

PRODUCTS
CATALOGUE
2020



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#### What is EDC SUPPLY?

It is a company that works to improve electrical energy based on the primary objective of providing solutions and products to increase operational efficiency in facilities by delivering clean electrical energy to its clients, national and international.

#### **MISION**

We offer comprehensive solutions to achieve optimum quality in the electrical energy systems used by our national and international clients, complying with quality standards, respecting the environment and providing benefits to the society in which we operate.

#### **VISION**

To be the leading corporation in comprehensive quality solutions for electrical energy in the national and international market, with high-quality innovative teams and a human talent committed to excellence.

# PRODUCTS

#### **SUPPRESSORS**

It is an event that presents overvoltage and overcurrent conditions, which can last up to 100 microseconds. It is capable of reaching 100,000 volts in extreme events such as lightning; at 20,000 volts due to switching in the power system of the power supply company (which is an external cause); It can reach 6,000 volts when there is switching of inductive loads (electric motors); and it can reach 2,000 volts due to internal causes in the installation.

Transients produced by internal causes can occur millions of times per hour in heavy industrial environments.

#### **MEDIUM VOLTAGE UNITS**



Panel mounted devices for 1,000 volts to 7,200 volts.

#### **SERIES LA Y RM**

Level 1 - LA and RM units were specifically designed for highly competitive international markets.



- LA units have 10 protection modes.
- They include network frequency attenuation technology just as RM units are in reduced mode.
- Network.
- UL94V enclosure.
- No DRC.
- Devices at competitive prices.

#### **SINETAMER ADVANTAGE**

Level 2 - Advanced Suppressor Series.

Level 3 - Network Frequency Attenuation, Advanced Suppressor Series



- Both with 10 dedicated protection modes. UL1449 third edition.
- CE MARK.
- Nema 1.
- Enclosures.
- Others available as an option.
- Standard thermal fusion.
- Many options available.

## UNITS FOR DATA AND TELECOM



We offer a complete standard line of phone suppressors, over category 5 data units in various configurations, 4-20,000 amps and coaxial suppressors.

## PROTECTION OF INDIVIDUAL CIRCUITS



120V 240VAC units at 15, 30 and up to 60Amp. Wired configurations, optimal response and improved frequency tracking. Available with screw or wire terminal. We also produce a full range of direct current devices in various configurations.

### HARMONICS FILTERS

It is one of many electrical disturbances that originate in the presence of non-linear loads and that alter or modify the fundamental waveform causing multiple effects in different areas of an electrical installation..

The modification that occurs in the fundamental wave is given by the sum of the harmonic waves that accompany the fundamental wave.

#### PROBLEMS TO WHICH IT PROVIDES SOLUTION

Among the problems that we can find in installations with high levels of harmonics, the following can be mentioned:

- Heating cables.
- Protection shot.
- Return through the neutral conductor. Over intensity by the neutral.
- Neutral heating.
- Premature degradation of isolates.
- Protection shot.
- Parallel resonance with the system. -

Amplification of the harmonics.

- Capacitor heating.
- Premature aging of condensers.
- Destruction of capacitors.

- Circulation of harmonic currents through the windings and harmonic voltages at terminals.
- Overheating and loss of thermal insulation.
- Increase magnetic losses.
- Shaft vibrations, mechanical wear on bearings.
- Invalid measurements.
- Errors in control processes.
- Incorrect magnitude values.
- Interferences with communication and control systems.
- Error in the firing moments of ti-ristores

## FILTROS DE ARMÓNICOS

## LINEATOR AUHF ADVANCED UNIVERSAL HARMONIC FILTER



It is a purely passive equipment consisting of a single inductor combined with a relatively small bank of capacitors

- -Reduces the greatest amount of harmonic current generated by variable speed drives or other rectified 6-pulse loads.
- The resulting THDI is <8%.

