

VOLTAGE DETECTORS



VOLTAGE DETECTORS

VOLTAGE DETECTION APPLICATION CHART

GREEN - RECOMMENDED FOR USE.

The cells highlighted in green identify appropriate detector settings for a given system voltage.

YELLOW - SUITABLE FOR USE ONLY UNDER SPECIAL CIRCUMSTANCES.

The cells highlighted in yellow may be used in special circumstances. These circumstances may include the detection of voltage on an under-built circuit with induced voltage sufficient to cause a detection alarm. For example: In the 25kV setting the tester may not detect lower voltages at the required 8 to 10 inches from the conductor. However it may detect lower induced voltage, e.g. 5kV at 1" from the conductor.

RED - NEVER SELECT A DETECTOR SETTING INDICATED BY A RED CELL FOR A GIVEN SYSTEM VOLTAGE.

The detector may not indicate voltage present and serious injury or death may result.

SALISBURY

by Honeywell

Detector setting	System Voltage - (Phase to Phase/Phase to Ground)																	
	4160 2400	8320 4800	12000 6930	12470 7200	13200 7620	13800 7970	20780 12000	22860 13200	24940 14400	34500 19920	46000 26560	69000 39840	115000 66400	138000 79670	161000 92950	230000 132790	345000 199190	500000 288680
240 v	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green
4.2kV	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green
15kV	Red	Yellow	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green
25kV	Red	Yellow	Yellow	Yellow	Yellow	Yellow	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green
35kV	Red	Red	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Green	Green	Green	Green	Green	Green	Green	Green	Green
46kV	Red	Red	Red	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Green	Green	Green	Green	Green	Green	Green	Green	Green
69kV	Red	Red	Red	Red	Red	Red	Yellow	Yellow	Yellow	Green	Green	Green	Green	Green	Green	Green	Green	Green
115kV	Red	Red	Red	Red	Red	Red	Red	Red	Yellow	Yellow	Yellow	Green	Green	Green	Green	Green	Green	Green
230kV	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Yellow	Yellow	Green	Green	Green	Green	Green	Green
345kV	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Yellow	Yellow	Yellow	Yellow	Green	Green	Green
500kV	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Yellow	Yellow	Yellow	Yellow	Green	Green
URD TEST POINTS ONLY																		
15kV URD	Red	Yellow	Yellow	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green
25kV URD	Red	Red	Yellow	Yellow	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green
35kV URD	Red	Red	Red	Yellow	Yellow	Yellow	Yellow	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green

The above matrix identifies Salisbury by Honeywell Models 4244, 4544, 4344, 4644, 4444, 4744, voltage detector applications settings for given system voltage. By selecting a detector voltage higher than the system voltage setting, the sensitivity of the detector is reduced and it may not detect the system voltage tested. Always install an appropriate grounding system before working on any conductors.

CAT. NO.		DIMENSIONS in. (mm)	SETTINGS PHASE TO PHASE	WEIGHT EA. lbs. (kgs)
STD. MODEL	SELF TEST MODEL			
4244	4544	11 x 3.5 (279.4 x 89)	Off / 240 V / 4.2 kV / 15 kV / 25 kV / 35 kV / 69 kV / 115 kV / 230 kV	0.937 (.43)
4344	4644	11 x 3.5 (279.4 x 89)	Off / 240 V / 4.2 kV / 35 kV / 69 kV / 115 kV / 230 kV / 345 kV / 500 kV	0.937 (.43)
4444	4744	11 x 3.5 (279.4 x 89)	Off / Test-240 V / Battery / URD:15 kV / 25 kV / 35 kV Overhead: 4.2 kV / 15 kV / 25 kV / 35 kV / 46 kV / 69 kV	0.937 (.43)

FAQ

Q: Are there any precautions, besides wearing the proper safety equipment, when using voltage detectors?

A: Yes, do not assume conductors that have been tested de-energized will stay de-energized. Always install proper grounding devices before working. Failure to do so may result in serious injury or death.

VOLTAGE DETECTORS

SELF TESTING AUDIO / VISUAL



SELF TESTING VOLTAGE DETECTOR KITS - Salisbury's self-testing voltage detectors allow testing to be continuous and automatic. An intermittent flash and beep confirms the detector is functioning properly.

Self-testing voltage detectors are used to verify live or de-energized conductors. These detectors may be used with insulating rubber gloves or hotsticks using the splined universal end fitting. Testers indicate voltage with an extra bright LED light and a distinctive audible signal. It is recommended that the tester be moved closer to the conductor until a warning is indicated, or it touches the conductor, apparatus or test point. Each tester includes three "C" batteries.

The need for additional PPE can be minimized by confirming that there is no electrical hazard present before work is performed. This can be determined by using a Salisbury voltage detector attached to a insulating hotstick of a length long enough to keep the worker outside of the arc flash boundary.

The Salisbury voltage detector alarms in the proximity of electric fields, so that it is not necessary to make physical contact with the equipment being checked. It is made of non-conductive materials, meaning that it will not conduct electricity nor will it cause an arc flash, even if contact with energized equipment is made.

