

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 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

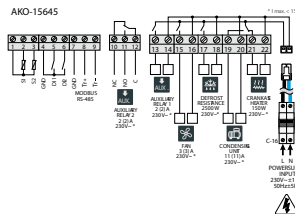
PROPlus BASIC

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



Reference	Condensing Unit		Evaporator		Defrost		Light	Trapped Person Alarm	Power supply	Family	Pack
	230 V/I	230 V/II	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
	Compressor	Compressor							
	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
	Compressor	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.

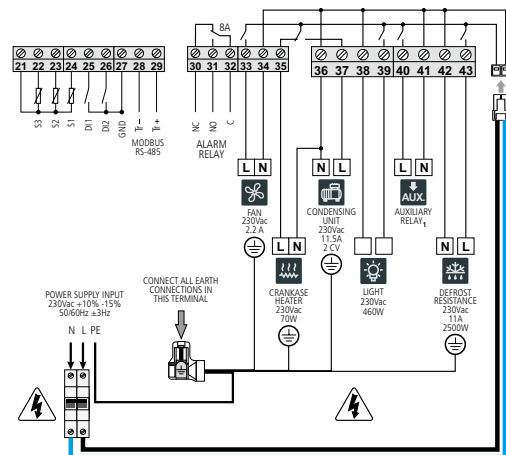
PROPlus

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)	Fans Eva.		Elec Defrost		Power supply	Family	Pack
		230 V/I Res. (Induc.)	230 V/I	230V/I	400 V/III			
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

PROCool

Universal Electronic Panels up to 25A



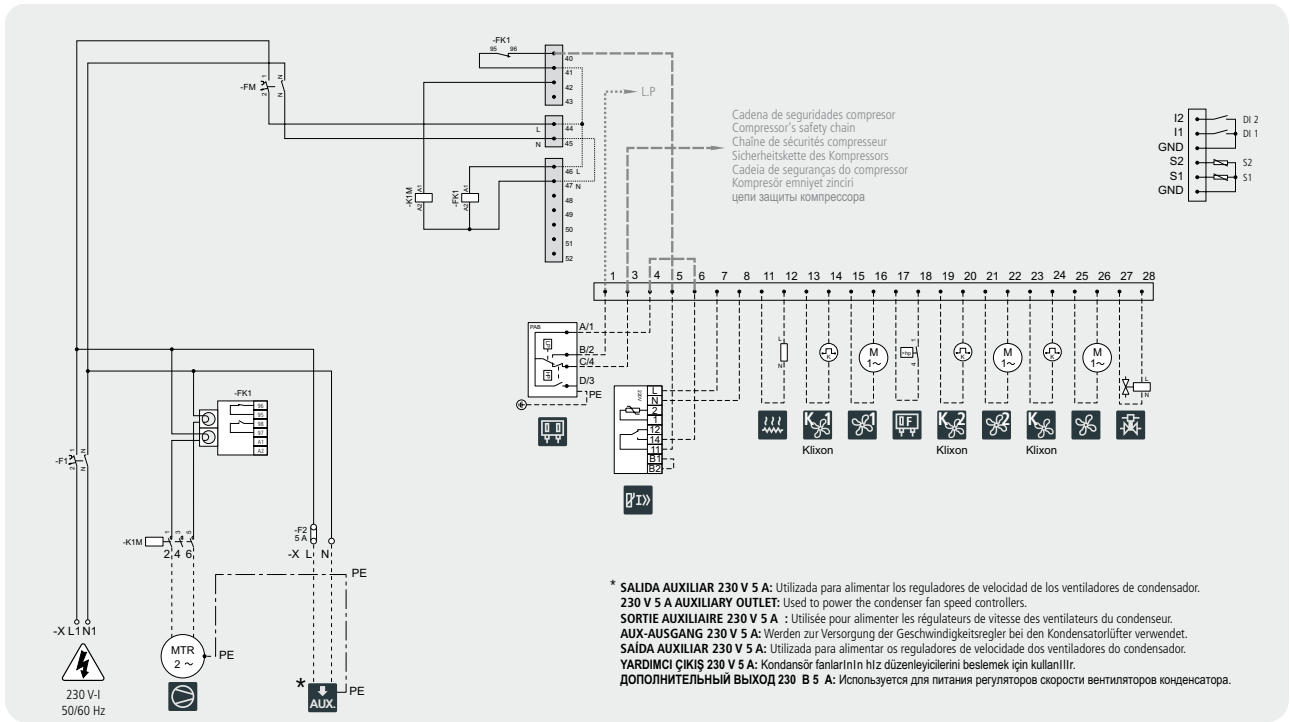
Electronic Panels for Single and Three Phase Condensing Units with Electrical Protection that is adjustable between 3 and 25A. Versions for single and three phase evaporator fans and/or single and three phase condenser fans, with or without single and three phase defrosting.

