

## MOTOR STARTING AND PROTECTION

### CWC MINIATURE CONTACTORS

- Complete line from 7 to 22 A (AC-3)
- Built-in auxiliary contacts up to 16 A
- Low-consumption DC coils, allowing direct connection to PLCs



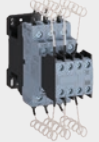
### CWB AND CWM CONTACTORS

- Complete line from 9 to 800 A (AC-3)
- Several coil voltages available in AC and DC
- Complete accessory line



### CWBC CONTACTORS FOR CAPACITOR SWITCHING

- Available for switching capacitor banks of up to 50 kvar at 400/415 V
- Direct mounting on DIN rail 35 mm or screw mounting



### MPW MOTOR-PROTECTIVE CIRCUIT-BREAKERS

- Motor start and protection up to 40 cv at 220 V and 75 cv at 380/440 V
- Adjustable thermal releases to protect the motor against overloads up to 100 A
- Wide range of accessories



### RW AND RW\_E THERMAL AND ELECTRONIC OVERLOAD RELAYS

- Models up to 840 A
- Manual or automatic reset
- Conventional (RW) versions with trip class 10
- Electronic versions (RW\_E) with selectable trip class: 10, 20 and 30
- Protection against phase loss and phase unbalance in the electronic versions (RW\_E)



### ENCLOSED STARTERS

- Three-phase contactors in thermoplastic enclosures up to 40 cv at 220 V and 75 cv at 380/440 V, and single-phase contactors
- Star-delta starters in thermoplastic enclosures up to 20 cv at 220 V and 40 cv at 380 V
- Star-delta, reduced-voltage and series-parallel starters in metallic enclosure starting from 15 HP



### SRW01 SMART RELAYS

- USB port
- Communication in Modbus-RTU, Profibus-DP, DeviceNet, EtherNet/IP, PROFINET IO or Modbus-TCP
- Free parameter setting software
- Fast and precise fault and alarm diagnosis
- Fault record and statistics
- Backup of the original configuration
- Possibility to measure current, voltage and earth leakage



### MMW MULTI-METERS

- Direct and reverse energy measurement
- Memory for 1,920 hourly parameter records, 240 daily parameter records and 36 monthly parameter records for local reading or export via communication network
- Communication with RS485 isolated serial output, Modbus-RTU protocol
- Simple and easy parameter setting via front keys or remotely



### RTW, RPW AND RIEW ELECTRONIC RELAYS

- Timers, voltage and level monitors – 17.5 mm wide
- Status indicator LEDs
- Simple configuration and operation
- Settings via external selectors
- Highly reliable contacts
- Excellent precision and repeatability
- Noise immunity



## SAFETY

### SAFETY

- Safety light screens
- Zero-force electronic push-buttons
- Safety Control System - SCSW
- Magnetic safety switch with radio frequency
- Magnetic sensors with safety function
- Emergency-stop push-button with monitored contact
- Rope pull emergency stop switch
- Safety blocks for presses
- Contactors for safety applications
- Two-hand control
- 3-stage safety foot switch
- Safety interlock switches
- Safety relays

- Limit switches
- Safety PLC
- Compact Switch Disconnectors



## INDUSTRIAL SENSORS AND POWER SUPPLIES

### SENSORS

- Inductive
- Capacitive
- Optical
- Magnetic
- Resistive magnets (hall effect)
- Magnetic - pick-up type

### POWER SUPPLIES

- Power for sensors
- Power supplies for equipment in electrical panels



## COMMAND AND SIGNALING

### CSW AND CEW

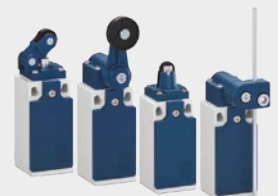
- Pushbuttons, selector switches and pilot lights
- IP66 protection degree
- Quick and easy assembly system
- High reliability auxiliary contacts
- Lighting block with integrated LED



