

# **Current Supply Units**

These high-current supply units have two main fields of application. The first is to conduct primary tests on protective relays. A primary test shows whether all parts of the protection system are functioning together properly within the specified time limits under operating conditions.

The second field of application involves conducting current tests on low-voltage circuit breakers and overcurrent devices

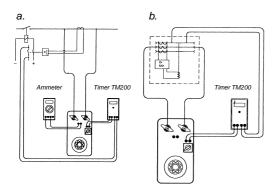
The CSU600A $^{\text{\tiny M}}$  is a compact instrument which, together with Timer TM200 $^{\text{\tiny M}}$  and an external ammeter, meets stringent requirements for accuracy, easy handling and performance. This current supply unit is ideal for a) performance and turn-ratio tests of current transformers, b) primary tests of protective relays, c) current tests on low- and high-voltage circuit breakers and d) commissioning tests that require variable currents.

The more sophisticated CSU600AT™ provides a more comprehensive solution. It has a built-in timer and an analog ammeter that provide rough current settings quickly and easily. As a result, connection time has been reduced to the bare minimum.

The CSU600A™ and CSU600AT™ current supply units have an excellent weight/performance ratio.



#### APPLICATION EXAMPLE



# Primary test of protective relay equipment and low-voltage circuit breaker

- 1. Connect the CSU600A's current outputs across the current transformer (diagram a) or to the breaker terminals (diagram b).
- 2. Connect Timer TM200's start input to output T and the stop input to the protective relay equipment's auxiliary contact.
- 3. Set the current.
- 4. Execute the test.
- 5. Read the time from Timer TM200.

# **SPECIFICATIONS**

### **Outputs, AC intermittent output**

	115 V mains voltage		230 V mains voltage	
Current	Load time	Minimum output voltage	Load time	Minimum output voltage
100 A	10 min	5.6 V	2 h	9.0 V
200 A	2.5 min	5.3 V	6 min	8.5 V
300 A	1.5 min	4.9 V	3 min	8.0 V
400 A	1 min	4.6 V	1.5 min	7.5 V
500 A	20 s	4.2 V	40 s	7.0 V
600 A	15 s	3.9 V	20 s	6.5 V

Non-load voltage: 6.0 V at 115 V mains voltage. 9.5 V at 230 V mains voltage.

#### **Measurement section**

Ammeter: Built-in, 0-600 A\*. Output for external ammeter.

Current transformer: 500/5 A, class 0.5

**Timer:**\* 0-999.999 s. Resolution: 1 ms. Accuracy: ±0.02%, + 0-2 ms of displayed value. Independent of mains frequency.

Other: Output for starting external timer.

\*Only on CSU600AT.

#### **Other**

**Application field:** The instrument is intended for use in high-voltage substations and industrial environments.

Protection: Thermal cut-outs and miniature circuit breakers.

Cable set 5 m (16 ft):  $2 \times 5$  m (16 ft)/50 mm<sup>2</sup> Maximum lengths at 600 A:  $2 \times 5$  m (16 ft)/50 mm<sup>2</sup>.

 $2 \times 5 \text{ m} (16 \text{ ft})/70 \text{ mm}^2 (\text{for } 115 \text{ V}). \ 2 \times 10 \text{ m} (33 \text{ ft})/70 \text{ mm}^2.$ 

 $2 \times 15 \text{ m } (49 \text{ ft})/95 \text{ mm}^2.$ 

Mains voltage: 115 V or 230 V AC  $\pm 10\%$ , 50-60 Hz Dimensions:  $356 \times 203 \times 241$  mm (14.0"  $\times 8.0$ "  $\times 9.5$ ") Dimensions transport case:  $610 \times 290 \times 360$  mm

(24.0" x 11.4" x 14.2")

 $\textbf{Weight:}\ 21.9\ \text{kg}\ (48\ \text{lbs}).\ 36.1\ \text{kg}\ (79.6\ \text{lbs})\ \text{with accessories}\ \text{and}$ 

carrying case. **Warranty:** 1 year

**Dielectric strength:** Complies with IEC 348 and IEC 255.5. The above specifications are valid at nominal input voltage and an ambient temperature of +25°C (+77°F).

Specifications are subject to change without notice.

# **OPTIONAL ACCESSORIES**

# Cable set 5 m (for 115 V)

2 x 5 m (16 ft)/70 mm<sup>2</sup> **Weight:** 8.4 kg (18 lbs) **Art.No:** GA-07052

#### Cable set 10 m (33 ft)

2 x 10 m (33 ft)/70 mm<sup>2</sup> **Weight:** 16.8 kg (37 lbs) **Art.No:** GA-07102

# Cable set 15 m (49 ft)

2 x 15 m (49 ft)/95 mm<sup>2</sup> Weight: 29.4 kg (65 lbs) Art.No: GA-09152

#### AC/DC adapter

Used with CSU600A/600AT to test protective relay equipment with

AC tripping signals.

**Dimensions:** 100 x 45 x 30 mm (3.9" x 1.8" x 1.2")

**Weight:** 0.1 kg (0.3 lbs) **Art.No:** BA-90015

#### Timer TM200

External timer for CSU600A.

**Dimensions:** 194 x 113 x 44 mm (7.6" x 4.4" x 1.7"), excl. handle.

**Weight:** 1.0 kg (2.2 lbs) **Art.No:** BE-29090

#### ORDERING INFORMATION

#### CSU600A/600AT Current Supply Units

Complete with cable set GA-05052 and transport case GD-00182.

CSU600A

Mains voltage: 115 V Art.No: BF-11190

CSU600A

Mains voltage: 230 V Art.No: BF-12290

CSU600AT

Mains voltage: 115 V Art.No: BF-21190

CSU600AT

Mains voltage: 230 V Art.No: BF-22290



Cable set GA-05052