There are also two versions solely for control of three phase condensing units with single and three phase fans

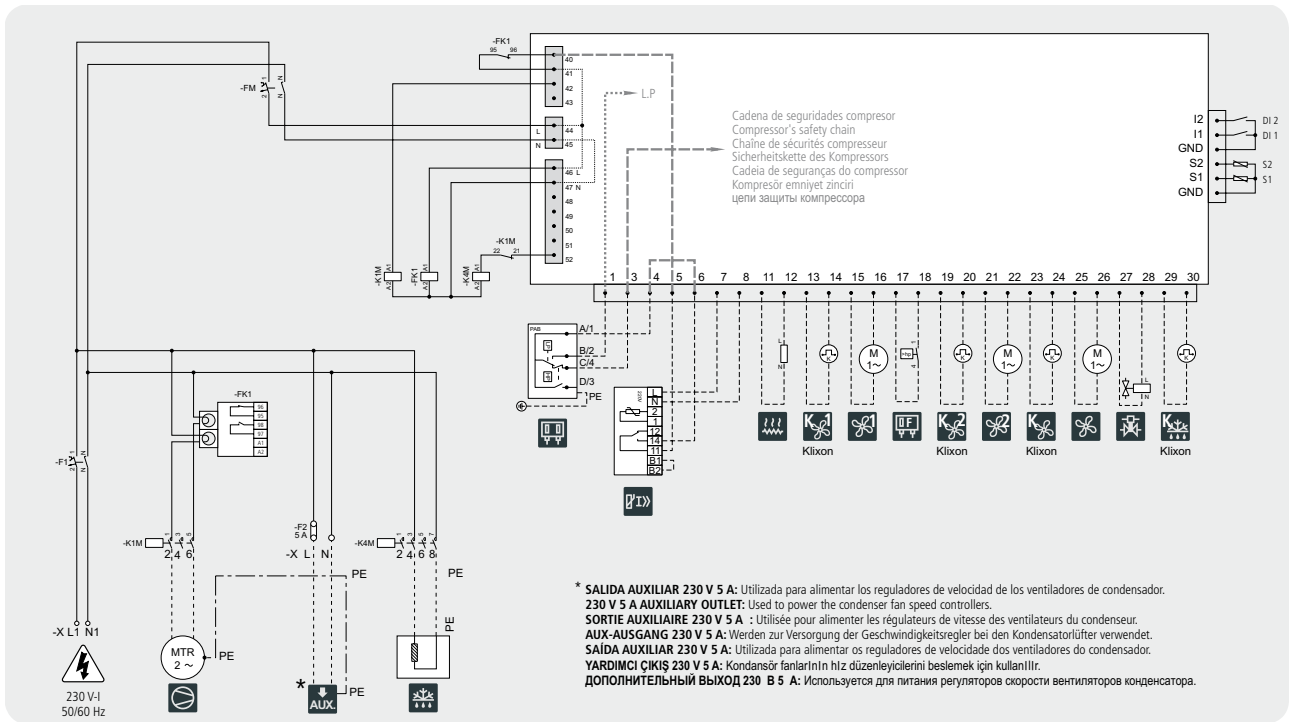
Applications: Positive and negative cold room stores up to 10CV

- Electrical Protection adjustable between 3 and 25A in a single reference
- Quick and safe wiring to Electronic Board via clamping terminals
- Electronic Control with Advanced Functionality, including combined management of Pump Down and Defrost
- Large sized user interface, with Hotkeys, large screen and synoptic of the installation on the front door
- Light IP65 enclosure suitable for industrial use
- Electrical elements and protections from top globally recognised brands and with global replacement on the market
- Configurable digital inputs for special functions (door contact, stop for fans and solenoid in door opening, remote defrost etc.)
- 5 Security systems to protect all the elements in the facility
- Large screen for maximum visibility of temperature over at long distance

