



HIPOT ANALYZER MODEL 19055

Electrical Safety & Quality Testing

Chroma 19055 Hi-pot Analyzer series is designed for Hi-Pot test and Analysis. The test of AC/DC/IR can be programmed in 5kV/100mA with 500VA output rating which meet EN50191 requirements. (For more detail information, please refer application note)

Model 19055-C not only have AC/DC/IR test, but New measurement technology - Corona Discharge Detection (CDD). The Discharge Level Analysis (DLA) provide a test mode for electrical quality which can be used to detect discharge in:

- Corona discharge Start Voltage (CSV)
- Flashover Start Voltage (FSV)
- BreakDown Voltage (BDV)

Regarding Contact check while Hi-Pot test, Chroma 19055 series have High Frequency Contact Check (HFCC) and Open Short Check (OSC). HFCC detect contact lose by high frequency and perform with Hi-Pot test, highly efficient test can be created.

For convenience operation, Chroma 19055 have large LCD display for operation and judgment. Floating output and GFI function protect operator from electrical hazard.

Applications

- Motor: Chroma 19055 series have 500VA output rating for high current Hi-Pot testing and analysis like motor components which have higher Parasitic Capacitor.
- Transformer: Corona discharge caused components broken even if transformer be used in rate voltage. Corona discharge detection (CDD) of 19055-C can find out corona discharge for electrical quality improving.
- Capacitor, Photocoupler, Insulation material: If there have gaps or voids in insulation material after molding, insulation level may lower than designed. Corona discharge detection (CDD) of 19055-C can find these defects which impacted insulation ability.

R&D engineer can perform insulation analysis and then improve insulation ability by these new measurement technologies.

MODEL 19055

Function

- HIPOT
 - >AC 5kV/100mA
 - ➤DC 6kV/20mA
- Insulation
 - ≥5kVmax
 - $> 1M\Omega \sim 50G\Omega$

Feature

- 500VA output rating
- Floating output meet EN50191
- Corona Discharge Detection (CDD, option)
- Flashover Detection
- Discharge Level Analysis (DLA)
- Open Short Check (OSC)
- High Frequency Contact Check (HFCC)
- Ground Fault Interrupt
- Standard RS232 interface
- Option GPIB&HANDLER interface
- Key lock function as Fail
- Programmable Voltage & limit
- CE Mark



Chroma

MEASUREMENT TECHNILOGY

Dielectric Withstand Test - Breakdown / Flashover / Corona Discharge Detection

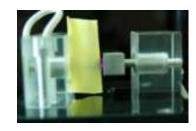
What does dielectric wthstand fail mean? Most of regulations write: "During the test, no flashover or breakdown shall occur."

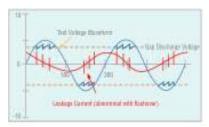
However, insulation failureure and discharge have been more important in materials and components. Because there is high relation between discharge and insulation ability, discharge is not only saftey issue but also a key point of electrial quality. Discharge have three types by material characteric: Corona discharge, Glow discharge and Arc discharge.

Corona Discharge: A type of localized discharge resulting from transient gaseous ionization in an insulation system when the voltage stress exceeds a critical value. The ionization is usually localized over a portion of the distance between the electrodes of the system and with lighting and temp rising. A long term of corona discharge and temp rising may cause qualitative Change of material, insulation deterioration, and finally insulation failure (a real corona discharge as figure). Corona discharge is a high frequency phenomenon which be able to detect by high level electric meter.

Glow Discharge and Arc Discharge: This is the electrical discharge generated by high electric field inside or on the surface of insulation material that makes the DUT lost its insulation and form a transient or discontinuous discharge. It causes the conductive path to be carbonated or the product to be damaged. Test for leakage current only is unable to screen out the defects. It is necessary to test the voltage or current for its change ration to screen out the defects. Thus Flashover detection is one of the most indispensable test items.

Chroma 19055 provide discharge level analysis including corona discharge detection (19055-C only), ARC/Flashover detection and breakdown detection for research and quality assurance.





