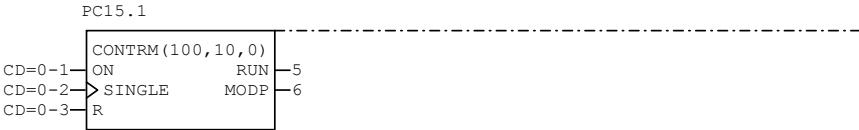


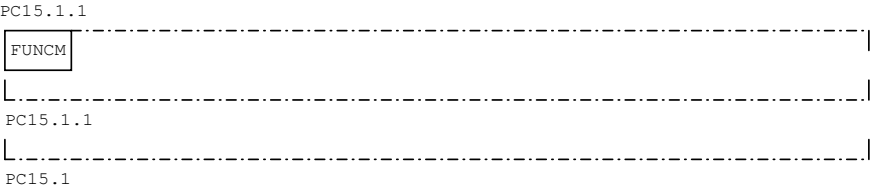
Burners

Design ch.	PC DIAGRAM PC15		Lang.
Tech. ref.			Rev. ind.
Resp. dept.			Sheet 1
Date			Cont. 2

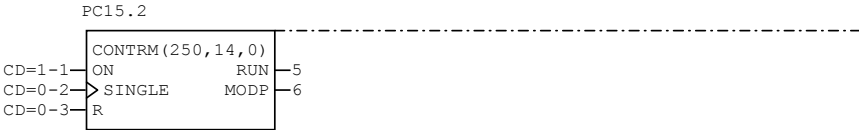


Fast database insinals

Design ch.	PC DIAGRAM PC15		Lang.
Tech. ref.			Rev. ind.
Resp. dept.			Sheet 2
Date			Cont. 3

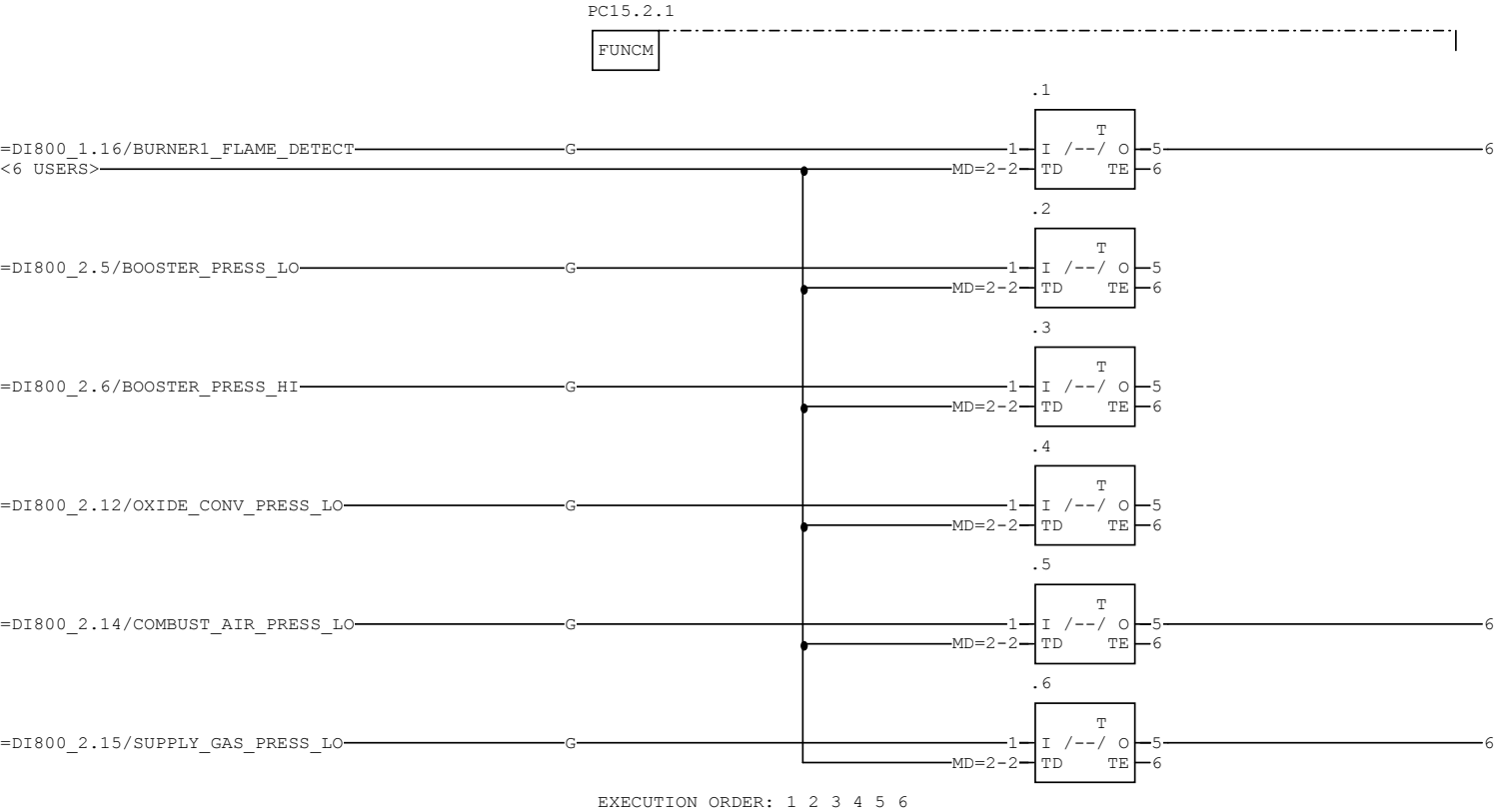


Design ch.	PC DIAGRAM PC15		Lang.
Tech. ref.			Rev. ind.
Resp. dept.			Sheet 3
Date			Cont. 4



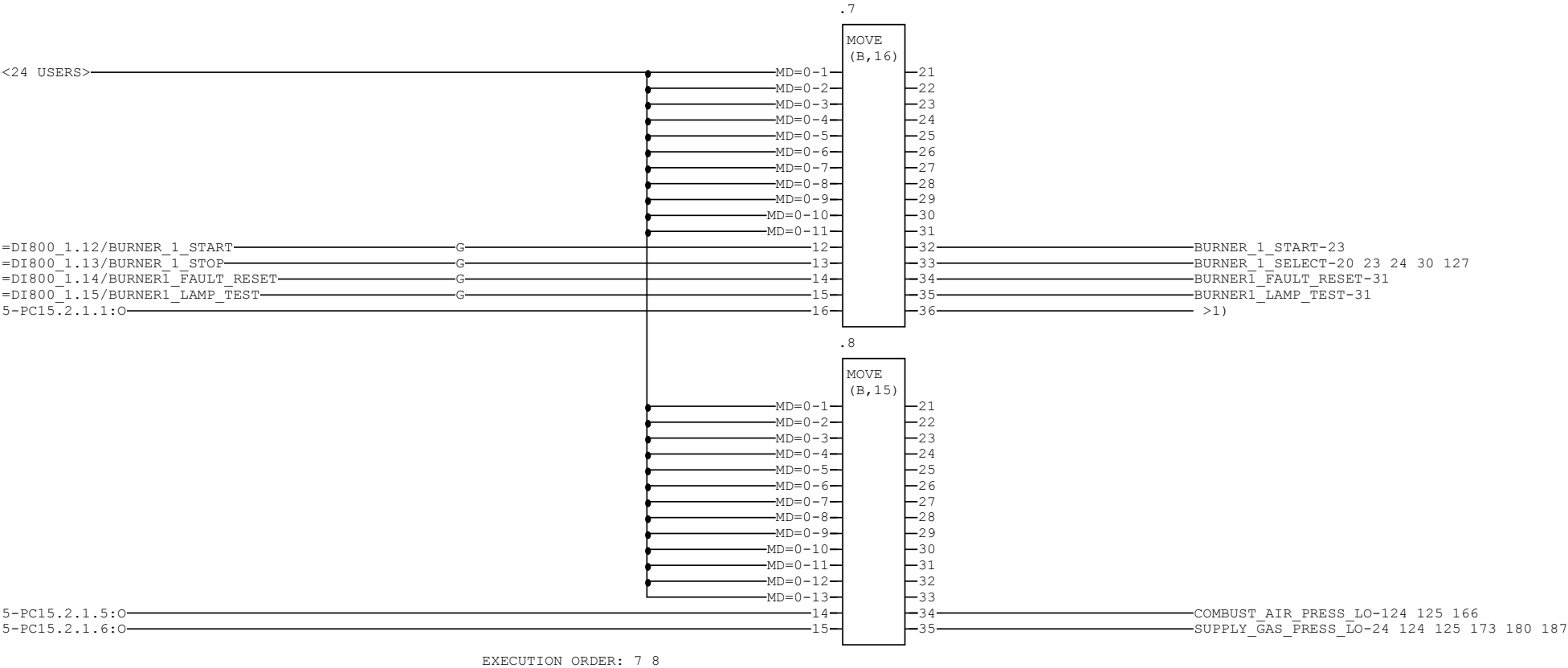
Normal database insinals

Design ch.	PC DIAGRAM PC15		Lang.
Tech. ref.			Rev. ind.
Resp. dept.			Sheet 4
Date			Cont. 5



Digital input signals - DI800\_1 , 2

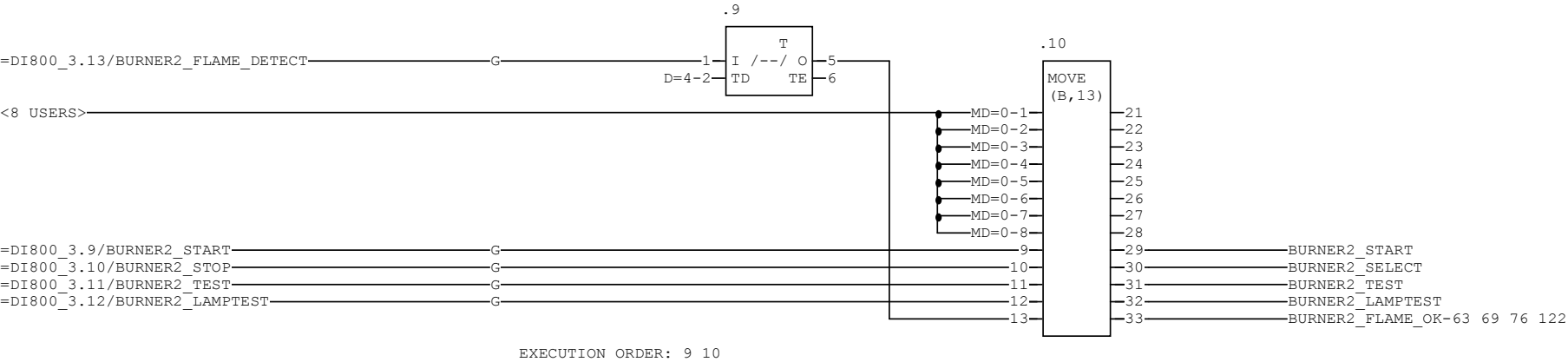
Design ch.	PC DIAGRAM PC15		Lang.
Tech. ref.			Rev. ind.
Resp. dept.			Sheet 5
Date			Cont. 6



>1) BURNER1\_FLAME\_OK-23 24 39 41 42 44 46 48 50 52 63 69 76 122 132 133 134 142 151 152 164

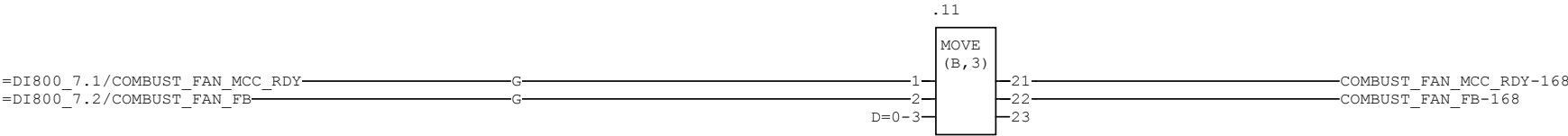
Digital input signals - DI800\_1 , 2

Design ch.	PC DIAGRAM PC15		Lang.
Tech. ref.			Rev. ind.
Resp. dept.			Sheet 6
Date			Cont. 7



DI800\_3 ,DI800\_5

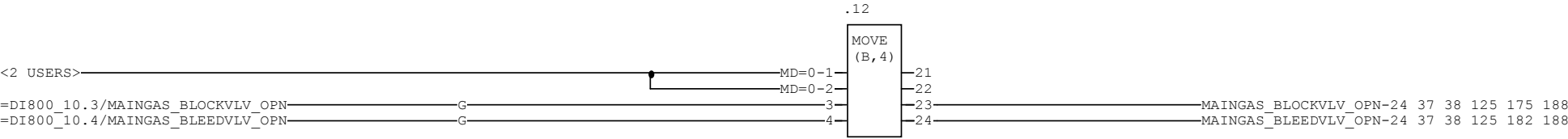
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Tech. ref.			Rev. ind.
Resp. dept.			Sheet 7
Date			Cont. 8



DI800\_6,DI800\_7

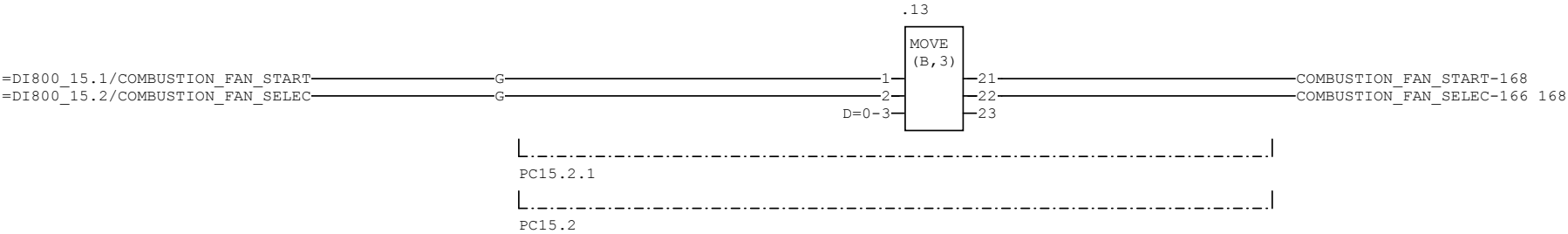
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Tech. ref.			Rev. ind.
Resp. dept.			Sheet 8
Date			Cont. 9



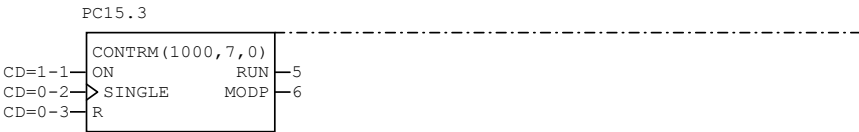


DI800\_10,DI800\_11

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Tech. ref.			Rev. ind.
Resp. dept.			Sheet 9
Date			Cont. 10

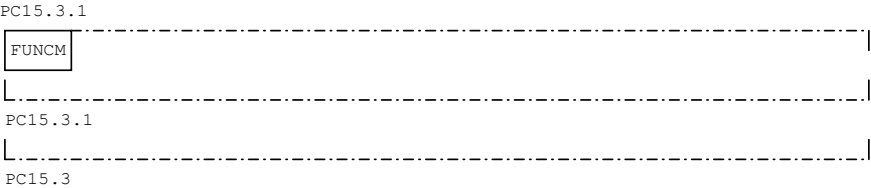


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Tech. ref.			Rev. ind.
Resp. dept.			Sheet 10
Date			Cont. 11



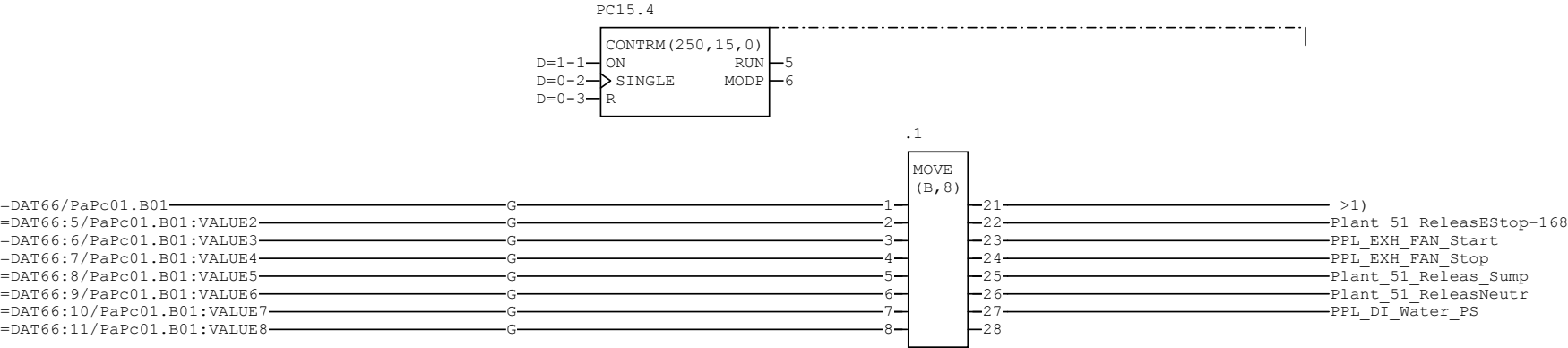
Slow database insinals

Design ch.	PC DIAGRAM PC15		Lang.
Tech. ref.			Rev. ind.
Resp. dept.			Sheet 11
Date			Cont. 12



Digital input signals

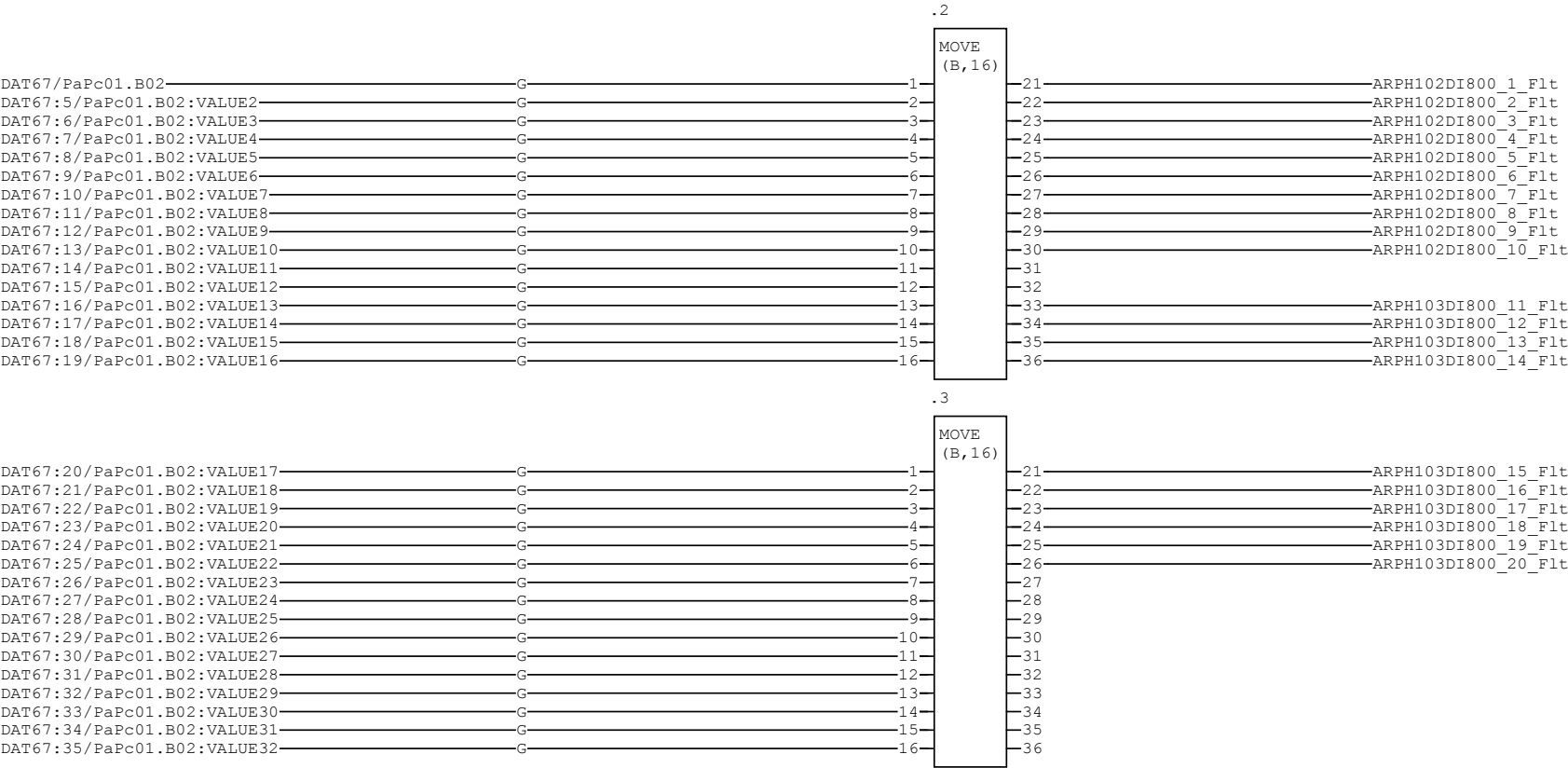
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Tech. ref.			Rev. ind.
Resp. dept.			Sheet 12
Date			Cont. 13



>1) Plant\_51\_Release-69 71 76 78 135 140 145 149 153 160 164 168 175 182 189

PC programm insinals

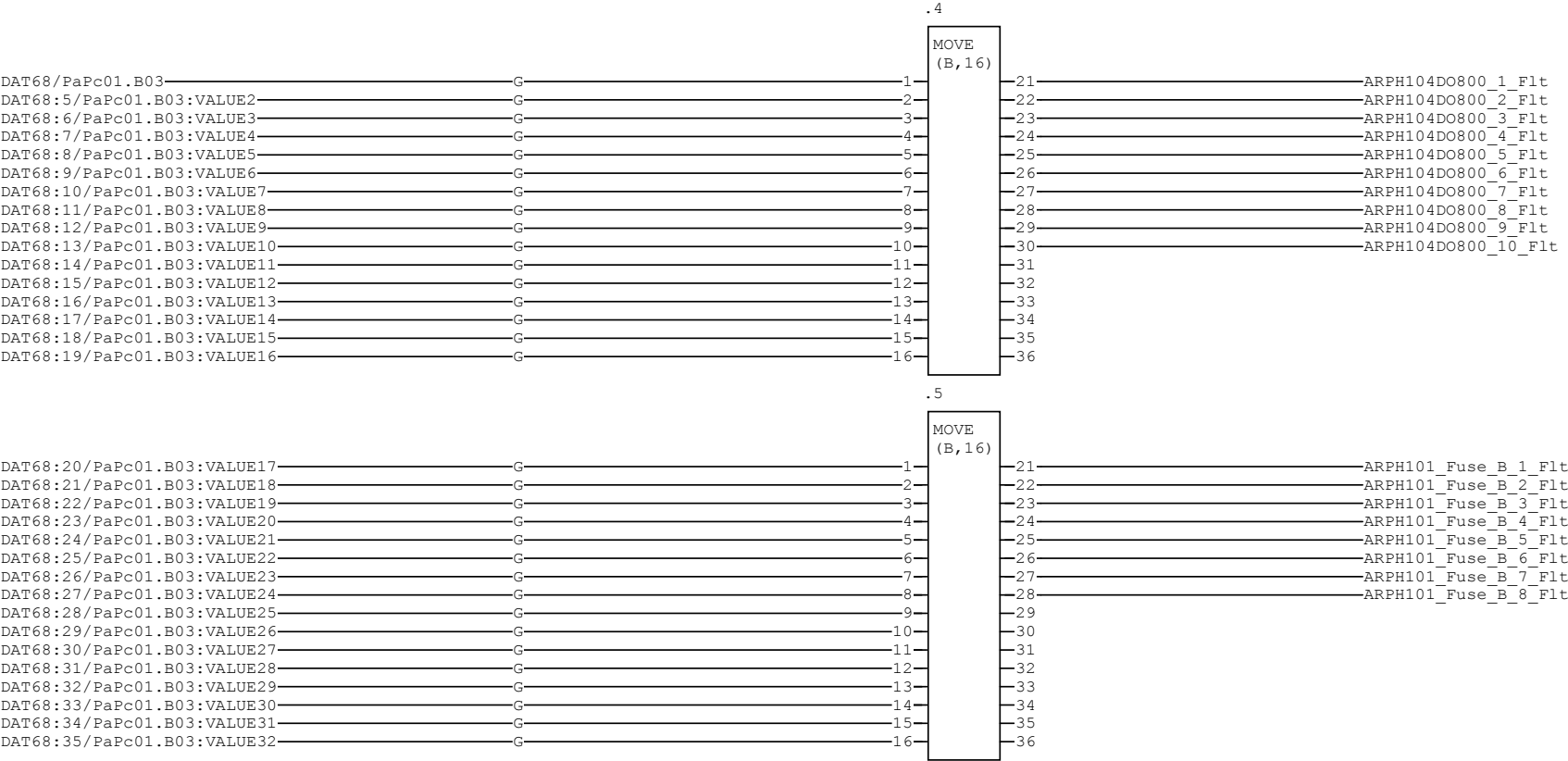
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Tech. ref.			Rev. ind.
Resp. dept.			Sheet 13
Date			Cont. 14



EXECUTION ORDER: 2 3

PC programm insinals

Design ch.	PC DIAGRAM PC15		Lang.
Tech. ref.			Rev. ind.
Resp. dept.			Sheet 14
Date			Cont. 15



EXECUTION ORDER: 4 5

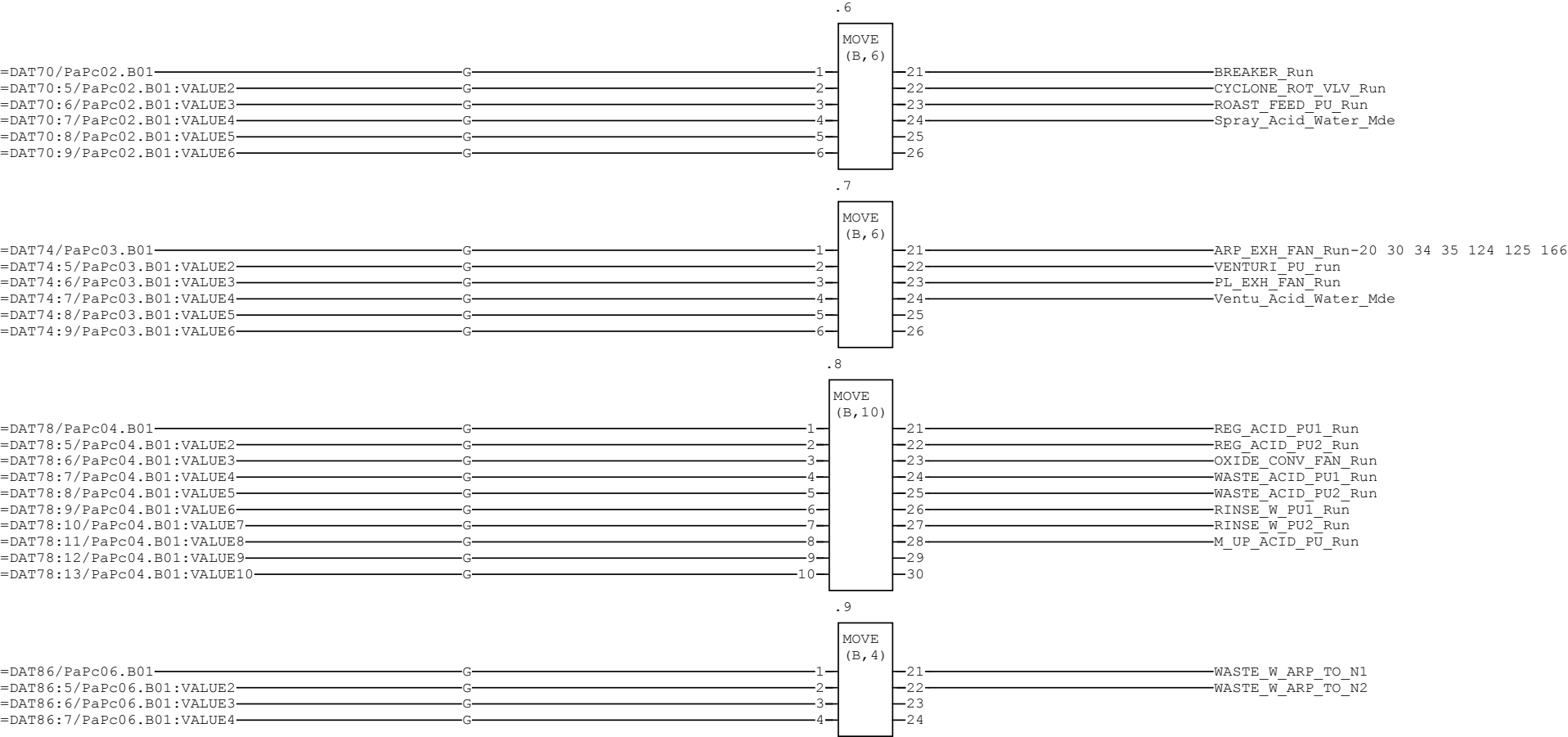
PC programm insinals

Design ch.	PC DIAGRAM PC15		Lang.
Tech. ref.			Rev. ind.
Resp. dept.			Sheet 15
Date			Cont. 16

ABB Automation

10-JAN-2017/12:04

COMMON IDENTITY: PC15.4

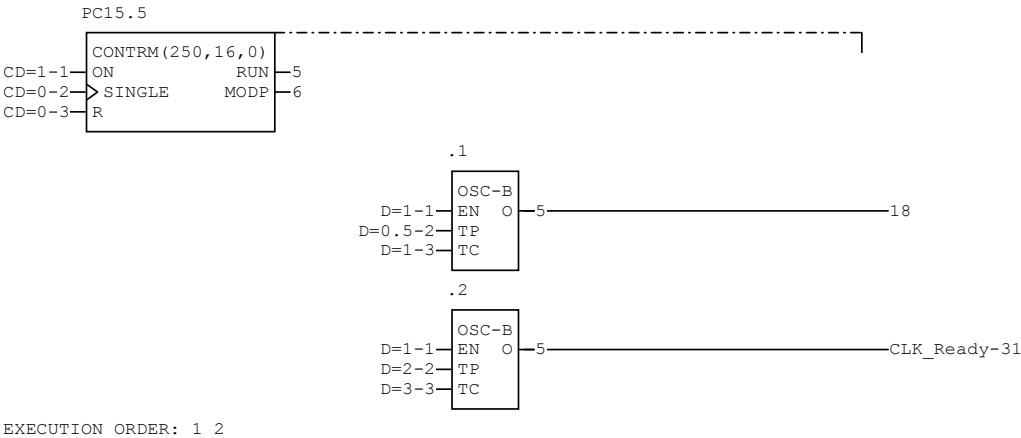


EXECUTION ORDER: 6 7 8 9  
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PC15.4

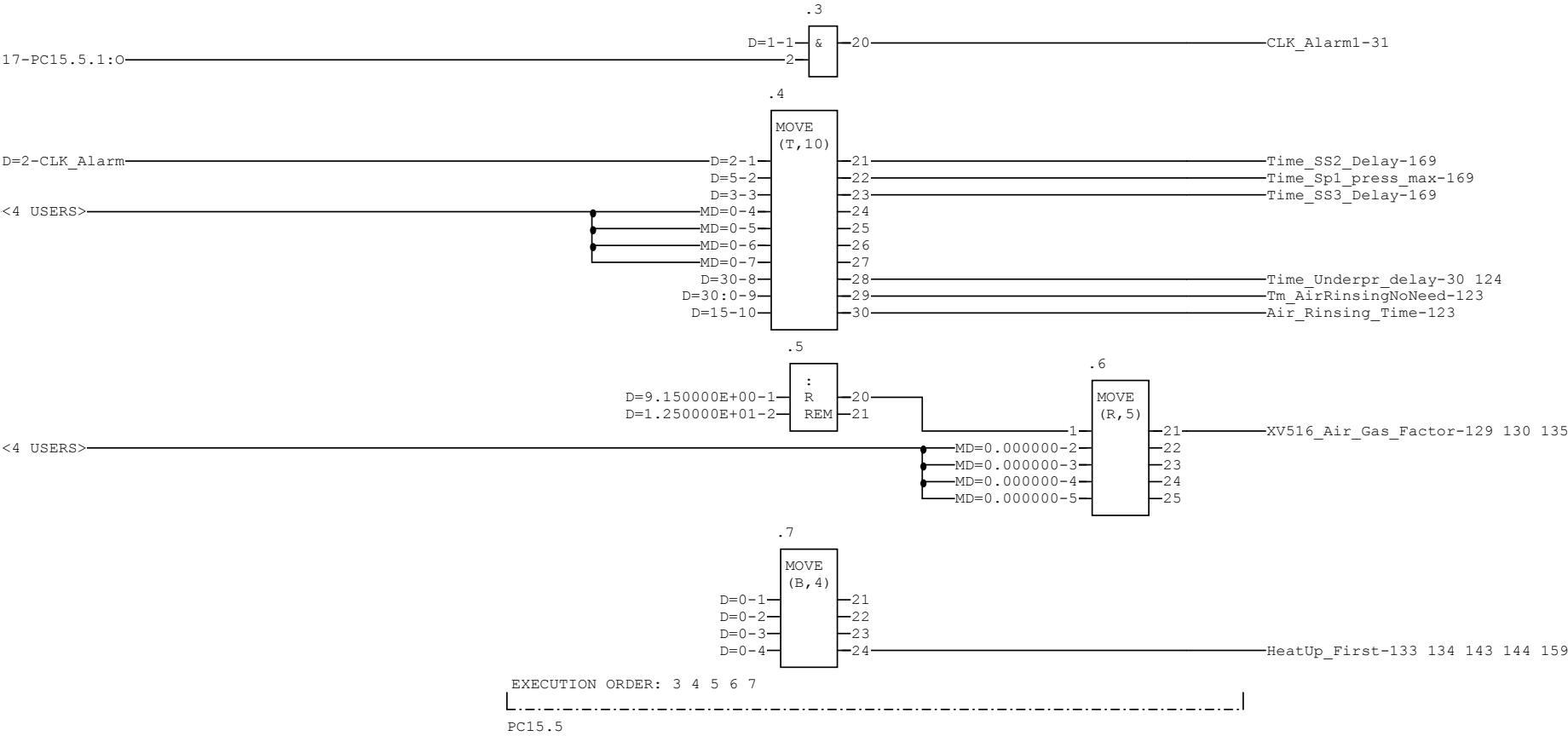
PC programm insinals

Design ch.	PC DIAGRAM PC15		Lang.
Tech. ref.			Rev. ind.
Resp. dept.			Sheet 16
Date			Cont. 17

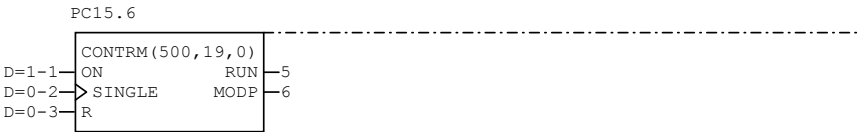




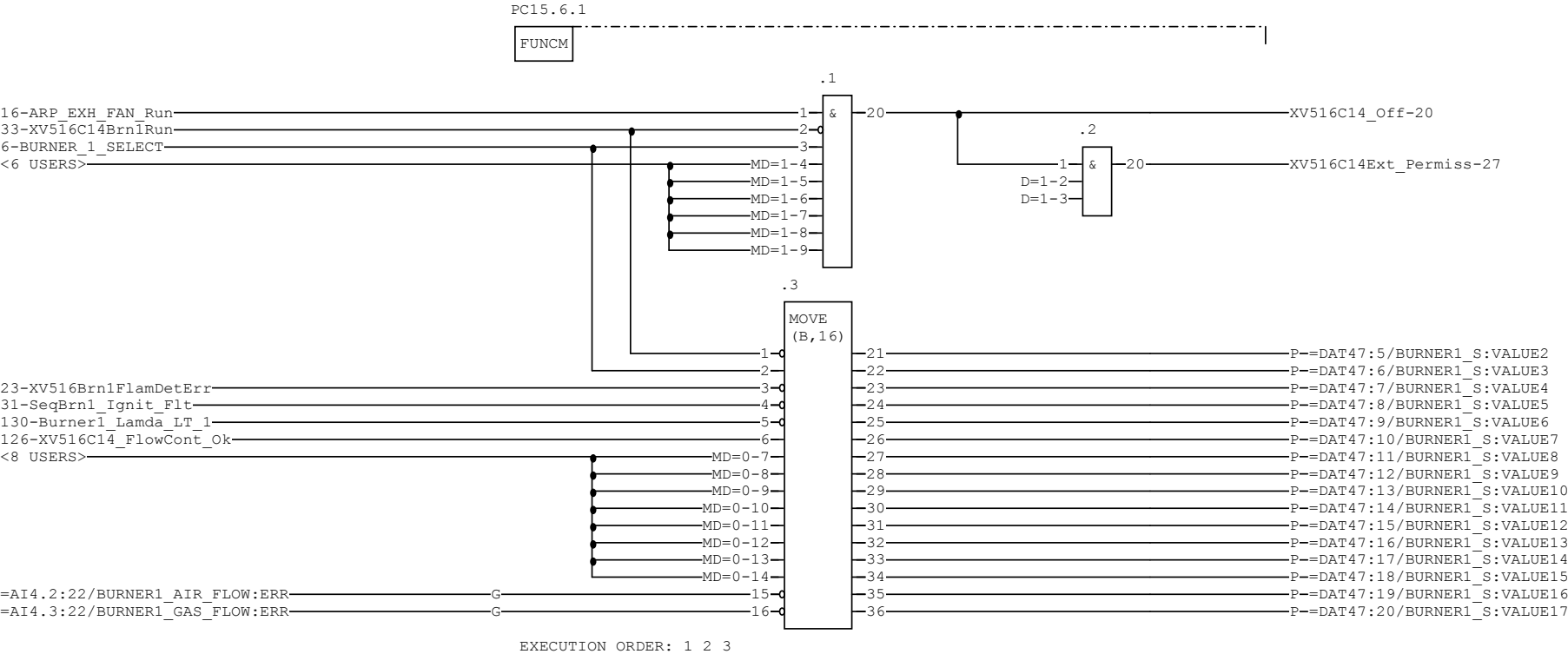
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Tech. ref.			Rev. ind.
Resp. dept.			Sheet 17
Date			Cont. 18



Design ch.	PC DIAGRAM PC15		Lang.
Tech. ref.			Rev. ind.
Resp. dept.			Sheet 18
Date			Cont. 19

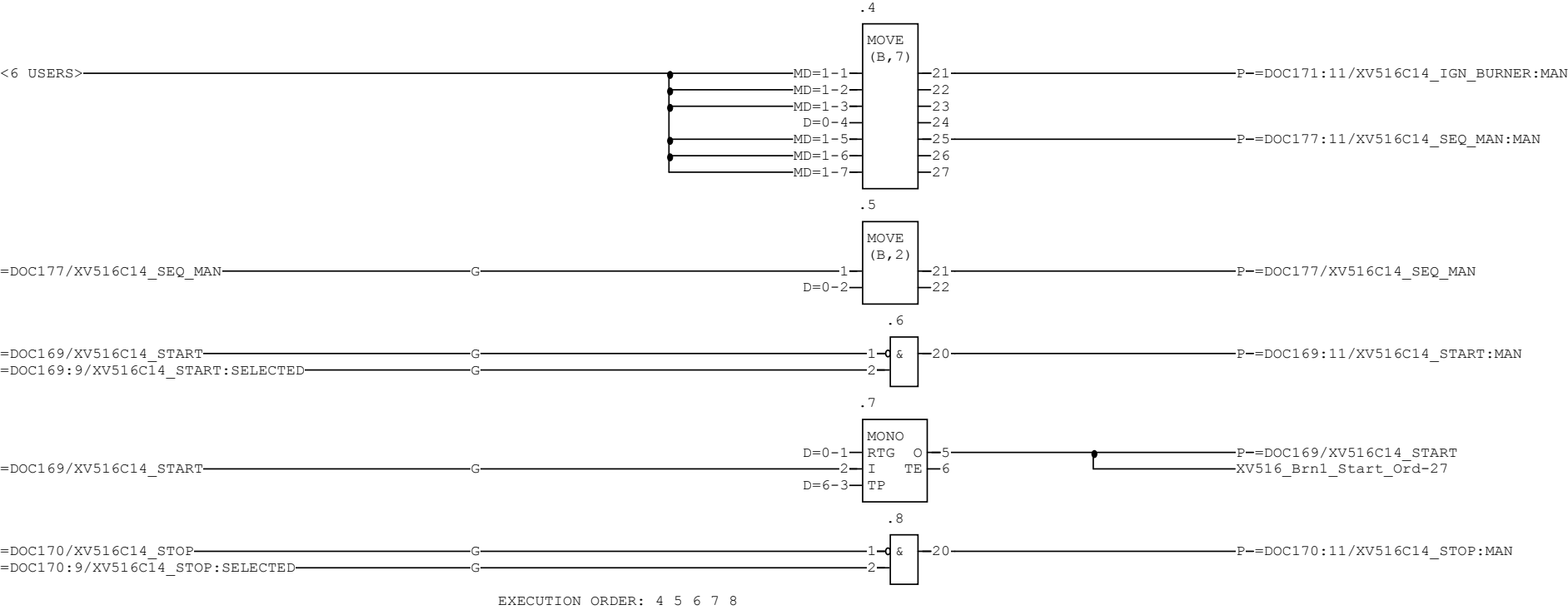


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Tech. ref.			Rev. ind.
Resp. dept.			Sheet 19
Date			Cont. 20



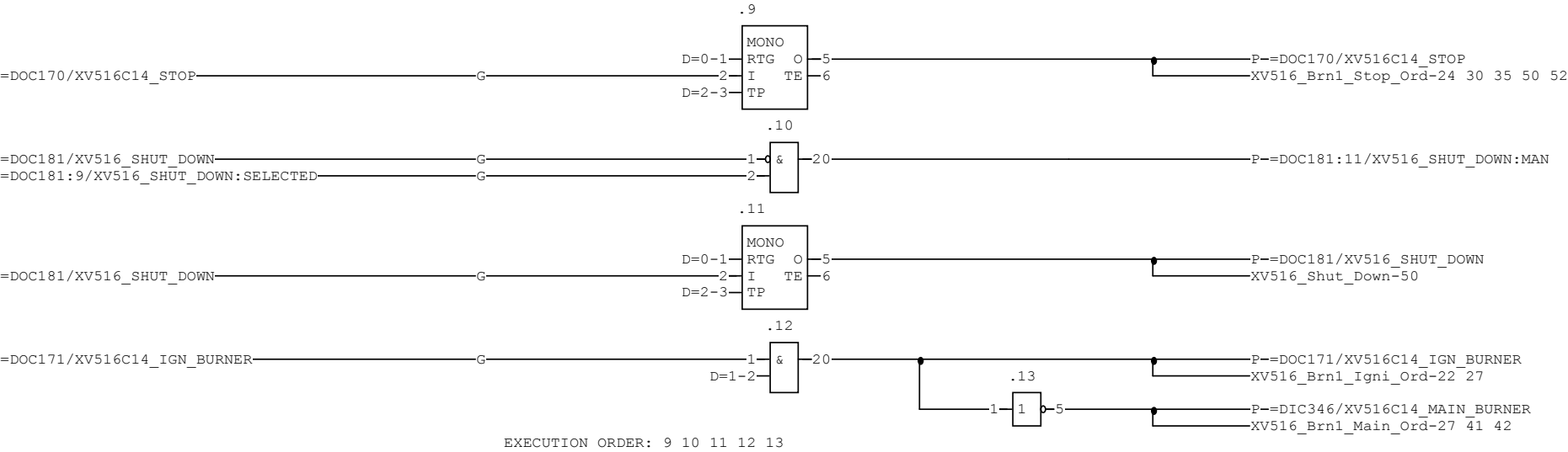
Sequence Control - Common for XV516C14 Burner 1

