



Danfoss MyDrive® HIL Packages for Typhoon HIL Control Center

Danfoss A/S

www.danfoss.com

Ulsnaes 1, DK-6300 Graasten, DENMARK

Copyright© 2026, Danfoss A/S, all rights reserved

End User License Agreement: suite.mydrive.danfoss.com/introduction -> settings -> legal information -> EULA

Reporting and status of vulnerabilities and incidents: www.danfoss.com/en/service-and-support/coordinated-vulnerability-disclosure

Version: 7.1.0

UUID: 01a0193a-6ca1-7abd-8ba1-1284a2e5d33b

Minimum THCC version: 2026.2

Build completed: 25 September 2026

Security support end date: September 2031

Highlights

- Compliant with European Union's Cyber Resilience Act: Vulnerability and incident reporting obligations applying as of 11 September 2026.
- Help text now available in both Schematic Editor (components) and HIL SCADA (widgets).
- Library structure in MyDrive HIL package updated.
- iC7 SM: Updating requirement for licenses. System modules cannot run on HIL simulators without valid license.
- iC7 SM: Updating A5 and G7 voltage classes for liquid cooled AFE, GC and INU products.
- iC7 SM: Making commissioning SCADA widget more robust and reducing duration of the commissioning process.
- iC7 SM: Better support for monitoring internal temperatures and fan speeds.
- iC7 FC: Making commissioning SCADA widget more robust.

Known Issues

- iC7 FC: CIO flags popping up occasionally after stepping up to THCC2023.4. Reported to Typhoon HIL.

Version: 7.0.0

Build Completed: 24 July 2026

Minimum THCC version: 2026.2

Highlights

- iC7 SM: Official release of MyDrive HIL for iC7 System Module with support for AFE, DCDC, GC, and INU products, including a variety of example models.
- iC7 FC: Added series resistance to DC-link inductor.
- iC7 FC: Loading of PUD file corrected and update to commissioning widget with progress bar.
- Updated Motor components supporting both iC7 System Module and iC7 Frequency Converter and correcting scaling of resolver signals.
- Modified execution rates for all components to have them available as top level properties.

Known Issues

- iC7 FC: CIO flags popping up occasionally after stepping up to THCC2023.4. Reported to Typhoon HIL.
- Help text not available in HIL SCADA widget. Reported to Typhoon HIL.

Version: 6.0.0

Build Completed: 27 February 2026

Minimum THCC version: 2025.2

Highlights

- iC7 FC: Added support for Signed PUD files (requires Signed Control cards).
- iC7 FC: Solving issues with commissioning SCADA widget, can now successfully commission iC7 FC.
- iC7 FC: Solving issue with iC7 FC SCADA widget not showing state of power-supplies.
- IO test box widget: Correcting scaling for 0-20 mA current-loop values.
- Basic load model: Correcting polarity of relay input for mechanical brake.



Known Issues

- CIO flags popping up occasionally after stepping up to THCC2023.4. Reported to Typhoon HIL.
- Help text not available in HIL SCADA widget. Reported to Typhoon HIL.

Version: 5.0.0

Build Completed: 30 July 2025

Minimum THCC version: 2025.2

Highlights

- iC7 FC: Selecting products to simulate based on product-code like on the Danfoss Product Store.
- iC7 FC: Better handling of some data describing the iC7 hardware (IGBT switching delays, updates on ESR of grid filter capacitors).
- iC7 FC: Supporting all HIL Simulators with UART communication through digital IO pins.
- LAST RELEASE WITH SUPPORT FOR VLT!

Known Issues

- iC7 Frequency Converter commissioning widget fails to load PUD file to control card.
- CIO flags popping up occasionally after stepping up to THCC2023.4. Reported to Typhoon HIL.
- Help text not available in HIL SCADA widget. Reported to Typhoon HIL.