## LIMIT SWITCHES

### LSW

- Interchangeable contacts and a wide range of heads and fast and slow action contacts
- Shorter assembly time, as the switches are assembled at the factory
- High durability even in harsh environments



# ELECTRICAL CIRCUIT PROTECTION

## ABW/ABWC AIR CIRCUIT-BREAKERS

- Rated currents up to 6,300 A
- Short-circuit breaking capacity of up to 120 kA (380/415 V)
- Standard trigger unit with LSIG protection
- Fixed and withdrawable versions
- Complete range of accessories
- Developed according to IEC 60947-2



## ACW HIGH CAPACITY MOLDED-CASE CIRCUIT-BREAKERS

- Complete accessory line
- Rated currents from 20 to 1,600 A
- Short-circuit breaking capacity of up to 200 kA (220/240 V)
- Models with adjustable electronic and thermomagnetic releases
- Protection of electrical circuits and motor circuits
- Developed according to IEC 62771-100



## AGW MOLDED-CASE CIRCUIT BREAKERS

- Developed according to IEC 60947-2
- Breaking capacity of 18 to 45 kA @ 380 V
- Available in four frames: currents from 15 to 800 A
- Complete accessory line



## DWB AND DWA MOLDED-CASE CIRCUIT-BREAKERS

- Rated currents from 16 to 1,600 A
- Short-circuit breaking capacity of up to 80 kA (380/415 V)
- Models with fixed, adjustable and electronic thermal and magnetic releases
- Developed according to IEC 60947-2



## DWP - MOLDED-CASE CIRCUIT-BREAKERS

- 16 to 800 A rated currents
- Fixed thermal and magnetic releases
- Protection of electrical installations against overloads



## MDW E MDWH MINIATURE CIRCUIT BREAKERS

- Rated currents from 2 to 125 A
- One, Two, Three and Four Poles
- Breaking capacity:
  - 1.5 kA...10 kA (230/400 V ac) NBR NM 60898
  - 5 kA...10 kA (230/400 V ac) NBR IEC 60947-2



## SPW02 SURGE SUPPRESSORS

- Protection of equipment and installations, classes I and II (for direct and indirect discharges), 12, 20, 45 and 60 kA for class II, plug-in connection and auxiliary contact (optional)



## RDWS RESIDUAL CURRENT CIRCUIT BREAKERS

- Protection against leakage current
- Sensitivity of 30 mA (life protection) or 300 mA (installation protection)
- Two and four poles
- Rated currents from 25 to 100 A



## QDW DISTRIBUTION BOARDS

- Installation of 4, 8, 12, 18, 24 and 36 circuit breaker modules
- Wall and flush models
- Smoked and white cover finish
- Stickers for circuit identification included



## FUSES

- Manufactured according to IEC 60269 in currents from 2 to 2,000 A
- aR class, NH and flush-end type: protection against short-circuit in semiconductors/electronic equipment up to 690 V ac
- gL/GG, class NH and D types: protection against short-circuit and overloads for general appliances up to 500 V ac



## SWITCH-DISCONNECTORS

- FSW Fuse-Switch-Disconnectors
- RiW Rotary Switch-Disconnectors
- RfW Rotary Switch-Disconnectors



## BWW SHIELDED BUSBARS

- Reduced installation space in relation to the conventional cable method
- Flexibility to position the load supply points with withdrawable box for up to 630 A
- Installation time up to 80% shorter than required for conventional cable systems
- Product certified according to international standard IEC-60.439-2 / IEC-61.439-6 and homologated for building use in the main energy concessionaires



## MSW - SWITCH-DISCONNECTORS

- Rated currents from 12 up to 160 A
- Mounting option: top and base
- Compliance with the requirements of NR12 and IEC 60947-3 standards
- Compact and easy installation
- Complete range of accessories
- Terminals with IP20 protection degree
- Handle with IP65 protection degree



## VBV VACUUM CIRCUIT BREAKERS

- Rated currents: 630 and 1,250 A
- Rated voltage of 17.5 kV
- Short-circuit interrupting capacity of 25 kA
- Distance between poles: 150 mm
- Complete line of accessories
- Robust and compact structure
- Vacuum-insulated ceramic bottle
- Developed according to IEC 602771-100



