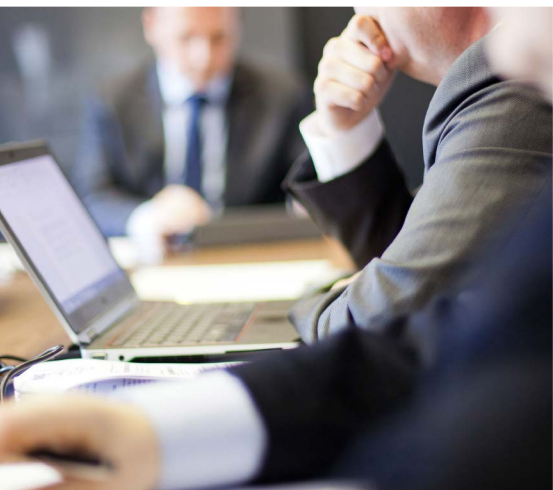




COMERCIAL CATALOGUE 2016

REGULATION AND CONTROL OF
TEMPERATURE FOR REFRIGERATION,
INDUSTRY AND CONSTRUCTION

OUR WORK, YOUR WARRANTY



AKO

AKOCAM

Alarms, gas detectors, dataloggers and
temperature controllers for cold room stores



CAMCtrl BASIC

5 control relays, from -50 °C to 99.9 °C

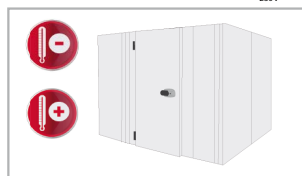
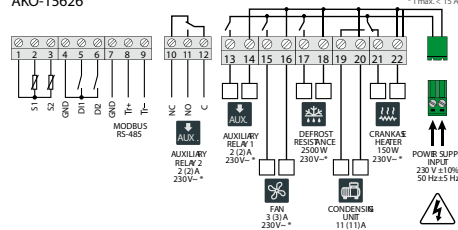


Temperature controller for positive or negative temperature cold storage rooms

Ideal for positive or negative services and ventilated refrigerated units. Defrost using resistances with configurable auxiliary relay. Gas collection manoeuvre (pump-down) selectable per programme. Digital inputs for door switch, high pressure controller, low pressure controller, remote defrost, Set-Point change (energy savings). Allows a 2nd temperature probe to control the evaporator's fans and end of defrost. Does not contain an internal battery.

Application: Industrial and commercial refrigeration.

AKO-15626



- Box dimensions 230 x 230 x 90 mm
- Panel cut-out 14 x 214 mm
- Protection IP65
- Buzzer
- NTC Probe / Resolution 0,1 °C
- Accuracy ± 1 °C
- Comp. relay SPDT 20, 11(11)A, 230 V, AC=11
- Fan relay SPST 16, 3(3)A, 230 V, AC3=3
- Defrost relay SPST 16, 10A, 230 V, AC1=10
- Aux relay 1 SPST 16, 2(2)A, 230 V, AC=2
- Aux relay 2 SPDT 8, 2(2)A, 230 V, AC=2
- 2 configurable relay inputs
- Power free relay for compressor (In AKO-15626-1)

Reference	Description	Family	Pack
AKO-15626	CAMCtrl Basic, 1 probe included, 230 V~	CAMCTRL-Cold Rooms Control	1 Unit
AKO-15626-1	CAMCtrl Basic, 1 probe included, 230 V~	CAMCTRL-Cold Rooms Control	1 Unit
AKO-15627	CAMCtrl Basic + Alarm, 1 probe included, 230 V~	CAMCTRL-Cold Rooms Control	1 Unit

CAMCtrl

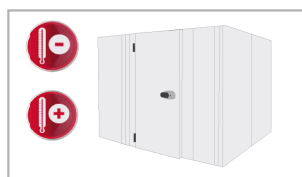
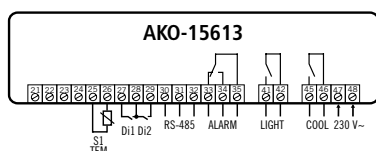
3 and 6 control relays, from -40 °C to +99.9 °C



Controller with built-in register.

Graphic screen with customisable information. Programming assistant and on screen help. Auxiliary relay configurable for 2nd evaporator defrost or stop for pump down. Input for independent temperature probe or defrost control in 2nd evaporator. Internal memory up to one year for temperature register, with a battery for autonomy up to 48 hours. Designed under EN 12830 European standard. Wall and panel mounting. Integrated RS485 communication. ModBus protocol.

Applicaition: Industrial and commercial cold.



- Box dimensions 230 x 230 x 90 mm
- Panel cut-out 214 x 214 mm
- Protection IP65
- Buzzer
- NTC probe / Resolution 0,1 °C
- Accuracy ± 1 °C
- Compressor relay SPST 16 A, 250 V
- Fan relay SPST 8 A, 250 V (AKO-1563x)
- Defrost relay SPDT 16 A, 250 V (AKO-1563x)
- Aux relay SPST 16 A, 250 V (AKO-1563x)
- Light relay SPST 16 A, 250 V
- Alarm relay SPDT 8 A, 250 V
- 2 configurable relay inputs

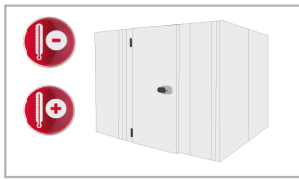
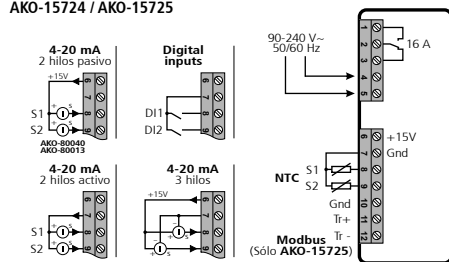
Reference	Description	Family	Pack
AKO-15613	CAMCtrl-3, 230 V~	CAMCTRL-Cold Rooms Control	1 Unit
AKO-156131	CAMCtrl-3 + printer, 100 to 240 V~	CAMCTRL-Cold Rooms Control	1 Unit
AKO-15633	CAMCtrl-6, 230 V~	CAMCTRL-Cold Rooms Control	1 Unit
AKO-156331	CAMCtrl-6 + print , 100 to 240 V~	CAMCTRL-Cold Rooms Control	1 Unit

CAMRegis BASIC

Slim temperature, humidity and events datalogger, according to European Standard EN 12830



AKO-15724 / AKO-15725



Inputs for NTC probes and 4-20 mA

Date logger with two configurable inputs, acoustic alarm + alarm relay and data downloading using an memory card. Display of maximum and minimum values of the last 24 hours (NTC and 4-20 mA inputs). Alarm logging function, saves a record per alarm activation/deactivation. Downloading of the stored data onto an memory card, in .csv format (value table separated by a comma). Log interval selectable from 1, 5, 15, 30 and 60 minutes. Maintenance of date/hour in the event of a power failure up to 2 days.