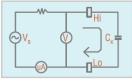
Flashover waveform

Contact Check — High Frequency Contact Check (HFCC) & Open Short Check (OSC, patent:254135)

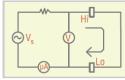
When open occurred during test procedure, FAIL product will be judged as GOOD product. When short occurred during test procedure, screening earlier to reduce the damage on equipment for saving test cost. Generally speaking, the DUT has capacitive load (Cx) from tens to thousands pF under normal status. To form a micro capacitance on open circuit interface once connection interrupted (as Cc). Generally speaking, the capacitance is lower than 10pF thus total capacitance is far lower than the status of normal product. The capacitance is far higher than normal status when DUT short or close to short. Therefore, users judge the short problem by using high/low limit value of capacitance change.

HFCC (High Frequency Contact Check) is a new measurement technology for contact check. HFCC is able to perform with Hi-Pot test by high frequency around 1MHz for higher efficiency on production line.

OSC (open / short check) is a mode for checking open & short on test circuit.
OSC avoid equipment damage and test fail from circuit open and DUT short
Before start the hipot test.



Normal Condition If Circuit

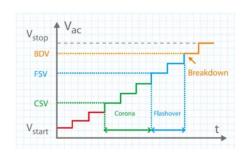


If Circuit opened: If circuit shorted: Cm >> Cx

DISCHARGE LEVEL ANALYSIS (DLA)

Dielectric withstanding voltage of component depends on material and Manufacturing Processes For improving insulation ability, discharge level should be defined including Corona discharge, Flashover and Breakdown. Chroma 19055 have Discharge Level Analysis mode (DLA) for definition by programming voltage, time, counts and limits.

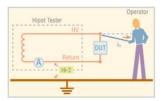
Discharge Level Analysis (DLA) provide three level and programmable limit judgment of Corona limit, ARC limit for flashover, high limit for breakdown. DLA mode will show the withstanding voltage depend on the different level limit, that means corona discharge Start Voltage (CSV), Flashover Start Voltage (FSV), and Breakdown Voltage (BDV). R&D and QC dept. can improving insulation by discharge data collection and analysis.



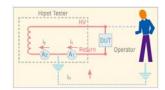
Operator Protection – Floating output / Ground Fault Interrupt (GFI)

Chroma develops Floating circuit by all new technology in order to let operator to use safety test equipment safely. Whatever the operator touches any Hipot test terminal under Floating status. The earth leakage current is lower than 3.5mA, the operator won't be hurt by electricity.

The requirement of test environment indicates that test equipment is equipped with auto interrupt device so that Chroma develops into Ground Fault Interrupt (GFI) function. When the current meter A1 and A2 detect the difference (i2-i1=iH) between the value i1 and actual i2 test current over high, this device can cut the power transiently for protecting human body safety. It is not only accordingly to the safety standard but also more safeguards for test personnel.



Floating output

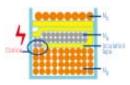


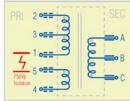
Ground Fault Interrupt

APPLICATION

Corona Discharge Detection (CDD) under rate voltage

Corona discharge caused components broken even if transformer be used in rate voltage. For example, most of power transformer have auxiliary winding in primary for other components used. As the figure, An input Vp=750V produce Corona discharge caused by manufacturing processes like insulation type fail or tubing fail. in After a Long time discharge inside lead to insulation qualitative change and failure.



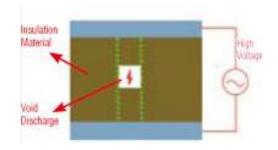


Primary winding fail cause insulation failure

Discharge Level Analysis for Capacitor/Photocoupler/Insulation material

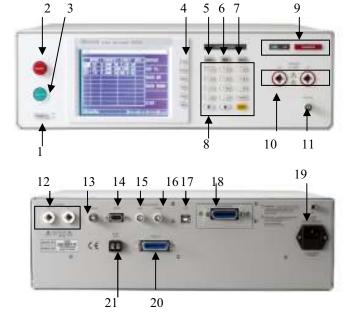
Generally, component research needs Discharge Level Analysis to verify insulation ability like high voltage capacitor, Photocoupler and Insulation material. If there are some gaps or voids inside insulation material, a electric field will change lead to corona discharge while a high voltage test performed.

Chroma 19055 Hipot Analyzer have Corona Discharge Detection (CDD) to find corona discharge out. Discharge Level Analysis can defined CSV, FSV, BDV and provide data for capacitor, photocoupler and other insulation materials analysis.



