

Catalogue | Commercial Refrigeration

# Commercial Refrigeration Controller portfolio

Suitable for commercial fridges and freezers, cold rooms, and glass door merchandisers.





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# ELECTRONIC THERMOSTATS

The EET electronic thermostat enables a seamless switch from mechanical to electronic temperature control of food service equipment, with minimal design change. The thermostats are suitable for use with commercial fridges and freezers.

EETc 11/12



EETc 21/22



EETa 2W



EETa 3W



# EETc 11/12



## Features

- Condenser protection
- Compressor voltage protection
- Zero cross technology
- Sensor error handling
- Initial pull down



## Energy saving features

- Variable defrost interval
- Eco mode (Temp. offset)



- Temperature control
- Compressor control
- Defrost control

	Technical specifications	
	EETc 11	EETc 12
Voltage	120V AC, 50/60 Hz	230V AC, 50/60 Hz
DO1	16(16)A	16(10)A
AI	2 (1 Analogue + Analogue / Digital)	
Sensor type	NTC 5K, NTC 10K	
LED indication	Power	
Installation	Cold space installable (-25... +55°C)	

## Ordering and connections

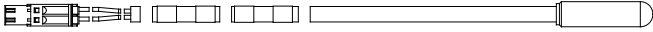
EETc 11/12	Min. Q-ty	Code no.
EETc 12 - EET Compact, 1 relay, 230 V, 50/60 Hz	150	080N0010
EETc 11 - EET Compact, 1 relay, 120 V, 50/60 Hz		080N0012

Optional	Q-ty	Code no.
Hand knob, black	480	077F8562
Washer, black with white print 0-9		077F8577
Power Plug, 4-pole with screw (28A max.)	50	080N0310



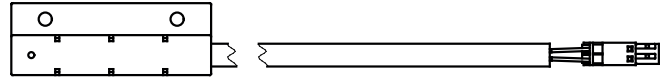
## Accessories

### Temperature sensor (Cabinet), -40 – +80 °C, PVC Standard, NTC 10K



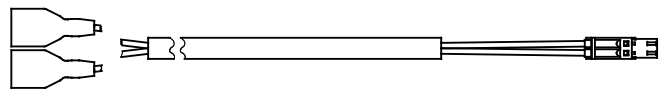
Port	Cable length	Q-ty	Code no.
S1	1000 mm	150	080N0300
	1500 mm		080N0301
	2000 mm		080N0302
	3000 mm		080N0303
	4000 mm		080N0332
S2	1500 mm, 2 Blue Stripes	150	080N0304
	2000 mm, 2 Blue Stripes		080N0305
	3000 mm, 2 Blue Stripes		080N0306
	4000 mm, 2 Blue stripes		080N0333

### Magnetic door sensor



Port	Cable length	Q-ty	Code no.
S2	2000 mm	150	080N0311
	3000 mm		080N0312

### Cable door sensor



Port	Cable length	Q-ty	Code no.
S2	2000 mm	150	080N0313
	4000 mm		080N0314



**Programming tools and app**  
KoolProg is available for EETc 11/12.  
[Find more info on page 34.](#)

# EETc 21/22



## Features

- Condenser protection
- Compressor voltage protection
- Zero cross technology
- Sensor error handling
- Initial pull down



## Energy saving features

- Variable defrost interval
- Fan pulsing mode
- Eco mode (Temp. offset)



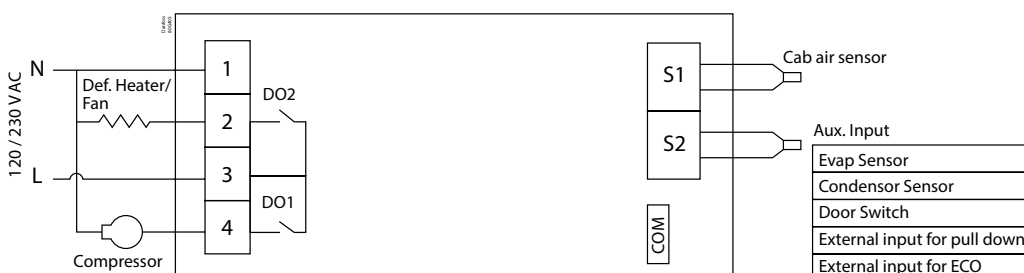
- Temperature control
- Compressor control
- Defrost control
- Evaporator fan control

	Technical specifications	
	EETc 21	EETc 22
Voltage	120V AC, 50/60 Hz	230V AC, 50/60 Hz
DO1/2	16(16)/5(2)A	16(10)/5(2)A
AI	2 (1 Analogue + Analogue / Digital)	
Sensor type	NTC 5K, NTC 10K	
LED indication	Power	
Installation	Cold space installable (-25... +55°C)	

## Ordering and connections

EETc 21/22	Q-ty	Code no.
EETc 22 – EET Compact, 2 relays, 230V, 50/60 Hz	150	080N0011
EETc 21 - EET Compact, 2 relays, 120V, 50/60 Hz		080N0013

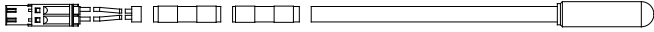
Optional	Q-ty	Code no.
Hand knob, black	480	077F8562
Washer, black with white print 0-9		077F8577
Power Plug, 4-pole with screw (28A max.)	50	080N0310





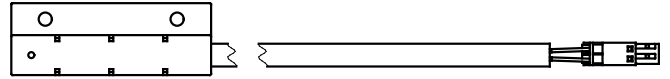
## Accessories

### Temperature sensor (Cabinet), -40 – +80 °C, PVC Standard, NTC 10K



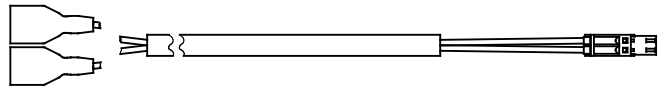
Port	Cable length	Q-ty	Code no.
S1	1000 mm	150	080N0300
	1500 mm		080N0301
	2000 mm		080N0302
	3000 mm		080N0303
	4000 mm		080N0332
S2	1500 mm, 2 Blue Stripes	150	080N0304
	2000 mm, 2 Blue Stripes		080N0305
	3000 mm, 2 Blue Stripes		080N0306
	4000 mm, 2 Blue stripes		080N0333

### Magnetic door sensor



Port	Cable length	Q-ty	Code no.
S2	2000 mm	150	080N0311
	3000 mm		080N0312

### Cable door sensor



Port	Cable length	Q-ty	Code no.
S2	2000 mm	150	080N0313
	4000 mm		080N0314



**Programming tools and app**  
KoolProg is available for EETc 21/22.  
[Find more info on page 34.](#)

# EETa 2W



## Features

- Condenser protection
- Compressor voltage protection
- Zero cross technology
- Sensor error handling
- Automatic pull down
- Dual evaporator defrost
- Dual compressor control
- Leakage detection



## Energy saving features

- Variable defrost interval
- Fan pulsing mode
- Eco mode (Temp. offset and light switching off)
- Holiday mode



- Temperature control
- High temperature alarm
- Compressor control
- Defrost control
- Evaporator fan control
- Heater control

