

Vendor:	ABB
Device:	TZIDC / TZIDC-200
Protocol:	HART

Type:	Digital Positioner
Application:	Electro-Pneumatic Valve Positioner

	System 800xA	Asset Vision
Supported System versions:	SV4.1 (RU-Jun06) SV5.0	v5.0

Device Object Type	ABB TZIDC-200 V2.2-HART
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For detail information about supported system versions refer to HART Device Object Type ABB TZIDC-200 Version 2.x Release Notes (2PAA100306)



TZIDC/ TZIDC-200
Digital Valve Positioner
HART

Conditions monitored:

Condition ID	SubCond	Description	Possible Cause	Suggested Action	Severity
DEVICE MALFUNCTION					
	Yes	Device self diagnostic has detected a problem with the device operation.	The device has detected a hardware error or failure	Read Additional Device Status provided by its DTM.	1000
CONFIGURATION CHANGED					
	Yes	Data belonging to the device's non-volatile data is altered and will get lost without running the device's non-volatile change procedure.	Either A write or set command has been executed or stroke / travel counters have increased	None	1
COLD START					
	Yes	Either device restart, self test or master reset has occurred.	Power has been removed and reapplied resulting in the re-initialization of the device.	If the problem persists, check power wiring.	1000

Condition ID	SubCond	Description	Possible Cause	Suggested Action	Severity
MORE STATUS AVAILABLE					
	Yes	Additional device status is available by using the DTM.	More status information is available than can be returned in the Field Device Status.	Read Additional Device Status provided by its DTM.	1000
ANALOG INPUT FIXED					
	Yes	Device ignores analog input signal, so the device does not respond to any setpoint changes.	The device's HART-address is <>0,	Use a HART configurator (DTM - Hand held) to set device's HART address to 0	1000
ANALOG INPUT SATURATED					
	Yes	The analog input is beyond its limits. The device can't fulfill the requested positioning.		Read Additional Device Status provided by its DTM.	1
NON-PRIMARY VARIABLE OUT OF LIMITS					
	Yes	One or more non-primary variables are out of limits	The process applied to a sensor, other than that of the Primary Variable, is beyond the operating limits of the device.	Read Additional Device Status provided by its DTM.	1
PRIMARY VARIABLE OUT OF LIMIT					
	Yes	The input value applied for the Primary Variable is beyond the device's operating limits	The input value applied for the Primary Variable is beyond the device's operating limits.	Check the device's mounting and configuration.	1
ANALOG INPUT VALIDATED					
	No	The analog input value for the primary variable is disturbed.	Problem with the devices current source - the system's Analog Output signal	Check the system-configuration	1000
POSITION SENSOR MALFUNCTION					
	Yes	Device Functionality related. Malfunction in position measurement	The device internal position sensor has a fault, or the cable linking sensor and PCB is broken	Replace device for repair	1000
POSITIONING TIME					
	Exceeded	Installation and Process related. The configured time-frame when the valve shall have reached the requested position is exceeded	Valve operates too slow or is immobile due to blockades, high friction or break down of supply pressure	Check valve, positioner, pneumatic connections and air supply	1000
POSITIONING CONTROLLER					
	Inactive	Installation and Process related. Position controller is deactivated	1) Operation-Mode is set to MANUAL on MANUAL_SENS 2) The device's factory reset was performed 3) The device's control and working range parameters are invalid	1) Check device's operation mode and change it to Mode CTRL_ADP or CTRL_FIX 2) & 3) Run the autoadjust procedure or configure the device's control-and range parameters	750

Condition ID	SubCond	Description	Possible Cause	Suggested Action	Severity
TOTAL VALVE STROKE					
	Exceeded	Configuration and process-load related. The configured limit for the applicable valve load regarding strokes has exceeded.	The configured limit for the applicable valve load regarding strokes has exceeded.	Check the valve within a close time-schedule	500
	Significantly changed	Configuration and process-load related. The number of valve strokes / time has significantly changed.	The process or valve conditions are supposed to have changed, which causes the valve to perform more frequent stroking.	Analyse the process data trended for all TAGs trended which are located around the valve. Check valve and installation.	750
TOTAL VALVE TRAVEL					
	Exceeded	Configuration and process-load related. The configured limit for the applicable valve load regarding total travel has exceeded.	The configured limit for the applicable valve load regarding total travel has exceeded.	Check the valve within a close time-schedule	500
VALVE LOAD					
	Will exceed	Configuration and process-load related. The configured limit for the applicable valve load regarding total travel and total strokes will exceeded within a AssetMonitor configurable time-frame	The configured limit for the applicable valve load regarding total travel and total strokes will exceeded within a AssetMonitor configurable time-frame	Schedule preventively a valve maintenance task for the next planned shutdown period	500
POSITIONING SENSOR RANGE					
	Out of Range	Installation and Process related. Working range not adjusted	If factory data were loaded (after factory reset) the working range settings would have been deleted	Adjust working range	500
	Out of Range	Installation and Process related. Value Limit Switch SW1 exceeded	Digital valve position / behaviour	to be described by application	500
	Out of Range	Installation and Process related. Value Limit Switch SW2 exceeded	Digital valve position / behaviour	to be described by application	500
SETPOINT					
	Out of Range	Installation and Process related. Analog Setpoint >20 mA or <4 mA	Error in system output or in wiring	Check system output or wiring	500



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