## LINEATOR HP (HIGH PERFORMANCE LINEATOR)



The lineator high performance (HP) model is used where the highest quality standards are required.

- Exceeds the efficiency of active filters by 2% or more.
- It is more reliable and simpler in its maintenance than any currently available active filter.

#### LINEATOR ED EXTREME DUTY LINEATOR

- For extreme environments, with an excessive harmonic load in voltage (5% to 12%), ambient temperature above 55°C or at altitudes above 3,000 ft.
- MIRUS now also offers the Lineator AUHF for extreme environments.



#### LINEATOR ATL LOW VOLTAGE AUTOTRANSFORMER WITH LINEATOR HARMONIC FILTER

It is the greatest advance in the area of harmonic mitigation with low voltage passive filters, no other equipment on the market can meet the limits of the IEEE 519 standard with an equivalence in size, efficiency and price.

When the application calls for the handling of harmonics in 6-pulse drives where the drive voltage is different from the supply voltage, the Auto Translineator is the only logical choice.



## UNINTERRUPTED POWER SYSTEMS (UPS)

It is an equipment that becomes an alternate energy source that allows the continuous operation of the AC powered equipment connected to it. There are different topologies or system configurations, among which we have:



- UPS OFFLINE
- INTERACTIVE UPS
- UPS ONLINE

#### WHAT IS ITS UTILITY?

Among the most common applications for ups systems we can find the following:

- Backup of desktop computers.
- Backup photocopiers.
- Support sales points.
- Backup of computer rooms and servers.
- Support of medical equipment (mammograms, x-ray developers, tomographs, gastroscopes, life support equipment, operating rooms, etc.).
- Support of PLC in industrial machines.
- Support protection and control equipment.

### HOME / OFFICE OFFLINE AND INTERACTIVE UPS

- Capacity 125VA to 3KVA.
- 120VAC, 1F supply voltage.
- Autonomy times according to the client's request.



### SMALL AND MEDIUM-SIZED ENTERPRISE UPS AND ONLINE

- Capacity 1KVA to 20KVA.
- Supply voltage 120VAC, 1F / 220VAC, 1F / 208 VAC,
   3F.
- Times of autonomy according at the request of the client.
- Monitoring options.
- Modular equipment.

## LARGE ONLINE AND INTERACTIVE UPS COMPANIES

- Capacity 1KVA to 1125KVA.
- Supply voltage 120VAC, 1F / 220VAC, 1F / 208 VAC, 3F / 480VAC, 3F.
- Times of autonomy according at the request of the client.
- Monitoring options.
- Modular equipment.
- Equipment for heavy industrial environments.
- With nickel cadmium or lead acid battery.
- SCR and PWM technologies.
- Special enclosures





## INDUSTRIAL LEAD ACID BATTERY



The VRLA battery is small and light and high performance making it inexpensive to use. In addition to these benefits, the sealed construction eliminates the need to fill the battery with water.

## WHY USE SEALED LEAD ACID BATTERIES WITH VRLA TECHNOLOGY?

- Does not need maintenance.
- It can be installed and operated in any position since the gas generation is self-contained and there is no electrolyte leakage.
- Security measures.
- Ready to be used when charging even after being stored for an extended period.
- High performance lead acid battery.
- Economy.

EDCSUPPLY is a CSB battery distributor, so it has a wide range of sealed lead acid batteries with VRLA technology for all applications available on the market. With capacities ranging from 4.5Ah to 1,500Ah.

INDUSTRIAL NICKEL
CADMIUM BATTERIES OPEN

**AND SEALEDS** 

Nickel cadmium batteries have one of the highest operating ranges within the most demanding environments, so applications for these batteries are found in most industries.

#### **CHARACTERISTICS**

- Operating temperature range: 50 C to 60 C.
- Period 1.40 vpc water maintenance:20 years at 20 C.
- Cap seal: welded, leak proof



#### **OUR PRODUCT LINES**

- FNC (nickel cadmium batteries). Available for any application.
- FNC-A (advanced ber nickel cad-mium batteries). Low maintenance batteries.
- FNC-EH (energy high power series). Highrange / performance batteries.
- FNC-EX (extreme low maintenance). Low maintenance FNC batteries with aquagen patented vents.

