

~~CNH15009~~ CNKH0007



CERTIFICATION OF CONFORMANCE

Title Page of Calibration Certificate Documentation

CUSTOMER:

PLASTIC OMNIUM AUTO INERG
136 RUE DES HUREAUX
VENETTE
VENETTE, 60280
FRANCE

PURCHASE ORDER #: PO14700

PCB ORDER #: I000207209

QTY	ITEM	DESCRIPTION
1	ACS-1T S/N 40010	RECALIBRATE 356B21

Notes:

1. This document certifies that the subject item(s) have been manufactured, repaired (if applicable), tested, or inspected in accordance with referenced purchase order and conform(s) to applicable specifications per PCB Quality Policy Manual Rev. I 09/30/2014.
2. Equipment used in validation is traceable to NIST and appropriate records are on file.
3. Calibrations comply with ISO 17025 and ANSI/NCCL Z540-1-1994 except as noted on associated calibration certificate(s).
4. Calibrations are performed using processes having a test uncertainty ratio (TUR) of four or more times greater than the unit calibrated, unless otherwise noted on the calibration certificate. Calibration at 4:1 TUR provides reasonable confidence that the instrument is within product specifications.

Logistics Associate:

Date: 02/25/16

**- ISO 9001 Certified / ISO 17025 Accredited -
PCB Piezotronics, Inc.**

3425 Walden Avenue Depew, New York, US 14043-2495
Phone: 716-684-0001 Fax: 716-684-0987

~ Calibration Certificate ~

Per ISO 16063-21

Model Number: 356B21

Serial Number: 40010 (x axis)

Description: ICP® Triaxial Accelerometer

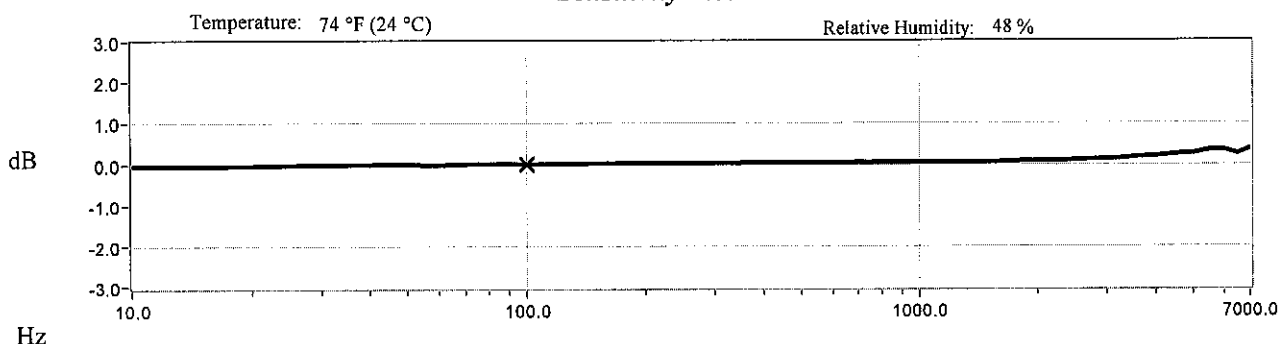
Manufacturer: PCB

Method: Back-to-Back Comparison AT401-3

Calibration Data

Sensitivity @ 100 Hz 9.78 mV/g
(0.997 mV/m/s²) Output Bias 9.9 VDC
Discharge Time Constant 0.7 seconds Transverse Sensitivity 3.2 %

Sensitivity Plot



Data Points

Frequency (Hz)	Dev. (%)	Frequency (Hz)	Dev. (%)	Frequency (Hz)	Dev. (%)
10	-0.5	300	0.3	7000	4.4
15	-0.6	500	0.4		
30	-0.3	1000	0.5		
50	-0.0	3000	1.3		
REF. FREQ.	0.0	5000	3.0		

Mounting Surface: Beryllium Fastener: Adhesive Fixture Orientation: Inverted Vertical
Acceleration Level (pk): 10.0 g (98.1 m/s²)

*The acceleration level may be limited by shaker displacement at low frequencies. If the listed level cannot be obtained, the calibration system uses the following formula to set the vibration amplitude: Acceleration Level (g) = 0.008 x (freq)². *The gravitational constant used for calculations by the calibration system is: 1 g = 9.80665 m/s².