Application: Industrial and commercial refrigeration, process industry, etc. Loggers for facilities that require temperature, moisture and events logging.

- Temp range -50 °C to + 99.9 °C
- Range 4-20 mA -100 to +900
- Display and logging 0.1 °C.
- Precision ± 1 °C
- Precision inputs 4-20 mA $\pm 1\%$ (mA)
- Box dimensions 171 x 94 x 42 mm
- Alarm relay 2 SPDT 8 A, 250 V
- Power supply 90 to 240 V~
- Protection degree IP40
- Compatible with AKONet and SOFTRegis (configuration and monitoring software).

Features:

	AKO-15724	AKO-15725	AKO-15726
Modbus communications	No	Yes	Yes
Inputs	2, configurable		4 (2 configurables)
Input configurations	NTC / 4-20 mA / digital input / Off		
Alarm relay	yes (SPDT 8 A)		
Acoustical alarm	yes (Buzzer)		
Power supply	90 - 240 V~		
Protection	IP40		
Memory card input	yes		
Installation	Wall		
Accordance	1 s/ EN-12830		
Included accessories	NTC Probe, SD Card and SD card USB reader		T/H Probe, SD Card and SD card USB reader
Custom range	NTC: -50 °C to 99 °C; 4-20 mA: Configurable from -100 a 900 (1000 levels) AKO-14940: Temp 0 to 50°C, Humidity 5%HR to 90% HR		

Reference	Description	Family	Pack
AKO-15724	CAMRegis Basic, 90 to 240 V~, SPDT 8A	CAMREGIS-Data loggers	4 Units
AKO-15725	CAMRegis Basic, 90 to 240 V~, SPDT 8A + Modbus communication	CAMREGIS-Data loggers	4 Units
AKO-15726	CAMRegis Basic, 90 to 240V~, NTC/4-20mA and remote probe T/H	CAMREGIS-Data loggers	4 Units
AKO-14931	Spare probe	CAMREGIS-Data loggers	12 Units
AKO-80013	Wall humidity probe	Accessories	1 Unit
AKO-80040	Tubular wall humidity probe	Accessories	1 Unit
AKO-14940	Spare probe, temperature and humidity (For AKO-15726)	Accessories	4 Units
AKO-15705	Metre of cable for extending probes, 4 x 0,5 mm2 shielded	Accessories	100m (A)

NEW
V.4

CAMRegis

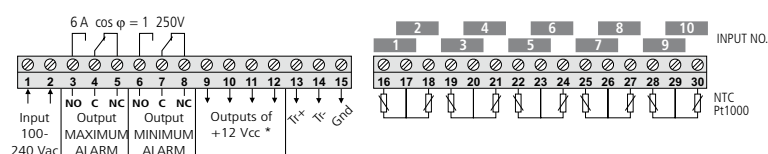
Temperature and humidity loggers, according to European Standard EN 12830



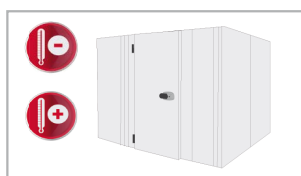
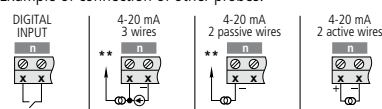
Inputs for NTC, Pt1000 digital and 4-20 mA probes.

Large, high luminosity graphic display. Setup wizard and text menus in multiple languages, with on-screen help. Quick print button, to print out the last calendar week of all entries logged. Internal memory up to three years, with a recording frequency of 15 minutes. Designed in compliance with European standard EN 12830. Integrated RS485 communications. ModBus protocol. Possibility of connecting Pt100 probes to 5-input units.

Application: Industrial and commercial refrigeration, processing industry, etc.



Example of connection of other probes:



- Temp range -150 °C to +590 °C
- Range 4-20 mA -999 °C to +999 °C
- Display & logging 0,1 °C.
- Accuracy ± 1 °C
- Input accuracy 4-20 mA $\pm 1\%$ (mA)
- Box dimensions 230 x 230 x 90 mm
- 5 and 10 input logger included 5 NTC probes
- 2 input logger included 2 NTC probes
- Alarm relays 2 SPDT 8 A, 250 V
- Power supply 100 a 240 V~
- IP65 protection
- Autonomy 6 hours recording, 3 months to maintain time and date
- 5, 15 or 30 min recording interval
- New Feature TTI To The Right Food Preservation

Reference	Description	Family	Pack
AKO-15780	CAMRegis-2, 2-input temperature and humidity logger	CAMREGIS-Data loggers	1 Unit
AKO-15782	CAMRegis-2i, 2-input temperature and humidity logger + printer	CAMREGIS-Data loggers	1 Unit
AKO-15750	CAMRegis-5, 5-input temperature and humidity logger	CAMREGIS-Data loggers	1 Unit
AKO-15752	CAMRegis-5i, 5-input temperature and humidity logger + printer	CAMREGIS-Data loggers	1 Unit
AKO-15740	CAMRegis-10, 10-input temperature and humidity logger	CAMREGIS-Data loggers	1 Unit
AKO-15742	CAMRegis-10i, 10-input temperature and humidity logger + printer	CAMREGIS-Data loggers	1 Unit
AKO-14901	NTC probe from -50 to +100 °C, 1,5 m cable	Temperature	48 Units
AKO-14903	NTC probe from -50 to +100 °C, 3 m cable	Temperature	48 Units
AKO-14906	NTC probe from -50 to +100 °C, 6m cable	Temperature	48 Units
AKO-80013	Wall humidity probe, 10 a 95%, -5/50°C, output 4-20 mA	Accessories	1 Unit
AKO-80040	tubular humidity probe, 5%-95%, -10/70 °C, output 4-20 mA	Accessories	1 Unit
AKO-15703	Spare roll of thermal paper	CAMREGIS-Data loggers	10 Units
AKO-15704	Spare battery	CAMREGIS-Data loggers	1 Unit
AKO-80039	USB/RS485 converter with 2 m cable to PC	Accessories	1 Unit
AKO-5008	SOFTRegis, software for managing and monitoring CAMRegis loggers	Software	1 Unit
AKO-15586	Metre of cable for extending probes, 3 x 0,5 mm2 shielded	Temperature	100m (A)

AKOPRO

Electronic panels



PROPlus BASIC

Electronic panels for cold room stores

PROPlus BASIC is the comprehensive solution in one device, for managing cold rooms, both above and below freezing, in conjunction with: Standard condensing units, fully enclosed condensation, as a service panel in decentralized systems.

