



# **EKC 102 Temperature controller series**

EKC 102 controllers for panel mounting are used for temperature and defrost control via pump-down or start/stop of compressor.

**IP 65 rating guaranteed**: Danfoss' innovative plastic moulding technology has made it possible to integrate push buttons and front packing in the controller's front panel.

**Easy installation:** Integrated mounting brackets ensure easy and effortless panel installation.

**Simple installation:** High-effect 16A relays enable direct connection of heavy loads, such as compressor or defrost elements without use of intermediate relays.

**Quick and easy programming:** The "Copy key" programming key with room for 25 controller setups ensures a quick and easy factory programming.



## **Functions**

#### **Thermostat**

- ON/OFF thermostat
- Sensors: Danfoss Pt1000, PTC1000 or NTC5000
- Calibration of sensors
- Day/night control
- Alarm thermostat with delays

#### **Defrost**

- Electrical or natural defrost
- Start via DI input, time interval or display
- Defrost on demand
- Stop on time or temperature

## Compressor

- Anti cycle timers for optimum compressor protection
- High-effect 16A relays for connection of compressors without use of intermediate relay
- Control of 2 compressors (version 102B)

## **Multipurpose DI input**

• Multipurpose DI input for defrost start, day/night control, door alarm or main switch

## Other functions

- The S5 sensor can be used for monitoring of condenser temperature or as product sensor (version 102B+102D)
- Door function with alarm monitoring
- Manual control of outputs
- Delay of outputs at power up

## **Display & Programming**

- High-efficient LED display with icons for indication of operational status. Parameter settings/readouts and alarm conditions can be read on the display.
- "Copy key" programming key with room for 25 different controller setups

## Fan (102D only)

- Fan delay during defrost
- Fan stop when compressor cuts out
- Fan stop at high S5 temperature

## **Advantages**



#### Simple installation:

High-effect 16A relays enable direct connection of heavy loads, such as compressors or defrost elements without use of intermediate relays



## IP 65 rating guaranteed:

Integration of push buttons and packing in the controller's front panel ensures a cleaning-safe tightness.



## Quick and easy installation:

The integrated mounting bracket in the controller's housing ensures quick and easy installation of the panel.

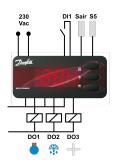


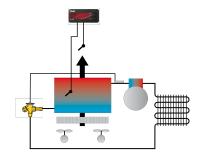
## Quick and easy programming:

The "Copy key" programming key can save up to 25 different controller setups. A valuable tool when controllers have to be programmed without risk of errors.

## **Electric connections and applications**

Below example is showing electrical wiring diagram for EKC 102D. The table on the right hand side shows an overview for all controllers





Controller	Outputs			Inputs		
	DO1	DO2	DO3	Sair	S5	DI
EKC 102A	<u> </u>			•		
EKC 102B	<u> </u>	Ø/		•	•	•
EKC 102C	<u> </u>	*/		•	•	•
EKC 102D	<u> </u>	3	#	•	•	•

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