

SIMATIC

turbine_modify\
SIMATIC 300 Station\CPU314(1)\...\OB1 - <offline>

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OB1 - <offline>

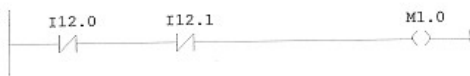
"Cycle Execution"

Name: Family:
Author: Version: 0.1
Block version: 2
Time stamp Code: 08/15/2010 09:09:42 PM
Interface: 02/15/1996 04:51:12 PM
Lengths (block/logic/data): 03082 02674 00022

Name	Data Type	Address	Comment
TEMP		0.0	
OB1_EV_CLASS	Byte	0.0	Bits 0-3 = 1 (Coming event), Bits 4-7 = 1 (Event class 1)
OB1_SCAN_1	Byte	1.0	1 (Cold restart scan 1 of OB 1), 3 (Scan 2-n of OB 1)
OB1_PRIORITY	Byte	2.0	Priority of OB Execution
OB1_OS_NUMBR	Byte	3.0	1 (Organization block 1, OB1)
OB1_RESERVED_1	Byte	4.0	Reserved for system
OB1_RESERVED_2	Byte	5.0	Reserved for system
OB1_PREV_CYCLE	Int	6.0	Cycle time of previous OB1 scan (milliseconds)
OB1_MIN_CYCLE	Int	8.0	Minimum cycle time of OB1 (milliseconds)
OB1_MAX_CYCLE	Int	10.0	Maximum cycle time of OB1 (milliseconds)
OB1_DATE_TIME	Date_And_Time	12.0	Date and time OB1 started

Block: OB1 "Main Program Sweep (Cycle)"

Network: 1 channel_A_condenser_Vacuum

I 12.0 close when vacuum < -513 mBar
I 12.1 isolate vacuum P\B

Network: 2 chanel_A_condenser_Level

I 12.2 close when condenser water level > normal +540 mm



Network: 3 channel_A_Electrical_tripping_contact



A-1

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Network: 4 channel_A_lube_oil_pressure

I 12.5 close when lube_oil_pressure < 0.28 Bar

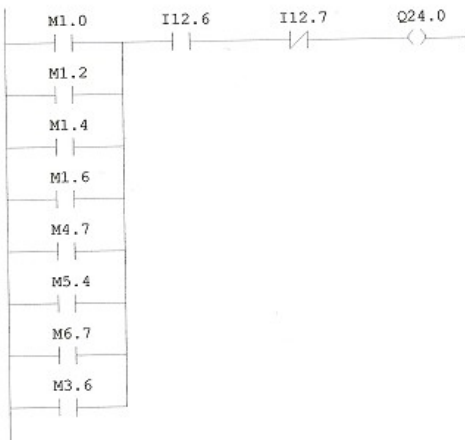


Network: 5 Trip s.v channel a

I 12.6 Power oil > 1 Bar

I 12.7 On load test

Q24.0 Output Relay to Trip S.V channel_A



Network: 6 channel_B_condenser_Vacuum

I 16.0 close when vacuum < -513 mBar

I 16.1 Isolate vacuum P\B



Network: 7 chanel_B_condenser_Level

I 16.2 close when condenser water level > normal +540 mm



A-2

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Network: 8 channel_A_Electrical_trippping_contact



