



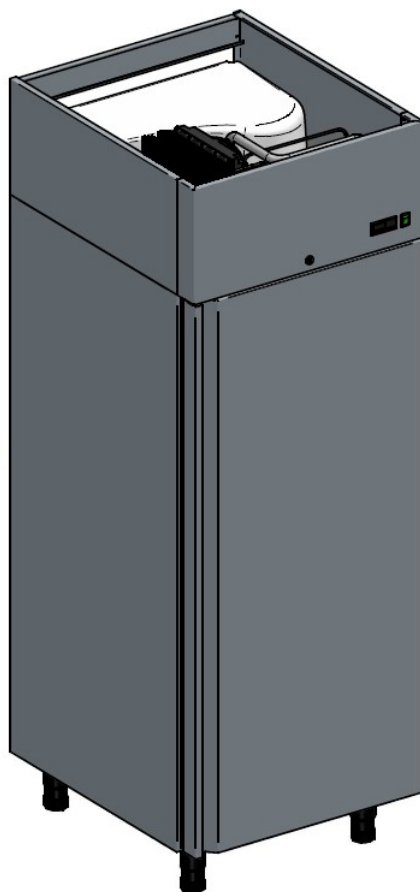
MANUAL GUIDE

UPRIGHT REFRIGERATORS

DM-92601	DM-92601-BA
DM-92602	DM-92602-BA
DM-92603	DM-92603-BA
DM-92604	DM-92604-BA
DM-92609	DM-92609-BA
DM-92612	DM-92612-BA
DM-92614	DM-92614-BA
DM-92615	DM-92615-BA
DM-92616	DM-92616-BA
DM-92621	DM-92621-BA
DM-92622	DM-92622-BA
DM-92624	DM-92624-BA
DM-92625	DM-92625-BA
DM-92131	DM-92131-BA
DM-92132	DM-92132-BA

UPRIGHT FREEZERS

DM-92606	DM-92606-BA
DM-92607	DM-92607-BA
DM-92608	DM-92608-BA
DM-92617	DM-92617-BA



DM-92627 DM-92627-BA

DM-92628 DM-92628-BA

DM-92137 DM-92137-BA

UPRIGHT REFRIGERATORS&FREEZERS

DM-94610 DM-92610-BA



Information of special importance for the user's safety and a correct operation of equipment is marked with this sign.

Read this user manual carefully before operating the equipment.

PROPER AND SAFETY OPERATION PRINCIPLES



In order to ensure operational safety and long trouble-free operation of the device, the following principles should be observed:

- **Acquaint the operating staff with basic regulations concerning the operation of electric equipment, rules of safe operation and first aid provision in case of emergency.**
- **Acquaint practically the operating staff with proper operation rules.**
- **It is forbidden to connect the device to the power supply system that is not previously checked with regard to the anti-shock protection installation correctness.**
- **It is forbidden to connect the device to the plug-in socket without a grounding pin.**
- **It is forbidden to wash, clean or carry out any repairs of the device connected to the power supply system.**
- **All repairs of the device can be carried out only by an authorized person, observing rules related to the replacement of damaged parts with identical ones.**
- **The producer does not assume responsibility for the use of the device contrary to its purpose or the recommendations of this user manual.**
- **Ensure a free airflow above the upright refrigerator or freezer. The minimum distance between the edge of the upright refrigerator or freezer and the ceiling of the room should be 400 mm.**
- **In order to ensure the correct operation of the device and to obtain the parameters specified by the producer of the upright refrigerator or freezer it is forbidden to cover the perforation in the side part of the control panel. The producer does not guarantee the correct operation of the device if the perforation is covered.**
- **The devices may be operated only and exclusively in a ventilated room within the range of the ambient temperatures of +16 to +40°C and relative air humidity of up to 40%.**
- **In case of the operation of the devices in the ambient conditions exceeding the recommended ones the lowest declared operating temperature may not be achieved and the electricity consumption may be increased.**
- **The devices are not designed for the operation outside the buildings and they cannot be exposed to the direct effects of adverse weather conditions (snow, rain, sunlight).**
- **It is forbidden to store the devices in rooms where freezing temperatures may occur.**

- ***After withdrawal of the device from service it should be disposed in an environmentally responsible manner. The valid local regulations related to disposal and scrapping works should be observed.***
- ***It is forbidden to store explosive substances or as aerosol cans with combustible gas, e.g. propane, butane etc., in the device. It is forbidden to store electrical appliances.***
- ***Please keep this user manual for future use or transfer to any subsequent user.***

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PURPOSE

The devices produced by DORA METAL belong to a group of professional chilling and freezing equipment. They are intended for short-term storage of foodstuffs at work place. The devices can be used in restaurants, confectioners' shops, cafés, networks of stores in which it is necessary to display foodstuffs in a chilled or frozen state allowing maintaining their taste, smell and aesthetic values.

The temperature adjustment ranges for particular types of devices are specified in the technical data.



The device should be located away from heat sources, in a place not exposed to sunlight. The devices are not designed for the operation outside the buildings and they cannot be exposed to the direct effects of adverse weather conditions (snow, rain, sunlight).



The devices are not intended to store drugs, blood plasma, laboratory resources and other substances and products specified in the directive 2007/47/CE.

The producer does not assume responsibility for any improper use of the device, contrary to its purpose.

REFRIGERATED SYSTEM OPERATION

There is one-step, compressor's refrigerating cycle in the device. The refrigerated system is filled with an ecological refrigerating medium permitted by the current law regulations (R290 – data included in the rating plate).

- DM – 926__ - BA cabinets – are designed to be connected to central cooling and are not fitted with built-in refrigeration unit

INTERIOR TEMPERATURE SET-UP

Electronic temperature controller sensor is provided in upper part of the chamber, behind the fan. The controller is programmed so the device reaches internal temperature as specified in technical data. For the method of the required temperature set-up – see pages 45 and 48.

START-UP PREPARATION. CLEANING AND MAINTENANCE

The first start-up and daily maintenance may be carried out by the operating personnel, provided that the below-mentioned recommendations are strictly observed. The producer shall not take responsibility for any operation carried out on the device without observing the recommendations specified in this user manual.



Disconnect the device from the power supply system before starting any maintenance works. The removal of any safety systems is forbidden.

Remove a protective foil before the first start-up. Wash external and internal surfaces with warm water with an addition of degreasing agent, used for washing kitchen utensils, with a soft cloth in accordance with a direction of the joint, never by circular movements. The protective foil should be removed slowly to avoid leaving remains of adhesive. If the adhesive is left, it can be removed by means of proper non-corrosive solvent – after this operation the surface should be washed out and dried.

In daily cleaning, use neutral soap, window cleaners or 90%-degradable liquid detergent (to minimize amounts of contaminants disposed to the surrounding environment) and a soft cloth, always in accordance with a direction of the joint, never by circular movements.



It is forbidden to use scouring agents, materials including steel wool that can scratch the surface and agents containing aggressive acids. Do not use a stream of water but only a damp cloth wipe while washing.

After washing, before connecting to the electric system, leave the device to dry completely.

When planning the location of the device there should be taken into account the space for free opening of the doors. The devices should be moved away from the wall to ensure free air circulation through the condenser. It is necessary to leave 40 cm of free space at least above the device and not less than 10 cm of free space on the sides and at the back which ensures a proper air circulation for the correct operation of the device.

Check if the floor is levelled where the device is to be located. Then, level the device, using adjusting feet, checking whether the door is closed well at the same time.




In accordance with the EN378 standard it should be ensured that the room where the device with R290 medium is to be located has the proper volume. 1 m³ is required for 8 g of R290 refrigerant. The amount of R290 refrigerating medium is specified on the rating plate of the device.

CONNECTION TO ELECTRIC SYSTEM

The construction of the device is made according to the appropriate directives and harmonised standards:

- low voltage directive 2014/35/UE,
- electromagnetic compatibility directive 2014/30/UE,
- PN-EN 60335-2-89:2012, PN-EN 60335-1:2012 standards,
- PN-EN 55014-1:2017-06, PN-EN-55014-2:2015-06 standards,
- PN-EN 61000-3-2:2019-04, PN-EN 61000-3-3:2013-10 standards.

The device is adapted to be supplied from the 230V 50Hz line and should be supplied from a separate low voltage circuit. A grounded plug-in socket must be equipped with anti-shock protection selected, according to the requirements of local standards and regulations, in compliance with the parameters specified on the rating plate. The parameters of a residual current device should be selected according to the current value, specified on the rating plate. The devices are provided with a flexible power supply cable of HO5VV-F type (3x1,5mm², including protective conductor). The damaged power supply cable should be replaced by a specialist from technical service or by a skilled person with appropriate qualifications.

The devices are equipped with a terminal to connect external equipotential bonding, marked by a symbol . Before connecting the device the installation correctness and effectiveness of equipotential bonding operation should be checked in accordance with PN-IEC-60364-4-41.



The device can be started when effectiveness of anti-shock protection is confirmed by results of measurements carried out according to the regulations in force.

The device can be connected to the electric system when it is stated that the electric system fulfils the afore-mentioned requirements. The device is connected by inserting a plug of connecting cable into the plug-in socket. A device, prepared in such a way, is ready to operate.