Version: 4.0.0

Build Completed: 17 January 2025

Minimum THCC version: 2024.3

Highlights

- New SCADA widget for testing voltage dips, short interruptions and voltage variations according to IEC 61000-4-34.
- Help text integrated into SCADA widgets.
- iC7 FC: Solving problem with updating drive firmware through SCADA panel (for iC7 General Release 4 and later).
- iC7 FC: More correct start-up behavior of internal power supplies and their power consumption.
- iC7 FC: Better handling of some data describing the iC7 hardware (removing ESR of grid filter capacitors).

Known Issues

- CIO flags popping up occasionally after stepping up to THCC2023.4. Reported to Typhoon HIL.
- Help text not available in HIL SCADA widget. Reported to Typhoon HIL.

Version: 3.0.0

Build Completed: 29 May 2024

Minimum THCC version: 2024.1

Highlights

- New model 'Synchronous Motor Current Source' with support for Dynamic Flux.
- Added support for Synchronous Reluctance Motors (SynRM).
- Improvements in iC7 Frequency Converter.

Known Issues

- CIO flags popping up occasionally after stepping up to THCC2023.4. Reported to Typhoon HIL.

Version: 2.0.0

Build Completed: 25 January 2024

Minimum THCC version: 2023.4 sp1

Highlights

- Readout of parameters in mask for LC and LCL filter.
- ddCommunication wheel updated to meet the requirements for python 3.11.
- Motor and loads models updated to have $T_{nomInv} = 1/T_{nom}$ in parameter bus.
- Motor and Inverter thermal models are updated with enable input.
- Libraries in Schematic Editor and HIL SCADA restructured and components renamed.

Known Issues

- iC7 Frequency Converter: CIO flags popping up occasionally after stepping up to THCC2023.4

Version: 1.0.2

Build Completed: 18 October 2023

Minimum THCC version: 2023.3 sp1

Highlights

- iC7 FC can simulate with both HIL402 and HIL404 devices.
- Calibration of HIL Compatible iC7 Frequency Converter.
- Added stand-alone mechanical load models and SCADA widgets for: basic motion load, gear mode, position load, and two mass load.
- Updated 'Basic Load' with possibilities for simulating 'High Starting Torque' and 'Wind Milling'.
- Updated 'Grid with Droop' to run on FPGA, removing stair-case waveform.
- Fixing bug in basic grid widget and added possibility for more types of grid faults and specifying amount of unbalance.
- iC7 FC adding DcLink terminals with possibility to feed from DC source.
- iC7 FC better support for testing of fans (FX09 - FX12).
- iC7 FC fixing gain and offset for grid voltages to have correct measurements (FX06 - FX12).

Version: 1.0.1

Build Completed: 27 June 2023

Supported THCC version: 2023.2

Highlights

- Fix: iC7 Frequency Converter and VLT Frequency Converter libraries updated to ensure data stored in model would persist after reloading model and libraries,
- Fix: Virtual '1500 A HIL' Frequency converter could not power up due to error in PUD file.

Version: 1.0.0

Build Completed: 26 June 2023

Supported THCC version: 2023.2

Highlights

- Initial release of MyDrive HIL for iC7 Frequency Converters,
- Including 1500 A iC7 Frequency Converter for testing purposes. Not a real iC7 variant!
- Package installation through Typhoon HIL Package Manager.

Version: 0.0.3

Build Completed: 1 June 2023

Supported THCC version: 2022.4

Highlights

- Added 1 MW VLT Frequency Converter to package for testing purposes. Not a real VLT variant!



Version: 0.0.2

Build Completed: 25 January 2023

Supported THCC version: 2022.4

Highlights

- Improve torque results at low speed,
- Extend range of squared term for torque,
- Add torque oscillations for simulating load disturbance.

Version: 0.0.1

Build Completed: 22 December 2022

Supported THCC version: 2022.4

Highlights

- Hello World - Initial release of MyDrive HIL for VLT Frequency Converters.