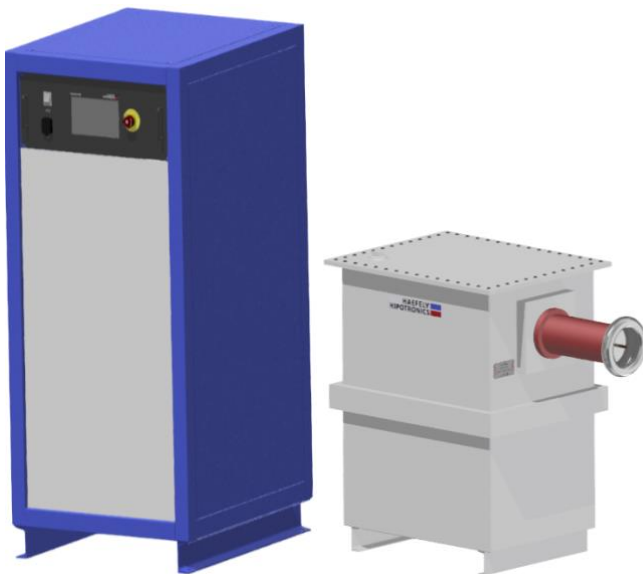


700-DI Series AC Dielectric Test Sets

High Voltage AC Test Systems – 2-100kVA

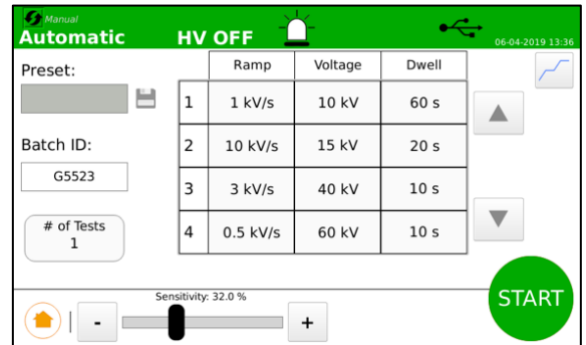
The HAEFELY HIPOTRONICS standard line of AC Dielectric Test Systems are designed to perform high voltage AC tests on electrical apparatus in accordance with IEC60, IEEE 4 and IEC 270 and other national test standards. A variety of mechanical configurations are available to suit different installation conditions. Some models can be supplied in mobile versions when it is difficult to move the test object to the test area.

AC Dielectric Test Sets are available in a wide range of voltage and power ratings with exceptional reliability, durability and functionality. No matter what your requirement, HAEFELY HIPOTRONICS has an affordably priced, highly reliable test solution to meet your needs.



Embedded controller standard for all models

**Pictures are for reference only and may not reflect final design*



FEATURES

- Microprocessor controller** provides better regulation accuracy and measuring accuracy
- Continuously adjustable test output voltage**
- SIL3 Compatible**
- Designed** to operate from .5% to 100% of the maximum rated output voltage
- Easily accessible** meter recalibration
- Adjustable Overload** from 10% to 110% of rated current output
- Backup Breaker** overload safety situation
- Output Connected** voltmeter and ammeter
- Zero start interlock** ensures that the voltage control is at a minimum before HV can be energized
- Rated current** available from zero to rated voltage

BENEFITS

- Simple to Use** with minimal amount of setup time and intuitive control panel allows for simple testing
- Surge-compensated** HV transformer windings for withstanding flashovers at full voltage
- Output Connected Meters** ensures for fast and accurate readings
- Surge and Transient Protection** on all meters, transformers, etc.
- Partial Discharge Testing** allows for low PD levels available at full output voltage (PD level needs to be specified when ordering and may require additional components)

APPLICATIONS

- Transformers
- Bushings
- Connectors
- Capacitors
- Switchgear
- Arrestors
- Instrument Transformers
- Sample Cable Lengths
- Rotating Machines
- Insulating Materials
- Transmission Line Hardware
- HV Components

TECHNICAL SPECIFICATIONS

	Electronic Devices		High Voltage Equipment	
	Temperature	Humidity (r.h. non-condensing)	Temperature	Humidity (r.h. non-condensing)
Operation	+5°C ... +40°C	5...95%	-10°C ... +45°C	5...90%
Storage	-20°C ... +70°C	5...95%	-10°C ... +55°C	5...90%

System Accuracy	
Measurement Accuracy	
Kilovoltmeter Accuracy	± 1.5% of Reading ± 0.2% F.S
Current Meter Accuracy	± 1.5% of Reading ± 0.2% F.S
Measurement Resolution	0.01kV, 0.01mA
Ramp Rate Accuracy	+/- 5%
Step Resolution	0.5% of Full Scale
PD Baseline	≤20pC up to full voltage for oil insulated transformers