Design ch.	PC DIAGRAM PC15		Lang.
Tech. ref.			Rev. ind.
Resp. dept.			Sheet 20
Date			Cont. 21



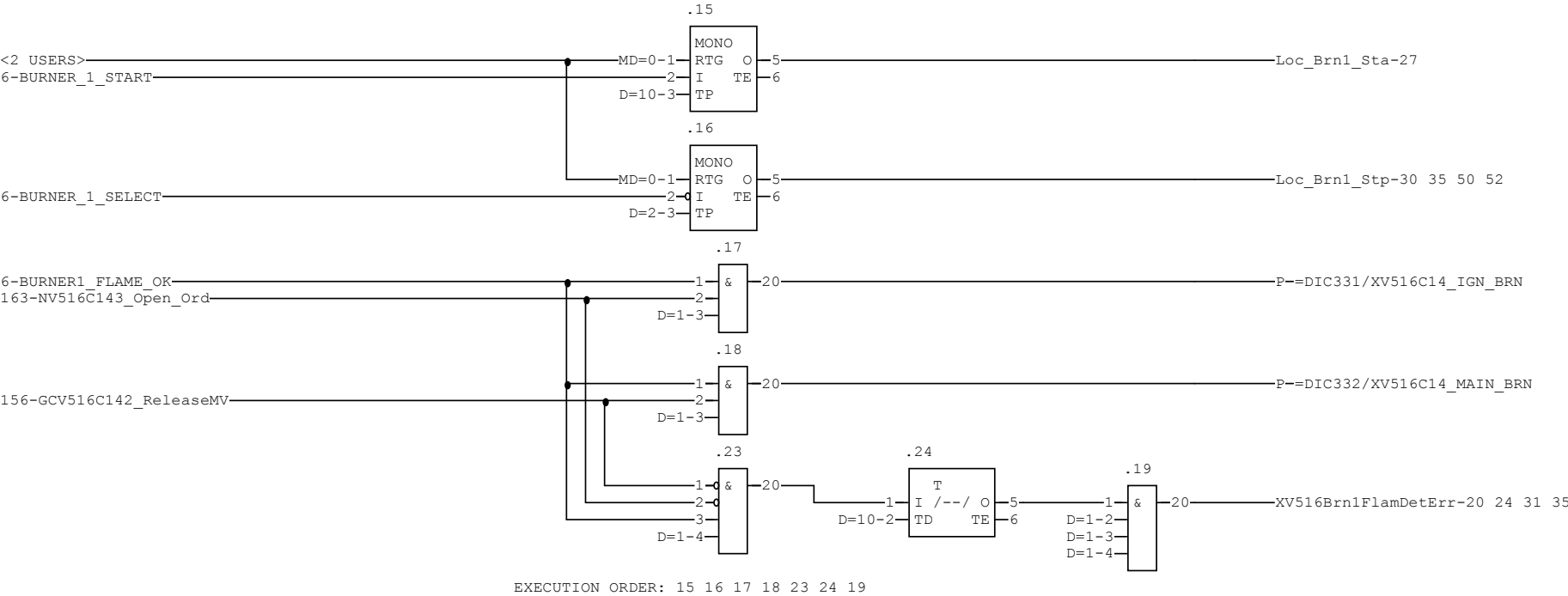
Sequence Control - Common for XV516C14 Burner 1

Design ch.	PC DIAGRAM PC15		Lang.
Tech. ref.			Rev. ind.
Resp. dept.			Sheet 21
Date			Cont. 22



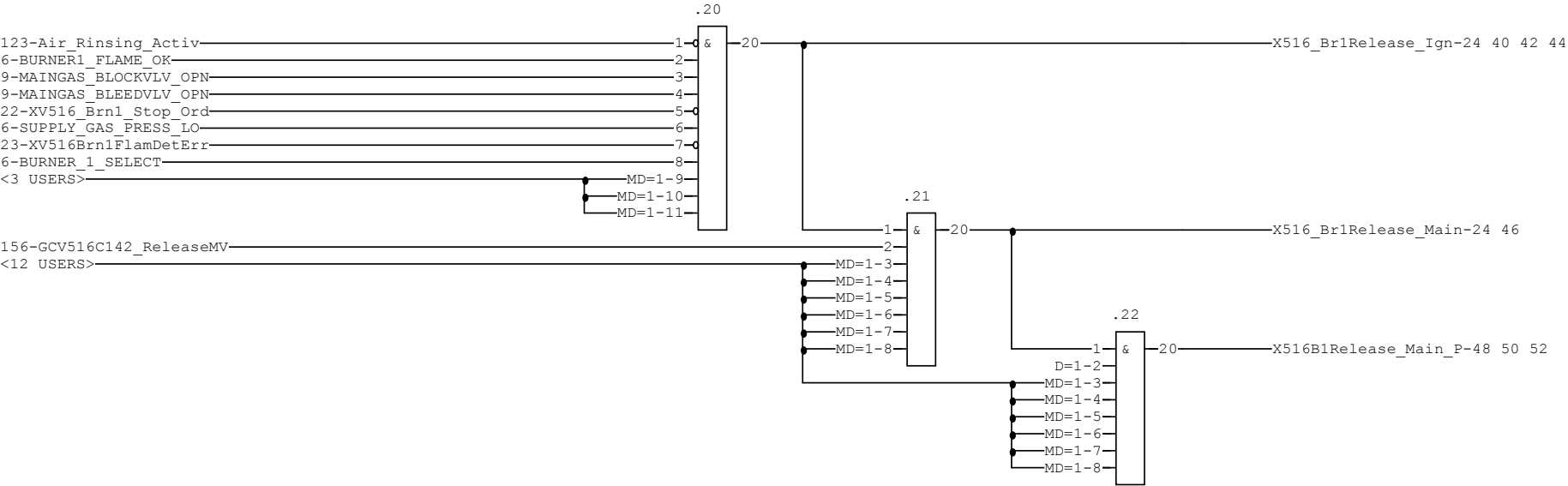
Sequence Control - Common for XV516C14 Burner 1

Design ch.	PC DIAGRAM PC15		Lang.
Tech. ref.			Rev. ind.
Resp. dept.			Sheet 22
Date			Cont. 23



Sequence Control - Common for XV516C14 Burner 1

Design ch.	PC DIAGRAM PC15		Lang.
Tech. ref.			Rev. ind.
Resp. dept.			Sheet 23
Date			Cont. 24

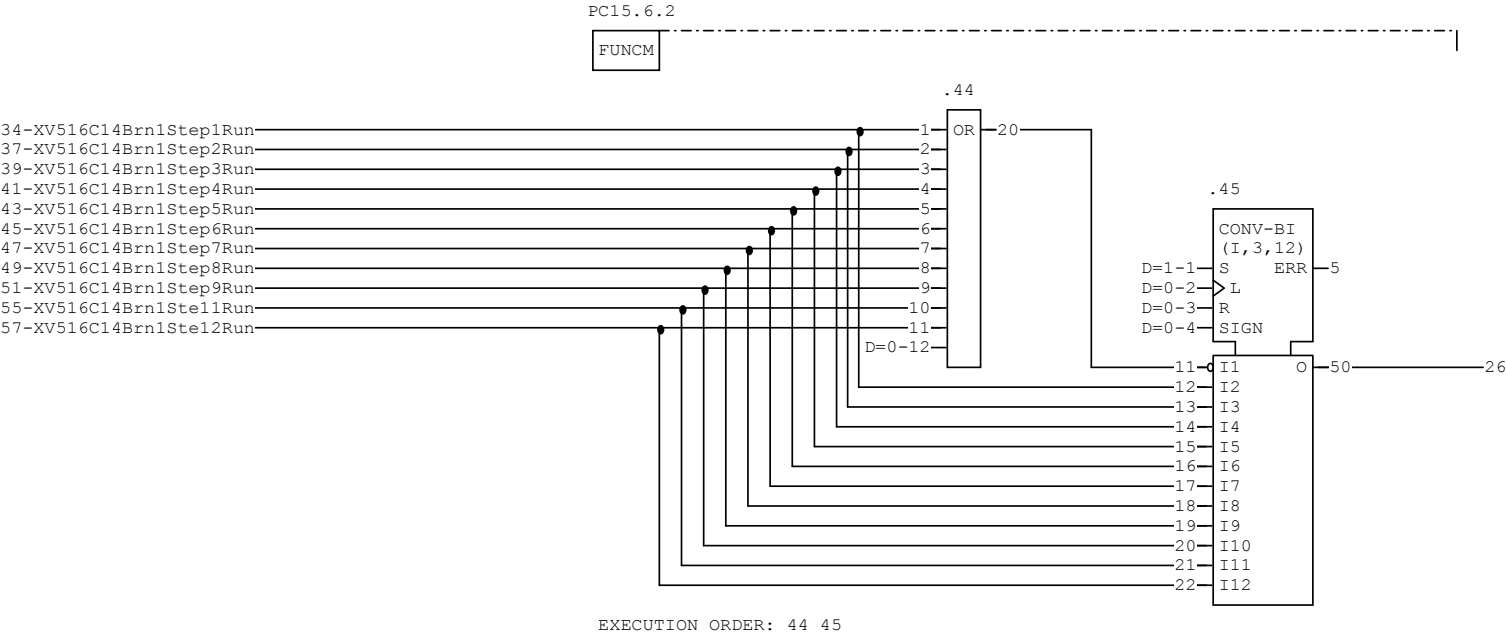


EXECUTION ORDER: 20 21 22  
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PC15.6.1

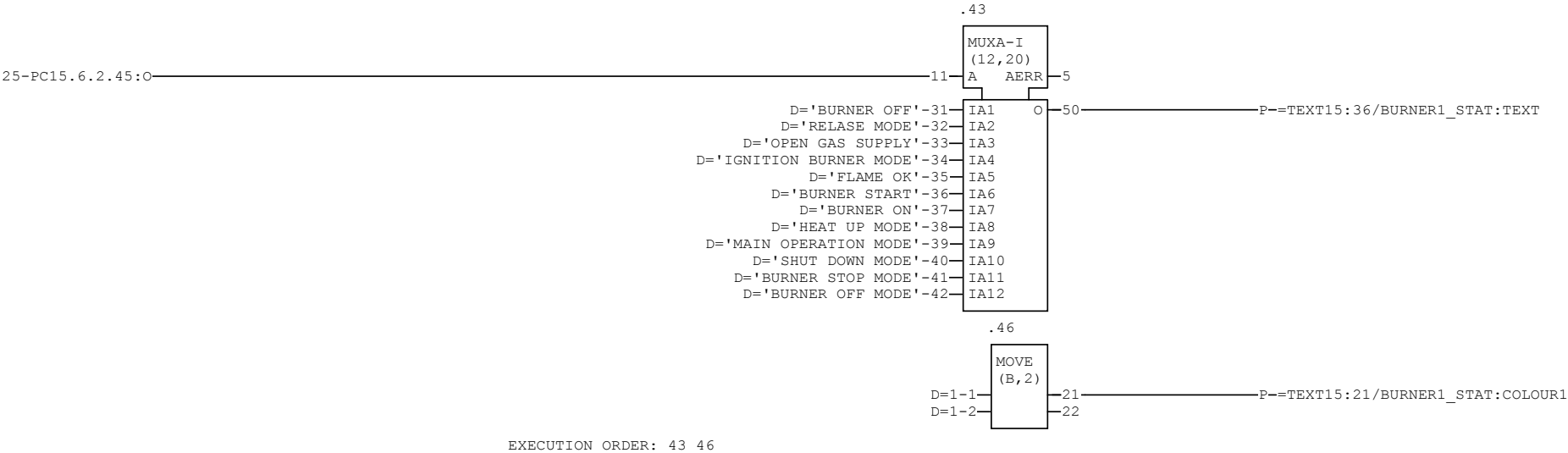
Sequence Control - Common for XV516C14 Burner 1

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Tech. ref.				Rev. ind.
Resp. dept.				Sheet 24
Date				Cont. 25

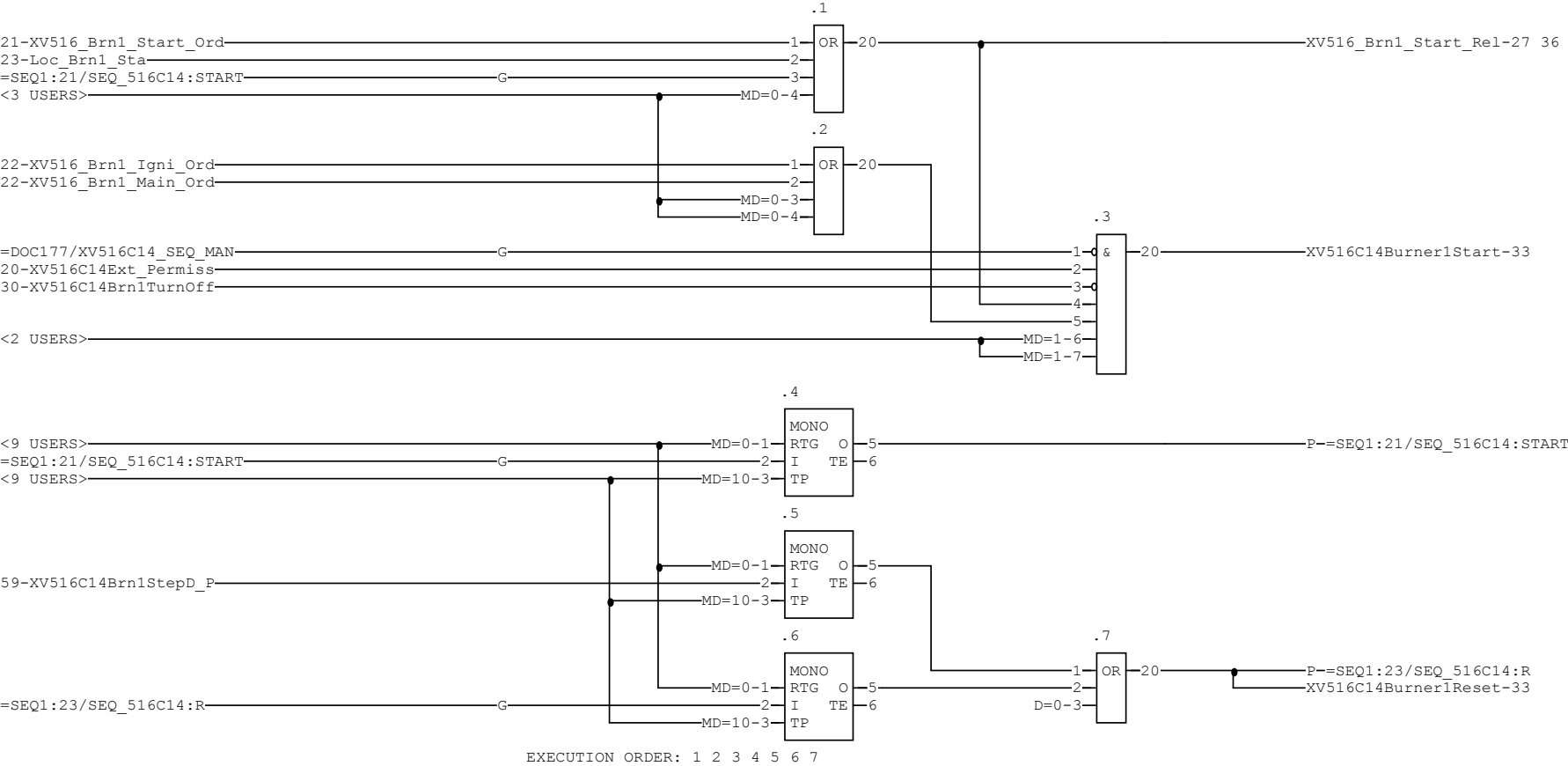




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Tech. ref.			Rev. ind.
Resp. dept.			Sheet 25
Date			Cont. 26

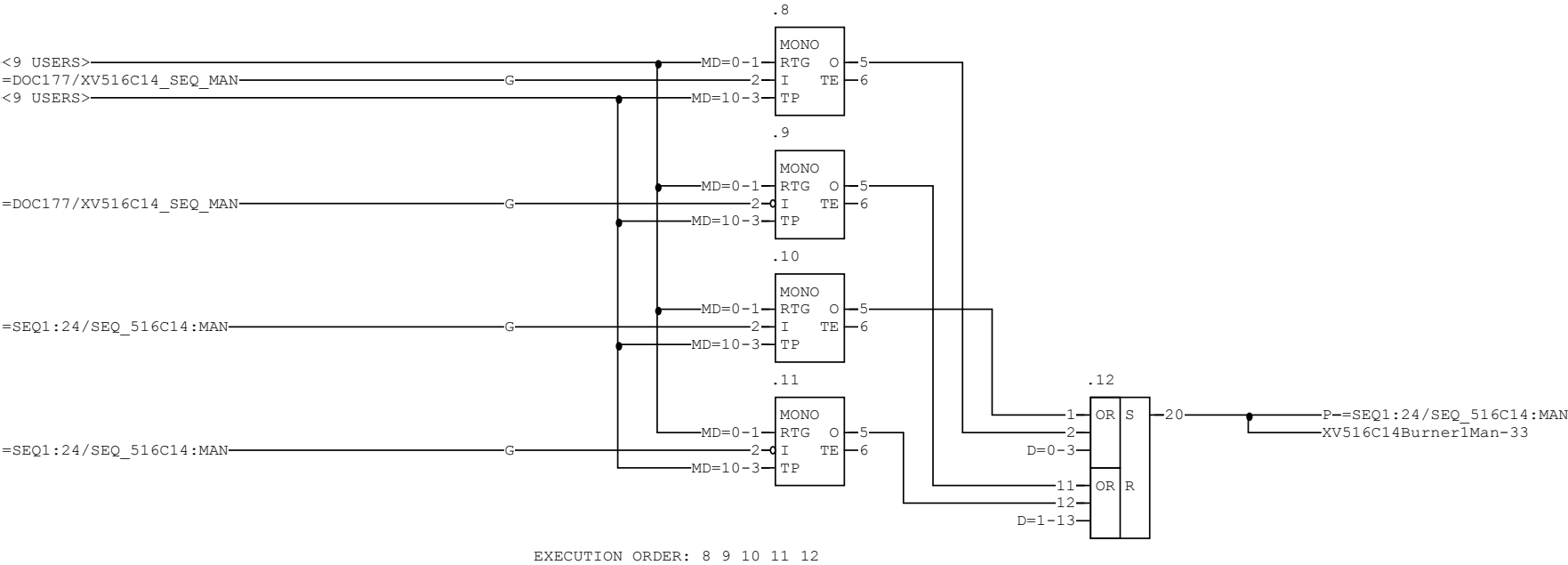


Design ch.	PC DIAGRAM PC15		Lang.
Tech. ref.			Rev. ind.
Resp. dept.			Sheet 26
Date			Cont. 27



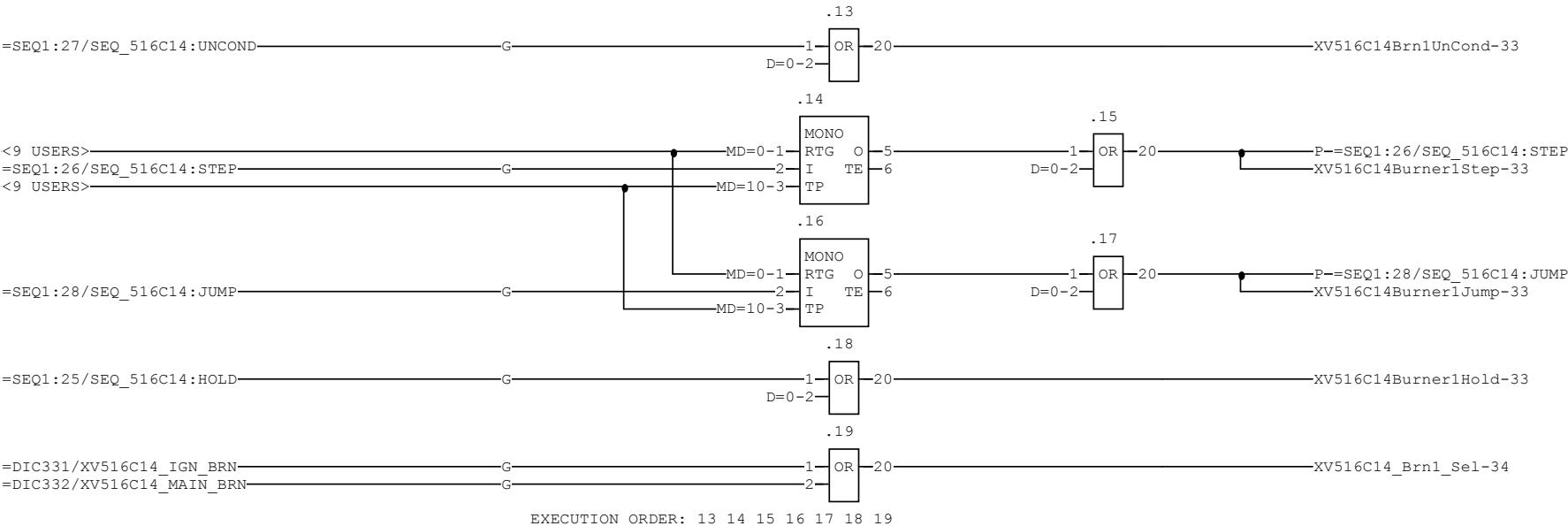
XV516C14 Burner1 - Sequence header

Design ch.	PC DIAGRAM PC15		Lang.
Tech. ref.			Rev. ind.
Resp. dept.			Sheet 27
Date			Cont. 28

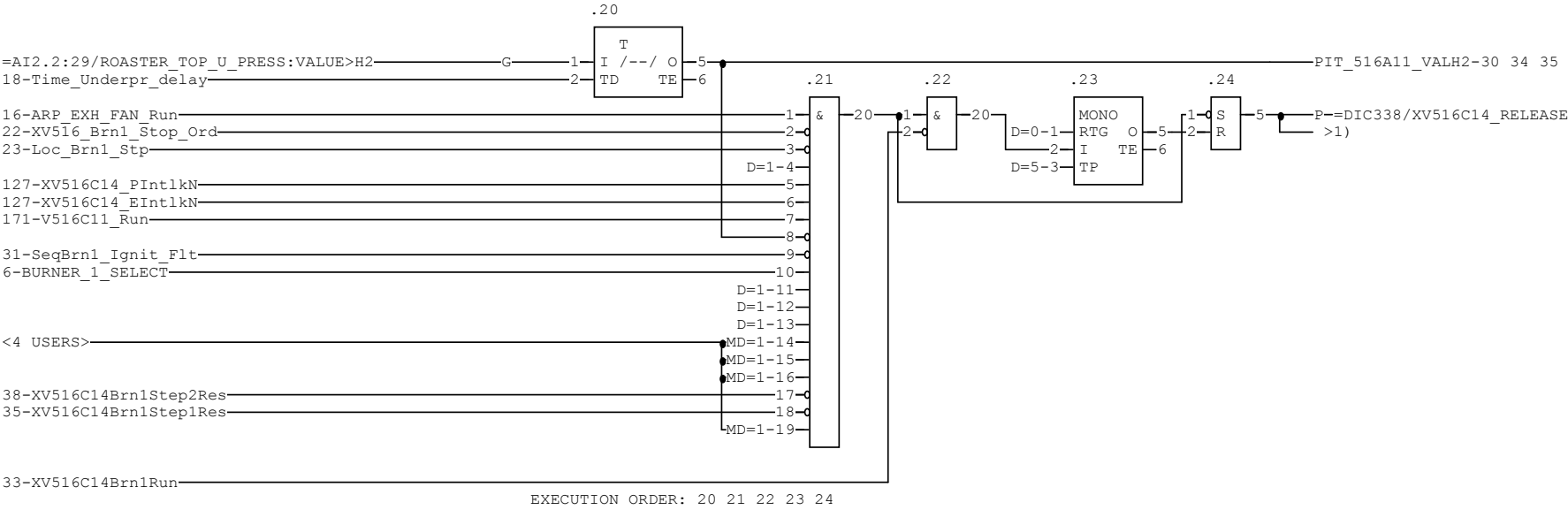


XV516C14 Burner1 - Sequence header

Design ch.	PC DIAGRAM PC15		Lang.
Tech. ref.			Rev. ind.
Resp. dept.			Sheet 28
Date			Cont. 29



Design ch.	PC DIAGRAM PC15		Lang.
Tech. ref.			Rev. ind.
Resp. dept.			Sheet 29
Date			Cont. 30

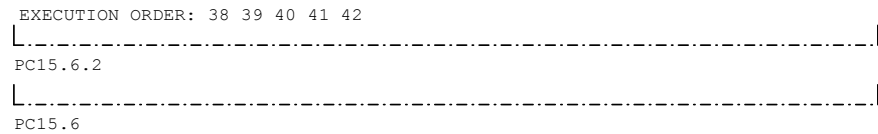


>1) XV516C14Brn1TurnOff-27 31 34 37 39 41 43 45 47 49 51 53 55

XV516C14 Burner1 - Sequence header Turn off

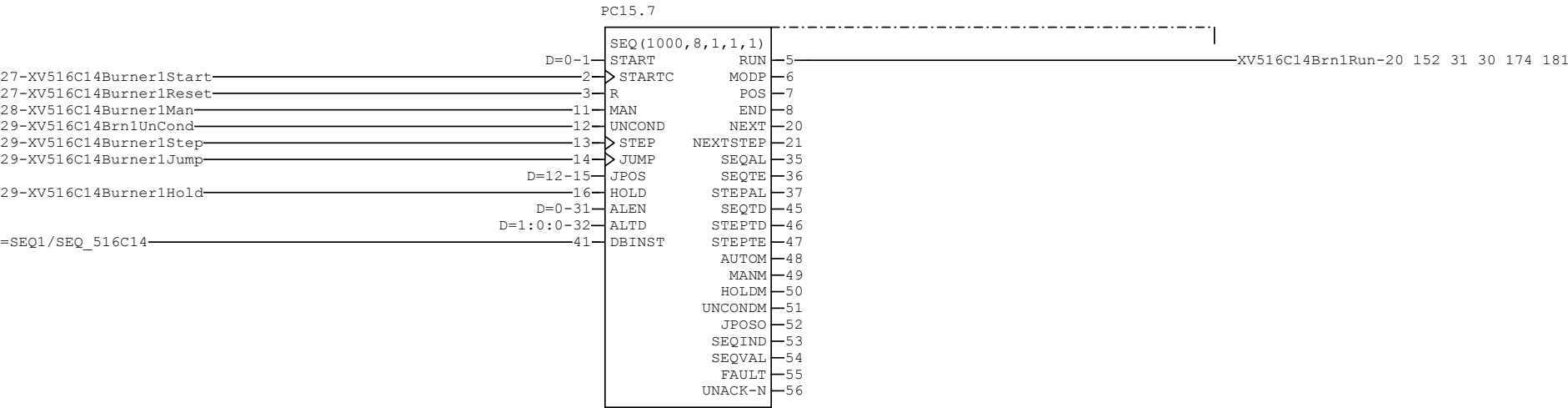
Design ch.	PC DIAGRAM PC15		Lang.
Tech. ref.			Rev. ind.
Resp. dept.			Sheet 30
Date			Cont. 31





Design ch.	PC DIAGRAM PC15		Lang.
Tech. ref.			Rev. ind.
Resp. dept.			Sheet 32
Date			Cont. 33

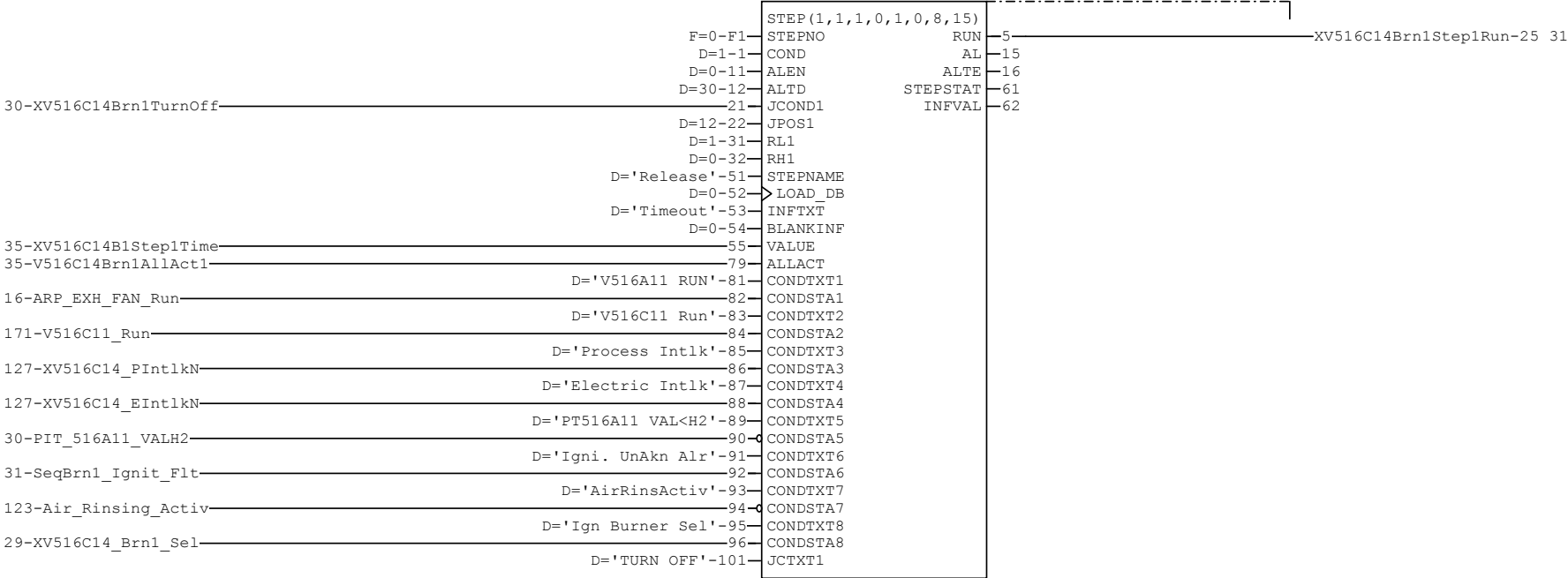




Sequence - XV516C14 Burner1

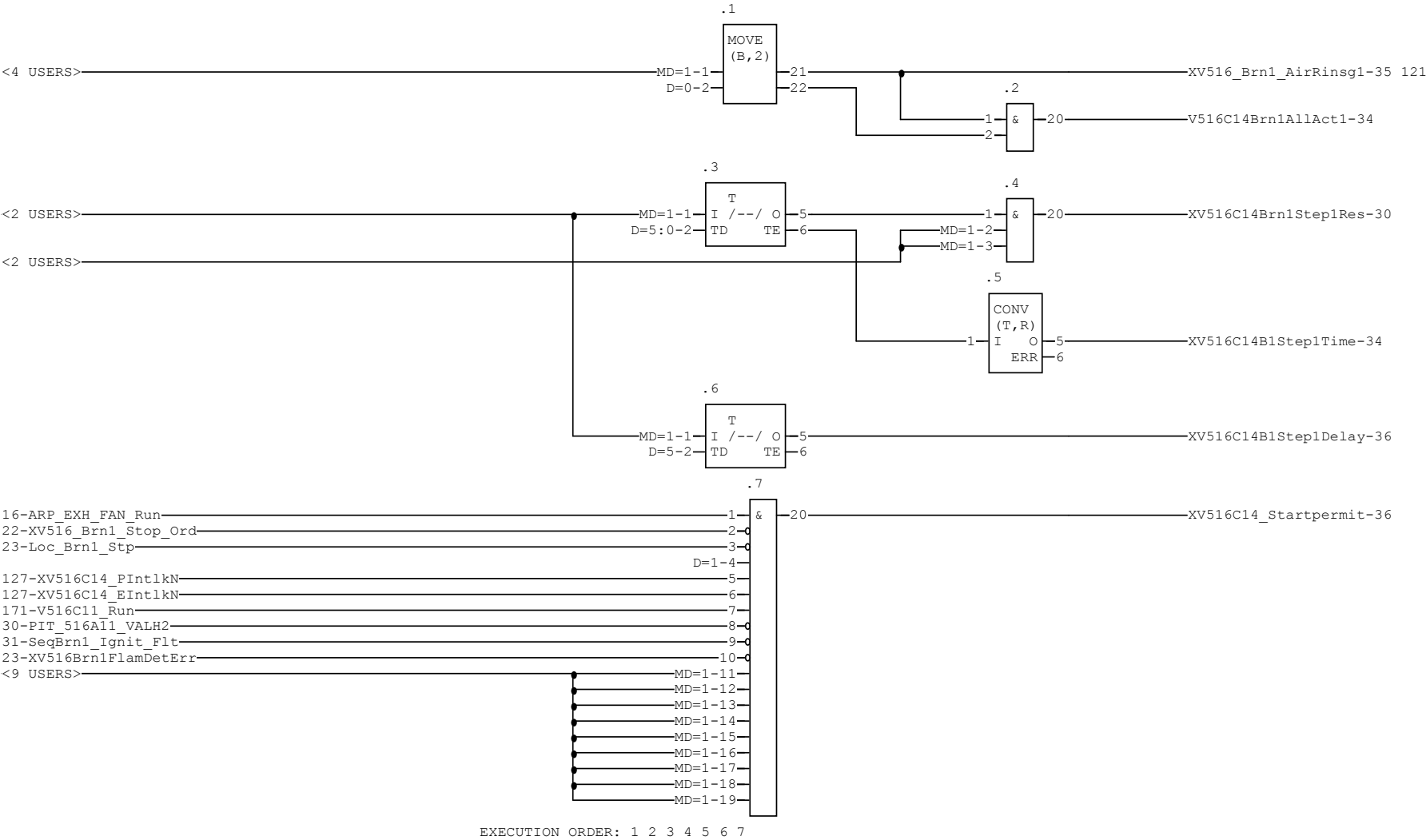
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Tech. ref.				Rev. ind.
Resp. dept.				Sheet 33
Date				Cont. 34

PC15.7.1

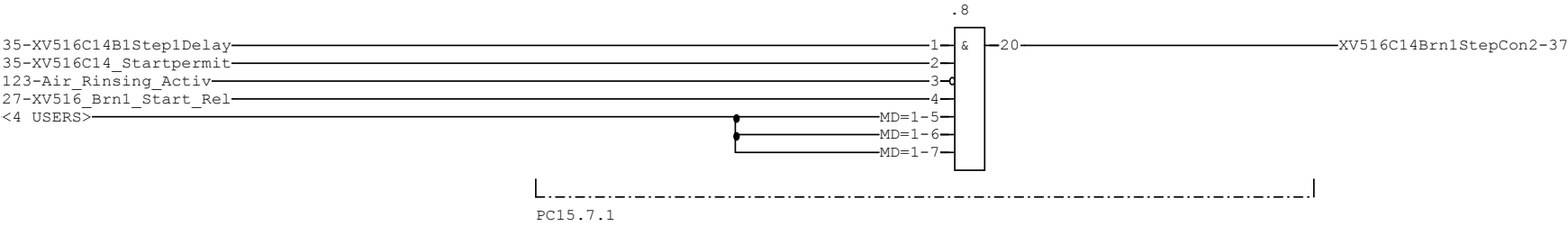


XV516C14 Burner 1 - STEP 1

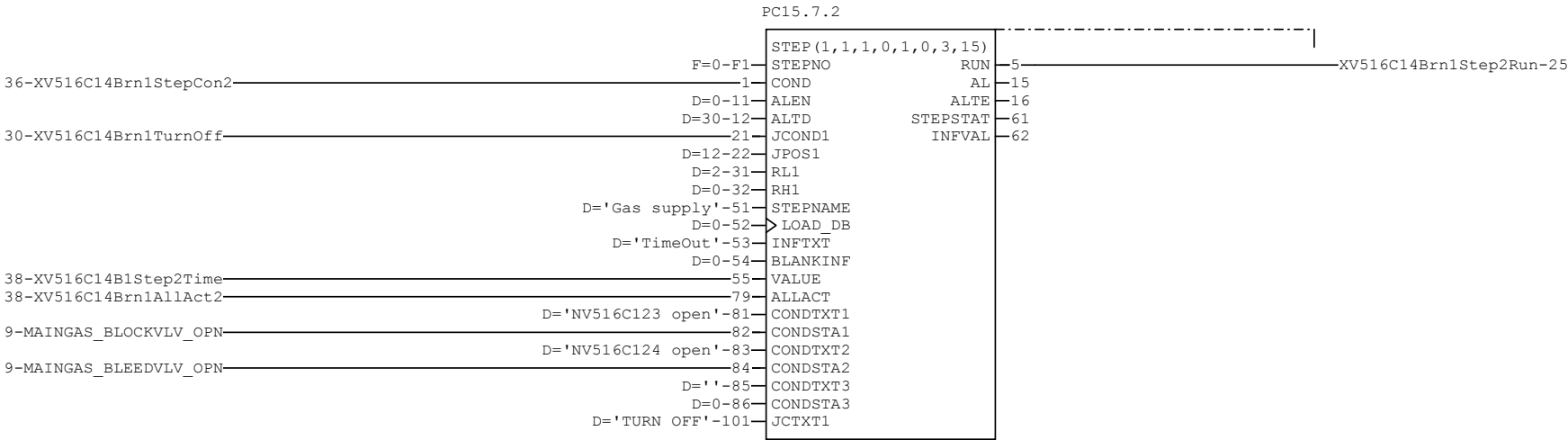
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Tech. ref.				Rev. ind.
Resp. dept.				Sheet 34
Date				Cont. 35



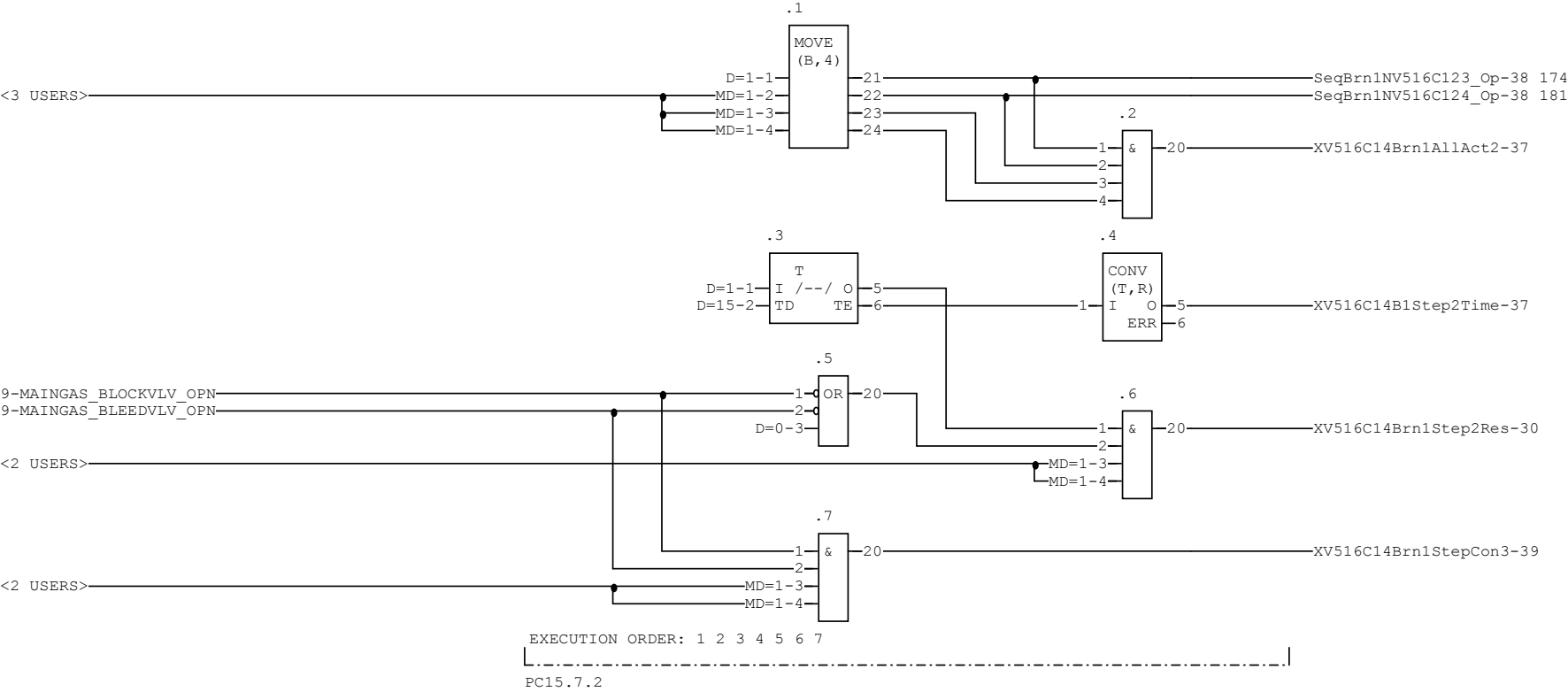
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Tech. ref.				Rev. ind.
Resp. dept.				Sheet 35
Date				Cont. 36



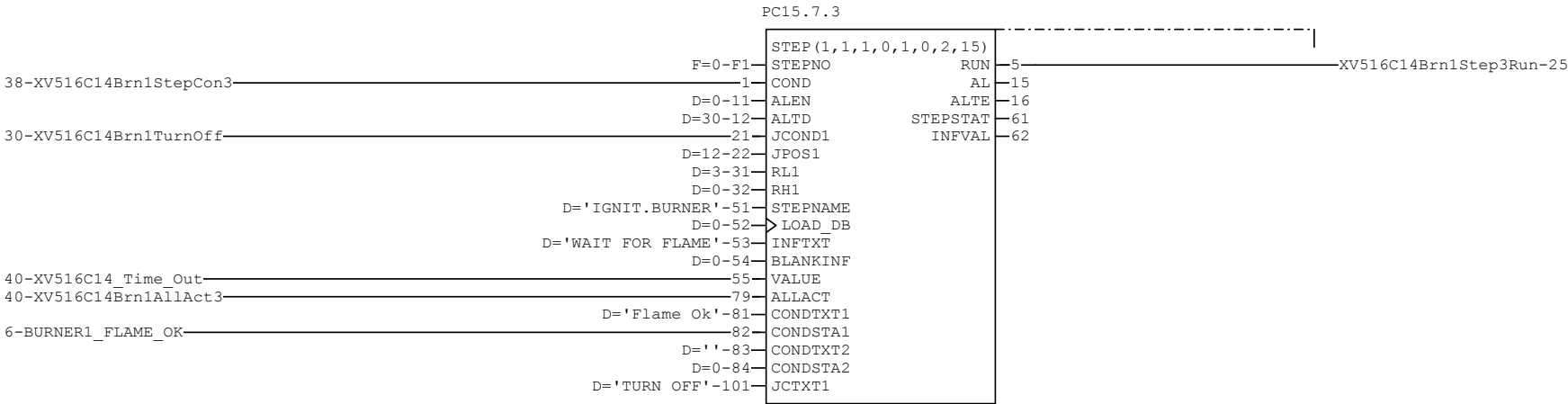
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Tech. ref.			Rev. ind.
Resp. dept.			Sheet 36
Date			Cont. 37