Void discharge

PANEL DESCRIPTION



- 1. Power Switch
- STOP Key
- 3. START Key
- Function Keys
- 5. MENU Key
- 6. MAIN INDEX Key7. LOCAL Key
- 8. Data Entry Keys/Program Keys
- 9. Indicator
- 10. HV1 / HV2
- 11. RTN/LOW
- 12. HV1 / HV2 (rear)
- 13. RTN/LOW (rear)
- 14. RS232 Interface
- 15. ARC Signal Monitor
- 16. Corona Signal Monitor
- 17. USB Interface18. GPIB Interface (option)
- 18. GPIB Interf19. Power Inlet
- 20. Handler Interface
- 21. Interlock

SPECIFICATIONS

Mode ACV/DCV/IR Withstanding Voltage AC : 0.05 - 5KV, DC : 0.05 ~ 6KV Load Regulation 1% of setting + 0.5% full range Voltage Accuracy 1% of setting + 0.5% full range Voltage Resolution 2V Cutoff Current AC : 100mA; DC : 20mA Current Accuracy 1% of setting + 0.5% full range Current Resolution AC : 1 μ A, DC : 0.1 μ A Output Frequency 50Hz / 60Hz Test/RampFall/Dwell 0.3 ~ 999 sec., continue / 0.1 ~ 999 sec., off / 0.1 ~ 999 sec., off Time Sine wave Insulation Resistance Test Output Voltage Output Voltage DC : 0.05 ~ 5kV Voltage Resolution 2V Voltage Accuracy 1% of setting + 0.5% full range IR Range 1MΩ ~ 50GΩ Resistance Resolution 0.1MΩ IR Sange 1MΩ ~ 1GΩ : ± 3% of reading + 0.1% of full range, I GΩ ~ 10GΩ : ± 7% of reading + 2% of full range, I GΩ ~ 10GΩ : ± 7% of reading + 2% of full range, ElkV 1GΩ ~ 10GΩ : ± 3% of reading + 0.1% of full range, Scanner Unit 8 ports, ± phase (4W DCR only 4 ports)	26.11		10000	
Withstanding Voltage	Model	19055		
Quiput Voltage		ACV/DCV/IR		
Voltage Accuracy 1% of setting ± 0.5% full range				
Voltage Accuracy	Output Voltage	AC: 0.05 ~ 5KV, DC: 0.05 ~ 6KV		
Voltage Accuracy	Load Regulation	1% of setting + 0.5% full range		
Cutoff Current AC:100mA;DC:20mA Current Accuracy 1% of setting + 0.5% full range Current Resolution AC:1 µA, DC: 0.1 µA Output Frequency \$101 µA Test/RampFall/Dwell 0.3 ~ 999 sec., continue / 0.1 ~ 999 sec., off / 0.1 ~ 999 sec., off Time Sine wave Waveform Sine wave Invalidation Resistance Test Output Voltage Output Voltage DC: 0.05 ~ 5kV Voltage Resolution 2V Voltage Accuracy 1 Mn ∩ - 50% full range IR Range 1 Mn ∩ - 50% full range Resistance Resolution 0.1MΩ Mn ∩ - 1GΩ : 2 3% of reading + 2% of full range, Fix V 1 Mn ∩ - 1GΩ : 2 3% of reading + 2% of full range, Section of the contract o	Voltage Accuracy	1% of setting + 0.5% full range		
Current Accuracy 1% of setting $+ 0.5\%$ full range Current Resolution AC: $1 \mu \Lambda$, DC: $0.1 \mu \Lambda$ Soluty frequency Soluty for $1 \mu \Lambda$ Solution Resistance Test Solution Resistance Test Solution	Voltage Resolution			
Current Resolution AC: 1 μ A, DC: 0.1 μ A Output Frequency Solt 2: 60Hz Test RampFall/Dwell Time 0.3 ~ 999 sec., continue / 0.1 ~ 999 sec., off / 0.1 ~ 999 sec., off / 0.1 ~ 999 sec., off Transition Resistance Test DC: 0.05 ~ 5kV Output Voltage DC: 0.05 ~ 5kV Voltage Resolution 2V Voltage Resolution 1MΩ ~ 50GΩ Resistance Resolution 0.1MΩ ~ 50GΩ Resistance Resolution 0.1MΩ ~ 50GΩ Resistance Resolution 0.1MΩ ~ 50GΩ Resistance Accuracy 1MΩ ~ 1GΩ : ± 3% of reading + 0.1% of full range, 16Q ~ 10GΩ : ± 10GΩ ~ 50GΩ 11MΩ ~ 60GΩ 16Q ~ 10GΩ : ± 10GΩ ~ 50GΩ 11MΩ ~ 60GΩ 2 kV 10GΩ ~ 50GΩ : ± 10% of reading + 0.1% of full range, 2 kV 10GΩ ~ 50GΩ : ± 10% of reading + 0.1% of full range, 2 kV 10GΩ ~ 50GΩ : ± 10% of reading + 0.1% of full range, 2 kV 10GΩ ~ 50GΩ : ± 10% of reading + 0.1% of full range, 2 kV 10GΩ ~ 50GΩ : ± 10% of reading + 0.1% of full range, 2 kV 10GΩ ~ 50GΩ : ± 10% of reading + 0.1% of full range, 2 kV 10GΩ ~ 50GΩ : ± 10% of reading + 0.0± of full range,	Cutoff Current	AC:100mA;DC:20mA		
