

### NLV12.6CN Controller Software Update (Version 1.13)

**Code numbers  
affected: 105N4710  
and 105N4760**

#### 1. Upgrade of communication interfaces

To ensure better integration, several temperature controllers use serial communication to receive information from the compressor about load, controller temperature, motor faults, etc.

Secop controllers are now delivered with an upgraded software that meet those demands and support four different interfaces:

1. DWI (Dual Wire Interface with separated RX and TX lines)
2. Frequency signal
3. AEO (Thermostatic operation)
4. (1) SWI (Single Wire Interface, Modbus protocol based for Tool4Cool<sup>®</sup>)

The software has automatic input detection and will select the input which is active:

- If more signals are connected, the input with highest priority (1–4) will be used.
- The SWI has lowest priority and can be used for Tool4Cool<sup>®</sup> in combination with the other inputs.
- If Tool4Cool<sup>®</sup> sends an active start command, the SWI input will change the priority to 1 and overrule all other input signals. The SWI input will then remain selected until Tool4Cool<sup>®</sup> is closed.

#### 2. Wider power-supply range.

At supply voltages higher than 265 V AC, the compressor was stopped to protect the motor. Our investigations show, that the protection works so well that there is no reason for stopping the motor at this voltage. On the contrary, running the motor can help to keep the internal voltage low.

#### 3. Alignment of software functionality across compressor series

All NLV, DLV and SLV compressors will be released with identical software, starting with the NLV controllers 105N4710 and 105N460. This will enable you to use the same controller settings for any Secop variable speed compressor. Differences might still arise for speed and voltage range.

#### Does the update affect my current setup?

No, the frequency signal and AEO are completely unchanged and will not be affected. You can continue with the setup as it is. If you used Tool4Cool<sup>®</sup> to select input, you don't need this anymore, signals will be automatically detected. If you changed the settings of the AEO, you will still need to do this.

#### What about the physical connection of the signals?

They remain unchanged. The DWI's TX is shared with the frequency signal. A new signal (RX) has been added to the unused pin in the middle.

For a complete description of the interfaces, please contact Nidec GA Compressors.

#### Can I then use it for higher voltages?

No, the maximum limit remains unchanged. Running at higher voltages than 270 V AC continuously might not affect the compressor but it will affect the electronics' slife.

#### How can I identify the software version?

Software version is always stated on the product-label and as information in 2D Data Matrix code.

#### When will I receive controllers with software 1.13?

Controllers with new software will be delivered from the beginning of May.

Samples can be requested at Nidec GA Compressors.