Because during transport the device could be inclined by more than 30° from the vertical, wait about 1 hour before connecting the device to the power supply system. Otherwise, the condensing unit can be damaged.

OPERATION

The temperature of chilled space and operating cycle of the refrigeration unit can vary. It depends on the ambient temperature, amounts of inserted fresh products and heat inflow from outside. Therefore it is necessary to avoid opening the door when unnecessary and inserting warm foodstuffs with temperatures that significantly exceed the storage temperatures. Otherwise, it can considerably increase the chilling time of products.

It is recommended to avoid a long contact of the skin with cold surfaces of the device or cold products. The protective clothing should be used in case of longer contact. The failure to use the protective clothing can cause torpidity or frostbite.

During operation of the device, observe the rule that the maximum load does not exceed the values specified in the table and the red symbol in the device chamber. The products should be arranged in such a manner to allow free air circulation in the upright refrigerator or freezer.



The first filling of the refrigerated space should be done after cooling it earlier to the operating temperature (the required time for the first cooling of the unloaded undercounter refrigerator or freezer to the set-up temperature: ~ 2h). This rule should be observed also after a longer break in operation.



It is not recommended to load the cabinet with non-refrigerated products (with a temperature exceeding ambient temperature or containers with loose fluids as this could cause instant icing of the system and increased consumption of electric energy and failure to reach the lowest declared storage temperatures).

From time to time it is recommended to stop the operation of the device to clean its interior, defrost naturally the evaporator unit, clean the condenser of the refrigeration unit and check the condition of the door seal. A face heated by electric heater protects the seal against freezing in the freezing devices.

Any replacement of the seal consists in removing the old seal and pushing the new one in the groove of the profile.

Before performing the afore-mentioned steps, it is necessary to switch off the device by means of a main switch and remove the plug of connecting cable from the plug-in socket.

Condenser of refrigeration unit must be cleaned at least once every 4 weeks. To clean the condenser, remove front shutter of the refrigeration unit chamber by removing (depending on model) two or four screws by hand. For this use a soft brush or a vacuum cleaner.

It is not applicable to products connected to external refrigeration unit (no condensers are fitted).



Do not use a stream of water while cleaning the device. The producer does not assume responsibility for the damages of the condensing unit arisen as a result of not maintaining the condenser in a clean state!

The icing of the evaporator is removed automatically. The most frequent reason for the excessive icing of the evaporator is the failure to observe the procedure of the pre-cooling of a product before placing it in the freezing device.

All setups of the controller necessary for a normal function of the device are introduced by the producer.



It is strictly forbidden to intervene in the system parameters of the controller because it may cause very serious consequences, including damage of the goods and refrigerated device. In case of the breakdown the goods stored in the device should be protected against damage. Dora Metal does not assume responsibility for the goods damaged as a result of the breakdown of the device.

The devices are provided with an automatic condensate evaporation system.

TRANSPORT

The producer delivers the device protected with cardboard angles and foil. During the transport the device should be protected against moving.

The device should be transported in an operation position. Upon receipt of the device (before unpacking) it is necessary to check if any damages did not arise during the transport. All noticed damages should be immediately notified to the forwarder. In no case, a damaged device can be returned to its producer, without notification, and without a written permit, received earlier from the producer.



The producer does not assume responsibility for the device that is damaged during the transport.

DISPOSAL

Prior to the transport the device is protected by a packing which consists of the following recyclable elements: wooden planks, cardboards, propylene fastening tapes, polyethylene foil.

The elements of the device packaging should be kept out of reach of children.

After withdrawal of the device from service it cannot be mixed with other household waste. Before handing over the device to disposal it is necessary:

- to protect the device by disconnecting the power supply cable,
- to check the tightness of the refrigerated system.



The valid local regulations related to disposal and scrapping works should be observed.

NOTE

Due to continuous development of our products – we reserve the right to make changes in our products.

TECHNICAL DATA**Table 1. Upright refrigerators DM-926xx series**

Dane		Catalogue number								
		DM-92601	DM-92603	DM-92612	DM-92614	DM-92602	DM-92615	DM-92616	DM-92604	DM-92609
Depth	mm	821					681		821	
Width	mm	720					660		1440	
Height	mm	2045								
Number of doors	pcs	1	2	1	1	1	1	1	2	2
Type of doors	-	Solid door				Glass door	Solid door	Glass door	Solid door	Glass door
Capacity (gross)	liter	610					440		1340	
Permissible loading	kg	150							250	
Surface of shelf	m²	0,34					0,24		0,34	
Number of shelves	pcs	3	3	10 guide sets	4 guide sets	3	3	3	6	6
Max. loading of shelf	kg	35								
Arrange ability of shelves	mm	spacing every 50mm								
Air circulation	-	forced (fan) circulation								
Interior temperature	°C	+2...+10			-4 ..+6		+2...+10			
Power supply	V/Hz	230 / 50								
Power rating	-	Data specified on the rating plate								
Climatic class	-									
Type of refrigeration unit	-									
Type of refrigerant	-	R290								
Refrigerant qty	kg	0,075	0,075	0,075	0,07	0,075	0,055	0,055	0,08	0,08
GWP	-	3								

Table 2. Upright refrigerators without condensing unit DM-926xx-BA series

Dane		Catalogue number								
		DM-92601 -BA	DM-92603 -BA	DM-92612 -BA	DM-92614 -BA	DM-92602 -BA	DM-92615 -BA	DM-92616 -BA	DM-92604 -BA	DM-92609 -BA
Depth	mm	821					681		821	
Width	mm	720					660		1440	
Height	mm	2045								
Number of doors	pcs	1	2	1	1	1	1	1	2	2
Type of doors	-	Solid door				Glass door	Solid door	Glass door	Solid door	Glass door
Capacity (gross)	liter	610					440		1340	
Permissible loading	kg	150							250	
Surface of shelf	m²	0,34					0,24		0,34	
Number of shelves	pcs	3	3	10 guide sets	4 guide sets	3	3	3	6	6
Max. loading of shelf	kg	35								
Arrange ability of shelves	mm	spacing every 50mm								
Air circulation	-	forced (fan) circulation								
Interior temperature	°C	+2...+10			-4 ..+6		+2...+10			
Power supply	V/Hz	230 / 50								
Power rating	-	Data specified on the rating plate								
Climatic class	-									
Type of refrigeration unit	-									
Type of refrigerant	-	R290								

Refrigerant qty	kg	-
GWP	-	3

Table 3. Upright refrigerators DM-9262x and DM-9213x series

Dane		Catalogue number					
		DM-92621	DM-92625	DM-92622	DM-92624	DM-92131	DM-92132
Depth	mm	821				869	
Width	mm	720			1440	714	
Height	mm	2045				2070	
Number of doors	pcs	1			2	1	
Type of doors	-	Solid door		Glass door	Solid door		Glass door
Capacity (gross)	liter	610			1340	520	
Permissible loading	kg	150			250	150	
Surface of shelf	m ²	0,34					
Number of shelves	pcs	3	10 guide sets	3	6	3	
Max. loading of shelf	kg	35					
Arrange ability of shelves	mm	spacing every 50mm				spacing every 55mm	
Air circulation	-	forced (fan) circulation					
Interior temperature	°C	-2...+10	+2...+10	+2...+10	-2...+10	-2...+10	+2...+10
Power supply	V/Hz	230 / 50					
Power rating	-	Data specified on the rating plate					
Climatic class	-						
Type of refrigeration unit	-						
Type of refrigerant	-	R290					
Refrigerant qty	kg	0,075	0,075	0,075	0,08	0,075	0,075
GWP	-	3					

Table 4. Upright refrigerators without condensing unit DM-9262x-BA and DM-9213x-BA series

Dane		Catalogue number					
		DM-92621-BA	DM-92625-BA	DM-92622-BA	DM-92624-BA	DM-92131-BA	DM-92132-BA
Depth	mm	821				869	
Width	mm	720			1440	714	
Height	mm	2045				2070	
Number of doors	pcs	1			2	1	
Type of doors	-	Solid door		Glass door	Solid door		Glass door
Capacity (gross)	liter	610			1340	520	
Permissible loading	kg	150			250	150	
Surface of shelf	m ²	0,34					
Number of shelves	pcs	3	10 guide sets	3	6	3	
Max. loading of shelf	kg	35					
Arrange ability of shelves	mm	spacing every 50mm				spacing every 55mm	
Air circulation	-	forced (fan) circulation					
Interior temperature	°C	-2...+10	+2...+10	+2...+10	-2...+10	-2...+10	+2...+10
Power supply	V/Hz	230 / 50					
Power rating	-	Data specified on the rating plate					
Climatic class	-						
Type of refrigeration unit	-						
Type of refrigerant	-	R290					
Refrigerant qty	kg	-					
GWP	-	3					