Output Frequency 50Hz / 60Hz Time 0.3 ~ 999 sec., continue / 0.1 ~ 999 sec., off / 0.1 ~ 999 sec., off / 0.1 ~ 999 sec., off Waveform Sine wave Insulation Resistance Test Output Voltage Output Voltage DC: 0.05 ~ 5kV Voltage Accuracy 1% of setting + 0.5% full range IR Range IMQ ~ 50GΩ Resistance Resolution 0.1MΩ Resistance Accuracy 1MQ ~ 16GΩ : ±3% of reading + 1% of full range, 1MQ ~ 1GΩ : ±3% of reading + 2% of full range, 10GΩ ~ 50GΩ : ±10% of reading ± 2% of full range, 2500V 0.1MΩ ~ 1GΩ : ±3% of reading ± 1% of full range, 500V 0.1MΩ ~ 1GΩ : ±3% of reading ± 1% of full range, 500V 0.1MΩ ~ 1GΩ : ±3% of reading ± 1% of full range, 500V 0.1MΩ ~ 1GΩ : ±3% of reading ± 1% of full range, 500V 0.1MΩ ~ 1GΩ : ±3% of reading ± 1% of full range, 600Q : ±3% of reading ± 1% of full range, 8 ports, ±phase (4W DCR only 4 ports) 9 ports, ±phase (4W DCR only 4 ports) 1 p	Current Accuracy	1% of setting + 0.5% full range		
Output Frequency \$0Hz / 60Hz Time 0.3 ~ 999 sec., continue / 0.1 ~ 999 sec., off / 0.1 ~ 900 sec.	Current Resolution	, , , , , , , , , , , , , , , , , , ,		
TestRampfFall/Dwell				
Time 0.3 × 999 sec., continue / 0.1 × 999 sec., control. 1 × 990 sec., control. 1 × 990 sec., control. 2 × 990 volta. 2 × 990				
Insulation Resistance Test	<u> </u>	0.5 ~ 999 sec., continue / 0.1 ~ 999 sec., off / 0.1 ~ 999 sec., off / 0.1 ~ 999 sec., off		
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $	Waveform	Sine wave		
$\begin{tabular}{ c c c c c c } \hline Voltage Resolution & 2V \\ \hline Voltage Accuracy & 1% of setting + 0.5\% full range & 1M\Omega \sim 50G\Omega \\ \hline Resistance Resolution & 0.1M\Omega \\ \hline Resistance Resolution & 0.1M\Omega \\ \hline Resistance Resolution & 0.1M\Omega \\ \hline & 1M\Omega \sim 1G\Omega: \pm 3\% \ of reading + 0.1\% \ of full range, \\ \hline & 1G\Omega \sim 10G\Omega: \pm 1\% \ of reading + 2\% \ of full range, \\ \hline & 1G\Omega \sim 10G\Omega: \pm 10\% \ of reading + 1\% \ of full range, \\ \hline & 1G\Omega \sim 10G\Omega: \pm 10\% \ of reading + 1\% \ of full range, \\ \hline & 1G\Omega \sim 10G\Omega: \pm 2\% \ of reading + 1\% \ of full range, \\ \hline & 1G\Omega \sim 10G\Omega: \pm 2\% \ of reading + 1\% \ of full range, \\ \hline & 1G\Omega \sim 10G\Omega: \pm 10\% \ of reading + 1\% \ of full range, \\ \hline & 1G\Omega \sim 10G\Omega: \pm 10\% \ of reading + 1\% \ of full range, \\ \hline & 1G\Omega \sim 10G\Omega: \pm 10\% \ of reading + 1\% \ of full range, \\ \hline & 1G\Omega \sim 10G\Omega: \pm 10\% \ of reading + 1\% \ of full range, \\ \hline & 1G\Omega \sim 10G\Omega: \pm 10\% \ of reading + 1\% \ of full range, \\ \hline & 1G\Omega \sim 10G\Omega: \pm 10\% \ of reading + 1\% \ of full range, \\ \hline & 1G\Omega \sim 10G\Omega: \pm 10\% \ of reading + 1\% \ of full range, \\ \hline & 1G\Omega \sim 10G\Omega: \pm 2\% \ of reading + 1\% \ of full range, \\ \hline & 1G\Omega \sim 10G\Omega: \pm 2\% \ of reading + 1\% \ of full range, \\ \hline & 1G\Omega \sim 10G\Omega: \pm 2\% \ of reading + 1\% \ of full range, \\ \hline & 1G\Omega \sim 10G\Omega: \pm 2\% \ of reading + 1\% \ of full range, \\ \hline & 1G\Omega \sim 10G\Omega: \pm 2\% \ of reading + 1\% \ of full range, \\ \hline & 1G\Omega \sim 10G\Omega: \pm 2\% \ of reading + 1\% \ of full range, \\ \hline & 1G\Omega \sim 10G\Omega: \pm 2\% \ of reading + 1\% \ of full range, \\ \hline & 1G\Omega \sim 10G\Omega: \pm 2\% \ of reading + 1\% \ of full range, \\ \hline & 1G\Omega \sim 10G\Omega: \pm 2\% \ of reading + 1\% \ of full range, \\ \hline & 1G\Omega \sim 10G\Omega: \pm 2\% \ of reading + 1\% \ of full range, \\ \hline & 1G\Omega \sim 10G\Omega: \pm 2\% \ of reading + 1\% \ of full range, \\ \hline & 1G\Omega \sim 10G\Omega: \pm 2\% \ of reading + 1\% \ of full range, \\ \hline & 1G\Omega \sim 10G\Omega: \pm 2\% \ of reading + 1\% \ of full range, \\ \hline & 1G\Omega \sim 10G\Omega: \pm 2\% \ of reading + 1\% \ of full range, \\ \hline & 1G\Omega \sim 10G\Omega: \pm 2\% \ of reading + 1\% \ of full range, \\ \hline & 1G\Omega \sim 10G\Omega: \pm 2\% \ of reading + 1\% \ of reading \\ \hline & 1G\Omega \sim 10G\Omega: \pm 2\% \ of reading + 1\% \ of reading \\ \hline & 1G\Omega \sim 10G\Omega: \pm 2\% \ of reading + 10$	Insulation Resistance Test			
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RR Range $1M\Omega - 50G\Omega$ $0.1M\Omega$ $0.1M\Omega$	Voltage Accuracy	1% of setting + 0.5% full range		
Resistance Resolution 0.1MΩ Resistance Accuracy 1MΩ ∩ 1GΩ : ± 3% of reading + 0.1% of full range, 10GΩ − 50GΩ : ± 10% of reading + 2% of full range, 10GΩ − 50GΩ : ± 10% of reading + 1% of full range, 10GΩ − 10GΩ : ± 3% of reading + 1% of full range, 10GΩ − 10GΩ : ± 3% of reading + 2% of full range, 10GΩ − 10GΩ : ± 3% of reading + 2% of full range, 10GΩ − 50GΩ : ± 10% of reading + 1% of full range, 10GΩ − 50GΩ : ± 10% of reading + 1% of full range, 10GΩ − 50GΩ : ± 10% of reading + 1% of full range, 10GΩ − 50GΩ : ± 10% of reading + 1% of full range, 10GΩ + 2% of full range, 10GΩ - 50GΩ : ± 10% of reading + 1% of full range, 10GΩ - 20GΩ ·				
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Scanner Unit S ports, ±phase (4W DCR only 4 ports)				
Scanner Unit 8 ports, ±phase (4W DCR only 4 ports) Flashover Detection setting Mode Programmable setting Detection Current AC: 20mA;DC: 10mA Contact Check Function HFCC High frequency contact check OSC (open/short check) 200Hz, 0.1s Electrical Hazard Protection Function Floating output design Leakage current <3 mA Fast Output Cut-off 0.4ms after NG happen Ground Fault Interrupt 0.5m 4 ±0.5m AC, ON/OFF Panel Operation Lock Present password Interlock YES GO/NG Judgment Window Indication, Alarm GO: Short sound, Green LED; NG: Long sound, Red LED Data Hold Least tests data memories Memory Storage Interface R\$232, Handler interface (Standard), GPIB interface (Optional). General Operation Environment Temperature: 0°C ~ 45°C, Humidity: 15% to 95% R.H.@ ≤ 40°C Power Consumption SOVA Power Requirements 90~132Vac or 198~264Vac, 47~66Hz Weight		<500V		
