
c18
[OP3]
Level Inlet Aktual

000005
(000016)

CF113
P_On
Always
ON Flag

MOV (021)
#1F40
D15

[OP1]
[OP2]
in_word belakang
8000
<cD00015>
c18

BCD (024)
D15
D30

[OP1]
in_word belakang
8000
<cD00015>
c17
[OP2]
in_2nd word
<cD00030>
c15

MOV (021)
#0000
D16

[OP1]
[OP2]
in_word depan
<cD00016>
c20

BCD (024)
D16
D31

[OP1]
in_word depan
<cD00016>
c19
[OP2]
in_1st word

000006
(000021)

CF113
P_On
Always
ON Flag

MOV (021)
D50
D700

[OP1]
In Scaling Result
<cD00050>
c13 c54
[OP2]
in_2nd word1
<cD00700>
c15

MOV (021)
#0
D17

[OP1]
[OP2]
in_word depan1
<cD00017>
c24

BCD (024)
D17
D701

[OP1]
in_word depan1
<cD00017>
c23
[OP2]
in_1st word1

Lampiran 2 Program PLC

Program Level Outlet

[Program Name : NewProgram1]

[Section Name : Outlet]

000000 (000026)
CF113 P_On Always ON Flag
MOV (021) I: 2006 D20
[OP1] RAW SINYAL OUTLET
[OP2] SOURCE OUTLET
<cD00020> c39

000001 (000028)
CF113 P_On Always ON Flag
MOV (021) #0 D110
[OP1]
[OP2] <cD00110> c30

BCD (024) D110 D111
[OP1] <cD00110> c29
[OP2] <cD00111> c34

MOV (021) #FA0 D112
[OP1]
[OP2] <cD00112> c32

BCD (024) D112 D113
[OP1] <cD00112> c31
[OP2] <cD00113> c36

000002 (000033)
CF113 P_On Always ON Flag
MOV (021) D111 D120
[OP1] <cD00111> c30
[OP2] <cD00120> c39

MOV (021) #0 D121
[OP1]
[OP2]

MOV (021) D113 D122
[OP1] <cD00113> c32
[OP2]

MOV (021) #0F9F D123
[OP1]
[OP2]

000003 (000038)
CF113 P_On Always ON Flag
SCL (194) D20 D120 D60
[OP1] SOURCE OUTLET
<cD00020> c27
[OP2] <cD00120> c34
[OP3] out scaling result
<cD00060> c50 c53

000004
(000040)

CF113
P_On
Always
ON Flag

+BL
(405)
D800
D540
D810

[OP1]
out_2nd word1
<cD00800>
c50
[OP2]
out_2nd word
<cD00540>
c44
[OP3]
Level Outlet
Aktual

000005
(000042)

CF113
P_On
Always
ON Flag

MOV
(021)
#1F40
D354

[OP1]
[OP2]
out_word
belakang 8000
<cD00354>
c44

BCD
(024)
D354
D540

[OP1]
out_word
belakang 8000
<cD00354>
c43
[OP2]
out_2nd word
<cD00540>
c41

MOV
(021)
#0000
D18

[OP1]
[OP2]
out_word depan
<cD00018>
c46

BCD
(024)
D18
D541

[OP1]
out_word depan
<cD00018>
c45
[OP2]
out_2nd word

000007
(000047)

CF113
P_On
Always
ON Flag

MOV
(021)
#0
D28

[OP1]
[OP2]
out_word depan1
<cD00028>
c49

BCD
(024)
D28
D801

[OP1]
out_word depan1
<cD00028>
c48
[OP2]
out_1st word1

MOV
(021)
D60
D800

[OP1]
out scaling result
<cD00060>
c39 c53
[OP2]
out_2nd word1
<cD00800>
c41

Lampiran 3 Program PLC

Program Command Motor

[Program Name : NewProgram1]

[Section Name : Motor]

000000 (000052)

