

# AC/DC/IR HIPOT TESTER MODEL : 19071/19072/19073

## **Complete Dielectric Testing Solution**

The Chroma Hipot Tester 19070 series provide 3 models for choice. The 19071 for AC Hipot testing, the 19072 for AC/DC Hipot testing, and the 19073 which combines both AC and DC Hipot with insulation resistance (IR) measurements into a single compact unit. The front panel of the testers make them easy to operate. The digital display and user friendly control allow test parameters and limits to be set easily without activating the high voltage.

The 19070 series electrical safety tester are advanced digital hipots with load and line regulation to ensure the measurement integrity. Multi-step capability allows users to perform up to two tests in a sequence such as AC hipot followed by IR.

The 19071 AC Hipot Tester performs AC dielectric withstand (hipot) tests. The test voltage can be programmed in the range of 50V AC to 5kV AC with a resolution of 1V. Its maximum total output current is 15mA.

The 19072 AC/DC Hipot Tester has all the features of the 19071 with the addition of DC hipot capability. The test voltage can be programmed in the range of 50V DC to 6kV DC with a resolution of 1V. The maximum total current is 5.0mA.

The 19073 AC/DC/IR Hipot Tester has all the features of the 19072 plus measurement of

insulation resistance. The IR measurement range is from  $1M\Omega$  to  $10G\Omega$  with test voltages from 50 to 1000V DC.

#### Ground Fault Interrupters (GFI)

GFI is required by the National Electrical Code in wet locations. Such devices automatically interrupt power when a ground current >0.5mA exists for more than a few milliseconds to protect users.

### **Quick Discharge**

In DC hipot and IR the device under test is discharged back through the HV transformer. This technique results in a rapid and safe discharge.

### **Ground Continuity Check**

All of the 19070 Series testers have a ground continuity check feature to determine that the resistance, that is between the ground blade of power cord and any exposed metal on the product, is less than  $1\Omega$ .

# **Arc Detection**

The 19070 series are sensitive enough to monitor 10µsec current spikes even if they do not exceed the maximum trip current level.

#### Large LCD display

Users can easy to operate instrument with great view of setting functions and test result .

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# **AC/DC/IR Hipot Tester**

# MODEL 19071 19072 19073

# **Key Features :**

- Ground fault interruption
  - shutdown the instrument when imbalance current > 0.5mA , provide the highest protection capability
- TUV approved
- CE Certified
- Programmable output voltage up to 5kV AC and 6kV DC
- Insulation resistance measurements from 1MΩ to 10GΩ
- Ground continuity check with  $1\Omega$  limit
- Arc detection with programmable limit
- Front panel lockout
- Large LCD display (240 x 64dot matrix) can supply great view of test result and setting functions
- Programmable ramp and test times
- Programmable high and low limits
- Cost effective solution for Hipot and IR
- Quick discharge of DUT in IR and DC Hipot
- Storage of 10 test setups with 10 steps per setup
- Remote control
- Easy to use



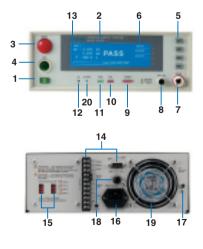


# **Specification**

Model	19071	19072	19073
Mode	ACV	ACV/DCV	ACV/DCV/IR
Withstanding Voltage Test			
Output Voltage	AC : 0.05 ~ 5kV AC : 0.05 ~ 5kV , DC : 0.05 ~ 6kV		
Load Regulation	1 % + 5V		
Voltage Resolution	1V		
Voltage Accuracy	1% + 5 counts		
Cutoff Current	AC : 15 mA	AC : 15 mA,	DC: 5 mA
Current Resolution	AC : 1µA, DC : 0.1µA		
Current Accuracy	1.5% + 5 counts		
Output Frequency	50/60Hz		
Test Time	0.1 ~ 999 seconds, continue		
Ramp up Time	0.1 ~ 999 seconds, off		
Wave Form	Sine wave		
Insulation Resistance			
Output Voltage			DC: 50 ~ 1000V
Voltage Resolution			2V
Voltage Accuracy			5% + 5 counts
IR Range			1 ~ 9999MΩ
IR Accuracy			≥ 500V, 20 ~ 2000MΩ: 10% + 10 counts
			< 500V, 1 ~ 2000MΩ: 15% + 10 counts
Continuity Check		Current 0.1A, 1 $\Omega \pm 0.2\Omega$ , On/Off	
Arc Detection			
Setting Mode	Programmable Setting		
Detection Current	AC : 1mA ~ 15mA, DC : 1mA ~ 5mA		
Minimum Pulse Width		10 µs	
Secure Protection Function		·	
Fast Output Cut-off	0.	.4 ms after NG happen	
Fast DC discharge	0.2 sec.		
Ground Fault Interrupt (GFI)	0.5mA ± 0.2mA AC (Low), 5mA ± 2mA AC (High), Close		
Panel Operation Lock	Present password		
Continuity Check	Current 0.1A, $1\Omega \pm 0.2\Omega$ , On/Off		
GO/ NG Judgment			
Indication, Alarm	Window comparator system		
Data Hold	Last tests data memories		
Step Hold	Step signal trigger On/Off		
Memory Storage	10 tests setups with 10 steps per setup		
General			
Operation Environment	Temperature : 0 ~ 40°C		
	Humidity : ≤ 80% RH		
Power Consumption	No load : < 60W		
	With rated load : 300W max.		
Power Requirement	100V/120V/ 220V AC ±10%, 240V AC +5%~ -10%,		
	50/60Hz		
Weight	12kg		
Dimension(W X H X D)	270 X 100 X 350mm		

All specifications are subject to change without notice.

# **Panel Description**



- 1. LINE Switch
- 2. Window Display
- 3. Reset Button
- 4. Start Button
- 5. Function Keys F1~F4
- 6. Function Key Display Area
- 7. High Voltage Output Terminal 8. Common Test Terminal
- 9. Test Indicator
- 10. Fail Indicator
- 11. Pass Indicator 12. Calibration Switch
- 13. Status Line
- 5. Status Line
- 14. Remote Control
- 15. LINE Voltage Selector
- 16. Power Cord Receptacle 17. Earth Ground Terminal
- 18. Continuity Check
- 19. Fan
- 20. Update Switch

# Application

- Production testing of appliances, instruments and information technology equipment in accordance with UL, IEC, TUV and other standards such as EN 60335, EN 60950, EN 61010, CSA C22.2 No.1010.1, UL 3111 and UL1950
- Transformer electrical safety testing
- Electric motor safety testing
- Variety of electrical components
- Testing of electronic components

# **Order Information**

 19071
 AC Hipot Tester

 19072
 AC/DC Hipot Tester

 19073
 AC/DC/IR Hipot Tester

 190701
 Remote Control Box

 A190702
 40kV Test Probe

Developed and Manufactured by:

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