General features:

- Temperature range: -50.0 °C to +99.9 °C
- 2 digital inputs: configurable
- Alarm signals: buzzer (acoustic alarm) and relay
- IP65 protection
- Integrated communication: RS485

Advantages:

- Easy access to thermo-magnetic circuit breaker, thanks to its frontal arrangement
- High degree of protection IP65 for installing in humid environments
- Comprehensive functionality for managing cold room with fully enclosed condensing units
- Easy connection in distributed control facilities, ideal for protecting and monitoring in facilities that they have suffered expansion of services.
- Wizard to start up. Selecting: 1- Service Panel (evaporator control), 2- Control panel for condensing units and the evaporator
- The wizard sets up the device to facilitate programming
- User-friendly menus with common parameters



AKO-15645



AKO-15646



AKO-15590



AKO-15590-EVC

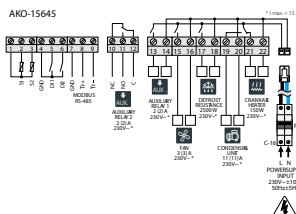
PROPlus BASIC

For condensing units and evaporators with single & three-phase resistors



Electronic panel with 16 A thermo-magnetic circuit breaker, for controlling cold rooms. Alarm trapped person function for positive cold rooms (without battery) in AKO-15646 using the pushbutton AKO-520622 (1 included).

- Compressor/liquid solenoid
- Configuration type AKO control
- 5 relays (comp, fan, defrost, aux1, aux2)
- Up to 2 probes
- Configurable relays for solenoid, alarm and light
- Gas collection (pump-down)



Reference	Condensing Unit	Evaporator		Defrost		Light	Trapped Person Alarm	Power supply	Family	Pack
	230 V/I	230 V/I	400 V/III	230 V/I	400 V/III					
AKO-15645	11 A	4 A	-	2.500 W	-	250 W	-	230 V/I	PROPlus BASIC	1 Unit
AKO-15646	11 A	4 A	-	2.500 W	-	250 W	SI	230 V/I	PROPlus BASIC	1 Unit
AKO-15648	9 A	4 A	-	-	5.500 W	250 W	-	400 V/III	PROPlus BASIC	1 Unit
AKO-15697	-	5 A	-	-	10.200 W	250 W	-	400 V/III	PROPlus BASIC	1 Unit

PROPlus 3PH BASIC

For three-phase condensing units and evaporators with three-phase resistors



Electronic panel with thermo-magnetic circuit breaker up to 25 A, for controlling cold rooms.

Easy installation thanks to its new connecting strip.

- Access for connecting the securities: thermistors, pressure switches, resistor thermostats
- Management up to 2 condensing fans (first: direct, second by PA)
- Control of cold room's light by door contact
- Stop fans and solenoid to open the door

Reference	Condensing Unit		Evaporator		Defrost	Light	Power supply	Family	Pack
	Compresor	Compresor							
	400 V/III	230 V/I	230 V/I	400 V/III	400 V/III				
AKO-15690	2,5 - 4 A	3 A	4 A	-	7.000 W	250 W	400 V/III	PROPlus 3PH BASIC	1 Unit
AKO-15691	4 - 6,3 A	3 A	4 A	-	7.000 W	250 W	400 V/III	PROPlus 3PH BASIC	1 Unit
AKO-15692	6,3 - 10 A	3 A	4 A	-	10.200 W	250 W	400 V/III	PROPlus 3PH BASIC	1 Unit
AKO-15693	10 - 12 A	3 A	5 A	-	10.200 W	250 W	400 V/III	PROPlus 3PH BASIC	1 Unit
AKO-15699	-	-	-	1,6 - 2,5 A	10.200 W	250 W	400 V/III	PROPlus 3PH BASIC	1 Unit
AKO-15699-1				6,3 - 10A	20.000 W	250 W	400 V/III	PROPlus 3PH BASIC	1 Unit

PROPlus 3PH BASIC + EVC

For three-phase condensing units and evaporators with resistors



Electronic panel, with thermo-magnetic circuit breaker up to 25 A, for controlling cold rooms.

- Single-phase and three-phase fans (depending on model)
- Access for connecting the securities: thermistors, pressure switches, resistor thermostats (except service panels)
- Included AKO controller to the stepper electronic expansion valve.

Reference	Condensing Unit			Fans		Defrost	Light	Family	Pack
	Compresor	Condenser							
	400 V-III	230 V-I	400 V-III	230 V-I	400 V-III	400 V-III	230 V-I		
AKO-15690-EVC	2,5 - 4 A	3 A		4 A		7000 W	250 W	PROPlus 3PH BASIC	1 unit
AKO-15691-EVC	4 - 6,3 A	3 A		4 A		7000 W	250 W	PROPlus 3PH BASIC	1 unit
AKO-15692-EVC	6,3 - 10 A	3 A		4 A		7000 W	250 W	PROPlus 3PH BASIC	1 unit
AKO-15693-EVC	10 - 12 A	3 A		4 A		10200 W	250 W	PROPlus 3PH BASIC	1 unit
AKO-15697-EVC				5 A		10200 W	250 W	PROPlus 3PH BASIC	1 unit
AKO-15699-EVC					1,6 - 2,5 A	10200 W	250 W	PROPlus 3PH BASIC	1 unit

PROPlus

Electronic panels for cold rooms

PROPlus is the comprehensive solution in one device for managing cold rooms, both above and below freezing, in conjunction with: Standard condensing units, fully enclosed condensation, as a service panel in decentralized systems.