CF113 P_On Always ON Flag

BIN (023) D60 D401 — [OP1] out scaling result <cD00060> c39 c50 — [OP2] <cD00401> c55

BIN (023) D50 D400 — [OP1] In Scaling Result <cD00050> c13 c22 — [OP2] <cD00400> c55

- (410) D400 D401 D70 — [OP1] <cD00400> c54 — [OP2] <cD00401> c53 — [OP3] Command Output <cD00070> c56 c57 c71 c72 c75 c76 c78 c79 c81

BCD (024) D70 D80 — [OP1] Command Output <cD00070> c55 c57 c71 c72 c75 c76 c78 c79 c81 — [OP2] Differential Level Actual

000001 (000057)

< (310) D70 #C8 — [OP1] Command Output — [OP2]

56.00 — Bit Motor OFF <56.00> a59 a64

000002 (000059)

56.00 Bit Motor OFF

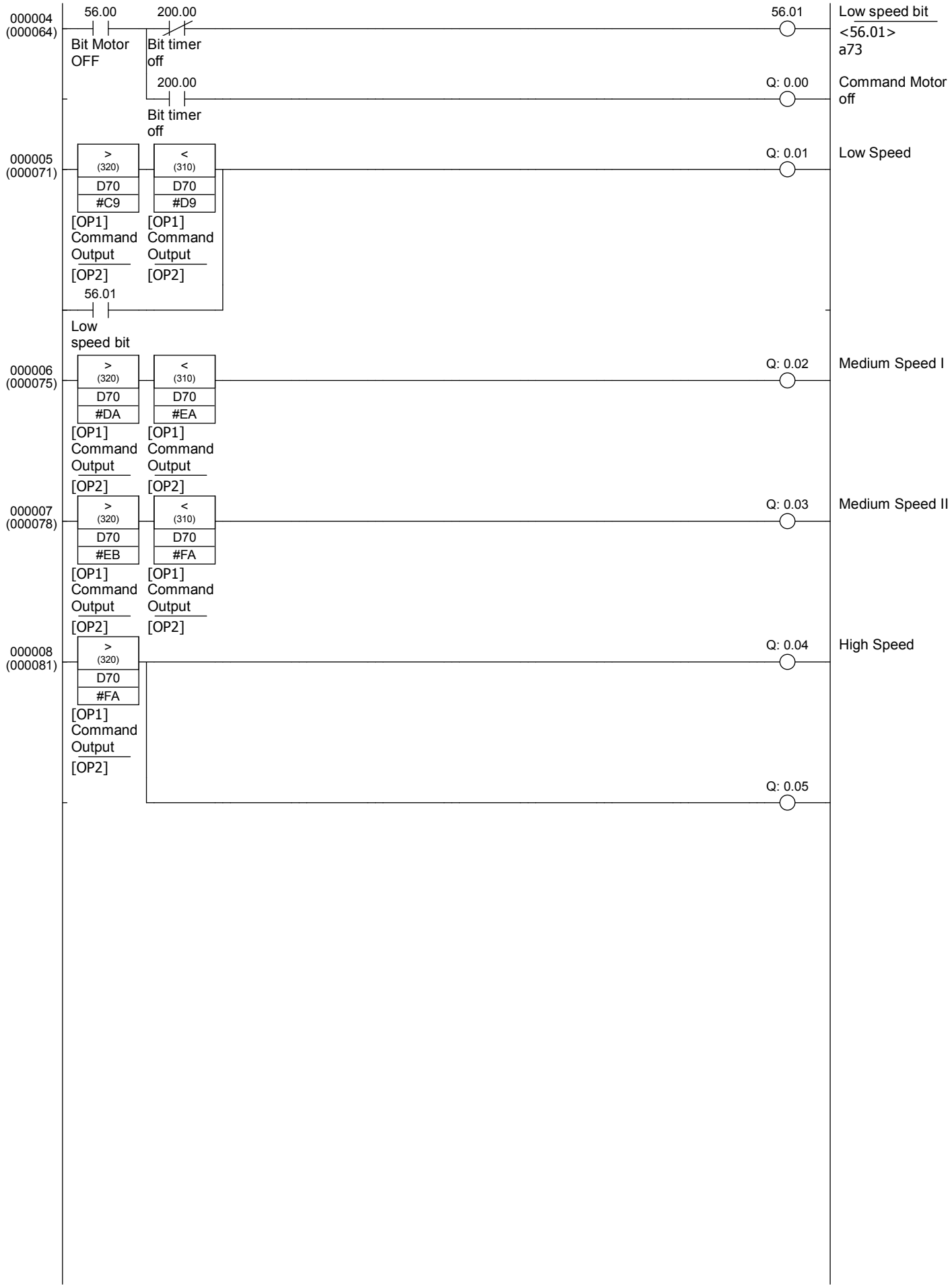
TIML (542) 200 D900 D200 — [OP1] <200.00> b66 a69 — [OP2] — [OP3] <cD00200> c62

