



## ELECTRICAL TEST INSTRUMENTS

# Benchtop AC Dielectric Test Sets

5-15 KV

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SUITABLE FOR DIELECTRIC AND INSULATION TESTING UP TO 15 KV ON ALL TYPES OF ELECTRICAL APPARATUS

# BENCHTOP AC DIELECTRIC TEST SETS

5-15 kV

## SUITABLE FOR DIELECTRIC AND INSULATION TESTING UP TO 15 KV ON ALL TYPES OF ELECTRICAL APPARATUS

## Testing Applications

- Suitable for AC dielectric and insulation testing up to 15 kV on all types of electrical products such as motors, cables, switchgear, bushings, capacitors, fuses, and arrestors
- Complies with UL, CSA, OSHA, NEMA, IEC, AEIC, EPCEA, IEEE, ASTM and other applicable testing standards

## Design Features

- 1-piece design
- Housed in a rugged steel enclosure
- Models available with easy to read digital meters or a full-color touch screen display with data acquisition
- ISO17025 calibration upon request

The Doble line of 5 kV-15 kV AC Hipots offer a completely integrated, easy-to-use high voltage AC supply. The air insulated high voltage transformer, controls and regulator are housed either in a painted steel benchtop enclosure or for the larger units in a free-standing steel enclosure with casters.

All units are equipped with standard safety features such as circuit breaker protection, adjustable output overloads, external interlock provisions, and zero start interlock. The output voltage is completely adjustable from near zero to 100% of output via a rugged and reliable variable autotransformer.

These AC dielectric test systems are ideally suited for dielectric testing up to 15kVAC within a wide variety of applications.



Model 615-20P



Model 605-2P



|                                                | MODEL               | 605-2P or B                                               | 605-5P or B                                                  | 605-10P or B                                                 | 610-2P or B                                               | 610-5P or B                                                  |
|------------------------------------------------|---------------------|-----------------------------------------------------------|--------------------------------------------------------------|--------------------------------------------------------------|-----------------------------------------------------------|--------------------------------------------------------------|
| INPUT                                          | Voltage             | 115/120 V, 60 Hz<br>or                                    | 220/240 V                                                    | 220/240 V                                                    | 115/120 V, 60 Hz<br>or                                    | 220/240 V                                                    |
|                                                | Frequency           | 220/240 V, 50 Hz                                          | 50/60 Hz                                                     | 50/60 Hz                                                     | 220/240 V, 50 Hz                                          | 50/60 Hz                                                     |
| OUTPUT                                         | Voltage             | ≈ 0-5 kV                                                  | ≈ 0-5 kV                                                     | ≈ 0-5 kV                                                     | ≈ 0-10 kV                                                 | ≈ 0-10 kV                                                    |
|                                                | Current             | 0-400 mA                                                  | 0-1 A                                                        | 0-2 A                                                        | 0-200 mA                                                  | 0-500 mA                                                     |
| DUTY CYCLES                                    | 5 min ON/15 min OFF | 2 kVA                                                     | 5 kVA                                                        | 10 kVA                                                       | 2 kVA                                                     | 5 kVA                                                        |
| OPTION BURN                                    | Rating              | 1 kVA                                                     | 3 kVA                                                        | 3 kVA                                                        | 1 kVA                                                     | 3 kVA                                                        |
| "P" MODELS<br>Dimensions & Weight<br>(approx.) |                     | 20"L x16"W x12"H, 70 lbs<br>508 x 406 x 305 mm,<br>32 kgs | 24"L x24"W x44"H, 315 lbs<br>609 x 609 x 1117 mm,<br>143 kgs | 24"L x24"W x44"H, 400 lbs<br>609 x 609 x 1117 mm,<br>181 kgs | 20"L x16"W x12"H, 80 lbs<br>508 x 406 x 305 mm,<br>36 kgs | 24"L x24"W x44"H, 320 lbs<br>609 x 609 x 1117 mm,<br>145 kgs |
| "B" MODELS<br>Dimensions & Weight<br>(approx.) |                     | 20"L x16"W x12"H, 70 lbs<br>508 x 406 x 305 mm,<br>32 kgs | 24"L x35"W x70"H, 410 lbs<br>609 x 889 x 1778 mm,<br>186 kgs | 24"L x35"W x70"H, 510 lbs<br>609 x 889 x 1778 mm,<br>231 kgs | 20"L x16"W x12"H, 80 lbs<br>508 x 406 x 305 mm,<br>36 kgs | 24"L x35"W x70"H, 420 lbs<br>609 x 889 x 1778 mm,<br>191 kgs |
| Casters mounted on cabinets                    |                     | n/a                                                       | included                                                     | included                                                     | n/a                                                       | included                                                     |
| Shielded Output Cable                          |                     | 15' (5 m)                                                 |                                                              |                                                              |                                                           |                                                              |
| Input Power Cable                              |                     | 6.5' (2 m)                                                | n/a                                                          | n/a                                                          | 6.5' (2 m)                                                | n/a                                                          |

## "P" Models – Design & Safety Features

- Main power circuit breaker switch (with indicator)
- External warning circuit provision for safety devices such as flashing light
- High Voltage ON/OFF pushbuttons with indicators
- Emergency off pushbutton (Locking)
- Manual control of output voltage
- Zero Start interlock
- External interlock provision
- Overload circuit adjustable from 10% to 110% of rated current
- Output overload indicator with reset button
- Slow and fast acting transient protection on all meters and relays
- Digital meters, 3 ½ digit LCD display