General features:

- Temperature range: -50.0 °C to +99.9 °C
- 2 digital inputs: configurable
- Alarm signals: buzzer (acoustic alarm) and relay
- IP65 protection
- Integrated communication: RS485
- Graphic LCD screen
- RTC: Real Time Clock
- Internal record for temperatures storage
- According to EN-12830

Advantages:

- Easy access to thermo-magnetic circuit breaker, thanks to its frontal arrangement.
- High degree of protection IP65 for installing in humid environments
- Comprehensive functionality for managing cold room with fully enclosed condensing units.
- Easy connection in distributed control facilities, ideal for protecting and monitoring in facilities that they have suffered expansion of services
- Multi-language graphic LCD screen, user-friendly menus and help texts to facilitate programming, without user manual.

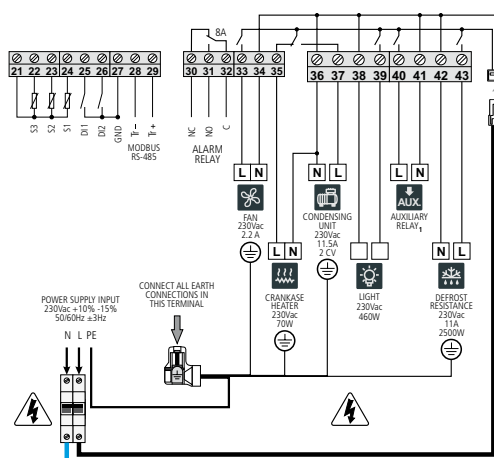
PROPlus

For condensing units and evaporators with single and three-phase resistors



Electronic panel with thermo-magnetic circuit breaker up to 16 A, for controlling cold rooms. AKO-15643 reference also has the exclusive thermo-magnetic circuit breaker to defrost resistances.

- Compressor/liquid solenoid
- Output: 6 relays (comp, aux, light, defrost, fan, alarm)
- Auxiliary relay (solenoid, defrost, 2 evaporators)
- Up to 3 NTC probes (included 1)



Reference	Condensing Unit Description AC1 (AC3)	230 V/I Res. (Induc.)	Fans Eva. 230 V/I	Elec Defrost 230V/I	400 V/III	Power supply	Family	Pack
AKO-15640	PROPlus - 1F	20A (11,5 A) 8A	(2,2 A)	2.500 W		230 V/I (50/60 Hz)	PROPlus	1Unit
AKO-15643	PROPlus - 1F	20A (11,5 A) 8A	(2,2 A)		5.500 W	230 V/I (50/60 Hz)	PROPlus	1Unit

PROPlus 3PH

Electrical and electronic panels for three-phase condensing units and evaporators



Electronic panel with thermo-magnetic circuit breaker up to 16 A, for controlling cold rooms. Easy installation thanks to its new connecting strip.

- Compressor/liquid solenoid
- Single-phase and three-phase fans (depending on model)
- Air or electrical defrost
- Access for connecting the securities: thermistors, pressure switches, resistor thermostats (except service panels)
- Management up to 2 condensing fans (first: direct)
- Control of cold room's light by door contact

Condensing units				Evaporator			Light	Family	Pack
Reference	Compressor	Condensing		Fans		Defrost			
	400 V-III	230 V-I	400 V-III	230 V-I	400 V-III	400 V-III	230 V-I		
AKO-15650	2,5 - 4 A	3 A		3 A		7000 W	460 W	PROPLUS-3 Phase	1 Unit
AKO-15651	4 - 6,3 A	3 A		3 A		7000 W	460 W	PROPLUS-3 Phase	1 Unit
AKO-15651-3			0,63 - 1 A						
AKO-15652	6,3-10 A	3 A		3 A		10200 W	460 W	PROPLUS-3 Phase	1 Unit
AKO-15652-3			1-1,6 A						
AKO-15653	10-12 A	3 A		3 A		10200 W	460 W	PROPLUS-3 Phase	1 Unit
AKO-15653-3			1-1,6 A						
AKO-15658					1-1,6 A	7000 W	460 W	PROPLUS-3 Phase	1 Unit
AKO-15659					1,6-2,5 A	10200 W	460 W	PROPLUS-3 Phase	1 Unit
AKO-15680	2,5 - 4 A		3 A	3 A		7000 W	460 W	PROPLUS-3 Phase	1 Unit
AKO-15681	4 - 6,3 A		3 A	3 A		7000 W	460 W	PROPLUS-3 Phase	1 Unit
AKO-15682	6,3 - 10 A		3 A	3 A		10200 W	460 W	PROPLUS-3 Phase	1 Unit
AKO-15683	10 - 12 A		3 A	3 A		10200 W	460 W	PROPLUS-3 Phase	1 Unit

AKOCABLE

Heating cable solutions



Heating cable quick guide

Installation, checking and connection to power supplies, and coordination should be carried out by qualified staff. AKO recommends selecting heating cables according to their application.

Applications in Refrigeration

TECHNOLOGIES	Parallel cable constant wattage			Parallel cable self-regulating	Serie cable
Application/finishing	Fluoropolymer Outer Jacket	Metal Braid	Silicone Insulation / PVC	Polyolefin Outer Jacket	Silicone Insulation
Avoid ice on drainpipes		AKO-52341	AKO-5234, AKO-52342, AKO-52344, AKO-52346, AKO-712545	AKO-71214T, AKO-1221, AKO-71218T, AKO-7121xP	AKO-7137x, AKO-7138x
Frames of cold rooms		AKO-52341, AKO-5237	AKO-5234, AKO-52342, AKO-52344, AKO-52346		
Cupboard frames and glass cabinets		AKO-52341, AKO-5237	AKO-5234, AKO-52342, AKO-52344, AKO-52346		
Cold room entrance	AKO-70130				
Cold room floors			AKO-5231		

TECHNOLOGIES	Heating resistances
Refrigeration compressors	AKO-718x

Applications in Construction

TECHNOLOGIES	Parallel cable constant wattage			Parallel cable self-regulating
Application/finishing	Fluoropolymer Outer Jacket	Metal Braid	Silicone Insulation / PVC	Polyolefin Outer Jacket
Avoid ice on drainpipes		AKO-710xx		AKO71214T, AKO-1221, AKO7128T, AKO-7121xP.
Avoiding ice ramps, streets ...	AKO-70130, AKO-70140			
Maintain the flow of water on tiled roofs and canals	AKO-70130			
Underfloor heating			AKO-1212	
Hot water supply (HWS)		AKO-710xx		

