

M9183A-03

Information Only Service Note

Supersedes:
NONE

M9183A PXI Digital Multimeter

Serial Numbers: US51010000/US52010999 and MY51010000/MY60909999

The Problem – Safety precautions in the floating isolation and maximum allowable measured voltage for the M9183A PXI Digital Multimeter.

Parts Required:
NONE

ADMINISTRATIVE INFORMATION

Calibration Required
 Calibration NOT Required

PRODUCT LINE: PLGM
AUTHOR: SH

ADDITIONAL INFORMATION:

Situation:

General safety precautions in the floating isolation and maximum allowable measured voltage for the M9183A PXI Digital Multimeter must be observed during all phases of operation.

Solution/Action:

Measurement limits are defined for the input terminals:

- **HI to LO measurement limit.** The measurement limit from HI to LO (Input terminals) is 300 VACrms, which is also the maximum voltage measurement.
- **LO to ground measurement limit.** The LO input terminal can safely "float" a maximum of 300 VACrms relative to ground, where ground is defined as the Protective Earth Conductor in the AC mains power cord connected to the instrument.
- **Current input terminal:** The current input ("I") terminal has a measurement limit of 2.4 A (DC or AC) between the HI terminal and the LO input terminal. Note that the current input terminals will always be at approximately the same voltage as the main input LO terminal.
- **Sense terminal measurement limits:** The HI and LO sense terminals are used for four-wire resistance and temperature measurements. The measurement limit is 5 Vpk for all the terminal pairings: LO sense to LO input, HI sense to LO input, and HI sense to LO sense.

Refer to the [M9180 Series PXI 6 1/2 Digit Digital Multimeters Startup Guide](#) for proper use and installation.

Revision History:

Date	Service Note Revision	Author	Reason for Change
22 May 2023	01	Hashini	As Published