Network: 9 channel_B_lube_oil_pressure

I 16.5 close when lube_oil_pressure < 0.28 Bar

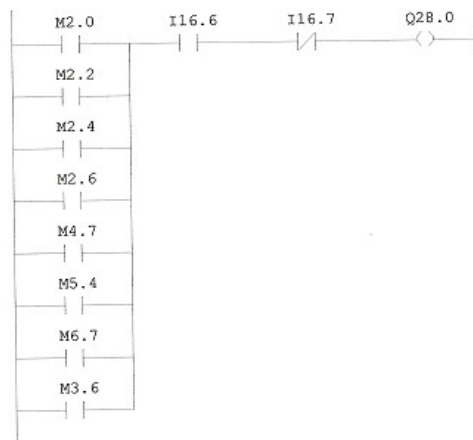


Network: 10 Trip s.v channel_B

I 16.6 Power oil > 1 Bar

I 16.7 On load test

Q28.0 Output Relay to Trip S.V channel_B

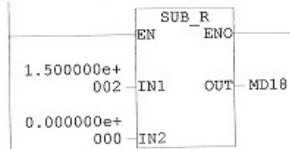


Network: 11 Genrator winding_R

PIW256 analoge input



Network: 12



Network: 13



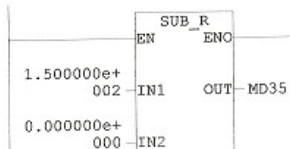
Network: 14



Network: 15 Genrator winding_Y



Network: 16



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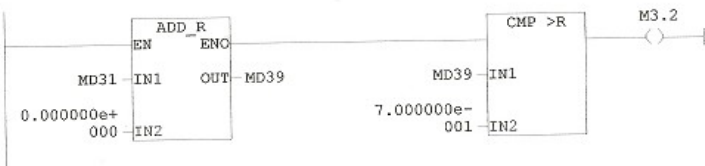
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Network: 17



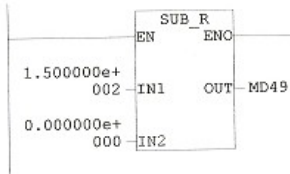
Network: 18



Network: 19 Genrator winding_B



Network: 20



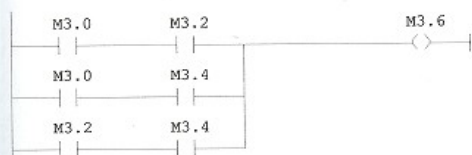
Network: 21



Network: 22



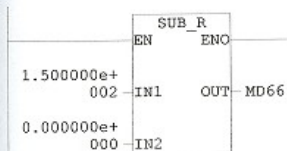
Network: 23



Network: 24 Vibration Bearing_1



Network: 25



Network: 26

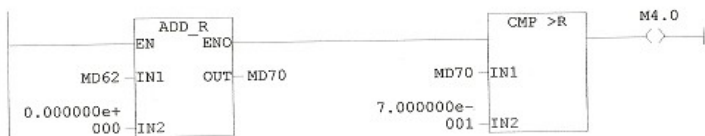


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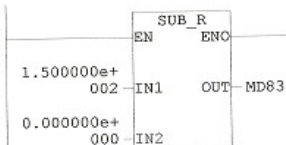
Network: 27



Network: 28 Vibration Bearing_2



Network: 29



Network: 30



Network: 31



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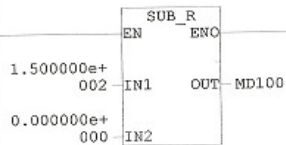
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Network: 32 Vibration Bearing_3



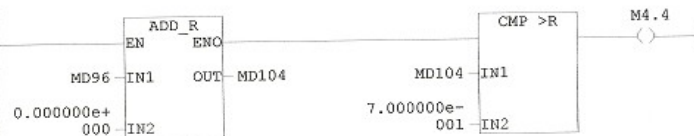
Network: 33



Network: 34



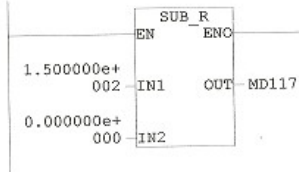
Network: 35



Network: 36 Vibration Bearing_4



Network: 37



Network: 38



Network: 39



Network: 40



Network: 41 Turbine Speed Channel_A

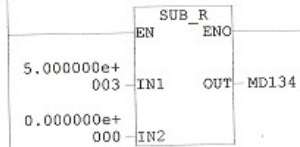


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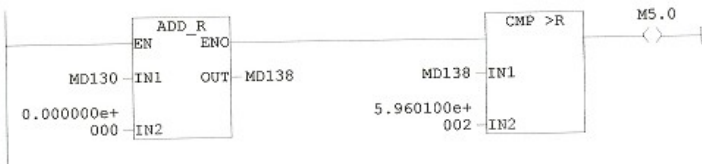
Network: 42