## VBWK INPUT MODULES IN MV FOR MASONRY INSTALLATIONS

- Installation in masonry cabinets
- Protection relay homologated by the utility companies
- Supplied assembled with all the equipment interconnected, tested and ready for energizing



# ELECTRICAL PANELS

## CCM LOW VOLTAGE MOTOR CONTROL CENTER

- User safety during operation, supervision and maintenance
- Installation in centralized locations to simplify operation and maintenance
- Versatility to command and protect a great number of motors



## LCW LOW-VOLTAGE LOAD CENTERS

- Lower risk of accidents with operators
- Fast and easy maintenance
- Modular system enables easy expansion
- Easy rear access to the electric cable terminals
- Greater reliability on the protection system



## ELW, EMW AND ESW E-HOUSES

- Shorter project lead time
- Faster field assembly time
- Little infrastructure required at the site (lower mobilization and demobilization costs)



## MTW MEDIUM VOLTAGE SWITCHGEAR

- Voltage class: 7.2 to 36 kV
- Short-circuit current: 25 / 31.5 / 40 / 50 kA
- Main disconnection and protection of manufacturing plants and industrial installations
- In compliance with IEC 62271-200
- Operation by means of removable circuit breaker
- Reduced dimensions



## CCW COMPACT MEDIUM VOLTAGE SWITCHING AND PROTECTION SET UP TO 20 KA / 24 KV

- Gas-insulated switchgear and switch disconnector (opening with load)
- Three positions: open, closed and grounded (with closing to earth capacity)
- Compact dimensions: 375, 500, 750 and 1,000 mm widths



## TTW01 ELECTRIC PANELS

- Panels tested according to NBR IEC 60439 and NBR IEC 61439
- Supply through accredited panel builders, ensuring quality and speed in the manufacture



# CAPACITORS AND POWER FACTOR CORRECTION

## UCW SINGLE-PHASE CAPACITIVE UNIT

- Power up to 10 kvar, diameters from 40 to 75 mm and 535 V ac
- Capacitive units for mounting three-phase modules and banks



## UCWT THREE-PHASE CAPACITIVE UNIT

- Ideal for localized/individual motor correction:
  - 0.5 to 50 kvar at 220 V
  - 0.5 to 50 kvar at 380/440/480/535 V
  - 50 to 50 kvar at 600/660/690 V



## MCW THREE-PHASE CAPACITOR MODULE

- Powers up to 60 kvar and 480 V
- Single-phase capacitive units delta connected
- Built-in discharge resistors



## DRW DETUNING REACTOR

- Voltage: 220, 380 and 440 (V)
- Power: 9.0...63.3 (kvar)
- Reduced vibration
- Reduced noise
- Insulation class H (180 °C)
- Insulation voltage of 1 kV



## BCW AND BCWP THREE-PHASE CAPACITOR MODULES

- Power: up to 100 kvar and 535 V ac
- Capacitors connected in delta configuration
- General protection with "NH" fuses or circuit breakers
- Electronic timing relay that protects the capacitors in the reenergizing



## PFW AUTOMATIC POWER FACTOR CONTROLLERS

- Switching of capacitors and reactors with 8 to 24 control steps available
- Ability to "learn" and record the reactive powers of the steps, eliminating the need for parameter setting of each one



## MOTOR RUN AND LAMP METALIZED POLYPROPYLENE CAPACITOR

- Rated voltages 250 V / 400 V and 440 V
- Rated frequency 50/60 Hz
- Capacitance tolerance  $\pm 5\%$
- Expected service life 10,000h
- Protection safety class: A



# VARIABLE SPEED DRIVES

## CFW100

- Power supply: 100-127 or 200-240 V (single-phase)
- Output rated current: 1.6 to 7.3 A
- Maximum applicable motor 0.25 cv to 1 cv 4.2 A (1 cv)
- Vector control (VW) or scalar control (V/F)
- SoftPLC
- Free WPS Programming Software