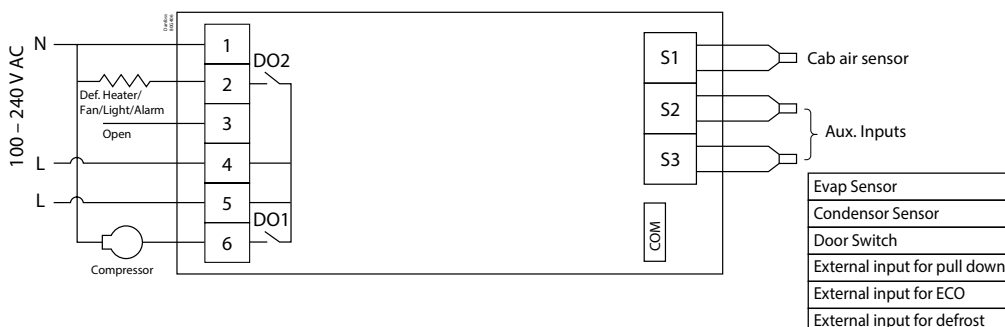
## Technical specifications

Voltage	100-240V AC, 50/60 Hz
DO1/2	16(16)/8(2)A
AI	3 (1 Analogue + 2 Analogue / Digital)
Sensor type	NTC 5K, NTC 10K, PTC
LED indication	Power + Errors
Installation	Cold space installable (-25... +55°C)

## Ordering and connections

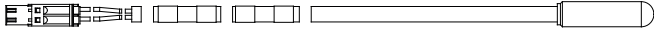
EETa 2W	Q-ty	Code no.
EETa 2W - EET Advanced, 2 relays, wide voltage (120 – 230 V), 50/60 Hz	150	080N0014

Optional	Q-ty	Code no.
Hand knob, black	480	077F8562
Washer, black with white print 0-9		077F8577
Power Plug, 6-pole with screw (28A max.)	54	080G3357



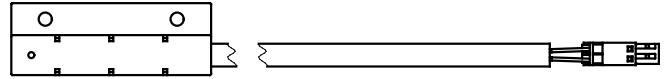
## Accessories

### Temperature sensor (Cabinet), -40 – +80 °C, PVC Standard, NTC 10K



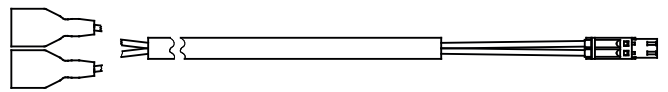
Port	Cable length	Q-ty	Code no.
S1	1000 mm	150	080N0300
	1500 mm		080N0301
	2000 mm		080N0302
	3000 mm		080N0303
	4000 mm		080N0332
S2	1500 mm, 2 Blue Stripes	150	080N0304
	2000 mm, 2 Blue Stripes		080N0305
	3000 mm, 2 Blue Stripes		080N0306
	4000 mm, 2 Blue stripes		080N0333
S3	1000 mm, 1 Blue Stripe	150	080N0307
	3000 mm, 1 Blue Stripe		080N0308

### Magnetic door sensor



Port	Cable length	Q-ty	Code no.
S2 / S3	2000 mm	150	080N0311
	3000 mm		080N0312

### Cable door sensor



Port	Cable length	Q-ty	Code no.
S2 / S3	2000 mm	150	080N0313
	4000 mm		080N0314



**Programming tools and apps**  
KoolProg is available for EETa 2W.  
[Find more info on page 34.](#)

# EETa 3W



## Features

- Condenser protection
- Compressor voltage protection
- Zero cross technology
- Sensor error handling
- Automatic pull down
- Dual evaporator defrost
- Dual compressor control
- Leakage detection



## Energy saving features

- Variable defrost interval
- Fan pulsing mode
- Eco mode (Temp. offset and light switching off)
- Holiday mode



- Temperature control
- High temperature alarm
- Compressor control
- Defrost control
- Evaporator fan control
- Heater control

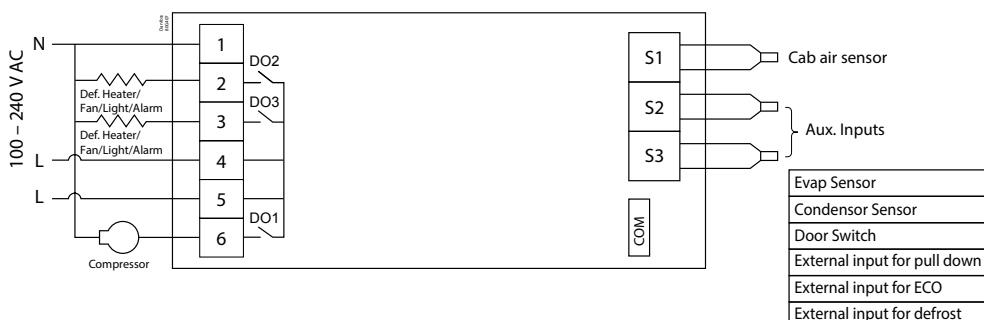
## Technical specifications

Voltage	100-240V AC, 50/60 Hz
DO1/2/3	16(16)/8(2)A/5(2)A
AI	3 (1 Analogue + 2 Analogue / Digital)
Sensor type	NTC 5K, NTC 10K, PTC
LED indication	Power + Errors
Installation	Cold space installable (-25... +55°C)

## Ordering and connections

EETa 3W	Q-ty	Code no.
EETa 3W - EET Advanced, 3 relays, wide voltage (120 – 230 V), 50/60 Hz	150	080N0015

Optional	Q-ty	Code no.
Hand knob, black	480	077F8562
Washer, black with white print 0-9		077F8577
Power Plug, 6-pole with screw (28A max.)	54	080G3357



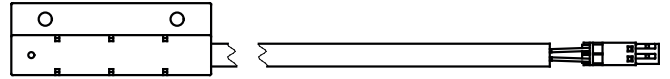
## Accessories

### Temperature sensor (Cabinet), -40 – +80 °C, PVC Standard, NTC 10K



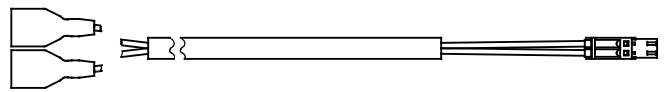
Port	Cable length	Q-ty	Code no.
S1	1000 mm	150	080N0300
	1500 mm		080N0301
	2000 mm		080N0302
	3000 mm		080N0303
	4000 mm		080N0332
S2	1500 mm, 2 Blue Stripes	150	080N0304
	2000 mm, 2 Blue Stripes		080N0305
	3000 mm, 2 Blue Stripes		080N0306
	4000 mm, 2 Blue stripes		080N0333
S3	1000 mm, 1 Blue Stripe	150	080N0307
	3000 mm, 1 Blue Stripe		080N0308

### Magnetic door sensor



Port	Cable length	Q-ty	Code no.
S2 / S3	2000 mm	150	080N0311
	3000 mm		080N0312

### Cable door sensor



Port	Cable length	Q-ty	Code no.
S2 / S3	2000 mm	150	080N0313
	4000 mm		080N0314



**Programming tools and apps**  
KoolProg is available for EETa 3W.  
[Find more info on page 34.](#)



# REFRIGERATION CONTROLLERS

ERC multipurpose electronic refrigeration controls offer energy savings through defrost on demand, smart evaporator fan management, as well as ECO and Holiday modes depending on the ERC model. The controllers are suitable for use with glass door merchandisers, coolers, commercial fridges and freezers, and cold rooms.

Due to their standard size, easy configuration and multiple sensors compatibility, installation is quick and easy. They also improve food safety by protecting the compressor from fluctuations in power supply and high condensing temperatures. Their long relay lifetime ensure minimal maintenance costs.



