

# ICM450A Line Voltage Monitor

before you buy – see a side by side comparison

**Providing Superior Motor Protection from Premature Failure and Damage Caused By Common Voltage Faults**



ICM line monitors allow you to set parameters for over/under voltage and provide protection to your expensive equipment when power is outside the acceptable range.



Specifications	ICM Advantage	ICM Controls ICM450A Features	TimeMark 20/20H Features
Operating Voltage	X	Universal 190-600 VAC in one model	2 different models to cover 190-600VAC
Frequency		50/60 HZ	50/60 HZ
Type of Measurement		RMS	RMS
Under Voltage Trip	X	User settable 2%-25%	Fixed at 10%
Over Voltage Trip	X	User settable 2%-25%	Fixed at 10%
Voltage Imbalance Trip		User selectable 2%-20%	2%-8%
Fault Interrogation Trip Delay	X	User settable 0-15 seconds across all parameters	1-30 second (over/under voltage) / 1 second fixed (single phasing) / 1 second fixed (imbalance > 15%)
Anti-Short Cycle Restart Delay	X	Adjustable 0-10 minutes	Adjustable 1-8 min
Output Contacts		10A @ 250VAC Resistive	10A @ 250VAC Resistive
Mounting		Surface mount or DIN rail kit available	DIN rail or surface mount, no extra kit needed
Connections	X	1/4" quick connect	Labor intensive terminal block with screws
Environmental	X	-40°F to 167°F, 0-95% non-condensing	-20°F to 140°F, 0-97% non-condensing
Control Voltage Input (option)	X	18-240VAC	None
Dual Language	X	English & Spanish	N/A
Graphical User Interface	X	Backlit LED	None
Settings precision	X	Digital adjustment down to 1V resolution	Adjustable potentiometers
Lockout	X	Auto reset or 1-10 trials before hard lock out & manual reset available with one model	Auto reset / Manual resets available on select models/ No trials
Dimensions		6.5" L x 4.75" W x 1.09" D	3.9" x 1.7" x 2.3"
Fault History	X	50 Plus stored in memory	None
Fault Indicators	X	LCD human readable display	Flashing LED lights
Certification	X	UL Listed	UL Recognized
Voltage Read Resolution & Frequency	X	12-BIT (4096), 3 simultaneous sample & hold, 120MHZ MCU	10-BIT (1024), sequential sampling, 32MHZ MCU
Safety	X	World Class DFMEA	Absolute minimal construction
Country of Origin		USA	USA
EFT Immunity		Passes to Level 4	Passes to level 4
Surge Immunity	X	Passes to Level 4	Circuit components feature insufficient voltage ratings

Note: TimeMark accuracy for over /under voltage trip point is about 3% of stated value and imbalance is within 1% of stated value