PLC I/O INDEX

1. GENERAL

1.1 References - General

Refer To Section 17010.

1.2 PLC I/O Index

.1 1The following spreadsheet gives an itemized list of the input and output between the PLC and the field devices. It is intended to serve as an aid for determining the cabling requirements for the work specified in this Division.

2. PRODUCTS

Not used in this section

3. EXECUTION

Not used in this section

END OF SECTION

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CITY OF WINNIPEG
DEACON BOOSTER PUMPING STATION
U.V. LIGHT DISINFECTION SYSTEM
PLC INPUT/OUTPUT LIST

Project No. 63672

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RECORD NO.	REV. NO.	TAG NAME	DESCRIPTION		P&ID DRAWING	I/O SPECIFICATION						
			FUNCTION	SERVICE		ENG. UNITS	SCALE LOW-HIGH	ALARMS		PLC CABINET	I/O POINT TYPE	I/O POINT NO.
								LOW	HIGH			
1	0	DD-050-UVT-1	U.V. Transmittance Transmitter	Station Discharge Header for Branch 1	P02	%	4-20 ma		X	UM	AI	
2	0	DD-050-UVT-2	U.V. Transmittance Transmitter	Station Discharge Header for Branch 2	P05	%	4-20 ma		X	UM	AI	
3	0	DD-041-VD-1	Normal solenoid valve Open Command	Pump #1 discharge control valve	P05					Existing LCP-1	DO	
4	0	DD-041-VD-2	Emergency solenoid valve Open Command	Pump #1 discharge control valve	P05					Existing LCP-1	DO	
5	0	DD-041-ZB	Closed limit switch	Pump #1 discharge control valve	P05			X	X	Existing LCP-1	DI	
6	0	DD-042-VD-1	Normal solenoid valve Open Command	Pump #2 discharge control valve	P05					Existing LCP-2	DO	
7	0	DD-042-VD-2	Emergency solenoid valve Open Command	Pump #2 discharge control valve	P05					Existing LCP-2	DO	
8	0	DD-042-ZB	Closed limit switch	Pump #2 discharge control valve	P05			X	X	Existing LCP-2	DI	
9	0	DD-043-VD-1	Normal solenoid valve Open Command	Pump #3 discharge control valve	P05					Existing LCP-3	DO	
10	0	DD-043-VD-2	Emergency solenoid valve Open Command	Pump #3 discharge control valve	P05					Existing LCP-3	DO	
11	0	DD-043-ZB	Closed limit switch	Pump #3 discharge control valve	P05			X	X	Existing LCP-3	DI	
12	0	DS-041-ZB-1	Closed limit switch	Pump #1 suction isolation valve	P05			X	X	Existing LCP-1	DI	
13	0	DS-041-ZD-1	Open limit switch	Pump #1 suction isolation valve	P05			X	X	Existing LCP-1	DI	
14	0	DD-041-ZB-1	Closed limit switch	Pump #1 discharge isolation valve	P05			X	X	Existing LCP-1	DI	
15	0	DD-041-ZD-1	Open limit switch	Pump #1 discharge isolation valve	P05			X	X	Existing LCP-1	DI	
16	0	DS-042-ZB-1	Closed limit switch	Pump #2 suction isolation valve	P05			X	X	Existing LCP-2	DI	
17	0	DS-042-ZD-1	Open limit switch	Pump #2 suction isolation valve	P05			X	X	Existing LCP-2	DI	
18	0	DD-042-ZB-1	Closed limit switch	Pump #2 discharge isolation valve	P05			X	X	Existing LCP-2	DI	
19	0	DD-042-ZD-1	Open limit switch	Pump #2 discharge isolation valve	P05			X	X	Existing LCP-2	DI	
20	0	DS-043-ZB-1	Closed limit switch	Pump #3 suction isolation valve	P05			X	X	Existing LCP-3	DI	
21	0	DS-043-ZD-1	Open limit switch	Pump #3 suction isolation valve	P05			X	X	Existing LCP-3	DI	
22	0	DD-043-ZB-1	Closed limit switch	Pump #3 discharge isolation valve	P05			X	X	Existing LCP-3	DI	
23	0	DD-043-ZD-1	Open limit switch	Pump #3 discharge isolation valve	P05			X	X	Existing LCP-3	DI	
24	0	DU-060-ZB-1	Closed limit switch	Intermediate header valve DU-061-IHV-1	P02			X	X	UM	DI	
25	0	DU-060-ZD-1	Open limit switch	Intermediate header valve DU-061-IHV-1	P02			X	X	UM	DI	
26	0	DU-060-ZB-2	Closed limit switch	Intermediate header valve DU-062-IHV-2	P05			X	X	UM	DI	
27	0	DU-060-ZD-2	Open limit switch	Intermediate header valve DU-062-IHV-2	P05			X	X	UM	DI	