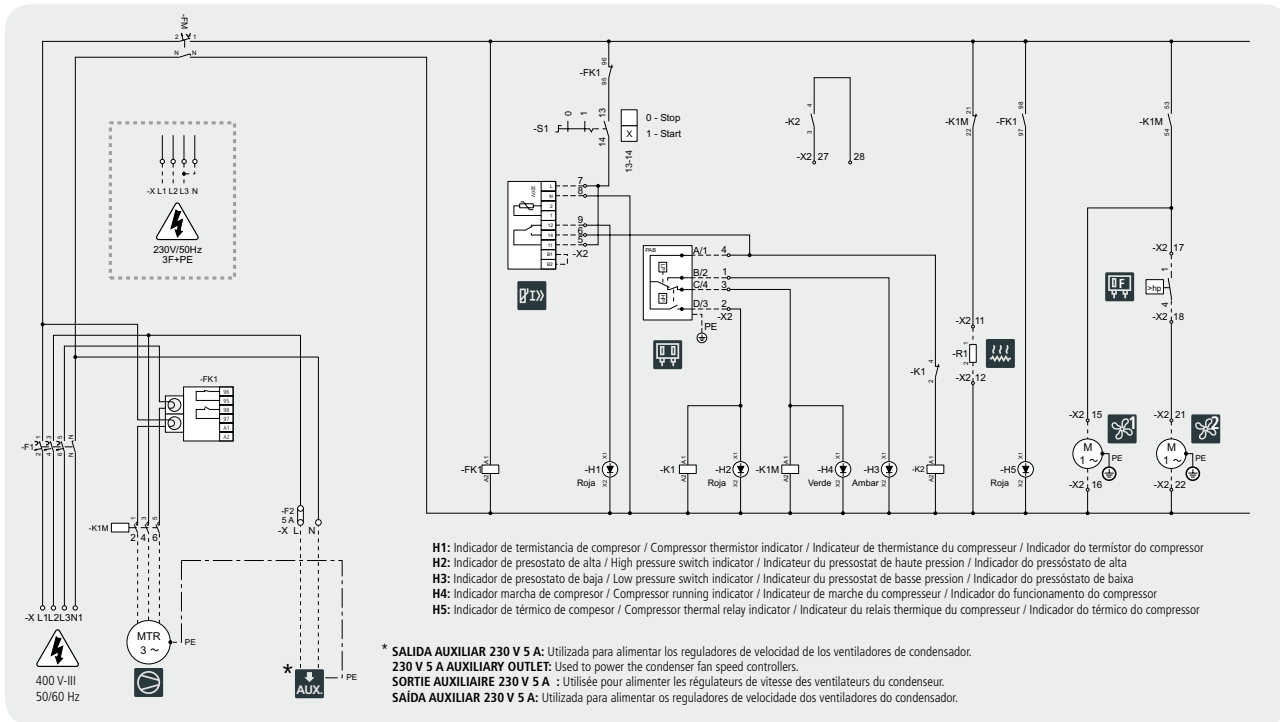
Reference AKO	Condensing Unit				Evaporator				Family	Packaging
	Compressor		Condenser		Fans		Defrost resistors			
	230 V-I	400 V-III	230 V-I	400 V-III	230 V-I	400 V-III	230 V-I	400 V-III		
AKO-17520	3 - 25 A	-	3 A	-	4 A	-	-	-	PROCool	1 Unit
AKO-17521	3 - 25 A	-	3 A	-	4 A	-	4,400 W	-	PROCool	1 Unit
AKO-17630	-	3 - 25 A	3 A	-	-	-	-	-	PROCool	1 Unit
AKO-17631	-	3 - 25 A	-	0.3 - 3 A	-	-	-	-	PROCool	1 Unit
AKO-17632	-	3 - 25 A	3 A	-	4 A	-	-	-	PROCool	1 Unit
AKO-17633	-	3 - 25 A	-	0.3 - 3 A	4 A	-	-	-	PROCool	1 Unit
AKO-17634	-	3 - 25 A	-	0.3 - 3 A	-	0.3 - 6 A	-	-	PROCool	1 Unit
AKO-17635	-	3 - 25 A	3 A	-	4 A	-	-	13,500 W	PROCool	1 Unit
AKO-17636	-	3 - 25 A	-	0.3 - 3 A	4 A	-	-	13,500 W	PROCool	1 Unit
AKO-17637	-	3 - 25 A	-	0.3 - 3 A	-	0.3 - 6 A	-	13,500 W	PROCool	1 Unit