Network: 43



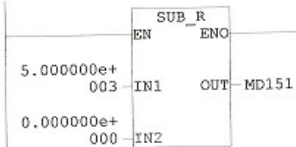
Network: 44



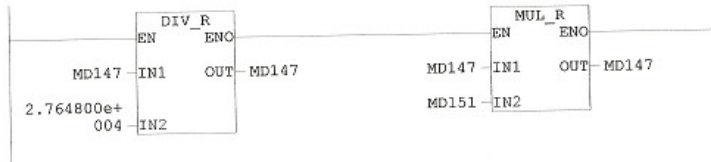
Network: 45 Turbine Speed Channel_B



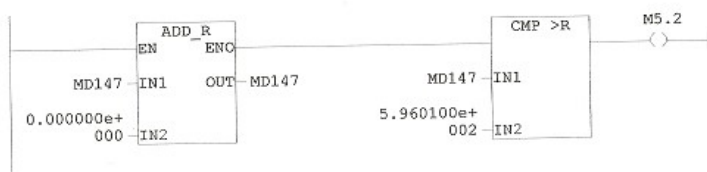
Network: 46



Network: 47



Network: 48



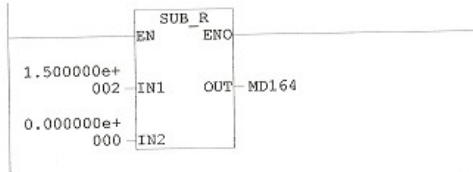
Network: 49



Network: 50 Bearing_2_temp



Network: 51



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Network: 52



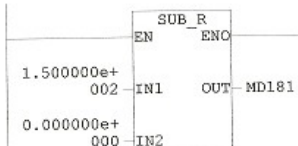
Network: 53



Network: 54 Bearing_3_temp



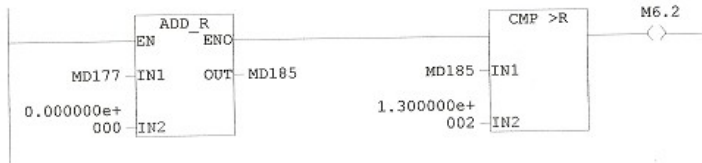
Network: 55



Network: 56



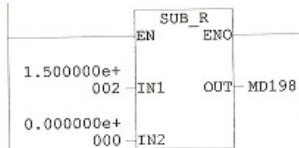
Network: 57



Network: 58 Bearing_4_temp



Network: 59



Network: 60



Network: 61



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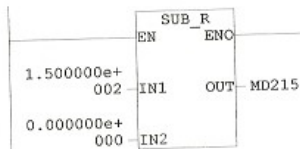
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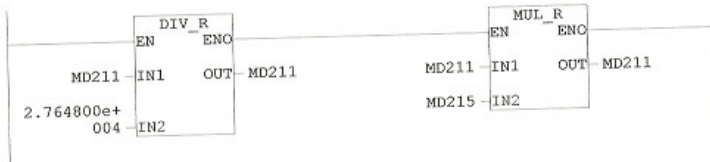
Network: 62 Bearing_5_temp



Network: 63



Network: 64



Network: 65



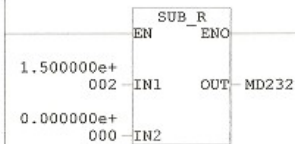
Network: 66



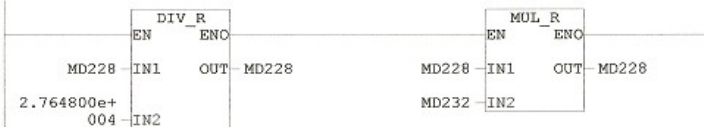
Network: 67 thrust Pad_1 temp



Network: 68



Network: 69



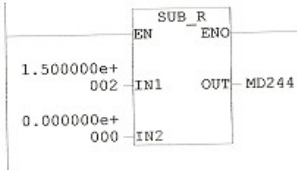
Network: 70



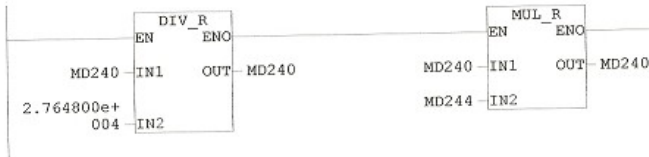
Network: 71 thrust Pad_2 temp



Network: 72



Network: 73



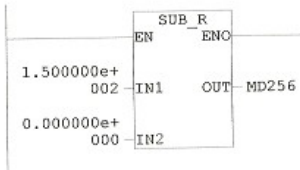
Network: 74



Network: 75 thrust Pad_3 temp



Network: 76



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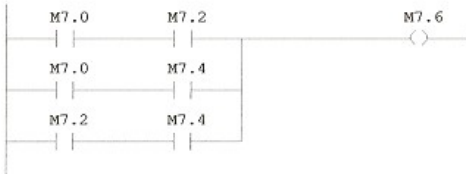
Network: 77



