

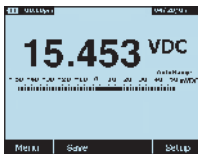
stator windings, you can uncover internal connection problems that may contribute to reduced motor performance or impending failure.

The second is the fact that the measuring circuit in this function uses a much higher measurement current than normal ohms functions, with an available voltage up to 20 V. For the industrial technician, who often works in high noise environments, this means that the low resistance readings will be more accurate in the presence of that noise, which may easily appear on the circuit of concern.

**LoZ ac volts**

This safety and accuracy function clearly identifies live conductors among those showing ‘ghost voltage’—which appears on unconnected wiring in close proximity to live conductors.

The LoZ feature provides a load for the circuit that collapses ghost voltage to a zero reading, indicating that the conductor would be safe to work with.



The feature also automatically displays the ac voltage of a live circuit, as well as any dc voltage, in a dual display presentation. Besides the everyday safety of reliable measurements, LoZ is also useful for monitoring residual dc voltage while troubleshooting electronic power controls such as those used for theatrical stage lighting or motor drives.

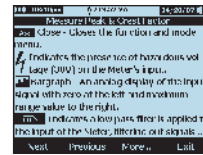
**Low pass filter**

The V ac and mV ac functions of the Fluke 289 DMM offer a low pass filter feature that reduces the ac measurement bandwidth to one kHz and below. Using this feature, you can monitor the output voltage and frequency of an adjustable speed motor drive accurately, while rejecting the higher frequency output voltages that often confuse lesser meters.

**For example:** Sometimes a drive output smoothing filter is installed to protect a motor from those higher frequency voltage components that can result in damaging high peak voltages. In that kind of setup, measuring the unfiltered voltage at the motor can insure that the filter is effective, by showing that the high frequency voltages are significantly reduced in value. That is indicated when the unfiltered reading nearly equals the filtered reading.

**The (i) info button**

With all the added features and functions in the Fluke 289, the new ‘(i) info’ button provides a convenient alternative to the need to carry a manual or reference card around. To use this new feature, select the desired function, highlight it in the menu, and press ‘(i) info’ to see a brief description of the function and its use. It’s effectively a manual that’s automatically turned to the right page as you move from measurement to measurement. This feature actually suggests uses for several of the new features and how to apply them. The ‘i’ info button is also multilingual; you can change the language.



So, besides being a meter that can be your ultimate helper, the new Fluke 289, with all of its capabilities and new features, is also the tool for the industrial technician who wants to better understand the many processes he or she may deal with. Using this meter, you can not only test for the usual voltages, currents, and resistances encountered in your daily work, but you can explore machine and circuit operations in more depth, learning as you go.

**Fluke.** Keeping your world up and running.®