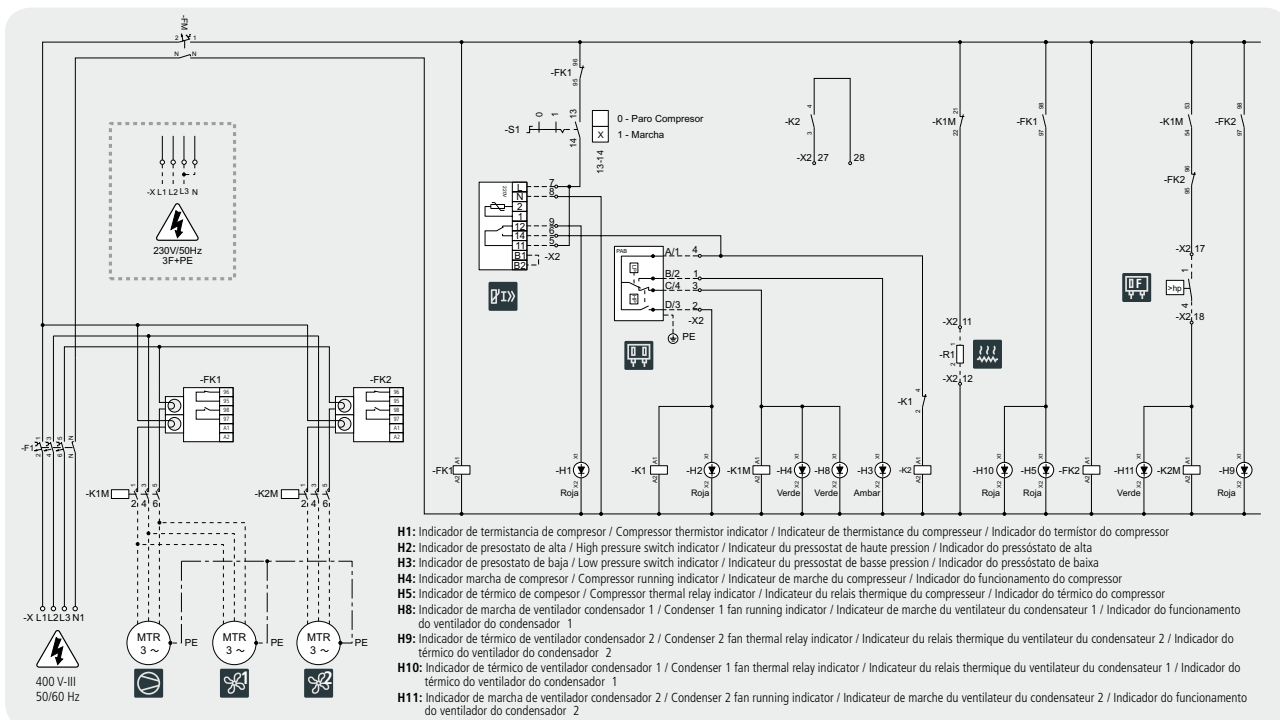
AKO-17520



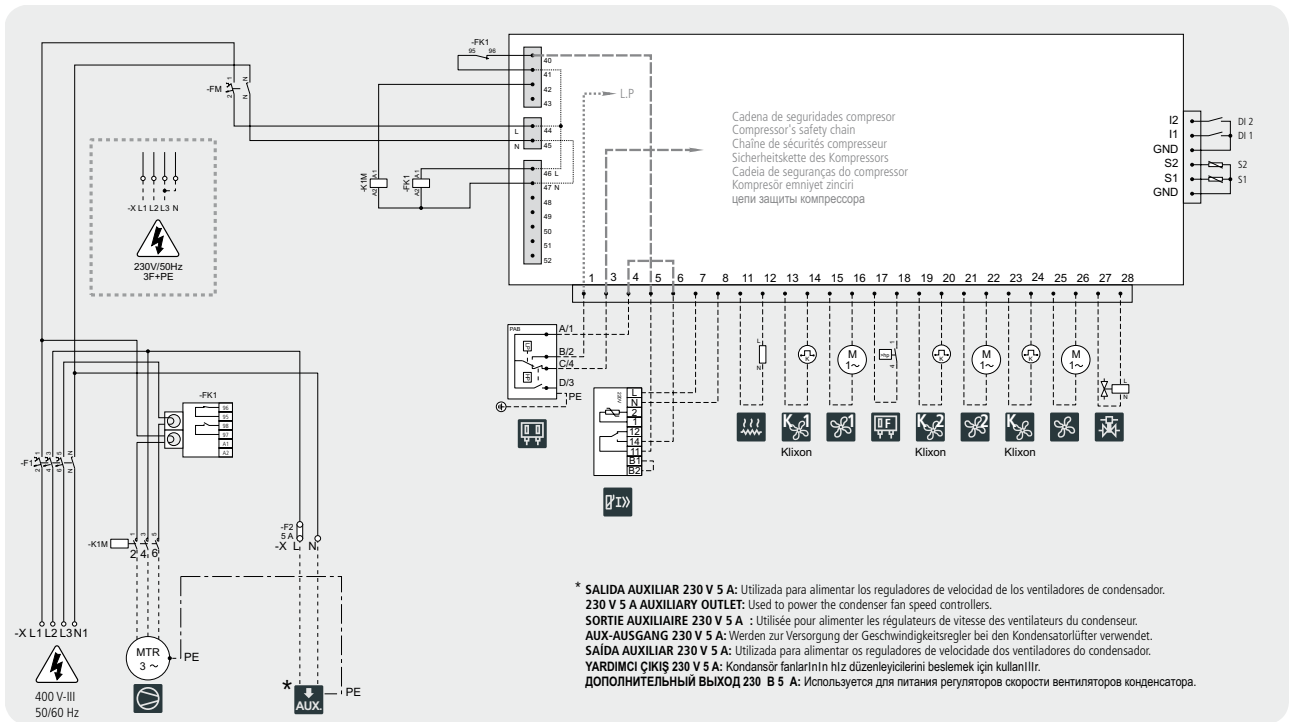
