

## VOLTAGE DETECTOR 3120

Field Measuring Instruments



# Twin Light Audible Voltage Detector

**3 years**  
Guaranteed for 3 years

**Green for  
Battery Check**

**Red for Voltage  
Detection**



3120:UL mark product



3246-60



3280-10



3129



## Model 3120 Specifications

<b>Measurement function:</b>	Voltage Detection
<b>Voltage range:</b>	AC 70 to 600 V, 50/60 Hz (when touching insulated wiring equivalent to IV2mm <sup>2</sup> )
<b>Indication:</b>	Red LED and continuous beeping sound
<b>Battery check:</b>	Green LED
<b>Power supply:</b>	“AAA“ manganese (R03) or alkaline (LR03) battery x 2
<b>Rated voltage:</b>	DC 3.0 V
<b>Maximum rated power:</b>	170 mW(max)
<b>Rated power:</b>	27 mW(Typ) (when switched to “ON”and in standby)
<b>Continuous use:</b>	Approx. 200 hours (when switched to “ON” and in standby using LR03 batteries)
<b>Dimensions and mass:</b>	149H x ø18.5 mm / 5.9” x ø 0.7” (excl. protrusions), 38 g / 1.3 oz (incl. batteries)
<b>Operating environment:</b>	Indoors, up to an altitude of 2000m
<b>Operating temperature:</b>	0 to 40°C, 80%rh max. (no condensation)
<b>Storage environment:</b>	-20 to 60 °C, 80%rh max. (no condensation)
<b>Applicable standards:</b>	Safety: EN61010 Pollution degree 2, CAT IV 600 V (Anticipated Transient Overvoltage: 8,000V) UL1436:1998 CSA C22.2 No.160-M1985 EMC: EN61326
<b>Accessories:</b>	“AAA“ manganese (R03) batteries x 2, Instruction manual x 1



## Easy and Safe Instruments for Field Use!!!

Model 3246-60 Specifications		Model 3280-10 Specifications		Model 3129 Specifications	
<b>Measurement</b>		<b>Measurement</b>		<b>Measurement</b>	
<b>Function</b>	<b>Range (Accuracy)</b>	<b>Function</b>	<b>Range (Accuracy)</b>	<b>Function</b>	Phase detection (positive, negative), live wire check
<b>DC voltage</b>	420.0 m/4.200/42.00/420.0/600 V (±1.3%rdg.±4dgt.)	<b>AC current</b>	(0.06) - 42.00/420.0/1000A (50 / 60 Hz) (±1.5%rdg.±5dgt.)	<b>Voltage Detection Method</b>	Electrostatic induction method
<b>AC voltage</b> (50 to 500 Hz)	4.200/42.00/420.0/600V (±2.3%rdg.±8dgt.)	<b>DC voltage</b>	420.0m/4.200/42.00/420.0/600V (±1.3%rdg.±4dgt.)	<b>Voltage Range</b>	70 to 600V AC (50/60Hz) (sine wave, continuous input)
<b>Resistance</b> (open terminal voltage 3.4V max) <sup>1</sup>	420.0/4.200k/42.00k/420.0k/4.200M/42.00MΩ (±2.0%rdg.±4dgt. <sup>2</sup> )	<b>AC voltage</b> (50 to 500 Hz)	4.200/42.00/420.0/600V (±2.3%rdg.±8dgt.)	<b>Clamp Diameter</b>	17mm max. of insulated wiring
<b>Continuity</b> (open terminal voltage 3.4V max)	420.0Ω (±2.0%rdg.±4dgt.) Buzzer sounds at approx. 50Ω ±30Ω or less	<b>Resistance</b> (open terminal voltage 3.4V max) <sup>1</sup>	420.0/4.200k/42.00k/420.0k/4.200M/42.00MΩ (±2.0%rdg.±4dgt. <sup>2</sup> )	<b>Display</b>	
<b>Diode test</b> (open terminal voltage 3.4V max.)	Forward direction identification function <sup>3</sup> Indicated flashes and buzzer sounds to indicate forward direction	<b>Continuity</b> (open terminal voltage 3.4V max)	420.0Ω (±2.0%rdg.±6dgt.) Buzzer sounds at approx. 50Ω or less	<b>Phase Detection</b>	Positive: 4 LEDs lit in clockwise order and 3 short beeps Negative: 4 LEDs lit in counter-clockwise order and one continuous beep
<b>Standards</b>		<b>Standards</b>		<b>Live Wire Check</b>	R-S and S-T lamps light if voltage between wires are within range
<b>Safety</b>	EN61010 Pollution Degree 2 CATIII 600V	<b>Safety</b>	EN61010	<b>Standards</b>	
<b>EMC</b>	EN61326	<b>EMC</b>	EN61326	<b>Safety</b>	EN61010 Pollution Degree 2 CATIII 600V
*1. at 420.0Ω [4.2k 0.7V (typ.); 42k to 42MΩ 0.5V (typ.)]		*1. at 420.0Ω [4.2k 0.7V (typ.); 42k to 42MΩ 0.5V (typ.)]		<b>EMC</b>	EN61326
*2. at 420Ω to 420kΩ (4.2MΩ ±5.0%rdg.±4dgt.; 42MΩ ±10.0%rdg.±4dgt.)		*2. at 420Ω to 420kΩ (4.2MΩ ±5.0%rdg.±4dgt.; 42MΩ ±10.0%rdg.±4dgt.)			
*3. Works when diode has a forward voltage from 0.3V to 2.0V					

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