# ERC 111A



## Features

- Condenser protection
- Compressor voltage protection
- Zero cross technology
- Service information
- Sensor error handling
- Leakage detection



## Energy saving features

- Variable defrost interval
- Defrost on demand
- Holiday mode (Temp. offset)



- Temperature control
- High temperature alarm
- Compressor control
- Defrost control

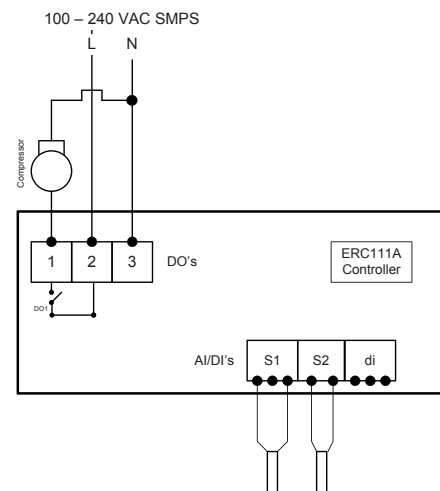
## Technical specifications

Voltage	100 – 240V AC
DO1	16(16)A
AI (configurable)	2 (NTC 5K, NTC 100K)
DI	0 (for communication only)
Protection	Front: IP65, Rear: IP00

## Ordering and connections

Left buttons	ERC 111A	Q-ty	Code no.
	ERC 111A, <b>Red</b> LED, without buzzer	54	080G3230
	ERC 111A, <b>Blue</b> LED, without buzzer		080G3231
	ERC 111A, <b>Blue</b> LED, with buzzer		080G3236
	ERC111A, <b>Red</b> LED, with buzzer		080G3235

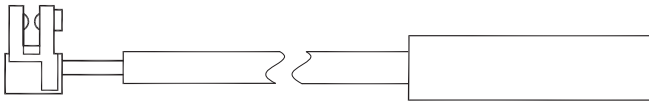
Optional	Q-ty	Code no.
Clips, black (2 pcs needed per controller)	54	080G3308
Power Plug, 3-pole with screw (16A max.)	108	080G3356





## Accessories

Temperature sensor, -40 – +85 °C, PVC Standard, NTC 5K



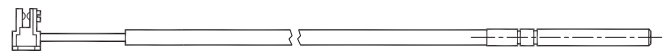
Port	Cable length	Q-ty	Code no.
S1	470 mm	120	077F8751
	1000 mm		077F8757
	1500 mm		077F8761
	2000 mm		077F8765
	2200 mm		077F8767
	3000 mm		60
	3500 mm	077F8723	
		6000 mm	27
S2	1000 mm	120	077F8786
	1500 mm		077F8790
	2000 mm		077F8794
	3000 mm	60	077F8798
	6000 mm	27	080G2029

Temperature sensor, -40 – +120 °C, TPE precision, NTC 5K



Port	Cable length	Q-ty	Code no.
S1	1500 mm	120	077F8726

Temperature sensor, -20 – +175 °C, Silicone cable, NTC 100K



Port	Cable length	Q-ty	Code no.
S1/S3	2000 mm	108	080G2043



**Programming tools and apps**  
KoolProg is available for ERC 111A.  
[Find more info on page 34.](#)

# ERC 112C



## Features

- Condenser protection
- Compressor voltage protection
- Zero cross technology
- Service information
- Sensor error handling
- Leakage detection
- Automatic pull down
- Dual evaporator defrost
- Summer/winter mode



## Energy saving features

- Variable defrost interval
- Defrost on demand
- Holiday mode
- Automatic fan control
- ECO mode (Light off and temp. offset)
- Early wake up



- Temperature control
- High temperature alarm
- Compressor control
- Defrost control
- Evaporator fan control
- Heater control

## Technical specifications

Voltage	100 – 240V AC
DO1/2/3	16(16)/8(2)/8(2) A*
AI (configurable)	4 (NTC 5K, NTC 100K, Pt 1000, Light, DI)
DI	1 (also for communication)
Protection	Front: IP65, Rear: IP00

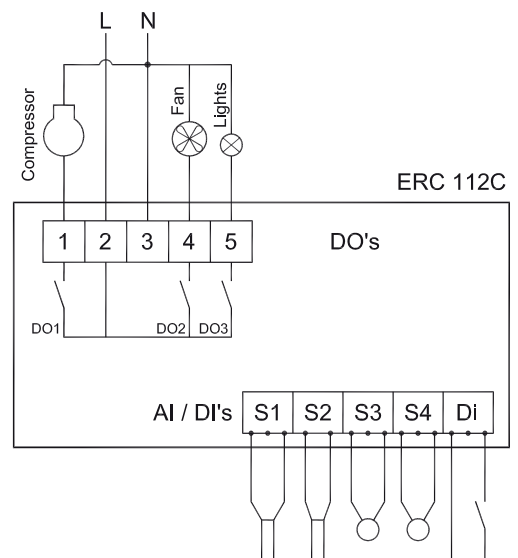
\* Max 10 A total "DO2-3".

## Ordering and connections

Left buttons	ERC 112C	Q-ty	Code no.
	ERC 112C, GDM, <b>Red</b> LED, without buzzer	27	080G3489
	ERC 112C, GDM, <b>Blue</b> LED, without buzzer		080G3491
	ERC 112C, CFF, <b>Red</b> LED, with buzzer		080G3493
	ERC 112C, CFF, <b>Blue</b> LED, with buzzer		080G3494
	ERC 112C, CFF, <b>Blue</b> LED, with buzzer		080G3496

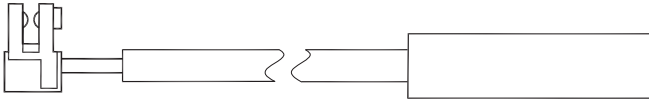
Optional	Q-ty	Code no.
Clips, black (2 pcs needed per controller)	54	080G3308
Power Plug, 6-pole with screw (28A max.)		080G3357

100 - 240 Va.c. SMPS



## Accessories

Temperature sensor, -40 – +85 °C, PVC Standard, NTC 5K



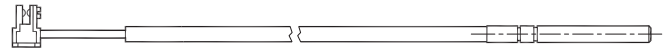
Port	Cable length	Q-ty	Code no.
S1	470 mm	120	077F8751
	1000 mm		077F8757
	1500 mm		077F8761
	2000 mm		077F8765
	2200 mm		077F8767
	3000 mm		077F8769
	3500 mm	60	077F8723
S2	6000 mm	27	080G2019
	1000 mm	120	077F8786
	1500 mm		077F8790
	2000 mm		077F8794
S3	3000 mm	60	077F8798
	6000 mm	27	080G2029
	1000 mm	120	077F8756
	1500 mm		077F8760
2200 mm	077F8766		
	3000 mm	60	077F8768

Temperature sensor, -40 – +120 °C, TPE precision, NTC 5K



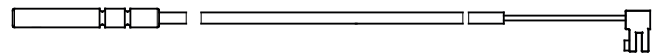
Port	Cable length	Q-ty	Code no.
S1	1500 mm	120	077F8726

Temperature sensor, -20 – +175 °C, Silicone cable, NTC 100K



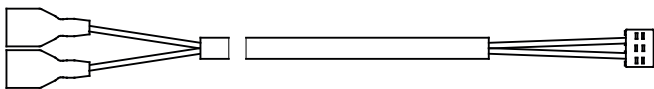
Port	Cable length	Q-ty	Code no.
S1/S3	2000 mm	108	080G2043

Temperature sensor, -100 – +200 °C, PT 1000



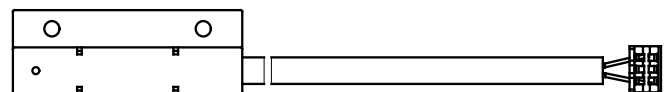
Port	Cable length	Q-ty	Code no.
S4	1000 mm	108	080G3350

Cable door sensor



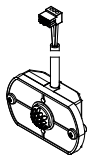
Port	Cable length	Q-ty	Code no.
S4/di	1000 mm	108	080G3340
	2000 mm		080G3341
	3000 mm		080G3342
	4000 mm	81	080G3343

Magnetic door sensor



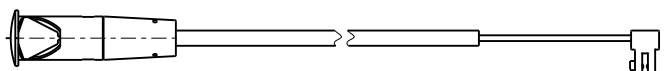
Port	Cable length	Q-ty	Code no.
S4/di	1000 mm	81	080G3320
	2000 mm		080G3322
	3000 mm		080G3324