2kVA Power Rating					
Parameter	705-2	710-2	715-2	730-2	750-2
Input Voltage	90-264VAC, 50/60Hz				
Max Output Voltage	5kV	10kV	15kV	30kV	50kV
Max Output Current	400mA	200mA	133mA	66mA	40mA
Output Connection					
HV Air Transformer	Shielded Cable Output			n/a	
HV Tank	Shielded Cable Output			Epoxy Output Bushing	
Duty Cycle					
HV Air Transformer	15min ON / 45min OFF, 6x/day			n/a	
HV Tank	1hr ON / 1hr OFF, 6x/day or Continuous @ 90% rated voltage, and 75% rated current				
Controller Dimensions (W x H x D)					
HV Air Transformer	21.5" x 15" x 15.7" (546 x 381 x 399mm)			n/a	
HV Tank	16.925" x 7" x 18.1" (430 x 180 x 460mm)				
Controller Weight (Net)					
HV Air Transformer	80lbs (37kg)			n/a	
HV Tank	40lbs (18kg)				
HV Source Dimensions (W x H x D)					
HV Air Transformer	In Control / Regulator Section			n/a	
HV Tank	10" x 10" x 10" (254 x 254 x 254mm)			12" x 12" x 11" (305 x 305 x 279mm)	14" x 14" x 12" (356 x 356 x 305mm)
HV Weight (Net)					
HV Air Transformer	In Control / Regulator Section			n/a	
HV Tank	50lbs (23kg)			60lbs (28kg)	72lbs (33kg)

5kVA Power Rating						
Parameter	705-5	715-5	730-5	775-5	7100-5	
Input Voltage	90-264VAC, 50/60Hz					
Max Output Voltage	5kV	15kV	30kV	75kV	100kV	
Max Output Current	1000mA	333mA	166mA	66mA	50mA	
Output Connection						
HV Air Transformer	Shielded Cable Output			n/a		
HV Tank	Shielded Cable Output			Epoxy Output Bushing		
Duty Cycle						
HV Air Transformer	15min ON / 45min OFF, 6x/day			n/a		
HV Tank	1hr ON / 1hr OFF, 6x/day or Continuous @ 90% rated voltage, and 75% rated current					
Controller Dimensions (W x H x D)						
HV Air Transformer	21.5" x 15" x 15.7" (546 x 381 x 399mm)			n/a		
HV Tank	16.925" x 7" x 18.1" (430 x 180 x 460mm)					
Controller Weight (Net)						
HV Air Transformer	420lbs (191kg)			n/a		
HV Tank	40lbs (18kg)					
HV Source Dimensions (W x H x D)						
HV Air Transformer	In Control / Regulator Section			n/a		
HV Tank	16" x 19" x 16" (407 x 483 x 407mm)			21" x 23" x 36" (533 x 584 x 914mm)	21" x 36" x 40" (533 x 914 x 1016mm)	21" x 36" x 48" (533 x 914 x 1219mm)
HV Weight (Net)						
HV Air Transformer	In Control / Regulator Section			n/a		
HV Tank	400lbs (182kg)			450lbs (205kg)	850lbs (386kg)	1100lbs (500kg)

	10kVA Power Rating				
Parameter	705-10	715-10	730-10	775-10	7100-10
Input Voltage	230V, 50/60Hz. Other Inputs Available. Consult Factory.				
Max Output Voltage	5kV	15kV	30kV	75kV	100kV
Max Output Current	2000mA	666mA	333mA	133mA	100mA
Output Connection	Shielded Cable Output		Epoxy Output Bushing		
Duty Cycle	1hr ON / 1hr OFF, 6x/day or Continuous @ 90% rated voltage, and 75% rated current				
Controller Dimensions (W x H x D)	25" x 72" x 30" (635 x 1829 x 762mm)		23" x 51" x 26" (584 x 1295 x 660mm)		
Controller Weight (Net)	1000lbs (454kg)		550lbs (250kg)		
HV Source Dimensions (W x H x D)	In Control / Regulator Section		21" x 23" x 36" (533 x 584 x 914mm)	21" x 36" x 40" (533 x 914 x 1016mm)	21" x 36" x 48" (533 x 914 x 1219mm)
HV Weight (Net)	In Control / Regulator Section		550lbs (250kg)	1000lbs (454kg)	1100lbs (500kg)