- FNCVR (valve regulated nickel-cadmium batteries). Ultra low maintenance battery types using low ventilation pressure and internal gas recombination.
- FNC-R (rail batteries). Batteries for railway and mass transit applications.
- FNC-T (traction batteries). High performance battery for use with chargers or traction systems.



## POWER AND ENERGY METERS

The electrical measurement or taking of electrical parameters are elements of vital importance for decision-making in improving the quality of electrical energy.

### SPECIFIC APPLICATIONS

#### 103/5000

- Feasibility of Energy Savings. Audit the invoice from which the Electric Service supplies.
- Demand Management.
- Submetering for cost invoicing.
- Allocation of costs by common area.
- Analysis of energy use.
- Analysis for corporations.
- Online measurements and Verifications.
- Monitoring.
- Availability and Reliability of energy.

### POWERLOGIC MEASUREMENT SYSTEM

Includes: measurement equipment, data transmission, information management and management software.



## POWER MEASUREMENT EQUIPMENT

Adapted to the client's measure, it includes measurement, data transmission, software and information management.



#### **LEDS LAMPS**

LED technology saves much more energy and is toxicity-free, currently the most environmentally friendly technology.

#### UTILITY

- Low energy consumption.
- 100% free of infrared and ultraviolet radiation.
- Decrease electronic waste.
- They save up to 80% of energy.
- They are high performance and long lasting.
- They are not explosive or use chemicals that are harmful to humans.
- Thousands of colors can be generated with the RGBY combination.
- They work with low voltages.

## INSTITUTIONAL LIGHTING



## **DECORATIVE LIGHTING**



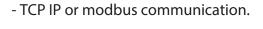
#### **BATTERY CHARGER RECTIFIERS**

It is a team in charge of transforming the Alternating Current (AC) into Direct Current (DC), it must also have qualities that allow it to provide a charge regime appropriate to the charge cycle of the battery bank connected to it and in turn for DC systems, power a connected system load indefinitely.

At EDCSUPPLY as specialists in energy backup systems we have advice for the design and dimensioning of these equipment, in addition to representing leading brands in the market.

#### **ELTEK RECTIFIERS**

- High Frequency Technology (PWM) Capacities from
- 1KW to 280KW Amps or more. Modular equipment.
- N + 1 redundant configuration
- Power: 85 300VAC 1F
- Includes Programmable controller.



- Battery verification system. Certifications,
- UL, IEC.
- Output voltages: 12, 24, 48, 130VDC.



#### **SENS RECTIFIERS**



- SCR technology.
- Capacities from 10 to 200 amps.
- Power: 120VAC, 220VAC, 208VAC, 480VAC, 1F or 3F.
- Dual microprocessor control.
- Battery verification system.
- History recorder.
- Certifications, C-UL, CE, IBC, and optional ABS certifications.
- Optional modbus communication.
- Output voltage: 12, 24, 48, 130, 240VDC.

#### **HOPPECKE RECTIFIERS**



- SCR technology.
- Capacities from 25 to 1000 amps.
- Power: 120VAC, 220VAC, 208VAC, 480VAC, 1F or 3F.
- Microprocessor controlled.
- Battery verification system.
- Certifications, SA, UL, CE, FC.
- Output voltages: 12, 24, 48, 130VDC.

#### **INVERTERS**

The function of an inverter is to change a direct current input voltage to a symmetrical alternating current output voltage, with the magnitude and frequency desired by the user or the designer.

#### UTILITY

There are many applications that we can give to these equipment, from the power supply of computers in the offices to the power supply of large loads, in the same way they are used as one of the main elements of UPS systems and is normally used as accessories of solar systems to supply different loads in alternating current.