I/O POINT TYPES: DN = DeviceNet, AI = Analog Input, AO = Analog Output, DI = Discrete Input, DO = Discrete Output

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RECORD NO.	REV. NO.	TAG NAME	DESCRIPTION		P&ID DRAWING	I/O SPECIFICATION						
			FUNCTION	SERVICE		ENG. UNITS	SCALE LOW-HIGH	ALARMS		PLC CABINET	I/O POINT TYPE	I/O POINT NO.
								LOW	HIGH			
28	0	DU-060-ZB-3	Closed limit switch	Intermediate header valve DU-063-IHV-3	P05			X	X	UM	DI	
29	0	DU-060-ZD-3	Open limit switch	Intermediate header valve DU-063-IHV-3	P05			X	X	UM	DI	
30	0	DU-060-ZB-4	Closed limit switch	Intermediate header valve DU-064-IHV-4	P05			X	X	UM	DI	
31	0	DU-060-ZD-4	Open limit switch	Intermediate header valve DU-064-IHV-4	P05			X	X	UM	DI	
32	0	DU-060-ZB-5	Closed limit switch	Intermediate header valve DU-065-IHV-5	P05			X	X	UM	DI	
33	0	DU-060-ZD-5	Open limit switch	Intermediate header valve DU-065-IHV-5	P05			X	X	UM	DI	
34	0	DU-061-ZB	Closed limit switch	U.V. Reactor #1100 valve DU-061-SIV-1	P03			X	X	UM	DI	
35	0	DU-061-ZD	Open limit switch	U.V. Reactor #1100 valve DU-061-SIV-1	P03			X	X	UM	DI	
36	0	DU-062-ZB	Closed limit switch	U.V. Reactor #1200 valve DU-062-SIV-2	P04			X	X	UM	DI	
37	0	DU-062-ZD	Open limit switch	U.V. Reactor #1200 valve DU-062-SIV-2	P04			X	X	UM	DI	
38	0	DU-063-ZB	Closed limit switch	U.V. Reactor #2100 valve DU-063-SIV-3	P06			X	X	UM	DI	
39	0	DU-063-ZD	Open limit switch	U.V. Reactor #2100 valve DU-063-SIV-3	P06			X	X	UM	DI	
40	0	DU-064-ZB	Closed limit switch	U.V. Reactor #2200 valve DU-064-SIV-4	P07			X	X	UM	DI	
41	0	DU-064-ZD	Open limit switch	U.V. Reactor #2200 valve DU-064-SIV-4	P07			X	X	UM	DI	
42	0	DU-065-ZB	Closed limit switch	U.V. Reactor #2300 valve DU-065-SIV-5	P08			X	X	UM	DI	
43	0	DU-065-ZD	Open limit switch	U.V. Reactor #2300 valve DU-065-SIV-5	P08			X	X	UM	DI	
44	0	DU-066-ZB	Closed limit switch	U.V. Reactor #2400 valve DU-066-SIV-6	P09			X	X	UM	DI	
45	0	DU-066-ZD	Open limit switch	U.V. Reactor #2400 valve DU-066-SIV-6	P09			X	X	UM	DI	
46	0	DU-061-FI	Flow rate transmitter	U.V. Reactor #1100	P03	ML/d	4-20 ma	X	X	CPP1100	AI	
47	0	DU-062-FI	Flow rate transmitter	U.V. Reactor #1200	P04	ML/d	4-20 ma	X	X	CPP1200	AI	
48	0	DU-063-FI	Flow rate transmitter	U.V. Reactor #2100	P06	ML/d	4-20 ma	X	X	CPP2100	AI	
49	0	DU-064-FI	Flow rate transmitter	U.V. Reactor #2200	P07	ML/d	4-20 ma	X	X	CPP2200	AI	
50	0	DU-065-FI	Flow rate transmitter	U.V. Reactor #2300	P08	ML/d	4-20 ma	X	X	CPP2300	AI	
51	0	DU-066-FI	Flow rate transmitter	U.V. Reactor #2400	P09	ML/d	4-20 ma	X	X	CPP2400	AI	
52	0	DU-061-XS-1087	U.V. Reactor run command	U.V. Reactor #1100 Control Power Panel	P03					UM	DO	
53	0	DU-061-YS-1084	U.V. Reactor ready	U.V. Reactor #1100 Control Power Panel	P03					UM	DI	
54	0	DU-061-YS-1085	U.V. Reactor run indication	U.V. Reactor #1100 Control Power Panel	P03					UM	DI	
55	0	DU-061-YS-1086	U.V. Reactor alarm	U.V. Reactor #1100 Control Power Panel	P03				X	UM	DI	
56	0	DU-061-YS-1087	U.V. Reactor shut down	U.V. Reactor #1100 Control Power Panel	P03				X	UM	DI	
57	0	DU-062-XS-1187	U.V. Reactor run command	U.V. Reactor #1200 Control Power Panel	P04					UM	DO	
58	0	DU-062-YS-1184	U.V. Reactor ready	U.V. Reactor #1200 Control Power Panel	P04					UM	DI	
59	0	DU-062-YS-1185	U.V. Reactor run indication	U.V. Reactor #1200 Control Power Panel	P04					UM	DI	
60	0	DU-062-YS-1186	U.V. Reactor alarm	U.V. Reactor #1200 Control Power Panel	P04				X	UM	DI	