	20kVA Power Rating				
Parameter	705-20	715-20	730-20	775-20	7100-20
Input Voltage	480V, single phase, 60Hz; 380V, single phase, 50Hz. Other Inputs Available. Consult Factory.				
Max Output Voltage	5kV	15kV	30kV	75kV	100kV
Max Output Current	4000mA	1333mA	666mA	266mA	200mA
Output Connection	Shielded Cable Output		Epoxy Output Bushing		
Duty Cycle	1hr ON / 1hr OFF, 6x/day or Continuous @ 90% rated voltage, and 75% rated current				
Controller Dimensions (W x H x D)	25" x 73" x 30" (635 x 1854 x 762mm)				
Controller Weight (Net)	2000lbs (909kg)		600lbs (273kg)		
HV Source Dimensions (W x H x D)	In Control / Regulator Section		21" x 36" x 39" (533 x 914 x 991mm)	21" x 36" x 40" (533 x 914 x 1016mm)	21" x 36" x 48" (533 x 914 x 1219mm)
HV Weight (Net)	In Control / Regulator Section		900lbs (409kg)	950lbs (432kg)	1300lbs (591kg)

	40kVA Power Rating				
Parameter	705-40	715-40	720-40	750-40	7100-40
Input Voltage	480V, single phase, 60Hz; 380V, single phase, 50Hz. Other Inputs Available. Consult Factory.				
Max Output Voltage	5kV	15kV	20kV	50kV	100kV
Max Output Current	8000mA	2666mA	2000mA	800mA	400mA
Output Connection	Shielded Cable Output		Epoxy Output Bushing		
Duty Cycle	1hr ON / 1hr OFF, 6x/day or Continuous @ 90% rated voltage, and 75% rated current				
Controller Dimensions (W x H x D)	25" x 73" x 30" (635 x 1854 x 762mm)				
Controller Weight (Net)	800lbs (363kg)				
HV Source Dimensions (W x H x D)	30" x 48" x 52" (762 x 1219 x 1320mm)		21" x 36" x 39" (533 x 914 x 991mm)	21" x 36" x 39" (533 x 914 x 991mm)	30" x 40" x 48" (533 x 914 x 991mm)
HV Weight (Net)	750lbs (340kg)		1200lbs (544kg)	Net 1700lbs (771kg)	2070lbs (941kg)

	60kVA Power Rating				
Parameter	705-60	720-60	760-60	7100-60	
Input Voltage	480V, single phase, 60Hz; 380V, single phase, 50Hz. Other Inputs Available. Consult Factory.				
Max Output Voltage	5kV	20kV	60kV	100kV	
Max Output Current	12000mA	3000mA	1000mA	600mA	
Output Connection	Shielded Cable Output		Epoxy Output Bushing		
Duty Cycle	1hr ON / 1hr OFF, 6x/day or Continuous @ 90% rated voltage, and 75% rated current				
Controller Dimensions (W x H x D)	25" x 73" x 30" (635 x 1854 x 762mm)				
Controller Weight (Net)	900lbs (409kg)				
HV Source Dimensions (W x H x D)	30" x 48" x 52" (762 x 1219 x 1320mm)		29" x 37" x 40" (737 x 940 x 1016mm)	34" x 42" x 49" (864 x 1067 x 1245mm)	34" x 48" x 55" (864 x 1220 x 1397mm)
HV Weight (Net)	1000lbs (454kg)		1600lbs (726 kg)	2000lbs (907 kg)	2540lbs (1155 kg)

	100kVA Power Rating			
Parameter	720-100	750-100	775-100	7100-100
Input Voltage	480V, single phase, 60Hz; 380V, single phase, 50Hz. Other Inputs Available. Consult Factory.			
Max Output Voltage	20kV AC	50kV AC	75kV AC	100kV AC
Max Output Current	5000mA	2000mA	1333mA	1000mA
Output Connection	Epoxy Output Bushing			
Duty Cycle	1hr ON / 1hr OFF, 6x/day or Continuous @ 90% rated voltage, and 75% rated current			
Controller Dimensions (W x H x D)	30" x 73" x 42" (762 x 1854 x 1067mm)			
Controller Weight (Net)	1400lbs (636 kg)			
HV Source Dimensions (W x H x D)	30" x 39" x 40" (762 x 991 x 1016mm)	30" x 39" x 40" (762 x 991 x 1016mm)	34" x 42" x 53" (864 x 1067 x 1346mm)	34" x 45" x 58" (864 x 1143 x 1473mm)
HV Weight (Net)	2600lbs (1182 kg)	2800lbs (1273 kg)	2900lbs (1315 kg)	3100lbs (1409 kg)

Note: Dimensions and weights are approximate.
 * Other output ratings available; consult factory with your requirements.

Voltage Output Range	0.5-100% of F.S.
ECCN	3A992.A
HTS US	9030.39.0100

SCOPE OF SUPPLY

Embedded controller
 Regulator
 HV transformer
 Manual and Test Report

STANDARD OPTIONS



HHDA13-280 – 120kV rated grounding stick



CF – $\leq 2\text{pC}$ PD Spec

REM – Controller remotely connected



GND Band or Braid – Grounding material

EXT-WARN – Warranty Extensions

OPTIONAL ACCESSORIES



2823 & 2823-REF C / $\tan\delta$ bridges



DDX9121b Partial Discharge Detector