#### **INVERTERS ELTEK**

- 1/4 x 19, 2U.
- Excellent overall efficiency and high speed regulation. "Hot plug in" design with backplane connection.
- High power density.
- CAN-Bus interface.
- Capacity for parallel operation.
- Fan cooling with temperature control. Synchronization bus.
- Excellent sinusoidal output.
- Shutdown in case of over / under input voltage, overload and short-circuit protected circuits.
- Three-phase operation as an option.



#### **INVERTERS WILMORE**

- Designed for limited space applications.
- The inverter produces regulated voltage, 60Hz stable frequency sine wave output.
- Standard versions allow operation, either positive or negative, from 48 VDC or 130 VDC sources.
- The inverter is compact, lightweight and compatible with any 19-inch or 23 inches.
- Well adapted to power a variety of loads.



#### **PHILTEK**

- Provides a complete friendly interface between inverter and operator.
- LCD digital meter and alarm display.
- Industrial style.
- Control programs can be updated in the field.
- RS232 option, communication port available.



## FIRETROL BRAND FIRE PUMP CONTROLLERS

It is an equipment that allows the continuous operation of the fire extinguishing system by means of the control that it exerts on the start and stop of the pump that works with diesel or electric motors. It must be manufactured under the NFPA20 standard for such operation.

## CONTROLLERS FOR ELECTRIC MOTORS

- FTA1000 Full voltage start.
- FTA1250 Two-part winding type reduced current start (closed transition).
- FTA1300 Delta star type reduced voltage start (open transition).
- FTA1350 Triangle star type reduced voltage start (closed transition).
- FTA1500 Primary resistance type reduced voltage start (closed transition).
- FTA1800 Starting at reduced voltage by solid state starter (closed transition).
- FTA2000 Medium voltage start.



### DIESEL CONTROLLER

- FTA1100 starter for 12 or 24 volt diesel engines.

All equipment includes the FIRETROL Mark II controller that allows monitoring, displaying and recording of system information.

## POWER SOURCES AND DC-DC CONVERTERS

These teams are one of the most common and frequent elements that we find in all areas of any industry. Its function is to provide the DC voltage in which all the electronics are fed into the control cabinets that handle the various automated processes.

#### **EDCSUPPLY OFFER**

Within our product lines we have supplier re-presentations that allow us to offer a wide range of DC power solutions. Therefore we are able to supply solutions according to the requirements of our clients.

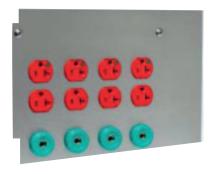






## HOSPITALS AND CLINICS

Mainly composed of a distribution board that must have elements such as an internal isolation transformer, which must be regulated for this purpose and a monitor that verifies the insulation and possible ground faults that its circuits may have.



The board can be single-phase, three-phase, dual or single. The idea is that circulating earth fault currents cannot be induced and, in the event that this happens, the panel can emit an alarm indicating to the doctors and assistance personnel that they should take precaution and verify the fault as soon as possible or take immediate action. on the case if required.

Within our line of products in critical areas of clinics and hospitals at EDCSUPPLY we are able to provide advice from conceptual design to project execution with the supply of electrical distribution equipment for the different areas of the Health. Our product line covers the following equipment.

#### **ENERGY AND EARTH MODULES**

- Surface mount.
- Up to 8 earth connections.
- Receptacles:
  - Up to 8.
  - Red or marl.

- Duplex or individual.
- Half turn lock.
- Earth bar:
  - Aluminum or copper.
  - Local code requirements.

#### **INSULATION BOARDS**

## ISO-GARD SERIES 6 LINE INSULATION MONITOR (LIM)

Automatic operating voltage selection reduces re-stops and technical calls, and increases customer satisfaction.