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RECORD NO.	REV. NO.	TAG NAME	DESCRIPTION		P&ID DRAWING	I/O SPECIFICATION						
			FUNCTION	SERVICE		ENG. UNITS	SCALE LOW-HIGH	ALARMS		PLC CABINET	I/O POINT TYPE	I/O POINT NO.
								LOW	HIGH			
61	0	DU-062-YS-1187	U.V. Reactor shut down	U.V. Reactor #1200 Control Power Panel	P04				X	UM	DI	
62	0	DU-063-XS-2087	U.V. Reactor run command	U.V. Reactor #2100 Control Power Panel	P06					UM	DO	
63	0	DU-063-YS-2084	U.V. Reactor ready	U.V. Reactor #2100 Control Power Panel	P06					UM	DI	
64	0	DU-063-YS-2085	U.V. Reactor run indication	U.V. Reactor #2100 Control Power Panel	P06					UM	DI	
65	0	DU-063-YS-2086	U.V. Reactor alarm	U.V. Reactor #2100 Control Power Panel	P06				X	UM	DI	
66	0	DU-063-YS-2087	U.V. Reactor shut down	U.V. Reactor #2100 Control Power Panel	P06				X	UM	DI	
67	0	DU-064-XS-2187	U.V. Reactor run command	U.V. Reactor #2200 Control Power Panel	P07					UM	DO	
68	0	DU-064-YS-2184	U.V. Reactor ready	U.V. Reactor #2200 Control Power Panel	P07					UM	DI	
69	0	DU-064-YS-2185	U.V. Reactor run indication	U.V. Reactor #2200 Control Power Panel	P07					UM	DI	
70	0	DU-064-YS-2186	U.V. Reactor alarm	U.V. Reactor #2200 Control Power Panel	P07				X	UM	DI	
71	0	DU-064-YS-2187	U.V. Reactor shut down	U.V. Reactor #2200 Control Power Panel	P07				X	UM	DI	
72	0	DU-065-XS-2287	U.V. Reactor run command	U.V. Reactor #2300 Control Power Panel	P08					UM	DO	
73	0	DU-065-YS-2284	U.V. Reactor ready	U.V. Reactor #2300 Control Power Panel	P08					UM	DI	
74	0	DU-065-YS-2285	U.V. Reactor run indication	U.V. Reactor #2300 Control Power Panel	P08					UM	DI	
75	0	DU-065-YS-2286	U.V. Reactor alarm	U.V. Reactor #2300 Control Power Panel	P08				X	UM	DI	
76	0	DU-065-YS-2287	U.V. Reactor shut down	U.V. Reactor #2300 Control Power Panel	P08				X	UM	DI	
77	0	DU-066-XS-2387	U.V. Reactor run command	U.V. Reactor #2400 Control Power Panel	P09					UM	DO	
78	0	DU-066-YS-2384	U.V. Reactor ready	U.V. Reactor #2400 Control Power Panel	P09					UM	DI	
79	0	DU-066-YS-2385	U.V. Reactor run indication	U.V. Reactor #2400 Control Power Panel	P09					UM	DI	
80	0	DU-066-YS-2386	U.V. Reactor alarm	U.V. Reactor #2400 Control Power Panel	P09				X	UM	DI	
81	0	DU-066-YS-2387	U.V. Reactor shut down	U.V. Reactor #2400 Control Power Panel	P09				X	UM	DI	
82	0	DD-061-ZB	Closed limit switch	U.V. Reactor #1100 flow control valve	P03			X	X	UM	DI	
83	0	DD-061-ZD	Open limit switch	U.V. Reactor #1100 flow control valve	P03			X	X	UM	DI	
84	0	DD-061-YS	Remote Control Selected	U.V. Reactor #1100 flow control valve	P03					UM	DI	
85	0	DD-061-ZT	Valve position transmitter	U.V. Reactor #1100 flow control valve	P03	%	4-20 ma	X	X	UM	AI	
86	0	DD-061-ZC	Valve position control	U.V. Reactor #1100 flow control valve	P03	%	4-20 ma			UM	AO	
87	0	DD-062-ZB	Closed limit switch	U.V. Reactor #1200 flow control valve	P04			X	X	UM	DI	
88	0	DD-062-ZD	Open limit switch	U.V. Reactor #1200 flow control valve	P04			X	X	UM	DI	
89	0	DD-062-YS	Remote Control Selected	U.V. Reactor #1200 flow control valve	P04					UM	DI	
90	0	DD-062-ZT	Valve position transmitter	U.V. Reactor #1200 flow control valve	P04	%	4-20 ma	X	X	UM	AI	
91	0	DD-062-ZC	Valve position control	U.V. Reactor #1200 flow control valve	P04	%	4-20 ma			UM	AO	
92	0	DD-063-ZB	Closed limit switch	U.V. Reactor #2100 flow control valve	P06			X	X	UM	DI	
93	0	DD-063-ZD	Open limit switch	U.V. Reactor #2100 flow control valve	P06			X	X	UM	DI	