Table 5. Upright freezers DM-926xx and DM-92137

Dane		Catalogue number				
		DM-92606	DM-92607 DM-92627	DM-92617	DM-92608 DM-92628	DM-92137
Depth	mm	821		681	821	869
Width	mm	720		660	1440	714
Height	mm	2045				2070
Number of doors	pcs	2	1	1	2	1
Type of doors	-	Solid door				
Capacity (gross)	liter	610		440	1340	520
Permissible loading	kg	150			250	150
Surface of shelf	m ²	0,34		0,24	0,34	0,34
Number of shelves	pcs	3			6	3
Max. loading of shelf	kg	35				
Arrange ability of shelves	mm	spacing every 50mm				spacing every 55mm
Air circulation	-	forced (fan) circulation				
Interior temperature	°C	-14...-22				
Power supply	V/Hz	230 / 50				
Power rating	-	Data specified on the rating plate				
Climatic class	-					
Type of refrigeration unit	-					
Type of refrigerant	-	R290				
Refrigerant qty	kg	0,07	0,07	0,10	0,095	0,07
GWP	-	3				

Table 6. Upright freezers without condensing unit DM-926xx-BA and DM-92137-BA series

Dane		Catalogue number				
		DM-92606-BA	DM-92607-BA DM-92627-BA	DM-92617-BA	DM-92608-BA DM-92628-BA	DM-92137-BA
Depth	mm	821		681	821	869
Width	mm	720		660	1440	714
Height	mm	2045				2070
Number of doors	pcs	2	1	1	2	1
Type of doors	-	Solid door				
Capacity (gross)	liter	610		440	1340	520
Permissible loading	kg	150			250	150
Surface of shelf	m ²	0,34		0,24	0,34	
Number of shelves	pcs	3			6	3
Max. loading of shelf	kg	35				
Arrange ability of shelves	mm	spacing every 50mm				spacing every 55mm
Air circulation	-	forced (fan) circulation				
Interior temperature	°C	-14...-22				
Power supply	V/Hz	230 / 50				
Power rating	-	Data specified on the rating plate				
Climatic class	-					
Type of refrigeration unit	-					
Type of refrigerant	-	R290				
Refrigerant qty	kg	-				
GWP	-	3				

Table 7. Upright refrigerators&freezers DM-92610

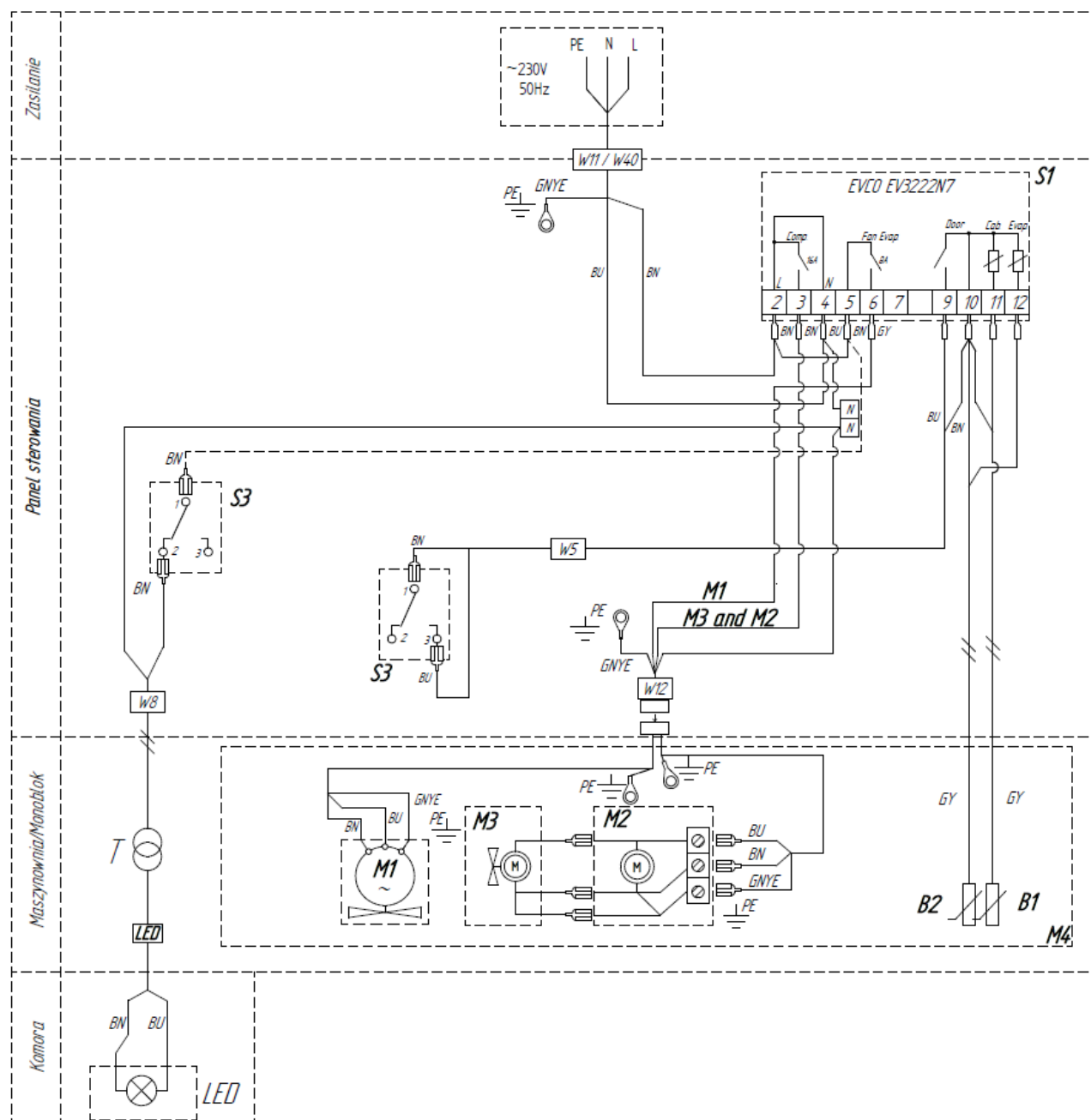
Dane		DM-92610	
		refrigerator	freezer
Depth	mm	881	
Width	mm	720	
Height	mm	2045	
Number of doors	pcs	1	1
Type of doors	-	Solid door	
Capacity (gross)	liter	290	300
Permissible loading	kg	150	
Surface of shelf	m ²	0,34	
Number of shelves	pcs	3	
Max. loading of shelf	kg	35	
Arrange ability of shelves	mm	spacing every 50mm	
Air circulation	-	forced (fan) circulation	
Interior temperature	°C	+2...+10	-21...-14
Power supply	V/Hz	230 / 50	
Power rating	-	Data specified on the rating plate	
Climatic class	-		
Type of refrigeration unit	-		
Type of refrigerant	-	R290	
Refrigerant qty	kg	0,1	0,12
GWP	-	3	

Table 8. Upright refrigerators&freezers without condensing unit DM-92610-BA

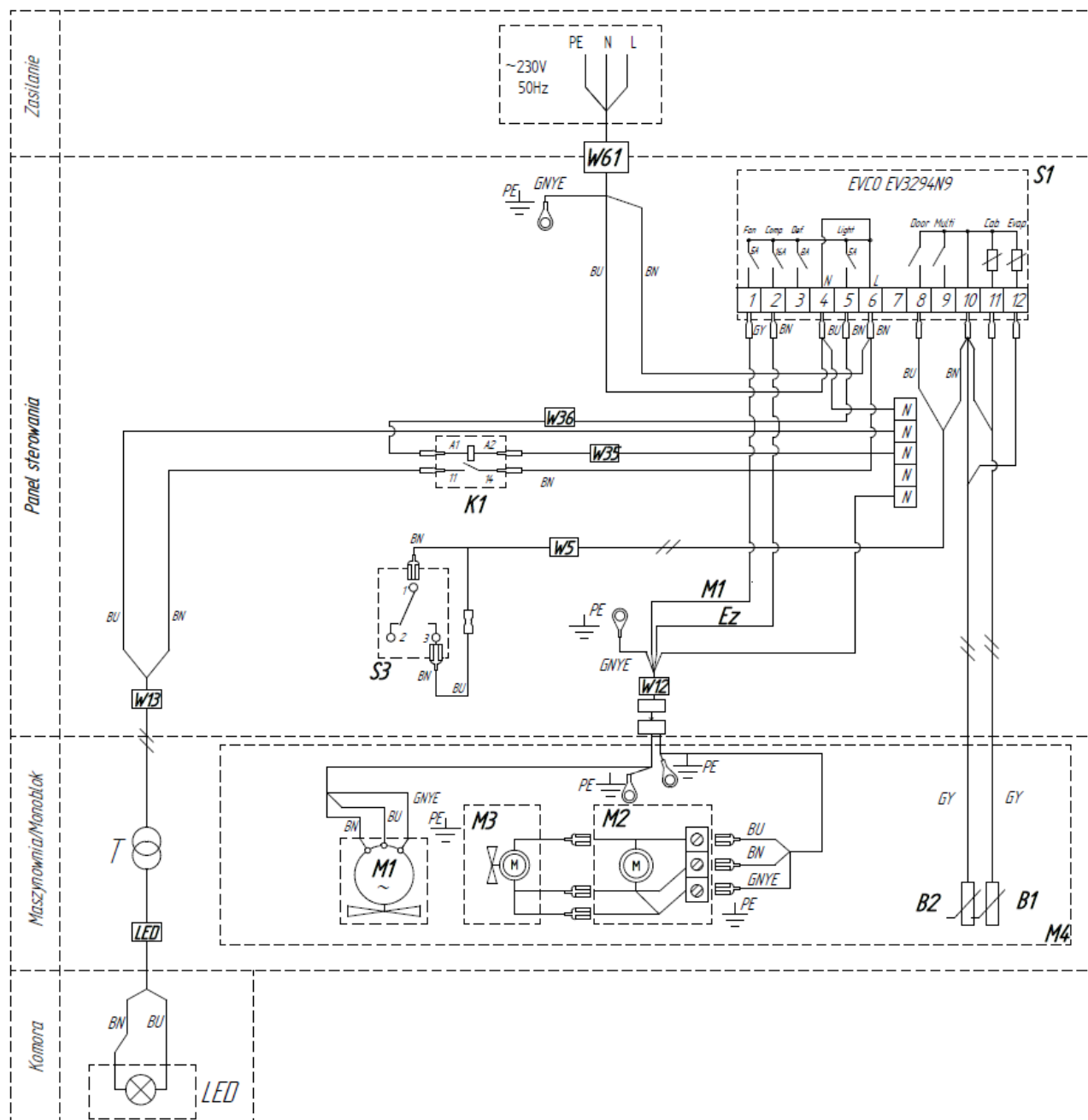
Dane		DM-92610-BA	
		refrigerator	freezer
Depth	mm	881	
Width	mm	720	
Height	mm	2045	
Number of doors	pcs	1	1
Type of doors	-	Solid door	
Capacity (gross)	liter	290	300
Permissible loading	kg	150	
Surface of shelf	m ²	0,34	
Number of shelves	pcs	3	
Max. loading of shelf	kg	35	
Arrange ability of shelves	mm	spacing every 50mm	
Air circulation	-	forced (fan) circulation	
Interior temperature	°C	+2...+10	-21...-14
Power supply	V/Hz	230 / 50	
Power rating	-	Data specified on the rating plate	
Climatic class	-		
Type of refrigeration unit	-		
Type of refrigerant	-	R290	
Refrigerant qty	kg	-	
GWP	-	3	

