

The Danfoss logo is displayed in a white, stylized script font within a red rectangular box.

ENGINEERING
TOMORROW

HIGHLIGHTS

- Scale up your installation easily
- Reduce system complexity
- Customize the system according to your needs
- Integrate flexibly into your application

 [iC7 series fact sheet index](#)

Ease
of connectivity

Industrial communication for iC7 series drives

Need **integration-friendly industrial** communication?

Optimize your communications with a wide range of industrial communication technologies.


In the iC7 series, industrial communication functionality is available on the control board as a software feature, making it easy to integrate, save time and provide efficient control and monitoring.

These technologies ensure the iC7 series integrates seamlessly into your system, and give you the freedom to communicate however you see fit.

Check the overview to find the functionality and compatibility you need:

- Functional extensions
- Control options
- Industrial communication
- Control panels
- Harmonic filters
- Input filters
- Output filters
- Brake resistors

Available for iC7-Automation and iC7-Marine drives

 [iC7-Automation fact sheet](#)

 [iC7-Marine fact sheet](#)

iC7.danfoss.com **iC7**

Fieldbus communication

Modbus TCP OS7MT

- Parallel Redundancy Protocol (PRP)
- Beacon-based DLR – Device level ring
- LLDP
- Secure Modbus
- Standard IT tools
- SNMPv1, SNMPv2c

Choose MODBUS TCP when integrating the drive into a MODBUS TCP network. Unless another fieldbus is selected, Modbus TCP is standard.

PROFINET RT OS7PR PROFINET RT/S2 OS7PS PROFINET IRT OS7PI

PROFINET is available in 3 different variants supporting your individual needs with the right set of features.

- Shared device
- PROFIenergy
- PROFINET Diagnostics (ALARM CR) and Extended Diagnostics
- Easy Device Replacement (Topology Discovery + Parameterization)
- Withstand Netload class III. Alarm/Warning representation
- Media redundancy MRP
- SNMPv1, SNMPv2c

Device description file, GSDML, enabling iC7 application-specific standard telegrams along with PROFIDRIVE and FC Profile support.

- Choose PROFINET RT when integrating the drive into a PROFINET network
- Choose PROFINET RT/S2 when the drive is part of a PROFINET System redundant solution
- Choose PROFINET IRT if you need to integrate the drive into a PROFINET network with isochronous performance

EtherNet/IP OS7IP EtherNet/IP CIP Energy OS7IC EtherNet/IP Redundant Owner OS7IR

EtherNet/IP is available in 3 different variants supporting your individual needs with the right set of features.

- EtherNet/IP conform
- EtherNet/IP interoperability tested
- CIP Security
- ACD – Address conflict detection
- Beacon-based DLR – Device level ring
- LLDP, Std IT tools SNMPv1, SNMPv2c

Device description file, EDS, enabling iC7 application-specific standard telegrams along and FC Profile support.

- Choose Ethernet/IP when integrating the drive into an Ethernet/IP network
- Choose Ethernet/IP CIP Energy when integrating the drive into a Ethernet/IP network with energy and metering management

- Choose Ethernet/IP Redundant owner when the drive is part of an Ethernet/IP System redundant solution

EtherCAT OS7EC EtherCAT DC OS7ES

EtherCAT is available in 2 different variants supporting your individual needs with the right set of features.

Main features:

- EoE
- CoE
- FoE
- Configurable OD
- ESI. Device model including communication adaptor

Application:

- Danfoss FC Profile
- CiA402
- Choose EtherCAT when integrating the drive into an EtherCAT network
- Choose EtherCAT DC when distributed clock is additionally required

Compatibility

Product	Industrial communication			
	Modbus TCP OS7MT	PROFINET RT OS7PR PROFINET RT/S2 OS7PS PROFINET IRT OS7PI	EtherNet/IP OS7IP EtherNet/IP CIP Energy OS7IC EtherNet/IP Redundant Owner OS7IR	EtherCAT OS7EC EtherCAT DC OS7ES
iC7-Marine	■			
iC7-Automation	■	■	■	■