## CFW700

- 200-600 V single or three-phase supply voltage
- 2.9 to 211 A rated output current
- Maximum applicable motor 1.5 cv (1.1 kW) to 175 cv (132 kW)
- SoftPLC



## CFW11

- 200 to 690 V single or three-phase supply voltage
- Output rated current: 3.6 a 1,141 A (2 to 950 cv)
- Vector control (sensorless or with encoder) and WMagnet, VWV



## MW500 MOTOR DRIVE

- Supply voltage: single-phase 200-240 V or three-phase 380-480 V
- Output rated current: 1.3 A to 16 A (0.5 cv / 0.37 kW to 10 cv / 7.5 kW)
- NEMA 4x/IP66 protection rating
- Adaptable to WEG W22 motor line or wall mounting
- Switch-disconnector (optional)
- Free WPS Programming Software



## CFW300

- Single-phase or three-phase supply voltage at 100-127 V, 200-240 V or 380-480 V and three-phase motor power supply at 220 V or 380 V. Direct current power supply is also possible
- Rated output current of 1.6 to 15.2 A
- Easy installation
- Flash memory module (accessory)
- Free WPS Programming Software
- Vector (VWV) or scalar (V/F) control modes



## CFW501 - HVAC

- Supply voltage of 200-240 V, 380-480 V
- Rated currents: 1.0 up to 31 A 1.0 A to 31 A (0.33 cv / 0.25 kW to 20 cv / 15 kW)
- Low input harmonic distortion
- SoftPLC
- Operator interface (HMI) with specific units for HVAC applications
- BACnet, Metasys N2 and Modbus-RTU communication protocols
- Free WPS Programming Software



## CFW500

- 200-600 V single or three-phase supply voltage
- 1 to 105 A rated output current 1.0 A to 221 A (0.33 cv / 0.25 kW to 175 cv / 132 kW)
- SoftPLC with free WPS programming software
- STO and SS1 safety functions
- Versions with IP20, NEMA1 or IP66 protection rating
- PM motor control
- Vector control (sensorless or with encoder) and VWV



## CFW701 - HVAC

- 200-600 V single or three-phase supply voltage
- Output rated current: 2.9 to 211 A
- Power range from 2 cv (1.5 kW) to 175 cv (132 kW)
- RFI filter according to the levels of EN 61800-3 (standard)
- Inductor on DC link
- BACnet, Metasys N2 y Modbus-RTU communication protocols
- SoftPLC with free WPS programming software
- Versions with IP20, NEMA1 or IP55 protection rating



## MVW01 MEDIUM VOLTAGE

- Input cubicle up to 36 kV
- Applicable to medium voltage induction motors of 2.3 kV up to 6.9 kV
- Maximum applicable motor of 500 cv (400 kW) to 22,500 cv (16,875 kW)
- 12, 18, 24 or 36-pulse diode input rectifier
- Power and control insulated by fiber optic



## MVW3000 - MEDIUM VOLTAGE

- Motor voltage: 2.3 kV to 13.8 kV
- Motor current: up to 1,140 A<sup>1)</sup>
- Input voltage: 2.3 kV...13.8 kV
- High-efficiency air cooling
- User-friendly interface
- Arc detector system on transformer and cells cabinet as standard



Note: 1) For higher currents, please contact WEG.

# SOFT-STARTERS

## SSW05

- Voltage: 220 to 575 V
- Output rated current: 3 to 85 A
- Built-in bypass
- Remote operating interface (HMI) (optional)



## SSW07

- Voltage: 220 to 575 V
- Output rated current: 17 to 412 A
- Incorporated bypass
- 3-phase control
- Built-in motor protections



## SSW08

- Voltage: for 220 to 575 V ac or 380 to 690 V ac
- Output rated current: 17 to 412 A
- Built-in bypass
- Control of 2 phases
- Built-in motor protections