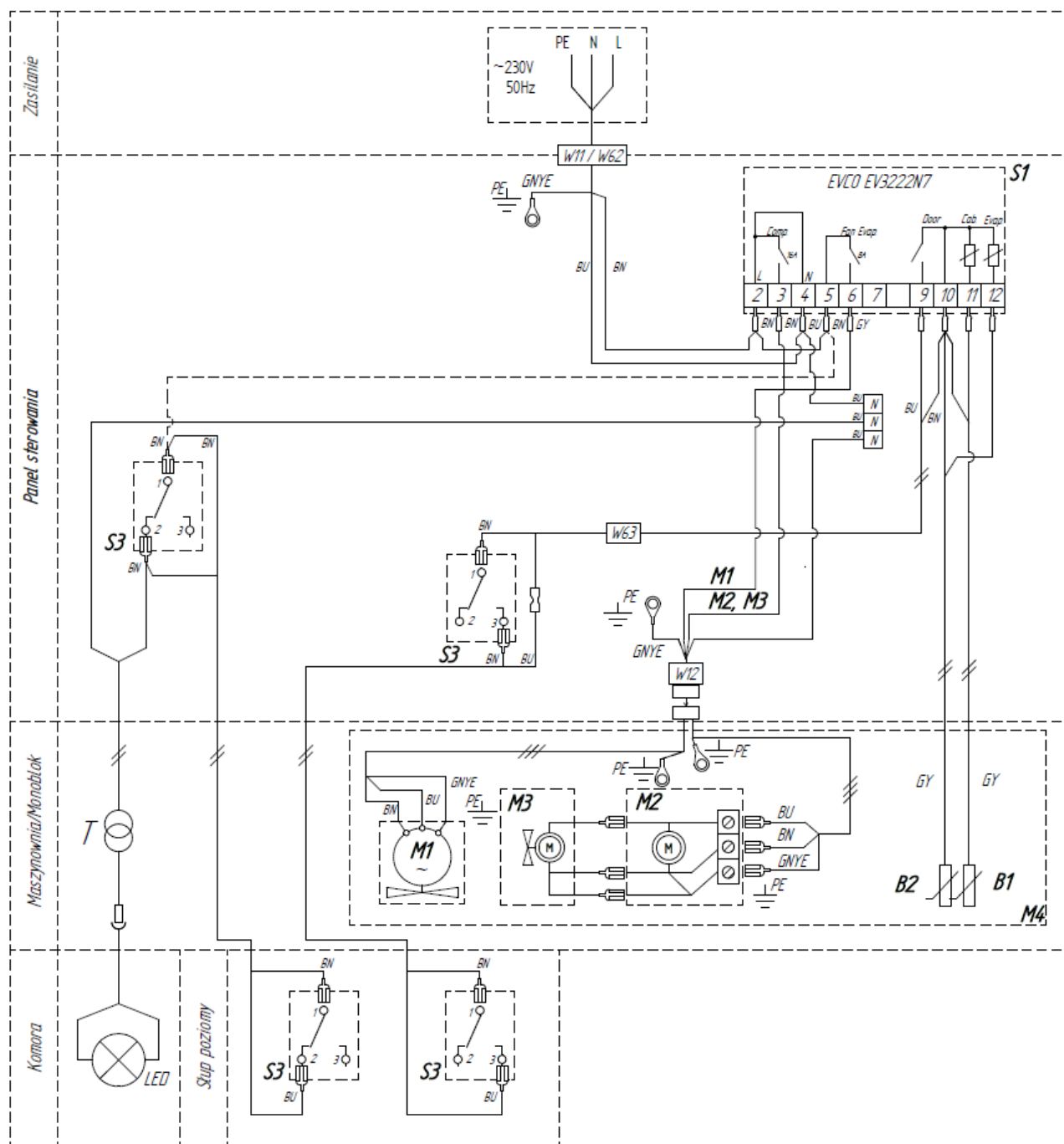
WIRING DIAGRAMS FOR UPRIGHT REFRIGERATORS WITH CONDENSING UNITS:

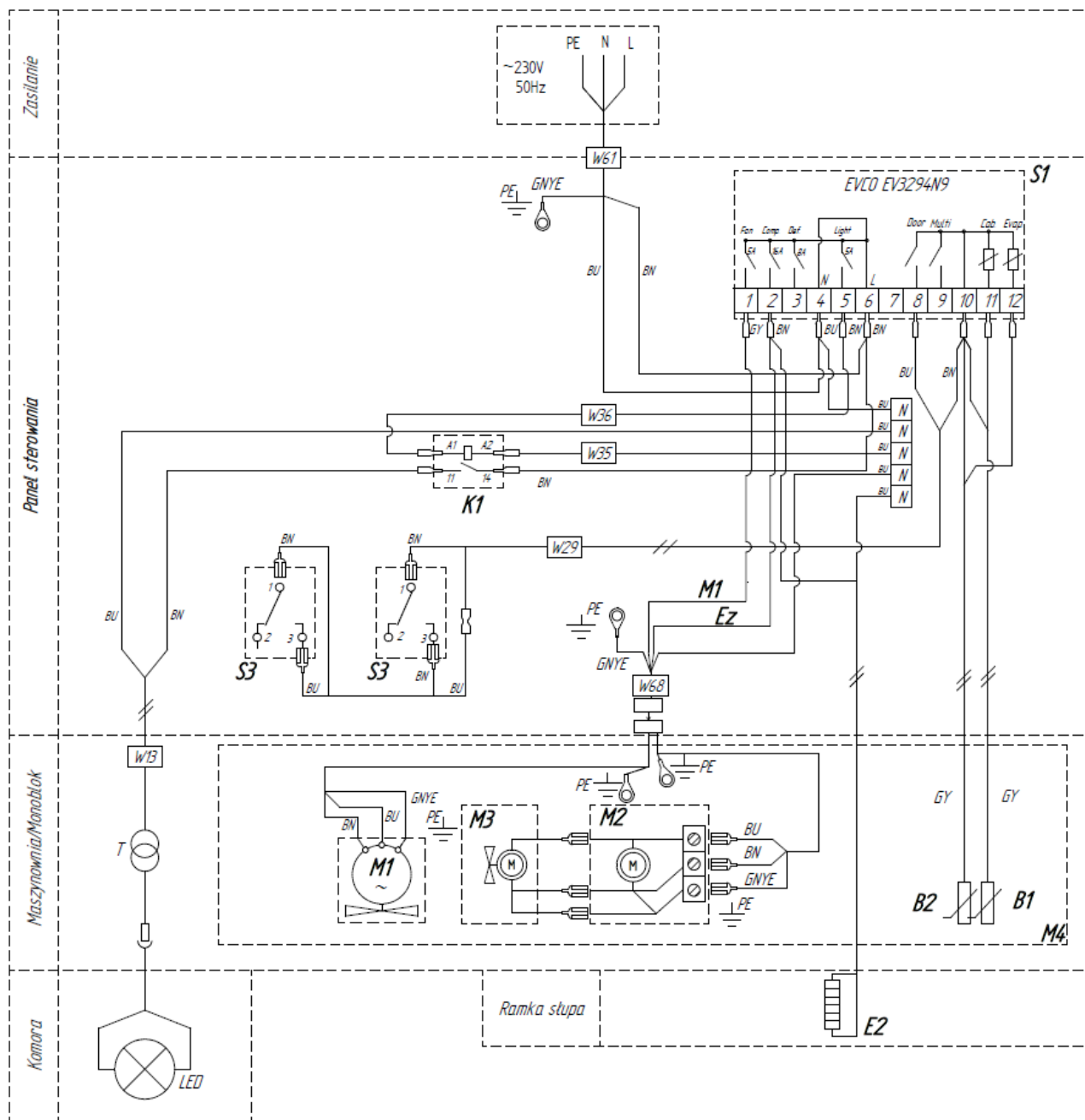
**Applies to: DM-92601, DM-92602 (no LED), DM-92612, DM-92615, DM-92616 (no LED),
DM-92622 (no LED) – with controller EVCO EV3222N7**