Applications in Industry

TECHNOLOGIES	T° maintain (°C)	Parallel cable constant wattage (Ex)	Parallel cable self-regulating (Ex)	Serie cable
Application/finishing	CABLE	Fluoropolymer Outer Jacket	Fluoropolymer Covering / TPC	Stainless steel sheath Quartz fibber insulation
Maintain the temperature of processes in piping, tanks, hoppers, and associated equipment	Up to 65	AKO-701xx, AKO-711xx	AKO-7121x	
	Up to 110		AKO-7124x	
	Up to 120		AKO-7125x	
	Up to 155		AKO-7126x	
	Up to 190	AKO-711xx	AKO-7126x	
	Up to 200		AKO-7126x	
	Up to 530			AKO-7130xA
	Up to 800			AKO-7132x

Maintain the temperature in tanks and drums	Temperature	Heaters
	Up to 185 °C	Heating panels: AKO-71515, AKO-71535
	< 100 °C	Heating bands with thermostat: AKO-8003xT
	< 100 °C	Heater Jacket: AKO-80041
	< 100 °C	Base and Ring heater: AKO-718510, AKO-718520, AKO-718720

PARALLEL HEATING CABLE

Cut-to-length on site without its linear power varying

The cable provides a constant wattage regardless of its length. This enables it to be cut made-to-measure on site at the time it is installed. Finishing of both ends of the cable for power supply is done using the appropriate kit.



SERIES CABLE

Finished in factory. The heating cable can't be cut on site.

The cable offers power for a determined length and therefore cannot be cut. It has 1 or 2 cold ends for its power supply.



Constant wattage heating cable

PVC insulation (conductors 2 x 1,5 mm²)



Exposure temperature up to 70 °C with PVC insulation.

AKO-5231 heater wire designed to prevent soil cracked cold storage, installed under the insulation.

AKO-1212 Heating cable for floor heating, installed above the insulation.

Application: Refrigeration and construction

- Copper conductor at 2 x 1,5 mm²
- Heating conductor element: Ni - Cr
- Nominal outler dimensions 9 x 6 mm.
- Minimum bend radius at 20 mm. to -15 °C
- Maximum exposure temperature (disconnected) 70 °C
- Distance between contacts: 1000 mm.



Reference	Description	Family	Pack
AKO-5231	Heating cable 10 W/m at 230 V, PVC insulation	Constant Wattage	100m .(A)
AKO-1212	Heating cable 20 W/m at 230 V, PVC insulation	Constant Wattage	100m. (A)
AKO-12192	Splice + end kit	Accessories	1 Unit
AKO-12193	Connection M25+ end kit	Accessories	1 Unit
AKO-5238	Termination kit	Accessories	25 Units

(A) The metres of packaged material are the standard ones; however, we reserve the right to supply in different lengths to those indicated.

Constant wattage heating cable

Silicone insulation (conductors 2 x 0,75 mm²)

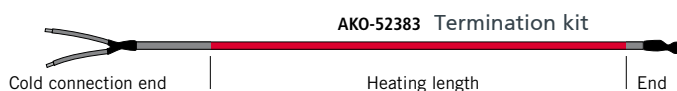


Exposure temperature up to 180 °C with silicone insulation

Heating cable is used in industrial or commercial refrigeration installations to avoid ice in the drain pipes, condensation on the surface, and in applications on metal surfaces. It can be cut to size.

Application: Industrial and commercial refrigeration

- Copper conductor at 2 x 1,5 mm²
- Heating conductor element: Ni - Cr
- Nominal outler dimensions 8 x 6 mm.
- Minimum bend radius at 10 mm. to -40 °C
- Maximum exposure temperature (disconnected) 180 °C
- Distance between contacts: 595 mm.



Reference	Description	Family	Pack
AKO-5234	Heating cable 30 W/m at 230 V, silicone insulation	Constant Wattage	150m.(A)
AKO-52342	Heating cable 30 W/m at 120 V, silicone insulation	Constant Wattage	150m.(A)
AKO-52344	Heating cable 40 W/m at 230 V, silicone insulation	Constant Wattage	150m.(A)
AKO-52346	Heating cable 65 W/m at 230 V, silicone insulation	Constant Wattage	75m.(A)
AKO-52383	Kit for sealing connection termination	Accessories	25 Units

(A) The metres of packaged material are the standard ones; however, we reserve the right to supply in different lengths to those indicated.

Constant wattage heating cable

Silicone insulation (conductors 2 x 1,5 mm²)



Exposure temperature up to 180 °C with silicone insulation

Heating cable is used in industrial or commercial refrigeration installations to avoid ice in the drain pipes and condensation on the surface. It can be cut to size.

Application: Refrigeration and construction

- Copper conductor at 2 x 1,5 mm²
- Heating conductor element: Ni - Cr
- Nominal outler dimensions 9 x 6 mm.
- Minimum bend radius at 20 mm. to -40 °C
- Maximum exposure temperature (disconnected) 180 °C
- Distance between contacts: 500 mm.



Reference	Description	Family	Pack
AKO-712545	Heating cable 50 W/m at 230 V, silicone insulation	Constant Wattage	100m.(A)
AKO-12192	Splice + end kit	Accessories	1 Unit
AKO-12193	Connection M25 + end kit	Accessories	1 Unit
AKO-5238	Termination kit	Accessories	25 Units

(A) The metres of packaged material are the standard ones; however, we reserve the right to supply in different lengths to those indicated.

Constant wattage heating cable

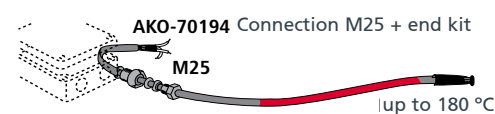
Silicone insulation + metal braid (conductors 2 x 0,75 mm²)



Exposure temperature up to 180 °C with metal protection braid.

