

Reduce your costs through the best quality while maximising your productivity

The ERC 101 is a multipurpose refrigeration controller dedicated to OEM customers. Cutting overall total cost levels, it meets the requirements of today's advanced commercial applications. The ERC 101 is perfect for bottle coolers, stainless steel fridges and freezers, beer coolers, light supermarket applications and many uses.

The new cutting-edge product design allows a large array of cost savings:

Inventory reduction The wide application fit and modular design of the ERC 101 allows OEM manufacturers to reduce inventory costs by at least 30% – with just one Danfoss code number.

Global availability The ERC 101 comes with a unique array of global approvals and can be shipped to anywhere in the world at short notice. The average lead-time is cut by no less than 50%.

Easy programming The ERC 101 is programmed directly on the assembly line in less than 10 seconds using Danfoss' docking station.

Quick mounting The front mounting technology (patent pending) reduces assembly time on the production line to only five seconds – a new world record in efficiency improvement.

Service call reduction The intuitive display and menu structure along with 3 password levels reduce the need for onsite service. In fact, total service costs can be reduced by up to 25% with the ERC 101.

Quality The ERC 101 quality controller ensures optimum performance under all conditions – from Siberia to tropical conditions – setting new standards in IP protection and operational stability.





TECHNICAL SPECIFICATIONS

Power Supply	100 VAC - 240 VAC 50-60 Hertz, automatic switch mode power supply
Rated Power	Less than 0.5 W
Input	3 Inputs: 2 Analogue & Digital, 1 Digital; user specific assignment • Air / Evaporator / Condenser • Door sensor: All types, user specific • Danfoss NTC evaporator temperature probes • Danfoss NTC evaporator temperature probes • Danfoss ambient light sensor • Danfoss PIR sensor*
Output	Compressor relay: 16 (16A) EN60730; 16 (16A) CQC; 16A (16A FLA/72A LRA) UL60730
Probes	Danfoss NTC sensors and Danfoss ECO accessories
Connectors	Modular connector system for OEM customers, with optional output screw terminal adapter. Input connector type: Rast 2.5 Edge connectors. Output connector type: RAST 5 Standard
Programming	Lab programming: Danfoss USB Gateway with KoolProg Software. Assembly line programming: Danfoss ERC docking station. Offline programming: 4 push buttons
Assembly	3 types (all ERC 101 controls): front mounting (patents pending); brackets; fully integrated solution (requires "OEM specific" design of mounting hole)
Display	LED 7 inch display, 3 digits, decimal point and "multi functionality" icons; °C/F scale. Available in various colours
Keypad	4 buttons (integrated IP65 design), 2 left, 2 right; user programmable
Operating Conditions	0 °C to 55 °C, 93% rH
Storage Conditions	-40 °C to 85 °C, 93% rH
Measurement Range	-40 °C to 85 °C
Protection	Front: IP65 / Rear: water and dust protection corresponds to IP31, accessibility of connectors limit rear part rating to IP00 $$
Environmental	Pollution degree III (can be mounted inside a refrigerated cabinet), non-condensing
Resistance to Heat & Fire	Category D (UL94-V0)
EMC Category	Category I
Operating Cycles	Compressor relay: more than 175,000 at full load (16A (16A))

^{*} customised

Technical highlights

- More than 100 parameters, all individually programmable
- Compact design total depth is only 46 mm
- Real 16A power relay up to 2.5 HP compressors
- · Automatically controlled brightness of large-size LED display
- · Intuitive menu system
- 3-level password protection
- Fully compatible with flammable refrigerants (R290)
- Triple moisture protection (housing, coating and connector plug)
- · Advanced defrost algorithms





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