AKO-17521



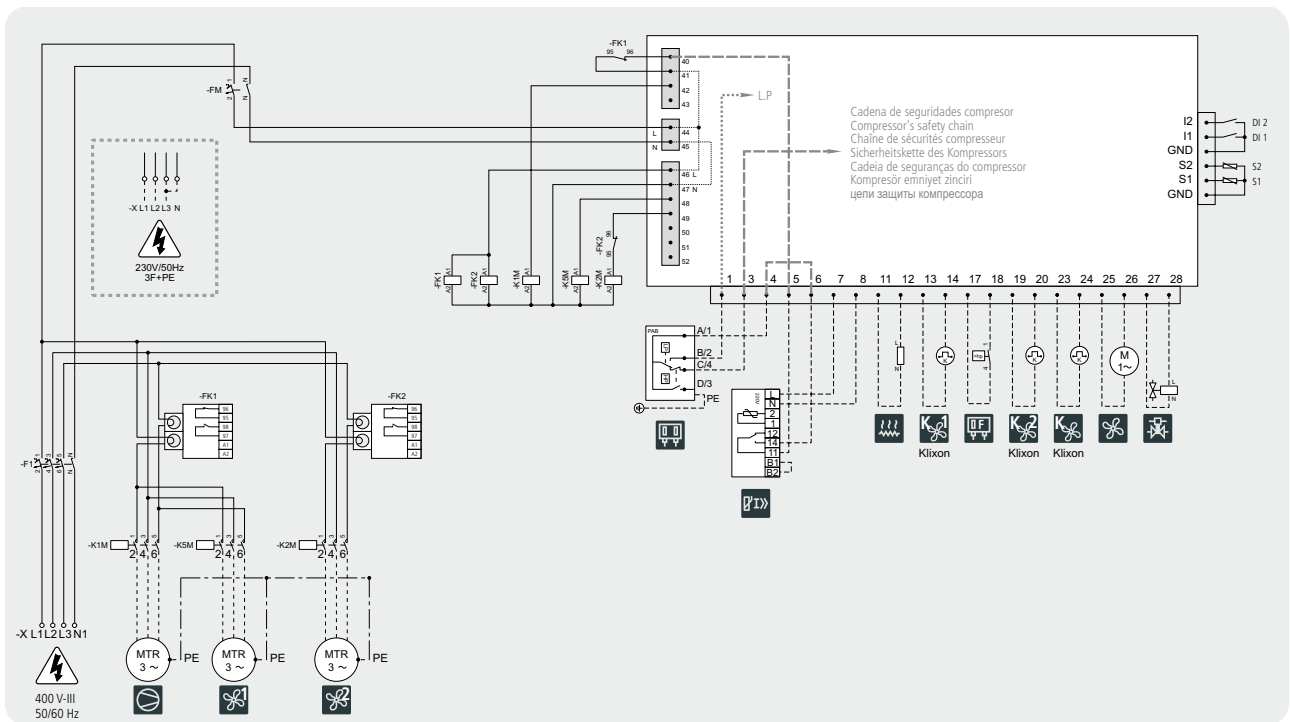
AKO-17630



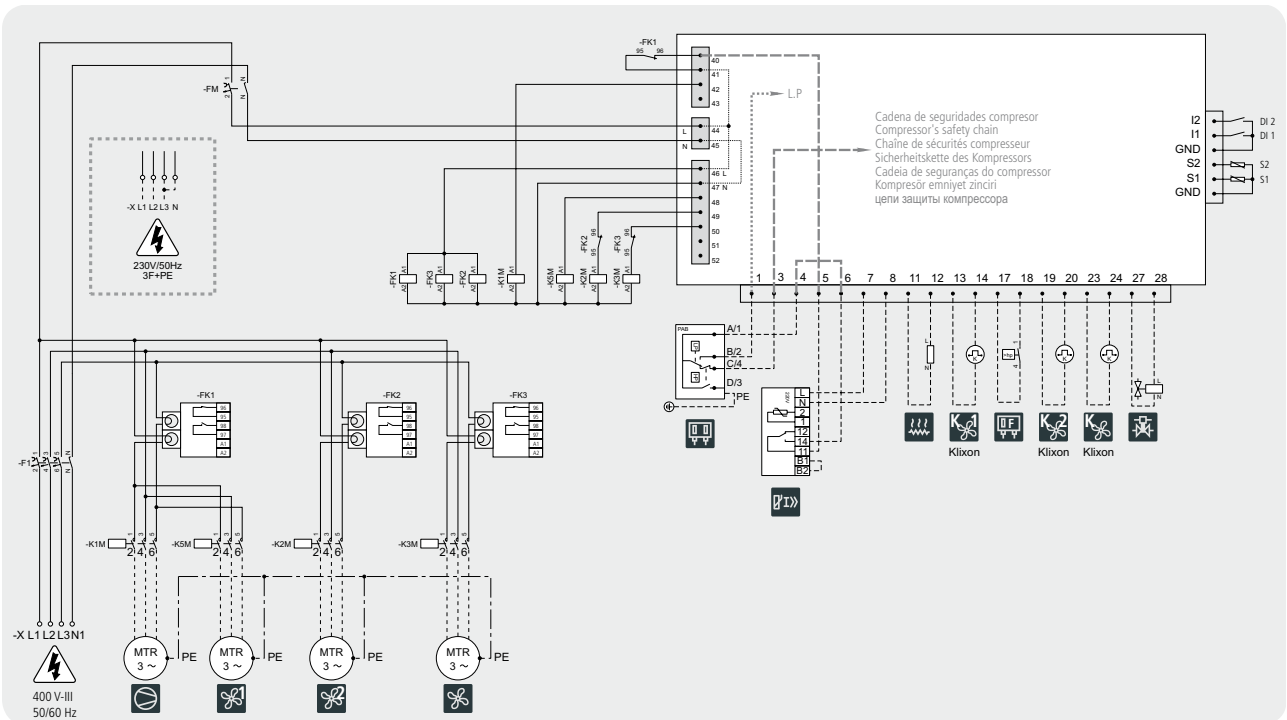