Condition of Unit

As Found: In Tolerance

As Left: In Tolerance

Notes

1. Calibration is NIST Traceable thru Project 683/287323 and PTB Traceable thru Project 17014.
2. This certificate shall not be reproduced, except in full, without written approval from PCB Piezotronics, Inc.
3. Calibration is performed in compliance with ISO 9001, ISO 10012-1, ANSI Z540.3 and ISO 17025.
4. See Manufacturer's Specification Sheet for a detailed listing of performance specifications.
5. Measurement uncertainty (95% confidence level with coverage factor of 2) for frequency ranges tested during calibration are as follows: 5-9 Hz; +/- 2.0%, 10-99 Hz; +/- 1.5%, 100-1999 Hz; +/- 1.0%, 2-10 kHz; +/- 2.5%.

Technician:

Jesse J. Johnson



Date: 2/17/2016



CALIBRATION CERT #1862.01

PCB PIEZOTRONICS
VIBRATION DIVISION

3425 Walden Avenue • Depew, NY 14043

TEL: 888-684-0013 • FAX: 716-685-3886 • www.pcb.com

CAL43-3538571865.393+0



~ Calibration Certificate ~

Per ISO 16063-21

Model Number: 356B21

Serial Number: 40010 (y axis)

Description: ICP® Triaxial Accelerometer

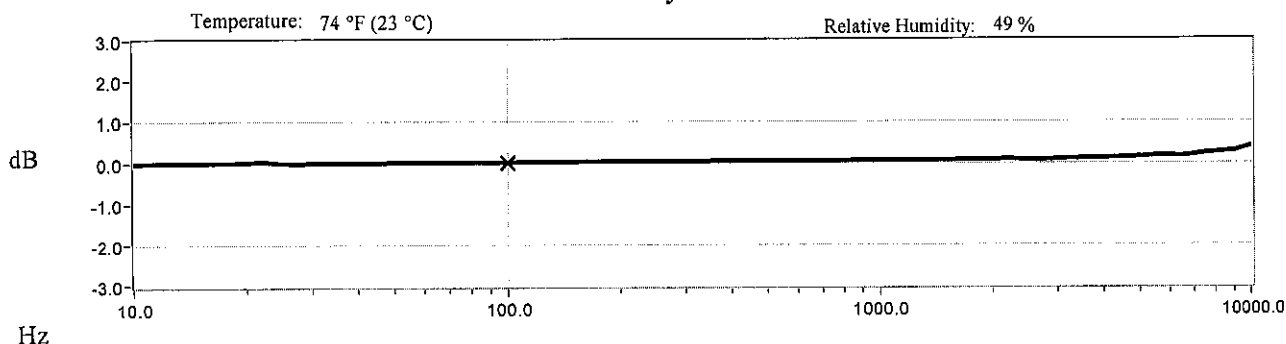
Manufacturer: PCB

Method: Back-to-Back Comparison AT401-3

Calibration Data

Sensitivity @ 100 Hz 9.40 mV/g
(0.958 mV/m/s²) Output Bias 10.0 VDC
Discharge Time Constant 0.6 seconds Transverse Sensitivity 1.3 %

Sensitivity Plot



Data Points

Frequency (Hz)	Dev. (%)	Frequency (Hz)	Dev. (%)	Frequency (Hz)	Dev. (%)
10	-0.3	300	0.4	7000	2.1
15	-0.1	500	0.5	10000	4.7
30	-0.2	1000	0.6		
50	0.0	3000	0.9		
REF. FREQ.	0.0	5000	1.6		

Mounting Surface: Beryllium w/Silicone Grease Fastener: 5-40 Female Fixture Orientation: Vertical
Acceleration Level (pk): 10.0 g (98.1 m/s²)

*The acceleration level may be limited by shaker displacement at low frequencies. If the listed level cannot be obtained, the calibration system uses the following formula to set the vibration amplitude: Acceleration Level (g) = 0.008 x (freq)². *The gravitational constant used for calculations by the calibration system is: 1 g = 9.80665 m/s².

