



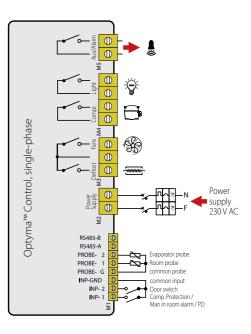
Dimensions



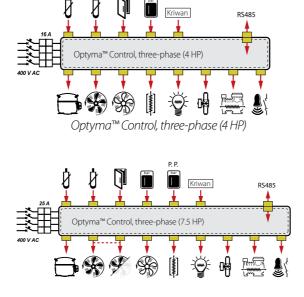
Optyma™ Control, single-phase



Connection diagrams



Optyma[™] Control, single-phase



Optyma[™] Control, three-phase (7.5 HP)

Complete portfolio from Danfoss for control of your refrigeration plant



ADAP-KOOL[™] systems



Optyma[™] condensing units





Remote control of cold rooms and convenience stores

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Remote access of cold rooms with Optyma[™] Control keeps you in control

Optyma[™] Control with RS485 ADAP-KOOL[®] compatible Modbus offers remote and accurate control of cold rooms .

Optyma[™] Control provides HACCP temperature monitoring in compliance with EN13485 Class II. Thanks to the unique built-in differential magnetothermic circuit breaker, which guarantees safety by cutting the general power supply, Optyma[™] Control offers both control and protection in a single unit.

Optyma[™] Control with **RS485** Modbus can be used as stand-alone or integrated in a complete ADAP-KOOL® system.





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ENGINEERING TOMORROW



www.danfoss.com

Optyma[™] Control, single-phase

Power supply

Voltage	230 V AC ± 10% 50/60 Hz
Max absorbed power	~ 7 VA
(electronic control)	

Ambient conditions

Operating temperature	-5 to +50°C
Storage temperature	-30 to +70°C
Relative humidity	< 90% RH

General characteristics

Connectable sensor types	NTC 10K 1%
Resolution	0.1 ℃
Probe tolerance	± 0.5 °C
Operating range	-45+45 ℃

Output characteristics - max. applicable load (230 V AC)

Compressor	1500 W (AC3)
Defrost	3000 W (AC1)
Fans	500 W (AC3)
Room light	800 W (AC1)
Configurable alarm contact / aux (voltage-free contact)	100 W

General electric protection

circuit breaker Id = 30 mA (on request)

Insulation and mechanical characteristics

Cover protection rating	IP 65
Cover material	self-extinguishing ABS
Type of insulation	Class II
Box dimensions	262 x 168 x 97

Ordering

Туре	Code no.
Optyma [™] Control, single-phase (2 HP)	080Z3200

Applications:

• Complete control of single-phase static or ventilated refrigeration systems up to 2 HP, with off-cycle or electrical defrosting and direct or pump-down compressor stop.

Main characteristics:

- Guaranteed certified safety and protection thanks to incorporated differential magnetothermic circuit breaker, which cuts the general power supply.
- Simple wiring and live outputs.
- New hinged cover for ease of installation and opening.
- Transparent cover for access to magnetothermic breaker, all with IP 65 protection rating.
- Simple, flexible programming for optimum versatility.

- Evaporator control via liquid line solenoid valve.
- HACCP temperature monitoring in compliance with EN13485 Class II.
- Remote control with RS485 Modbus.
- Compressor can be run in pump-down stop mode.
- Integration of control and protection in a single roomdedicated unit reduces installation time and costs.

	Optyma™ Control, three-phase (4 HP)	Optyma [™] Control, three-phase (7.5 HP)
	400 x 300 x 135 mm	400 x 300 x 135 mm
	IP 65	IP 65
	400 V AC ±10% 50/60Hz	400 V AC ±10% 50/60Hz
	three-phase	three-phase
	-5 to +40°C	-5 to +40°C
	-25 to +55°C	-25 to +55°C
	< 90% RH	< 90% RH
	4 poles magnetothermic 16A	4 poles magnetothermic 25A
	motor circuit breaker	motor circuit breaker
	electrical	electrical
	LED + display	LED + display
	LED + buzzer	LED + buzzer
	NTC 10K 1%	NTC 10K 1%
	NTC 10K 1%	NTC 10K 1%
		present
	•	present
		present
Compressor functioning mode selection		pump-down / thermostat
	370 W to 3000 W (0.5 to 4 HP)	3000 W to 5500 W (4 to 7.5 HP)
	· · · ·	800 W (1ph)
		total (1ph)
	500 W (1pb)	2000 W (1ph / 3ph)
		9000 W
		800 W (AC1) resistive load
		present
	•	present
		100 W
15624	Code no.	
	080Z3201	
		072303
7-10 A 11-16 A	08	073202
	4.5-6.3 A	400 x 300 x 135 mm IP 65 400 V AC ±10% 50/60Hz three-phase -5 to ±40°C -25 to ±55°C < 90% RH

Applications:

 Control of three-phase refrigeration plant up to 7.5 HP, static or ventilated, with off-cycle or electrical defrosting.

Main characteristics:

- Direct control of the compressor, condenser fans, compressor oil heater, defrosting heaters, evaporator fans, solenoid valve, room light and all standardcompliant electrical safeguards.
- Differential magnetothermic circuit breaker (for cutting the general power supply) accessible from the front panel.
- Adjustable motor circuit breaker for compressor protection accessible from the front panel.
- Easy wiring on the internal terminal block.
- Selection of functioning mode for the compressor (pumpdown / thermostat).

Optyma[™] Control, three-phase

- HACCP temperature monitoring in compliance with EN13485 Class II.
- Remote control with RS485 Modbus.
- Auxiliary relay with activation configurable by parameter.
- Transparent cover for access to magnetothermic circuit breaker, all with IP 65 protection rating.
- Electronic control with wide LED display and easy-to-use buttons.
- Status signaling with LED icons.

Options:

Hot-gas defrost control.