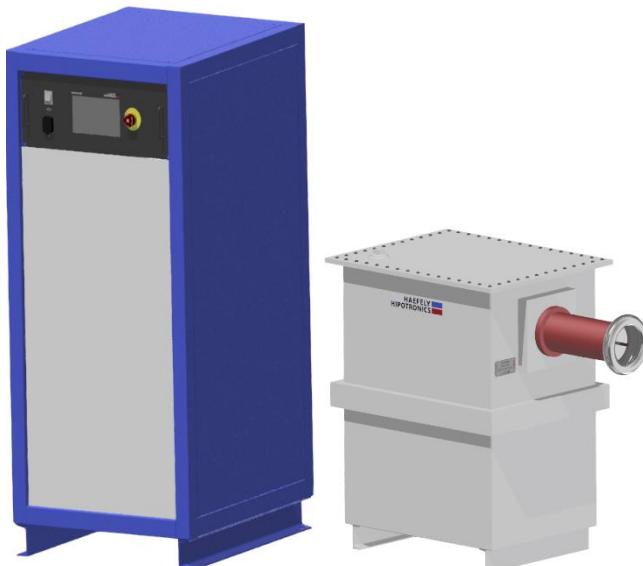


700-DI Series AC Dielectric Test Sets

High Voltage AC Test Systems – 2-100kVA

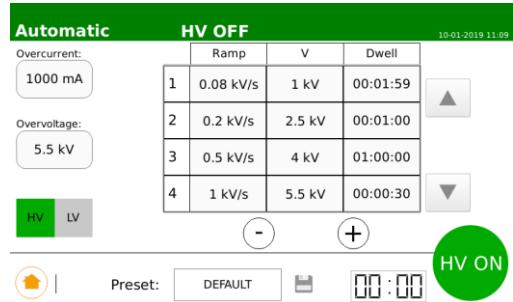
The HIPOTRONICS standard line of AC Dielectric Test Systems are designed to perform high voltage AC tests on electrical apparatus in accordance with IEC60, IEEE 4 and IEC 270 and other national test standards. A variety of mechanical configurations are available to suit different installation conditions. 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, 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 0.5% 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

- | | |
|--|--|
| <input checked="" type="checkbox"/> Transformers | <input checked="" type="checkbox"/> Instrument Transformers |
| <input checked="" type="checkbox"/> Bushings | <input checked="" type="checkbox"/> Sample Cable Lengths |
| <input checked="" type="checkbox"/> Connectors | <input checked="" type="checkbox"/> Rotating Machines |
| <input checked="" type="checkbox"/> Capacitors | <input checked="" type="checkbox"/> Insulating Materials |
| <input checked="" type="checkbox"/> Switchgear | <input checked="" type="checkbox"/> Transmission Line Hardware |
| <input checked="" type="checkbox"/> Arrestors | <input checked="" type="checkbox"/> 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
Voltage & Current Measurement 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	Bushing			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	22" x 21" x 26" (546 x 510 x 660mm)			n/a			
HV Tank	16.60" x 7.75" x 20.5" (422 x 197 x 520.7mm)						
Controller Weight (Net)							
HV Air Transformer	130lbs (59kg)			n/a			
HV Tank	30lbs (13.6kg)						
HV Source Dimensions (W x H x D)							
HV Air Transformer	In Control / Regulator Section			n/a			
HV Tank	20.50" x 29.25" x 25.0" (521 x 743 x 635mm)			20.50" x 25.00" x 31.00" (521 x 743 x 787mm)			
HV Weight (Net)							
HV Air Transformer	In Control / Regulator Section			n/a			
HV Tank	400lbs (181kg)			425lbs (193kg)	450lbs (204kg)		