Condition of Unit

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As Left: In Tolerance

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Technician: Jesse J. Johnson



Date: 2/17/2016



CALIBRATION CERT #1862.01

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3425 Walden Avenue Depew, NY 14043

TEL: 888-684-0013 FAX: 716-685-3886 www.pcb.com

CAL43-3538572488.508+0



~ Calibration Certificate ~

Per ISO 16063-21

Model Number: 356B21

Serial Number: 40010 (z axis)

Description: ICP® Triaxial Accelerometer

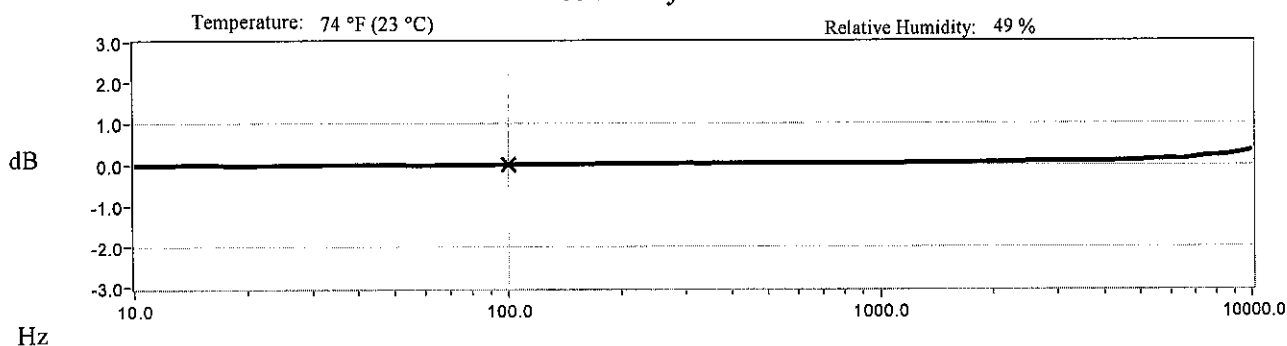
Manufacturer: PCB

Method: Back-to-Back Comparison AT401-3

Calibration Data

Sensitivity @ 100 Hz 10.07 mV/g
(1.027 mV/m/s²) Output Bias 9.3 VDC
Discharge Time Constant 0.8 seconds Transverse Sensitivity 1.7 %

Sensitivity Plot



Data Points

Frequency (Hz)	Dev. (%)	Frequency (Hz)	Dev. (%)	Frequency (Hz)	Dev. (%)
10	-0.2	300	0.2	7000	1.9
15	-0.2	500	0.3	10000	4.0
30	-0.3	1000	0.4		
50	-0.1	3000	0.8		
REF. FREQ.	0.0	5000	1.2		

Mounting Surface: Beryllium w/Silicone Grease Fastener: 5-40 Female Fixture Orientation: Vertical

Acceleration Level (pk): 10.0 g (98.1 m/s²)

¹The acceleration level may be limited by shaker displacement at low frequencies. If the listed level cannot be obtained, the calibration system uses the following formula to set the vibration amplitude: Acceleration Level (g) = 0.008 x (freq)². ²The gravitational constant used for calculations by the calibration system is: 1 g = 9.80665 m/s².

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Technician: _____

Jesse J. Johnson



Date: 2/17/2016



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CAL43-3538576878.665+0