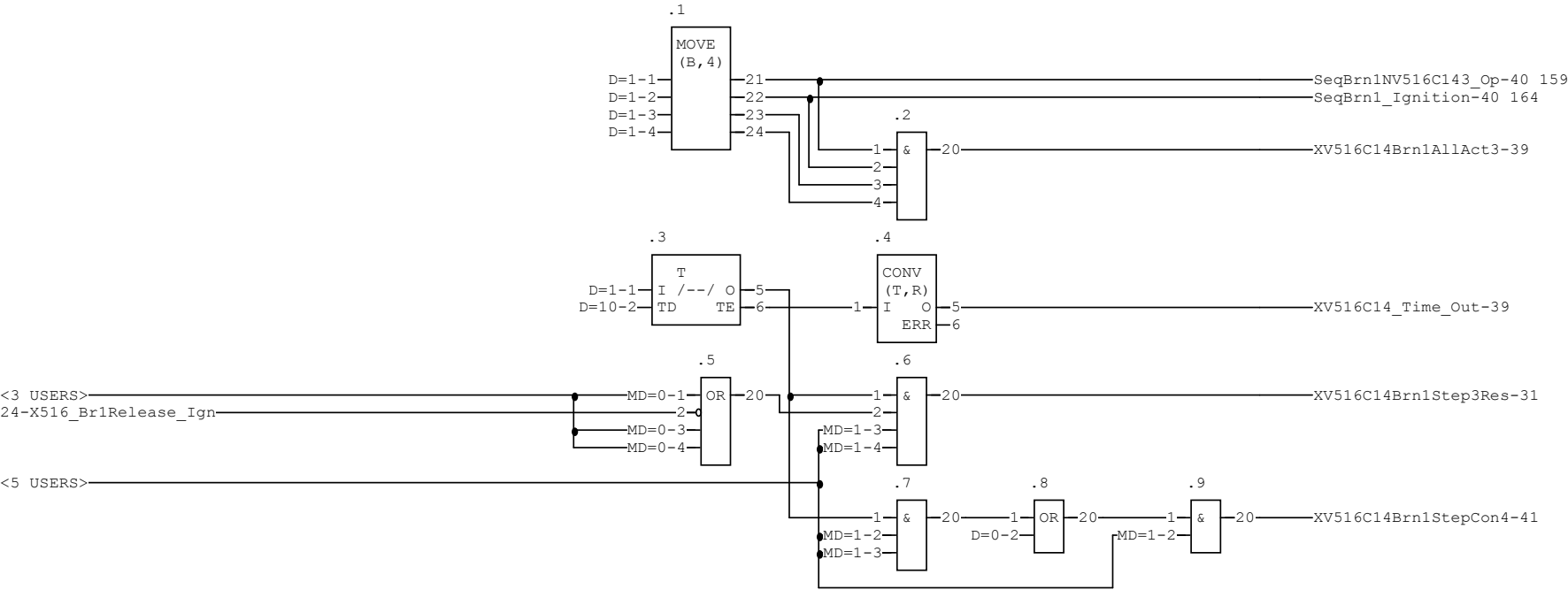
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Tech. ref.			Rev. ind.
Resp. dept.			Sheet 37
Date			Cont. 38



Design ch.	PC DIAGRAM PC15		Lang.
Tech. ref.			Rev. ind.
Resp. dept.			Sheet 38
Date			Cont. 39



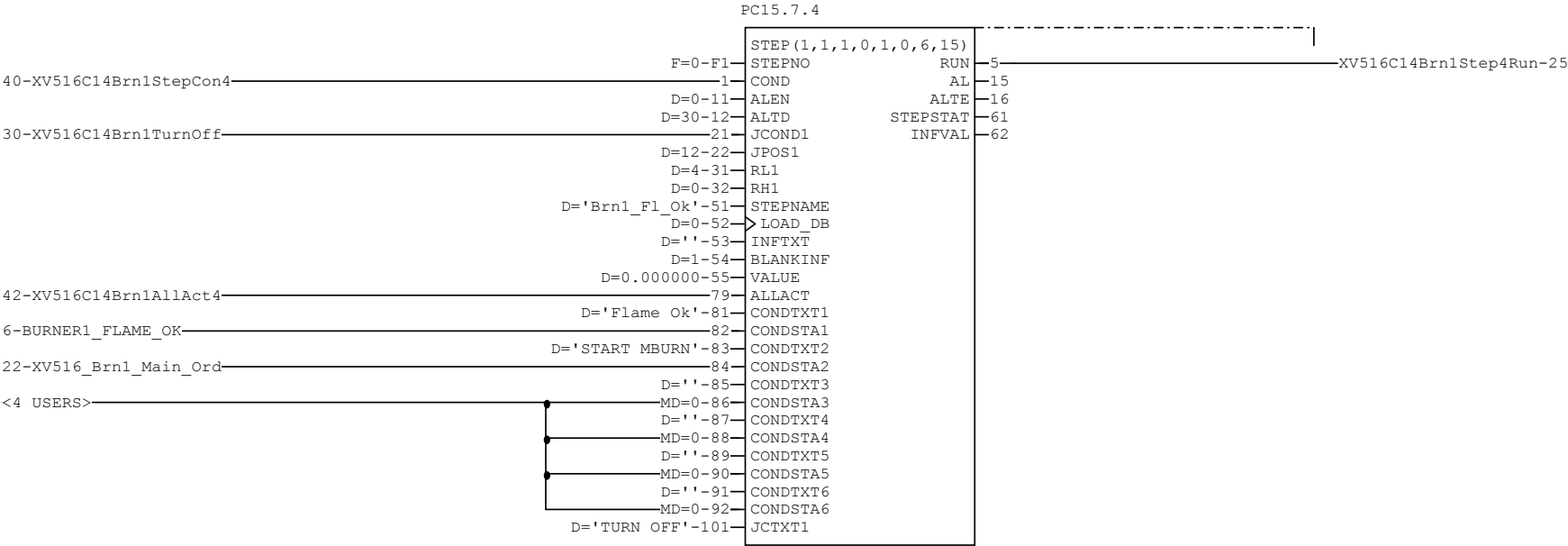
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Tech. ref.			Rev. ind.
Resp. dept.			Sheet 39
Date			Cont. 40



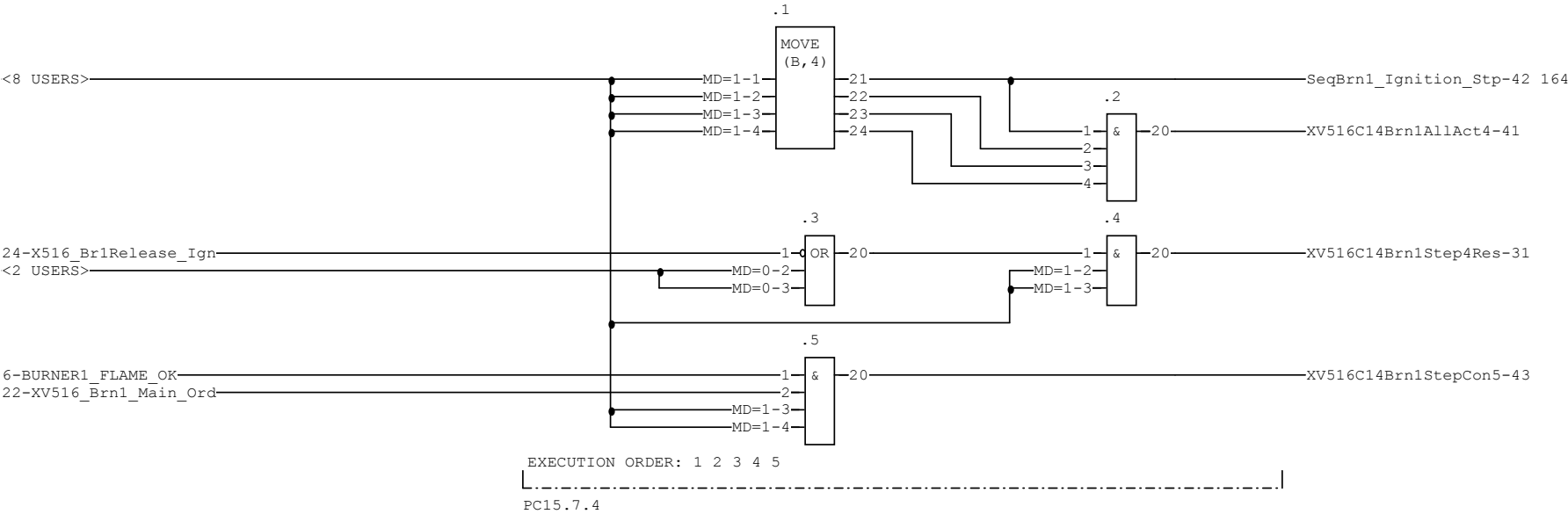
EXECUTION ORDER: 1 2 3 4 5 6 7 8 9  
PC15.7.3

Design ch.	PC DIAGRAM PC15		Lang.
Tech. ref.			Rev. ind.
Resp. dept.			Sheet 40
Date			Cont. 41



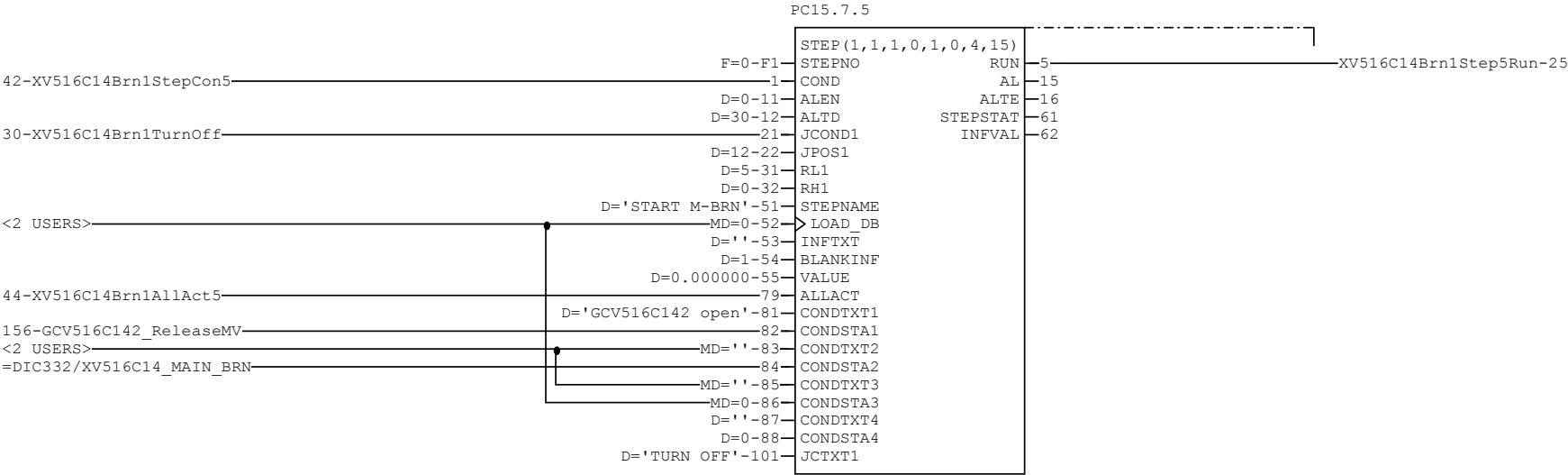


Design ch.	PC DIAGRAM PC15		Lang.
Tech. ref.			Rev. ind.
Resp. dept.			Sheet 41
Date			Cont. 42

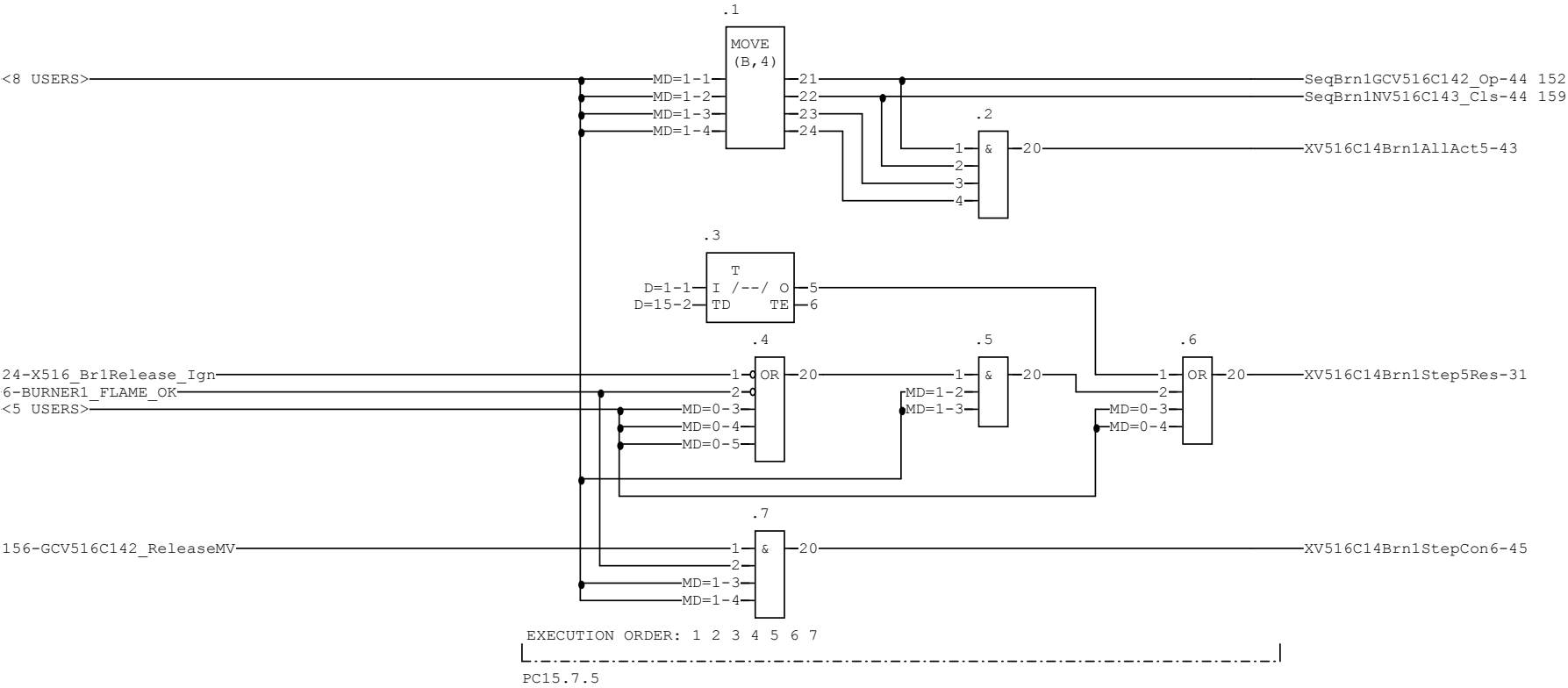


PC15.7.4

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Tech. ref.			Rev. ind.
Resp. dept.			Sheet 42
Date			Cont. 43

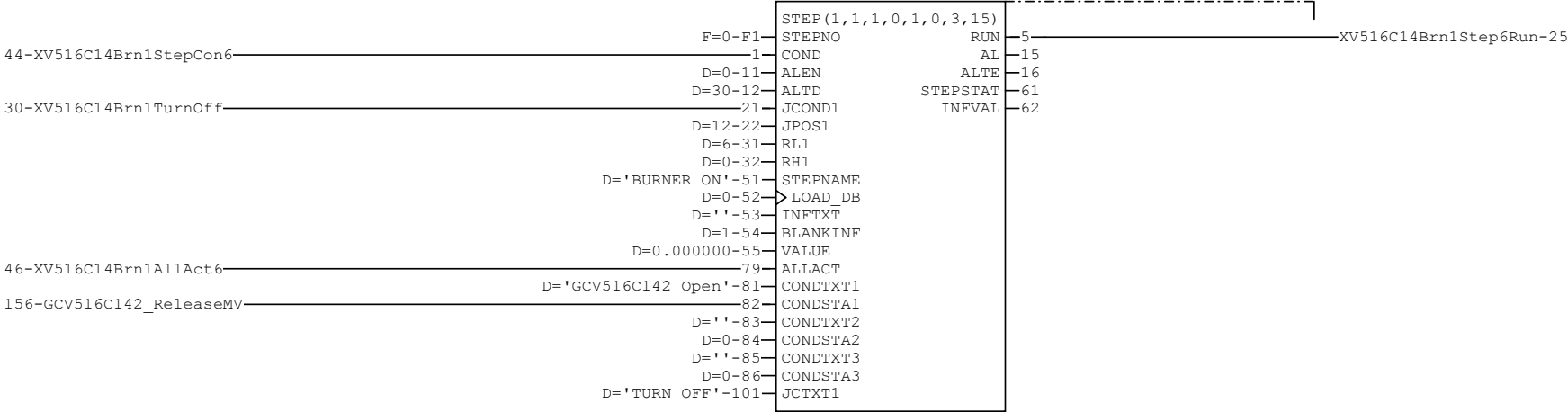


Design ch.	PC DIAGRAM PC15		Lang.
Tech. ref.			Rev. ind.
Resp. dept.			Sheet 43
Date			Cont. 44

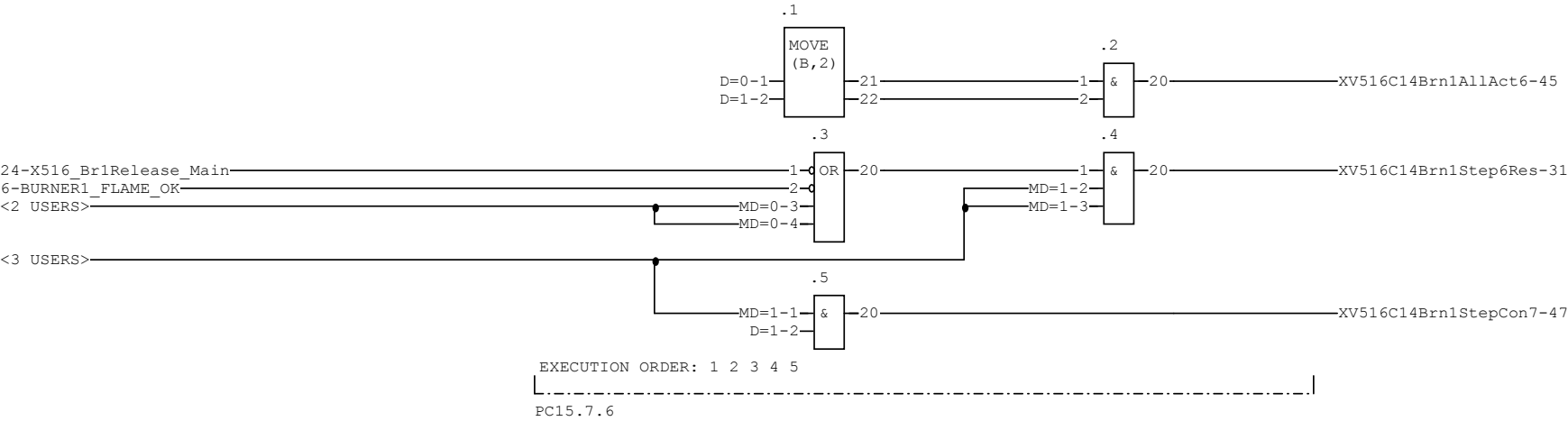


Design ch.	PC DIAGRAM PC15		Lang.
Tech. ref.			Rev. ind.
Resp. dept.			Sheet 44
Date			Cont. 45

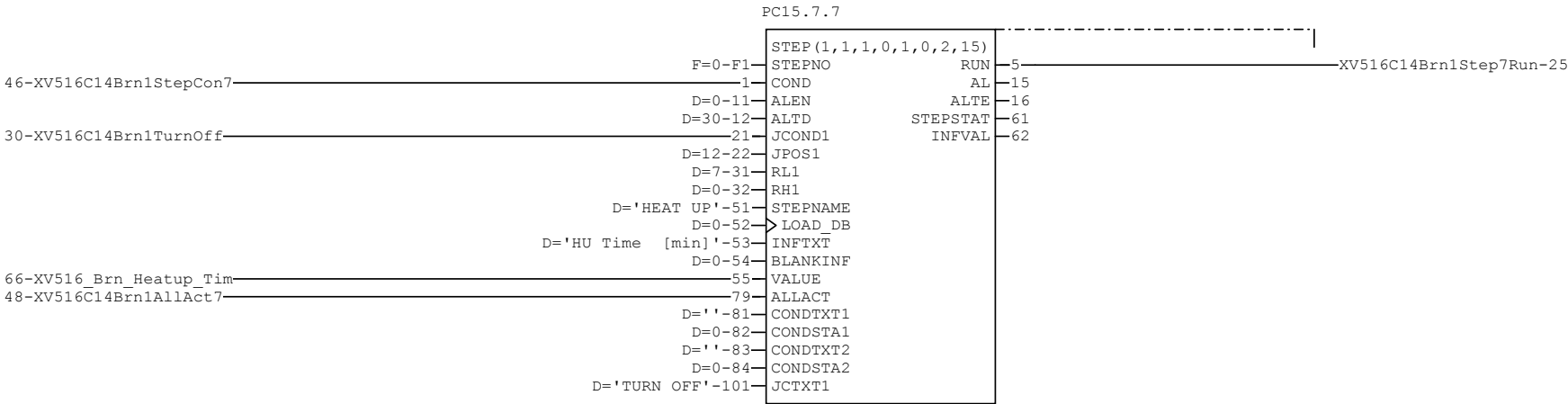
PC15.7.6



Design ch.	PC DIAGRAM PC15		Lang.
Tech. ref.			Rev. ind.
Resp. dept.			Sheet 45
Date			Cont. 46



Design ch.	PC DIAGRAM PC15		Lang.
Tech. ref.			Rev. ind.
Resp. dept.			Sheet 46
Date			Cont. 47



Design ch.	PC DIAGRAM PC15		Lang.
Tech. ref.			Rev. ind.
Resp. dept.			Sheet 47
Date			Cont. 48

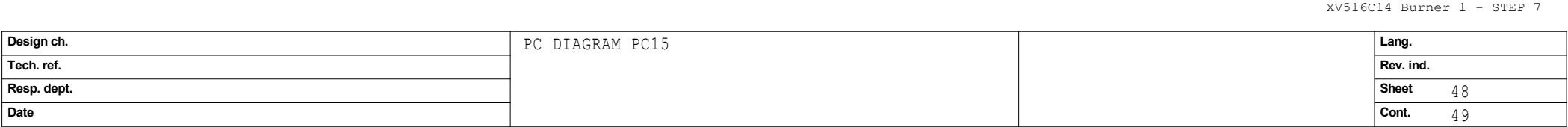
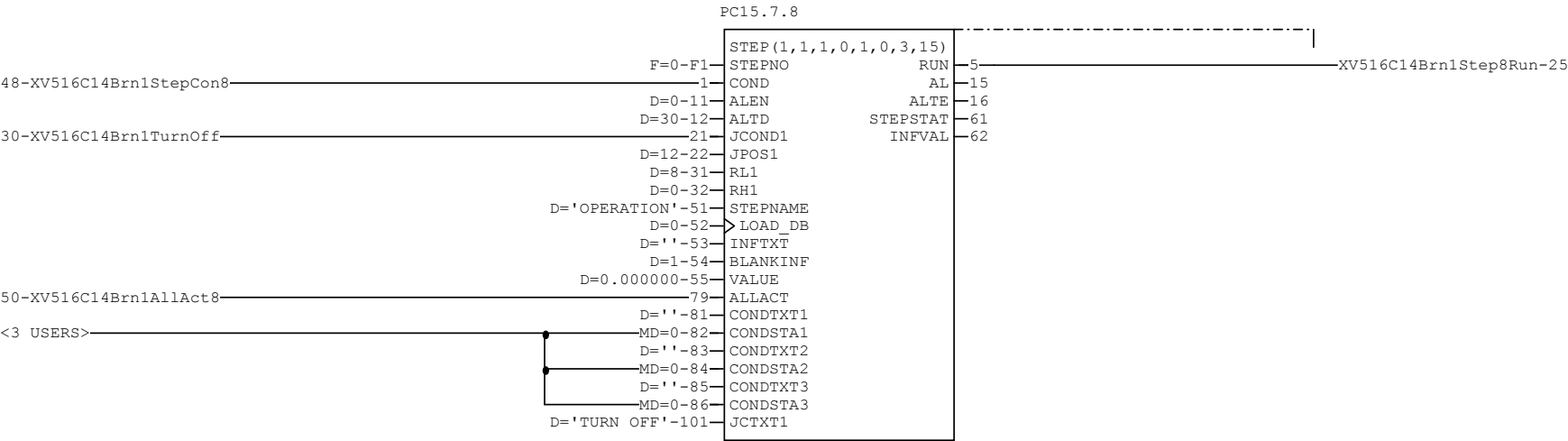




ABB Automation

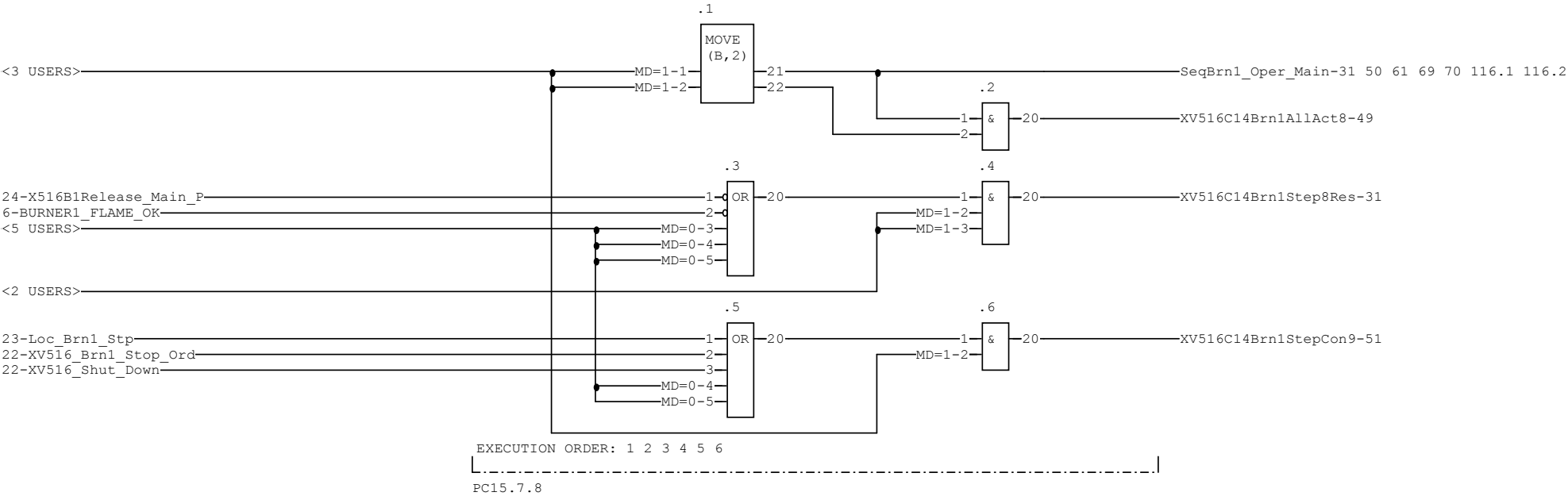
10-JAN-2017/12:04

COMMON IDENTITY: PC15.7

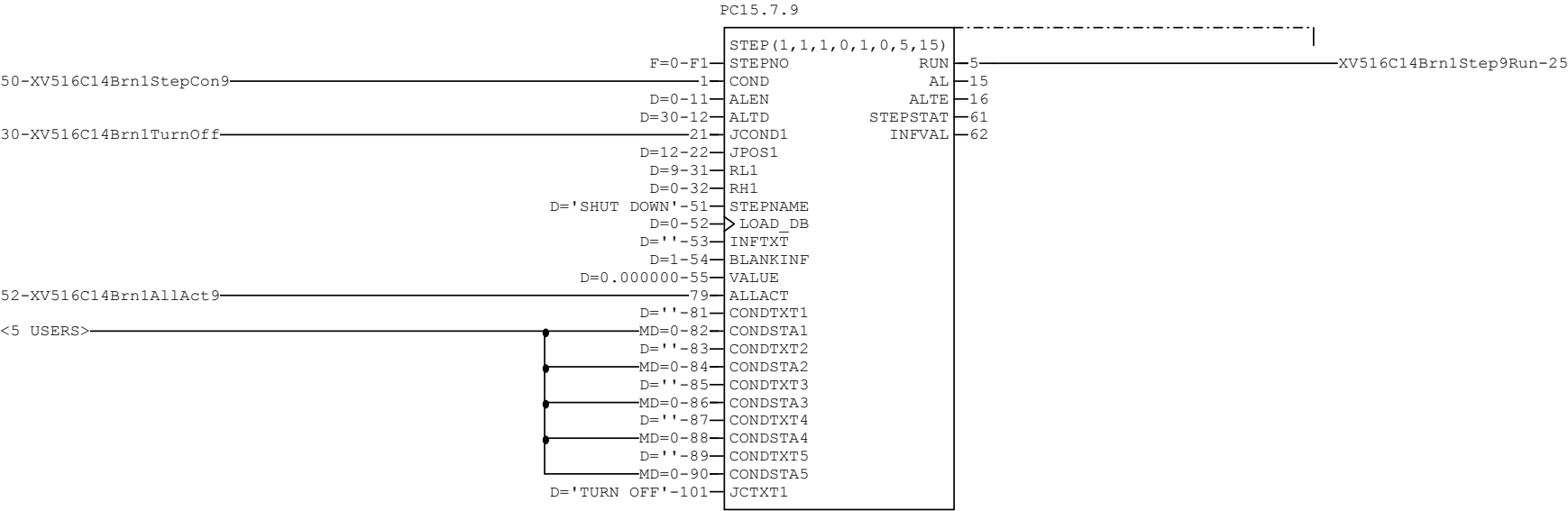


XV516C14 Burner 1 - STEP 8

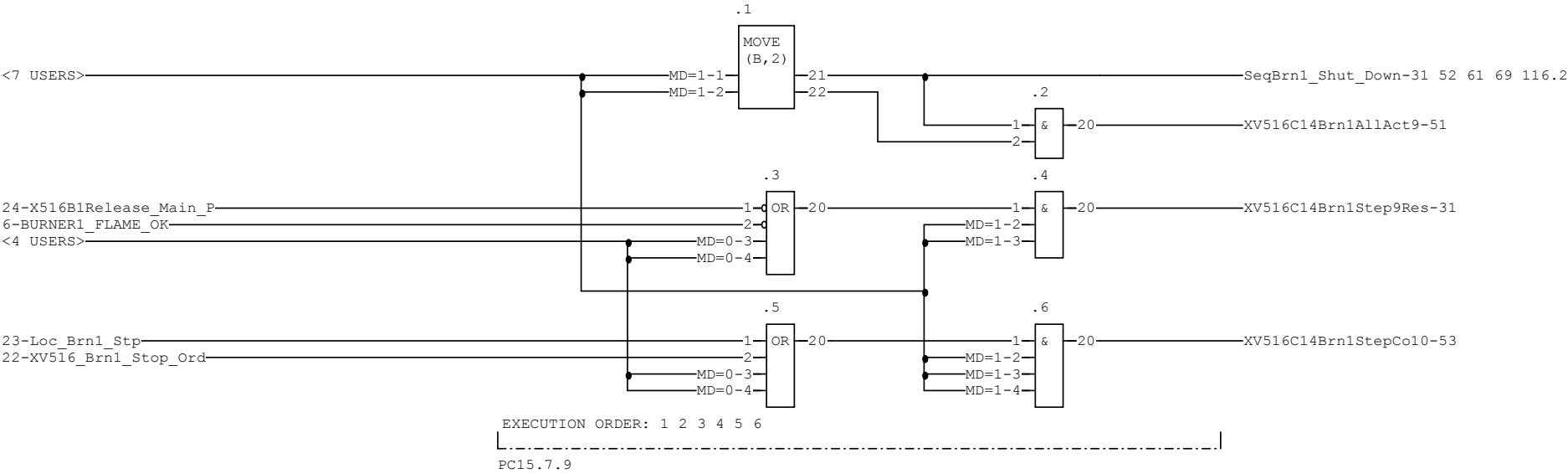
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Tech. ref.			Rev. ind.
Resp. dept.			Sheet 49
Date			Cont. 50



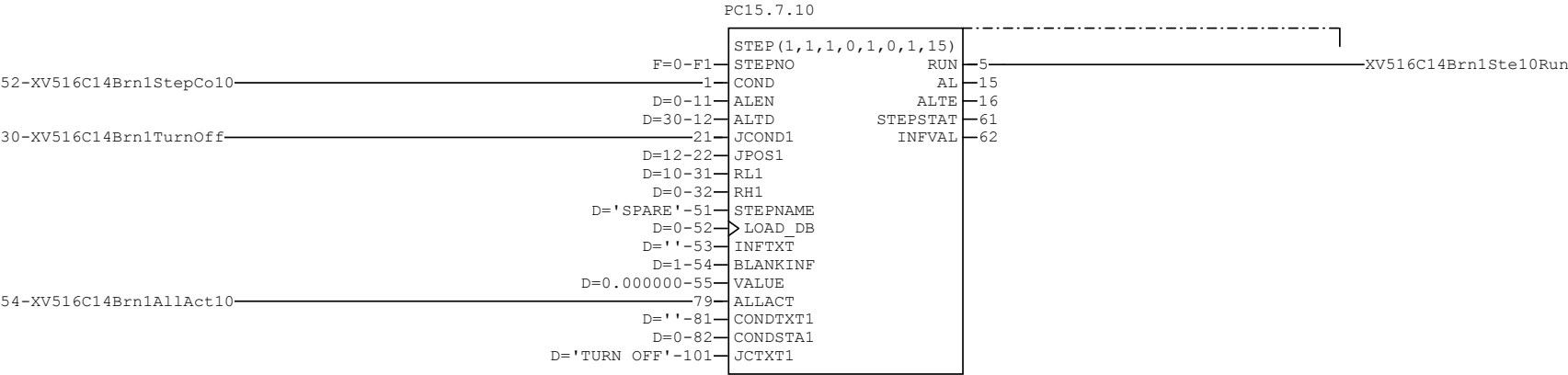
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Tech. ref.			Rev. ind.
Resp. dept.			Sheet 50
Date			Cont. 51



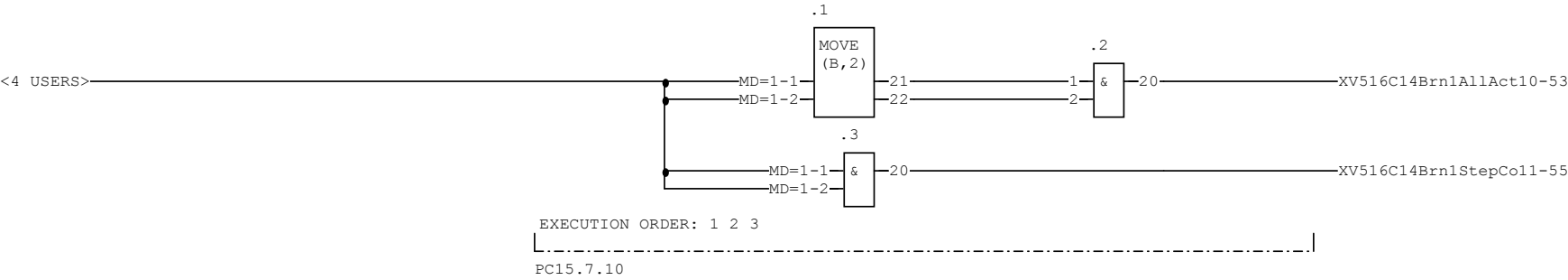
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Tech. ref.				Rev. ind.
Resp. dept.				Sheet 51
Date				Cont. 52



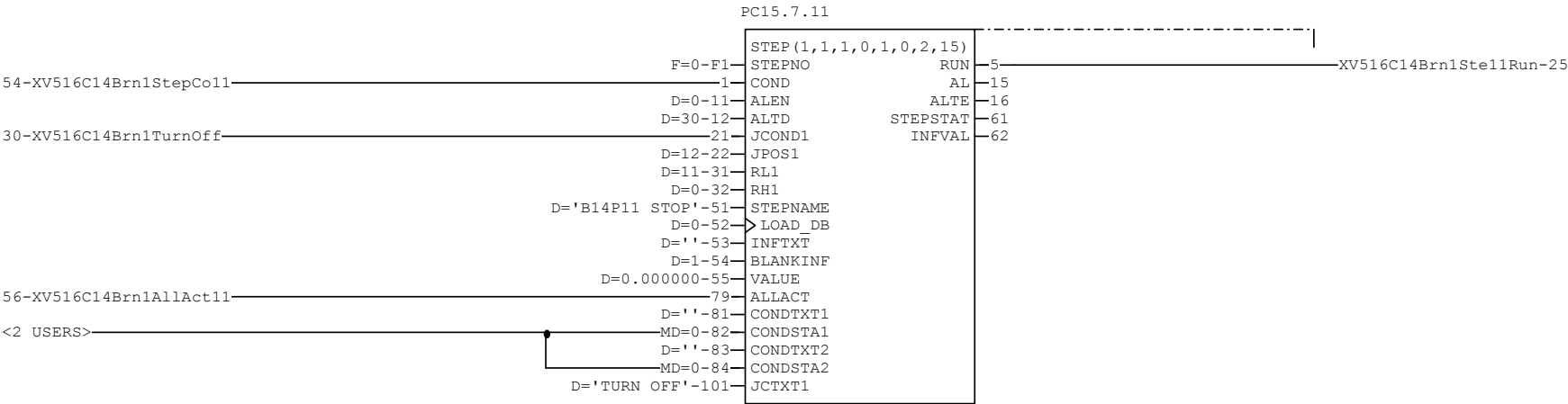
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Tech. ref.				Rev. ind.
Resp. dept.				Sheet 52
Date				Cont. 53



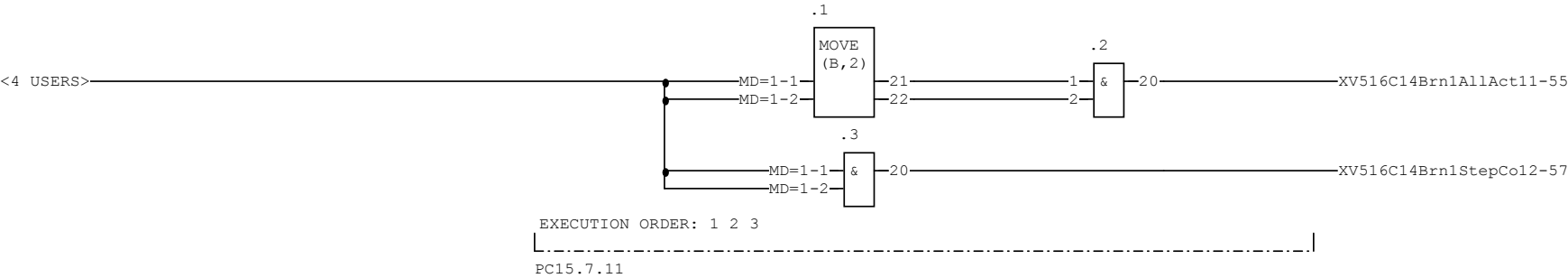
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Tech. ref.			Rev. ind.
Resp. dept.			Sheet 53
Date			Cont. 54



Design ch.	PC DIAGRAM PC15			Lang.
Tech. ref.				Rev. ind.
Resp. dept.				Sheet 54
Date				Cont. 55

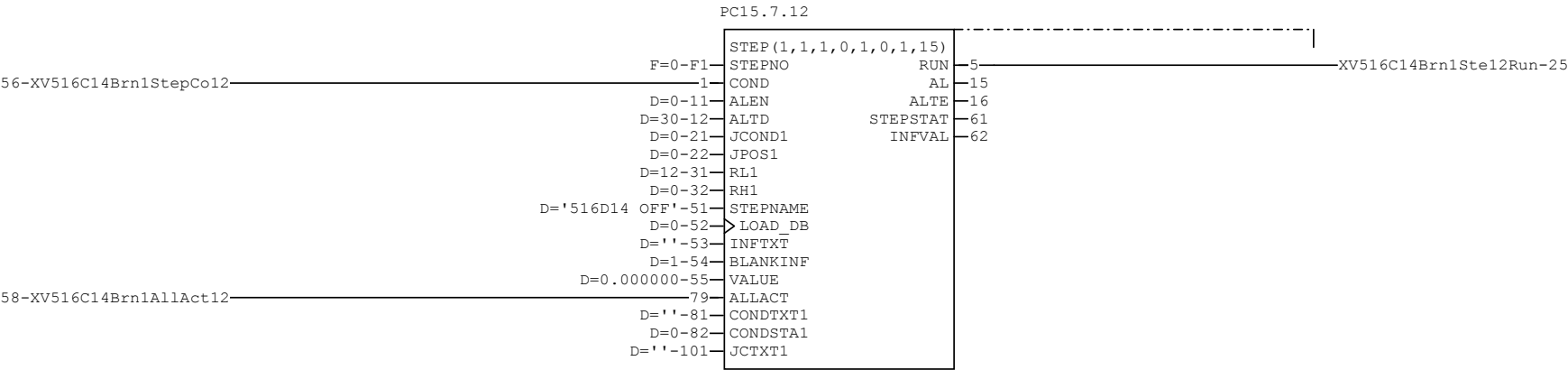


Design ch.	PC DIAGRAM PC15			Lang.
Tech. ref.				Rev. ind.
Resp. dept.				Sheet 55
Date				Cont. 56

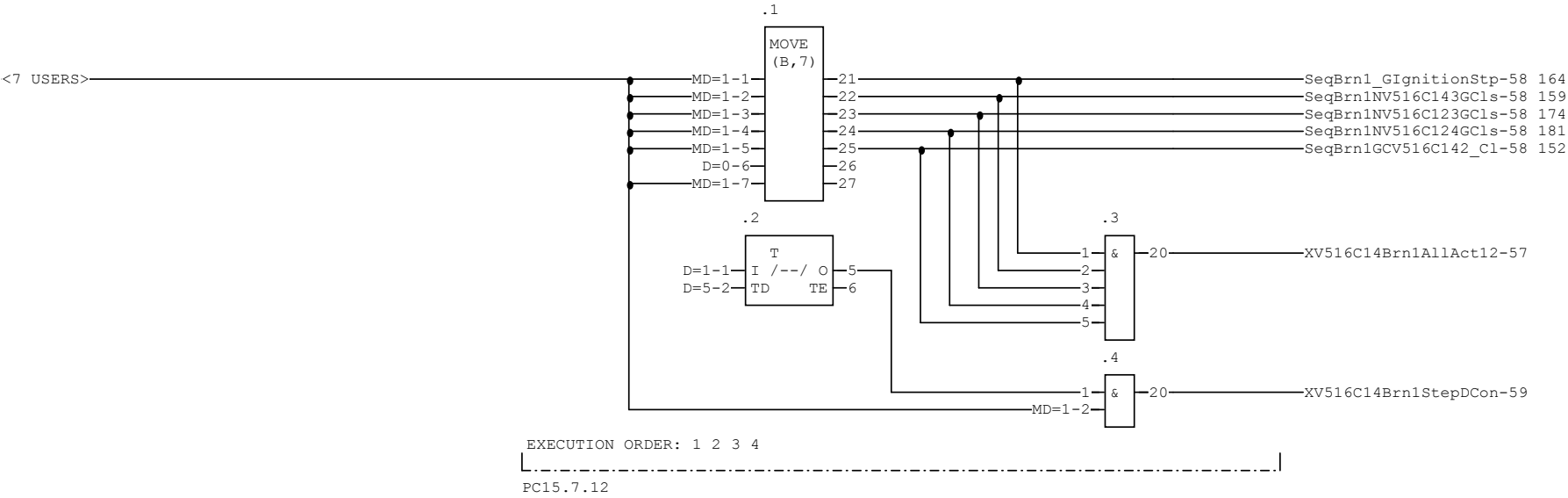


Design ch.	PC DIAGRAM PC15			Lang.
Tech. ref.				Rev. ind.
Resp. dept.				Sheet 56
Date				Cont. 57

