



Quality Certificate

VWR® TRACEABLE® THREE-LINE ALARM TIMER

This document certifies that the below product meets the following criteria:

North American Catalog No:	62344-912
Serial Number:	192290402
Description:	VWR Alarm Timer 3-Line

Standards/Equipment:

Description	Serial Number	Due Date	NIST Traceable Reference
Non-contact Frequency Counter	26.662025	April 10, 2020	10004239624

Procedure: CAL-01
Cal Date: June 28, 2019
Due Date: June 28, 2021
Test Conditions: 23.65 °C 56.46 %RH 1018 mBar

Calibration Data:

Unit(s)	Nominal	As Found	In Tol	Nominal	As Left	In Tol	Min	Max	±U	TUR
Sec/24hr	N.A.	N.A.		0.000	0.167	Y	-8.64	8.64	0.041	>4:1

This Instrument was calibrated using Instruments Traceable to National Institute of Standards and Technology.

A test uncertainty ratio of at least 4:1 is maintained unless otherwise stated and is calculated using the expanded measurement uncertainty. Uncertainty Evaluation includes the instrument under test and calculated in accordance with the ISO Guide to the Expression of Uncertainty in Measurement (GUM). The uncertainty represents an expanded uncertainty using a coverage factor k=2 to approximate a 95% confidence level. In tolerance conditions are based on test results falling within specified limits with no reduction by the uncertainty of the measurement. The results contained herein relate only to the item calibrated.

Nominal= Standard's reading; As Left= Instrument's reading; In Tol= In Tolerance; Min/Max= Acceptance Range; ±U= Expanded Measurement Uncertainty; TUR= Test Uncertainty Ratio. Accuracy=±(Max-Min)/2; Min= As Left Nominal(Rounded)- Tolerance; Max= As Left Nominal(Rounded)+Tolerance; Date=MM/DD/YY

Maintaining Accuracy:

According to the Manufacturer's opinion once calibrated Refrigerator/Freezer Thermometer should maintain its accuracy. There is no exact way to determine how long calibration will be maintained. Refrigerator/Freezer Thermometers change little, if any at all, but can be affected by aging, temperature, shock and contamination.

Signed:

Jamie Ethier
VP Global Quality
VWR, Part of Avantor

Date: January 14, 2020