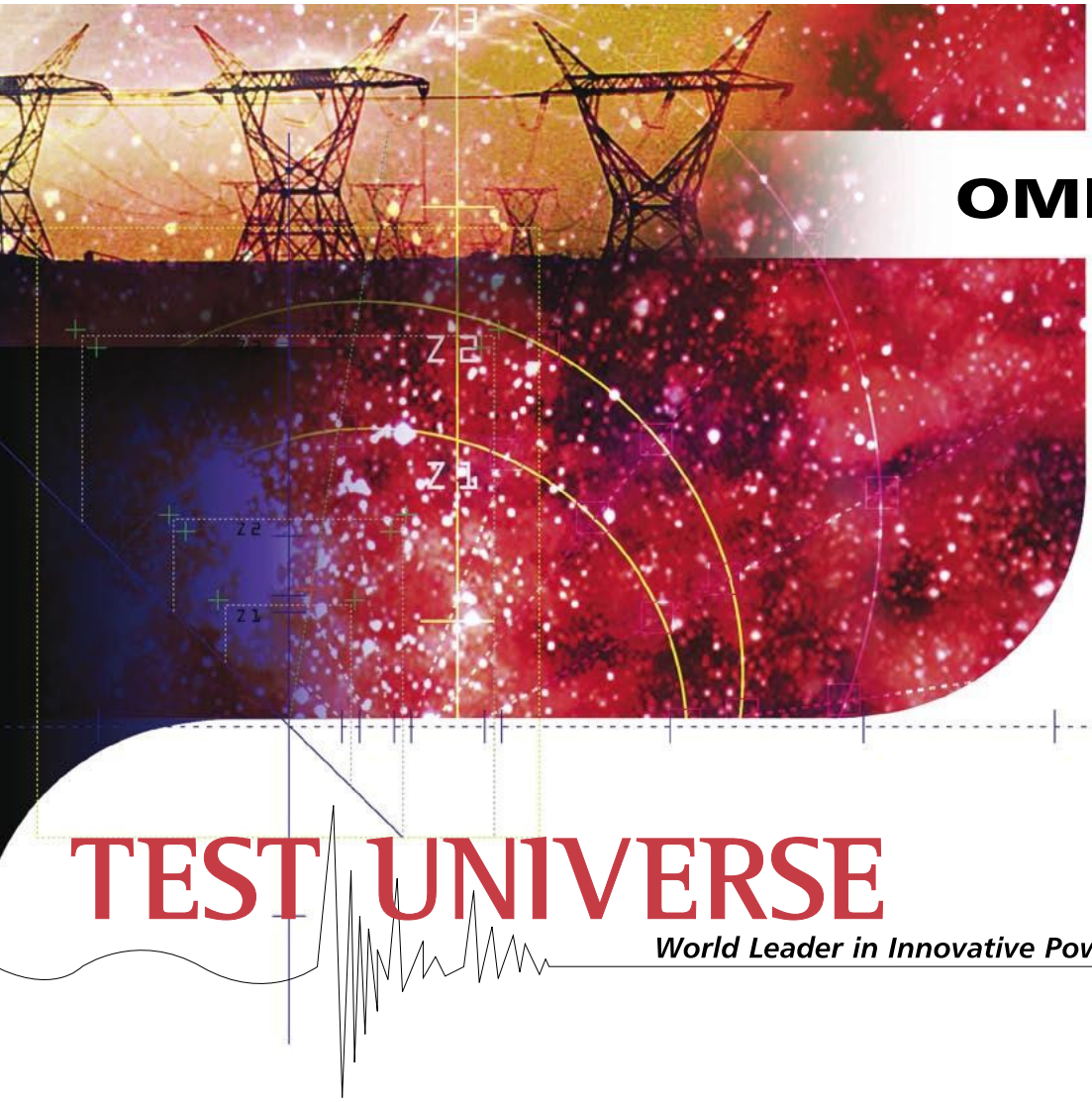


OMICRON

TEST UNIVERSE

World Leader in Innovative Power System Testing Solutions

CMC 356

The next generation of protection relay test set and commissioning tool



the workhorse

Generation • Transmission • Distribution • Industry • Railways

CMC 356 - technology leadership in pro

The CMC 356 is the universal solution for testing all relay generations and types. It is designed for protection testing of electromechanical relays as well as for testing modern IEC 61850 IEDs. The CMC 356 is the ideal tool for various testing tasks in substation commissioning and maintenance. It is the first choice for all applications requiring the highest versatility, amplitude and power.

DC supply (0 ... 264 V)

4 x binary outputs

4 x 300 V / 1 x 600 V



High current & output power !

