

# Service

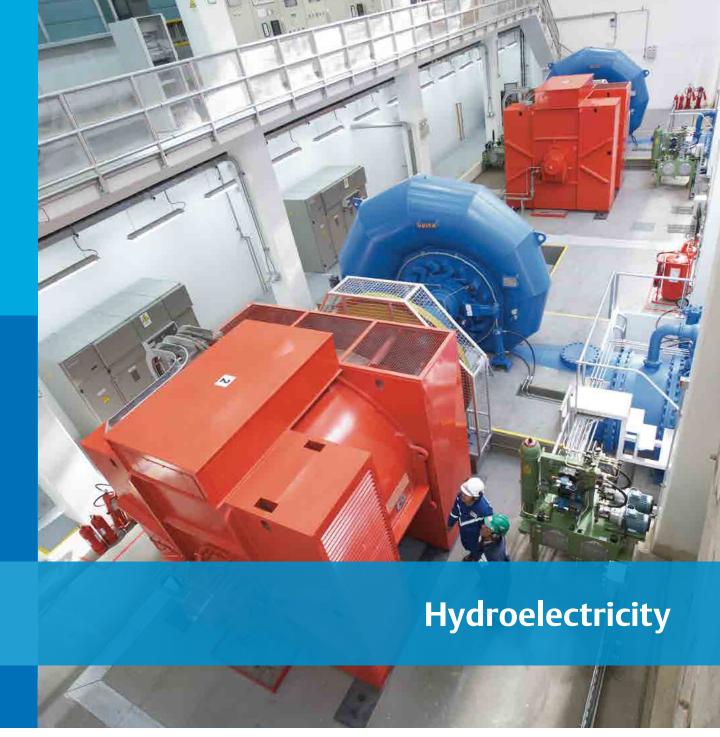
# Expertise I Responsiveness I Proximity

Low and medium voltage asynchronous alternators and generators: maintenance, cryogenic cleanup, reconstruction, rewinding

Direct current exciters replaced by static solution based on industrial digital regulators and drives



www.emersonindustrial.com/automation



A range of solutions dedicated to power generation



© Emerson 2015. The information contained in this brochure is for guidance only and does not form part of any contract. The accuracy cannot be guaranteed as Emerson have an ongoing process of development and reserve the right to change the specification of their products without notice.

Control Techniques Limited. Registered Office: The Gro, Newtown, Powys SY16 3BE. Registered in England and Wales. Company Reg. No. 01236886.

Moteurs Leroy-Somer SAS. Headquarters: Bd Marcellin Leroy, CS 10015, 16915 Angoulême Cedex 9, France. Share Capital: 65 800 512 €, RCS Angoulême 338 567 258.



4940 en - 2014.07 / c

# Hydroelectricity - A range of solutions dedicated to power generation

## **Tried and tested solutions**



- Voltages up to 15 kV
- Power ratings up to 20 MW
- Speed of rotation from 250 to 1500 rpm
- Product adapted and optimised for each project
- Installation possible on site
- Driven by any type of turbine
- Horizontal, vertical and inclined shaft
- Significant transfer of radial and/or axial forces
- Designed to withstand overspeed
- All cooling methods
- High efficiency levels
- Extremely flexible reactive power management over the whole power range
- Simplicity/reliability
- Wide choice of options and instrumentation



### **Generators**

- Voltages up to 690 V
- Power ratings up to:1500 kW for asynchronous generators
- 400 kW for magnet generators
- Speed of rotation from 600 to 1500 rpm
- IP23 or IP55 protection
- Driven by any type of turbine
- Horizontal, vertical and inclined shaft
- Designed to withstand overspeed
- IE2 or IE3 optimised efficiency
- Wide choice of options and instrumentation







## **Innovative solutions**

- > Increased production time
- > Adaptation to hydraulic conditions
- > Constant search for maximum power by adapting the speed
- > Allows optimised use of a second-hand turbine
- > Control regardless of the technology and number of generator poles
- > Integrated, linear and controlled reactive power supplied



# Frequency inverters

- Modular cabinet design
- *Range from 100 to 2800 kVA*
- For wound synchronous alternators, cage induction generators and standard or magnet low-speed generators
- 400 or 690 V voltages
- Air or liquid cooling
- Compliance with harmonic distortion and GRID CODE requirements
- Touch screen for "POWERSCREEN" supervision
- ETHERNET card for remote control
- Built-in overspeed control

