## NEXT-GENERATION MODULAR ELECTRONIC CONTROLLERS





Variable-Speed

Drive

→ Modular solution: MP Multipurpose and XT Extended variants

Energy Efficient

- → MP Multipurpose for a wide range of food retail, food service, and medical applications
- → XT Extended with expandable features and controls adaptable to specific application needs
- → Muti-voltage version for global grid coverage
- → Optimized for hydrocarbons and reduced energy consumption
- → Four types of controls: AEO (Adaptive Energy Optimization), frequency, serial, and closed-loop-control (XT)
- → Top robustness and safety
- → Additional relay outputs for case control in all variants
- ightarrow Optimized defrosting support
- → Easy customization

Secop has developed a new generation of efficient and effective electronic controllers with a modular SW-HW design, which allow flexible configurations based on system needs.

Premium

Controllers

The MP-Series (multi-purpose electronic controller) for variable-speed compressors of our NLV- and SLVE-series will substitute the former generation controllers, offering a range of additional features and connectivity options in a multi-voltage design, including GFCI tripping prevention (US).

The new MP controller features improved robustness and safety: fire-proof IP54 housing, galvanic isolated PCB coating, optical isolated I/Os, and SW safety layers.

The new generation of MP controllers is optimized for hydrocarbon compressors to achieve enhanced energy efficiency, improve system performance, and reduced noise.

The next series planned for modular configuration is the **XT-Series** (extended electronic controller): A controller designed to offer additional monitoring options, connectivity and customization of I/O for specific system needs, such as multiple temperature sensors, multiple digital/analog I/O, multi-application settings. It will come with a set of optional features: IOT, multi-compressor operation, or a pressure switch.

**Natural** 

Refrigerant

Features	105N47xx Series	MP – Multipurpose	XT – Extended
2-speed defrost control	$\oslash$	$\otimes$	$\otimes$
Remote upgrade of software/parameters	$\oslash$	$\otimes$	$\otimes$
Multiple applications (different parameters sets)	$\bigcirc$	$\oslash$	$\otimes$
Condenser fan speed control	$\oslash$	$\otimes$	$\otimes$
Evaporator fan speed control	$\oslash$	$\oslash$	$\otimes$
Temperature control	$\oslash$	$\oslash$	$\otimes$
Low leakage current variant for US GFCI requirements	$\oslash$	$\otimes$	$\otimes$
Rail/frame heater control	$\bigcirc$	$\oslash$	$\otimes$
Drain heater control	$\bigcirc$	$\oslash$	$\otimes$
Multi-compressor operation	$\bigcirc$	$\oslash$	$\otimes$
Dewpoint control	$\oslash$	$\oslash$	$\otimes$
Pressure switch	$\bigcirc$	$\oslash$	$\otimes$
Temperature data logger (future HACCP development)	$\oslash$	$\oslash$	$\otimes$
Enclosure IP rating	54	54	43
Relays for load control	$\oslash$	2	8
Temp sensors	$\bigcirc$	$\oslash$	4
Digital/Analog I/Os	$\bigcirc$	$\oslash$	4
Voltage	90–270 V 50/60 Hz Multi-Voltage	90–270 V 50/60 Hz Multi-Voltage	90–270 V 50/60 Hz Multi-Voltage
Compressor compatibility	NLV8.0CN NLV10CN NLV12.6CN SLVE18CN	NLV8.0CN NLV10CN NLV12.6CN SLVE18CN	NLV8.0CN NLV10CN NLV12.6CN SLVE18CN
	First generation of controllers for NLV-/SLVE-Series with limited connectivity and control options.	Multi-purpose with additional controls, GFCI, fireproof housing, and optimized performances for hydrocarbon compressors	Extended range with additional features and customization options for demanding applications.



## Tool4Cool® Software Interface

Tool 4Cool @is a unique PC software tool that enables you to precisely configure your Secop BD compressors to your cooling systems.

Via microprocessor-based controllers, Tool4Cool® gives you easy access to all parameters. These can be changed, monitored, downloaded or uploaded to get the optimum performance out of your cooling system.

## Summary:

With the release of the new generation of multi-purpose electronic controllers for variable-speed compressors, Secop offers additional control options with improved optimization features in a robust design. This new generation will enhance the performance and the connectivity of variable-speed compressors of NLV- and SLVE-Series, which are optimized for food-retail, food service, medical and other special applications in commercial refrigeration.

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