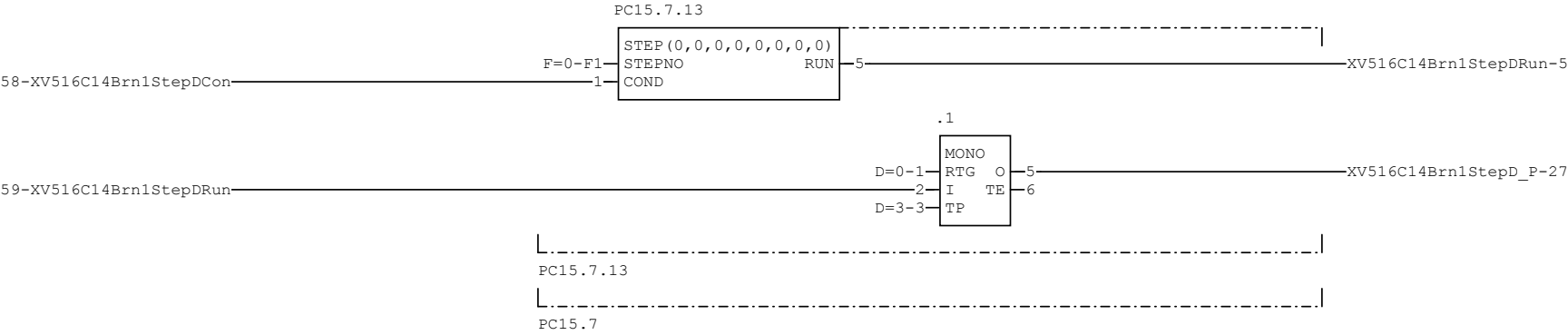




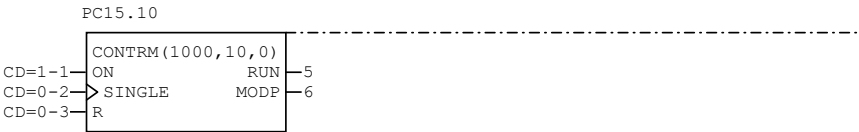
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Tech. ref.				Rev. ind.
Resp. dept.				Sheet 57
Date				Cont. 58



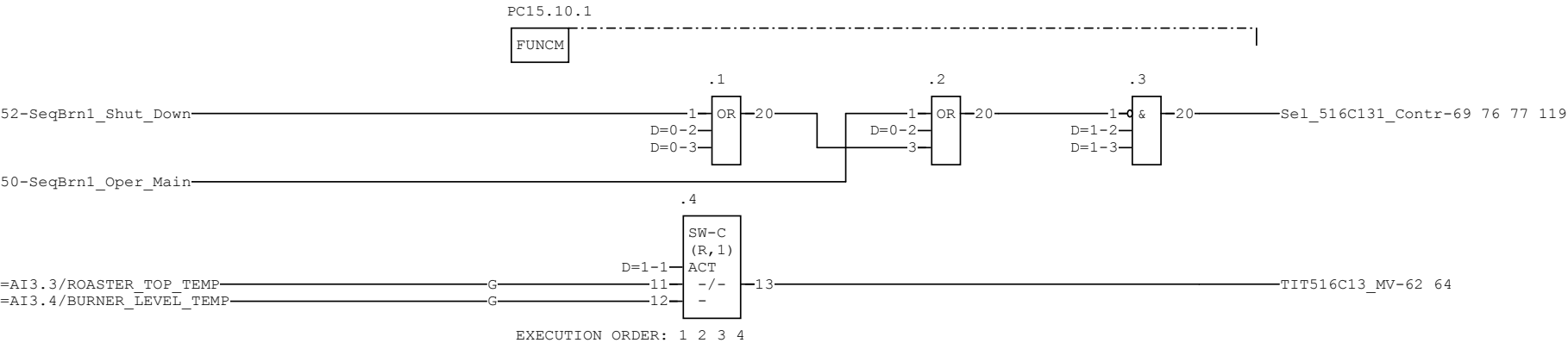
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Tech. ref.			Rev. ind.
Resp. dept.			Sheet 58
Date			Cont. 59



Design ch.	PC DIAGRAM PC15		Lang.
Tech. ref.			Rev. ind.
Resp. dept.			Sheet 59
Date			Cont. 60

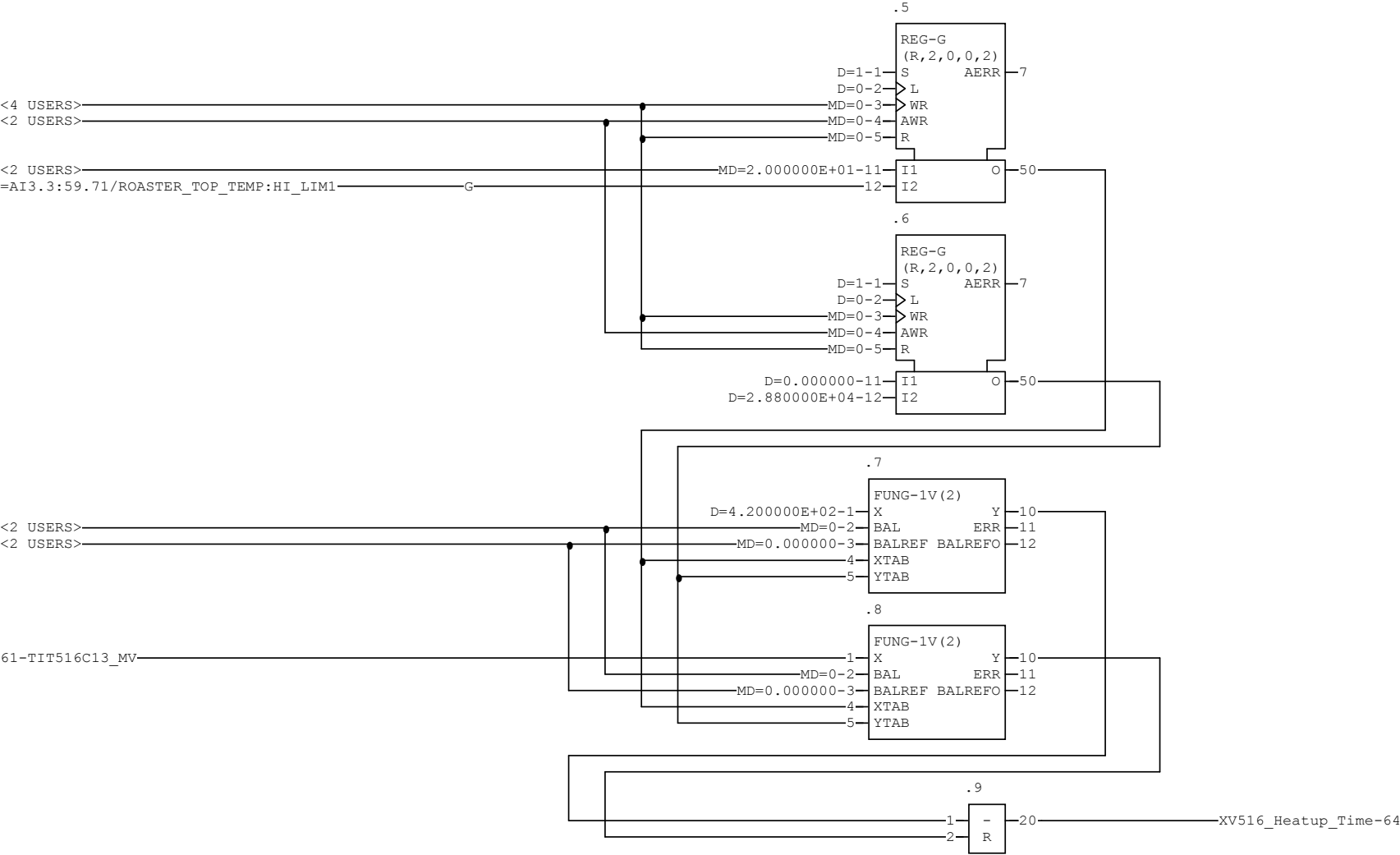


Design ch.	PC DIAGRAM PC15		Lang.
Tech. ref.			Rev. ind.
Resp. dept.			Sheet 60
Date			Cont. 61



516C\_ Burners temperature control system

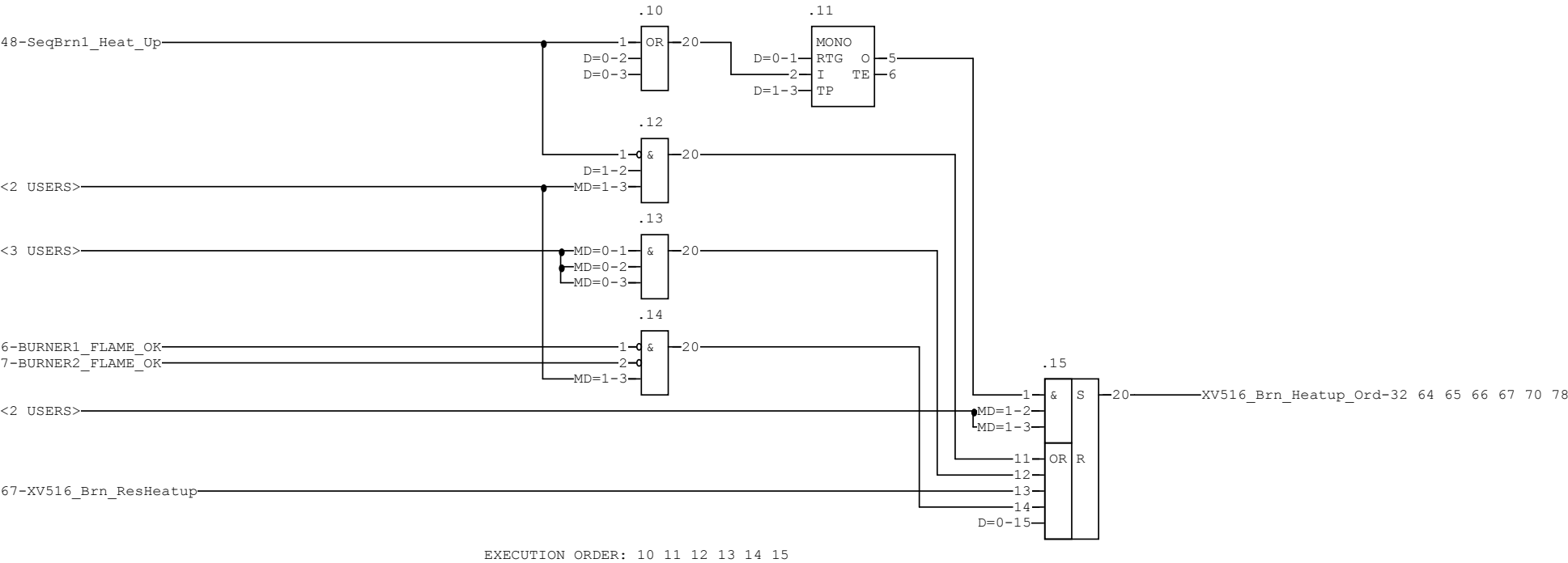
Design ch.	PC DIAGRAM PC15			Lang.
Tech. ref.				Rev. ind.
Resp. dept.				Sheet 61
Date				Cont. 62



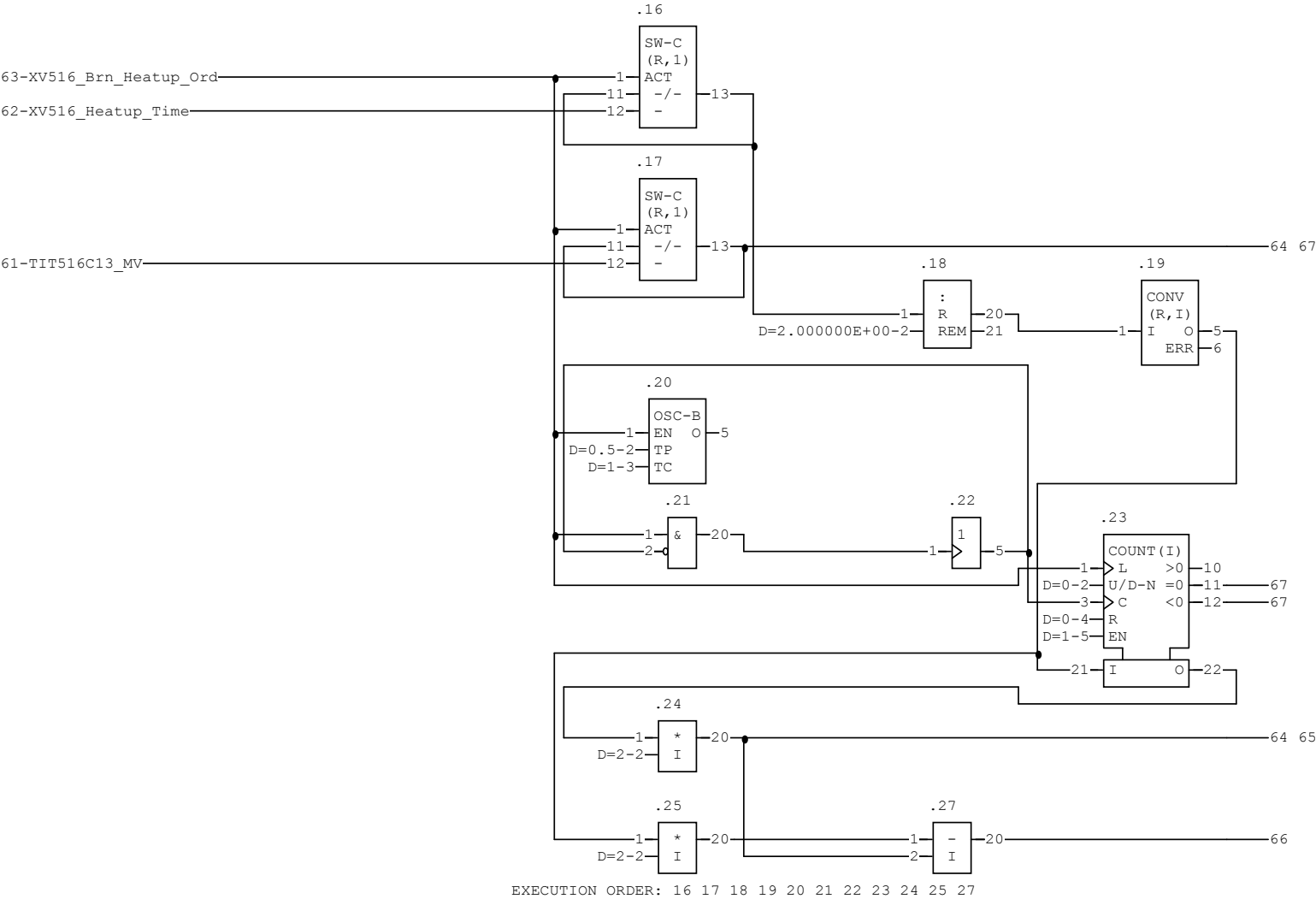
EXECUTION ORDER: 5 6 7 8 9

516C\_ Burners temperature control system

Design ch.	PC DIAGRAM PC15		Lang.
Tech. ref.			Rev. ind.
Resp. dept.			Sheet 62
Date			Cont. 63



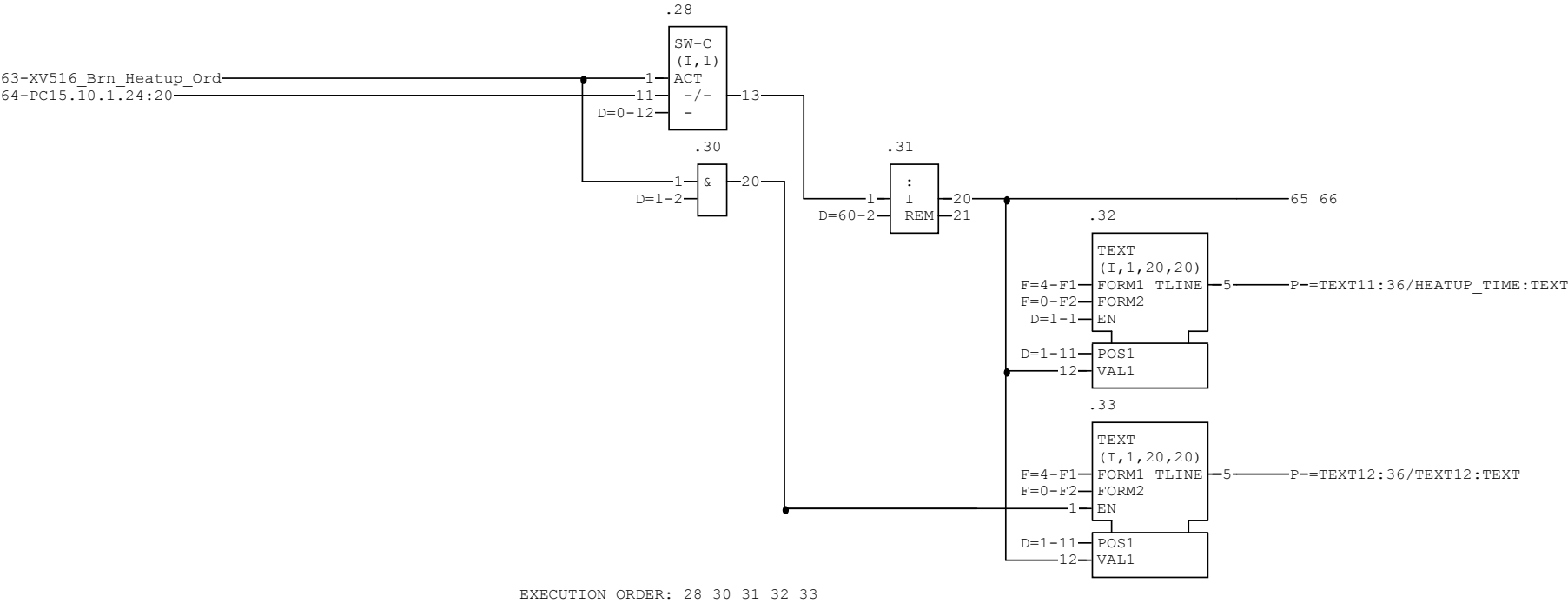
Design ch.	PC DIAGRAM PC15		Lang.
Tech. ref.			Rev. ind.
Resp. dept.			Sheet 63
Date			Cont. 64



516C\_ Burners temperature control system

Design ch.	PC DIAGRAM PC15		Lang.
Tech. ref.			Rev. ind.
Resp. dept.			Sheet 64
Date			Cont. 65

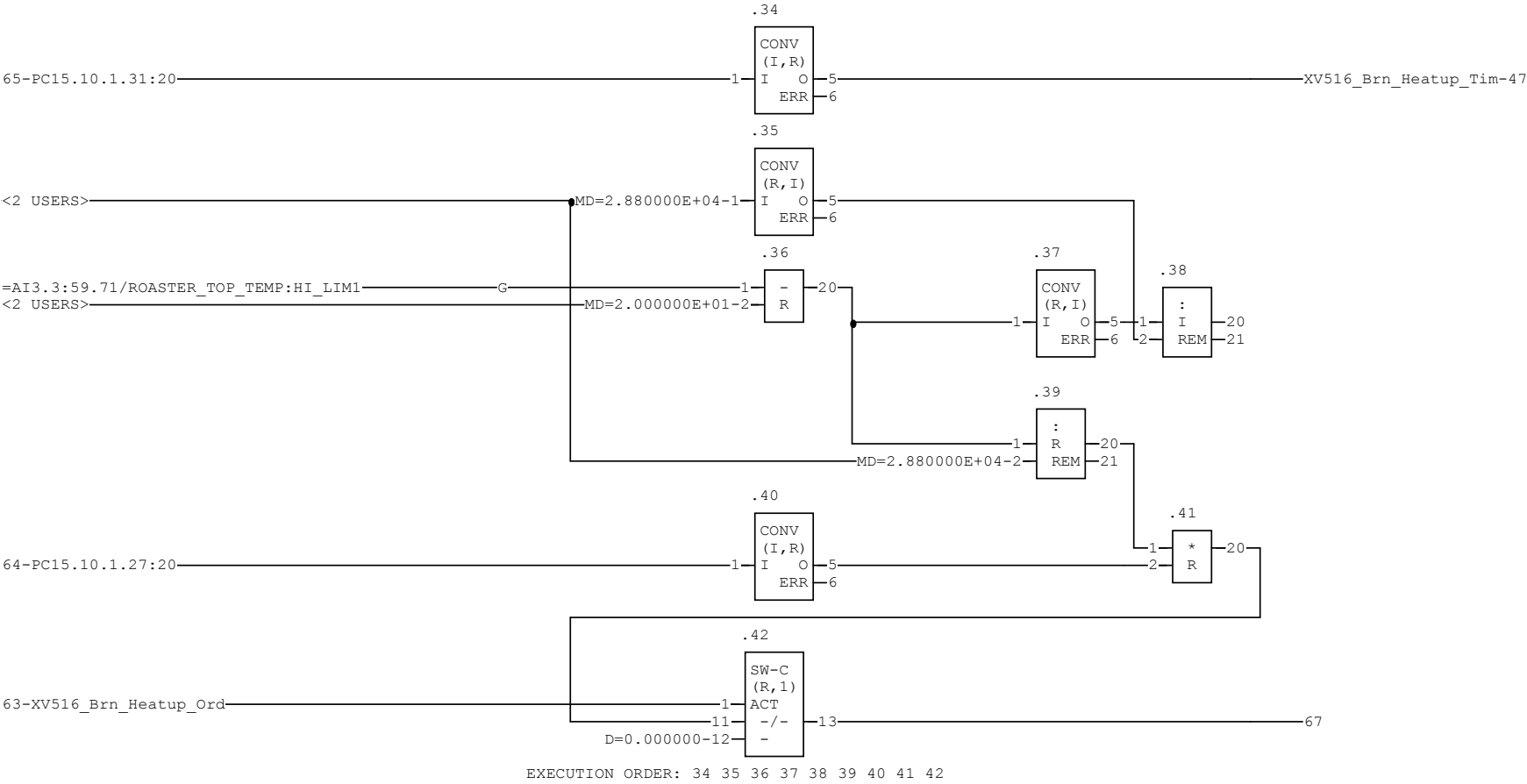




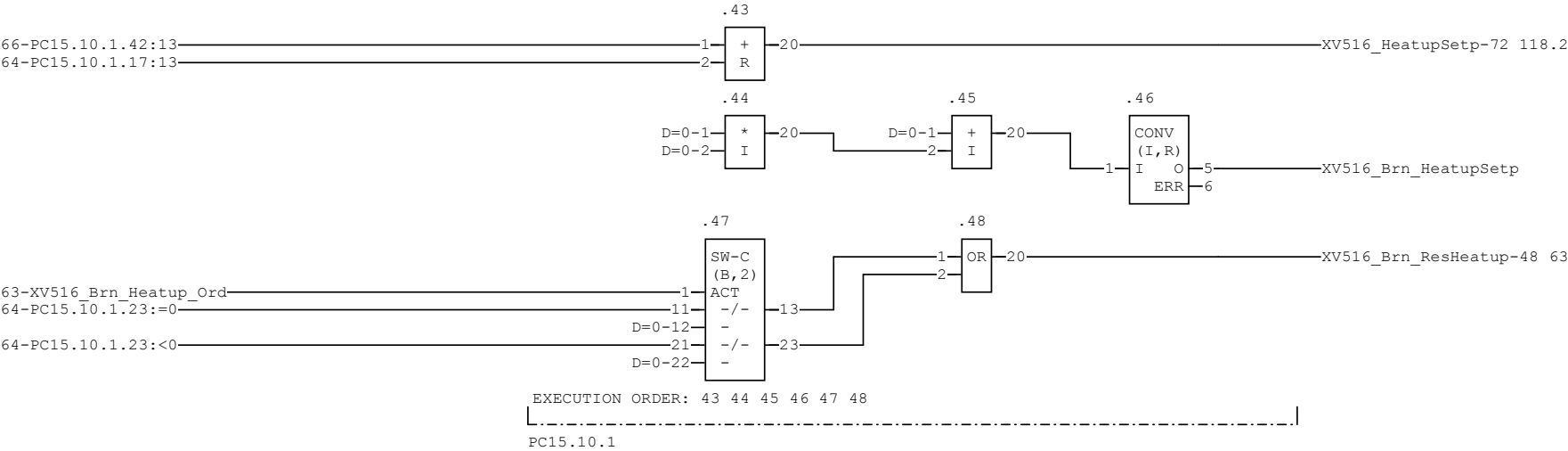
EXECUTION ORDER: 28 30 31 32 33

516C\_ Burners temperature control system

Design ch.	PC DIAGRAM PC15		Lang.
Tech. ref.			Rev. ind.
Resp. dept.			Sheet 65
Date			Cont. 66



Design ch.	PC DIAGRAM PC15		Lang.
Tech. ref.			Rev. ind.
Resp. dept.			Sheet 66
Date			Cont. 67



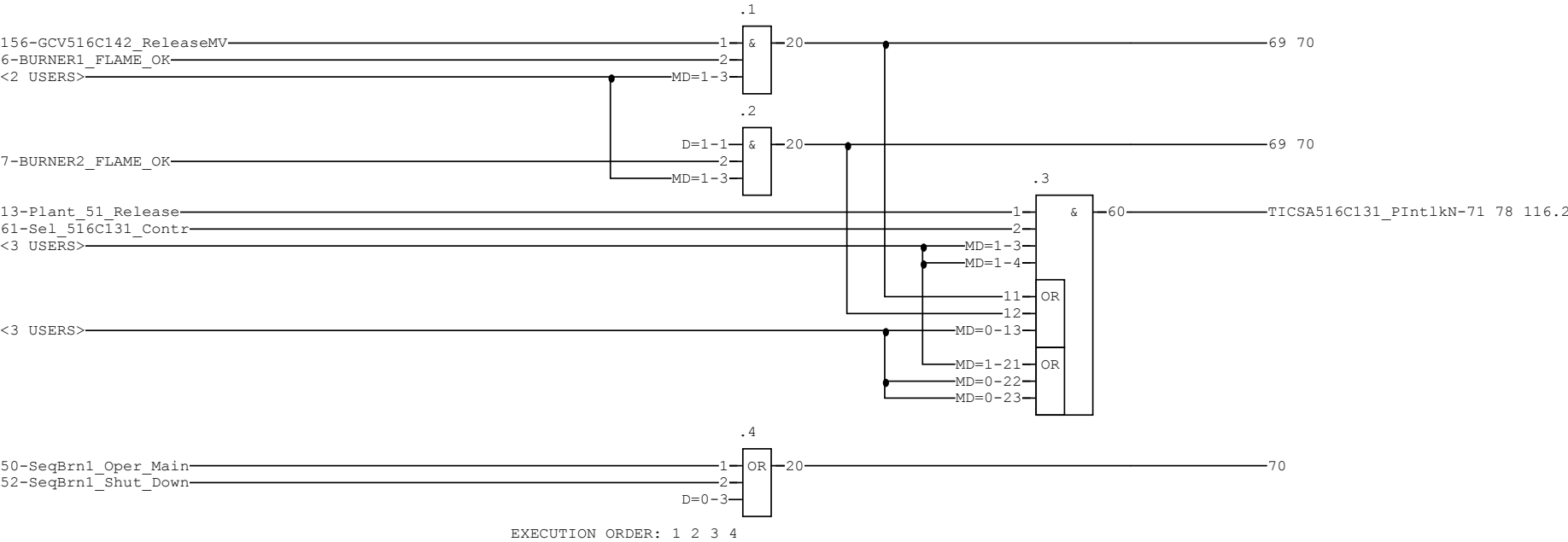
Design ch.	PC DIAGRAM PC15		Lang.
Tech. ref.			Rev. ind.
Resp. dept.			Sheet 67
Date			Cont. 68

PC15.10.2

FUNCM

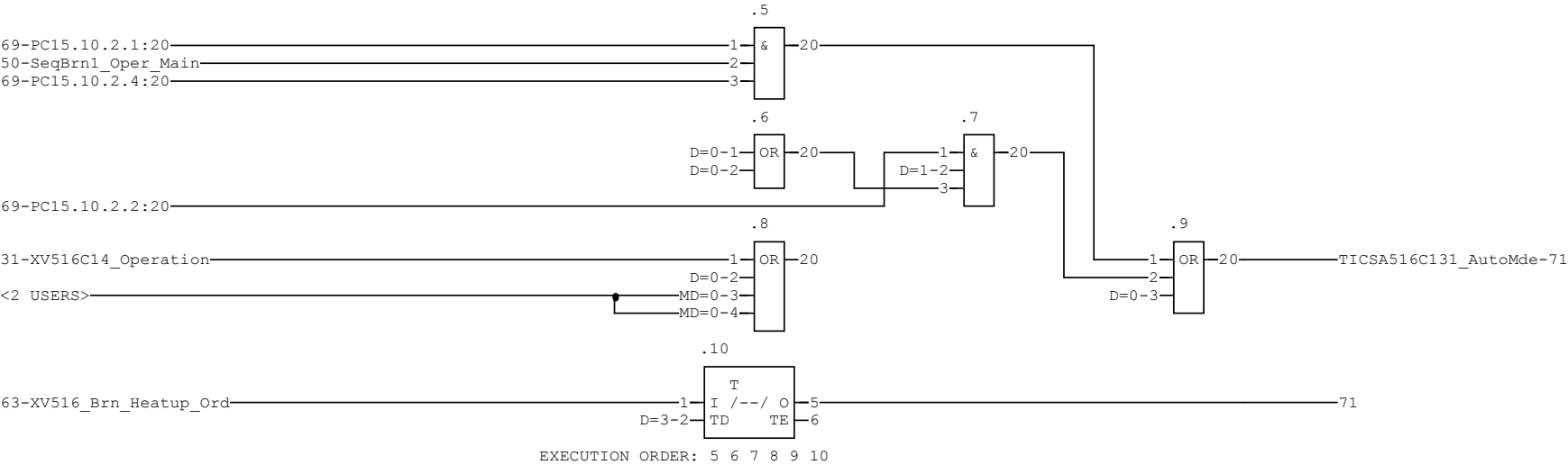
TICSA516C131 - Roaster top temperature controller

Design ch.	PC DIAGRAM PC15		Lang.
Tech. ref.			Rev. ind.
Resp. dept.			Sheet 68
Date			Cont. 69



TICSA516C131 - Process interlock

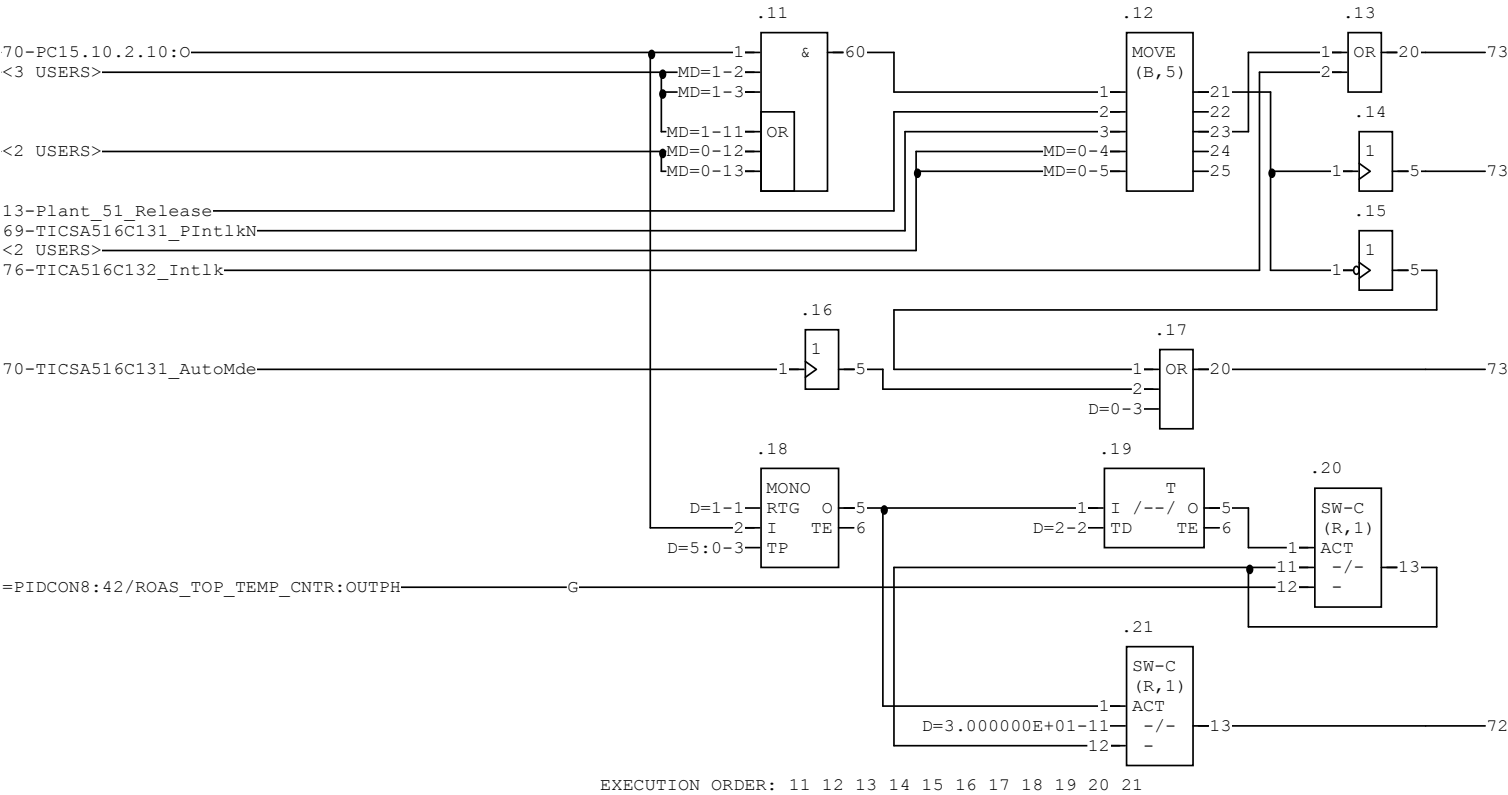
Design ch.	PC DIAGRAM PC15		Lang.
Tech. ref.			Rev. ind.
Resp. dept.			Sheet 69
Date			Cont. 70



Design ch.	PC DIAGRAM PC15		Lang.
Tech. ref.			Rev. ind.
Resp. dept.			Sheet 70
Date			Cont. 71

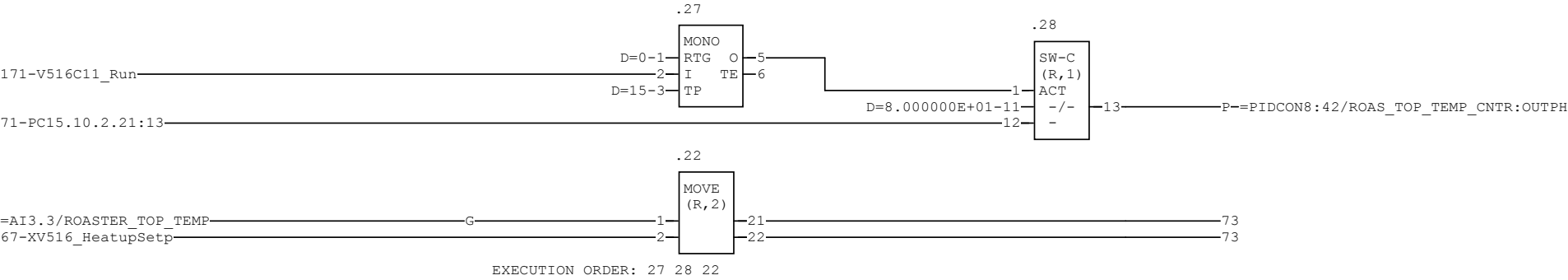
10-JAN-2017/12:04

COMMON IDENTITY: PC15.10.2



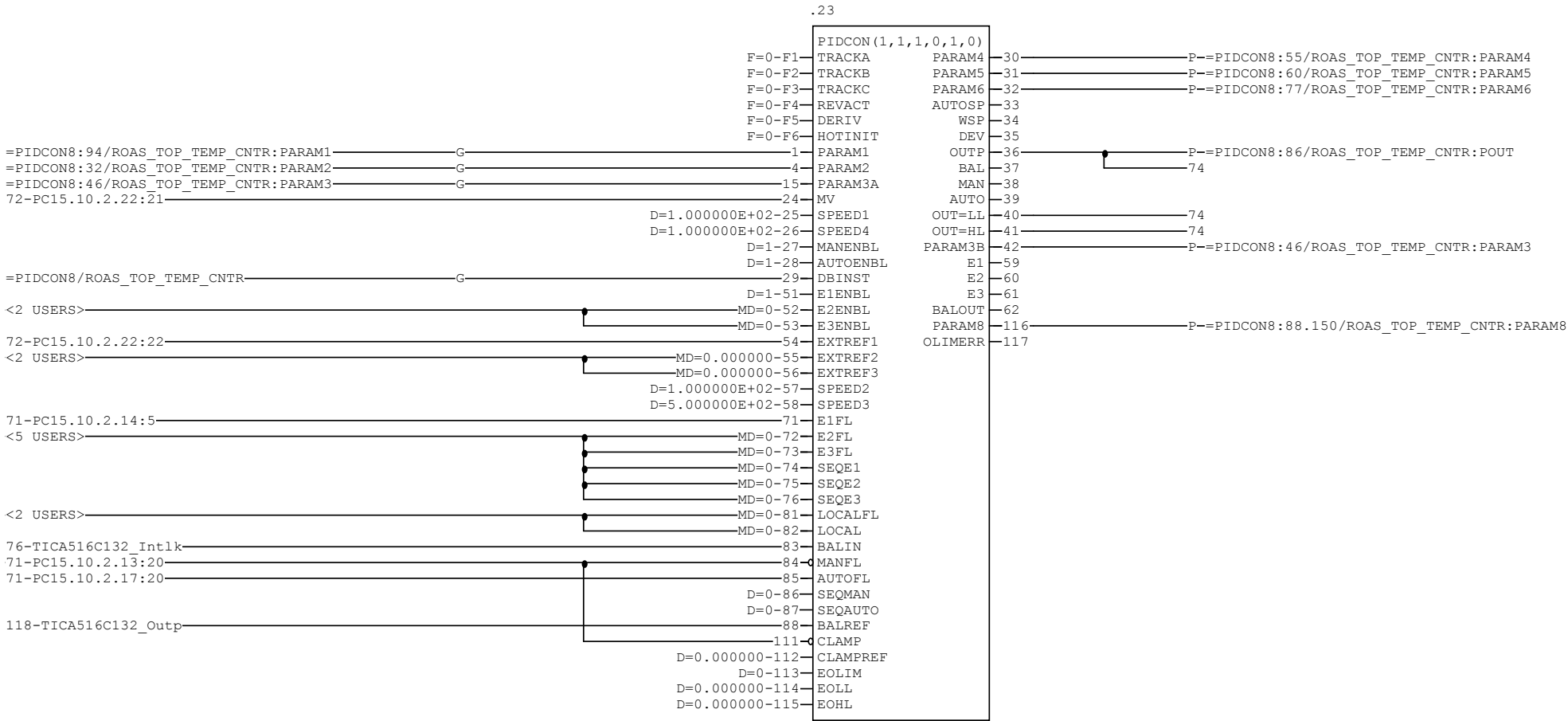
TICSA516C131 - insinals

Design ch.	PC DIAGRAM PC15		Lang.
Tech. ref.			Rev. ind.
Resp. dept.			Sheet 71
Date			Cont. 72



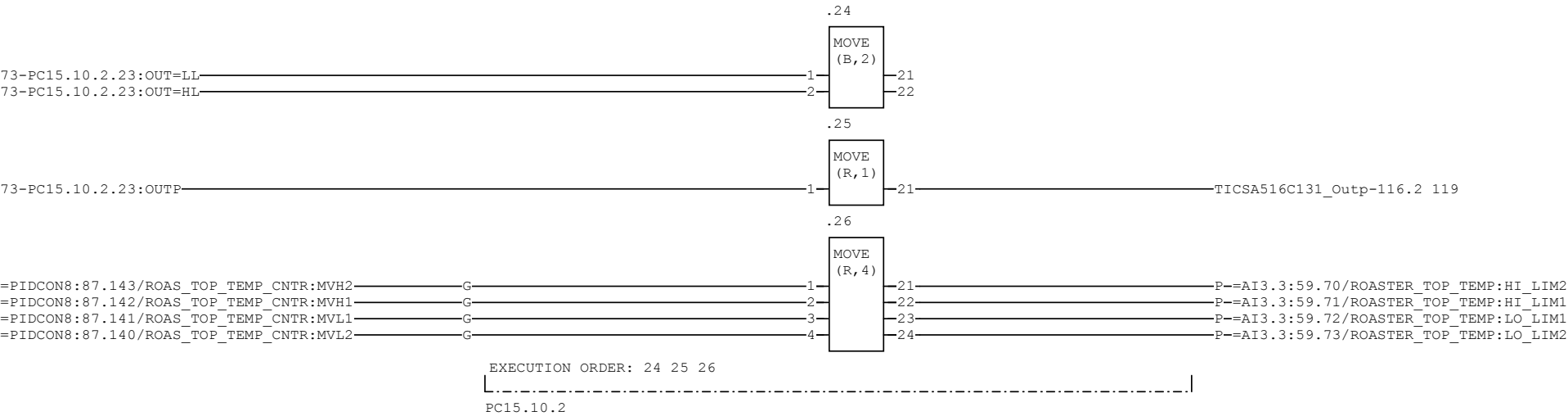
Design ch.	PC DIAGRAM PC15		Lang.
Tech. ref.			Rev. ind.
Resp. dept.			Sheet 72
Date			Cont. 73





TICA516C131 - PIDCON

Design ch.	PC DIAGRAM PC15		Lang.
Tech. ref.			Rev. ind.
Resp. dept.			Sheet 73
Date			Cont. 74



TICSA516C131 - outsignals

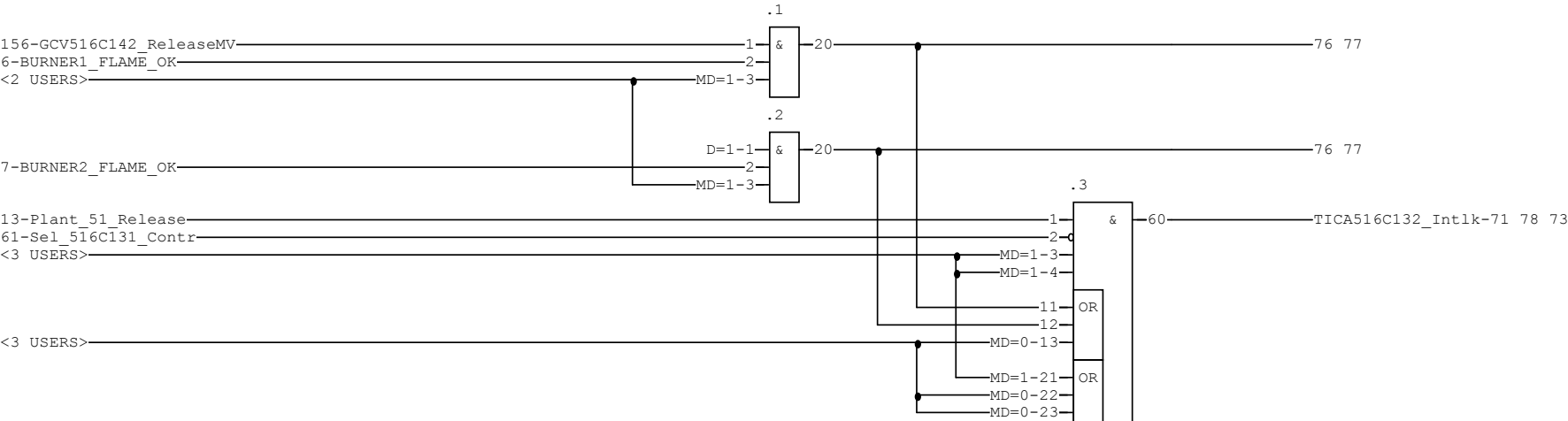
Design ch.	PC DIAGRAM PC15		Lang.
Tech. ref.			Rev. ind.
Resp. dept.			Sheet 74
Date			Cont. 75