Motion sensor



Port	Cable length	Q-ty	Code no.
S3/di	3000 mm	27	080G3392

Light sensor



Port	Cable length	Q-ty	Code no.
S3	3000 mm	108	080G3315



**Programming tools and apps**  
KoolProg is available for ERC 112C.  
[Find more info on page 34.](#)

# ERC 112D



## Features

- Condenser protection
- Compressor voltage protection
- Zero cross technology
- Dual compressor control
- Sensor error handling
- Leakage detection
- Automatic pull down
- Dual evaporator defrost
- Summer/winter mode



## Energy saving features

- Variable defrost interval
- Defrost on demand
- Holiday mode
- Automatic fan control
- ECO mode (Light off and temp. offset)
- Early wake up



- Temperature control
- High temperature alarm
- Compressor control
- Defrost control
- Evaporator fan control
- Heater control

## Technical specifications

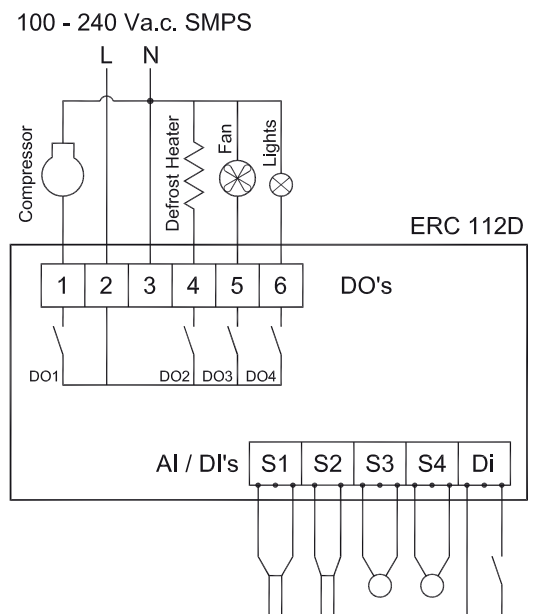
Voltage	100 – 240V AC
DO1/2/3	16(16)/8(2)/8(2) A*
AI configurable	4 (NTC 5K, NTC 100K, Pt 1000, Light, DI)
DI	1 (also for communication)
Protection	Front: IP65, Rear: IP00

\* Max 10 A total "DO2-4".

## Ordering and connections

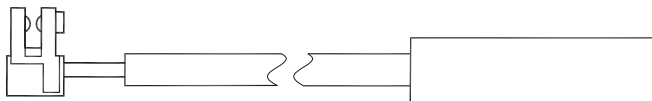
Left buttons	ERC 112D	Q-ty	Code no.
	ERC 112D, GDM, <b>Red</b> LED, without buzzer	27	080G3490
	ERC 112D, GDM, <b>Blue</b> LED, without buzzer		080G3492
	ERC 112D, CFF, <b>Red</b> LED, with buzzer		080G3498
	ERC 112D, CFF, <b>Blue</b> LED, with buzzer		080G3499
	ERC 112D, CFF, <b>Blue</b> LED, with buzzer		080G3413

Optional	Q-ty	Code no.
Clips, black (2 pcs needed per controller)	54	080G3308
Power Plug, 6-pole with screw (28A max.)		080G3357



## Accessories

Temperature sensor, -40 – +85 °C, PVC Standard, NTC 5K



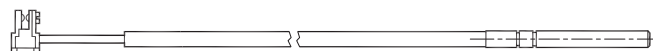
Port	Cable length	Q-ty	Code no.
S1	470 mm	120	077F8751
	1000 mm		077F8757
	1500 mm		077F8761
	2000 mm		077F8765
	2200 mm		077F8767
	3000 mm		077F8769
	3500 mm	60	077F8723
	6000 mm	27	080G2019
S2	1000 mm	120	077F8786
	1500 mm		077F8790
	2000 mm		077F8794
	3000 mm	60	077F8798
	6000 mm	27	080G2029
S3	1000 mm	120	077F8756
	1500 mm		077F8760
	2200 mm		077F8766
	3000 mm	60	077F8768

Temperature sensor, -40 – +120 °C, TPE precision, NTC 5K



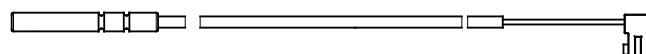
Port	Cable length	Q-ty	Code no.
S1	1500 mm	120	077F8726

Temperature sensor, -20 – +175 °C, Silicone cable, NTC 100K



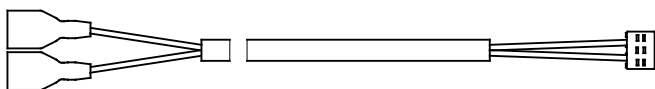
Port	Cable length	Q-ty	Code no.
S1/S3	2000 mm	108	080G2043

Temperature sensor, -100 – +200 °C, PT 1000



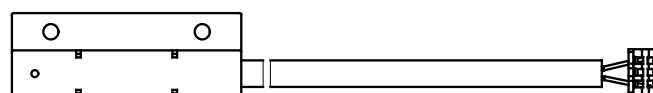
Port	Cable length	Q-ty	Code no.
S4	1000 mm	108	080G3350

Cable door sensor



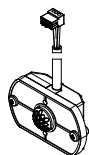
Port	Cable length	Q-ty	Code no.
S4/di	1000 mm	108	080G3340
	2000 mm		080G3341
	3000 mm		080G3342
	4000 mm	81	080G3343

Magnetic door sensor



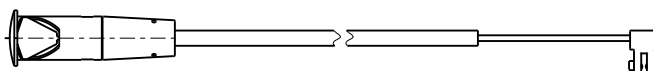
Port	Cable length	Q-ty	Code no.
S4/di	1000 mm	81	080G3320
	2000 mm		080G3322
	3000 mm		080G3324

Motion sensor



Port	Cable length	Q-ty	Code no.
S3/di	3000 mm	27	080G3392

Light sensor



Port	Cable length	Q-ty	Code no.
S3	3000 mm	108	080G3315



**Programming tools and apps**  
KoolProg is available for ERC 112D.  
[Find more info on page 34.](#)

# ERC 112D VSC



## Features

- Condenser protection
- Compressor voltage protection
- Zero cross technology
- Service information
- Sensor error handling
- Leakage detection
- Automatic pull down
- Dual evaporator defrost
- Summer/winter mode



## Energy saving features

- Variable defrost interval
- Defrost on demand
- Holiday mode
- Automatic fan control
- ECO mode (Light off and temp. offset)
- Early wake up



- Temperature control
- High temperature alarm
- Variable speed compressor control
- Defrost control
- Evaporator fan control
- Heater control

## Technical specifications

Voltage	100 – 240V AC
DO1/2/3/4	16(16)/8(2)/8(2)/8(2)A*
AO	1 (Frequency signal for variable speed 5V, 0-200 Hz)
AI (configurable)	3 (NTC 5K, NTC 100K, Pt 1000, Light, DI)
DI	1 (also for communication)
Protection	Front: IP65, Rear: IP00

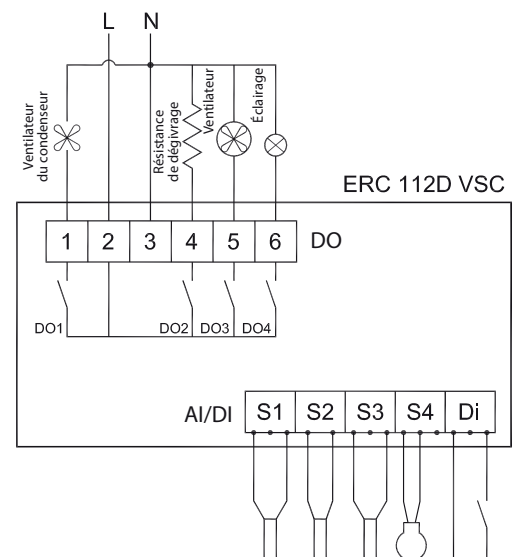
\*Max. 10A total "DO2-4"

