



protection relays
relè di protezione

remote control
controllo a distanza

energy management
gestione della energia

temperature control
controllo della temperatura

Distribution Industrial

Motors
Generators
Loads



Your strategic partner



ORION ITALIA



on protection relays

Reliability
affidabilità

Simplicity
semplicità

Certified Quality
qualità certificata

**ISO 9002
CERTIFIED**



CURRENT MEASUREMENT & PROTECTION RELAY

IPR-A

50, 50N/G	Phase/Neutral Ground Instantaneous overcurrent
51, 51N/G	Phase/Neutral/ Ground Ac Timed overcurrent

Applications

- Primary or secondary protection for generation, distribution & industrial applications.
- Allow the use of on load disconnectors for overload protection



Applicazioni

- Protezione primaria o secondaria per sistemi di generazione, distribuzione e industriali.
- Permette l'utilizzo di sezionatori sotto carico per apertura di sovraccarichi



Aplicaciones

- Protección primaria o secundaria para sistemas de generación, distribución e industria.
- Permite el uso de seccionadores bajo carga para la apertura de sobrecargas



CURRENT - VOLTAGE - POWER MEASUREMENT & PROTECTION RELAY

SMPR

Standard	
27	Under voltage
50, 50N/G	Phase/Neutral/ Ground Instantaneous overcurrent
51, 51N/G	Phase/Neutral/ Ground Ac Timed overcurrent
55	Power factor
59	Over voltage
81	Under/Over frequency

On request	
46	Reverse phase or phase balance
49	Thermal image
59 N	Neutral displacement
67, 67N	Phase/Neutral/ Ground directional overcurrent
79	Automatic reclosures

Applications

- Protection against adverse voltage, current & power conditions for generation, distribution & industrial applications



Applicazioni

- Protezione contro anomalie delle tensioni, correnti e potenze in sistemi di generazione, distribuzione e industriali.



Aplicaciones

- Protección contra condiciones adversas de tensión, corrientes y potencias en sistemas de generación, distribución e industria.



VOLTAGE MEASUREMENT & PROTECTION RELAY

VPR-A

27, 27R	Under voltage, residual voltage
46	Voltage unbalance
47	Phase reversal
59, 59N	Over voltage, Neutral displacement
81	Under/Over frequency

Applications

- Protection against adverse voltage conditions on generation, distribution & industrial applications
- Ground fault detection on medium voltage systems



Applicazioni

- Protezione contro anomalie delle tensioni in sistemi di generazione, distribuzione e industriali.
- Rilevamento di guasto a terra in sistemi di media tensione



Aplicaciones

- Protección contra condiciones adversas de tensión para sistemas de generación, distribución e industria.
- Detección de falla a tierra en sistemas de media tensión



TWIN INPUTS VOLTAGE MEASUREMENT & PROTECTION RELAY

VMPR

27, 27R	Under voltage, residual voltage
46	Voltage unbalance
47	Phase reversal
50, 59N	Over voltage, Neutral displacement (Each 3 ϕ input)
81	Under/Over frequency

Applications

- Used on bus transfer logic as line fault detector



Applicazioni

- Usato nelle logiche di riconfigurazione per rilevare anomalie di linea



Aplicaciones

- Usado en lógicas de transferencia para detección de anomalías de línea



DIGITAL MOTOR PROTECTION

DMP

37	Undercurrent
46	Current Unbalance
49	Overload
51, 51G	Phase/Ground Ac Timed overcurrent
66	Multiple start & time Between Starts
81	Under/Over frequency
86	Total Lockout
	Thermal Capacity
	Mechanical Jam
	Acceleration Timer
	Restart Block
	Auto Transfer Function



Applications

- Protection of medium and low voltage motors
- Motor behaviour Monitoring



Applicazioni

- Protezione motori in media e bassa tensione
- Supervisione del comportamento del motore



Aplicaciones

- Protección para motores en media y baja tensión
- Supervisión del comportamiento del motor



LINE ANALYZER & PROTECTION

EVAR

27	Under voltage
32	Watt negative/positive
37	Under current
46	Reverse phase or phase balance
47	Phase reversal
51, 51N/G	Phase/Neutral/ Ground Ac Timed overcurrent
55	Power factor
59	Over voltage
81	Under/Over frequency
	THD • VAR negative/positive • Current, power (active/reactive/apparent) demand

Applications

- Line analysis, Waveform captures, Harmonic analysis (THD), Power factor control, Energy management, Load Study



Applicazioni

- Analisi parametri di linea, Cattura forma d'onda, analisi armonica (THD), Controllo fattore di potenza, Gestione energia, studio del carico



Aplicaciones

- Análisis de línea, Captura forma de onda, análisis de armónicos (THD), regulación del factor de potencia, Gestión de energía, estudio de cargas.



EARTH LEAKAGE MEASUREMENT & PROTECTION RELAY

RD

64	Ground protection
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Applications

- Detection and display of earth leaking currents
- Preventive maintenance of motors, illumination systems & ovens



Applicazioni

- Rilevamento e visualizzazione delle correnti di dispersione terra
- Manutenzione preventiva di motori, distribuzione luce e forni



Aplicaciones

- Detección y visualización de las corrientes de fuga a tierra
- Mantenimiento preventivo de motores, distribución de alumbrado y hornos



TEMPERATURE MEASUREMENT, CONTROL & PROTECTION

TR-42

49	Thermal protection
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Applications

- Protection against over temperature on electric machinery
- Monitoring of motors, generators and transformers thermal status by PT100



Applicazioni

- Protezione contro le sovratemperature delle macchine elettriche
- Controllo dello stato termico di motori, generatori e trasformatori mediante PT100



Aplicaciones

- Protección de sobre temperatura en equipos eléctricos
- Supervisión de la condición térmica en motores, generadores y transformadores a través de PT100



our presences in the world

- ▼ europe
- ▼ south america
- ▼ north america
- ▼ asia
- ▼ australia

MANUFACTURE • DESIGN • METERING • PROTECTION

W W W . O R I O N I T A L I A . C O M



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