

ABB Ability™

Verification for Measurement Devices



Verification Report for: FCx1xx/FCX4xx

Measurement made easy

Measurement & Analytics
Service

Installation Details

Meter Owner	Roger Widenka MBA, B,Eng
Machine Name	Test bench
Medium	Air

Operator Details

Date and Time	25-07-2019 10:30:46
Operator's Name	Admin
Operator's Signature	

Customer Details

Site Address	ABB Automation GmbH Kallstadter Straße 1 68309 Mannheim, Germany
Telephone	
Email	roger.widenka@de.abb.com

Overall Status - Passed

Meter Specific Information		User Settings	
Device	FCXxxx HART	Qm Max	133,333 kg/min
Feature Series	Series 150	Qv Max	266,667 l/min
Sensor Serial No.		Density Max	3500,000 kg/m ³
Device Serial Number	1	Density Min	500,000 kg/m ³
Device Firmware Version		Low Flow Cut Off	0,500 %
Tag Name	????????	Density Cut Off	200,000 %
Date	1/1/1900	Damping Massflow	1,000 s
Long TAG	???????????????????????????????? ????????	Damping Density	1,000 s
Description	????????????????		
Message	???????????????????????????????? ????????		
Meter Size	DN15 - 1/2 in		

User set Process Alarm limits

Qm Massflow Min	0,000 %
Qm Massflow Max	110,000 %
Qv Volumeflow Min	0,000 %
Qv Volumeflow Max	110,000 %
Density Min	200,000 kg/m ³
Density Max	3500,000 kg/m ³
Temperature Min	-50,000 °C
Temperature Max	200,000 °C
Driver Output Max	7,028 mA
Driver Output Time	10,000 s
Sensor Signal Min	1,000 mV
Sensor Signal Time	30,000 s
Density Low Check	0,000 kg/m ³

Sensor Information		Transmitter Information	
Meter Size	DN15 - 1/2 in	Transmitter Type	FEBMINT
Freq. at Empty Pipe	486,000 Hz	Transmitter Restart Counter	14
Freq. at Full Pipe	446,000 Hz	Transmitter Run Hours	5 hrs
Span Forward	-630,000 t/s ²	Time Since Restart	0,000 hrs
Span Reverse	0,000 %	DensiMass	On
Zero Sensor	6,052 ns	FillMass	On
Qmax DN	133,333 kg/min	Transmitter Serial No	242855578X001
Density at Empty Pipe	0,001 kg/l	Bootloader FEB Ver	01.00.00
Density at Full Pipe	0,020 kg/l	FW Frontend Ver	01.03.00
Sensor Run Hours	5 hrs	HW Frontend Ver	HW REV01
First Calibration Date	2000-1-1	VeriMass	On
Calibration Certificate No	242849344X002_110315		

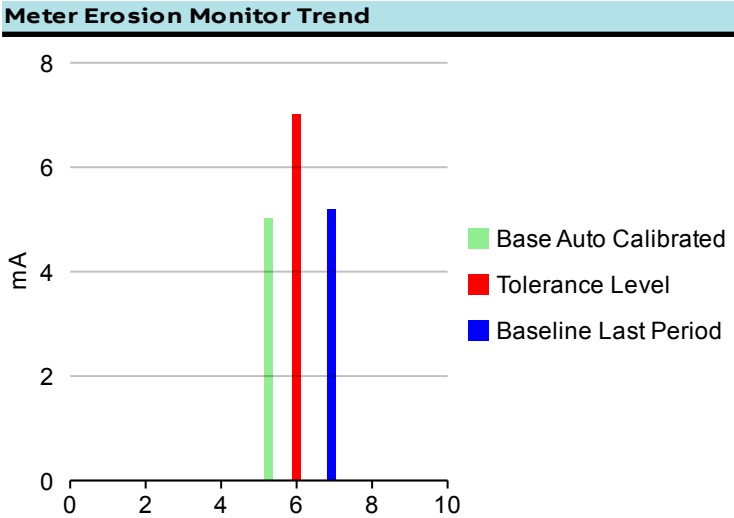
Diagnosis History					
Timestamp	Alarm Description	Possible Cause	Suggested Actions	Totalizer	Alarm Duration
NA	Sensor Driver Current too High (S060.034)	Gas bubbles in pipe.	Reduce gas content or Deactivate Driver Current Max with zero value.	NA	NA

Event History		
Timestamp	Event	Condition
25.07.2019 04:57:45	Clear Alarm	Enum not found
25.07.2019 04:57:45	Clear Alarm	Enum not found
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25.07.2019 04:57:45	Clear Alarm	Enum not found
25.07.2019 04:57:45	Set Alarm	Device not Calibrated (M024.008)
25.07.2019 04:57:45	Set Alarm	Sensor Amplitude Out of Range (S054.042)
25.07.2019 05:01:45	Set Alarm	Density Failure (F080.030)
25.07.2019 05:01:45	Clear Alarm	Density Failure (F080.030)
25.07.2019 06:39:45	Set Alarm	Sensor Driver Current too High (S060.034)
25.07.2019 06:39:45	Clear Alarm	Sensor Driver Current too High (S060.034)
25.07.2019 09:59:45	Set Alarm	Sensor Driver Current too High (S060.034)
25.07.2019 10:04:45	Clear Alarm	Sensor Driver Current too High (S060.034)

Verification of Sensor	
Sensor Group	PASS
Sensor Diagnostics	No Alarms

Verification of Transmitter	
Transmitter Group	PASS
Transmitter Diagnostics	No Alarms

Verification VeriMass: Erosion Monitor	
VeriMass Group	PASS
Erosion Monitor	Enabled
Baseline Fingerprint	5,028 mA
Tolerance Level	7,028 mA
Baseline Last Period	5,191 mA
Diagnostics	No Alarms



Verification of Transmitter I/O		
Output Group		
Digital Output 41/42		NOT EXECUTED
Applied	Measured	Result
10500 Hz		
5250 Hz		
Digital Output 51/52		NOT EXECUTED
Applied	Measured	Result
10500 Hz		
5250 Hz		

Comments (Installation, Grounding etc.)

Test

Verification Certificate has been generated by ABB Ability™ Verification for measurement devices "Licensed software testing" variant (ABB CoriolisMaster HART VDF Version 04,02).

ABB Ability™ Verification for measurement devices Version 03.90.00

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