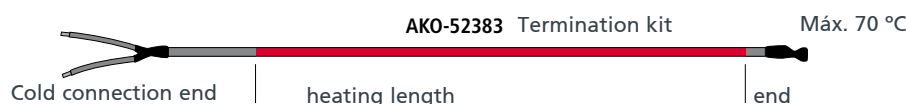
Heating cable is used in industrial or commercial refrigeration installations to avoid ice in the drain pipes, door frames and condensation on the surface. A range with braid, giving electrical protection by using it as an earth conductor. It can be cut to size.

Application: Industrial and commercial refrigeration



- Copper conductor at 2 x 0,75 mm²
- Heating conductor element: Ni - Cr
- Nominal outer dimensions 9 x 7 mm.
- Minimum bend radius at 10 mm. to -40 °C
- Maximum exposure temperature (disconnected) 70 °C / 180 °C (*)
- Distance between contacts: 595 mm.

(*): Using kit AKO-70194



Reference	Description	Family	Pack
AKO-52341	Heating cable 30 W/m at 230 V, insulation + metal braid	Constant Wattage	150 m.(A)
AKO-52383	Termination kit	Accessories	25 Units
AKO-70194	Connection M25 + end kit	Accessories	5 Units

(A) The metres of packaged material are the standard ones; however, we reserve the right to supply in different lengths to those indicated.

Constant wattage heating cable

Silicone insulation + metal braid (conductors 2 x 1,5 mm²)



Exposure temperature up to 180 °C with metal protection braid

Heating cable is used in the construction facilities to avoid ice in pipes and sanitary hot water. A range with braid, giving electrical protection by using it as an earth conductor. It can be cut to size.

Application: Construction

- Copper conductor at 2 x 1,5 mm²
- Heating conductor element: Ni - Cr
- Nominal outer dimensions: 9,4 x 6,9 mm
- Minimum bend radius at 20 mm a -40 °C
- Maximum operating temp. (connected) up to 165 °C
- Maximum exposure temp. (disconnected) 180 °C
- Distance between contacts: 1000 mm / 500 mm (for AKO-71025, AKO-71035, AKO-71050)



Reference	Description	Family	Pack
AKO-71010	Heating cable 10 W/m at 230 V, up to 165 °C	Constant Wattage	100 m.(A)
AKO-71015	Heating cable 15 W/m at 230 V, up to 150 °C	Constant Wattage	100 m.(A)
AKO-71020	Heating cable 20 W/m at 230 V, up to 130 °C	Constant Wattage	100 m (A)
AKO-71025	Heating cable 25 W/m at 230 V, up to 115 °C	Constant Wattage	100 m.(A)
AKO-71030	Heating cable 30 W/m at 230 V, up to 95 °C	Constant wattage	100 m (A)
AKO-71035	Heating cable 35 W/m at 230 V, up to 75 °C	Constant Wattage	100 m.(A)
AKO-71050	Heating cable 50 W/m at 230 V, up to 25 °C	Constant Wattage	100 m.(A)
AKO-71092	Connection M25 + end kit	Accessories	1 Unit

A) The metres of packaged material are the standard ones; however, we reserve the right to supply in different lengths to those indicated.

Constant wattage heating cable

Silicone insulation + metal braid (power supply 24/48 V)



24/48V power supply with metal protection braid

Heating cable is used in industrial or commercial refrigeration installations to avoid ice in the door frames and condensation on the surface. A range with braid, giving electrical protection by using it as an earth conductor. It can be cut to size.

Application: Industrial and commercial refrigeration

- Copper conductor at 2 x 1,5 mm²
- Heating conductor element: Ni - Cr
- Nominal outler dimensions 9,4 x 6,4 mm.
- Minimum bend radius at 20 mm. to -40 °C
- Maximum exposure temperature (disconnected) 180 °C
- Distance between contacts: 200 mm.



AKO-71092 Connection M25+ end kit

Reference	Description	Family	Pack
AKO-5237*	Heating cable 40 W/m to 48 V, (10 W/m to 24 V)	Constant Wattage	100 m. (A)
AKO-71092	Connection M25 + end kit	Accessories	1 Unit

(A) The metres of packaged material are the standard ones; however, we reserve the right to supply in different lengths to those indicated. *Available on request

Constant wattage heating cable

Fluoropolymer covering (conductors 2 x 0.75 mm²)



Exposure temperature up to 180 °C with fluoropolymer covering

These are used to maintain the temperature and protection against ice in pipes, on roofs, terraces, ramps, stairs, drains, etc. Maintaining process temperatures up to 155 °C and suitable for corrosive atmospheres and with risk of explosion. They can be cut to size.

Application: Refrigeration, Construction and Industry

- Copper conductor at 2 x 0,75 mm²
- Heating conductor element: Ni - Cr
- Nominal outler dimensions 9,4 x 6,5 mm.
- Minimum bend radius at 20 mm. to -40 °C
- Maximum operating temperature (connected) up to 155 °C
- Maximum exposure temperature (disconnected) 180 °C
- Distance between contacts: 1000 mm.



AKO-70194 Connection M25 + end kit



Splice + end kit

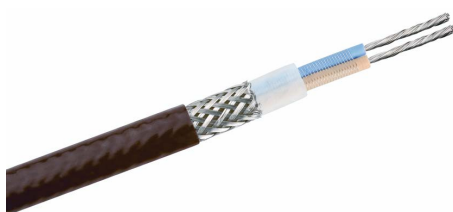
Máx. 70 °C

Reference	Description	Family	Pack
AKO-70115	Heating cable 15 W/m a 230 V, up to 155 °C	Constant Wattage	100m.(A)
AKO-70130	Heating cable 30 W/m a 230 V, up to 115 °C	Constant Wattage	100m.(A)
AKO-70140	Heating cable 40 W/m a 230 V, up to 84 °C	Constant Wattage	50m.(A)
AKO-70192	Splice kit + end, for cables embedded in concrete	Accessories	10Units (B)
AKO-70194	Connection M25 + end kit	Accessories	5Units

A) The metres of packaged material are the standard ones; however, we reserve the right to supply in different lengths to those indicated. (B) Minimum, indivisible pack units.

Constant wattage heating cable

Fluoropolymer covering (conductors 2 x 1,5 mm²)



Exposure temperature up to 200 °C with fluoropolymer cover

Heating cable is used to maintain the temperature up to 190 °C and protection against ice in pipes, tanks, etc. Suitable for corrosive atmospheres and with risk of explosion. It can be cut to size.