Network: 78



Network: 79



Network: 80 On load test Channel_A

I 13.0 on load test selector switch



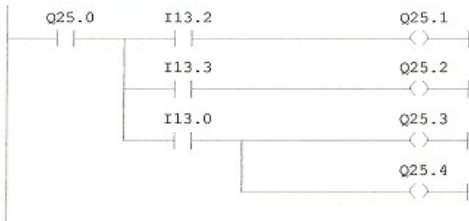
Network: 81 Channel A Selected



Network: 82 channel A on load test

I 13.2 lube oil P\B
 I 13.3 vacuumP\B
 I 13.0 condenser water level P\B
 Q 25.1 lube oil to bearing S.V 1/19
 Q 25.2 vacuum S.V 1/49

Q 25.3 Condenser water level S.V 3/49
Q 25.3 Condenser water level S.V 4/49

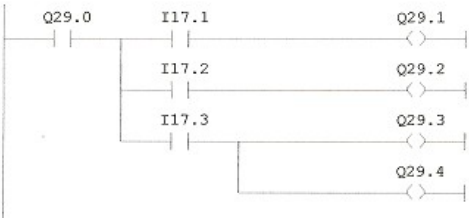


Network: 83 Channel B Selected



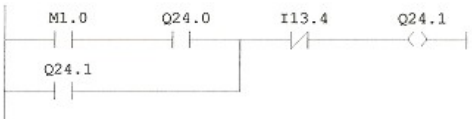
Network: 84 channel B on load test

I 17.1 lube oil P\B
I 17.2 vacuum P\B
I 17.3 condenser water level P\B
Q 29.1 lube oil to bearing S.V 2/19
Q 29.2 vacuum S.V 2/49
Q 29.3 Condenser water level S.V 5/49
Q 29.4 Condenser water level S.V 6/49

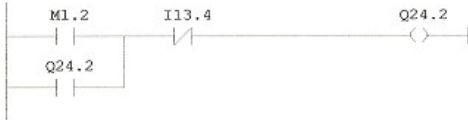


Network: 85 channel A Alarm vacuum

M 1.0 vacuum
I 13.4 alarm Reset P\B



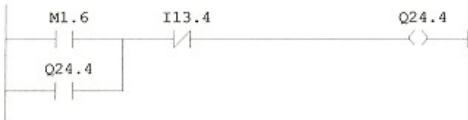
Network: 86 channel A Alarm condenser level



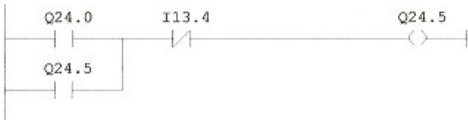
Network: 87 channel A Alarm Generator Protection



Network: 88 channel A Alarm lube oil press low



Network: 89 channel A Alarm Tuebine Trip



Network: 90 channel B Alarm vacuum



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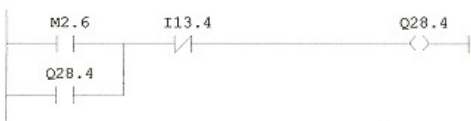
Network: 91 channel B Alarm condenser level



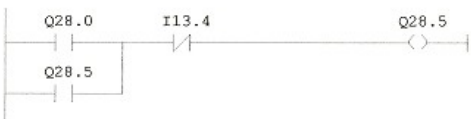
Network: 92 channel A Alarm Generator Protection



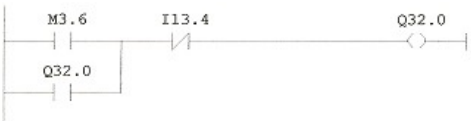
Network: 93 channel B Alarm lube oil press low



Network: 94 channel B Alarm Tuebine Trip



Network: 95 Alarm Genrator winding Temp high



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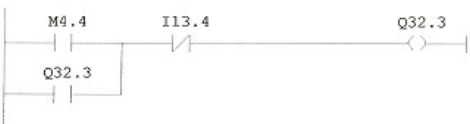
Network: 96 Alarm Bearing_1 Vibration High



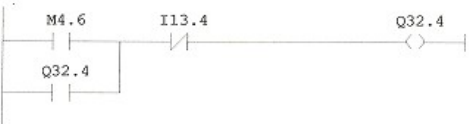
Network: 97 Alarm Bearing_2 Vibration High



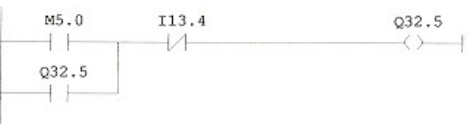
Network: 98 Alarm Bearing_3 Vibration High