000003 (000061)

CF113 P_On Always ON Flag

MOV (021) #0600 D200 — [OP1] — [OP2] <cD00200> c60

MOV (021) #0000 D201 — [OP1] — [OP2]


000004
(000064)
56.00
Bit Motor OFF
200.00
Bit timer off
56.01
Low speed bit
<56.01>
a73
200.00
Bit timer off
Q: 0.00
Command Motor off
000005
(000071)
> (320)
D70
#C9
[OP1] Command Output
[OP2]
< (310)
D70
#D9
[OP1] Command Output
[OP2]
Q: 0.01
Low Speed
56.01
Low speed bit
000006
(000075)
> (320)
D70
#DA
[OP1] Command Output
[OP2]
< (310)
D70
#EA
[OP1] Command Output
[OP2]
Q: 0.02
Medium Speed I
000007
(000078)
> (320)
D70
#EB
[OP1] Command Output
[OP2]
< (310)
D70
#FA
[OP1] Command Output
[OP2]
Q: 0.03
Medium Speed II
000008
(000081)
> (320)
D70
#FA
[OP1] Command Output
[OP2]
Q: 0.04
High Speed
Q: 0.05

Lampiran 4 Program PLC

Program Frekuensi Inverter

[Program Name : NewProgram1]

[Section Name : Frequency]

000000 (000085) — CF113 P_On Always ON Flag
- MOV (021) I: 2001 D19 — [OP1] Frequency; [OP2] raw frequency <cD00019> c98

000001 (000087) — CF113 P_On Always ON Flag
- MOV (021) #0 D130 — [OP1]; [OP2] <cD00130> c89
- BCD (024) D130 D131 — [OP1] <cD00130> c88; [OP2] <cD00131> c93
- MOV (021) #32 D132 — [OP1]; [OP2] <cD00132> c91
- BCD (024) D132 D133 — [OP1] <cD00132> c90; [OP2] <cD00133> c95

000002 (000092) — CF113 P_On Always ON Flag
- MOV (021) D131 D140 — [OP1] <cD00131> c89; [OP2] <cD00140> c98
- MOV (021) #0 D141 — [OP1]; [OP2]
- MOV (021) D133 D142 — [OP1] <cD00133> c91; [OP2]
- MOV (021) #D08 D143 — [OP1]; [OP2]

000003 (000097) — CF113 P_On Always ON Flag
- SCL (194) D19 D140 D77 — [OP1] raw frequency <cD00019> c86; [OP2] <cD00140> c93; [OP3] Actual Frequency Value

Lampiran 5 Hasil Percobaan Inverter

Frekuensi inverter 25 Hz, hasil RPM pada motor 749 rpm

Frekuensi inverter 33 Hz, hasil RPM pada motor 989 rpm

Frekuensi inverter 41 Hz, hasil RPM pada motor 1227 rpm

Frekuensi inverter 50 Hz, hasil RPM pada motor 1499 rpm