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OSC (open/short check) 200Hz, 0.1s Electrical Hazard Protection Function Floating output design Leakage current <3 mA				
OSC (open/short check) 200Hz, 0.1s Electrical Hazard Protection Function Floating output design Leakage current <3 mA	HFCC	High frequency contact check		
Electrical Hazard Protection Function Floating output design Fast Output Cut-off Ground Fault Interrupt Ground Fault Interrupt Description Lock Fresent password Interlock For Short sound, Green LED; NG: Long sound, Red LED Data Hold Least tests data memories Memory Storage Interface RS232, Handler interface (Standard), GPIB interface (Optional). General Operation Environment Temperature: 0°C ~ 45°C, Humidity: 15% to 95% R.H@≤ 40°C Power Consumption Sudy A green LED; NG: Long Sound, Red LED Data Hold Least tests data memories Temperature: 0°C ~ 45°C, Humidity: 15% to 95% R.H@≤ 40°C Power Requirements 90~132Vac or 198~264Vac, 47~66Hz Weight	OSC (open/short check)			
Floating output design Fast Output Cut-off Ground Fault Interrupt Ground Fault Interrupt D.5mA ±0.25mA AC, ON/OFF Panel Operation Lock Present password Interlock GO'NG Judgment Window Indication, Alarm GO: Short sound, Green LED; NG: Long sound, Red LED Data Hold Least tests data memories Memory Storage Interface RS232, Handler interface (Standard), GPIB interface (Optional). General Operation Environment Temperature: 0°C ~ 45°C, Humidity: 15% to 95% R.H@ ≤ 40°C Power Consumption 500VA Power Requirements 90~132Vac or 198~264Vac, 47~66Hz Weight	Electrical Hazard Protection Function			
Ground Fault Interrupt Panel Operation Lock Present password Interlock YES GO/NG Judgment Window Indication, Alarm GO: Short sound, Green LED; NG: Long sound, Red LED Data Hold Least tests data memories Memory Storage Interface RS232, Handler interface (Standard), GPIB interface (Optional). General Operation Environment Temperature: 0°C ~ 45°C, Humidity: 15% to 95% R.H@≦ 40°C Power Consumption 500VA Power Requirements 90~132Vac or 198~264Vac, 47~66Hz Weight	Floating output design	Leakage current <3 mA		
Panel Operation Lock Interlock GO/NG Judgment Window Indication, Alarm GO: Short sound, Green LED; NG: Long sound, Red LED Data Hold Least tests data memories Memory Storage Interface RS232, Handler interface (Standard), GPIB interface (Optional). General Operation Environment Temperature: 0°C ~ 45°C, Humidity: 15% to 95% R.H@≤ 40°C Power Consumption 500VA Power Requirements 90~132Vac or 198~264Vac, 47~66Hz Weight	Fast Output Cut-off			
Interlock GO/NG Judgment Window Indication, Alarm GO: Short sound, Green LED; NG: Long sound, Red LED Data Hold Least tests data memories Memory Storage Interface RS232, Handler interface (Standard), GPIB interface (Optional). General Operation Environment Temperature: 0°C ~ 45°C, Humidity: 15% to 95% R.H@≤ 40°C Power Consumption 500VA Power Requirements 90~132Vac or 198~264Vac, 47~66Hz Weight		0.5mA ±0.25mA AC, ON/OFF		