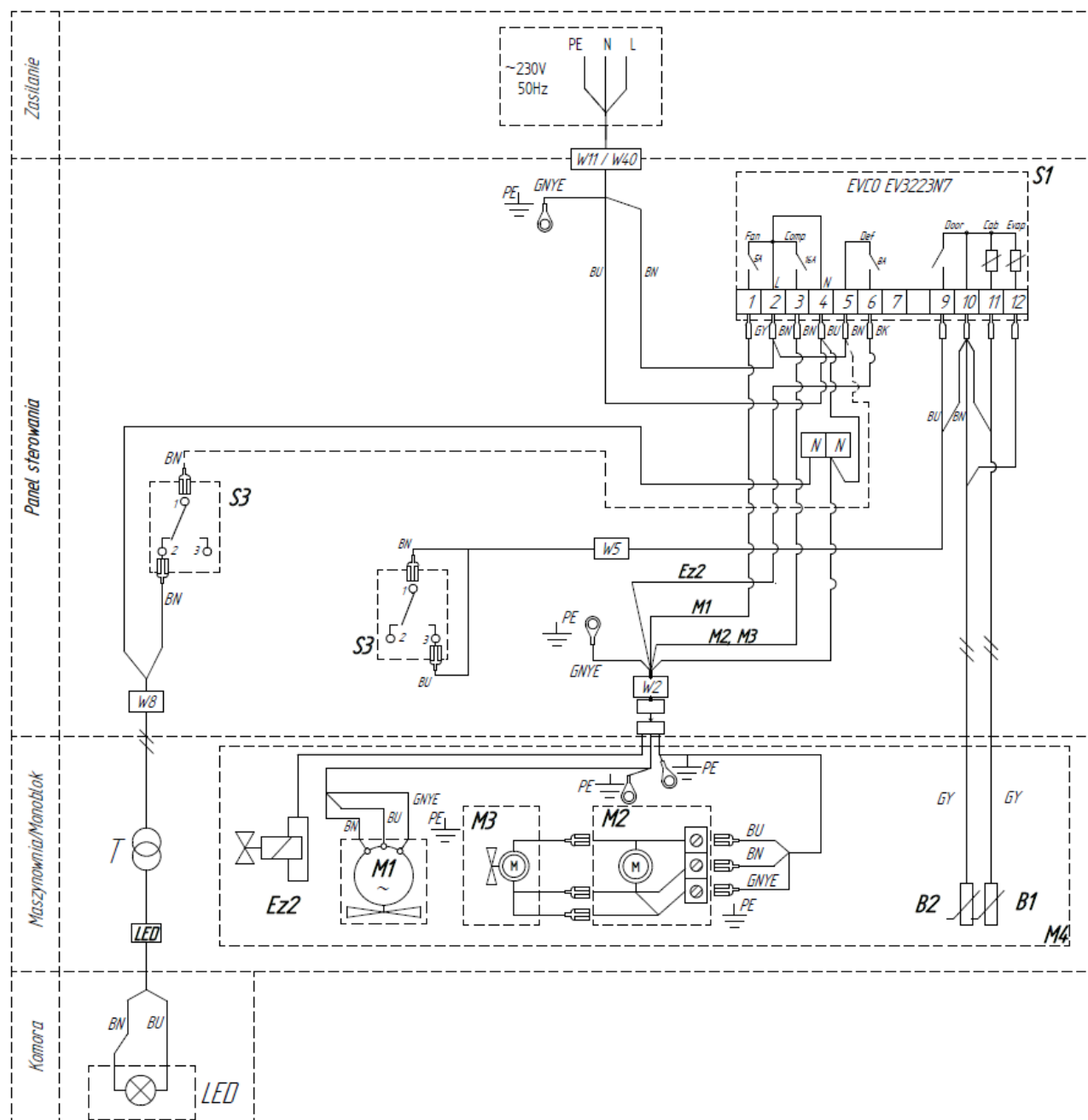
Applies to: DM-92602, DM-92616, DM-92622 – with LED and controller EVCO EV3294N9



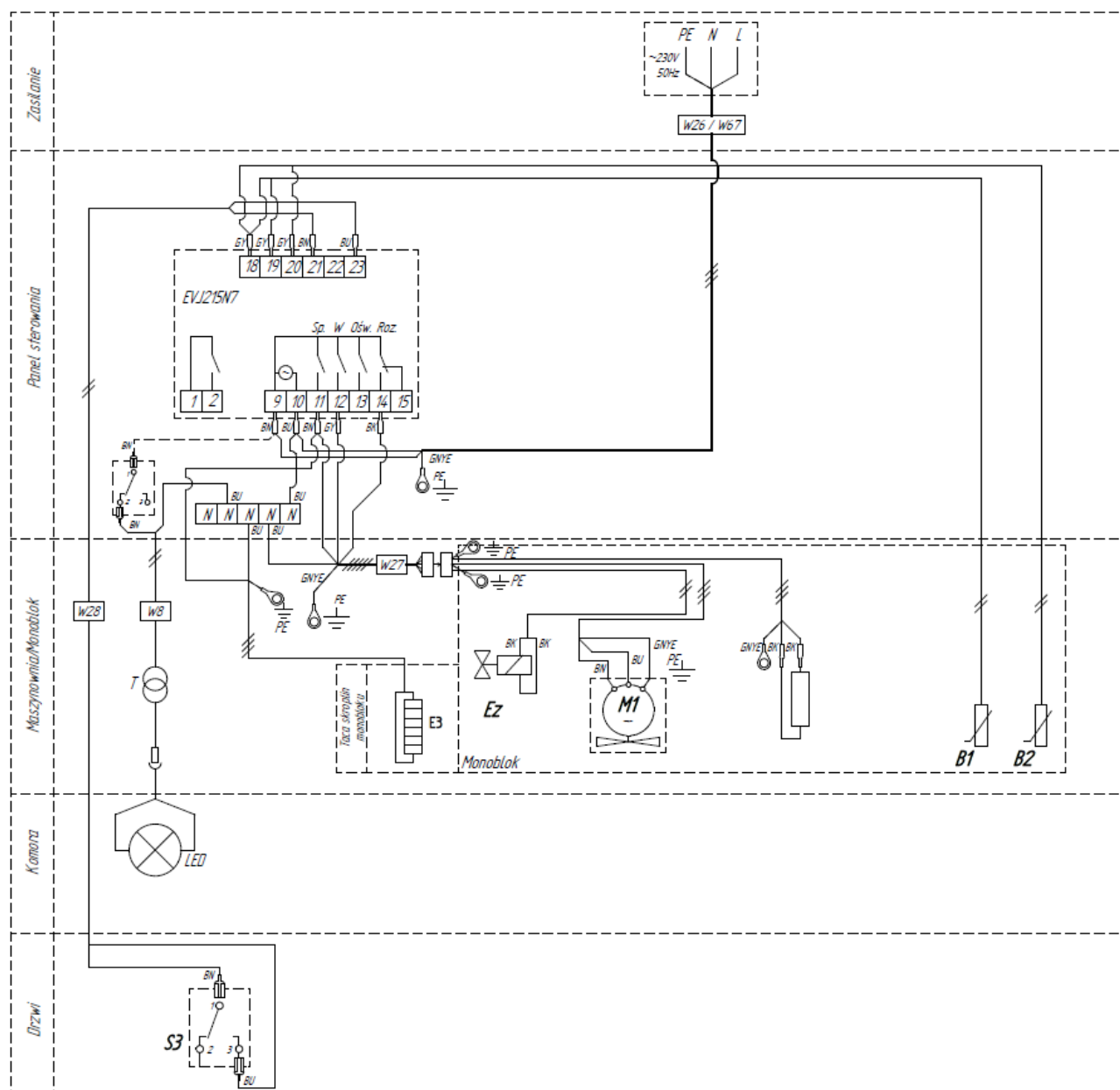
Applies to: DM-92603 – with controller EVCO EV3222N7