- The automatic test with data recording reduces the time required for periodic tests on the equipment.
- The communication bus provides centralized monitoring of LIM installations, offering predictive maintenance.
- El bus de comunicación provee monitoreo centra-lizado de instalaciones LIM, ofreciendo un manteni-miento predictivo.
- The Menu interface makes settings easy and alarms clear.
- Electrical system measurements help de-determine the root cause of the detected failure.



#### **DUPLEX BOARD**

It combines standard (208 or 240 V) and controlled (120 V) panels in a space-saving solution.

#### Main switch

#### 120V output

- Iso-Gard Series 6 line isolation monitor (8) Square D brand, 20 A, 2 pole, breakers
- Mounting provisions for (8) additional 20 A, 2-pole circuit breakers
- Reference ground bar with 20 terminals Available in 3, 5,
- 7.5 and 10 kVA
- Up to 8 receptacles
- Up to 8 earth connections.

#### 208 or 240 V output

- Iso-Gard Series 6 line isolation monitor
- (2) Square D brand, 20 A, 2 pole, breakers
- Reference ground bar with 20 terminals
- Custom Control to meet customer requirements
- Available in 15 kVA
- 1-2 laser points



#### **STANDARD BOARD**



- Iso-Gard series 6 LIM.
- Primary breaker.
- (8) 20 A, 2-pole, square D brand breakers.
- Mounting provisions for (8) additional 20 A, 2-pole breakers.
- Reference ground bar with 20 terminals.
- Designed for 120V applications.
- Available in 3, 5, 7.5, and 10 kVA.
- Ideal for operating rooms or critical areas.
- Convertible field above (16) 20 A, 2 poles, square D brand breakers.
- Receptacle.
- Red or marl.
- Duplex or alone.
- Half-turn closure.
- Power and ground modules.
- Optional screw-on breakers
- Allows centralized location receptacle and earth connections.

#### **DUPLEX BOARD**

- Series 6 Iso-Gard line isolation monitor.
- Main switch.
- (8) Square D brand, 20 A, 2 pole, breakers.
- Mounting arrangements for (8) additional 20A, 2-pole circuit breakers.
- Reference ground bar with 20 terminals.
- Designed for 120V applications.
- Available in 3, 5, 7.5 and 10 kVA.



#### X-RAY TAKING MODULE

- Surface mount. - 50 A. - 60 A.

- 20 A. NEMA #6-50R Hubbel #IN16494

NEMA #6-15R Hubbel #IN16494 - Remote indicator.

NEMA #6-20R - Controls.

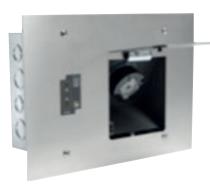
NEMA #L6-15R

- 30 A.

NEMA #6-30R

NEMA #L6-20R

NEMA #L6-30R



### SOLAR ENERGY SYSTEMS

Mainly composed of solar cells in charge of transforming the energy received from the solar rays into manageable energy and consumable as electrical energy.

The photovoltaic system is made up of the following elements.



**SOLAR PANEL**: responsible for transforming the sun's energy into electrical energy.

**CHARGE REGULATOR:** It receives the energy supplied by the solar cells and adapts it to be used by the load and the backup accumulators.

**BATTERIES:** Responsible for backing up energy when there is no sunlight.

**INVERTER:** Transforms direct current into alternating current to power common equipment such as fans, televisions, fridges, etc.

#### **BENEFITS**

- They are non-polluting systems that can be installed almost anywhere. They are modular and easy to expand.
- They do not consume fuel. Its energy source is inexhaustible.
- The useful life is long-lasting.
- Minimal maintenance is required
- Does not produce noise.
- The systems are simple and easy installation.
- They are reliable systems.