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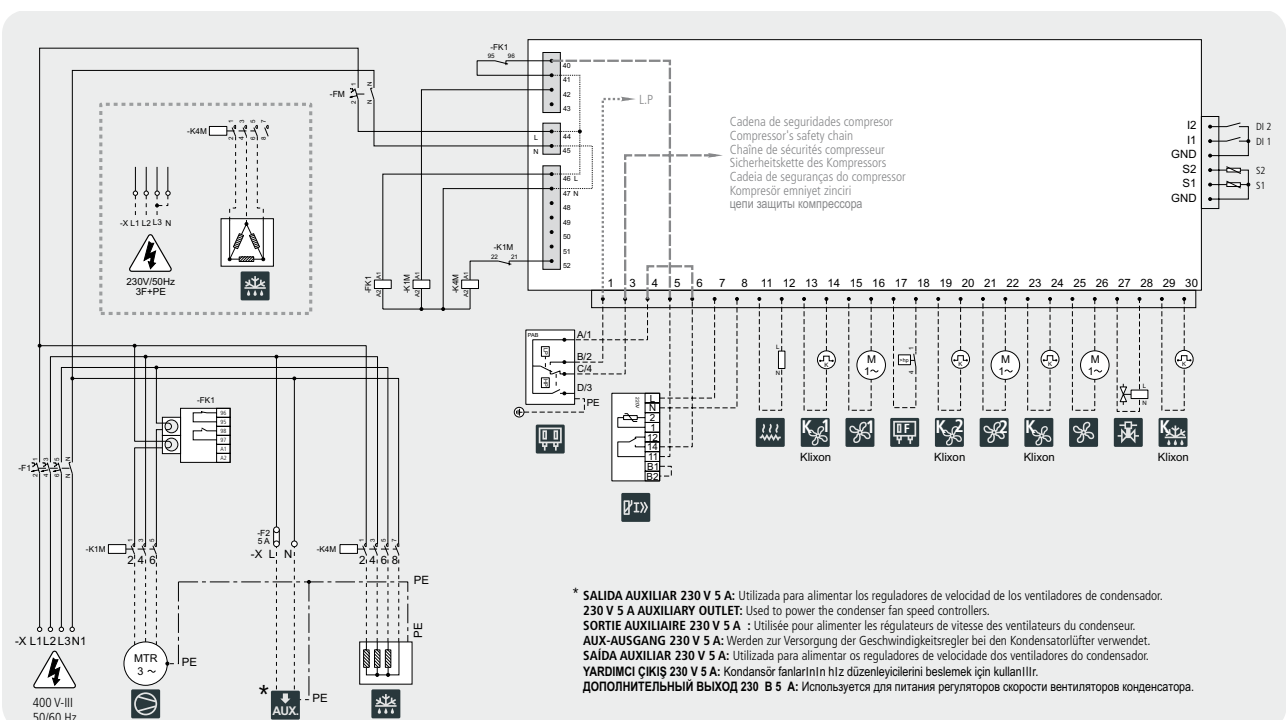