## Ordering and connections

Left buttons	ERC 112D VSC	Q-ty	Code no.
	ERC 112D VSC, Blue LED, with buzzer	27	080G3414

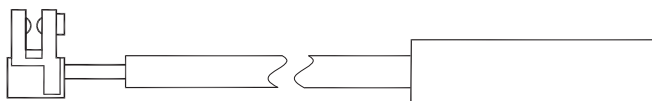
Optional	Q-ty	Code no.
Clips, black (2 pcs needed per controller)	54	080G3308
Power Plug, 6-pole with screw (28A max.)		080G3357

100 - 240 Va.c. SMPS



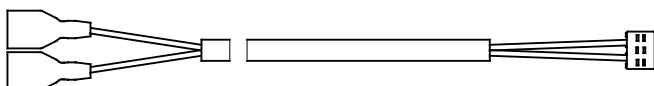
## Accessories

Temperature sensor, -40 – +85 °C, PVC Standard, NTC 5K



Port	Cable length	Q-ty	Code no.
S1	470 mm	120	077F8751
	1000 mm		077F8757
	1500 mm		077F8761
	2000 mm		077F8765
	2200 mm		077F8767
	3000 mm		077F8769
	3500 mm	60	077F8723
	6000 mm	27	080G2019
S2	1000 mm	120	077F8786
	1500 mm		077F8790
	2000 mm		077F8794
	3000 mm	60	077F8798
	6000 mm	27	080G2029
S3	1000 mm	120	077F8756
	1500 mm		077F8760
	2200 mm		077F8766
	3000 mm	60	077F8768

### Cable door sensor



Port	Cable length	Q-ty	Code no.
S4/di	1000 mm	108	080G3340
	2000 mm		080G3341
	3000 mm		080G3342
	4000 mm	81	080G3343

### Cable, variable speed compressor

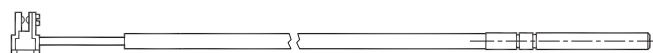
Port	Cable length	Q-ty	Code no.
S4	3500 mm	81	080G3397

Temperature sensor, -40 – +120 °C, TPE precision, NTC 5K



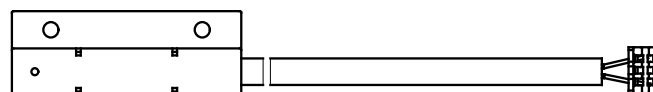
Port	Cable length	Q-ty	Code no.
S1	1500 mm	120	077F8726

Temperature sensor, -20 – +175 °C, Silicone cable, NTC 100K



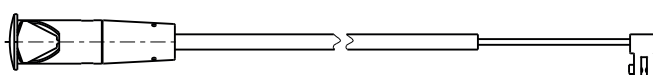
Port	Cable length	Q-ty	Code no.
S1/S3	2000 mm	108	080G2043

### Magnetic door sensor



Port	Cable length	Q-ty	Code no.
S4/di	1000 mm	81	080G3320
	2000 mm		080G3322
	3000 mm		080G3324

### Light sensor



Port	Cable length	Q-ty	Code no.
S3	3000 mm	108	080G3315

### Motion sensor



Port	Cable length	Q-ty	Code no.
S3/di	3000 mm	27	080G3392



**Programming tools and apps**  
KoolProg is available for ERC 112D VSC.  
[Find more info on page 34.](#)

# ERC 113D



## Features

- Condenser protection
- Compressor voltage protection
- Zero cross technology
- Service information
- Sensor error handling
- Leakage detection
- Automatic pull down
- Dual evaporator defrost
- Summer/winter mode



## Energy saving features

- Variable defrost interval
- Defrost on demand
- Holiday mode
- Automatic fan control
- ECO mode (Light off and temp. offset)
- Early wake up



- Temperature control
- High temperature alarm
- Compressor control
- Defrost control
- Evaporator fan control
- Heater control

## Technical specifications

Voltage	100-240V AC
DO1/2/3/4	16(16)/8(2)/8(2)/8(2) A*
DO5 optional**	16(16)A
AI (configurable)	4 or 6** (NTC 5K, NTC 100K, Pt 1000, Light, DI)
DI	1 (also for communication) or 0**
Protection	Front: IP31, Rear: IP00

\*Max 10 A total "DO2-4"

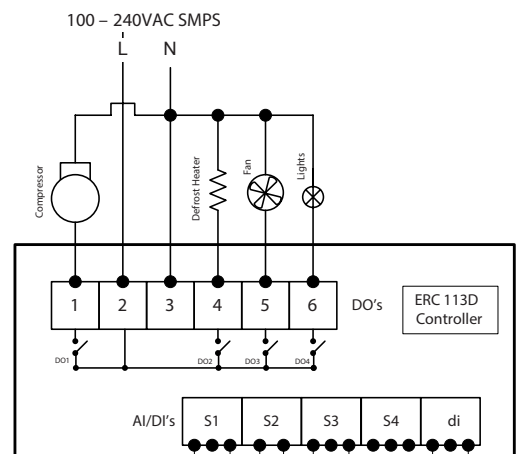
\*\* for ERC 1130 + RDI 107

## Ordering and connections

Left buttons	ERC 113D and remote display RDI 107	Q-ty	Code no.
–	ERC 113D	54	080G3253
	RDI 107, GDM, <b>Blue</b> LED, without buzzer*		080G3241
	RDI 107, CFF, <b>Red</b> LED, with buzzer*		080G3245
	RDI 107, CFF, <b>Blue</b> LED, with buzzer*		080G3246

\* I/O and connectors on RDI 107 are the same as for ERC111

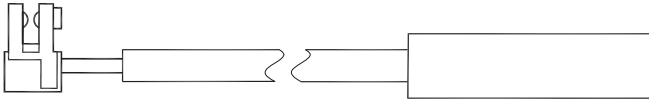
Optional	Q-ty	Code no.
Clips, black (2 pcs needed per RDI 107)	54	080G3308
Power Plug, 3-pole with screw (16A max.)	108	080G3356
Power Plug, 6-pole with screw (28A max.)	54	080G3357





## Accessories

Temperature sensor, -40 – +85 °C, PVC Standard, NTC 5K



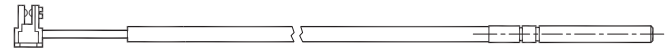
Port	Cable length	Q-ty	Code no.
S1	470 mm	120	077F8751
	1000 mm		077F8757
	1500 mm		077F8761
	2000 mm		077F8765
	2200 mm		077F8767
	3000 mm		077F8769
	3500 mm	60	077F8723
S2	6000 mm	27	080G2019
	1000 mm	120	077F8786
	1500 mm		077F8790
	2000 mm		077F8794
	3000 mm	60	077F8798
6000 mm	27	080G2029	
S3	1000 mm	120	077F8756
	1500 mm		077F8760
	2200 mm		077F8766
	3000 mm	60	077F8768

Temperature sensor, -40 – +120 °C, TPE precision, NTC 5K



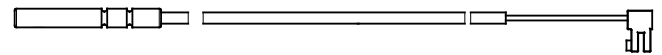
Port	Cable length	Q-ty	Code no.
S1	1500 mm	120	077F8726

Temperature sensor, -20 – +175 °C, Silicone cable, NTC 100K



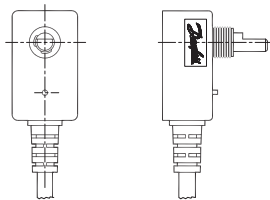
Port	Cable length	Q-ty	Code no.
S1/S3	2000 mm	108	080G2043