	5kVA Power Rating						
Parameter	705-5	715-5	730-5	775-5	7100-5		
Input Voltage	200-264VAC, 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	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 20.06" x 26.0" (546 x 510 x 660mm)			n/a			
HV Tank	16.60" x 7.75" x 20.5" (422 x 197 x 520.7mm)						
Controller Weight (Net)							
HV Air Transformer	150lbs (68kg)			n/a			
HV Tank	30lbs (13.6kg)						
HV Source Dimensions (W x H x D)							
HV Air Transformer	In Control / Regulator Section			n/a			
HV Tank	20.50" x 25" x 29.25" (521 x 635 x 743mm)			25" x 34" x 38" (635 x 864 x 965mm)	25" x 37" x 46.5" (635 x 940 x 1181mm)		



HV Weight (Net)					
HV Air Transformer	In Control / Regulator Section				n/a
HV Tank	425lbs (193kg)	450lbs (205kg)	500lbs (227kg)	660lbs (299kg)	860lbs (390kg)

Parameter	10kVA Power Rating								
	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)	22.75" x 26.25" x 47" (578 x 667 x 1194mm)								
Controller Weight (Net)	600lbs (272kg)		400lbs (181kg)						
HV Source Dimensions (W x H x D)	In Control / Regulator Section	20.50" x 25" x 29.25" (521 x 635 x 743mm)	25" x 37" x 40" (635 x 940 x 1016mm)	25" x 37" x 47" (635 x 940 x 1193mm)					
HV Weight (Net)	In Control / Regulator Section	500lbs (227kg)	860lbs (390kg)	900lbs (408kg)					

Parameter	20kVA Power Rating								
	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 30" x 54" (635 x 762 x 1371.2mm)								
Controller Weight (Net)	700lbs (318kg)		300lbs (136kg)						
HV Source Dimensions (W x H x D)	In Control / Regulator Section	25" x 38" x 37" (635 x 965 x 940mm)	25" x 37" x 40" (635 x 940 x 1016mm)	25" x 37" x 47" (635 x 940 x 1194mm)					
HV Weight (Net)	In Control / Regulator Section	900lbs (409kg)	950lbs (432kg)	1300lbs (591kg)					

Parameter	40kVA Power Rating				
	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)	30" x 75" x 48" (762 x 1905 x 1219mm)	30.25" x 60" x 31" (768 x 1524 x 787mm)			
Controller Weight (Net)	1400lbs (635kg)	450lbs (204kg)			
HV Source Dimensions (W x H x D)	In Control / Regulator Section	25" x 37" x 38" (635 x 940 x 965mm)			30.5" x 40" x 55.5" (775 x 1016 x 1410mm)
HV Weight (Net)	In Control / Regulator Section	925lbs (420kg)	Net 1450lbs (658kg)	1800lbs (816kg)	

	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)	30" x 75" x 48" (762 x 1905 x 1219mm)	30.25" x 31" x 75" (768 x 787 x 1905mm)		
Controller Weight (Net)	1800lbs (816kg)	800lbs (363kg)		
HV Source Dimensions (W x H x D)	In Control / Regulator Section	30.5" x 38" x 41" (775 x 965 x 1041mm)	30.5" x 40" x 46" (775 x 1016 x 1168mm)	36.5" x 48" x 55.5" (927 x 1219 x 1410mm)
HV Weight (Net)	In Control / Regulator Section	1400lbs (635 kg)	1925lbs (873 kg)	2600lbs (11795 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 73.5" x 48" (762 x 1867 x 1219mm)			
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 40" x 40" (762 x 1016 x 1016mm)	30" x 50" x 57.5" 762 x 1270x 1461mm	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 and are subject to change.

* 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

STANDARD OPTIONS

Embedded controller

HHDA13-280 – 120kV rated grounding stick

Regulator

CF – ≤2pC PD specification

HV transformer

REM – Controller remotely connected

Manual and Test Report

GND Braid – Grounding material

CUSTOMER SUPPLIED

Input & output regulator power cables

700-DI-HS – Hand operated interlock switch

High voltage output connection to test object

700-DI-FS – Foot operated interlock switch

Grounding materials

700-DI-WARN – Safety strobe light with magnetic base

Casters – Set of casters for regulator & HV tank (if applicable)

DI-FO – Fiber optic connection to computer (customer supplied)