PC15.10.3

FUNCM

TICA516C132 - Roaster burner level temperature controller

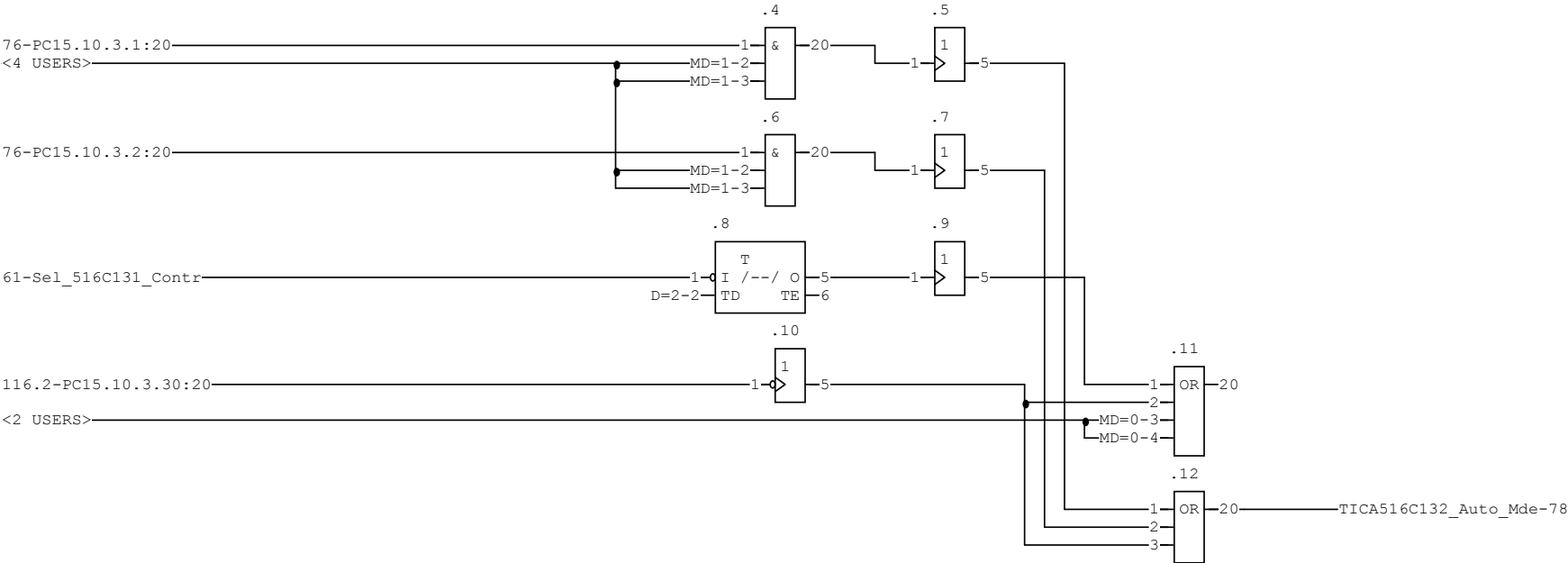
Design ch.	PC DIAGRAM PC15		Lang.
Tech. ref.			Rev. ind.
Resp. dept.			Sheet 75
Date			Cont. 76



EXECUTION ORDER: 1 2 3

TICA516C132 - Process interlock

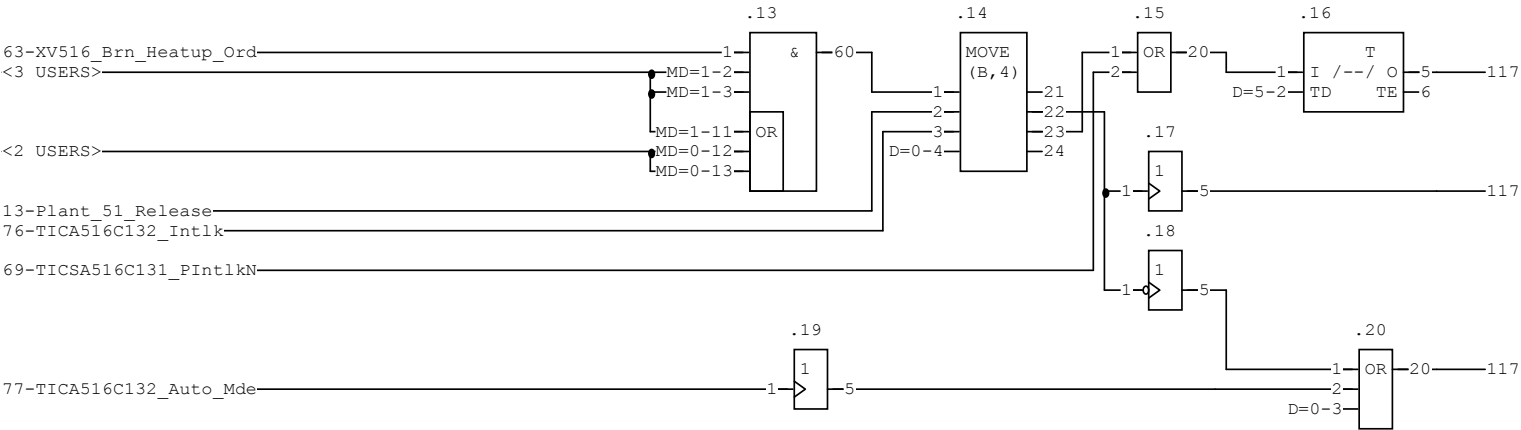
Design ch.	PC DIAGRAM PC15		Lang.
Tech. ref.			Rev. ind.
Resp. dept.			Sheet 76
Date			Cont. 77



Design ch.	PC DIAGRAM PC15		Lang.
Tech. ref.			Rev. ind.
Resp. dept.			Sheet 77
Date			Cont. 78

10-JAN-2017/12:04

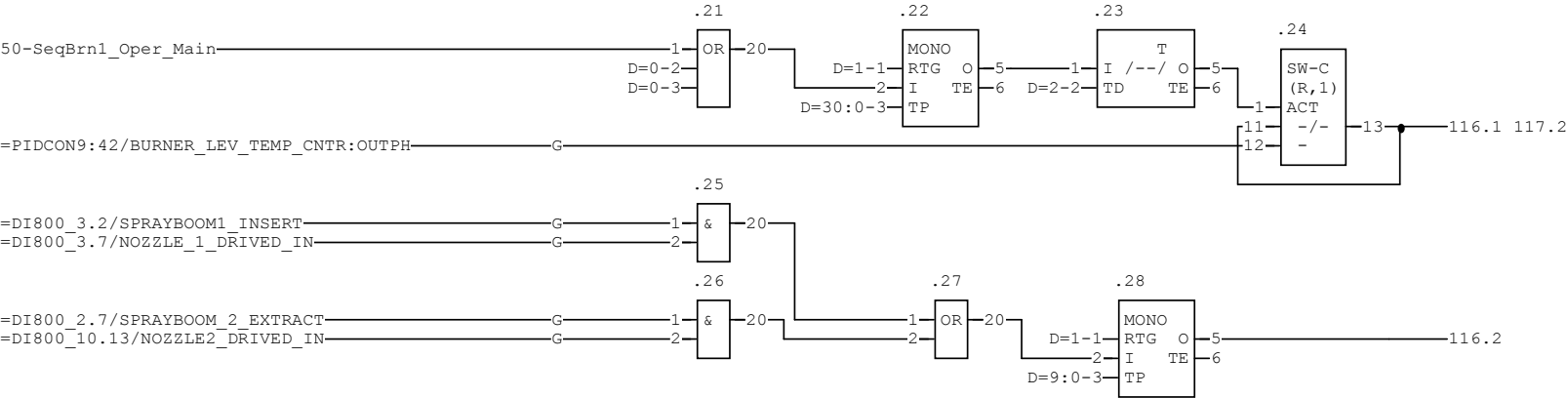
COMMON IDENTITY: PC15.10.3



EXECUTION ORDER: 13 14 15 16 17 18 19 20

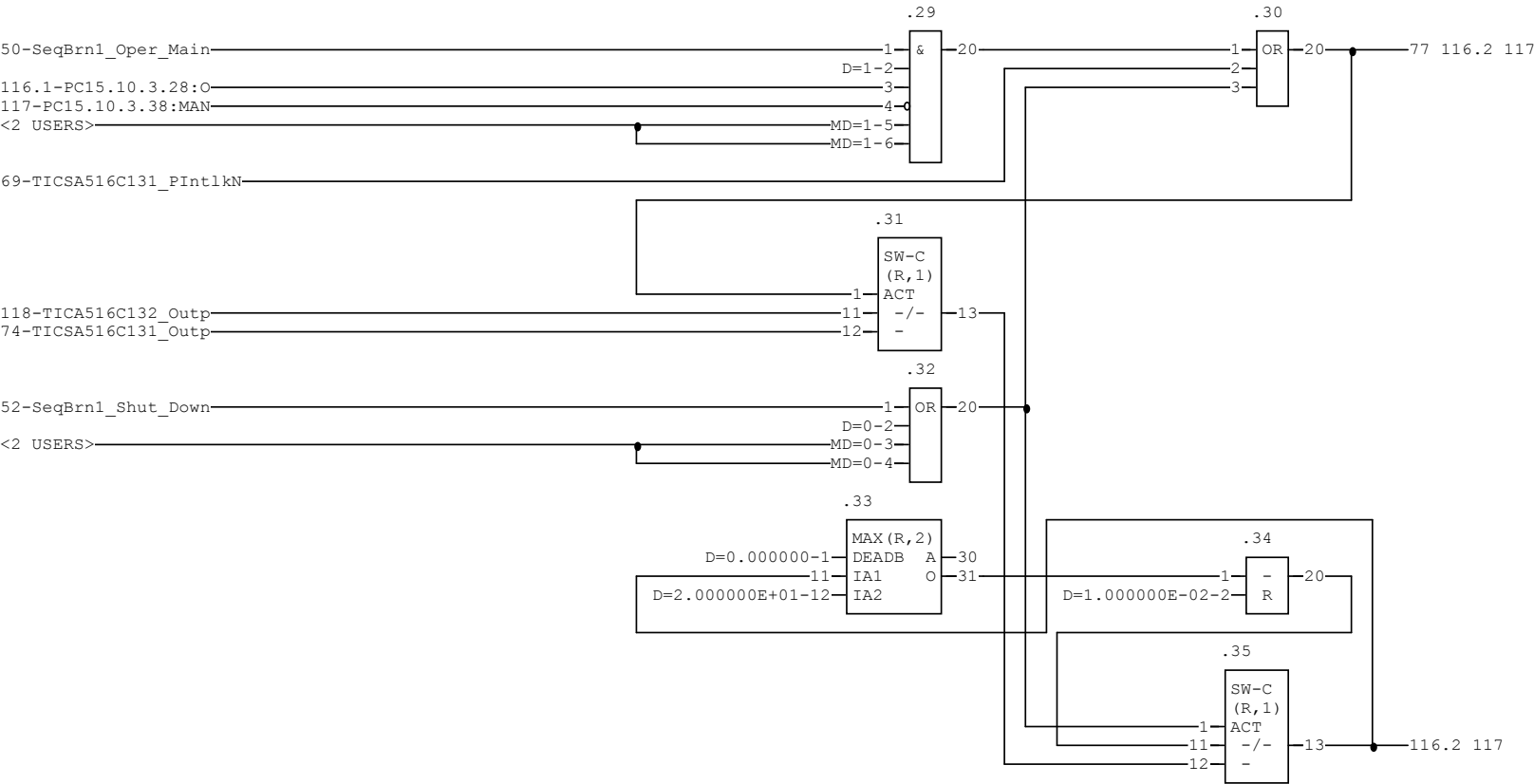
TICA516C132 - insinals

Design ch.	PC DIAGRAM PC15		Lang.
Tech. ref.			Rev. ind.
Resp. dept.			Sheet 78
Date			Cont. 116.1



EXECUTION ORDER: 21 22 23 24 25 26 27 28

Design ch.	PC DIAGRAM PC15		Lang.
Tech. ref.			Rev. ind.
Resp. dept.			Sheet 116.1
Date			Cont. 116.2



EXECUTION ORDER: 29 30 31 32 33 34 35

TICA516C132 - insinals

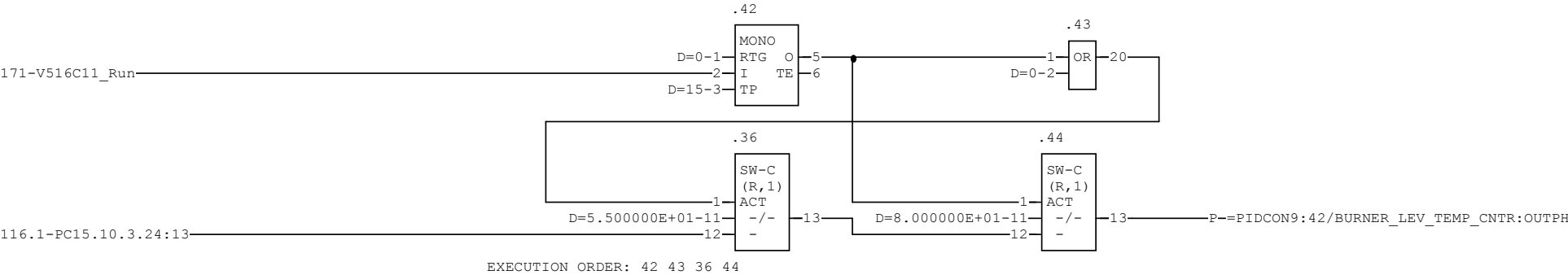
Design ch.	PC DIAGRAM PC15		Lang.
Tech. ref.			Rev. ind.
Resp. dept.			Sheet 116.2
Date			Cont. 117.2



ABB Automation

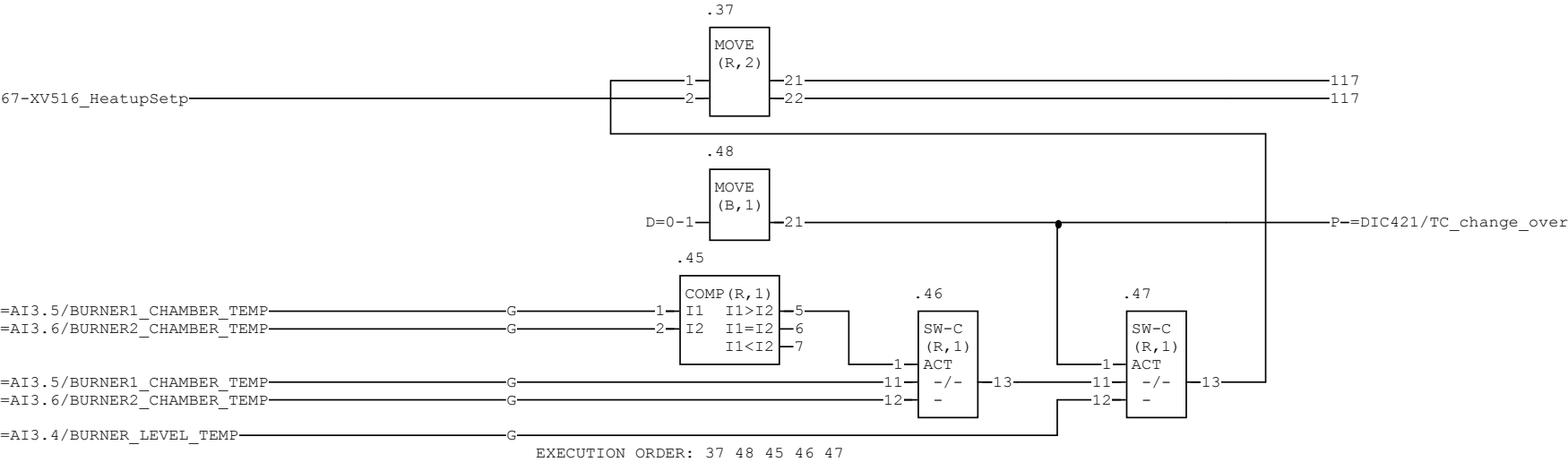
10-JAN-2017/12:04

COMMON IDENTITY: PC15.10.3

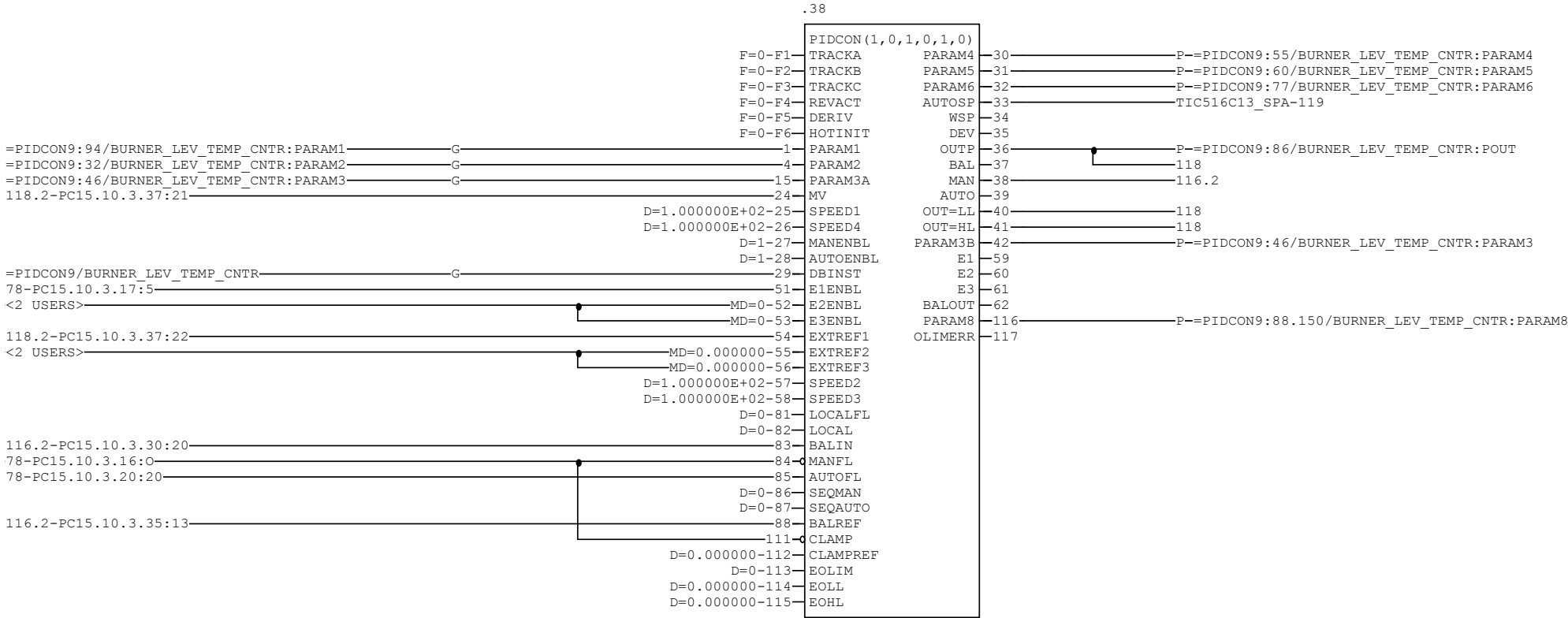


TICA516C132 - insinals

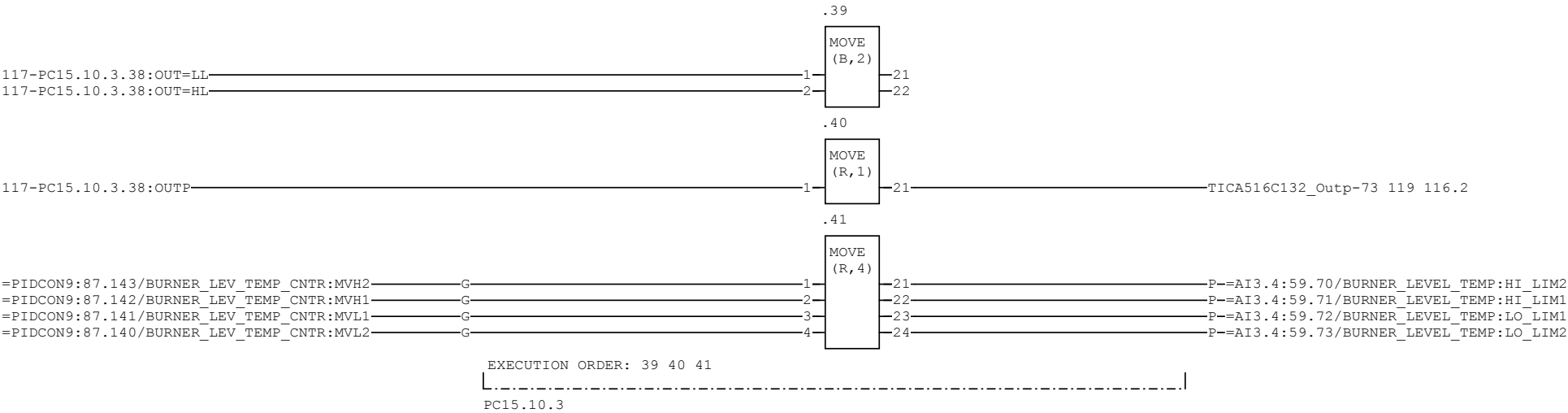
Design ch.	PC DIAGRAM PC15		Lang.
Tech. ref.			Rev. ind.
Resp. dept.			Sheet 117.2
Date			Cont. 118.2



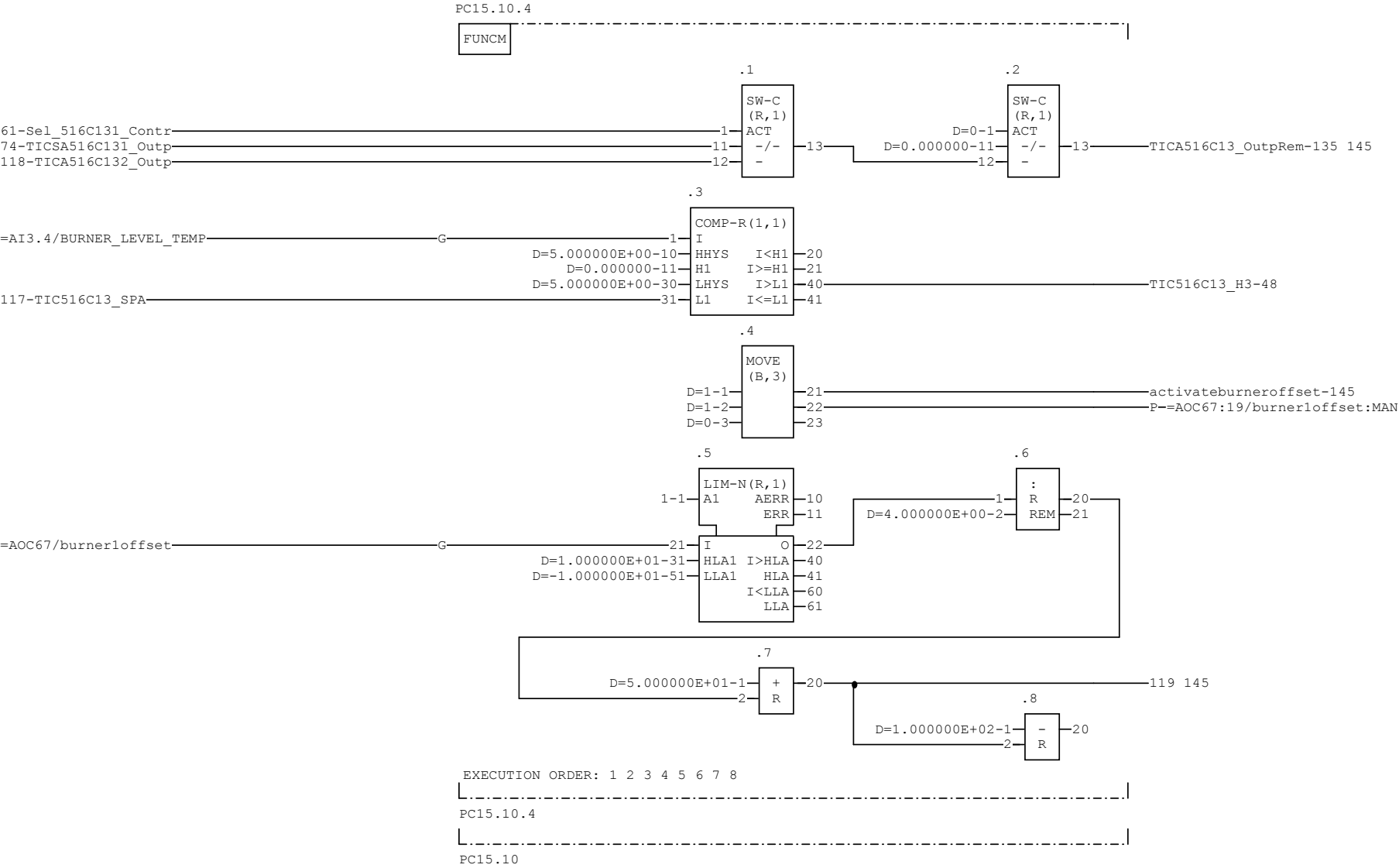
Design ch.	PC DIAGRAM PC15		Lang.
Tech. ref.			Rev. ind.
Resp. dept.			Sheet 118.2
Date			Cont. 117



Design ch.	PC DIAGRAM PC15			Lang.
Tech. ref.				Rev. ind.
Resp. dept.				Sheet 117
Date				Cont. 118

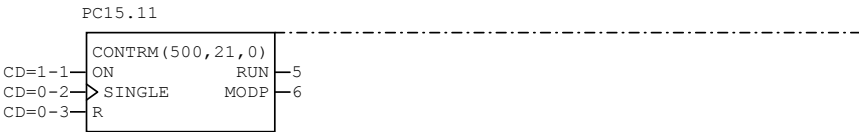


Design ch.	PC DIAGRAM PC15			Lang.
Tech. ref.				Rev. ind.
Resp. dept.				Sheet 118
Date				Cont. 119



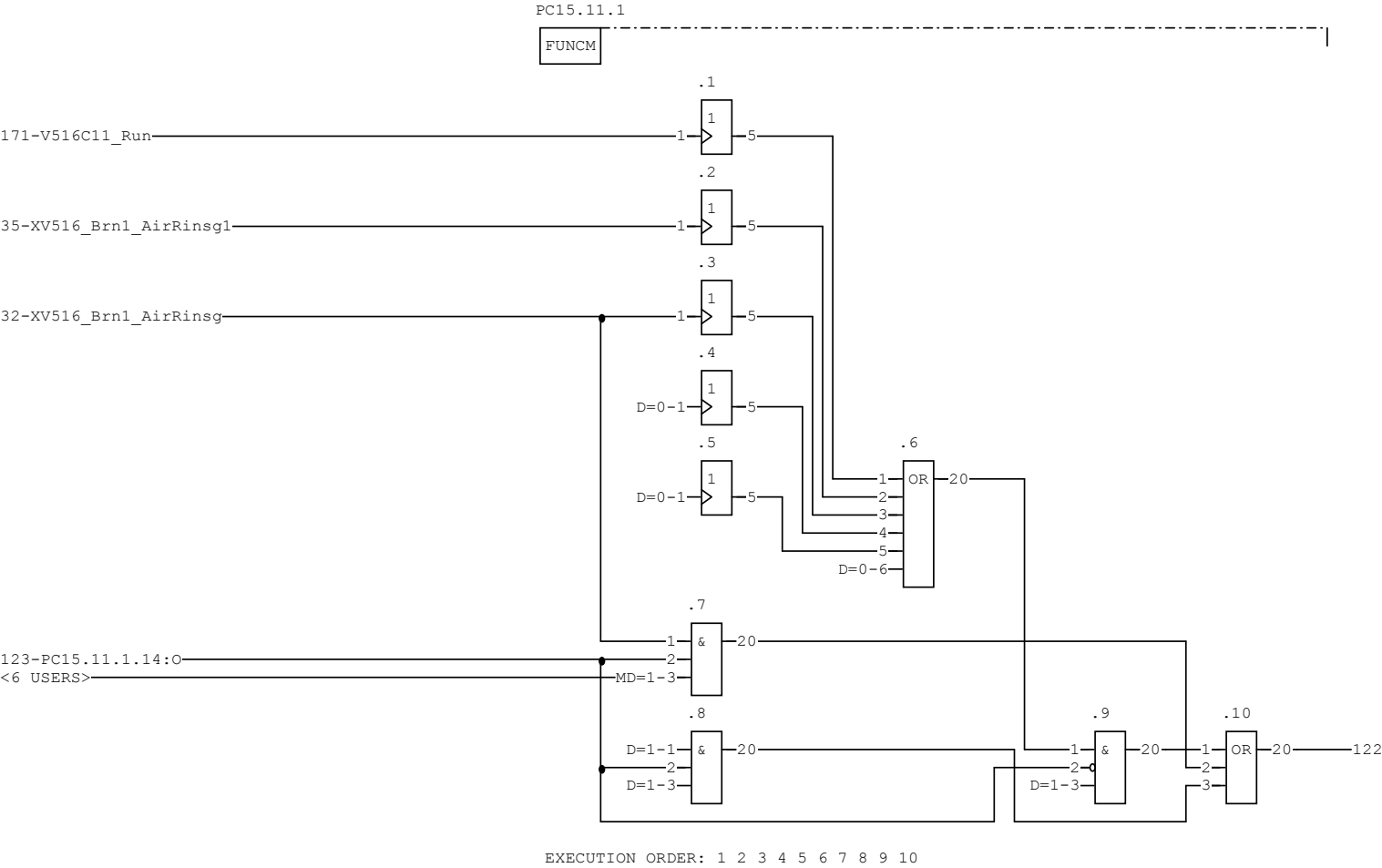
Heat ramp & temerature controller selector

Design ch.	PC DIAGRAM PC15		Lang.
Tech. ref.			Rev. ind.
Resp. dept.			Sheet 119
Date			Cont. 120



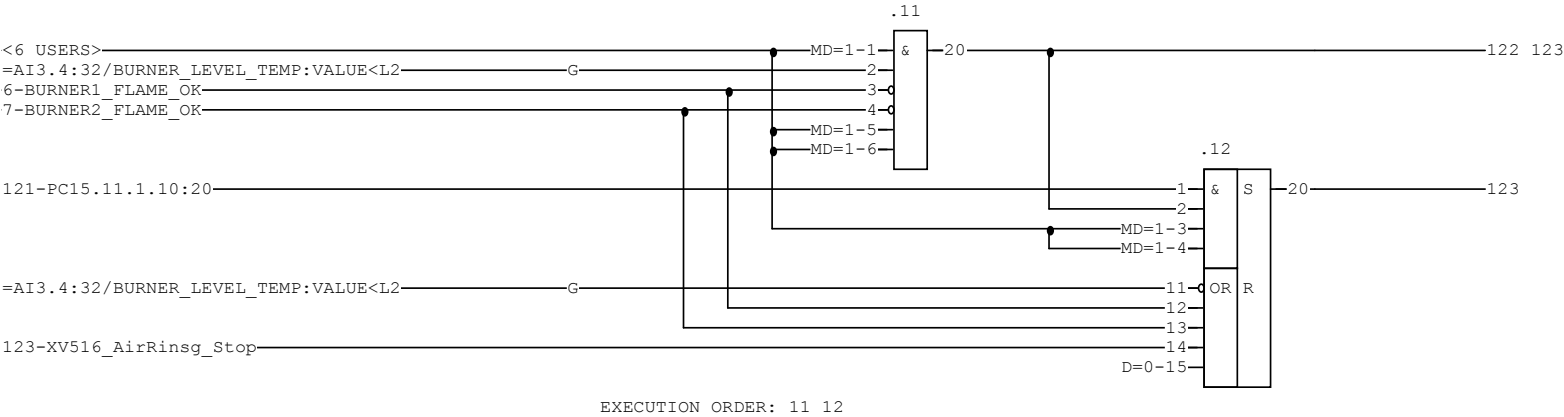
516C\_ Burners control

Design ch.	PC DIAGRAM PC15		Lang.
Tech. ref.			Rev. ind.
Resp. dept.			Sheet 120
Date			Cont. 121



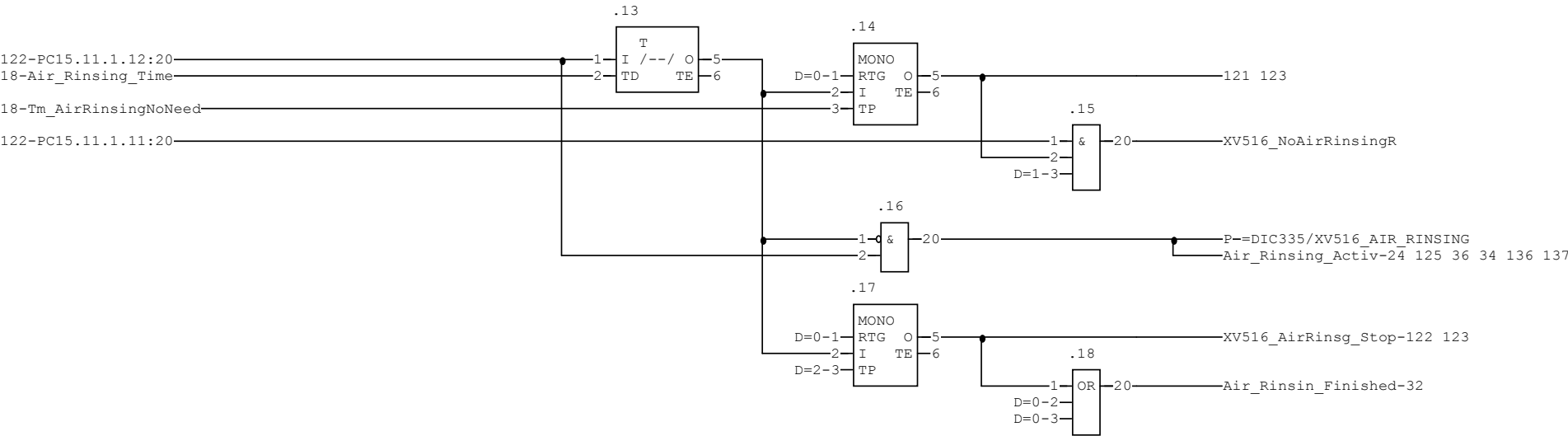
516C1\_Air rinsing

Design ch.	PC DIAGRAM PC15		Lang.
Tech. ref.			Rev. ind.
Resp. dept.			Sheet 121
Date			Cont. 122



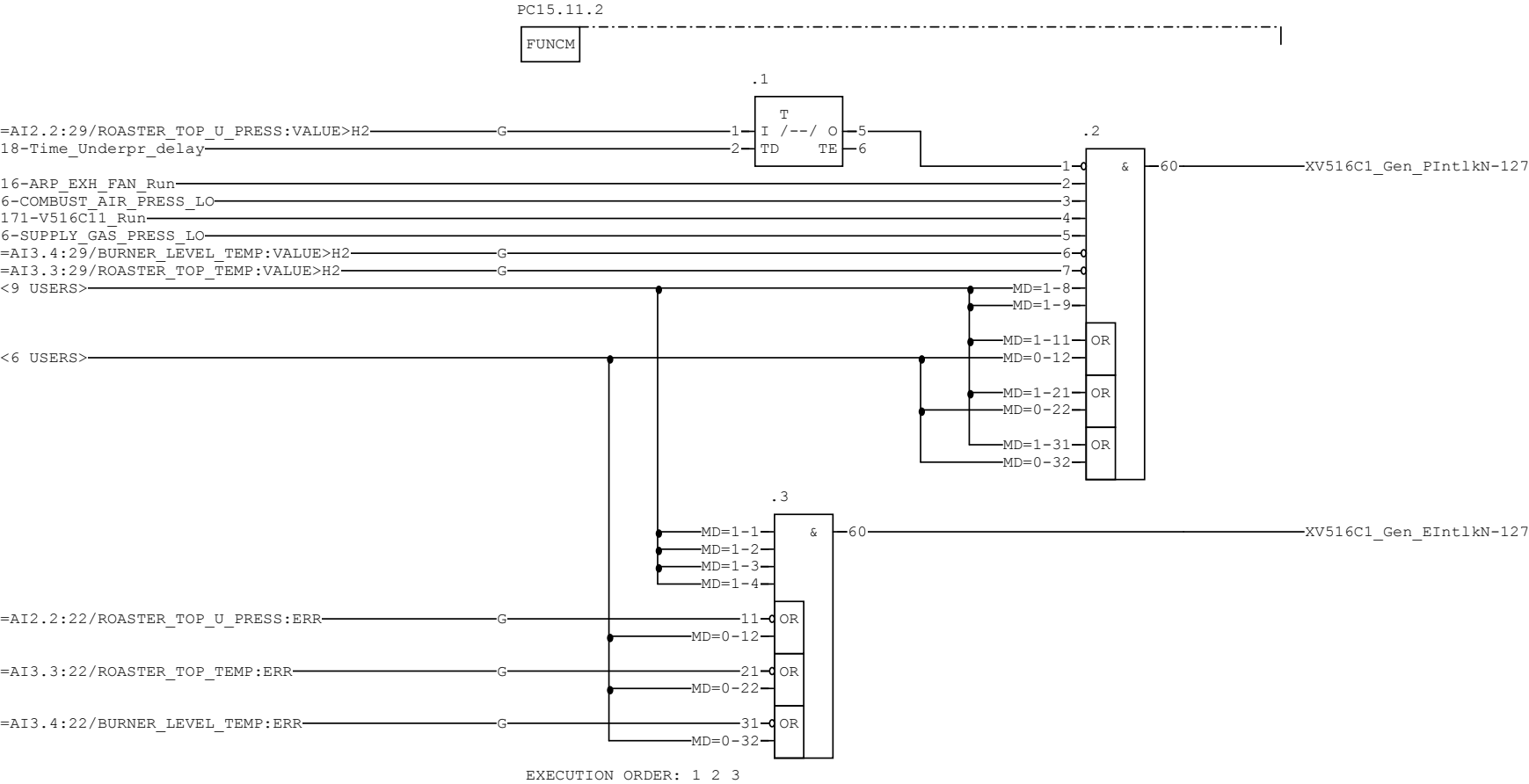
Design ch.	PC DIAGRAM PC15		Lang.
Tech. ref.			Rev. ind.
Resp. dept.			Sheet 122
Date			Cont. 123





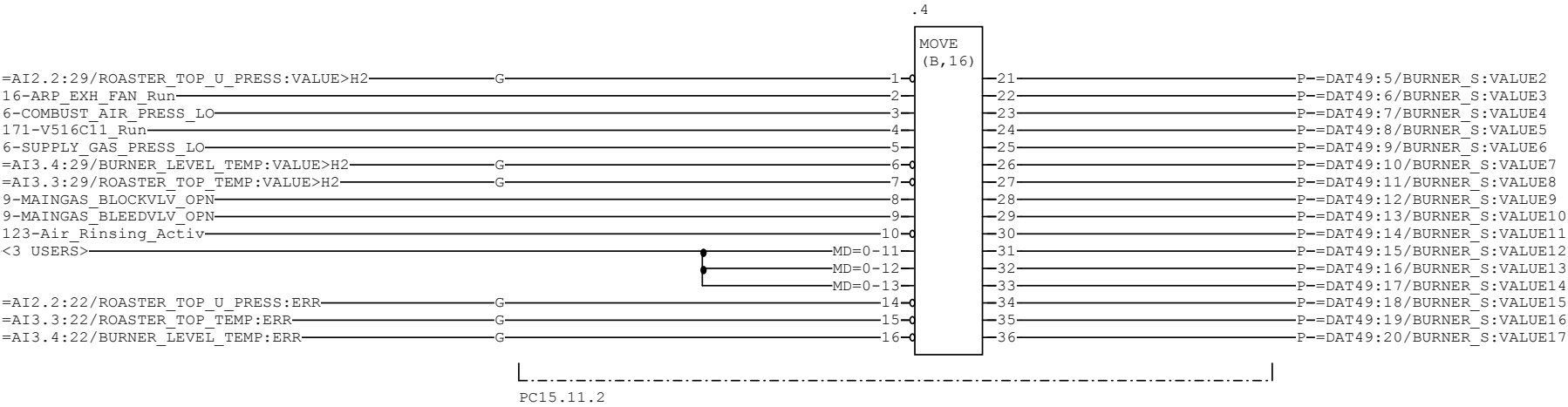
EXECUTION ORDER: 13 14 15 16 17 18  
PC15.11.1

Design ch.	PC DIAGRAM PC15		Lang.
Tech. ref.			Rev. ind.
Resp. dept.			Sheet 123
Date			Cont. 124



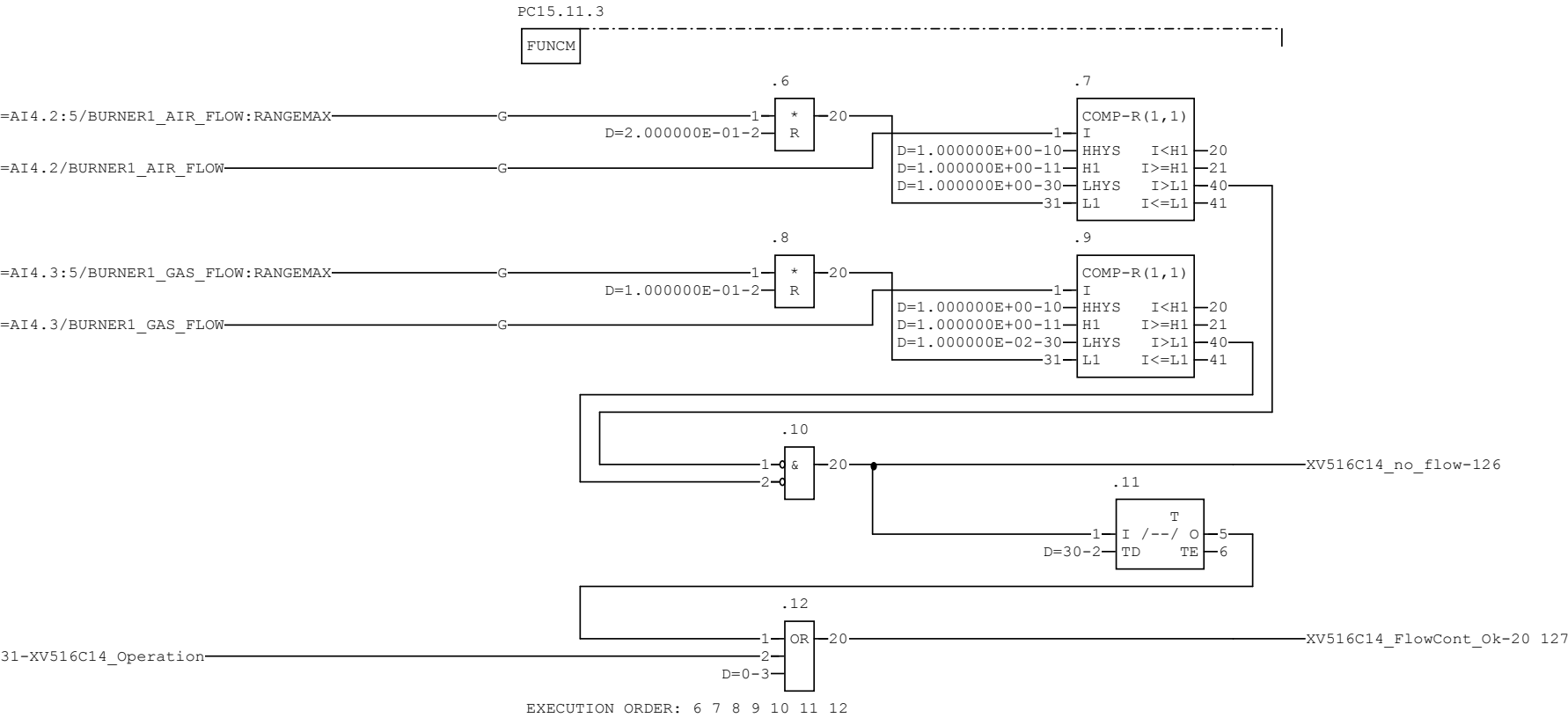
516C1\_ All burners interlock

Design ch.	PC DIAGRAM PC15		Lang.
Tech. ref.			Rev. ind.
Resp. dept.			Sheet 124
Date			Cont. 125



