TM200™	
TIMER TM200	
CE CE	
Programma -tr- -	
START Nax 250VAC Nax 2750C Nax 2750C Nax 2750C Nax 2750C Nax 250VAC Nax 2750C Nax 250VAC Nax 250VAC Nax 250VAC Nax 250VAC	
Timer	

A timer is often needed for use with the CSU600A[™] current supply unit or ODEN A[™] primary current injection test system. Testing relays with SVERKER 650[™] also requires an extra timer if more than one timing cycle is to be measured.

Timer TM200[™] is ideal for these tasks thanks to its precise accuracy, its broad application range and its compact dimensions. Timer TM200[™] is the obvious choice for maintenance work in substations.

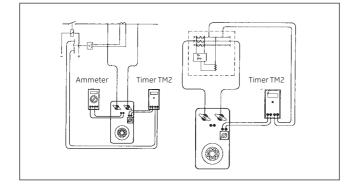
Application example

IMPORTANT!

Read the User's manual before using the instrument.

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 TM200

Specifications are valid at nominal input voltage and an ambient temperature of +25°C, (77°F). Specifications are subject to change without notice.

Environment

Ievel. Temperature Operating 0°C to +50°C (32°F to +122°F) Storage & transport -20°C to +55°C (-4°F to +131°F) Humidity 5% - 95% RH, non-condensing CE-marking Low Voltage Directive 73/23/ EEC an by 93/68/EEC EMC EMC Directive 89/336/EEC am. by 91/263/EEC, 92/31/EEC and 93/68/E General 115/230 V AC (switchable), 50/60 H Power consumption (max) 20 VA Dimensions 195 × 115 × 49 mm (naxle) Instrument, excl. 195 × 115 × 49 mm (naxle) Weight 1.0 kg (2.2 lbs) (2.7 kg (6 lbs) with accessories and carrying case Test lead set, with 4 × 2 m (6.6 ft), 2.5 mm²	Environment	
Operating 0°C to +50°C (32°F to +122°F) Storage & transport -20°C to +55°C (-4°F to +131°F) Humidity 5% – 95% RH, non-condensing CE-marking LVD Low Voltage Directive 73/23/ EEC an by 93/68/EEC EMC EMC Directive 89/336/EEC an. by 91/263/EEC, 92/31/EEC and 93/68/E General 20 VA Mains voltage 115/230 V AC (switchable), 50/60 H Power consumption (max) 20 VA Dimensions 195 x 115 x 49 mm (rax) Instrument, excl. handle 195 x 115 x 49 mm (rax) Weight 1.0 kg (2.2 lbs) (2.7 kg (6 lbs) with accessories and carrying case Test lead set, with 4 x 2 m (6.6 ft), 2.5 mm²	Application field	in medium-voltage substations and industrial environments. Altitude <2000 m (6500 ft) above sea
Storage & transport-20°C to +55°C (-4°F to +131°F)Humidity5% - 95% RH, non-condensingCE-markingLVDLVDLow Voltage Directive 73/23/ EEC an by 93/68/EECEMCEMC Directive 89/336/EEC am. by 91/263/EEC, 92/31/EEC and 93/68/EGeneral20 VAMains voltage115/230 V AC (switchable), 50/60 H Power consumption (max)Dimensions195 x 115 x 49 mm (nax)Instrument, excl.195 x 115 x 49 mm (17.7" x 4.5" x 1.9")Instrument, incl. 	Temperature	
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2.7 kg (6 lbs) with accessories and carrying case Test lead set, with 4 x 2 m (6.6 ft), 2.5 mm ²		
	Weight	2.7 kg (6 lbs) with accessories and
	Test lead set, with touch-proof contacts	4 x 2 m (6.6 ft), 2.5 mm²

Measurement sectio	n						
Range	0-999	999 s					
Resolution	1 ms						
Inaccuracy		% + 1 digit of	displa	ued value			
Timer inputs		0	, ,	<u> </u>			
Max input voltage	250 V	AC/DC					
Voltage mode							
Parameter	Min	Тур	Max	Unit			
Threshold level, DC	10	12.5	15	V DC			
Input current at threshold level DC Positive at red terminal	0.7	1.1	1.5	mA DC			
Input current at threshold level DC Positive at black terminal	4	6	8	mA DC			
Threshold level, Applying voltage at 50 Hz	5	10	15	V ACRMS			
Threshold level, Removing voltage at 50 Hz	60	90	140	V ACRMS			
Contact mode							
Parameter	Min	Тур	Max	Unit			
Threshold level	1	2	4	kΩ			
Open circuit voltage	17	18.5	20	V DC			
Short circuit current	8	10	13	mA DC			
Input current at maximum input voltage, inrush							
Parameter	Min	Max		Unit			
At 250 V DC, Positive at red terminal	4.5	5		mA DC			
At 250 V DC, Positive at black terminal	130	150		mA DC			
At 250 V AC	55	80		mA DC			
Input current at maximum input voltage, continuous							
Parameter	Min	Тур	Max	Unit			
At 250 V DC, Positive at red terminal	4	4.5	5	mA DC			
At 250 V DC, Positive at black terminal	7	8	9	mA DC			

Ordering information

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Visit our website at: http://www.cuthbertsonlaird.co.uk

Ordering information	
TM200	Art.No.
Complete with:	
Test lead set GA-00082	
Carrying case GD-00230	BE-29090