Applies to: DM-92609 – with LED and controller EVCO EV3294N9

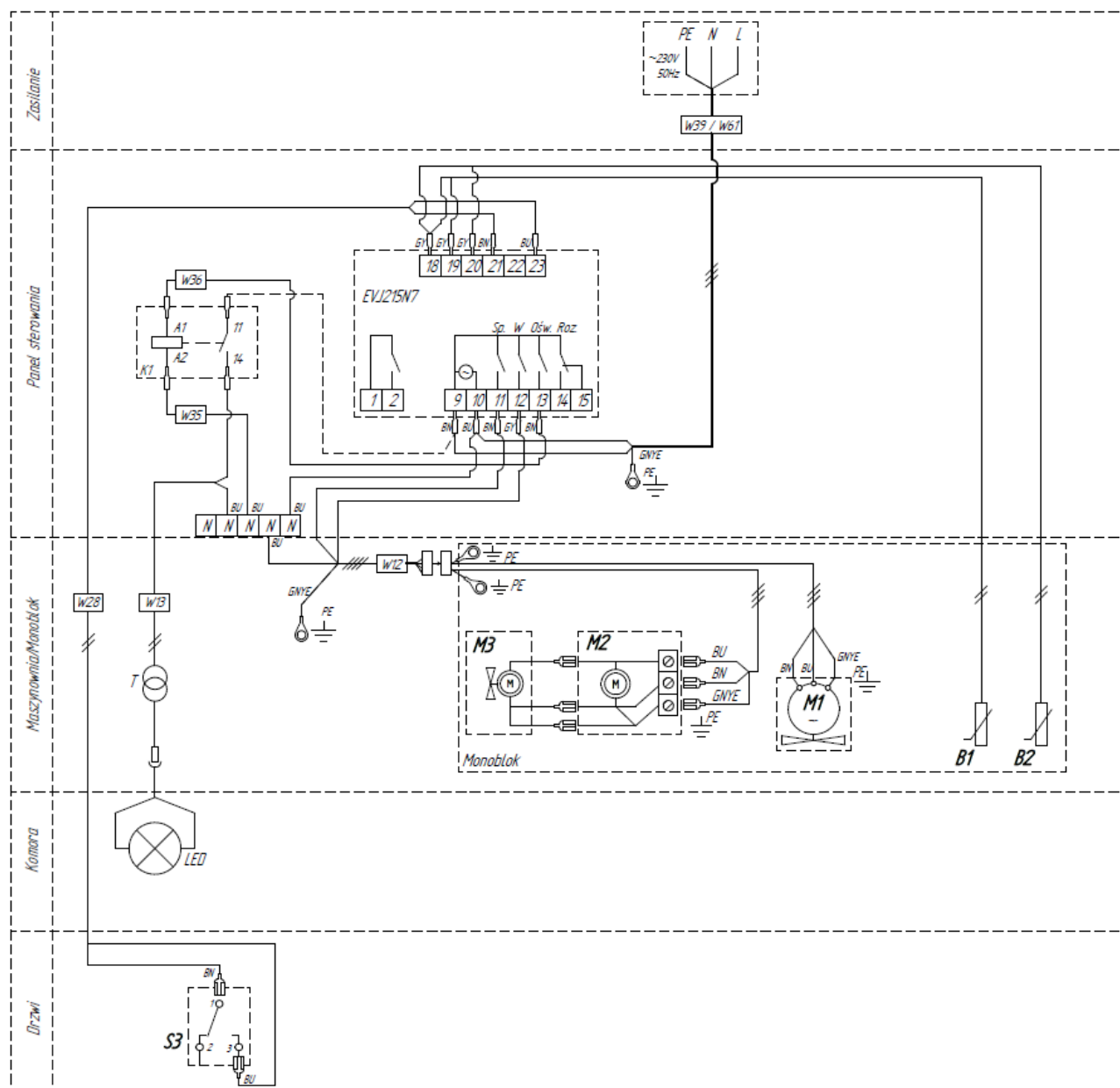
Applies to: DM-92621, DM-92625 – with controller EVCO EV3223N7



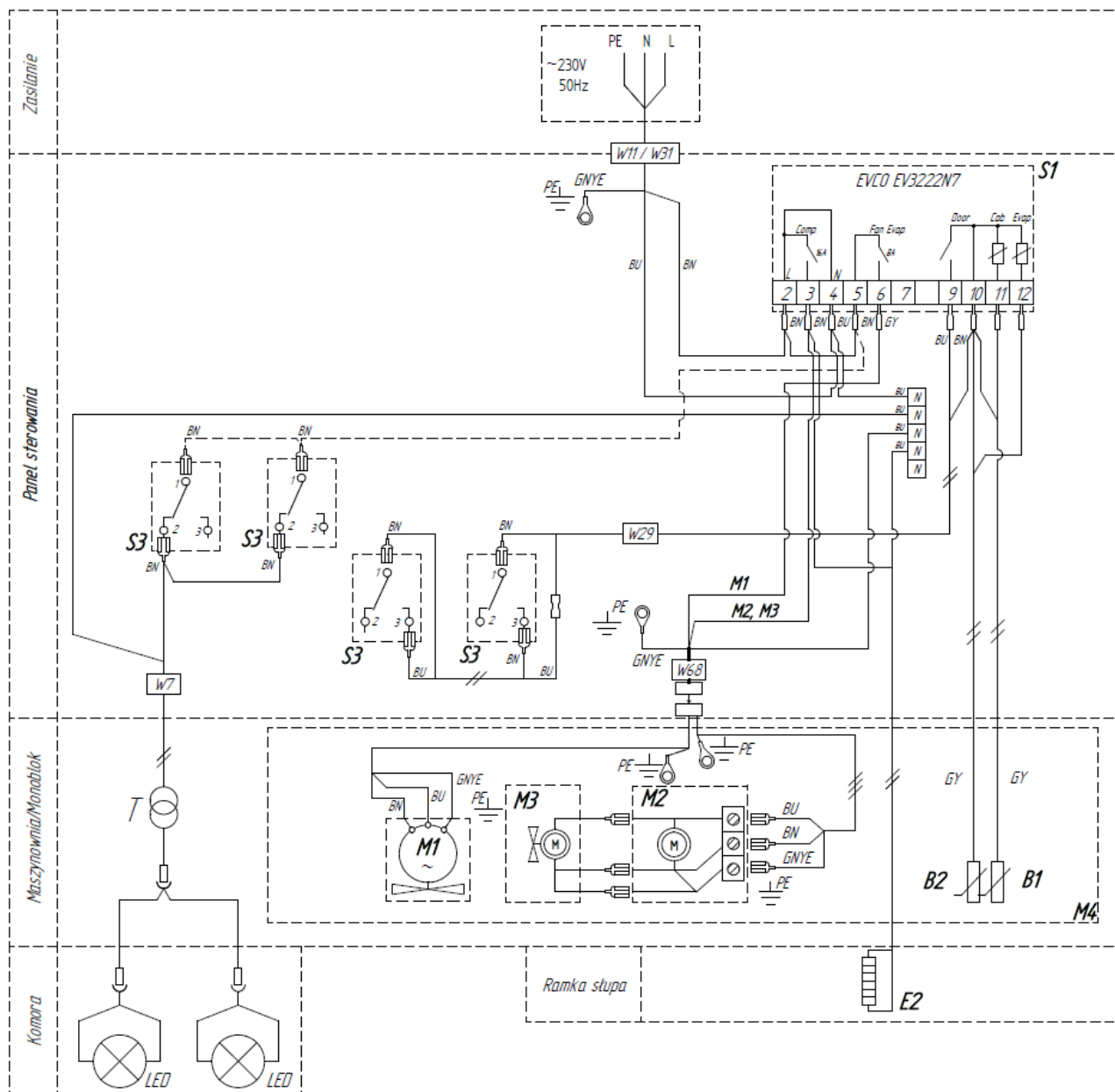
Applies to: DM-92621, DM-92625, DM-92131 – with controller EVJ215N7