516C1\_ All burners interlock

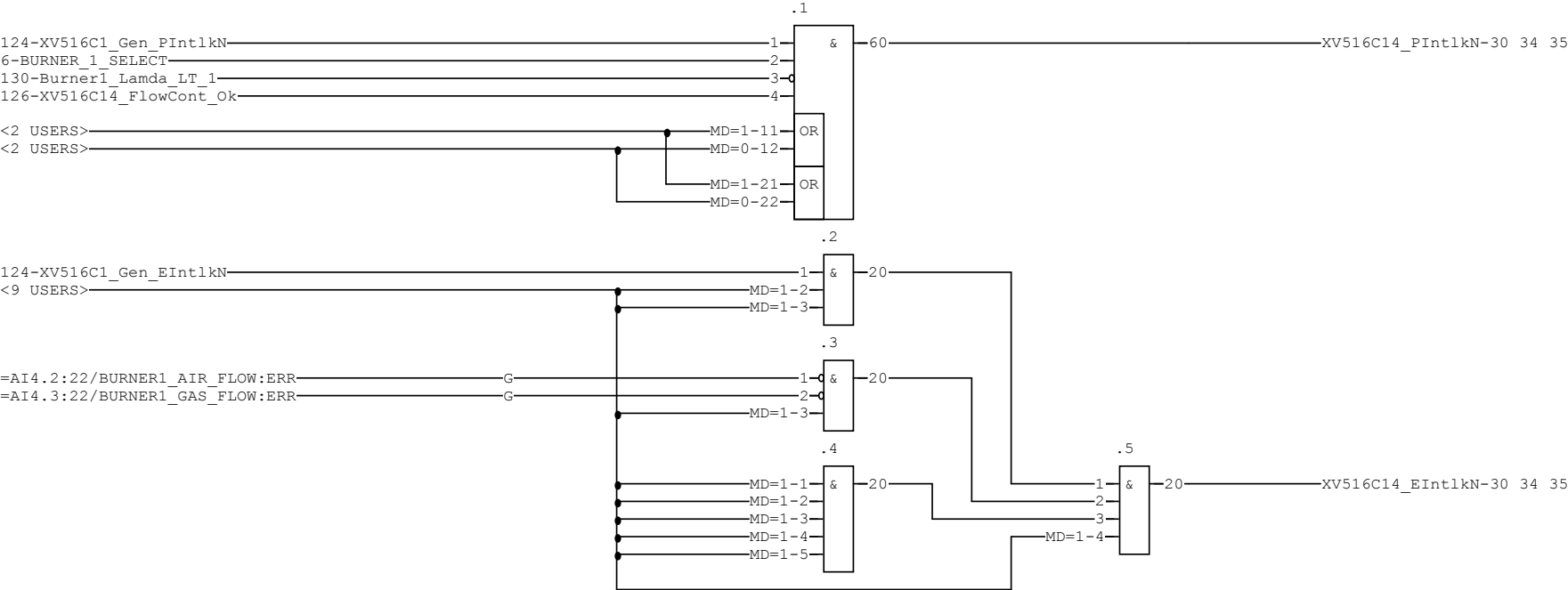
Design ch.	PC DIAGRAM PC15		Lang.
Tech. ref.			Rev. ind.
Resp. dept.			Sheet 125
Date			Cont. 126



Design ch.	PC DIAGRAM PC15		Lang.
Tech. ref.			Rev. ind.
Resp. dept.			Sheet 126
Date			Cont. 127

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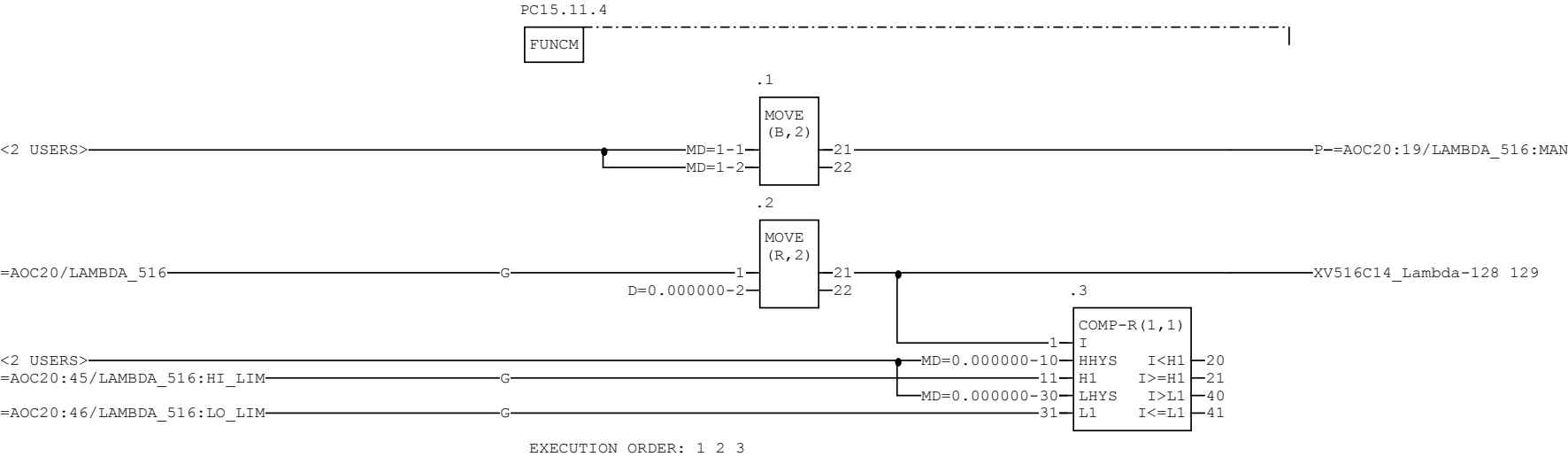
COMMON IDENTITY: PC15.11.3



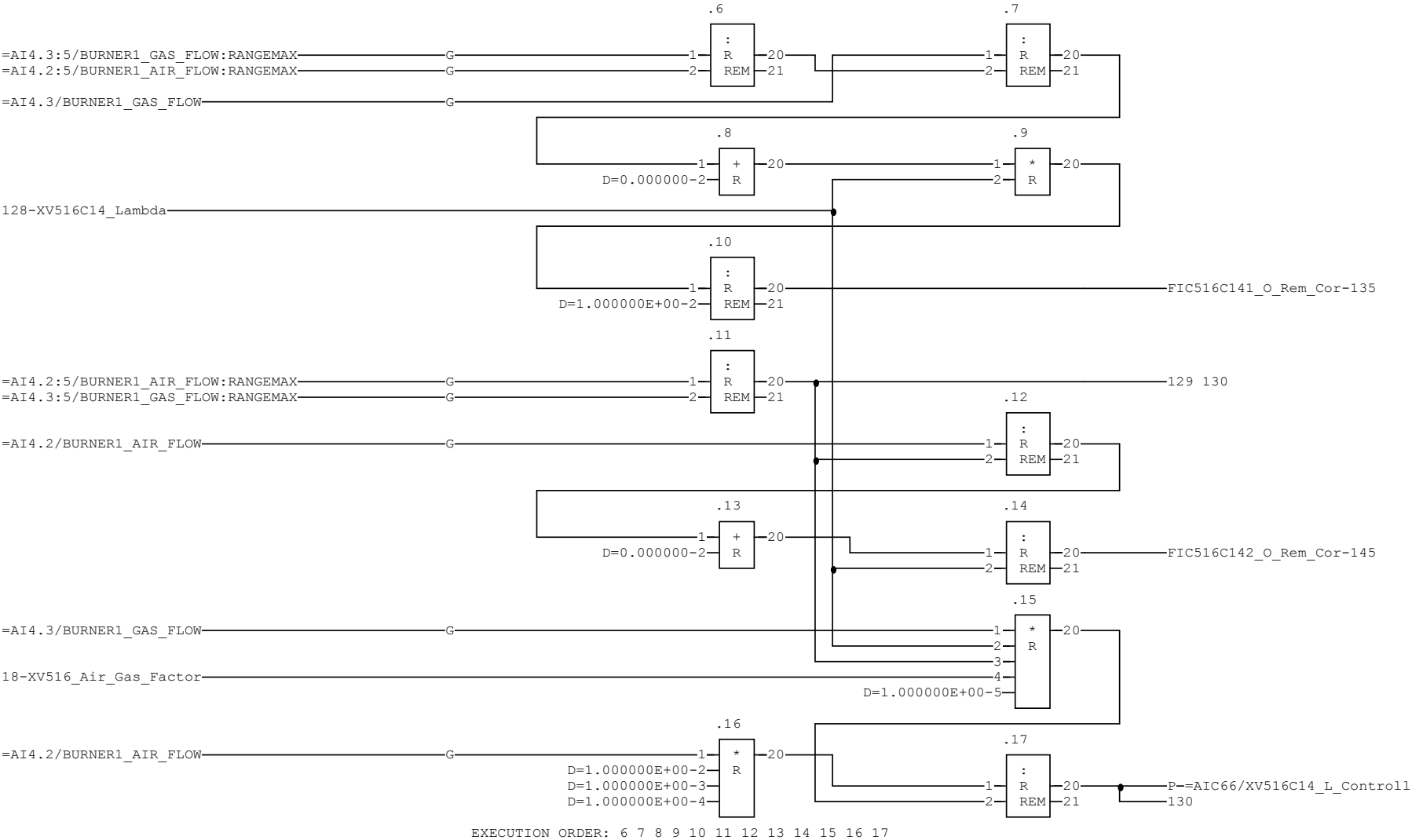
PC15.11.3

516C14\_ Burner 1 - process interlock

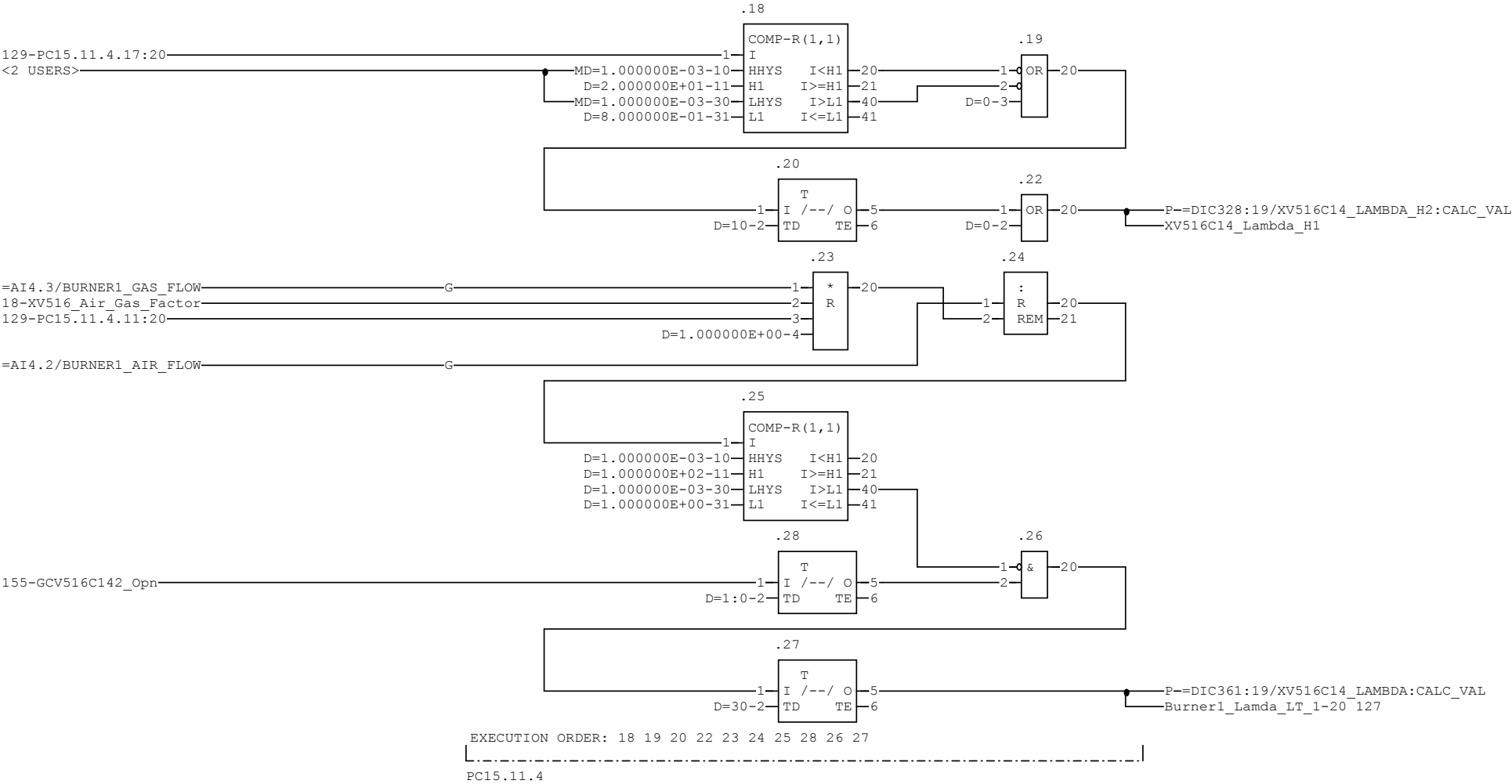
Design ch.	PC DIAGRAM PC15		Lang.
Tech. ref.			Rev. ind.
Resp. dept.			Sheet 127
Date			Cont. 128



Design ch.	PC DIAGRAM PC15			Lang.
Tech. ref.				Rev. ind.
Resp. dept.				Sheet 128
Date				Cont. 129



Design ch.	PC DIAGRAM PC15		Lang.
Tech. ref.			Rev. ind.
Resp. dept.			Sheet 129
Date			Cont. 130



516C14\_ Burner 1 - Lambda calculation

Design ch.	PC DIAGRAM PC15		Lang.
Tech. ref.			Rev. ind.
Resp. dept.			Sheet 130
Date			Cont. 131



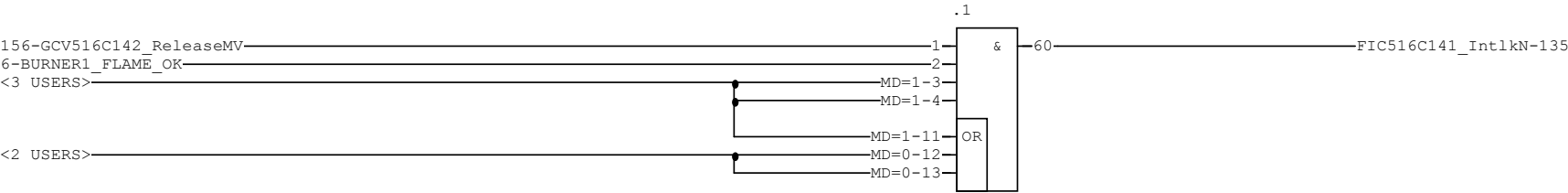
PC15.11.5

FUNCM



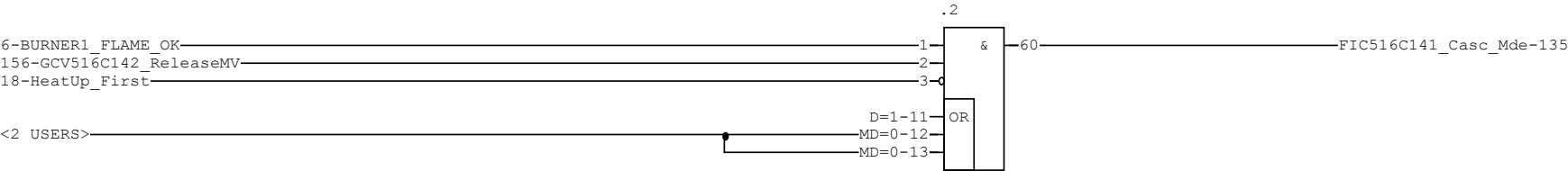
FIC516C141 - BURNER 1 - Air controller

Design ch.	PC DIAGRAM PC15		Lang.
Tech. ref.			Rev. ind.
Resp. dept.			Sheet 131
Date			Cont. 132

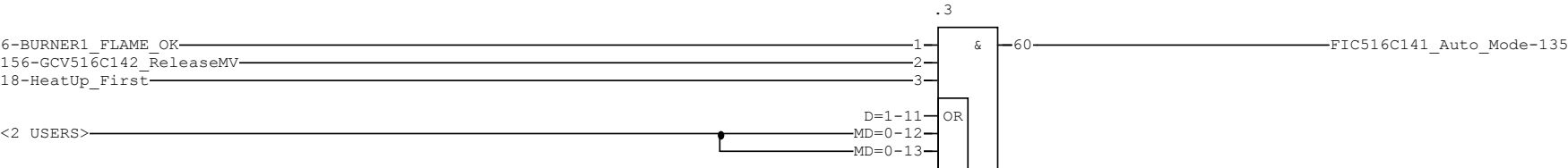


FIC516C141 - Process interlock

Design ch.	PC DIAGRAM PC15		Lang.
Tech. ref.			Rev. ind.
Resp. dept.			Sheet 132
Date			Cont. 133



Design ch.	PC DIAGRAM PC15		Lang.
Tech. ref.			Rev. ind.
Resp. dept.			Sheet 133
Date			Cont. 134



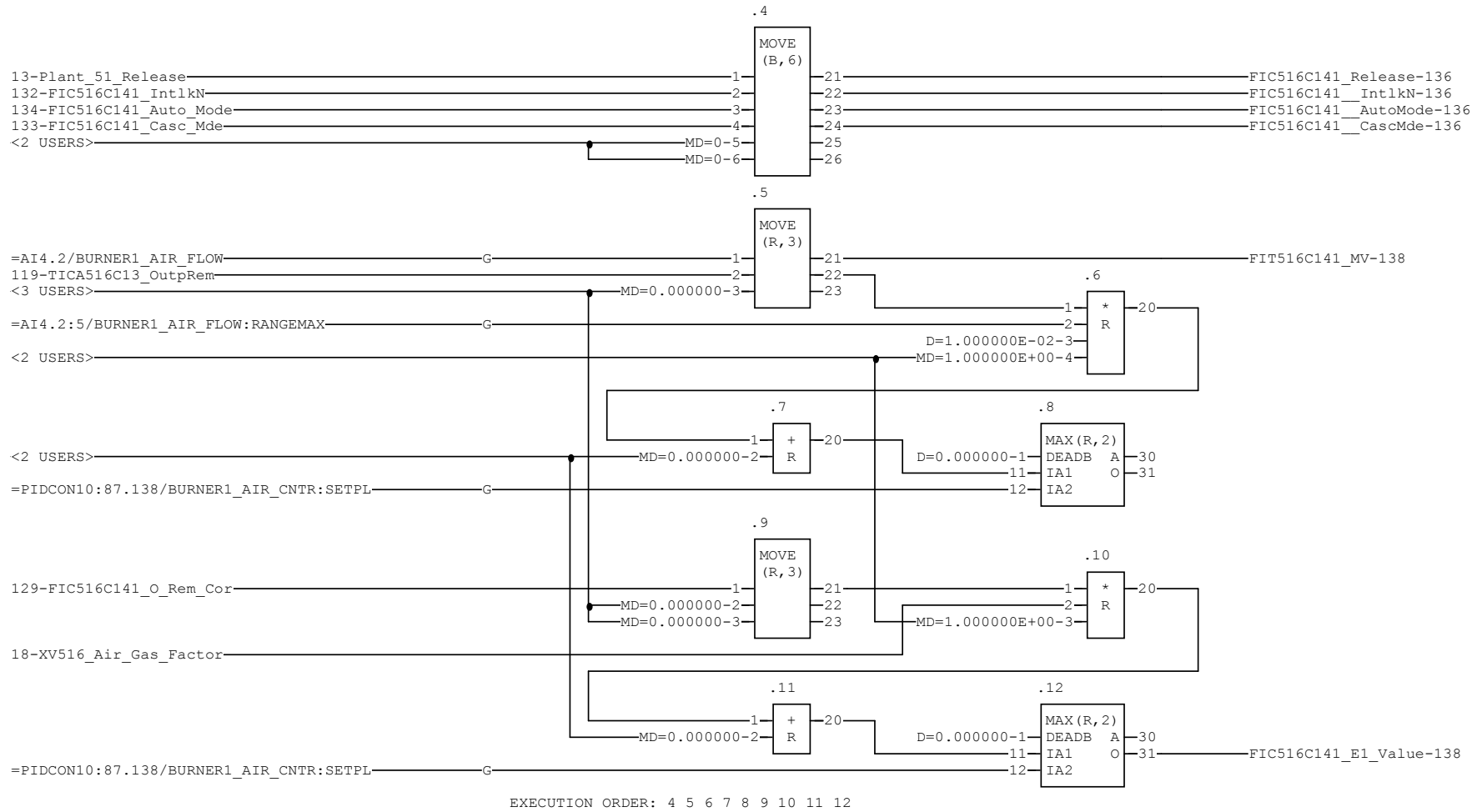
FIC516C141 - Auto mode

Design ch.	PC DIAGRAM PC15		Lang.
Tech. ref.			Rev. ind.
Resp. dept.			Sheet 134
Date			Cont. 135

# ABB Automation

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COMMON IDENTITY: PC15.11.5



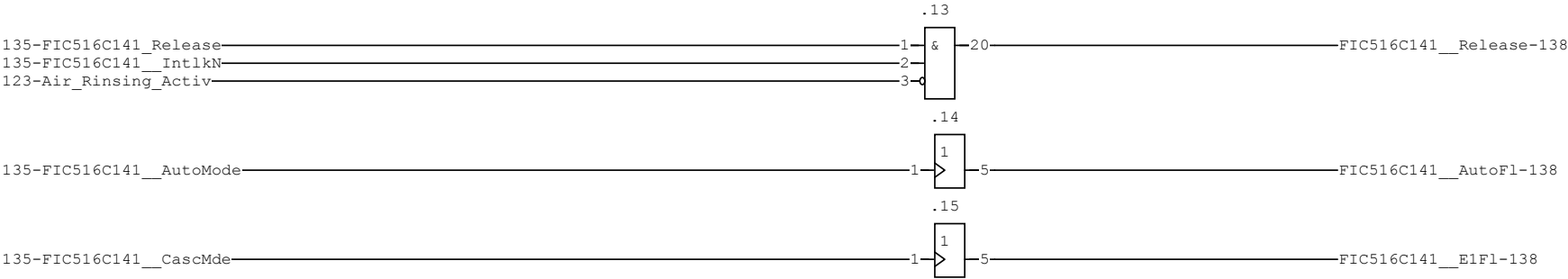
FIC516C141 - insinals

Design ch.	PC DIAGRAM PC15	Lang.
Tech. ref.		Rev. ind.
Resp. dept.		Sheet 135
Date		Cont. 136

ABB Automation

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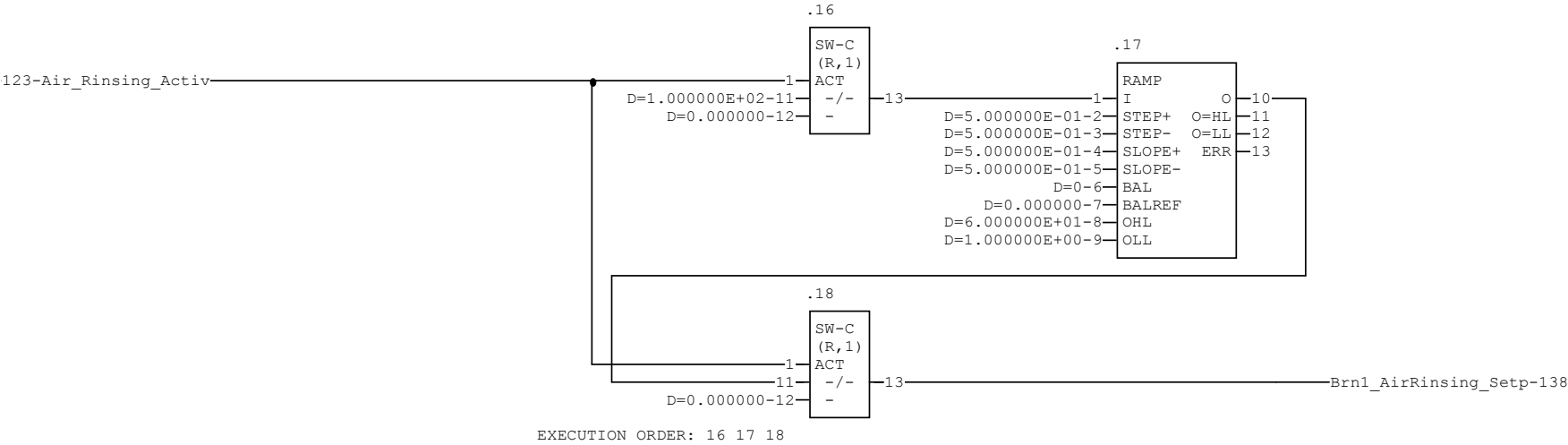
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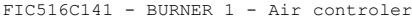
EXECUTION ORDER: 13 14 15

FIC516C141 - logic

Design ch.	PC DIAGRAM PC15		Lang.
Tech. ref.			Rev. ind.
Resp. dept.			Sheet 136
Date			Cont. 137

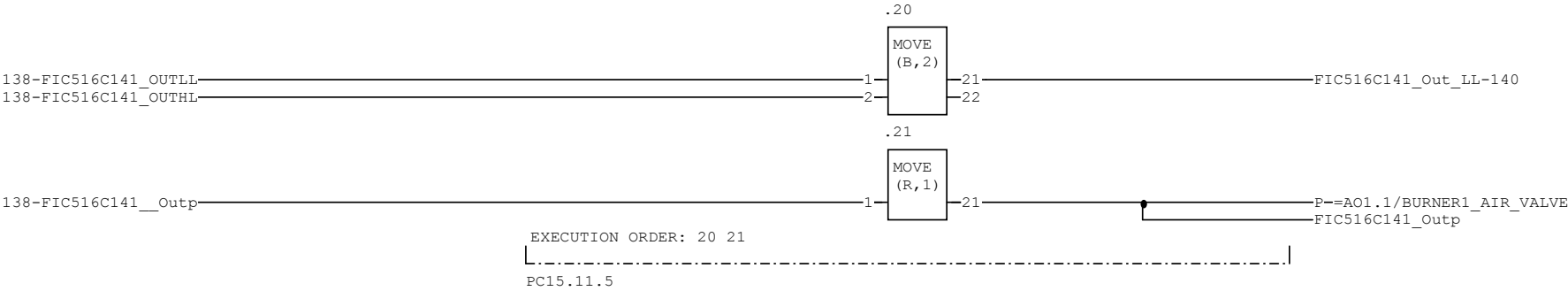


Design ch.	PC DIAGRAM PC15		Lang.
Tech. ref.			Rev. ind.
Resp. dept.			Sheet 137
Date			Cont. 138



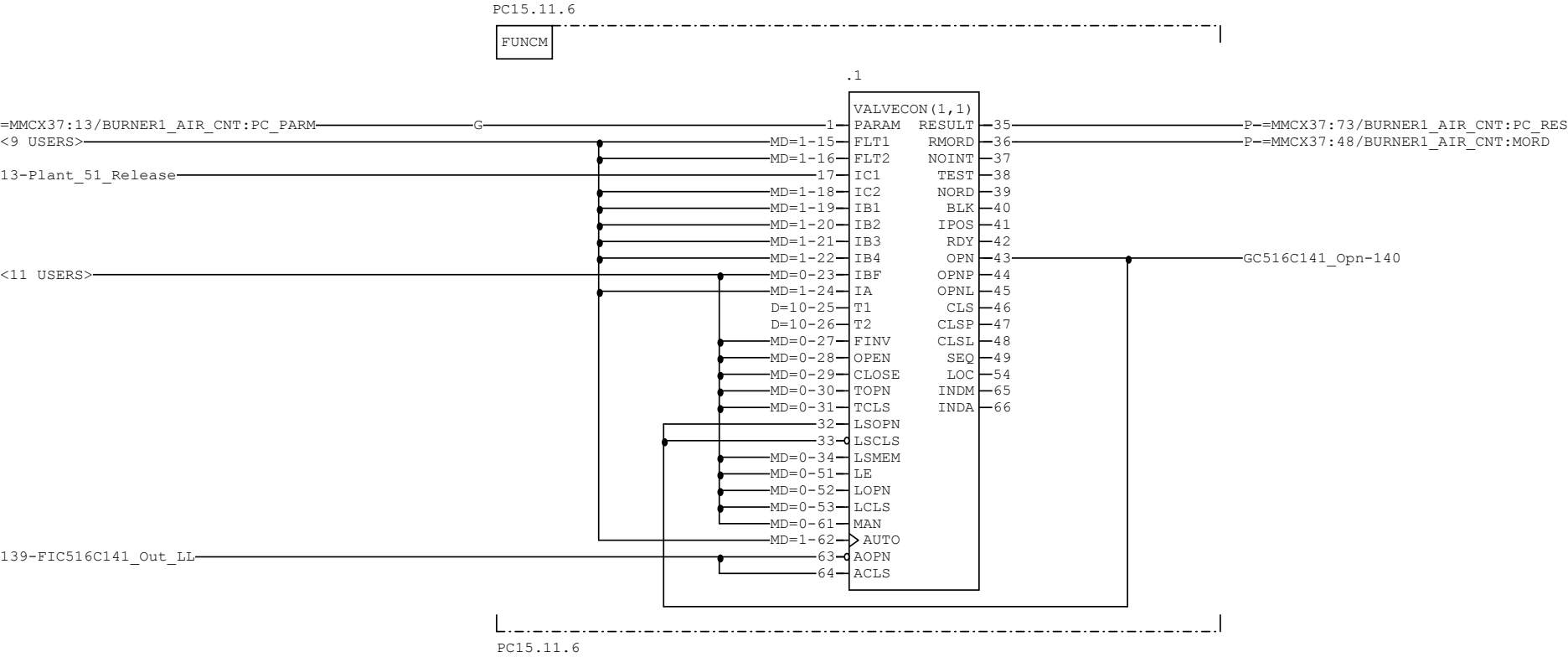
Design ch.	PC DIAGRAM PC15		Lang.
Tech. ref.			Rev. ind.
Resp. dept.			Sheet 138
Date			Cont. 139





FIC516C141 - outsignals

Design ch.	PC DIAGRAM PC15		Lang.
Tech. ref.			Rev. ind.
Resp. dept.			Sheet 139
Date			Cont. 140

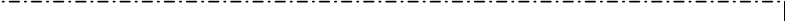


GC516C141 - BURNER 1 - Air control valve

Design ch.	PC DIAGRAM PC15		Lang.
Tech. ref.			Rev. ind.
Resp. dept.			Sheet 140
Date			Cont. 141

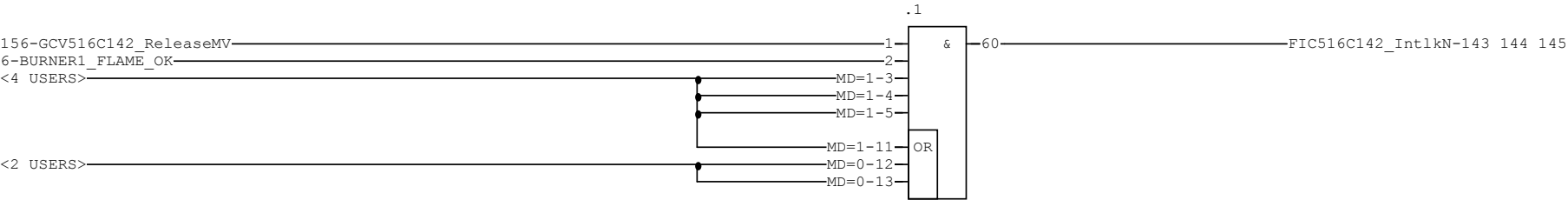
PC15.11.7

FUNCM



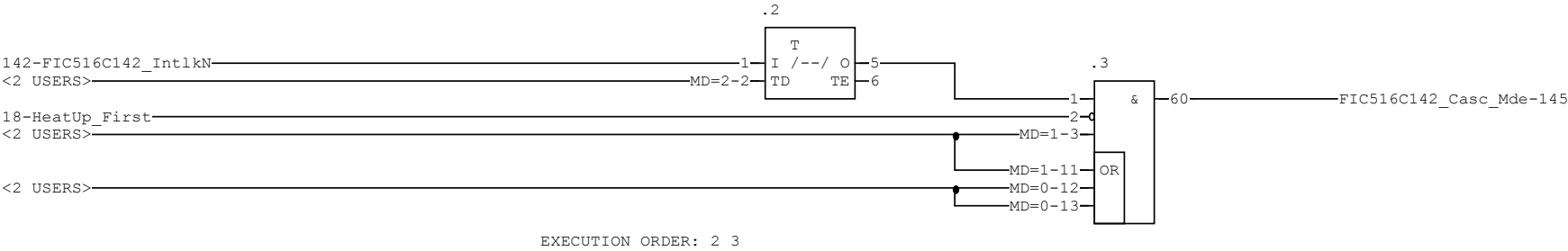
FIC516C142 - BURNER 1 - Gas controller

Design ch.	PC DIAGRAM PC15		Lang.
Tech. ref.			Rev. ind.
Resp. dept.			Sheet 141
Date			Cont. 142

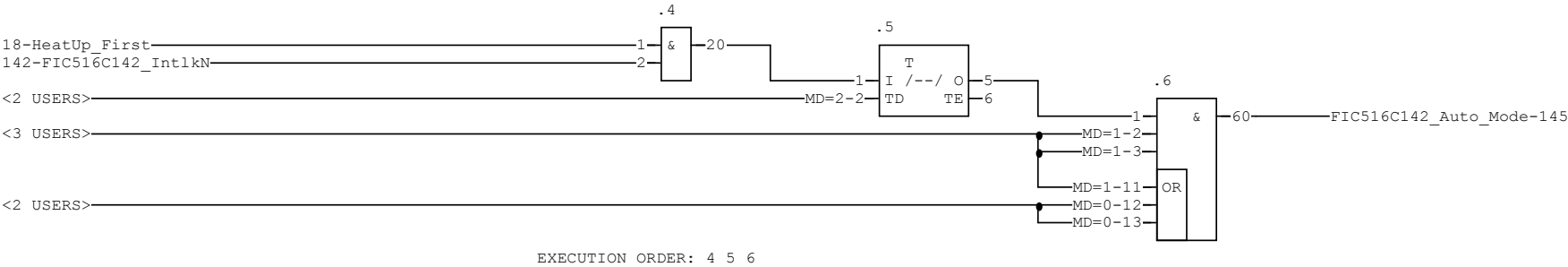


FIC516C142 - Process interlock

Design ch.	PC DIAGRAM PC15		Lang.
Tech. ref.			Rev. ind.
Resp. dept.			Sheet 142
Date			Cont. 143

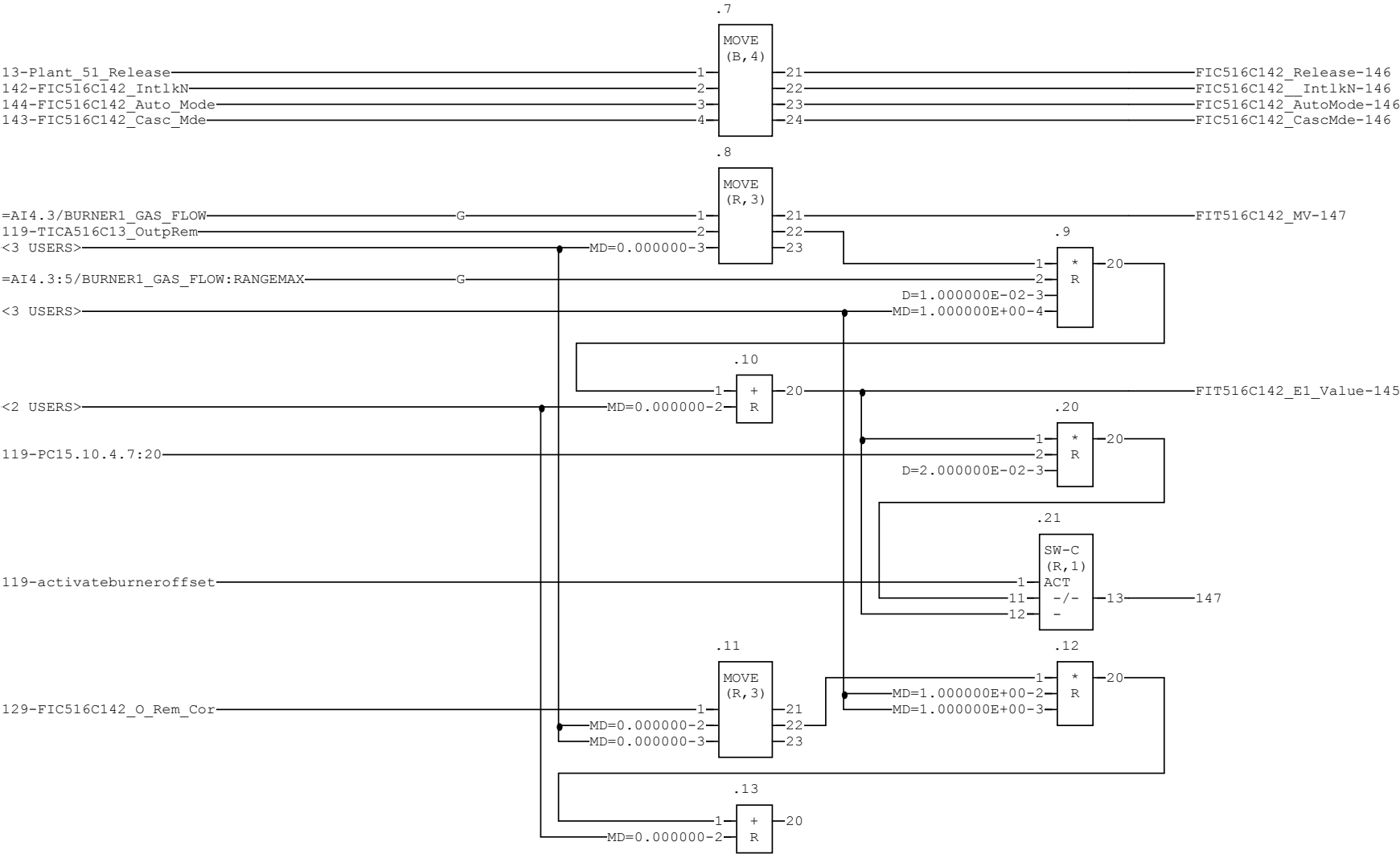


Design ch.	PC DIAGRAM PC15		Lang.
Tech. ref.			Rev. ind.
Resp. dept.			Sheet 143
Date			Cont. 144



FIC516C142 - Auto mode

Design ch.	PC DIAGRAM PC15		Lang.
Tech. ref.			Rev. ind.
Resp. dept.			Sheet 144
Date			Cont. 145



EXECUTION ORDER: 7 8 9 10 20 21 11 12 13

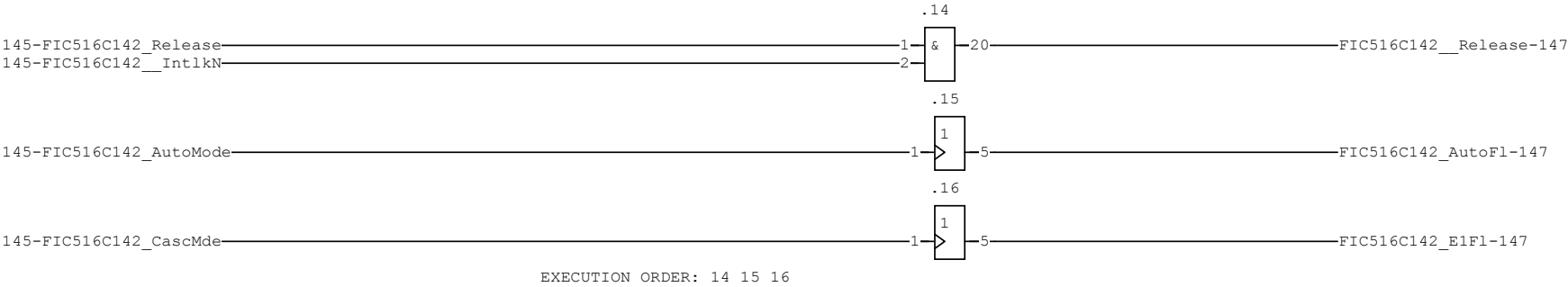
FIC516C142 - insinals

Design ch.	PC DIAGRAM PC15		Lang.
Tech. ref.			Rev. ind.
Resp. dept.			Sheet 145
Date			Cont. 146

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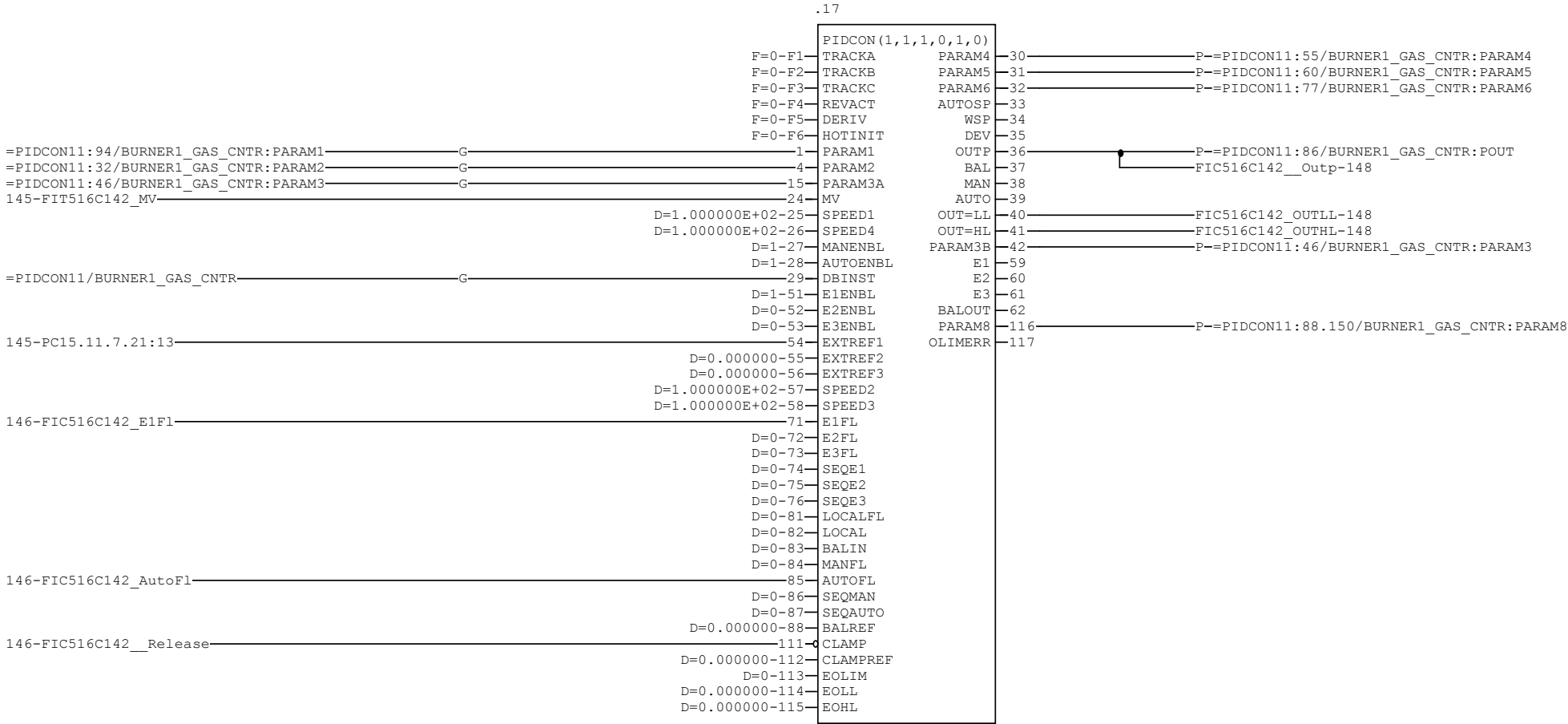
COMMON IDENTITY: PC15.11.7