WARNING



Do not assume conductors that have been tested de-energized will stay de-energized. Always install proper grounding devices before working. Failure to do so may result in serious injury or death.

CAT. NO.	DIMENSIONS in. (mm)	SETTINGS PHASE TO PHASE	WEIGHT EA. lbs. (kgs)
4544	11 x 3.5 (279.4 x 89)	Off / 240 V / 4.2 kV / 15 kV / 25 kV / 35 kV / 69 kV / 115 kV / 230 kV	15 oz. (.4)
4644	11 x 3.5 (279.4 x 89)	Off / 240 V / 4.2 kV / 35 kV / 69 kV / 115 kV / 230 kV / 345 kV / 500 kV	15 oz. (.43)
4744	11 x 3.5 (279.4 x 89)	Off / Test-240 V / Battery / URD:15 kV / 25 kV / 35 kV Overhead: 4.2 kV / 15 kV / 25 kV / 35 kV / 4 6kV / 69 kV	15 oz. (.43)
4745	11 x 3.5 (279.4 x 89)	Off / Test-240 V / Battery / URD:4.8 kV / 7.2 kV / 16 kV Overhead: 2.4/4.2 kV / 4.8/8.3 kV / 8.0/13.8-7.2 / 12.5 kV / 14.4/25-16/27.6 kV / 44 kV	15 oz. (.43)

COMPLETE KIT

4556	1-4544 Detector 240 V to 230 kV, 1-21517 Case, 1-2500 Shotgun Adapter	2 (.91)
4667	1-4644 Detector 240 V to 500 kV, 1-21517 Case, 1-2500 Shotgun Adapter	2 (.91)
4769	1-4744 Detector 240 V to 69 kV, 1-21517 Case, 1-2500 Shotgun Adapter	2 (.91)

ACCESSORIES

2500	Shotgun Adapter	.4 (.2)
21517	12 x 8 x 4.5 (305 x 203 x 114) Storage Case	1 (.45)

VOLTAGE DETECTORS

AUDIO / VISUAL

VOLTAGE DETECTORS are used to verify live or de-energized conductors. These detectors may be used with rubber insulating gloves or hotsticks using the splined universal end fitting. Testers indicate the presence of voltage with an extra bright LED light and a distinctive audible signal. It is recommended that the tester be moved closer to conductor until warning is indicated, or it touches conductor, apparatus or test point. Test the unit on a nearby energized conductor. Each tester requires three "C" batteries (included).

The **4445 VOLTAGE DETECTOR TESTER** provides the most convenient and reliable means of verifying operation of Salisbury Voltage Detectors. The tester features instant push-button operation and requires a standard 9-volt battery (included). It's portable and lightweight. To operate, push the button and move the tester toward the voltage detector being verified. The tester generates an electric field that activates the detector verifying the audible and visual signals are operational.



TEST PROCEDURES

Test Procedures

To assure unit is in operable condition switch tester into "Test-240V" position. The detector may now be tested in several different ways.

1. Place head as marked against live wire outlet or equivalent above 110 V.A.C.
2. Rub the head as marked on cloth or clothing to obtain static charge. Unit will only indicate intermittently.

WARNING



DO NOT ASSUME CONDUCTORS THAT HAVE BEEN TESTED DE-ENERGIZED WILL STAY DE-ENERGIZED. ALWAYS INSTALL PROPER GROUNDING DEVICES BEFORE WORKING. FAILURE TO DO SO MAY RESULT IN SERIOUS INJURY OR DEATH.

CAT. NO.	DIMENSIONS in. (mm)	SETTINGS PHASE TO PHASE	WEIGHT EA. lbs. (kgs)
4244	11 x 3.5 (279.4 x 89)	Off / 240 V / 4.2 kV / 15 kV / 25 kV / 35 kV / 69 kV / 115 kV / 230 kV	15oz. (.43)
4344	11 x 3.5 (279.4 x 89)	Off / 240 V / 4.2 kV / 35 kV / 69 kV / 115 kV / 230 kV / 345 kV / 500 kV	15oz. (.43)
4444	11 x 3.5 (279.4 x 89)	Off / Test-240 V / Battery / URD: 15k V / 25 kV / 35 kV Overhead: 4.2 kV / 15 kV / 25 kV / 35 kV / 46 kV / 69 kV	15oz. (.43)

COMPLETE KIT

4356	-	1-4244 Detector 240 V to 230 kV, 1-21517 Case, 1-2500 Shotgun Adapter	2 (.91)
4367	-	1-4344 Detector 240 V to 500 kV, 1-21517 Case, 1-2500 Shotgun Adapter	2 (.91)
4469	-	1-4444 Detector 240 V to 69 kV, 1-21517 Case, 1-2500 Shotgun Adapter	2 (.91)

ACCESSORIES

		DESCRIPTION	
2500	-	Shotgun Adapter	.4 (.2)
21517	12 x 8 x 4.5 (305 x 203 x 114)	Storage Case	1 (.45)
4445	-	Voltage Detector Tester	1 (.45)
21600	-	Replacement Handle	-