Application: Industry

- Copper conductor at 2 x 1,5 mm²
- Heating conductor element: Ni - Cr
- Nominal outler dimensions 10,3 x 7,4 mm.
- Minimum bend radius at 20 mm. to -40 °C
- Maximum operating temperature (connected) up to 190 °C
- Maximum exposure temperature (disconnected) 200 °C
- Distance between contacts: 1000 mm. / 500 mm. (for AKO-71150)



Reference	Description	Family	Pack
AKO-71110	Heating cable 10 W/m a 230 V, up to 190 °C	Constant Wattage	100 m.(A)
AKO-71115	Heating cable 15 W/m to 230 V, up to 185 °C	Constant Wattage	100 m (A)
AKO-71120	Heating cable 20 W/m a 230 V, up to 168 °C	Constant Wattage	100 m.(A)
AKO-71125	Heating cable 25 W/m to 230 V, up to 185 °C	Constant wattage	100 m (A)
AKO-71130	Heating cable 20 W/m a 230 V, up to 168 °C	Constant Wattage	100 m.(A)
AKO-71135	Heating cable 35 W/m a 230 V, up to 132 °C	Constant Wattage	100 m.(A)
AKO-71150	Heating cable 50 W/m a 230 V, up to 91 °C	Constant Wattage	100 m.(A)
AKO-71092	Connection M25 + end kit	Accessories	1 Unit

(A) The metres of packaged material are the standard ones; however, we reserve the right to supply in different lengths to those indicated.

Self-regulating heating cable

Polyolefin covering (conductors 2 x 1 mm²)

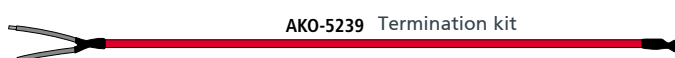


Exposure temperature up to 65 °C with polyolefin covering

Heating cable is used in the construction facilities to avoid ice in pipes or in the refrigeration to avoid ice. It can be cut to size.

Application: Refrigeration and construction

- Minimum bend radius at 25 mm. to -40 °C
- Maximum operating temperature (connected) 65 °C
- Maximum exposure temperature (disconnected) 65 °C
- Maximum exposure temperature (intermittent, max. 1000 h) 85 °C



Reference	Description	Family	Pack
AKO-71214T	Heating cable 15 W/m to 10 °C, 230 V (9 W/m, 40 °C)	Self-regulating	100m. (A)
AKO-1221	Heating cable 25 W/m to 10 °C, 230 V (11 W/m, 40 °C)	Self-Regulating	100m. (A)
AKO-71218T	Heating cable 30 W/m to 10 °C, 230 V (17 W/m, 40 °C)	Self-regulating	100m. (A)
AKO-12292	Connection M25 + end kit	Accessories	1 Unit
AKO-5239	Termination kit	Accessories	25 Units

Self-regulating heating cable

Polyolefin covering (conductors 2 x 1,2 mm²)



Exposure temperature up to 65 °C suitable for Ex zone

Heating cable is used in the construction facilities to avoid ice in pipes or in the refrigeration to avoid ice. Suitable for corrosive atmospheres and with risk of explosion. It can be cut to size.

Application: Industry

- Minimum bend radius at 25 mm. to -40 °C
- Maximum operating temperature (connected) 65 °C
- Maximum exposure temperature (disconnected) 65 °C
- Maximum exposure temperature (intermittent, max. 1000 h) 85 °C



AKO-71492 / AKO-71493

Reference	Description	Family	Pack
AKO-71212P	Heating cable 10 W/m to 10 °C, 230 V (5 W/m, 40 °C)	Self-regulating	–
AKO-71214P	Heating cable 15 W/m to 10 °C, 230 V (8 W/m, 40 °C)	Self-regulating	–
AKO-71216P	Heating cable 25 W/m to 10 °C, 230 V (14 W/m, 40 °C)	Self-regulating	–
AKO-71218P	Heating cable 33 W/m to 10 °C, 230 V (20 W/m, 40 °C)	Self-regulating	–
AKO-71492	Connection M20 + end kit (hot application)	Accessories	1 Unit
AKO-71493	Connection M20 + end kit (cold application)	Accessories	1 Unit

Self-regulating heating cable

Fluoropolymer covering (conductors 2 x 1,2 mm²)



Exposure temperature up to 65 °C with fluoropolymer covering

Heating cable is used to maintain the temperature up to 65 °C in pipes, tanks, etc. Suitable for corrosive atmospheres and with risk of explosion. It can be cut to size.

Application: Industry

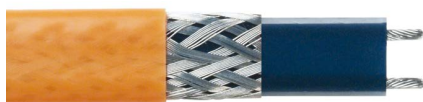
- Minimum bend radius at 25 mm. to -40 °C
- Maximum operating temperature (connected) 65 °C
- Maximum exposure temperature (disconnected) 65 °C
- Maximum exposure temperature (intermittent, max. 1000 h) 85 °C



Reference	Description	Family	Pack
AKO-71212	Heating cable 10 W/m to 10 °C, 230 V (5 W/m, 40 °C)	Self-regulating	–
AKO-71214	Heating cable 15 W/m to 10 °C, 230 V (8 W/m, 40 °C)	Self-regulating	–
AKO-71216	Heating cable 25 W/m to 10 °C, 230 V (14 W/m, 40 °C)	Self-regulating	–
AKO-71218	Heating cable 33 W/m to 10 °C, 230 V (20 W/m, 40 °C)	Self-regulating	–
AKO-71492	Connection M20 + end kit (hot application)	Accessories	1 Unit
AKO-71493	Connection M20 + end kit (cold application)	Accessories	1 Unit

Self-regulating heating cable

TPC covering (conductors 2 x 1,25 mm²)

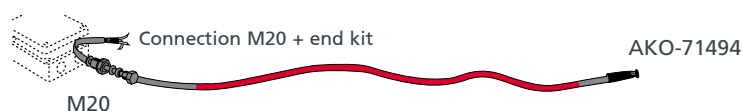


Exposure temperature up to 110 °C with TPC covering

Heating cable is used to maintain the temperature up to 110 °C in pipes, tanks, etc. Suitable for corrosive atmospheres and with risk of explosion. It can be cut to size.