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RECORD NO.	REV. NO.	TAG NAME	DESCRIPTION		P&ID DRAWING	I/O SPECIFICATION						
			FUNCTION	SERVICE		ENG. UNITS	SCALE LOW-HIGH	ALARMS LOW	ALARMS HIGH	PLC CABINET	I/O POINT TYPE	I/O POINT NO.
94	0	DD-063-YS	Remote Control Selected	U.V. Reactor #2100 flow control valve	P06					UM	DI	
95	0	DD-063-ZT	Valve position transmitter	U.V. Reactor #2100 flow control valve	P06	%	4-20 ma	X	X	UM	AI	
96	0	DD-063-ZC	Valve position control	U.V. Reactor #2100 flow control valve	P06	%	4-20 ma			UM	AO	
97	0	DD-064-ZB	Closed limit switch	U.V. Reactor #2200 flow control valve	P07			X	X	UM	DI	
98	0	DD-064-ZD	Open limit switch	U.V. Reactor #2200 flow control valve	P07			X	X	UM	DI	
99	0	DD-064-YS	Remote Control Selected	U.V. Reactor #2200 flow control valve	P07					UM	DI	
100	0	DD-064-ZT	Valve position transmitter	U.V. Reactor #2200 flow control valve	P07	%	4-20 ma	X	X	UM	AI	
101	0	DD-064-ZC	Valve position control	U.V. Reactor #2200 flow control valve	P07	%	4-20 ma			UM	AO	
102	0	DD-065-ZB	Closed limit switch	U.V. Reactor #2300 flow control valve	P08			X	X	UM	DI	
103	0	DD-065-ZD	Open limit switch	U.V. Reactor #2300 flow control valve	P08			X	X	UM	DI	
104	0	DD-065-YS	Remote Control Selected	U.V. Reactor #2300 flow control valve	P08					UM	DI	
105	0	DD-065-ZT	Valve position transmitter	U.V. Reactor #2300 flow control valve	P08	%	4-20 ma	X	X	UM	AI	
106	0	DD-065-ZC	Valve position control	U.V. Reactor #2300 flow control valve	P08	%	4-20 ma			UM	AO	
107	0	DD-066-ZB	Closed limit switch	U.V. Reactor #2400 flow control valve	P09			X	X	UM	DI	
108	0	DD-066-ZD	Open limit switch	U.V. Reactor #2400 flow control valve	P09			X	X	UM	DI	
109	0	DD-066-YS	Remote Control Selected	U.V. Reactor #2400 flow control valve	P09					UM	DI	
110	0	DD-066-ZT	Valve position transmitter	U.V. Reactor #2400 flow control valve	P09	%	4-20 ma	X	X	UM	AI	
111	0	DD-066-ZC	Valve position control	U.V. Reactor #2400 flow control valve	P09	%	4-20 ma			UM	AO	
