

We touch your **electricity** everyday!

- * Versatile & programmable relay
- * No interposing CT required
- * Vector group site selectable
- * CT ratio correction site selectable
- * Rated 1A/5A - 50/60 Hz site selectable
- * Dual slope differential protection



CSEPRO-T

Advance Transformer Protection & Monitoring System

Application

The CSEPRO-T differential relay protects two winding power transformers, for both internal & external faults in the influence area of current transformers.

Features

Main Features:

- 1A & 5A combined CT input programmable
- Modular design with self CT shorting
- SCADA communication (local & remote)
- Wide auxiliary supply range
- DI / DO matrix programmability
- Disturbance record
- Event record
- Fault record

Protection & Control

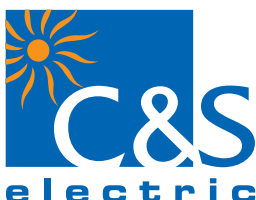
- Over current stage
- Differential over current stage
- Earth fault stages
- Restricted earth fault
- Unbalance / NPS
- Circuit breaker failure protection
- Trip circuit supervision
- 2nd & 5th harmonic blocking

Metering & Monitoring

- Primary / Secondary current, NPS
- Differential / Restraining current
- Disturbance / Harmonics / Event / Fault
- Maxi meter

Communication

- Modbus RTU
- IEC 60870-5-103
- IEC 61850
- Modbus TCP



Electronic Division
Unit - Protection & Control

We touch your **electricity** everyday!

Model Selection Chart

CSEProT-xxx-Series	ANSI	CSEProT140	CSEProT170	CSEProT200
CT Inputs		6	7	6
VT Inputs		-	-	1
Opto Inputs		4	6	6
Output Contacts		4	6	6
Function Keys/Hotkeys		●	●	●
Programming Logic		-	-	●
Protection				
Transformer Differential	87P	●	●	●
Windings		2	2	2
Restricted Earth Fault	87G	-	●	-
Overfluxing/5th Harmonic		●	●	●
Overexcitation	24	-	-	●
2nd Harmonic Restraint		●	●	●
Phase Over-current	50/51P	●	●	●
Ground Fault	50/51N	-	●	-
Negative Sequence Over-current	46	●	●	●
Thermal Overload	49	-	-	●
Circuit Breaker Failure	50BF	●	●	●
Trip Circuit Supervision	74TC	●	●	●
Communication				
Front (USB)		●	●	●
Rear RS485 Modbus		●	●	●
Modbus on Fiber Optics		●	●	●
RJ45 Modbus TCP/IP		●	●	●
IEC60870-5-103 on Fiber Optics		●	●	●
RJ45 IEC60870-5-101		●	●	●
RS-485 IEC60870-5-103		●	●	●
RJ45-IEC61850		●	●	●
SNTP-Time Synch RJ-45		●	●	●
Webserver on RJ-45		●	●	●

Technical Data

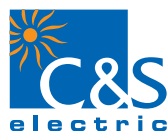
Auxiliary voltage Uaux	24-260V AC/DC
Rated phase current Ip	1A & 5A (site selectable)
-current measuring range	40xlp
Rated neutral current In	1A & 5A (site selectable)
Thermal withstand capability in current circuit	At Ip=1A Continuous=5xlp for 10 Sec=30xlp for 1 Sec=100xlp
Rated frequency fn	50/60 Hz
Digital inputs (external voltage)	6 programmable
Trip contacts	6 programmable

Records

Disturbance recorder (1200 cycles)	All analog channels and binary inputs/outputs
Event recorder	100
Fault recorder	10

Tests and Environment

(EMC Emission / Immunity / Mechanical / EMI)	IEC 60255 / 60068
Operating temperature	70°C
Degree of protection	IP54
Weight	1.5 kg
Dimension (WxHxD)	125.0x156.0x249.0 mm



C&S Electric Limited

(Protection & Control Division)

44, Okhla Industrial Estate, New Delhi -110 020 (INDIA)
Phone : +91 11- 66602414, 30883745/54/64 Fax: +91 11- 66602413 E-mail: cspc@cselectric.co.in

Issue Date: 21.07.11
Rev. No.: 01
Rev. Date: 07.12.11

Branch Offices :

Ahmedabad:+91 79 30074534/35/36 Fax:+91 79 30074519 Bangalore:+91 80 3057 0372/73, 3057 0347 Fax:+91 2558 4839 Bhubaneswar:+91 674 2507265 Fax:+91 674 2507265
Chennai:+91 44 3918 0531-35 Fax:+91 44 39180514 Cochin:+91 0484 3071717 Fax: +91 0484 3071716 Delhi:+91 11 30838822-25 Fax:+91 11 30838826 Hyderabad:+91 40 3918 2496/97
Fax:+91 40 3910 3631 Kolkata:+91 33 22275850/51 Fax: +91 33 2227 5849 Mumbai:+91 22 30487146/47/48 Fax:+91 22 2412 6631 Pune:+91 20 30283244/45 Fax:+91 20 30283244

For more details please visit us at : www.cselectric.co.in