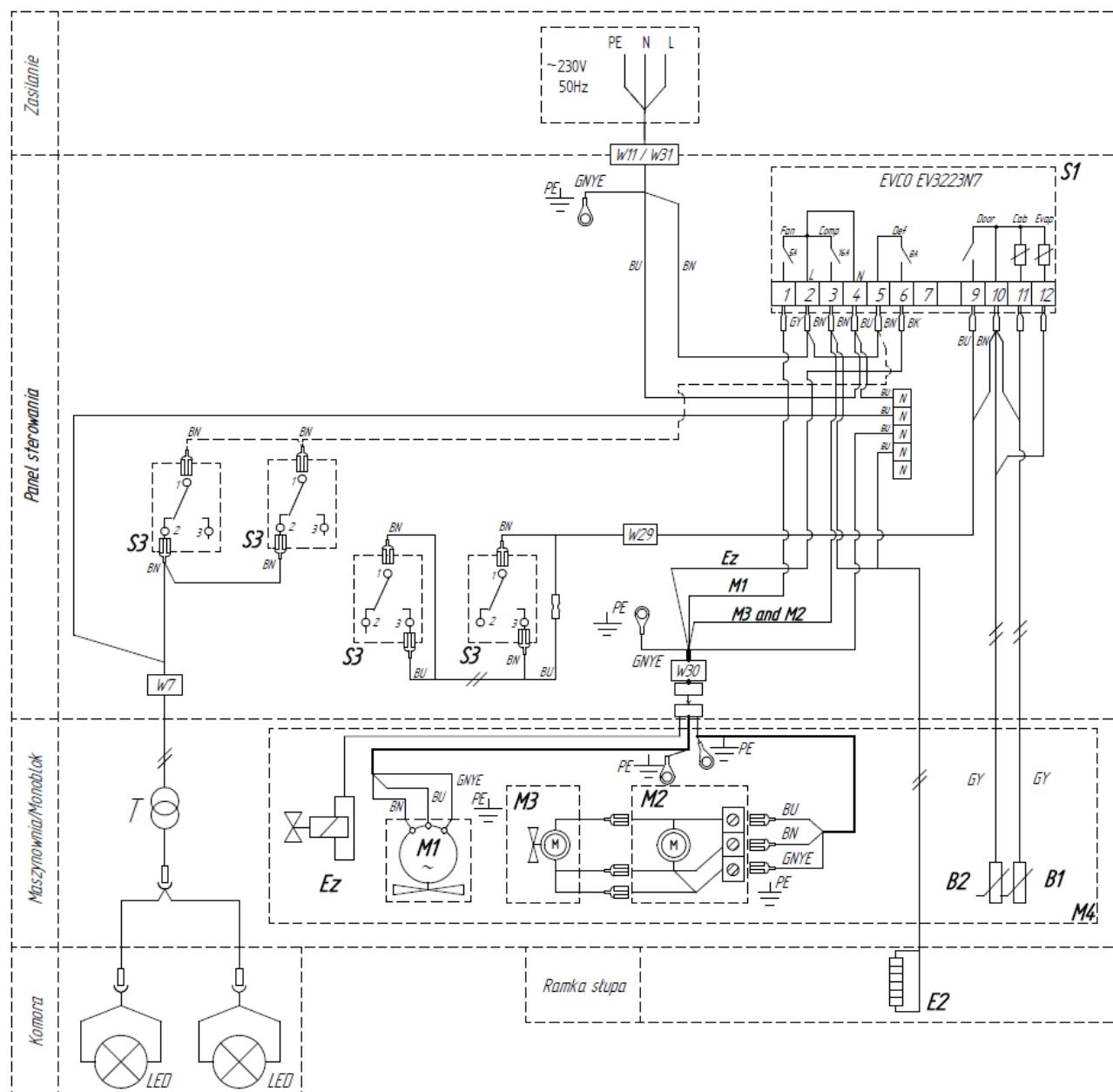
Applies to: DM-92622, DM-92132 – with controller EVCO EVJ215N7



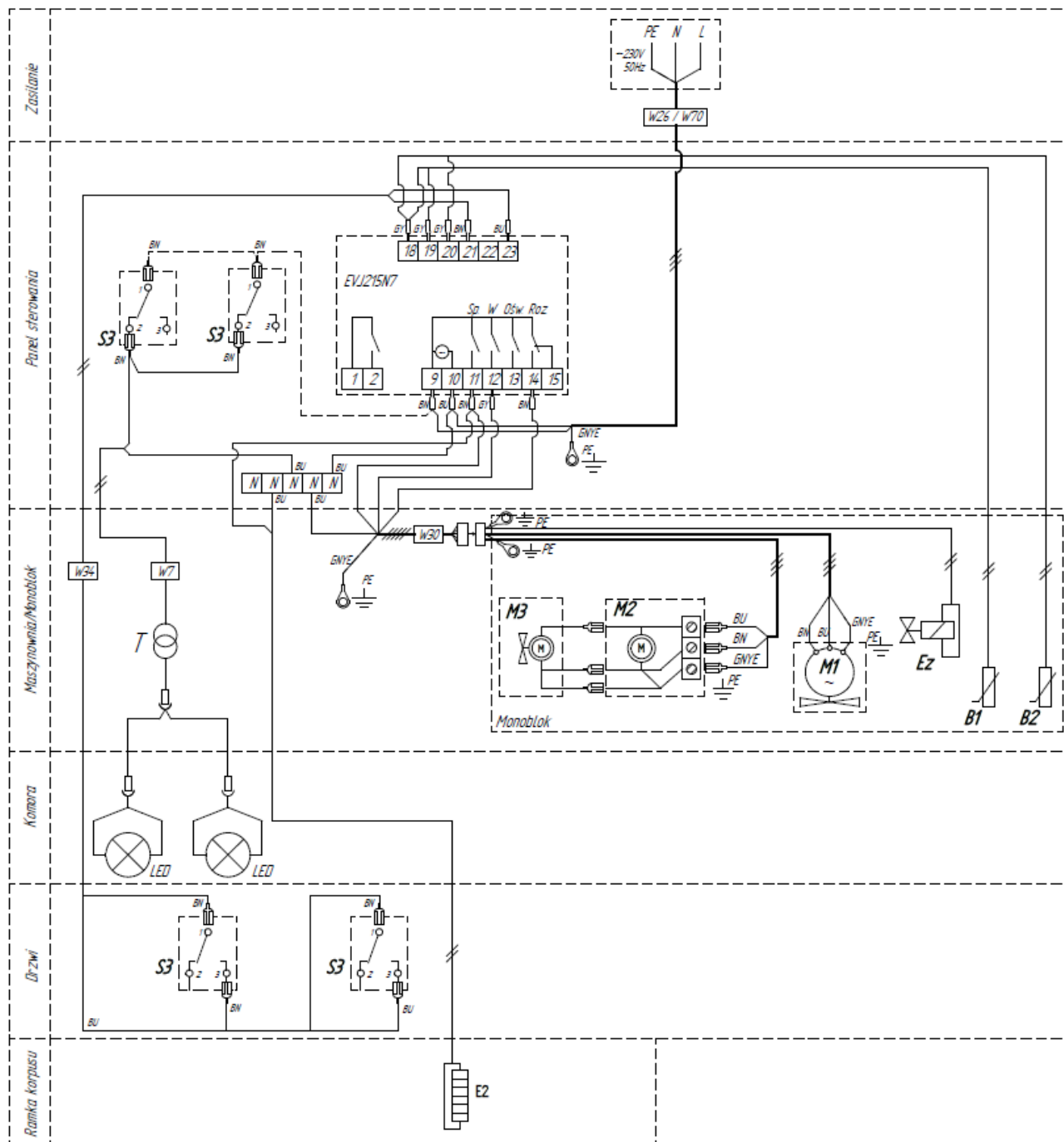
Applies to: DM-92604, DM-92609 (no LED) – with controller EVCO EV3222N7