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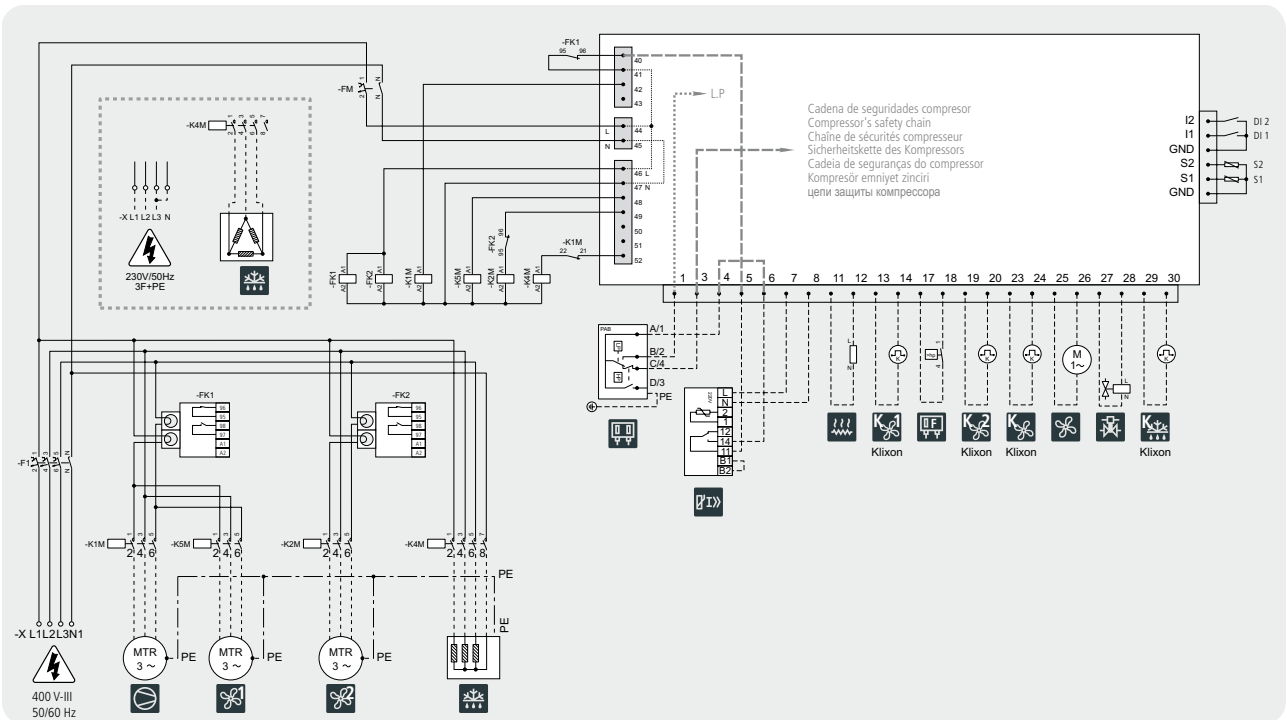
AKO-17633



