

# eWon drivers - Driver Details

## Danfoss

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## 1. Danfoss Driver Details

### 1.1. TAG list

Postfix TagName	Description	Index	SubIndex	ModuleId	Type
_TotalEn	Total Energy Production [Wh]	1	2	8	DWord
_VDC	Voltage DC [V]	2	14	13	Floating point
_IDC	Current DC [A]	2	15	13	Floating point
_PDC	Power DC [W]	2	1	13	Floating point
_VF1	Voltage R-S [V/10]	2	5E	8	Floating point
_VF2	Voltage S-T [V/10]	2	5F	8	Floating point
_VF3	Voltage T-R [V/10]	2	60	8	Floating point
_IL1	Current R [mA]	2	3F	8	Floating point
_IL2	Current S [mA]	2	40	8	Floating point
_IL3	Current T [mA]	2	41	8	Floating point
_POWER	Out Power [W]	2	46	8	Floating point
_FREQ	Frequency [mHz]	2	50	8	Floating point
_STATUS	Inverter State	0A	2	8	Word

### 1.2. Decode inverter state value

State value	Description	Explanation
0	Off	Night time, input voltage <220V, no communication
1	Sleeping	Sleeping (auto-shutdown)
2	Startup	The inverter is in the startup phase
3	Running	The inverter working with power supply
4	Derating	Output power derated due to high temperature or power reference
5	Shutting Down	Shutting down
6	Shutdown	Failure or altering operational condition
7	Service Mode	Manual override/standby

### 1.3. Default serial port configuration

Default inverter configuration: 19200 8-N-1

Serial port configuration tag description (RS-422):

COM0	DanfossPort**Serial**comm:com:0;baudrate=19200;blocking=on;autocts=off;autorts=off
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### 1.4. Slave configuration

For each device (inverter) must be defined a tag named INVn (e.g. : INV1) where n is the number of device starting from 1.

Description of INVn tag is used by the driver to read some parameters, as described below :

*commname\*\*nodeAddress\*\*timeoutMs*

Example :

INV1	COM0**3-2-25*1000
INV2	COM0**3-1-36*1000

INV1 is read on port COM0, the node address is 3-2-25 and the timeout for each request is 1 second.

## 1.5. Node scanning

At the first start, the driver sends a broadcast message to all connected devices.

This procedure takes a few minutes, and produces a file "usr \ Config \ DanfossScan\_COMx.csv" which lists all nodes that have replied to the message.

The next starts (if the file already exists, so remove it only if you want a new node scanning), this procedure will not be performed.

Below it's an example of the resulting file:

Found Id	Net	SubNet	Node
Found 1	3	1	25
Found 2	3	1	36
Found 3	3	1	47
Found 4	3	1	58
Found 5	3	1	69

## 1.6. Tested Devices

- DANFOSS using the Com Lynxprotocol with RS-485