

ERC 112D VSC for Variable Speed Compressor control

# Enhance your equipment efficiency with variable speed control

By continuously matching compressor speed with load requirements based on the cabinet's inside temperature and its dynamics, the Danfoss electronic controller ERC 112D VSC for Variable Speed Compressor fulfills key requirements of commercial refrigeration to maintain best food quality while reducing energy consumption.

Up to

**40%**

energy savings  
with variable speed  
vs. fixed speed  
compressor



# Energy savings and environmental protection

Especially designed for bottle coolers and commercial fridges and freezers where a variable speed compressor is installed, the ERC 112D VSC brings greater efficiency, precision and simplicity. Approved for hydrocarbon refrigerants, it is particularly suited for OEM customers where time, easy and reliable installation and high quality need to go hand in hand with flexibility.

## Type of applications



The ERC 112D VSC with the variable speed compressor is a perfect match for savings

## Technical specifications

<b>Power Supply</b>	100 - 240 V a.c. Switch mode power supply. Average 0.7 W
<b>Input</b>	Customizable inputs
<b>Output</b>	Frequency output for variable speed control and 4 relay outputs
<b>Probes</b>	Compatible with Danfoss NTC sensors and ECO accessories
<b>Connectors</b>	Standard tab with optional plug
<b>Programming</b>	Customization and mass programming allowed with Danfoss PC software
<b>Mounting</b>	Front and rear mounting possible
<b>Display</b>	Large LED display with multi-functionality icons
<b>Keypad</b>	Integrated keypad for easy interface
<b>Refrigerants</b>	Approved for R290/R600a end-use applications
<b>Environmental protection</b>	IP65 on the front



### Technology

ERC 112D VSC is able to control the variable speed compressor with a frequency control output through an S4 port, which delivers a 5V frequency signal with a range of 0-200 Hz.



### Accessories

- NTC sensors
- ECO accessories
- Gateway
- KoolProg software
- Docking station



### Ordering code number

**080G3414** – ERC 112D VSC Blue LED with layout description.



### Improved performance

The variable speed control logic along with best-in-class features to automate and optimize compressor operation, defrost, light, fan and alarms, enhance the performance of your system.



### Capacity Modulation

ERC enables stepless compressor modulation to slow down and speed up using a frequency of 0-200Hz signal output to save energy and match load fluctuations very accurately. This helps in faster pull-down and improved operation in varying load conditions.



### Single hardware solution

One order number for multiple applications. Simplicity to shorten development time.



### Built-in reliability

Built to last, withstanding high compressor in-rush loads and having passed the most stringent tests, our relays are suitable for use with flammable refrigerants like R290 (Propane) & R600a (Isobutane).

For details on specifications, programming, wiring diagram, and accessories code numbers, please see the **ERC 112D VSC User Guide**