Application: Industry

- Minimum bend radius at 25 mm. to -40 °C
- Maximum operating temperature (connected) 110 °C
- Maximum exposure temperature (disconnected) 110 °C
- Maximum exposure temperature (intermittent, max. 1000 h) 130 °C



Reference	Description	Family	Pack
AKO-71241	Heating cable 15 W/m to 10 °C, 230 V (4 W/m, 90 °C)	Self-regulating	–
AKO-71243	Heating cable 30 W/m to 10 °C, 230 V (12 W/m, 90 °C)	Self-regulating	–
AKO-71245	Heating cable 40 W/m to 10 °C, 230 V (18 W/m, 90 °C)	Self-regulating	–
AKO-71494	Connection M20 + end kit	Accessories	1 Unit

Self-regulating heating cable

Fluoropolymer covering (conductors 2 x 1,2 mm²)



Exposure temperature up to 120 °C with fluoropolymer covering

Heating cable is used to maintain the temperature up to 120 °C in pipes, tanks, etc. allowed steam cleanings. Suitable for corrosive atmospheres and with risk of explosion, It can be cut to size.

Application: Industry

- Minimum bend radius at 25 mm. to -50 °C
- Maximum operating temperature (connected) 120 °C
- Maximum exposure temperature (disconnected) 120 °C
- Maximum exposure temperature (intermittent, max. 1000 h) 190 °C



Reference	Description	Family	Pack
AKO-71250	Heating cable 10 W/m to 10 °C, 230 V (5 W/m, 100 °C)	Self-regulating	–
AKO-71251	Heating cable 15 W/m to 10 °C, 230 V (8 W/m, 100 °C)	Self-regulating	–
AKO-71252	Heating cable 25 W/m to 10 °C, 230 V (14 W/m, 100 °C)	Self-regulating	–
AKO-71253	Heating cable 30 W/m to 10 °C, 230 V (19 W/m, 100 °C)	Self-regulating	–
AKO-71255	Heating cable 45 W/m to 10 °C, 230 V (27 W/m, 100 °C)	Self-regulating	–
AKO-71258	Heating cable 60 W/m to 10 °C, 230 V (37 W/m, 100 °C)	Self-regulating	–
AKO-71494	Connection M20 + end kit	Accessories	1 Unit

Self-regulating heating cable

Fluoropolymer covering

(Conductors 2 x 1.2 mm² for 30 to 60 W/m and 1.9 mm² for 75 W/m)

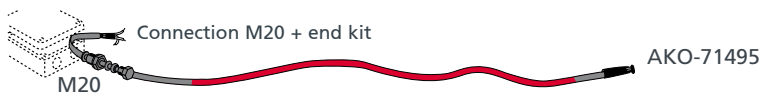


Exposure temperature up to 200 °C with fluoropolymer covering

Heating cable is used to maintain the temperature up to 200 °C in pipes, tanks, etc. allowed steam cleanings. Suitable for corrosive atmospheres and with risk of explosion. It can be cut to size.

Application: Industry

- Minimum bend radius at 25 mm. to -55 °C
- Maximum operating temperature (connected) 200 °C
- Maximum exposure temperature (disconnected) 200 °C
- Maximum exposure temperature (intermittent, max. 1000 h) 250 °C
- Installed ending kit inside the box and outside the insulation



Reference	Description	Family	Pack
AKO-71261	Heating cable 30 W/m to 10 °C, 230 V (4 W/m, 120 °C)	Self-regulating	–
AKO-71263	Heating cable 45 W/m to 10 °C, 230 V (9 W/m, 120 °C)	Self-regulating	–
AKO-71265	Heating cable 60 W/m to 10 °C, 230 V (19 W/m, 120 °C)	Self-regulating	–
AKO-71267	Heating cable 75 W/m to 10 °C, 230 V (24 W/m, 120 °C)	Self-regulating	–
AKO-71495	Connection M20 + end kit	Accessories	1 Unit

General conditions of sale

1. The prices in euros indicated do not include taxes, apply to materials placed in your our workshops (collect on delivery) including normal packaging but not the carriage charges for the merchandise sent on account and risk of the buyer.

2. Each product that are included in studies or estimates with designs adapted to customer specifications, the prices are established depending on each project.

3. The prices and conditions apply to materials supplied in container units. Those marked (A): The metres of packaging are the standard ones, but we reserve the right to supply in different lengths than the ones indicated. Those marked (B): Minimum and indivisible container units.

4. The minimum order value of 200,00 Euros (net invoice value) must be taken into consideration for each sale. For exports, a fixed cost (40,00 Euros) may be charged on each order.

5. Our warehouse do not accept the returning of goods without the W.E. indicating that they have previously been authorised to enter. In all case, a charge for depreciation will be made for inspecting and checking the goods.

6. No returns will be accepted after 48 hours have elapsed from the confirmation of the acceptance of the order.

7. Collections of our sales are insured by companies such as "Cesce" or similar companies. Payment of the first order will be done in cash, until the opening of the risk has been authorised for credit sales.

8. The payment method for credits sales will be agreed on in each case after authorised by the Insurance Company. The sales conditions will depend on the payment term.

9. The information show in this catalogue is merely informative.

We reserve the right to supply materials that could differ slightly from those contained in this publication.

Warranty conditions

1. AKO Electromecànica, S.A.L. guarantees its products for a term of 2 years from the date of sale.

2. This warranty covers the repair or replacement of parts, materials or faulty equipment as a result of factory defects. users will pay all expenses incurred in sending the faulty elements to the AKO premises.

3. AKO will not accept any returned item that has not been authorised previously.

4. The replacement of parts, materials of faulty equipment does not entail an extension of the warranty.

5. AKO will accept claims for differences between quantity and reference supplied within 10 days following the date that the Goods have been received.

6. This Warranty does not cover faults or damage due to the use of the product for a purpose other than the one they are intended for or products that have not been installed in accordance with the instructions for installation.

7. This warranty does not cover products, materials or equipment that have been handled by persons not authorised by AKO.

8. This warranty does not cover faults caused by catastrophic (fire, flood...) or atmospheric events, knocks and falls.

9. AKO is not responsible for any direct or indirect damage caused by failures or faults in its material or products as well as any other claims that could arise in them, unless this is mandatory in accordance with what is provided by the law.

10. To validate the warranty, the materials or products must be accompanied by their respective purchased receipts.



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