Steam PURE Per Boiler
Fulton N54 ProtoNode BACnet Network Addressing

BACnet Object ID	Description	Range	Type	Units	R/W
(X)001	Boiler (X) LMV Status	0 – LMV Safety Lockout 2 – LMV Safety Phase 10 – LMV Home Run 12 – LMV Standby 22 – Fan Motor 24 – Air Damper 30 – Prepurging 36 – Air Damper 38 – Preignition 39 – Testing Pressure Switch 40 – Fuel Valve 42 – Ignition 44 – Interval 1 50 – Safety Time 2 52 – Interval 2 60 – Modulating 70 – Afterburn Time 72 – Afterburn Time 74 – Postpurge Time 78 – Postpurge Time 80 – Evacuation of Test Space 81 – Atmospheric Pressure Test 83 – Gas Pressure Test 90 – Gas Shortage Waiting Time 91 – Limit String Open	AI		R
(X)002	Boiler (X) Control Status	0 – Waiting 1 – Disabled 2 – Not Available 3 – Lead 4 – Lag 1 5 – Lag 2 6 – Lag 3 7 – Lag 4 8 – Lag 5 9 – Lag 6 10 – Lag 7 11 – Lag 8 12 – Lag 9 14 – Lag 1 (T) 15 – Lag 2 (T) 16 – Lag 3 (T) 17 – Lag 4 (T) 18 – Lag 5 (T) 19 – Lag 6 (T) 20 – Lag 7 (T) 21 – Lag 8 (T)	AI		R

(X) = Modbus address of the boiler.

		22 – Lag 9 (T) 23 – Not Used 24 – Local 25 - Manual			
(X)003	Boiler (X) Modulation Status	0 – Normal Rate 1 – Low Fire Hold 2 – Cold Start 3 – Freeze Protection 4 – Delta T Protection 5 – Outlet Soft Limit 6 – Venting Limitation	AI		R
(X)004	Boiler (X) Modulation Target	0.0 to 100.0	AI	%	R
(X)005	Boiler (X) Modulation Rate	0.0 to 100.0	AI	%	R
(X)006	Boiler (X) Flame Signal	0.0 to 100.0	AI	%	R
(X)007	Boiler (X) Air Actuator Position	-50.0 to 100.0	AI		R
(X)008	Boiler (X) Fuel Actuator Position	-50.0 to 100.0	AI		R
(X)009	Boiler (X) VFD Status	0 – No Fault 2 – Auxiliary Input 3 – Power Loss 4 – Undervoltage 5 – Motor Overload 8 – Heatsink Over Temperature 12 – Hardware Overcurrent 300% 13 – Analog Input Loss 14 – Auto Restart Tried 38 – Phase U to Ground Short 39 – Phase V to Ground Short 40 – Phase W to Ground Short 41 – Phase U / V Short 42 – Phase U / W Short 63 – Software Overcurrent 70 – Power Unit Failure 80 – Autotune Failure 122 – I/O Board Failure	AI		R
(X)010	Boiler (X) O2 Sensor Status	0 – Normal Operation 1 – E1: Internal Communication Error 2 – E2: Internal Register Error 3 – E3: Short to Power 4 – E4: Short to Ground 5 – E5: Short to Power 6 – E6: Short to Ground 7 – E7: Short to Power 8 – E8: Short to Ground 9 – E9: Operating Voltage Too Low 10 – E10: Check Sensor Connection 11 – E11: Heater Circuit Short 12 – E12: Heater Circuit Short	AI		R
(X)011	Boiler (X) VFD Command	0.0 to 95.0	AI		R
(X)012	Boiler (X) VFD Feedback	0.0 to 95.0	AI		R
(X)013	Boiler (X) Fan Calculated RPM	0.0 to 5500.0	AI		R
(X)014	Boiler (X) VFD Output Current	0.00 to 15.00	AI		R

(X) = Modbus address of the boiler.

(X)015	Boiler (X) VFD Output Voltage	0.0 to 461.0	AI		R
(X)016	Boiler (X) Current O2%	000 to 21.00	AI	%	R
(X)017	Boiler (X) Outlet Pressure	0.0 to 200.0	AI	psi	R
(X)020	0.0 to 200.0	0.0 to 200.0	AI	psi	R
(X)021	Boiler (X) Stop Pressure	0.0 to 200.0	AI	psi	R
(X)022	Boiler (X) Stack Temperature	-50.0 to 250.0	AI	Deg. F	R
(X)023	Boiler (X) Combustion Air Temperature	-50.0 to 250.0	AI	Deg. F	R
(X)024	Boiler (X) Current Setpoint	0.0 to 200.0	AI	psi	R
(X)025	Boiler (X) Outdoor Air Temperature	0.0 to 200.0 [Note 1]	AV	Deg. F	R/W
(X)026	Boiler (X) Common Header Supply Pressure	0.0 to 200.0 [Note 1]	AV	psi	R/W
(X)030	Boiler (X) Call For Heat	0 – No Call 1 – Call For Heat	BI		R
(X)031	Boiler (X) On/Off Switch	0 – Off 1 – On	BI		R
(X)032	Boiler (X) Primary Low Water	0 – No Fault 1 – Fault	BI		R
(X)033	Boiler (X) High Pressure Limit	0 – Fault 1 – No Fault	BI		R
(X)034	Boiler (X) Operating Pressure Limit	0 – Fault 1 – No Fault	BI		R
(X)035	Boiler (X) Low Gas Pressure	0 – Fault 1 – No Fault	BI		R
(X)036	Boiler (X) Blocked Flue	0 – Fault 1 – No Fault	BI		R
(X)037	Boiler (X) Customer Interlock 1	0 – Fault 1 – No Fault	BI		R
(X)038	Boiler (X) Customer Interlock 2	0 – Fault 1 – No Fault	BI		R
(X)039	Boiler (X) Secondary Low Water	0 – No Fault 1 – Fault	BI		R
(X)040	Boiler (X) Run Hours		AI		R
(X)041	Boiler (X) Cycles		AI		R
(X)042	Boiler (X) Powered Hours		AI		R
(X)043	Boiler (X) Current Alarm Index	[Note 2]	AI		R
(X)044	Boiler (X) Active Alarm	0 – No Alarm 1 – Alarm [Note 2]	AI		R
(X)051	Boiler (X) Current Setpoint Mode	0 – Outdoor Reset Curve 1 – BMS Analog 4-20mA 2 – BMS Analog 0-10VDC 3 – BMS Network 4 – Manual	AI		R
(X)052	Boiler (X) BMS Network Setpoint	0.0 to 200.0	AV	psi	R/W
(X)053	Boiler (X) Maximum Setpoint	0.0 to 200.0	AI	psi	R
(X)054	Boiler (X) Minimum Setpoint	0.0 to 200.0	AI	psi	R
(X)055	Boiler (X) Outdoor Air Cutoff	40.0 to 185.0	AI	Deg. F	R
(X)056	Boiler (X) Outdoor Air Cutoff Reset	40.0 to 185.0	AI	Deg. F	R
(X)057	Boiler (X) BMS Enable	0 – Not Enabled	BV		R/W

(X) = Modbus address of the boiler.

		1 – Enabled [Note 3]			
(X)058	Boiler (X) BMS Heartbeat	1 must be sent at least once every 10 seconds for remote operation.	AV		R/W

Notes:

1. The value is only writable when the program has been set to accept a BMS communication signal. See program documentation for individual details.
2. Refer to alarm chart for index number definition. Alarm index is only active when the active alarm value is equal to 1.
3. Physical jumper must be removed in order to use this network enable point.

(X) = Modbus address of the boiler.