Temperature sensor, -100 – +200 °C, PT 1000



Port	Cable length	Q-ty	Code no.
S4	1000 mm	108	080G3350

Remote spindle, RSP 01



Port	Cable length	Q-ty	Code no.
di	2000 mm	42	080G3373

Communication wire for RD1 107

Port	Cable length	Q-ty	Code no.
di	2000 mm	108	080G3383
	3000 mm	54	080G3385

Motion sensor

Port	Cable length	Q-ty	Code no.
S3/di	3000 mm	27	080G3392

Light sensor

Port	Cable length	Q-ty	Code no.
S3	3000 mm	108	080G3315

Magnetic door sensor

Port	Cable length	Q-ty	Code no.
S4/di	1000 mm	81	080G3320
	2000 mm		080G3322
	3000 mm		080G3324

Cable door sensor

Port	Cable length	Q-ty	Code no.
S4/di	1000 mm	108	080G3340
	2000 mm		080G3341
	3000 mm		080G3342
	4000 mm	81	080G3343



**Programming tools and apps**  
KoolProg is available for ERC 113D.  
[Find more info on page 34.](#)

# ERC 211



## Features

- Condenser protection
- Compressor voltage protection
- Multi sensor support
- Pull down mode
- Pre-defined applications
- Thermostat reference displacement
- Keyboard lock
- Automatic emergency cooling
- Status menu
- Zero cross for all outputs



## Energy saving features

- Defrost on demand
- Night set back



- Temperature control
- High temperature alarm
- Compressor control
- Defrost control
- Heating mode

## Technical specifications

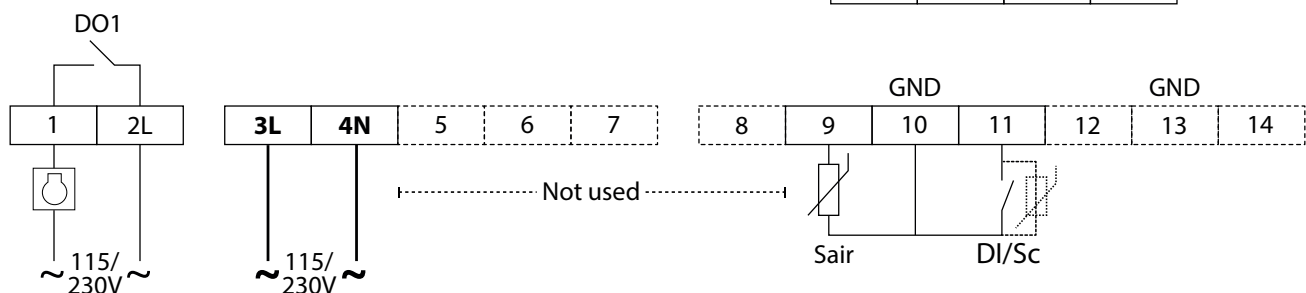
Voltage	115V AC, 50/60 Hz	230V AC, 50/60 Hz
DO1	16(16)A	
Inputs	2 (1 AI + 1 AI/DI)	
Sensor type	NTC 5K, NTC 10K, PTC, Pt 1000	
Protection	Front: IP65, Rear: IP00	

## Ordering and connections

ERC 211 Kit: – ERC 211 – Temp. sensor NTC 10k, cable 1.5m (1 pcs.)	Q-ty	Code no.
ERC 211, Red LED, 115V	1	080G3451
ERC 211, Red LED, 230V		080G3453

ERC 211 (w/o sensor)	Q-ty	Code no.
ERC 211, Controller, Red LED, 230V	1	080G3454
ERC 211, Controller, Red LED, 230 V, I-Pack	30	080G3459

GND	TX	RX	+5V
15	16	17	18



## Accessories

### Temperature sensors

Sensor	Cable length	Q-ty	Code no.
EKS 211, NTC 5K, Thermo plastic polyester 8x30	1.5 m	1 / 150	084N1220 / 084B4403
	3.5 m	1 / 75	084N1221 / 084B4404
EKS 221, NTC 10K, Thermo plastic rubber 6x5x15	3.5 m	1 / 150	084N3210 / 084N3206
	8.5 m	1 / 50	084N3209 / 084N3208
EKS 221, NTC 10K, Stainless steel 6x20	1.5 m	150	084N3200
EKS 111, PTC, Stainless steel 6x30	1.5 m	1 / 150	084N1178 / 084N1161
	3.5 m		084N1179 / 084N1163
	6.0 m	1 / 80	084N1180 / 084N1173
	8.5 m	60	084N1168
AKS 12, Pt 1000, Stainless steel 6x40	1.5 m	1 / 30	084N0036 / 084N0035
	3.5 m	30	084N0039
	5.5 m	30	084N0038



**Programming tools and apps**  
 KoolProg is available for ERC 211.  
[Find more info on page 34.](#)

# ERC 213



### Features

- Condenser protection
- Compressor voltage protection
- Multi sensor support
- Pull down mode
- Pre-defined applications
- Thermostat reference displacement
- Keyboard lock
- Automatic emergency cooling
- Status menu
- Zero cross for all outputs



### Energy saving features

- Defrost on demand
- Fan pulsating
- Lighting control
- Night set back



- Temperature control
- High temperature alarm
- Compressor control
- Defrost control
- Evaporator control
- Heating mode

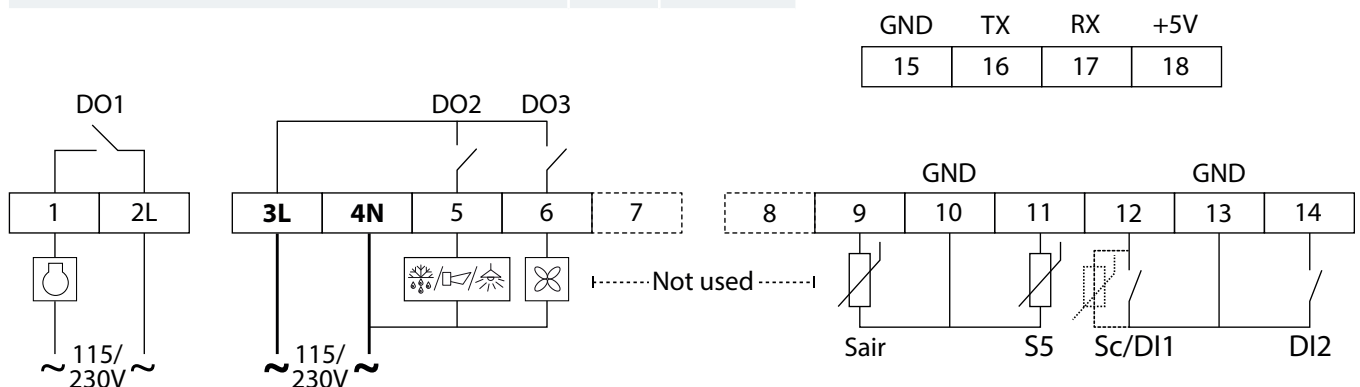
### Technical specifications

Voltage	115V AC, 50/60 Hz	230V AC, 50/60 Hz
DO1/2/3	16(16)/2(2)/2(2)A	
Inputs	4 (2 AI + 1 AI/DI + 1 DI))	
Sensor type	NTC 5K, NTC 10K, PTC, Pt 1000	
Protection	Front: IP65, Rear: IP00	

## Ordering and connections

ERC 213 Kit: - ERC 213 - Temp. sensor NTC 10k, cable 1.5m (2 pcs.)	Q-ty	Code no.
ERC 213, Red LED, 230V	1	080G3457

ERC 213 (w/o sensors)	Q-ty	Code no.
ERC 213, Controller, Red LED, 230V	1	080G3458
ERC 213, Controller, Red LED, 230 V, I-Pack	30	080G3460