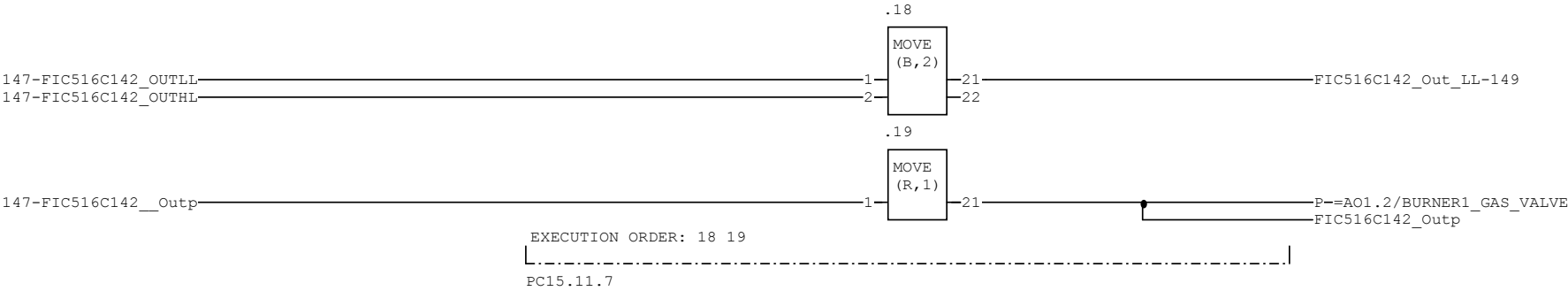
FIC516C142 - logic

Design ch.	PC DIAGRAM PC15		Lang.
Tech. ref.			Rev. ind.
Resp. dept.			Sheet 146
Date			Cont. 147



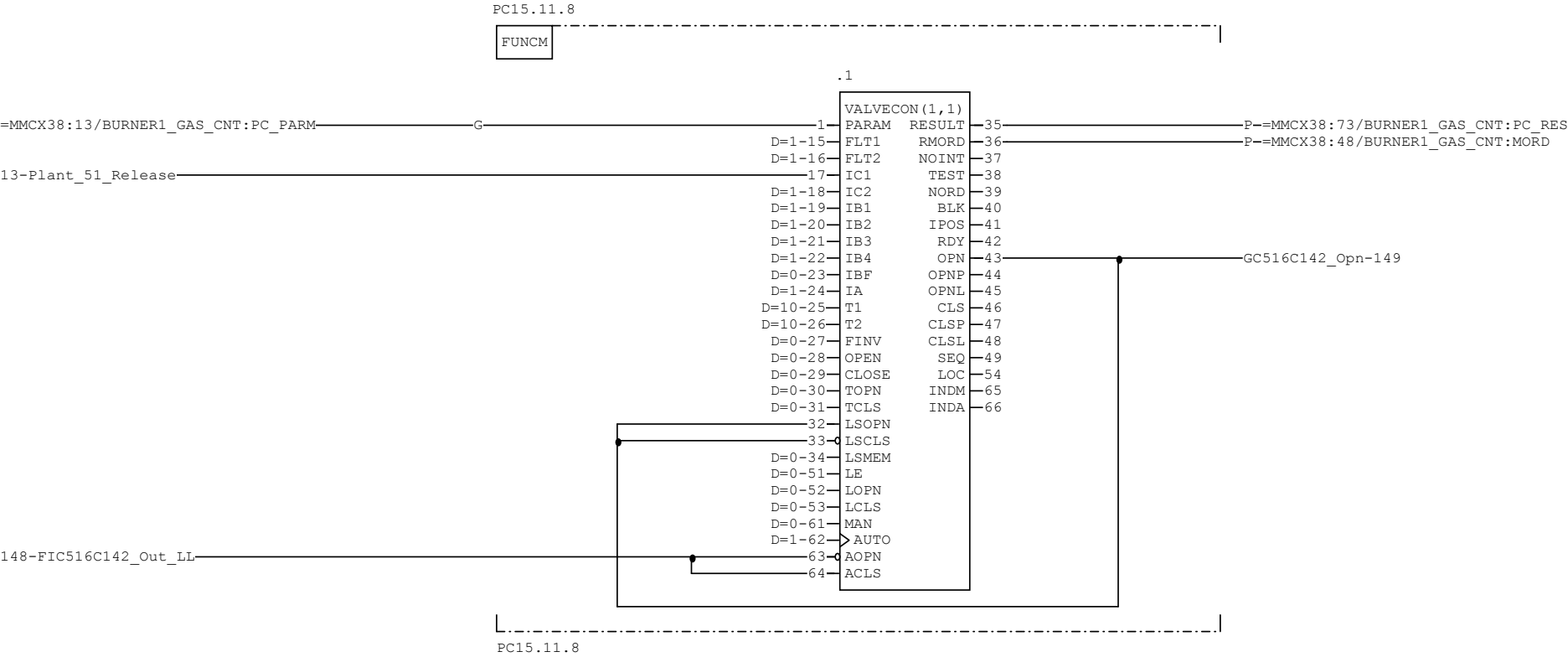


Design ch.	PC DIAGRAM PC15		Lang.
Tech. ref.			Rev. ind.
Resp. dept.			Sheet 147
Date			Cont. 148



FIC516C142 - outsignals

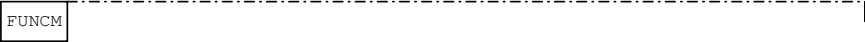
Design ch.	PC DIAGRAM PC15		Lang.
Tech. ref.			Rev. ind.
Resp. dept.			Sheet 148
Date			Cont. 149



GC516C142 - BURNER 1 - Gas control valve

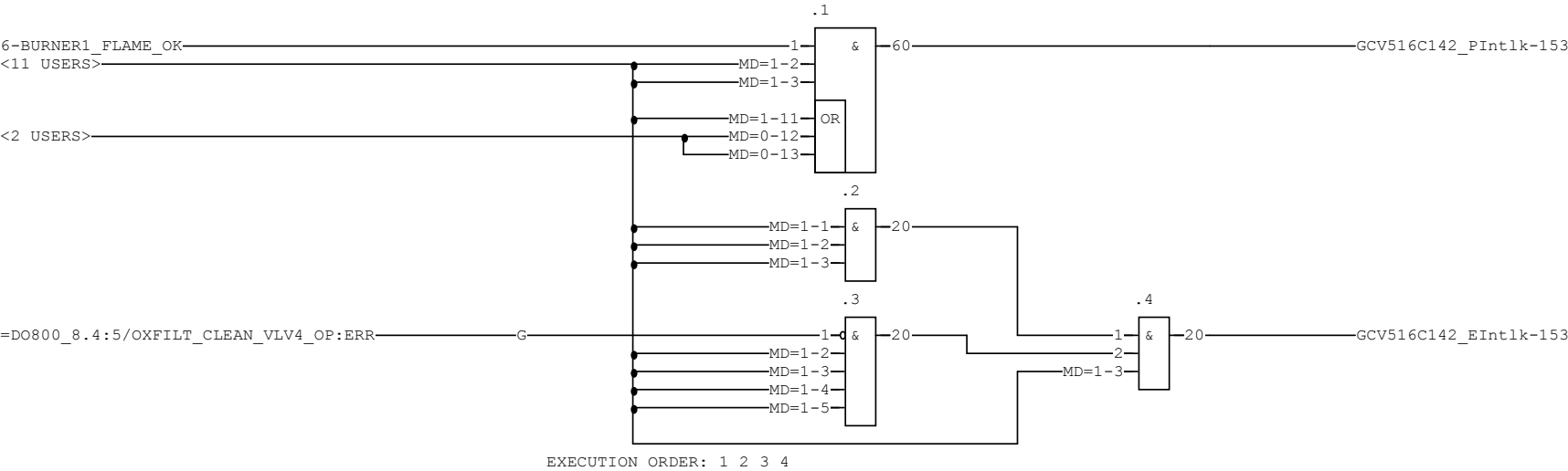
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Tech. ref.			Rev. ind.
Resp. dept.			Sheet 149
Date			Cont. 150

PC15.11.9

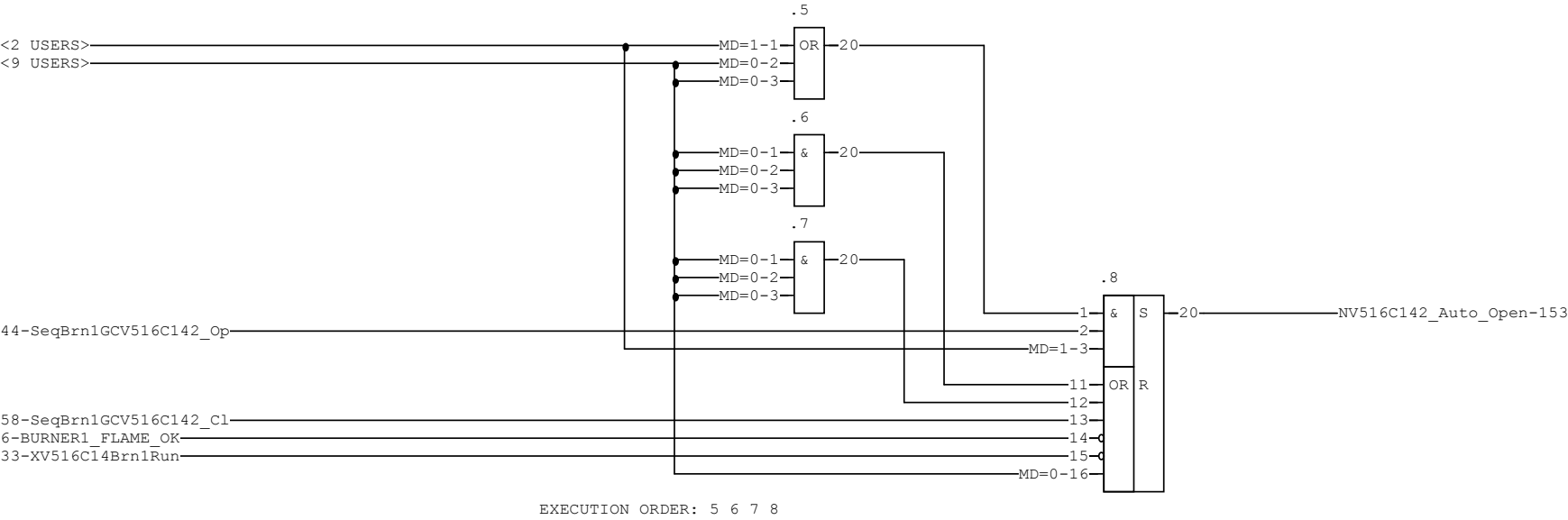


GCV516C142 - BURNER 1 - Gas control valve ( release )

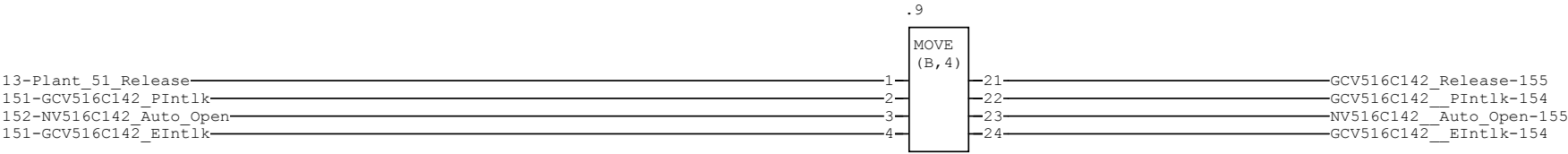
Design ch.	PC DIAGRAM PC15		Lang.
Tech. ref.			Rev. ind.
Resp. dept.			Sheet 150
Date			Cont. 151



Design ch.	PC DIAGRAM PC15		Lang.
Tech. ref.			Rev. ind.
Resp. dept.			Sheet 151
Date			Cont. 152

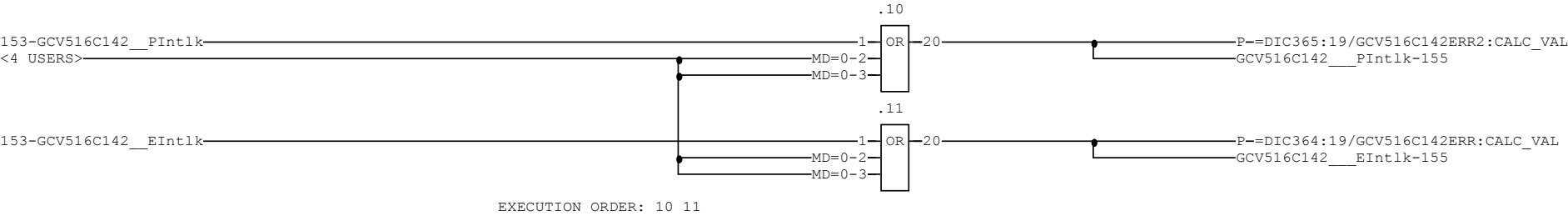


Design ch.	PC DIAGRAM PC15		Lang.
Tech. ref.			Rev. ind.
Resp. dept.			Sheet 152
Date			Cont. 153



GCV516C142 - logic insgnals

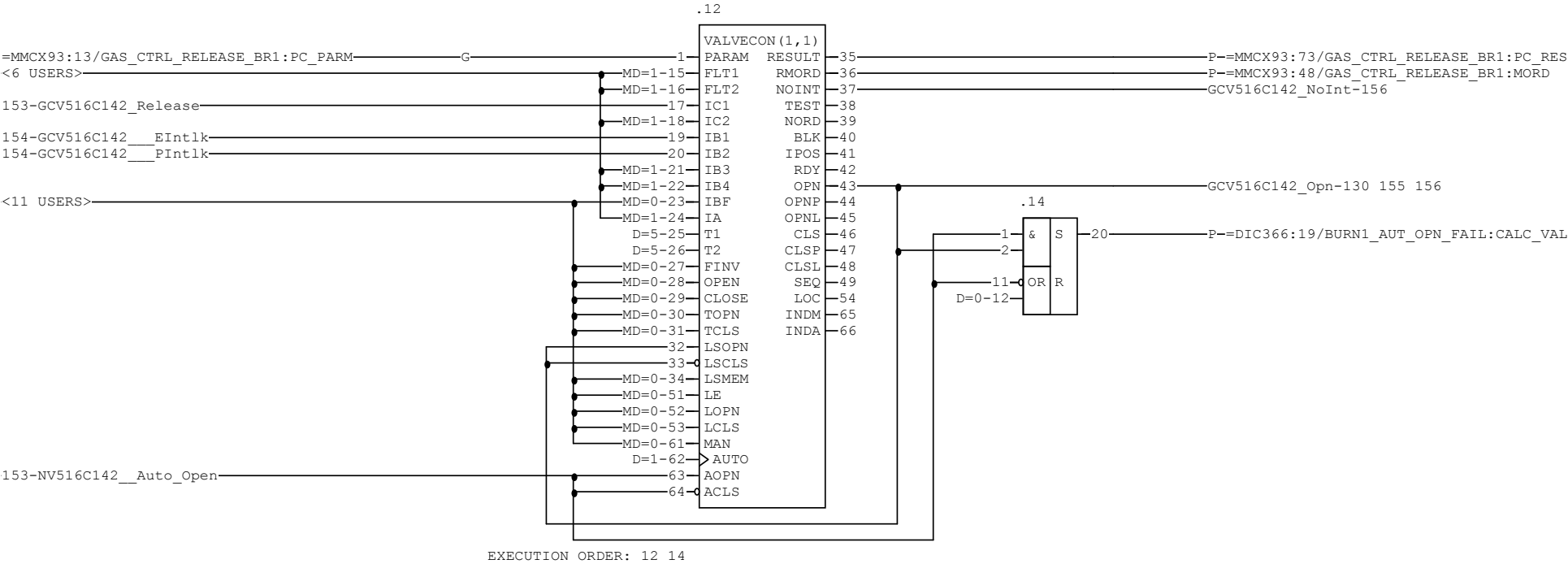
Design ch.	PC DIAGRAM PC15		Lang.
Tech. ref.			Rev. ind.
Resp. dept.			Sheet 153
Date			Cont. 154



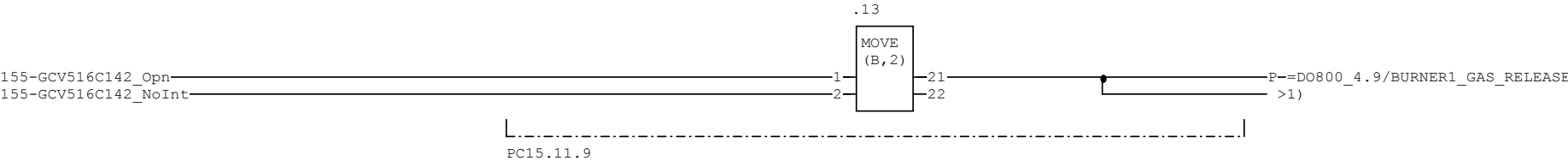
GCV516C142 - logic connections

Design ch.	PC DIAGRAM PC15		Lang.
Tech. ref.			Rev. ind.
Resp. dept.			Sheet 154
Date			Cont. 155





Design ch.	PC DIAGRAM PC15		Lang.
Tech. ref.			Rev. ind.
Resp. dept.			Sheet 155
Date			Cont. 156



>1) GCV516C142\_ReleaseMV-23 24 43 44 45 69 76 132 133 134 142

GCV516C142 - logic outsignals

Design ch.	PC DIAGRAM PC15		Lang.
Tech. ref.			Rev. ind.
Resp. dept.			Sheet 156
Date			Cont. 157

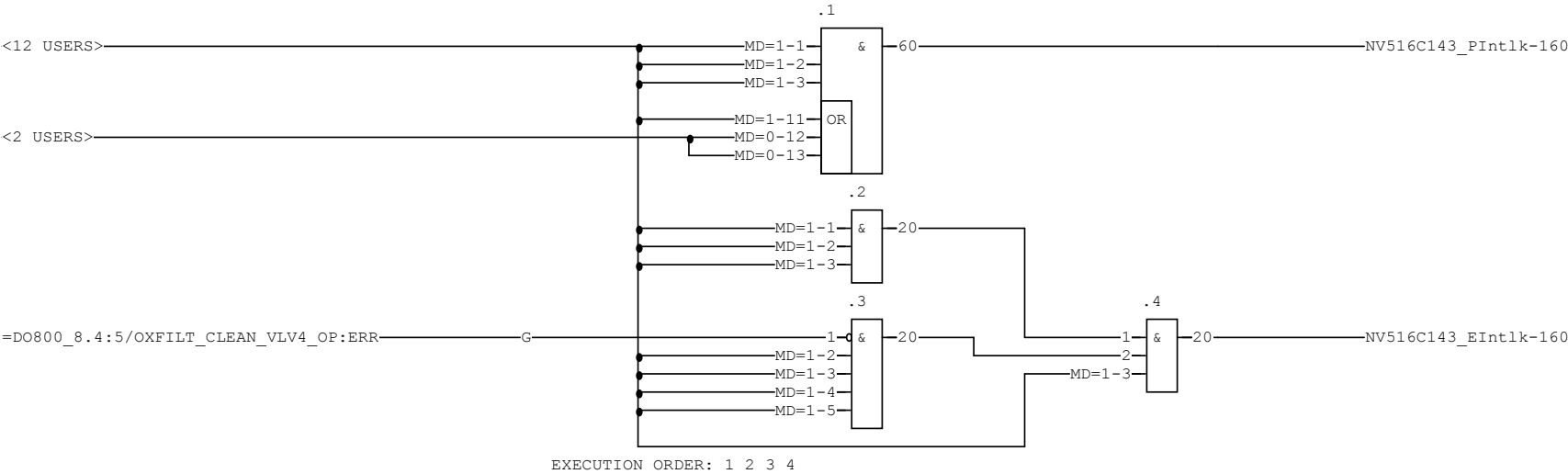
PC15.11.10

FUNCM

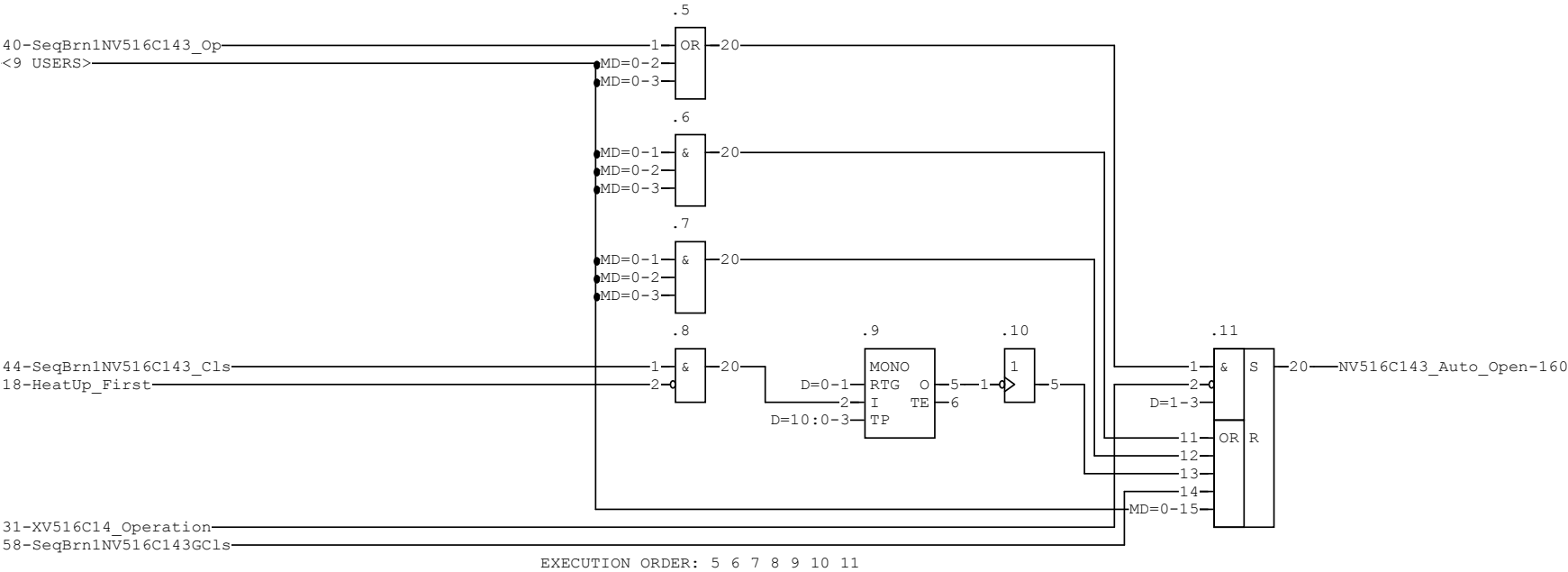
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NV516C143 - BURNER 1 - Ignition valve

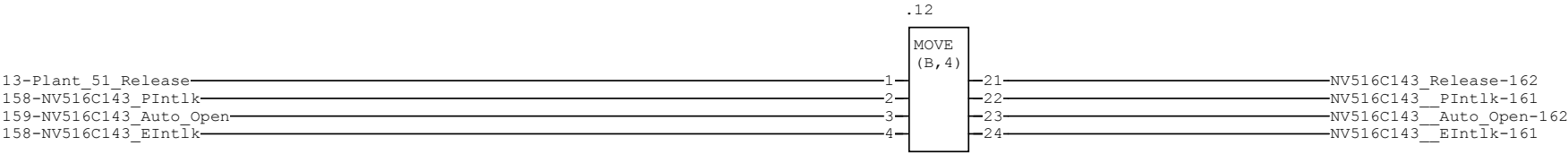
Design ch.	PC DIAGRAM PC15		Lang.
Tech. ref.			Rev. ind.
Resp. dept.			Sheet 157
Date			Cont. 158



Design ch.	PC DIAGRAM PC15		Lang.
Tech. ref.			Rev. ind.
Resp. dept.			Sheet 158
Date			Cont. 159

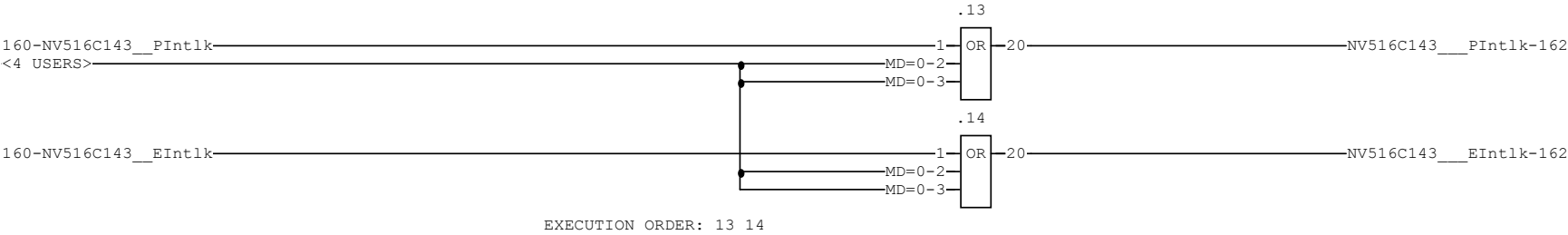


Design ch.	PC DIAGRAM PC15		Lang.
Tech. ref.			Rev. ind.
Resp. dept.			Sheet 159
Date			Cont. 160



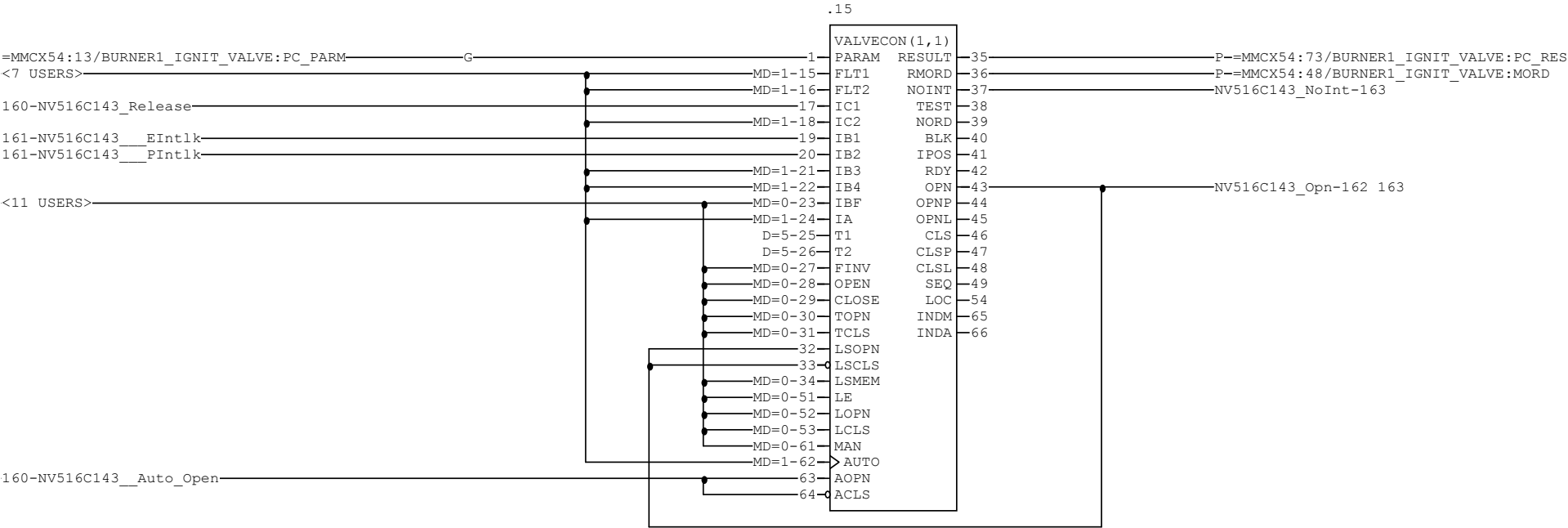
NV516C143 - logic insgnals

Design ch.	PC DIAGRAM PC15		Lang.
Tech. ref.			Rev. ind.
Resp. dept.			Sheet 160
Date			Cont. 161



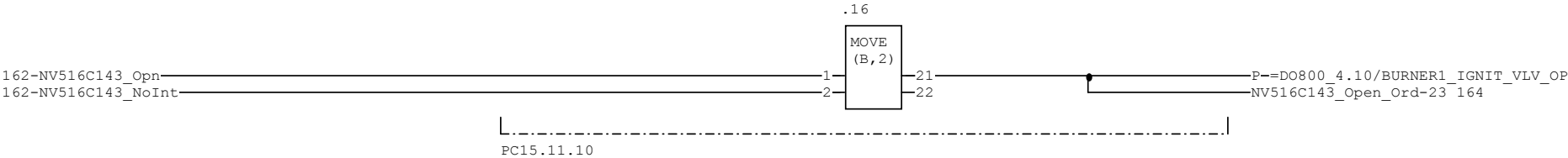
NV516C143 - logic connections

Design ch.	PC DIAGRAM PC15		Lang.
Tech. ref.			Rev. ind.
Resp. dept.			Sheet 161
Date			Cont. 162



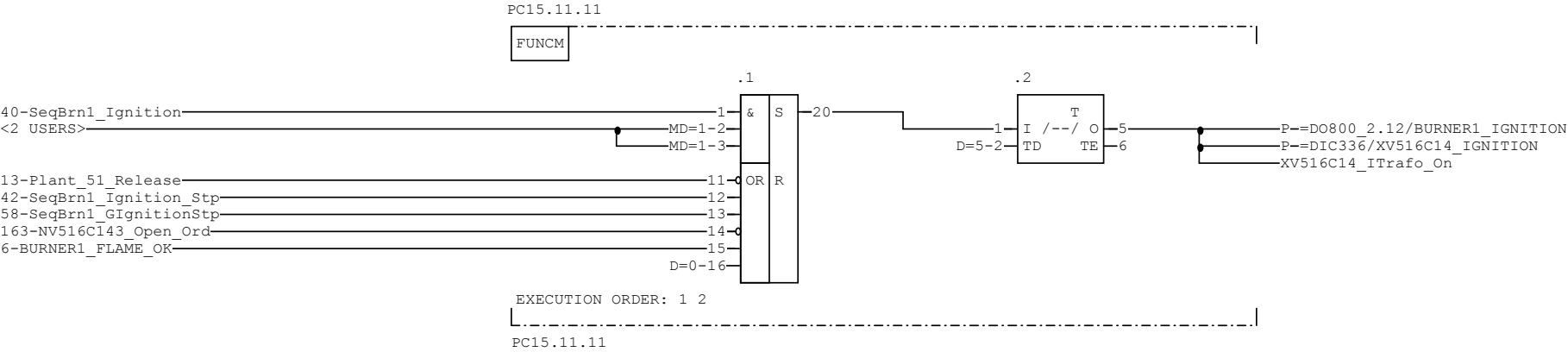
Design ch.	PC DIAGRAM PC15		Lang.
Tech. ref.			Rev. ind.
Resp. dept.			Sheet 162
Date			Cont. 163





NV516C143 - logic outsignals

Design ch.	PC DIAGRAM PC15		Lang.
Tech. ref.			Rev. ind.
Resp. dept.			Sheet 163
Date			Cont. 164



Ignition - BURNER 1

Design ch.	PC DIAGRAM PC15		Lang.
Tech. ref.			Rev. ind.
Resp. dept.			Sheet 164
Date			Cont. 165

PC15.11.21

FUNCM

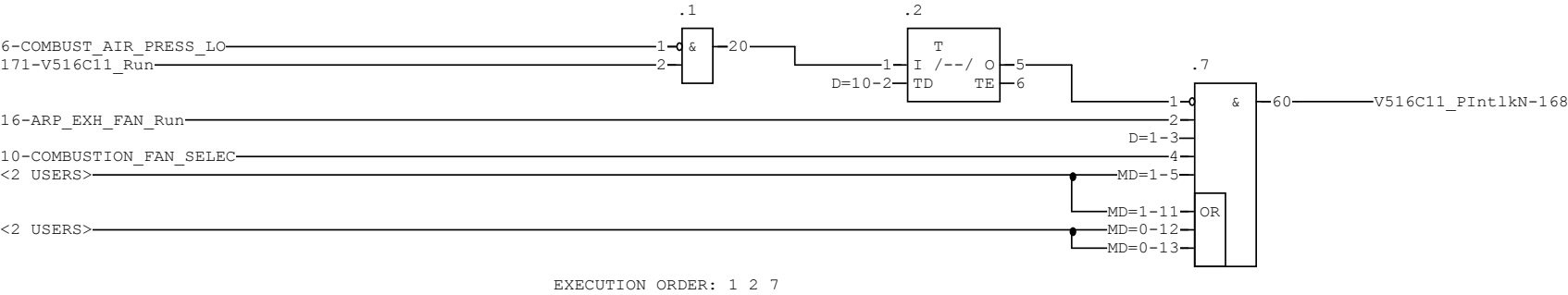
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V516C11 - Combustion fan

Design ch.	PC DIAGRAM PC15		Lang.
Tech. ref.			Rev. ind.
Resp. dept.			Sheet 165
Date			Cont. 166

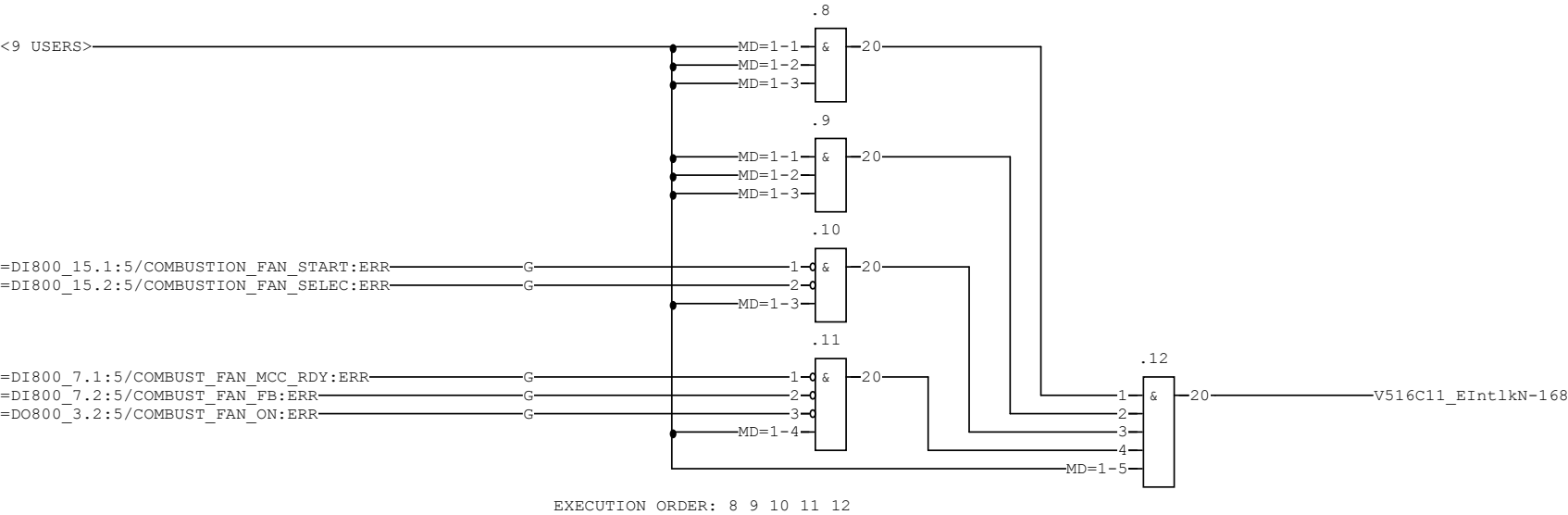
10-JAN-2017/12:04

COMMON IDENTITY: PC15.11.21



V516C11 - Process interlock

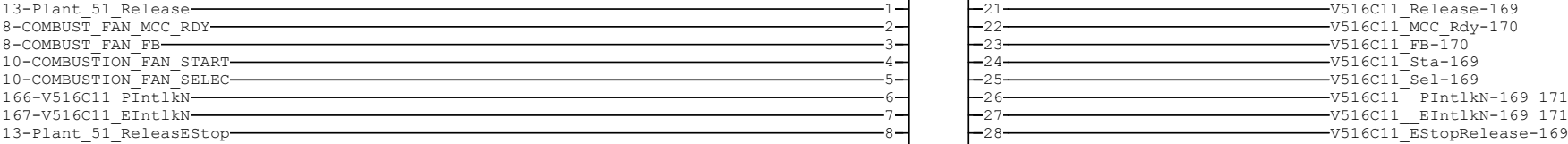
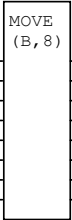
Design ch.	PC DIAGRAM PC15		Lang.
Tech. ref.			Rev. ind.
Resp. dept.			Sheet 166
Date			Cont. 167



V516C11 - Process interlock

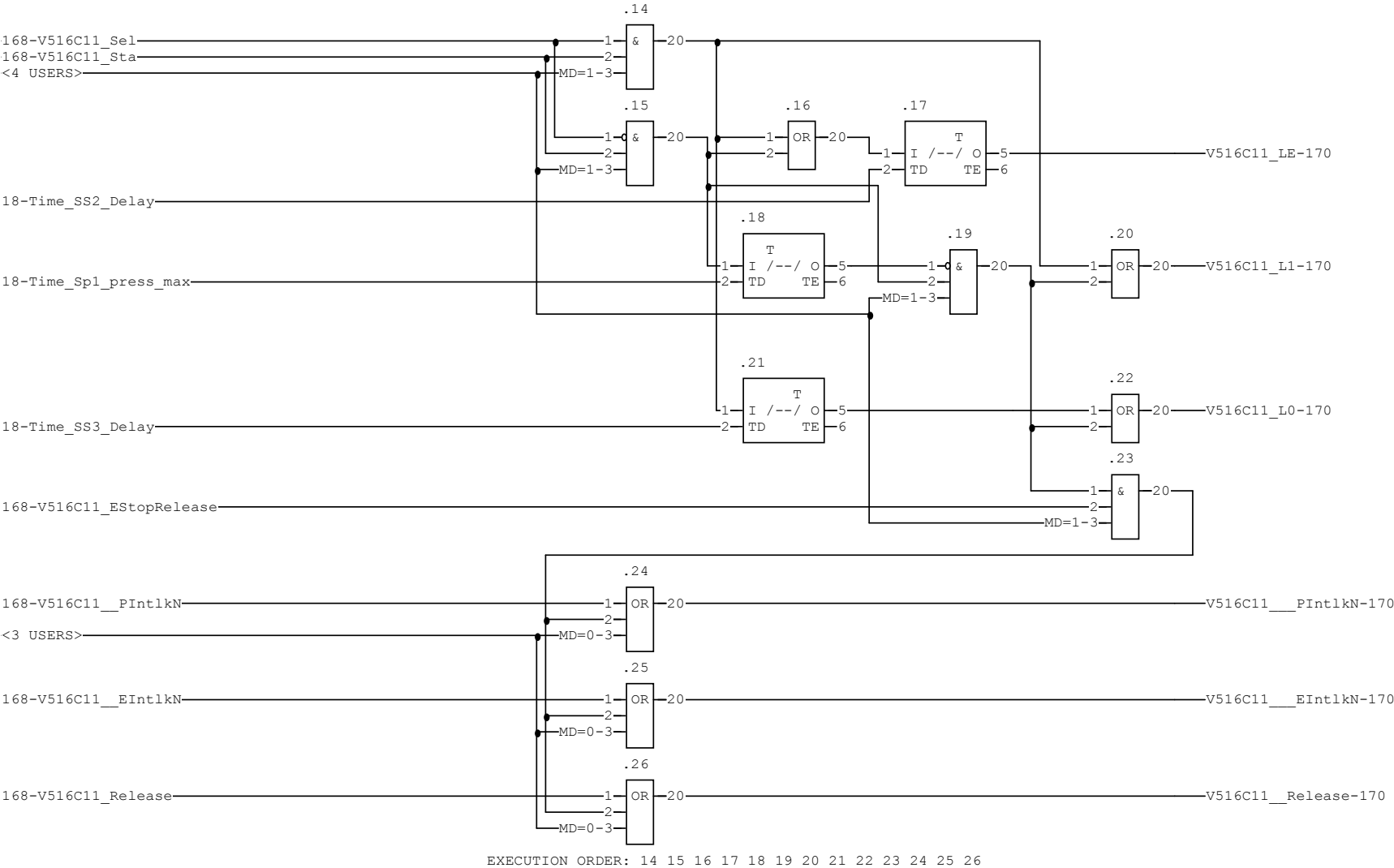
Design ch.	PC DIAGRAM PC15		Lang.
Tech. ref.			Rev. ind.
Resp. dept.			Sheet 167
Date			Cont. 168

.13



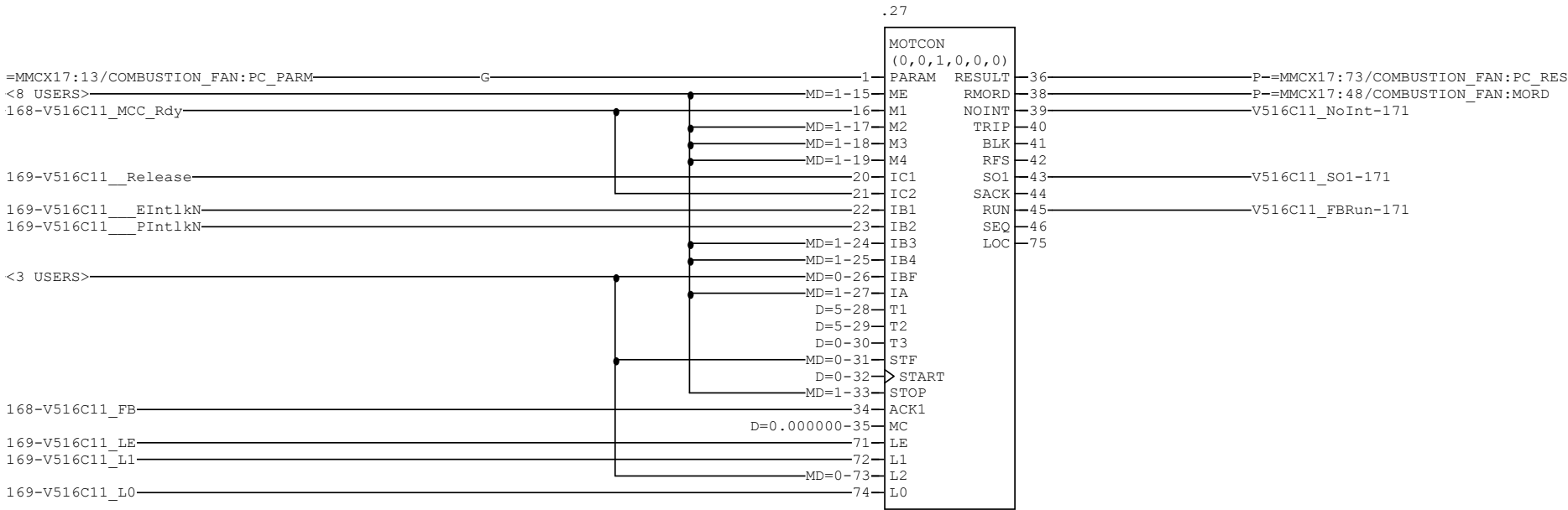
V516C11 - logic insgnals

Design ch.	PC DIAGRAM PC15		Lang.
Tech. ref.			Rev. ind.
Resp. dept.			Sheet 168
Date			Cont. 169