112	0	DD-050-ZB-1	Closed limit switch	Dischrge header valve DD-050-DHV-1	P02			X	X	UM	DI	
113	0	DD-050-ZD-1	Open limit switch	Dischrge header valve DD-050-DHV-1	P02			X	X	UM	DI	
114	0	DD-050-ZB-2	Closed limit switch	Dischrge header valve DD-050-DHV-2	P02			X	X	UM	DI	
115	0	DD-050-ZD-2	Open limit switch	Dischrge header valve DD-050-DHV-2	P02			X	X	UM	DI	
116	0	DD-050-ZB-3	Closed limit switch	Dischrge header valve DD-050-DHV-3	P05			X	X	UM	DI	
117	0	DD-050-ZD-3	Open limit switch	Dischrge header valve DD-050-DHV-3	P05			X	X	UM	DI	
118	0	DD-050-ZB-4	Closed limit switch	Dischrge header valve DD-050-DHV-4	P05			X	X	UM	DI	
119	0	DD-050-ZD-4	Open limit switch	Dischrge header valve DD-050-DHV-4	P05			X	X	UM	DI	
120	0	DD-050-ZB-5	Closed limit switch	Dischrge header valve DD-050-DHV-5	P05			X	X	UM	DI	
121	0	DD-050-ZD-5	Open limit switch	Dischrge header valve DD-050-DHV-5	P05			X	X	UM	DI	
122	0	DUH-610-XM	Air Handler run indication	Air Handling Unit #1	P10					UM	DI	
123	0	DUH-610-XA	Air Handler alarm/warning	Air Handling Unit #1	P10			X	X	UM	DI	
124	0	DUH-610-XF	Air Handler fault	Air Handling Unit #1	P10					UM	DI	
125	0	DUH-620-XM	Air Handler run indication	Air Handling Unit #2	P10					UM	DI	
126	0	DUH-620-XA	Air Handler alarm/warning	Air Handling Unit #2	P10			X	X	UM	DI	

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			FUNCTION	SERVICE		ENG. UNITS	SCALE LOW-HIGH	ALARMS		PLC CABINET	I/O POINT TYPE	I/O POINT NO.
								LOW	HIGH			
127	0	DUH-620-XF	Air Handler fault	Air Handling Unit #2	P10					UM	DI	
128	0	DU-916-EA	Voltage Surge Alarm	U.V. Master PLC panel power supply	P02				X	UM	DI	
129	0	DUZ-917-TAH	High Temperature Alarm	U.V. System Distribution Transformer	P10				X	UM	DI	
130	0	DUZ-917-TAHH	High-High Temperature Alarm	U.V. System Distribution Transformer	P10				X	UM	DI	
131												
132												
133												
134												
135												
136												
137												
138												
139												
140												
141												
142												

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