## Accessories

### Temperature sensors

Sensor	Cable length	Q-ty	Code no.
EKS 211, NTC 5K, Thermo plastic polyester 8x30	1.5 m	1 / 150	084N1220 / 084B4403
	3.5 m	1 / 75	084N1221 / 084B4404
EKS 221, NTC 10K, Thermo plastic rubber 6x5x15	3.5 m	1 / 150	084N3210 / 084N3206
	8.5 m	1 / 50	084N3209 / 084N3208
EKS 221, NTC 10K, Stainless steel 6x20	1.5 m	150	084N3200
EKS 111, PTC, Stainless steel 6x30	1.5 m	1 / 150	084N1178 / 084N1161
	3.5 m		084N1179 / 084N1163
	6.0 m	1 / 80	084N1180 / 084N1173
	8.5 m	60	084N1168
AKS 12, Pt 1000, Stainless steel 6x40	1.5 m	1 / 30	084N0036 / 084N0035
	3.5 m	30	084N0039
	5.5 m		084N0038



**Programming tools and apps**  
 KoolProg is available for ERC 213.  
[Find more info on page 34.](#)

# ERC 214



## Features

- Condenser protection
- Compressor voltage protection
- Multi sensor support
- Pull down mode
- Pre-defined applications
- Thermostat reference displacement
- Keyboard lock
- Automatic emergency cooling
- Status menu
- Zero cross for all outputs



## Energy saving features

- Defrost on demand
- Fan pulsating
- Lighting control
- Night set back



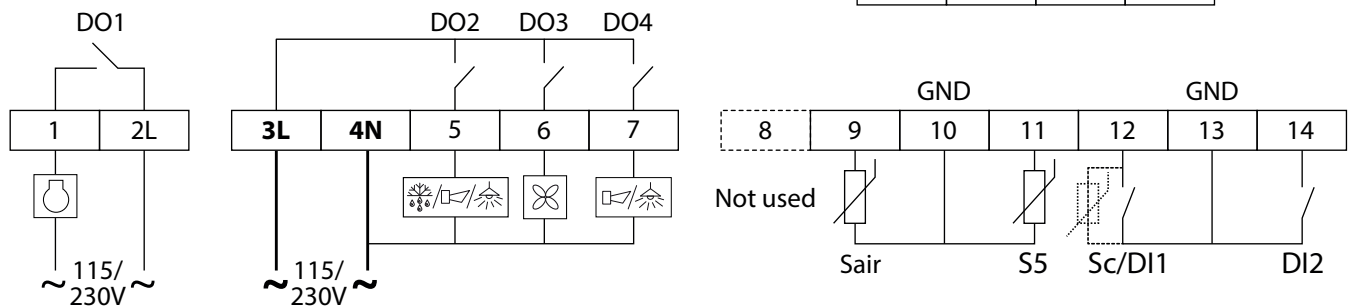
- Temperature control
- High temperature alarm
- Compressor control
- Defrost control
- Evaporator control
- Heating mode

## Technical specifications

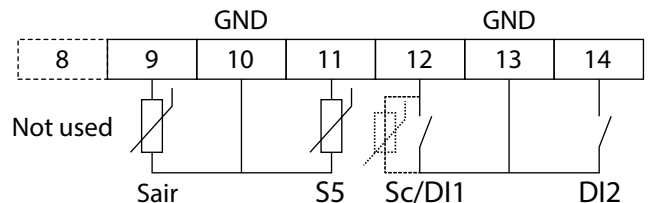
Voltage	115V AC, 50/60 Hz	230V AC, 50/60 Hz
DO1/2/3	16(16)/2(2)/2(2)/2(2)A	
Inputs	4 (2 AI + 1 AI/DI + 1 DI)	
Sensor type	NTC 5K, NTC 10K, PTC, Pt 1000	
Protection	Front: IP65, Rear: IP00	

## Ordering and connections

ERC 214 Kit: - ERC 214 - Temp. sensor NTC 10k, cable 1.5m (2 pcs.)	Q-ty	Code no.
ERC 214, Controller, Red LED, 115 V	1	080G3466
ERC 214, Controller, Red LED, 230 V	1	080G3463



GND	TX	RX	+5V
15	16	17	18



## Accessories

### Temperature sensors

Sensor	Cable length	Q-ty	Code no.
EKS 211, NTC 5K, Thermo plastic polyester 8x30	1.5 m	1 / 150	084N1220 / 084B4403
	3.5 m	1 / 75	084N1221 / 084B4404
EKS 221, NTC 10K, Thermo plastic rubber 6x5x15	3.5 m	1 / 150	084N3210 / 084N3206
	8.5 m	1 / 50	084N3209 / 084N3208
EKS 221, NTC 10K, Stainless steel 6x20	1.5 m	150	084N3200
EKS 111, PTC, Stainless steel 6x30	1.5 m	1 / 150	084N1178 / 084N1161
	3.5 m		084N1179 / 084N1163
	6.0 m	1 / 80	084N1180 / 084N1173
	8.5 m	60	084N1168
AKS 12, Pt 1000, Stainless steel 6x40	1.5 m	1 / 30	084N0036 / 084N0035
	3.5 m	30	084N0039
	5.5 m		084N0038

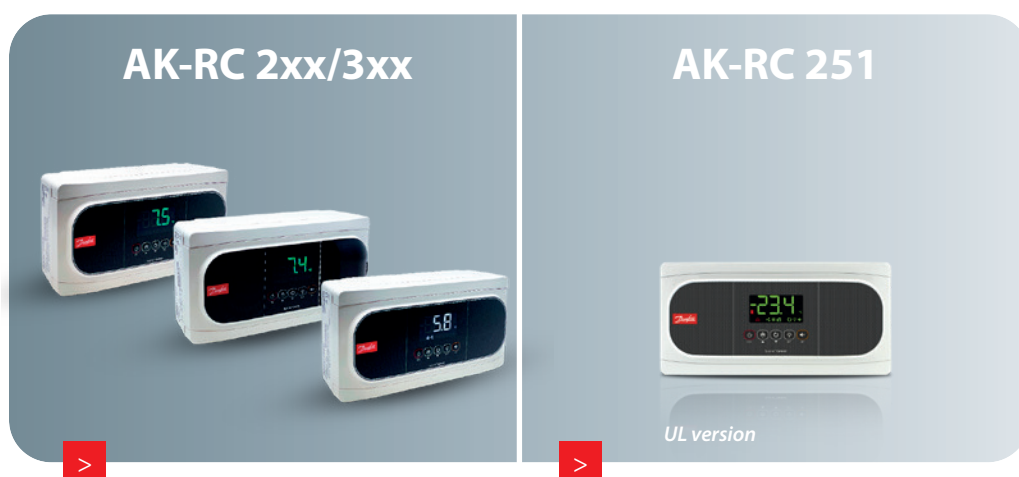


**Programming tools and apps**  
 KoolProg is available for ERC 214.  
[Find more info on page 34.](#)

# COLD ROOM CONTROLLERS

From standalone to fully managed solutions, the three-tiered Optyma™ Control range enable easy installation, simple setup, and energy savings for existing and new cold rooms.

For optimum protection of perishables and operational safety, the controllers provide HACCP temperature monitoring and transparency when combined with Danfoss System Manager.