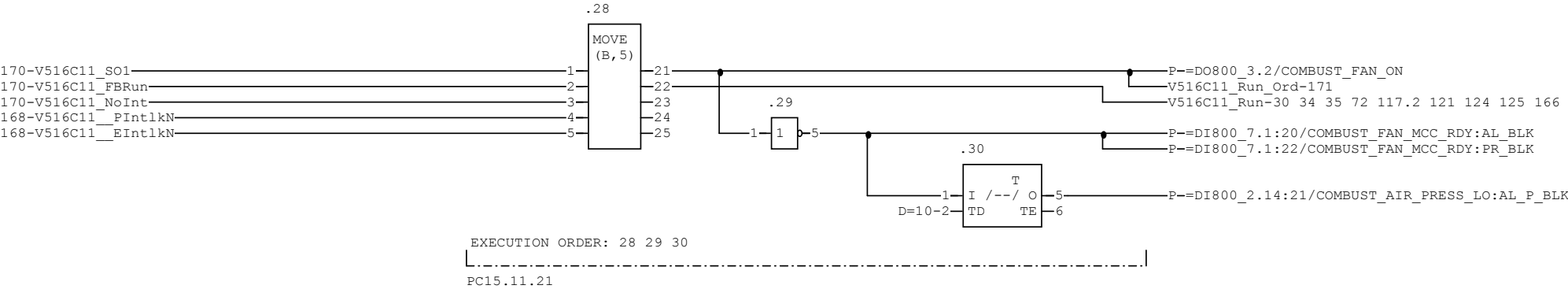
P515C11 - logic connections

Design ch.	PC DIAGRAM PC15		Lang.
Tech. ref.			Rev. ind.
Resp. dept.			Sheet 169
Date			Cont. 170



Design ch.	PC DIAGRAM PC15		Lang.
Tech. ref.			Rev. ind.
Resp. dept.			Sheet 170
Date			Cont. 171



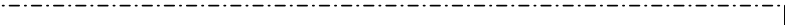


V516C11 - logic outsignals

Design ch.	PC DIAGRAM PC15			Lang.
Tech. ref.				Rev. ind.
Resp. dept.				Sheet 171
Date				Cont. 172

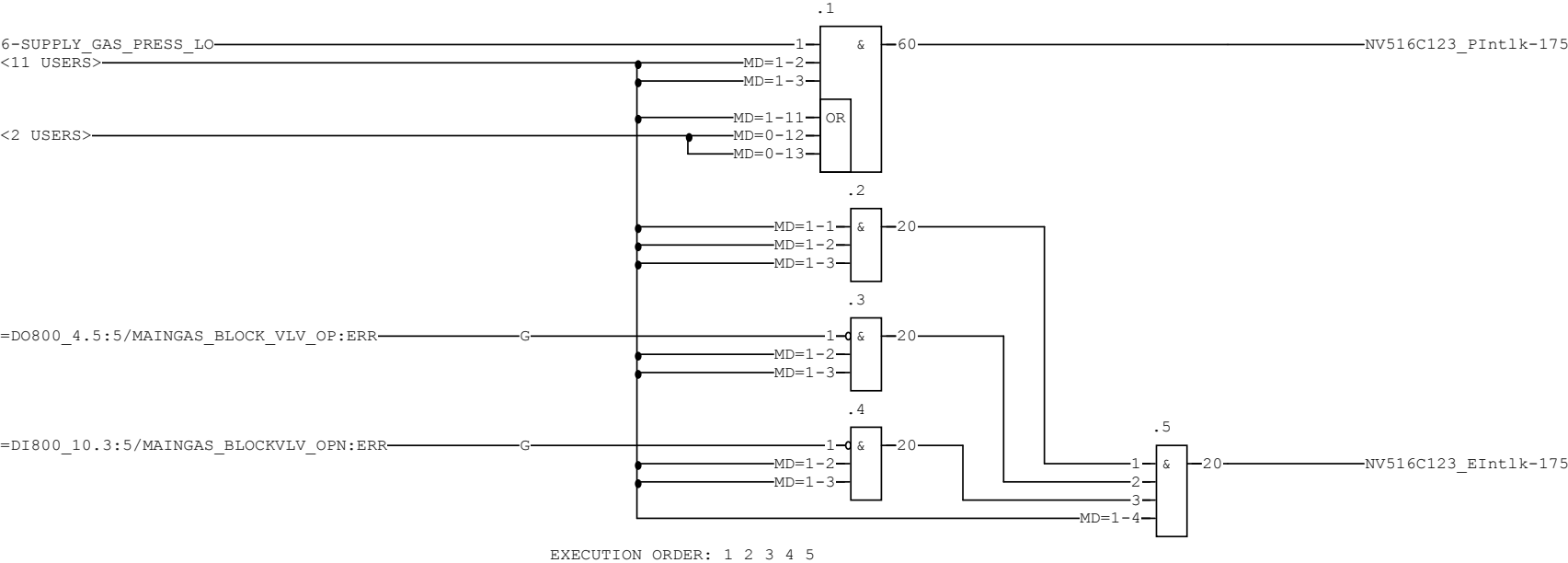
PC15.11.22

FUNCM

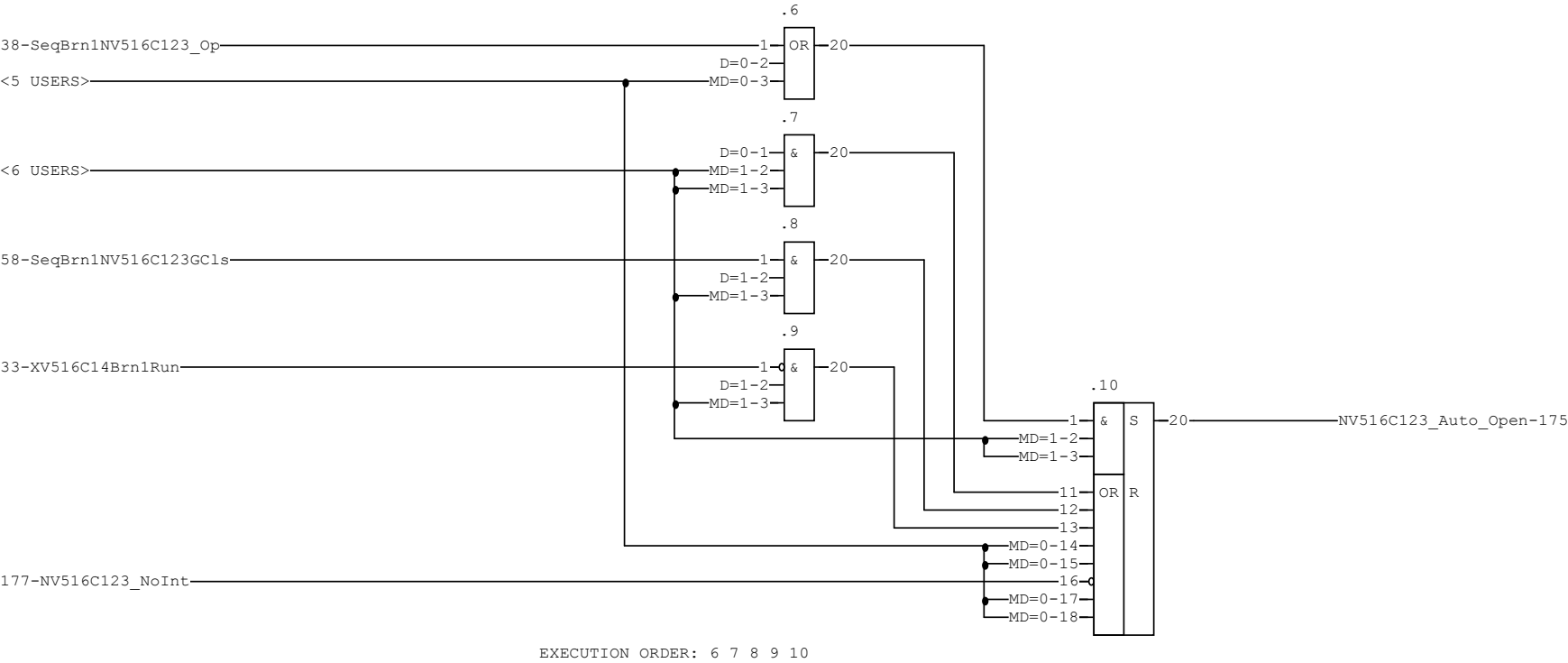


NV516C123 - Gas supply block valve

Design ch.	PC DIAGRAM PC15		Lang.
Tech. ref.			Rev. ind.
Resp. dept.			Sheet 172
Date			Cont. 173

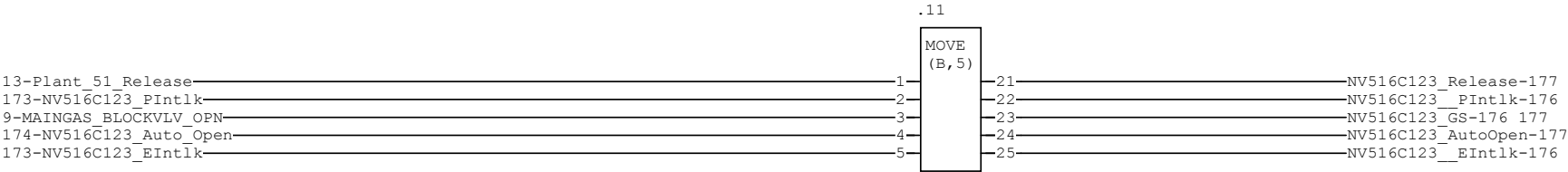


Design ch.	PC DIAGRAM PC15		Lang.
Tech. ref.			Rev. ind.
Resp. dept.			Sheet 173
Date			Cont. 174



NV516C123 - Auto control

Design ch.	PC DIAGRAM PC15		Lang.
Tech. ref.			Rev. ind.
Resp. dept.			Sheet 174
Date			Cont. 175



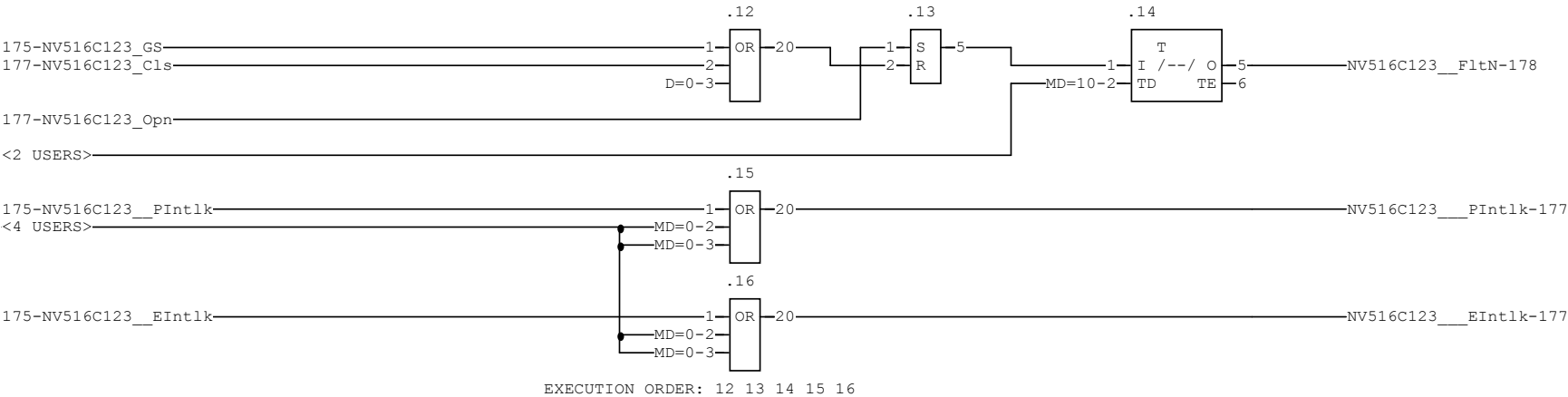
NV516C123 - logic insgnals

Design ch.	PC DIAGRAM PC15		Lang.
Tech. ref.			Rev. ind.
Resp. dept.			Sheet 175
Date			Cont. 176

ABB Automation

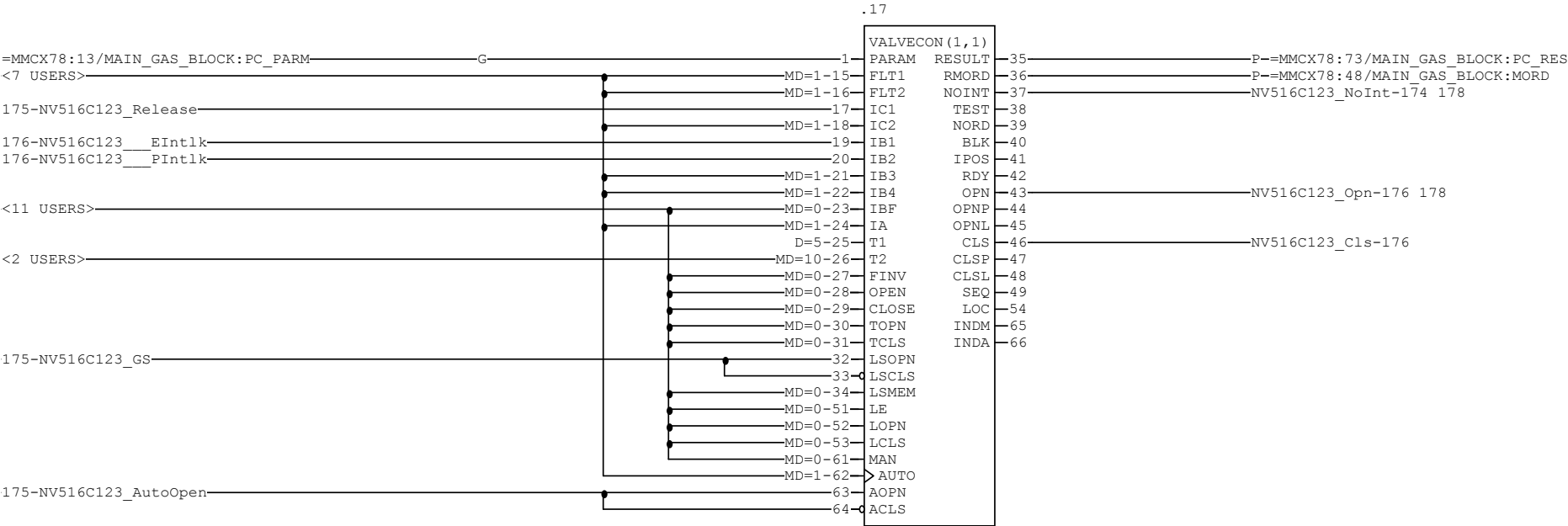
10-JAN-2017/12:04

COMMON IDENTITY: PC15.11.22

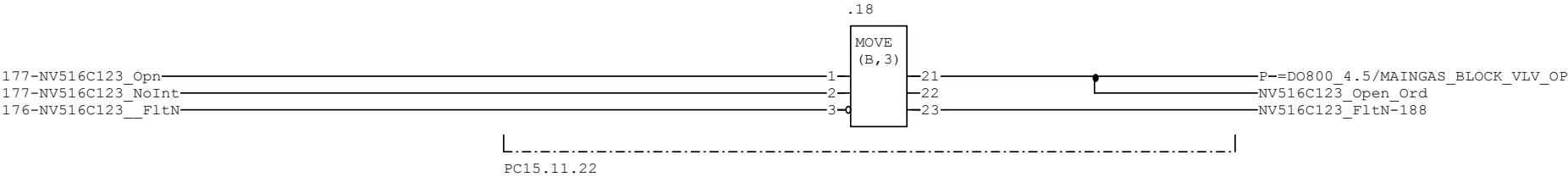


NV516C123 - logic connections

Design ch.	PC DIAGRAM PC15		Lang.
Tech. ref.			Rev. ind.
Resp. dept.			Sheet 176
Date			Cont. 177



Design ch.	PC DIAGRAM PC15		Lang.
Tech. ref.			Rev. ind.
Resp. dept.			Sheet 177
Date			Cont. 178



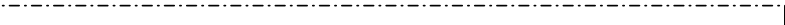
NV516C123 - logic outsignals

Design ch.	PC DIAGRAM PC15		Lang.
Tech. ref.			Rev. ind.
Resp. dept.			Sheet 178
Date			Cont. 179



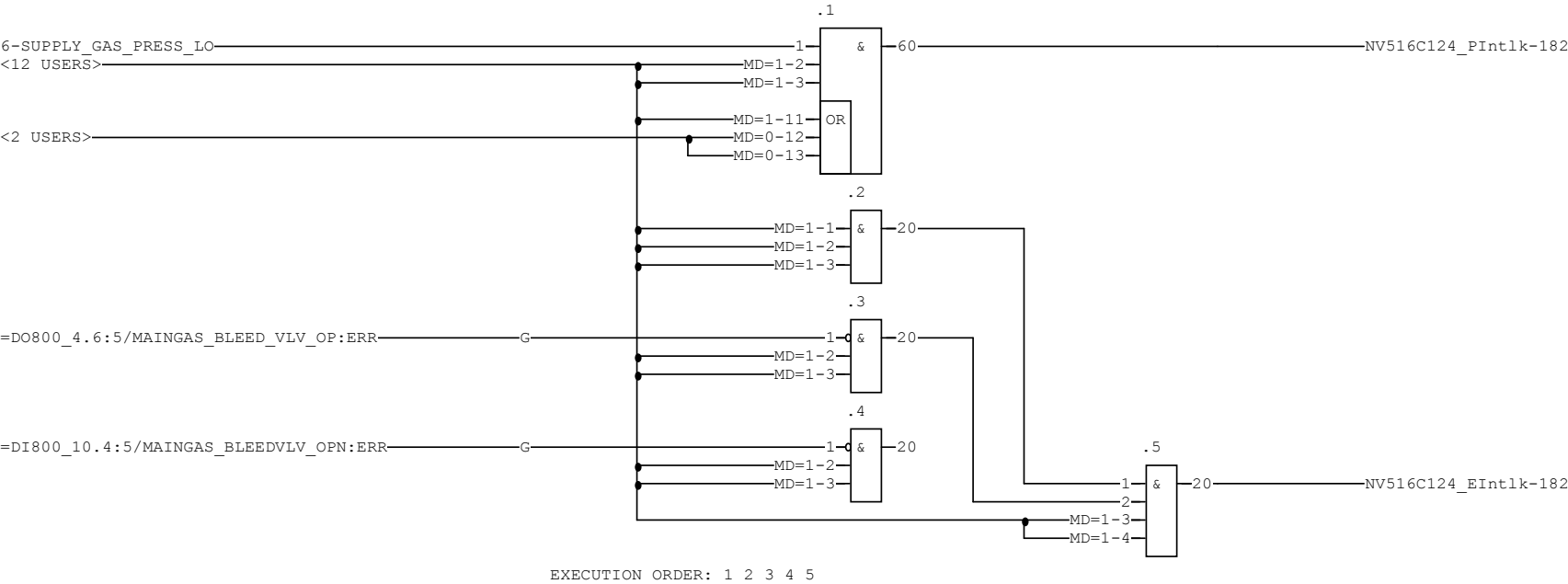
PC15.11.23

FUNCM

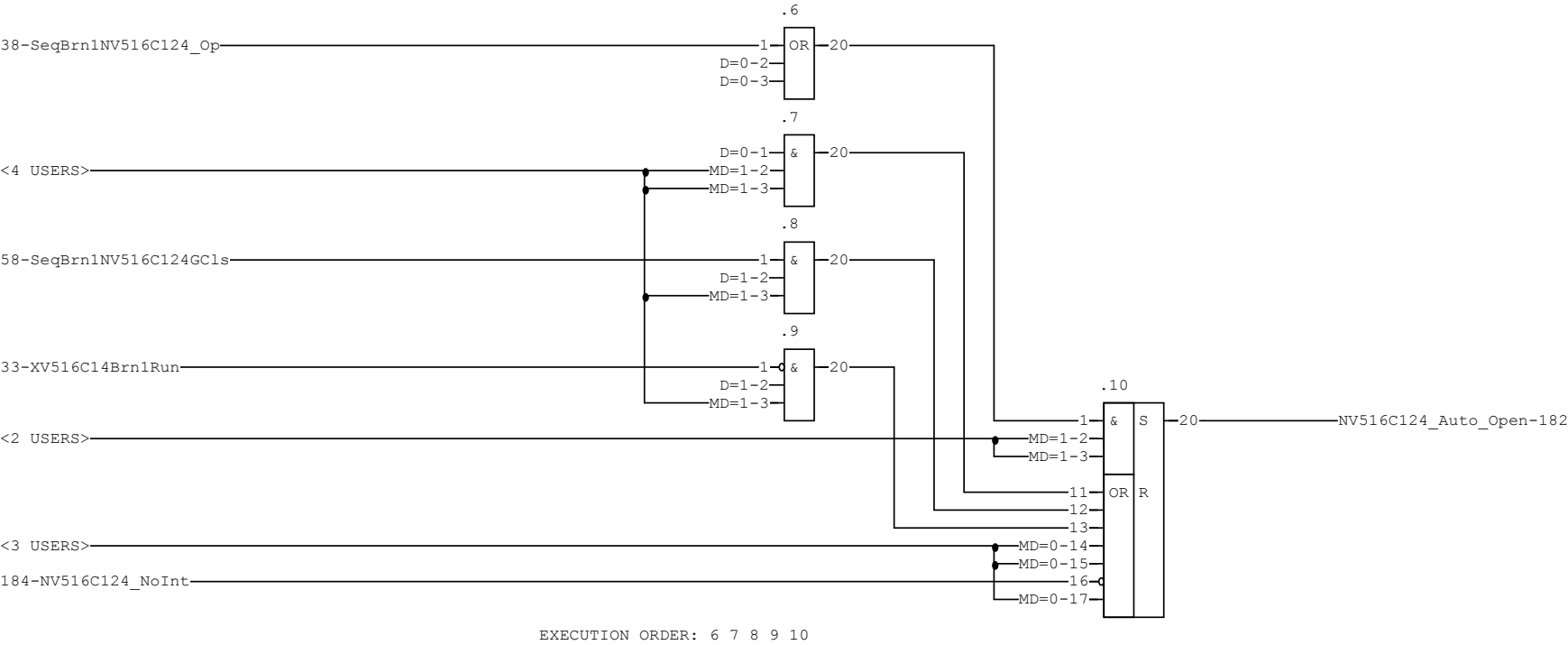


NV516C124 - Gas supply bleed valve

Design ch.	PC DIAGRAM PC15		Lang.
Tech. ref.			Rev. ind.
Resp. dept.			Sheet 179
Date			Cont. 180

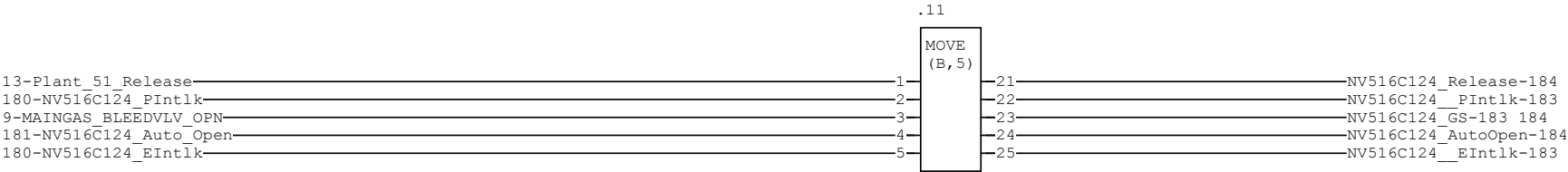


Design ch.	PC DIAGRAM PC15		Lang.
Tech. ref.			Rev. ind.
Resp. dept.			Sheet 180
Date			Cont. 181



NV516C124 - Auto control

Design ch.	PC DIAGRAM PC15		Lang.
Tech. ref.			Rev. ind.
Resp. dept.			Sheet 181
Date			Cont. 182

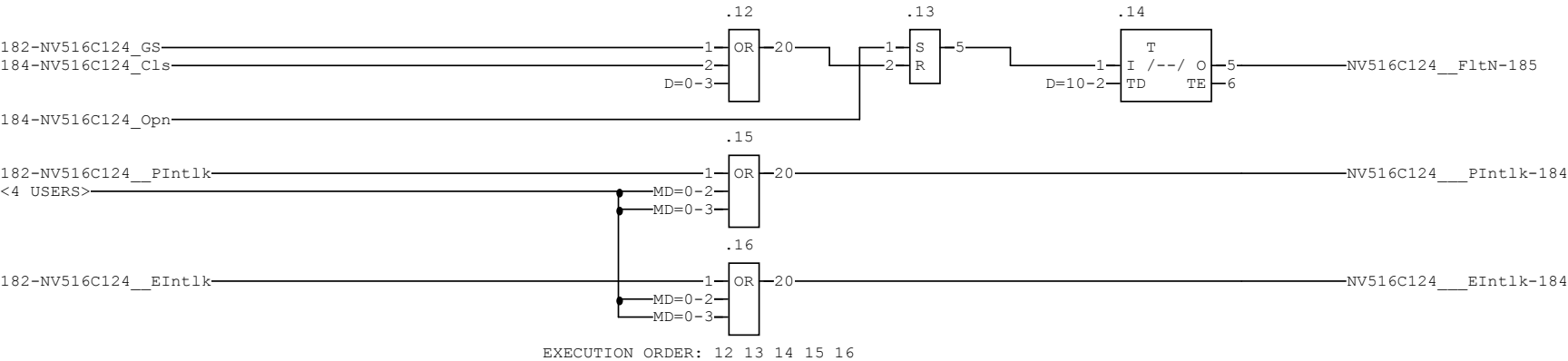


NV516C124 - logic insgnals

Design ch.	PC DIAGRAM PC15		Lang.
Tech. ref.			Rev. ind.
Resp. dept.			Sheet 182
Date			Cont. 183

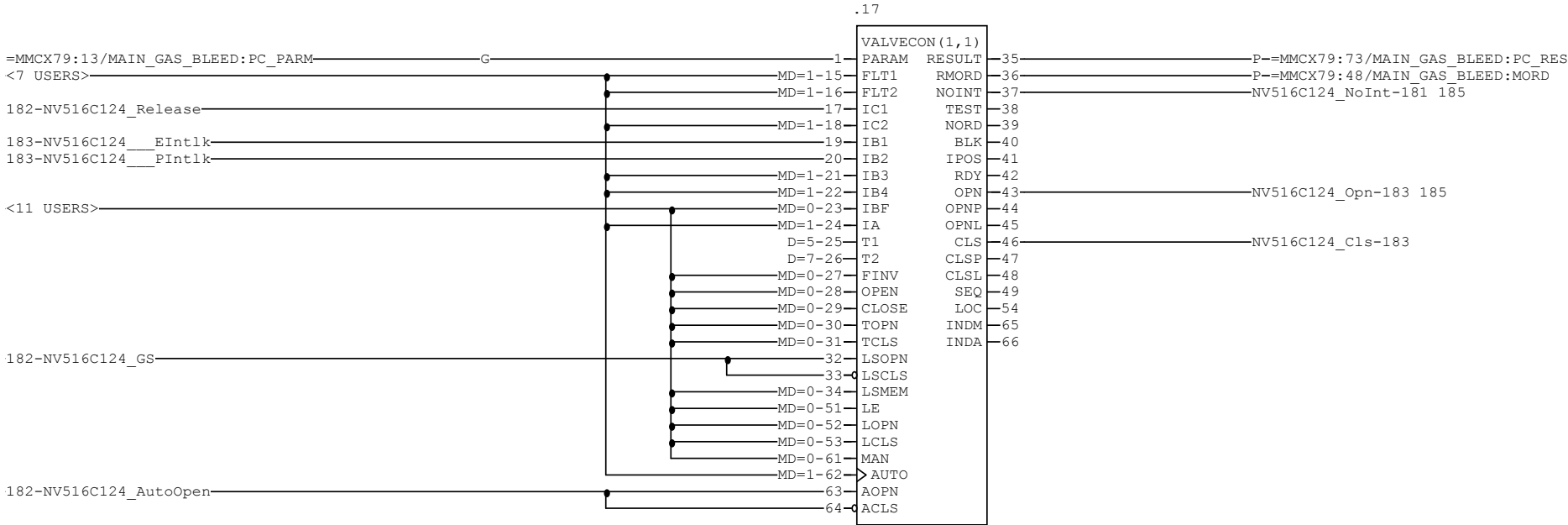
10-JAN-2017/12:04

COMMON IDENTITY: PC15.11.23

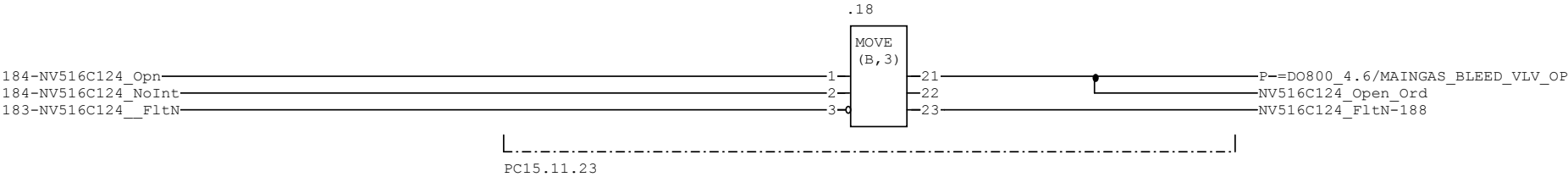


NV516C124 - logic connections

Design ch.	PC DIAGRAM PC15		Lang.
Tech. ref.			Rev. ind.
Resp. dept.			Sheet 183
Date			Cont. 184



Design ch.	PC DIAGRAM PC15		Lang.
Tech. ref.			Rev. ind.
Resp. dept.			Sheet 184
Date			Cont. 185



NV516C124 - logic outsignals

Design ch.	PC DIAGRAM PC15		Lang.
Tech. ref.			Rev. ind.
Resp. dept.			Sheet 185
Date			Cont. 186

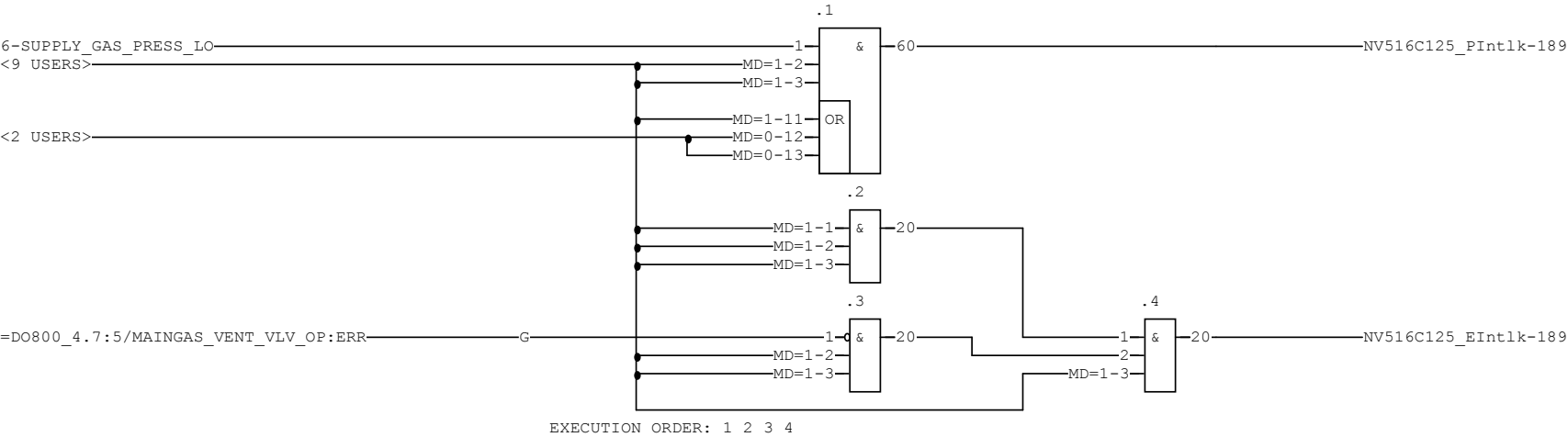
PC15.11.24

FUNCM

NV516C125 - Ventilation valve

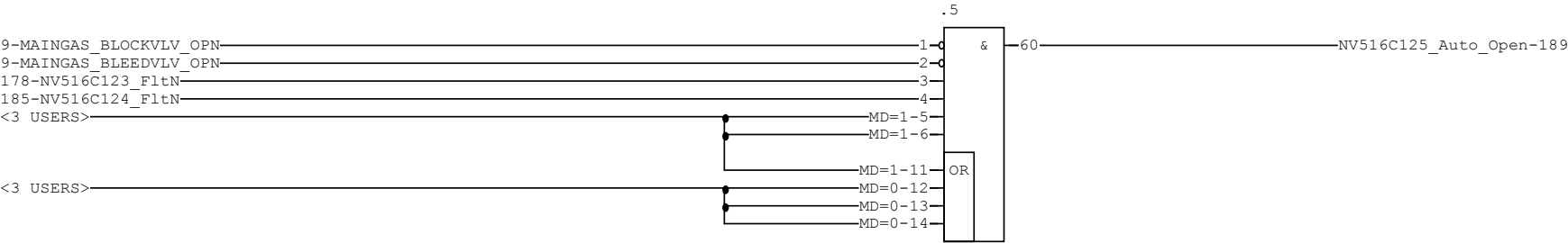
Design ch.	PC DIAGRAM PC15		Lang.
Tech. ref.			Rev. ind.
Resp. dept.			Sheet 186
Date			Cont. 187



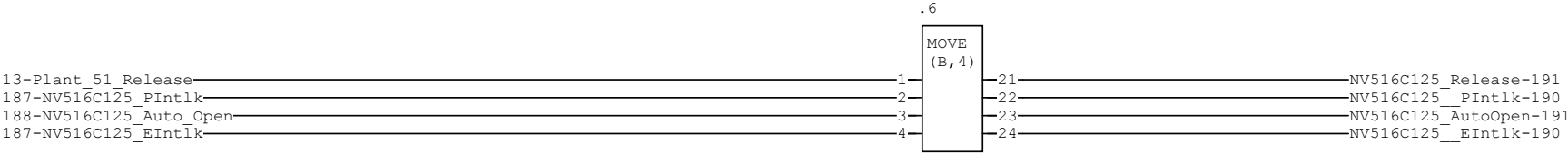


NV516C125 - Interlocks

Design ch.	PC DIAGRAM PC15		Lang.
Tech. ref.			Rev. ind.
Resp. dept.			Sheet 187
Date			Cont. 188

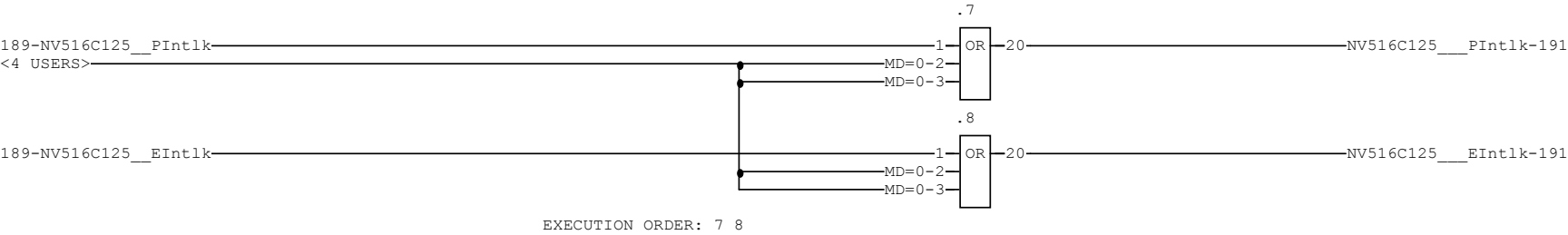


Design ch.	PC DIAGRAM PC15		Lang.
Tech. ref.			Rev. ind.
Resp. dept.			Sheet 188
Date			Cont. 189



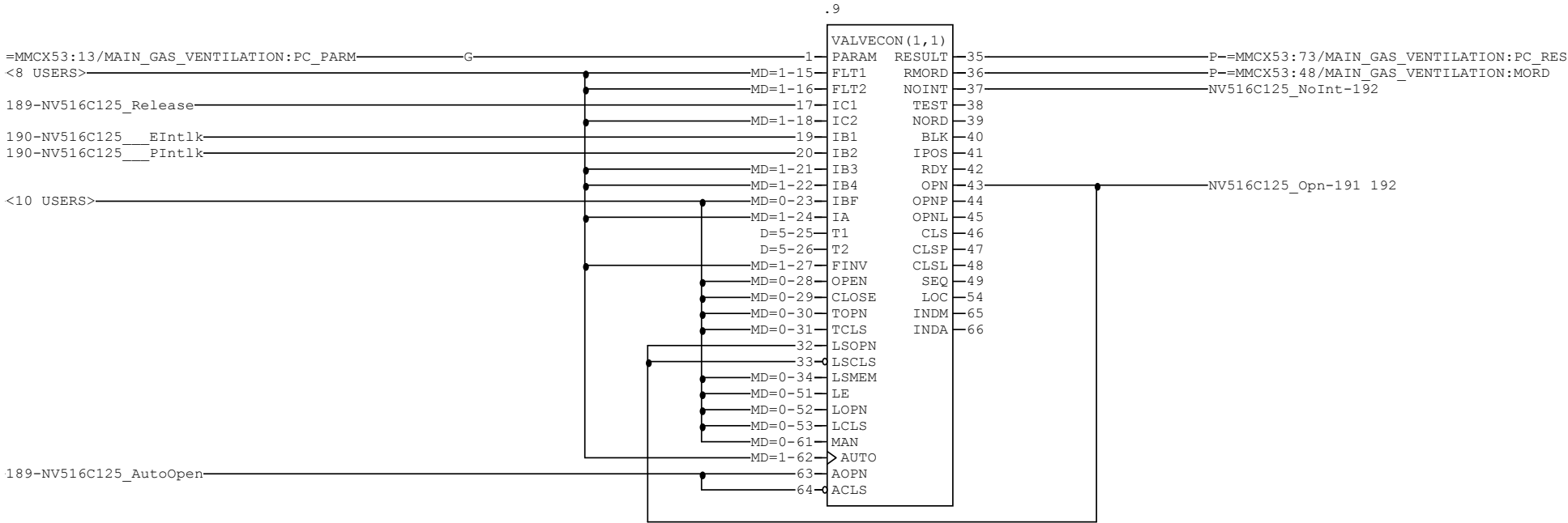
NV516C125 - logic insgnals

Design ch.	PC DIAGRAM PC15		Lang.
Tech. ref.			Rev. ind.
Resp. dept.			Sheet 189
Date			Cont. 190

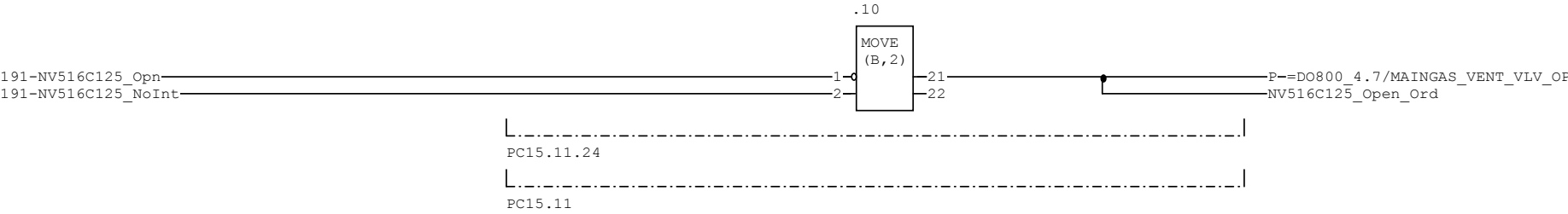


NV516C125 - logic connections

Design ch.	PC DIAGRAM PC15		Lang.
Tech. ref.			Rev. ind.
Resp. dept.			Sheet 190
Date			Cont. 191

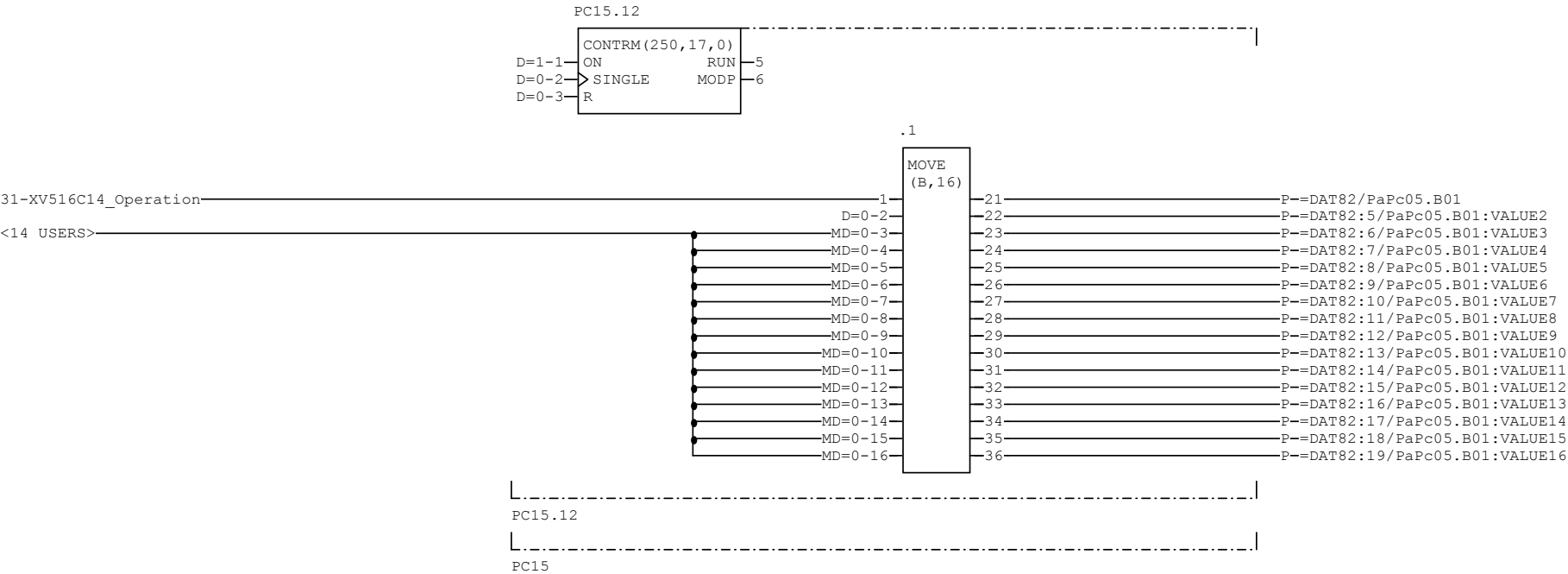


Design ch.	PC DIAGRAM PC15		Lang.
Tech. ref.			Rev. ind.
Resp. dept.			Sheet 191
Date			Cont. 192



NV516C125 - logic outsignals

Design ch.	PC DIAGRAM PC15		Lang.
Tech. ref.			Rev. ind.
Resp. dept.			Sheet 192
Date			Cont. 193



PC programm outsignals

Design ch.	PC DIAGRAM PC15		Lang.
Tech. ref.			Rev. ind.
Resp. dept.			Sheet 193
Date			Cont. -