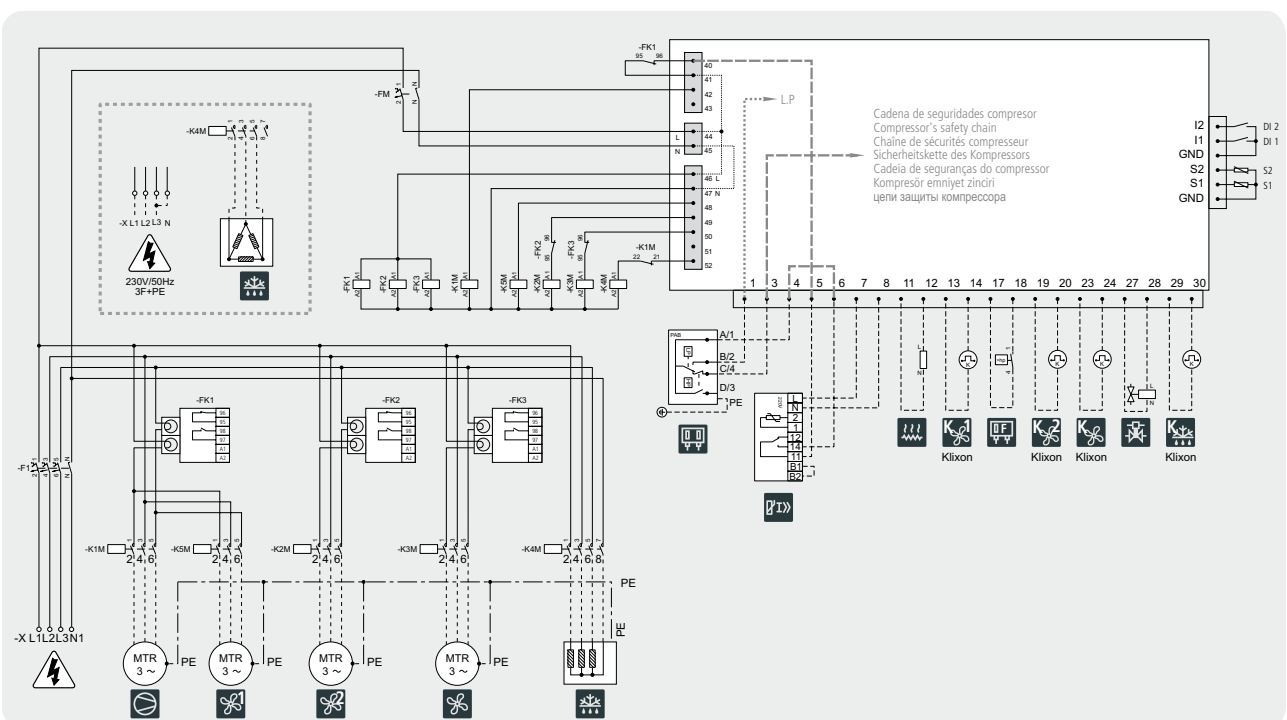
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AKO-17635



AKO-17636



AKO-17637