## SSW900

- Supply voltage from 220 to 575 V ac
- Currents: 10 to 1,400 A
- Detachable graphic IHM with built-in USB port and Bluetooth
- Built-in bypass
- Motor inside delta connection allowed
- SoftPLC with free WPS programming software



## SSW7000 MEDIUM VOLTAGE

- Applicable to 2.3 to 13.8 kV medium voltage induction motors
- Maximum applicable motor of 350 cv (250 kW) to 16,300 cv (12,200 kW)
- Torque control developed by WEG based on the torque control of the frequency inverters
- Vacuum bypass and main circuit breakers or contactors



## SERVO DRIVES

### SWA SERVOMOTORS

- Torque of 0.8 at 40 N.m
- Sinusoidal FCEM
- Protection level IP65
- Brushless
- Low inertia
- Low maintenance
- Rapid dynamic response
- Low noise and vibration levels



### SCA06 SERVO DRIVE

- Supply voltage of 220...230 V or 380...480 V
- High performance
- Precise movement control
- Operation in closed loops
- Position feedback by means of resolver
- Control and power with independent power supplies



## AC/DC CONVERTER

### CTW900

- Supply voltage of 200...500 V
- Output rated current: 20 to 2,000 A
- Current control field up to 25 A
- Speed or torque control
- USB Port
- SoftPLC
- Free software: WLP and Superdrive G2



## PLCS - PROGRAMMABLE LOGIC CONTROLLERS

### PLC300

- Power supply voltage: 24 V dc
- 10 digital inputs
- 9 digital outputs
- 1 isolated input for encoder
- 1 analog input 0-10 V dc / 4-20 mA
- Up to 2 expansion modules with digital and analog I/O
- Real time clock
- Operation interface (HMI)
- 5 inbuilt ports: USB, RS232, RS485, CANopen and Ethernet
- Free WPS Programming Software



### TPW04

- Supply voltage of 100/240 V ac
- Flexible basic units 10, 20, 30, 40 and 60 I/O points
- I/O expansion capacity
- Real time clock
- Incorporated Modbus communication
- Free programming software TPW PC Link



### CLIC02

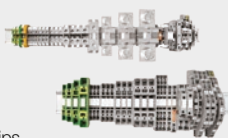
- Power supply voltage: 12 V dc, 24 V dc or 110-220 V ac (50/60 Hz)
- Basic units 10, 12 or 20 digital inputs and outputs or 4 analog inputs (0-10 V dc / 12 bits)
- Real time clock
- Two quick 1 kHz inputs
- Two PWM outputs and 1 kHz pulse train
- Free programming software Clic02 edit V3



## ELECTRICAL CONNECTIONS

### BTW TERMINALS

- Complete line of terminals, mini terminals and relay terminals
- Housing in polyamide PA66 with excellent dielectric properties and high mechanical strength
- EX certification
- Intelligent software for configuration of terminal strips and their accessories
- Complete line of accessories and terminal and cable markers



## INDUSTRIAL PLUGS AND SOCKETS

- Resistant to impacts and corrosion
- Protection against indirect contact
- Rated currents: 16 A, 32 A, 63 A and 125 A
- Number of poles: 3 (2P+T), 4 (3P+T) and 5 (3P+T+N)
- Rated voltages: 110 V ac, 220 V ac and 380 V ac
- Degree of protection IP44 and IP67
- Available in two lines:
  - Standard
  - Premium



## HUMAN MACHINE INTERFACES (HMI)

### MT

- 4.3 to 15 inch screen
- Real time clock
- USB port
- Ethernet communication
- Free edition software



## REMOTE UNITS

### RUW100

- Allows the expansion of digital, analog, thermocouple, Pt-100, Pt-1000 and load cell inputs and outputs, and relay outputs
- Modular, flexible and easy-to-integrate system
- Available in three main modules and ten expansion modules
- Supports up to 8 expansion modules per main unit, enabling the customization of automation systems
- Supply voltage: 24 V dc
- Connectivity to Modbus (RS485) and CANopen (CAN) networks and complete integration with the process network