#### **SOLAR PANEL**

- Polycrystalline cell (156mm x 156mm).
- Patented 3 busbar cell technology for increased performance..
- Low light reflection and homogeneous cell coloration that provide attractive aesthetics to the module.
- Black anodized and coated aluminum frame, screwed and glued, for extremely high corrosion resistance and durability.
- Load capacity:  $5,400 \text{ N} / \text{m}^2$  (IEC standard:  $2,400 \text{ N} / \text{m}^2$ ).
- 60 cell modules.
- Connection box.
- Maximum 5VA fireproof class according to UL94.
- Premade with plug connections and bypass diodes included for fast and flexible module mounting.
- 10-year product warranty and 25-year power (10 years at 90%, 25 years at 80%).

### SOLAR ENERGY SYSTEMS EXTREMELY HIGH RELIABILITY

- The failure rate of less than 1 per 1,000 sent (<0.1%)
- 100% solid state. MOSFET design.
- Manufactured in an ISO 9000 certified factory.
- 100% functional tests prior to dispatch.



#### A HIGHER BATTERY TIME

- Advanced PWM loading.
- Series design (not bypass) for cool operation.
- 4 stages of loading: bulk, absorption, float, equalize.
- Optimized sealing or flooded battery set points.
- Temperature compensated charging
- Low voltage load disconnection in various versions.

#### **DESIGNED FOR HARD ENVIRONMENTS**

- Nominal temperature from -40 ° C to + 60 ° C.
- Epoxy encapsulation for protection against moisture and ingress dust.
- Corrosion protection: marine terminals and anodized aluminum cabinet.
- Certified for use in dangerous places.

## ELECTRICAL ENERGY QUALITY ANALYZER METER

Used at critical points of distribution and sensitive loads, the meters offer unmatched functionality that includes advanced power quality analysis combined with billing accuracy, various communications options, web compatibility and control capabilities.

These meters integrate with the PQZIP software or the PQSCADA and INVES-TIGATOR applications; also with COMPLEMENTS FOR CONFIGURATION such as

- PQ REPORT ENGINE
- TOU STUDIO
- CONFIGURATION UTILITY
- ELSPEC SEARCH

Or they share operational data with existing SCADA systems using multiple channels and communication protocols.

## **COMMONLY USED** FOR:

- Reduce energy costs.
- Increase the use of equipment.
- Complies with environmental and regulatory requirements.
- Increase the quality and reliability of energy.
- Monitoring and control of basic and essential equipment.
- Integrated measurement of public services.

#### **KEY FEATURES**

#### Anticipate, diagnose and verify to increase efficiency

Reveal inefficiencies or waste of energy and optimize equipment operation to increase efficiency. Isolate reliability risks, diagnose energy-related equipment problems, and verify operation reliability.

#### Summarize power quality, set goals, measure and verify results

Consolidate all power quality characteristics into a single evolutionary index. Evaluate the quality and reliability of energy and compare it with standards, or compare facilities or processes.



### Modbus functionality, compatible with Scada systems

Read the information from the Mo-dbus devices downstream and display it through the front panel or store it in memory until it is loaded at the system level.

#### Monitoring of power quality compliance

Monitor compliance with international supply quality standards (IEC 61000-4-30 Class A1, EN501601, IEC 61000-4-7, IEC 61000-4-15, IEEE 519, IEEE 1159, and CBEMA / ITIC). Evaluate the flicker according to IEC 61000-4-15 and IEEE 1453 standards.

#### **INTEGRATION TO TCP / IP SYSTEMS**

Detect major changes in waveform, Continuous record of sine wave Detection of phase switching phenomena (for example, during the transfer of a high-speed static switch) not detected by conventional threshold alarms.

#### Record ultrafast electrical parameters 1024 samples per cycle.

Preventive maintenance: acquisition of a motor starting curve, etc. Identify problems due to brief disturbances, such as capacitor switching, etc.

#### Trend curves and short-term forecasts

Quick trends and forecasts of future values to make better decisions.







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#### **CONTACT**

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#### **CUSTOMER SUPPORT**

MONDAY THROUGH FRIDAY 9:00 am - 18:00 pm