# AK-RC 2xx/3xx



## Features

- Wizard mode
- Events in case of S1 fault
- Control with two temp. probes (large cold room)\*
- Additional alarms
- Password
- Compressor/crankcase resistor control
- High-pressure switch for hot gas
- Defrost of 2nd evaporator

\* Only for AK-RC 305W



## Energy saving features

- Adaptive mode incl. defrost\*
- Solenoid control/pump down
- Door frame resistor
- Drainage resistor\*



- Temperature control
- Compressor control
- Probes calibration
- Low pressure switch
- Continuous cycle
- Set point displacement
- Compressor protection timer
- Door management
- Defrost (El, air, how gas, reversed cycle)
- Fan control
- Alarms (temperature, probes, DI, door)
- Light control

## Technical specifications

Model	AK-RC204B	AK-RC 205C	AK-RC 305W	AK-RC 251
Voltage	230V AC, 50 Hz	230V AC, 50 Hz	100-240V AC, 50/60 Hz	100-240V AC, 50/60 Hz
DO	2 SPDT 20A 2 SPST 16A	1 SPDT 16A 2 SPDT 20A 2 SPST 16A	1 SPDT 16A 2 SPDT 20A 2 SPST 16A	1 SPDT 16A 2 SPDT 20A 2 SPST 16A
Electrical protection	–	MCB	–	–
Inputs	4 (2 AI + 1 AI/DI + 1 DI)			
Sensor type	NTC 10K			
Protection	IP65			

## Ordering and connections

Model	Includes	Q-ty	Code no.
AK-RC 204B	1 x 1.5 m, NTC 10K sensor	1	080Z5001
AK-RC 205C	1 x 3 m, NTC 10K sensor	1	080Z5002
AK-RC 305W	2 x 1.5 m, NTC 10K sensor	1	080Z5003
AK-RC 251	1 x 1.5m, NTC 10K sensor 1 x 3m, NTC 10K sensor	1	080Z5000

## Accessories

### Temperature sensors

Sensor	Cable length	Q-ty	Code no.
NTC 10K, Thermo plastic rubber	3.5 m	1	084N3210
	8.5 m	50	084N3208
NTC 10K, Stainless steel	1.5 m	150	084N3200
NTC 10K, High prec.	1.5 m	1	080Z3216



## Programming Tools

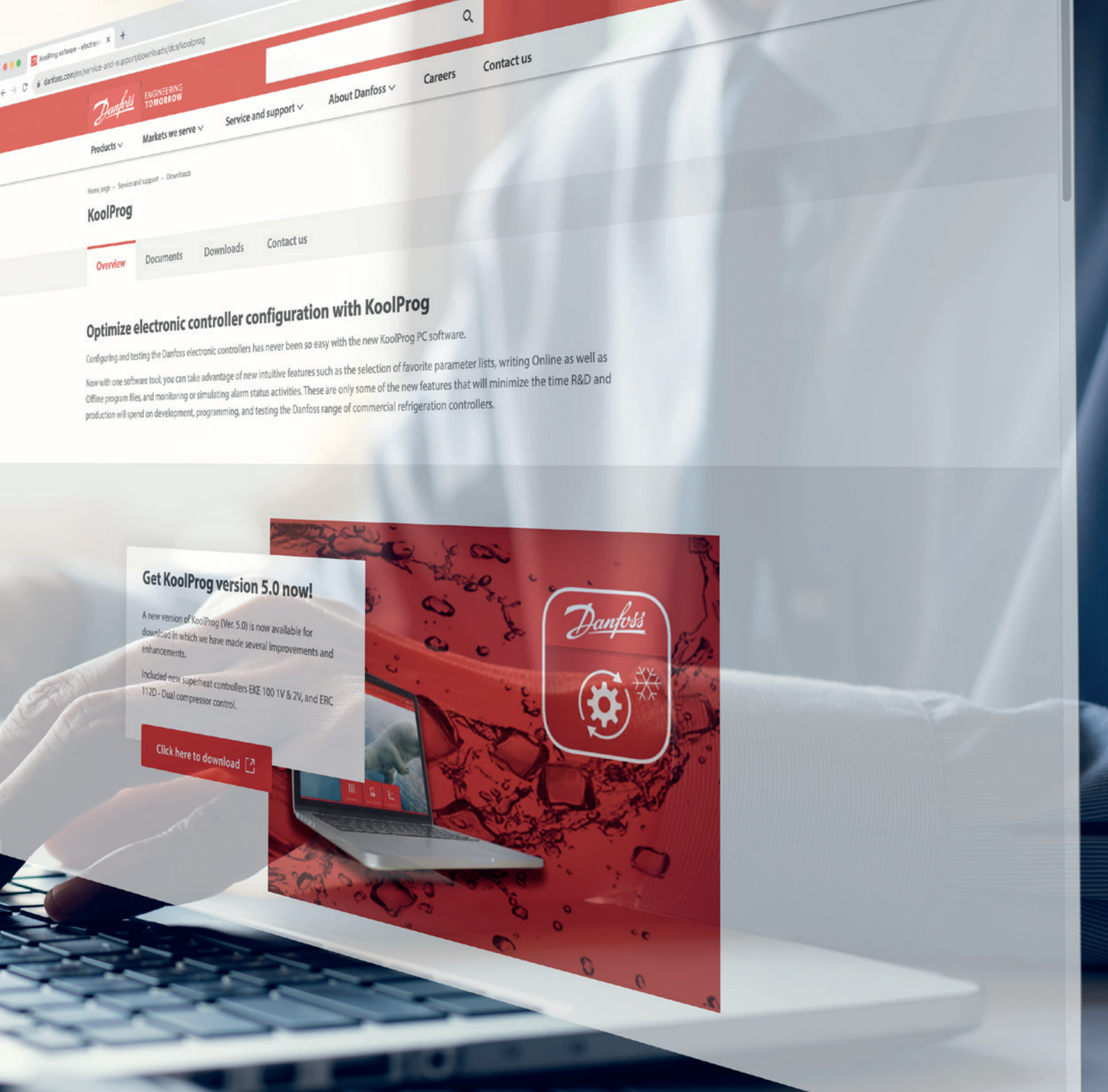


### KoolProg

Download the app for programming via PC  
[www.danfoss.com/en/service-and-support/downloads/dcs/koolprog](http://www.danfoss.com/en/service-and-support/downloads/dcs/koolprog)

Tools	Code no.
EKA 200 (KoolKey)	080N0020
EKA 201 (Mass Prog. Key)*	080N0021

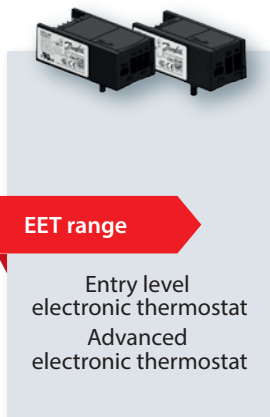


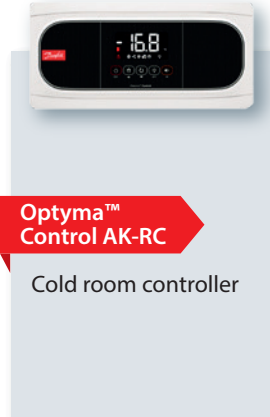
\* EKA 200 is needed to read/write config file for EKA 201



Cables for programming tools	Code No.	Cables for programming tools	Code No.
Cable - EET, 1M	080N0324	Cable - ERC21x 1M	080N0326
Cable - ERC11x 1M	080N0328	Cable - ERC21X 0.5M	080N0327

# Commercial Refrigeration Controller portfolio

From electronic thermostats to refrigeration and cold room controllers. Danfoss offers a strong commercial refrigeration controller portfolio to support your needs.

 <p><b>EET range</b></p> <p>Entry level electronic thermostat Advanced electronic thermostat</p>	 <p><b>ERC 21x</b></p> <p>Controller for small OEMs and indirect channel</p>	 <p><b>ERC 11x</b></p> <p>Advanced controller for large OEMs and end users</p>	 <p><b>Optyma™ Control AK-RC</b></p> <p>Cold room controller</p>
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## Read more about our solutions for Commercial Refrigeration:



### Commercial refrigeration solutions

[CLICK HERE](#)



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