Interlock YES GO/NG Judgment Window Indication, Alarm GO: Short sound, Green LED; NG: Long sound, Red LED Data Hold Least tests data memories Memory Storage Interface RS232, Handler interface (Standard), GPIB interface (Optional). General Operation Environment Temperature: 0°C ~ 45°C, Humidity: 15% to 95% R.H@≦ 40°C Power Consumption 500VA Power Requirements 90~132Vac or 198~264Vac, 47~66Hz Weight	Panel Operation Lock	Present password		
Indication, Alarm GO: Short sound, Green LED; NG: Long sound, Red LED Data Hold Least tests data memories Memory Storage Interface RS232, Handler interface (Standard), GPIB interface (Optional). General Operation Environment Temperature: $0^{\circ}C \sim 45^{\circ}C$, Humidity: 15% to 95% R.H@ $\leq 40^{\circ}C$ Power Consumption 500VA Power Requirements $90\sim132$ Vac or $198\sim264$ Vac, $47\sim66$ Hz Weight	Interlock			
Indication, Alarm GO: Short sound, Green LED; NG: Long sound, Red LED Data Hold Least tests data memories Memory Storage Interface RS232, Handler interface (Standard), GPIB interface (Optional). General Operation Environment Temperature: 0°C ~ 45°C, Humidity: 15% to 95% R.H@≤ 40°C Power Consumption 500VA Power Requirements 90~132Vac or 198~264Vac, 47~66Hz Weight	GO/NG Judgment Window			
$\begin{tabular}{ll} Data Hold & Least tests data memories \\ Memory Storage & \\ \hline {\bf Interface} & \\ \hline {\bf RS232, Handler interface (Standard), GPIB interface (Optional).} \\ \hline {\bf General} & \\ \hline {\bf Operation Environment} & Temperature: 0°C ~ 45°C, Humidity: 15% to 95% R.H@ \leq 40°C $		GO: Short sound, Green LED; NG: Long sound, Red LED		
Interface RS232, Handler interface (Standard), GPIB interface (Optional). General Operation Environment Temperature: 0° C ~ 45° C, Humidity: 15% to 95% R.H@≤ 40° C Power Consumption 500VA Power Requirements $90\sim132\text{Vac}$ or $198\sim264\text{Vac}$, $47\sim66\text{Hz}$ Weight $90\sim132\text{Vac}$ or $198\sim264\text{Vac}$, $47\sim66\text{Hz}$	Data Hold			
RS232, Handler interface (Standard), GPIB interface (Optional). General Operation Environment Temperature: $0^{\circ}\text{C} \sim 45^{\circ}\text{C}$, Humidity: 15% to 95% R.H@ $\leq 40^{\circ}\text{C}$ Power Consumption 500VA Power Requirements $90\sim132\text{Vac}$ or $198\sim264\text{Vac}$, $47\sim66\text{Hz}$ Weight	Memory Storage			
General Operation Environment Temperature: 0°C ~ 45°C, Humidity: 15% to 95% R.H@≤ 40°C Power Consumption 500VA Power Requirements 90~132Vac or 198~264Vac, 47~66Hz Weight $\frac{1}{2}$				
Operation EnvironmentTemperature: 0° C ~ 45° C, Humidity: 15% to 95% R.H@ $\leq 40^{\circ}$ CPower Consumption 500VA Power Requirements $90\sim132\text{Vac}$ or $198\sim264\text{Vac}$, $47\sim66\text{Hz}$ Weight $90\sim132\text{Vac}$ or $198\sim264\text{Vac}$, $198\sim264\text$	RS232, Handler interface (Standard), GPIB interface (Optional).			
Power Consumption 500VA Power Requirements 90~132Vac or 198~264Vac, 47~66Hz Weight				
Power Requirements 90~132Vac or 198~264Vac, 47~66Hz Weight				
Weight				
		90~132Vac or 198~264Vac, 47~66Hz		
Size				
	Size			

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A190708 ARC (Flashover) Verification Fixture

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