

## JBLM/YTC DDC Systems' Minimum Points Required

<b>Building HVAC Hydronic Hot Water Systems</b>	<b>Digital Input</b>	<b>Analog Input</b>	<b>Output</b>	<b>Analog Output</b>
Boiler(s) Enable Command			X	
Boiler(s) Status via Current Transmitter	X			
Boiler(s) General Alarm via Boiler Alarm Dry Contacts	X			
Boiler(s) Alarm Code via BACnet Interface Card Furnished With Boiler		X		
Boiler(s) Mode/Firing Rate via BACnet Interface Card Furnished With Boiler		X		
Boiler(s) Hot Water Temperature Setpoint Reset 0-10 VDC				X
Boiler(s) Hydronic Hot Water 3-Way Valve				X
Boiler(s) Emergency Shutdown Status	X			
Boiler(s) Circulating Pump Status via Current Transmitter	X			
Boiler(s) Seasonal Shutdown Schedule				
Hydronic Hot Water Pump(s) Enable			X	
Hydronic Hot Water Pump(s) Status via Current Transmitter	X			
Hydronic Hot Water Pump(s) Speed Command				X
Outside Air Temperature		X		
Outside Air Lockout Setpoint				X
Building Heating Hydronic Loop Supply and Return Temperatures		X		
Boiler Heating Hydronic Loop Temperatures		X		
<b>Building HVAC Air Handling Systems/Dedicated Outside Air Units/Heat Recovery Units/Variable Air Volume/Fan Coil Units/Etc.</b>	<b>Digital Input</b>	<b>Analog Input</b>	<b>Output</b>	<b>Analog Output</b>
Fan(s) Enable Command			X	
Fan(s) Status via Current Transmitter	X			
Fan(s) Speed Command if Applicable				X
Fan(s) Speed Setpoint if Applicable				X
Airflow Cubic Feet per Minute if Applicable		X		
Airflow Cubic Feet per Minute Setpoint if Applicable				X
Building Static Pressure if Applicable		X		
Building Static Pressure Setpoint if Applicable				X
Hydronic Heating Valve/Cooling Valve Command if Applicable			X	X
DX Heating/Cooling Coil Command if Applicable			X	
Dampers Command				X
Enthalpy Recovery Wheel Enable Command if Applicable			X	
Enthalpy Recovery Wheel Speed Command if Applicable				X
Enthalpy Recovery Wheel Status via Current Transmitter if Applicable	X			
Space Temperature if Applicable		X		
Space Temperature Heating and Cooling Setpoints if Applicable				X
Space Temperature Setpoint Adjust for the Heating and Cooling Setpoint if Applicable				X
Space Temperature Effective Setpoint		X		
Supply Air Temperature		X		
Return Air Temperature if Applicable		X		
Mixed Air Temperature if Applicable		X		
Supply Air Temperature Reset if Applicable				X
HVAC ATFP/Emergency Shutdown Status (this point should display on every graphics page for the building)	X			
Low Limit Temperature/Coil Freeze Protection Safety if Applicable	X			
High Duct Static Pressure if Applicable	X			
Dirty Filter Alarm if Applicable	X			
<b>Chilled Water Systems</b>	<b>Digital Input</b>	<b>Analog Input</b>	<b>Output</b>	<b>Analog Output</b>
Chiller(s) Enable			X	
Chiller(s) Status	X			
Chiller(s) General Alarm via Chiller Alarm Dry Contacts	X			
Chiller(s) Outside Air Lockout Setpoint				X
Hydronic Chilled Water Pump(s) Enable			X	
Hydronic Chilled Water Pump(s) Speed Command if Applicable				X
Hydronic Chilled Water Supply/Return Temperatures		X		
<b>Domestic Hot Water Systems (Monitor Points Only)</b>	<b>Digital Input</b>	<b>Analog Input</b>	<b>Output</b>	<b>Analog Output</b>
Domestic Hydronic Hot Water Temperatures to Building		X		
Domestic Hydronic Hot Water Heater Alarm Codes/Mode/Domestic Heater Status/Hot Water Setpoints if Applicable		X		
Domestic Hydronic Hot Water Heater(s) Emergency Shutdown Status	X			
<b>Miscellaneous</b>	<b>Digital Input</b>	<b>Analog Input</b>	<b>Output</b>	<b>Analog Output</b>
Building DDC HVAC Schedule			X	X
Occupied Override Button Statuses	X			
Occupied Override Statuses Remaining Time		X		