



New product!



DIGITAX ST



**The Servo drive ...
intelligent, compact, dynamic!**

Satisfying the requirements of the modern, constantly-evolving and rigorous automation environments in which industrial machinery operates, calls for very powerful products that are more flexible, more economical and fully-communicating.

DIGITAX ST drives meet these challenges in the world of Servo Process application drive systems.

Extremely compact and incorporating the latest technological developments, **DIGITAX ST** drives offer users maximum ease of use.

◆ Powerful

Designed and developed to satisfy the needs of high-performance servo systems and precision processes, **DIGITAX ST** drives allow transient cycles with an exceptional dynamic response, due to their ability to handle very high peak torques, up to 300% of T_n .

The standard I/O include a high-speed "Freeze" input and high-resolution analogue inputs. The universal encoder input can be used to control incremental, SinCos, Hiperface, EnDAT and SSI encoders, to be selected according to the application. Encoder emulation is also included.

Position motion control can be managed internally or externally via synchronisation of algorithms and high-speed data exchanges.

DIGITAX ST versions incorporating the position controller guarantee very high levels of performance and compact dimensions. It is then possible to control position servo systems in absolute or relative mode, cam profiles, synchronisation between axes, etc.

Automatic calibration is used to measure the characteristics of the servo motor and the machine being driven, and to optimise the control loop gains automatically, in order to obtain optimum performances.

◆ Flexible

The innovative and original **DIGITAX ST** concept always leads to the best solution for integration in systems:

- Perfect adaptation to the process now possible with **DIGITAX ST** drives and associated modules
- Option to control servo motors using torque, speed or position modes
- Universality of the analogue or digital offer allowing data exchange according to different protocols
- Used in conjunction with **LEROY-SOMER's UNIMOTOR FM** servo motors, the **DIGITAX ST** solution is always adapted to the environmental constraints because of its different mechanical configurations, electromagnetic brake and all the position/speed incremental or absolute sensor solutions.
- Compatible with 230, 400 or 480 V single or three-phase power supplies.

◆ Economical

As a result of carefully-controlled development work prioritising both innovation and reliability, **LEROY-SOMER** offers **DIGITAX ST** drives which, with their compactness and their high degree of integration, offer very competitive solutions, easily capable of satisfying the tough demands of Mechatronics and high-performance machine cells.

DIGITAX ST's embedded intelligence saves on having an external automated management system, while simplifying the installation. It therefore provides standalone operation with a built-in motion controller.

To comply with machine safety standards, a secure disable input conforming to EN 954-1 Cat 3 deactivates the power bridge (zero motor torque), thereby saving the need for a line contactor and safety relay.

◆ User-friendly and communicating

Commissioning is quick and easy, with a choice of parameter-setting mode via:

- a removable keypad
- a **Smartcard** which loads the application software and saves the parameters or copies them instantaneously to other drives
- **CTSoft** software which guides the user throughout parameter setting, displaying and modifying his configuration by means of animated views. In addition, a built-in graphics editor makes it very easy to create a servo control position, synchro, and indexing program.

The **CTscope** software, a 4-channel real-time oscilloscope, can be used to display, analyse and save application data with:

- selection of drive parameters
- adjustable time base and scale
- trigger function and measurement cursors

Access to application programs and creation of customised developments are easily possible using the **SyPTPro** Automation software, a variable speed Application development and Automation tool, with languages conforming to IEC 61131-3, PLCOpen and “Advanced Position Control” diagrams.

Standard application programs, in the form of modules that can be integrated in the drives, are available:

- position control, cam, indexing, synchronisation between axes

Interfacing with other automation system elements is still possible.

Add-on option modules provide connectivity to all standard industry fieldbuses:

EtherCAT, Ethernet IP, Ethernet TCP/IP, SERCOS, CANopen, Profibus, DeviceNet, Interbus

LEROY-SOMER offers **GUARANTEED PERFORMANCE** with **DIGITAX ST** drives used in conjunction with **UNIMOTOR FM** servo motors for all high-performance applications:

Wrapping, XY transfer stations, removing material, laser or waterjet cutting, profiling, indexing tables, metering, punching, printing, packaging, labelling, rotary cutting or cutting on the fly, spooling, robots, machine tools, special machines, etc.