## "B" Models – Design & Safety Features

- Main power circuit breaker switch
- External warning circuit provision for safety devices such as flashing light
- High Voltage ON/OFF buttons with indicators
- Emergency Off pushbutton (Locking)
- Automatic voltage control or manual voltage control via infinity dial
- USB port for data acquisition via USB drive
- Ethernet port for accessing the controls from PC (requires optional software)
- 7" Full-color touch-screen display

### The HMI displays the metering, various controls, and system messages including:

- Breakdown memory voltmeter
- Maximum voltage reached memory voltmeter
- Duration and Dwell timers
- Zero Start interlock
- Adjustable rate of rise in Volts/seconds
- Adjustable overcurrent trip point
- Output overload indication with reset



|                                                | MODEL               | 610-10P or B                                                   | 610-20P or B                                                   | 615-10P or B                                                   | 615-15P or B                                                   | 615-20P or B                                                   |
|------------------------------------------------|---------------------|----------------------------------------------------------------|----------------------------------------------------------------|----------------------------------------------------------------|----------------------------------------------------------------|----------------------------------------------------------------|
| INPUT                                          | Voltage             | 220/240 V                                                      | 220/240 V                                                      | 220/240 V                                                      | 220/240 V                                                      | 220/240 V                                                      |
|                                                | Frequency           | 50/60 Hz                                                       | 50/60 Hz                                                       | 50/60 Hz                                                       | 50/60 Hz                                                       | 50/60 Hz                                                       |
| OUTPUT                                         | Voltage             | ≈ 0-10 kV                                                      | ≈ 0-10 kV                                                      | ≈ 0-15 kV                                                      | ≈ 0-15 kV                                                      | ≈ 0-15 kV                                                      |
|                                                | Current             | 0-1 A                                                          | 0-2 A                                                          | 0-667 mA                                                       | 0-1 A                                                          | 0-1.33 A                                                       |
| DUTY CYCLES                                    | 5 min ON/15 min OFF | 10 kVA                                                         | 20 kVA                                                         | 10 kVA                                                         | 15 kVA                                                         | 20 kVA                                                         |
| OPTION BURN                                    | Rating              | 3 kVA                                                          | 3 kVA                                                          | 3 kVA                                                          | 3 kVA                                                          | 3 kVA                                                          |
| "P" MODELS<br>Dimensions & Weight<br>(approx.) |                     | 24"L x 24"W x 44"H, 400 lbs<br>609 x 609 x 1117 mm,<br>181 kgs | 24"L x 27"W x 68"H, 650 lbs<br>609 x 686 x 1727 mm,<br>295 kgs | 24"L x 24"W x 44"H, 460 lbs<br>609 x 609 x 1117 mm,<br>209 kgs | 24"L x 24"W x 52"H, 600 lbs<br>609 x 609 x 1321 mm,<br>272 kgs | 24"L x 27"W x 74"H, 670 lbs<br>609 x 686 x 1880 mm,<br>304 kgs |
| "B" MODELS<br>Dimensions & Weight<br>(approx.) |                     | 24"L x 35"W x 70"H,<br>609 x 889 x 1778 mm                     |                                                                |                                                                |                                                                |                                                                |
|                                                |                     | 500 lbs, 227 kgs                                               | 760 lbs, 345 kgs                                               | 560 lbs, 254 kgs                                               | 690 lbs, 313 kgs                                               | 780 lbs, 354 kgs                                               |
| Casters mounted on cabinets                    |                     | included                                                       |                                                                |                                                                |                                                                |                                                                |
| Shielded Output Cable                          |                     | 15' (5 m)                                                      |                                                                |                                                                |                                                                |                                                                |
| Input Power Cable                              |                     | n/a                                                            |                                                                |                                                                |                                                                |                                                                |

## Options

☒ Custom cable lengths

☒ Burn Feature

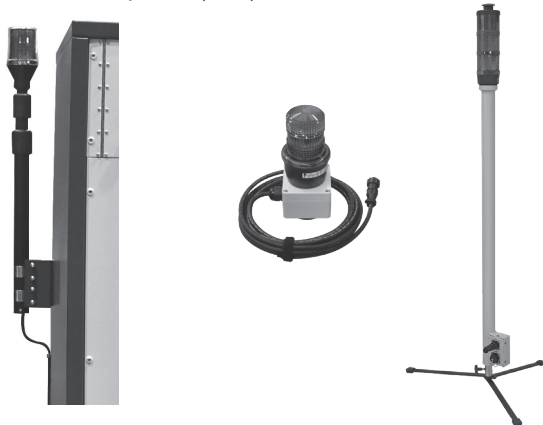
The Burn Feature is a current limiting device that is connected in series with the primary winding. This feature offers the ability to burn the faults in the test specimen at a controlled current level. The Burn Feature is available with rating listed above.

☒ PD Test Certification

☒ ISO17025 calibration

☒ Flashing Light, Mounted or Stand-alone

- Flashing Light, Mounted, Telescoping Pole
- Flashing Light with Security Circuit, magnetic base
- Red/Green Light, Folding Base, Security Circuit, E-stop, 20' (6 m) Cable



☒ Safety Foot Switch with 20' (6 m) lead



☒ Ground Stick



### For "B" models Only

☒ Windows Software for connection to PC

☒ Fiber Optic communications for lab use

### Environmental/Operating Conditions

- 10-40°C, indoor/outdoor in fair weather
- Humidity <95% non-condensing
- Altitude <3300 ft (1000 meters)



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