6 x 32 A / 3 x 64 A / 1 x 128 A
6 x 430 VA / 3 x 860 VA / 1 x 1000 VA

Generator combination socket
3 x 300 V / 3 x 25 A

otection testing

Option ELT-1:
DC measuring inputs
(0 ... 10 V / 0 ... 20 mA)

450 x 145 x 390 mm (17.7 x 5.7 x 15.4“)
16.6 kg (36.6 lb.)



Rear side

2 x counter inputs

4 x binary outputs (transistor)

GPS / IRIG-B synchronization interface

Low level outputs 1 - 6,
and 7 - 12 (Option LLO-2)
(0 ... 10 V)

Ethernet interfaces
RJ45 / optical for PC control
and IEC 61850 GOOSE and
Sampled Values

10 x multifunctional inputs, binary (dry/wet)
Option ELT-1: analog measurement, EnerLyzer™

the workhorse

... unrivaled range of applications

The CMC 356 is designed to optimally cover the modern requirements for commissioning and maintaining substations and protection devices. It opens up new possibilities especially for applications with 5 A CTs and for tests with very high power demand. Its specifications cover applications in generation (including distributed generation), transmission, distribution, industry and railways - in high, medium and low voltage levels.

The special feature of the CMC 356 are the powerful current sources with great dynamic range. Commissioning engineers will appreciate the possibility to perform wiring and plausibility checks of the current transformers, by primary injection of high currents from the test set.

Three-phase testing of high-burden electromechanical relays and the latest IEC 61850 technology in one device is the answer to the wide variety of challenges in today's protection engineering.

Protection Relay Test Set

- Electromechanical relays
- Static relays
- Numerical relays
- IEC 61850 IEDs
- Relay panels
- End-to-End testing
- Busbar protection (22 generators)

Power System Simulator

- Transient fault simulation
- Power swing
- CT saturation simulation
- CB simulation
- Compensated network
- Transient playback (e.g. COMTRADE)

Universal Tool for Substation Commissioning

- Checking SCADA annunciations
- Burden measurement
- CT/VT polarity checker
- Wiring checker
- Event recording
- Plausibility check for CT/VT with primary injection

Programmable Voltage and Current Source

- Production quality assurance
- Manufacturer of substation equipment
- Research & development

Portable 10-Channel Measurement Device - EnerLyzer™

- Transient recording
- Multi meter for: I, V, f, S, P, Q, cos φ ...
- Trend recording for: I, V, f, S, P, Q
- Harmonics analysis



CMC 356

OMICRON

12 reasons why ...



- Testing of all relay generations (electromechanical, static, numerical, IEC 61850 IEDs)
- High current (6 x 32 A, 3 x 64 A, 1 x 128 A)
- High power (6 x 430 VA, 3 x 860 VA, 1 x 1000 VA)
- 22 voltage/current generators in one device
- End-to-End testing with GPS or IRIG-B (typical error $< 5\ \mu s$)
- Test Universe software with unrivaled manual and automatic testing functionality
- OMICRON Protection Testing Library - test templates for the most important relays
- TestBase - relay data and test administration database
- Highest quality, safety, reliability and robustness
- Worldwide high quality technical support
- Worldwide training courses designed for electric power system technicians and engineers
- OMICRON provides platforms for an international knowledge exchange









OMICRON is an international company providing innovative power system testing solutions. With sales in more than 120 countries, offices in Europe, North America, and Asia, and a worldwide network of distributors and representatives, OMICRON has truly established its reputation as a quality supplier of leading edge technology with highest customer orientation.

OMICRON's automated primary and secondary testing capabilities are important benefits in light of the changing market conditions, resulting in restructured organizations required to "do more with less". Services in the area of consulting, commissioning, testing and training make the product range complete.

Specialization and visionary leadership allows OMICRON to continue with revolutionizing developments for its solutions to meet the customer needs of the 21st century.

OMICRON Sales Service Centers

Europe, Africa, Middle East

OMICRON electronics GmbH
Oberes Ried 1
A-6833 Klaus, Austria
Phone: +43 5523 507-0
Fax: +43 5523 507-999
info@omicron.at
www.omicron.at

Asia, Pacific

OMICRON electronics Asia Ltd.
Suite 2006, 20/F, Tower 2
The Gateway, Harbour City
Kowloon, Hong Kong S.A.R.
Phone: +852 2634 0377
Fax: +852 2634 0390
info@asia.omicron.at
www.omicron.at

North and South America

OMICRON electronics Corp. USA
12 Greenway Plaza, Suite 1510
Houston, TX 77046, USA
Phone: +1 713 830 4660
1-800-OMICRON
Fax: +1 713 830 4661
info@omicronusa.com
www.omicronusa.com

© OMICRON L073
Subject to change without notice
Last Update February 2008