Network: 99 Alarm Bearing_4 Vibration High



Network: 100 Alarm Turbine Speed Channel_A High



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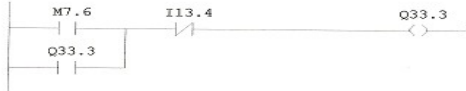
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Network: 106 Alarm thrust Pad temp High



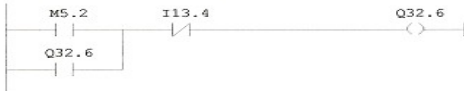
Network: 107 Alarm On load Test Selected

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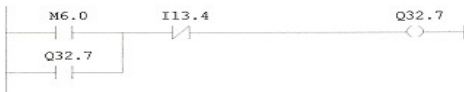
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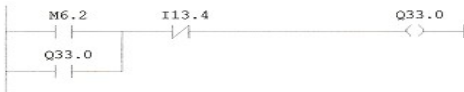
Network: 101 Alarm Turbine Speed Channel_B High



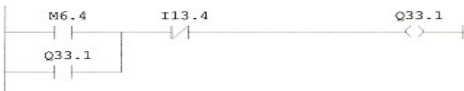
Network: 102 Alarm Bearing_2_temp High



Network: 103 Alarm Bearing_3_temp High



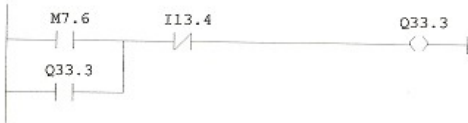
Network: 104 Alarm Bearing_4_temp High



Network: 105 Alarm Bearing_5_temp High



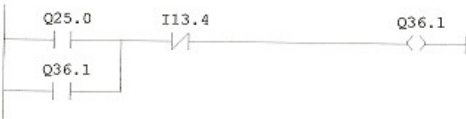
Network: 106 Alarm thrust Pad temp High



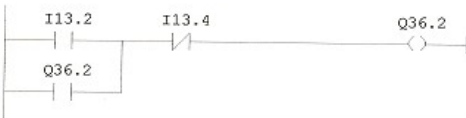
Network: 107 Alarm On load Test Selected



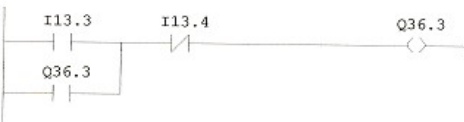
Network: 108 Alarm Channel A on load Test Selected



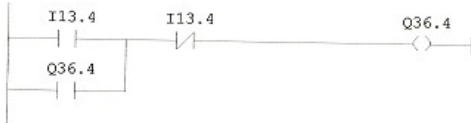
Network: 109 Alarm Channel A On load test lube oil P/B pressed



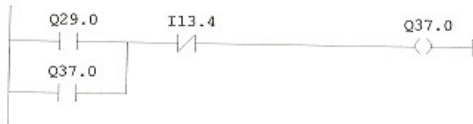
Network: 110 Alarm Channel A On load test condenser vacuum P/B pressed



Network: 111 Alarm Channel A On load test condenser water level P\B pressed



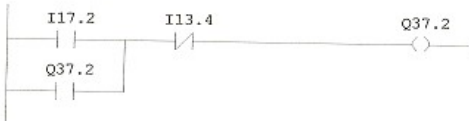
Network: 112 Alarm Channel A on load Test Selected



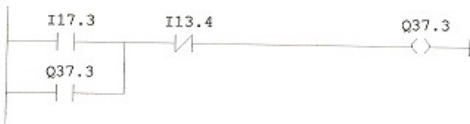
Network: 113 Alarm Channel B On load test lube oil P\B pressed



Network: 114 Alarm Channel B On load test condenser vacuum P\B pressed



Network: 115 Alarm Channel B On load test condenser water level P\B pressed



Network: 116 Turbine Reset Circuit

I 13.6 reset P/B in Central Control Room
I 13.7 PSW 3/7 contacts open when power oil >3 Bar
Q 24.6 output to trip solenoid



Network: 117 interlock to emergency stop valve

I 17.5 Limit switch USW 2/7 CONTACT OPENS WHEN TRIP PLUNGER FULLY RESET
Q 28.6 OUTPUT TO RELEASE EMERGENCY STOP VALVE INTERLOCK