Applies to: DM-92624 – with controller EVCO EV3223N7

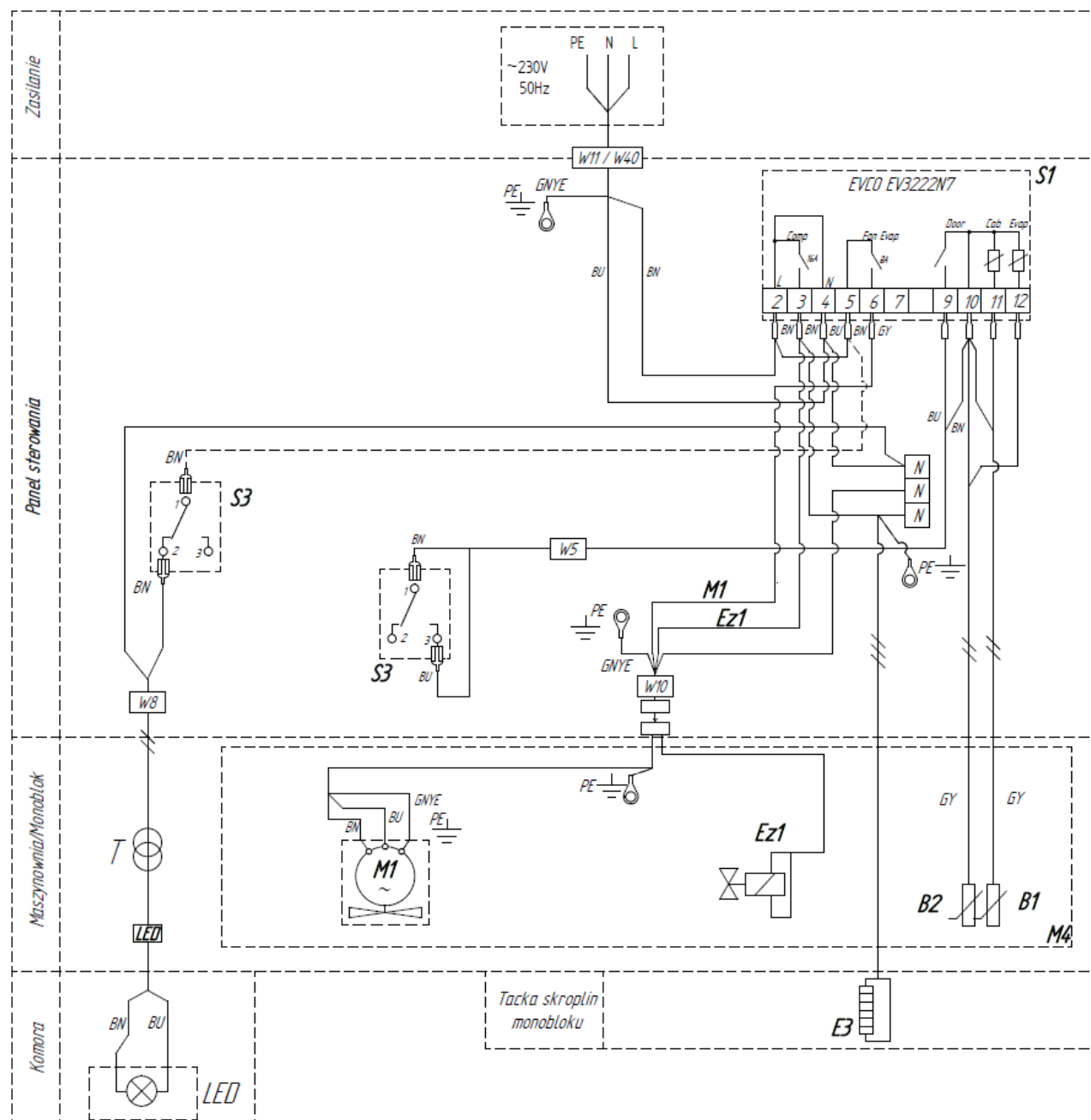


Applies to: DM-92624 – with controller EVCO EVJ215N7

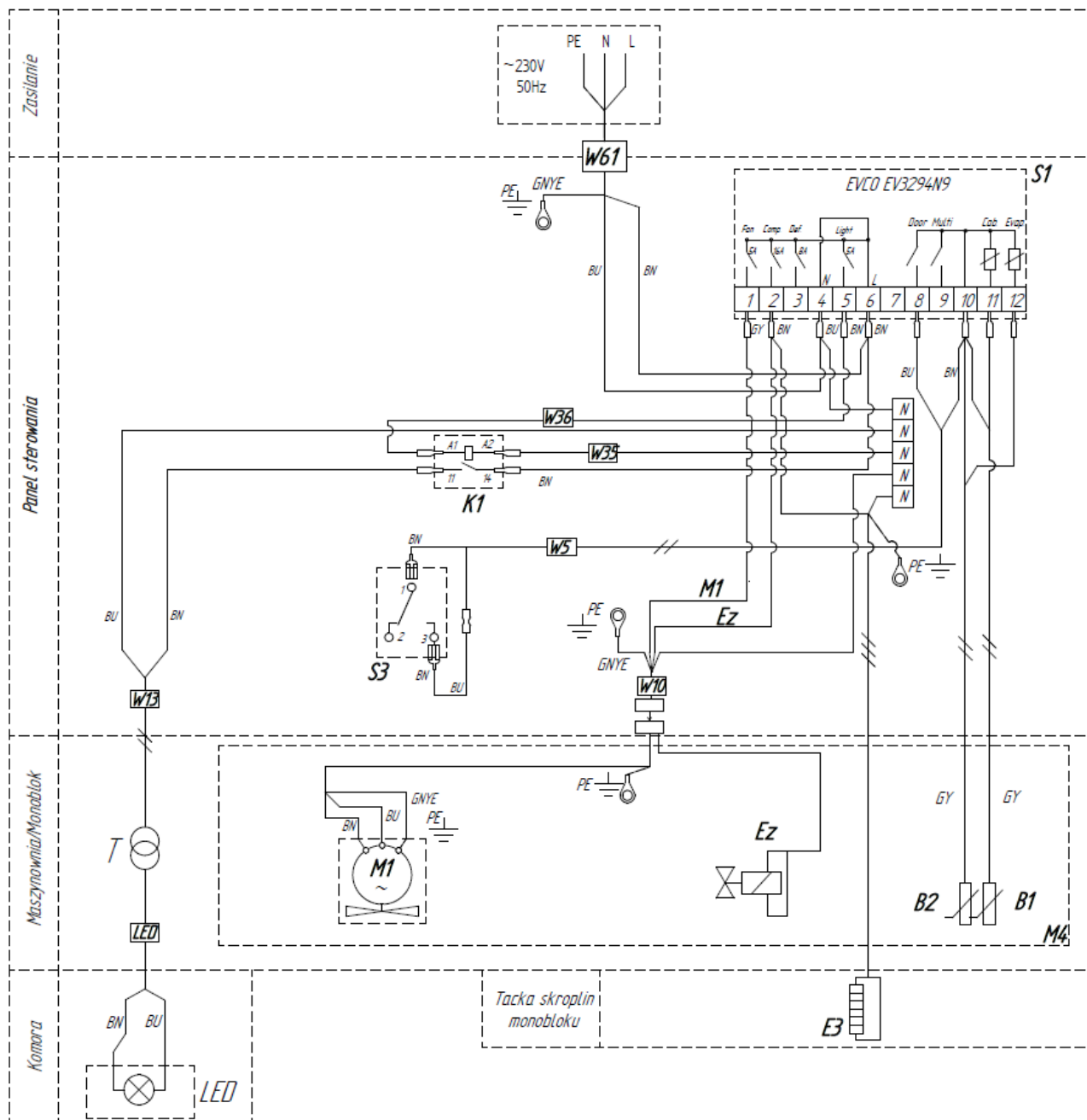


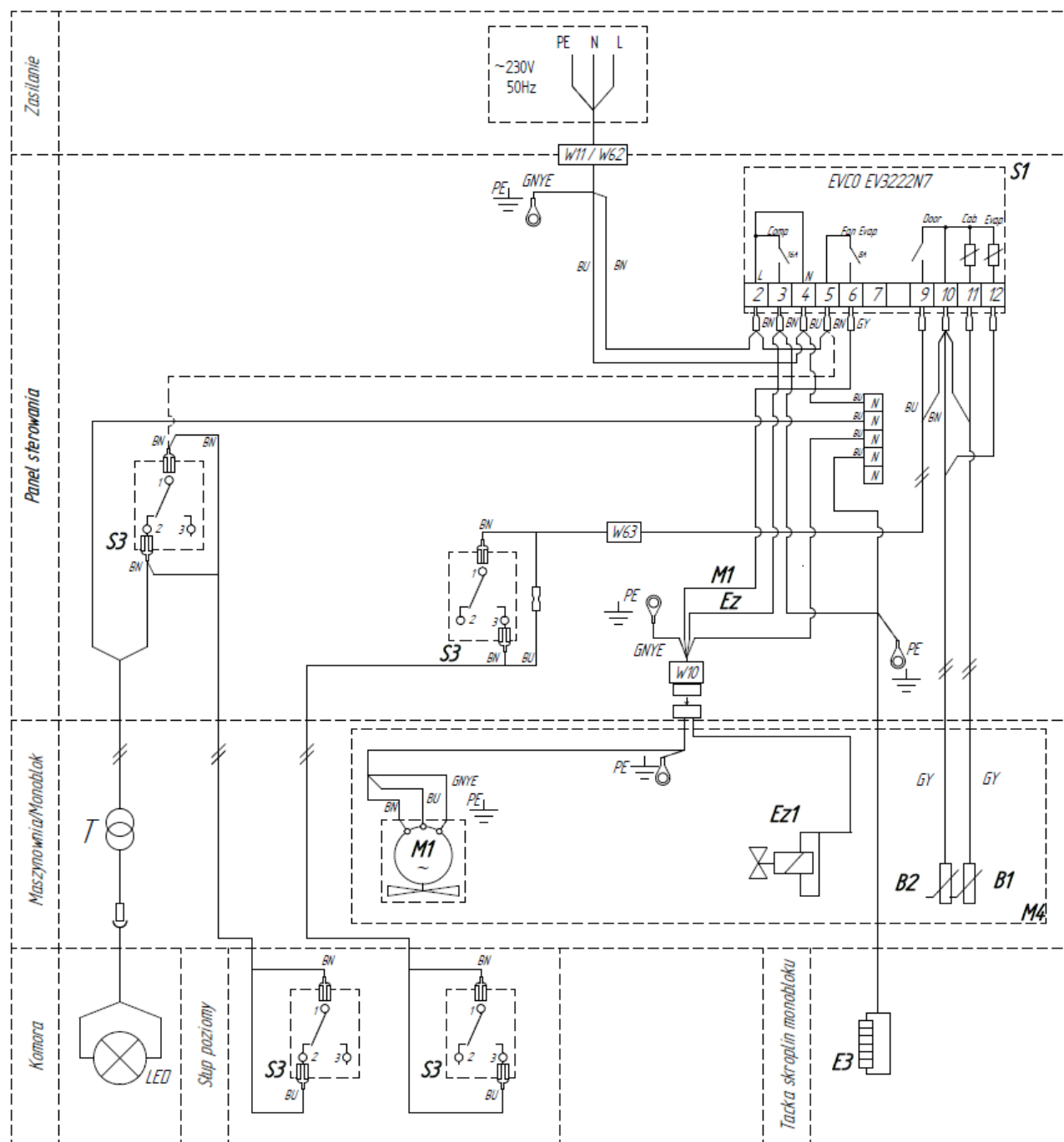
WIRING DIAGRAMS FOR UPRIGHT REFRIGERATORS WITHOUT CONDENSING UNITS:

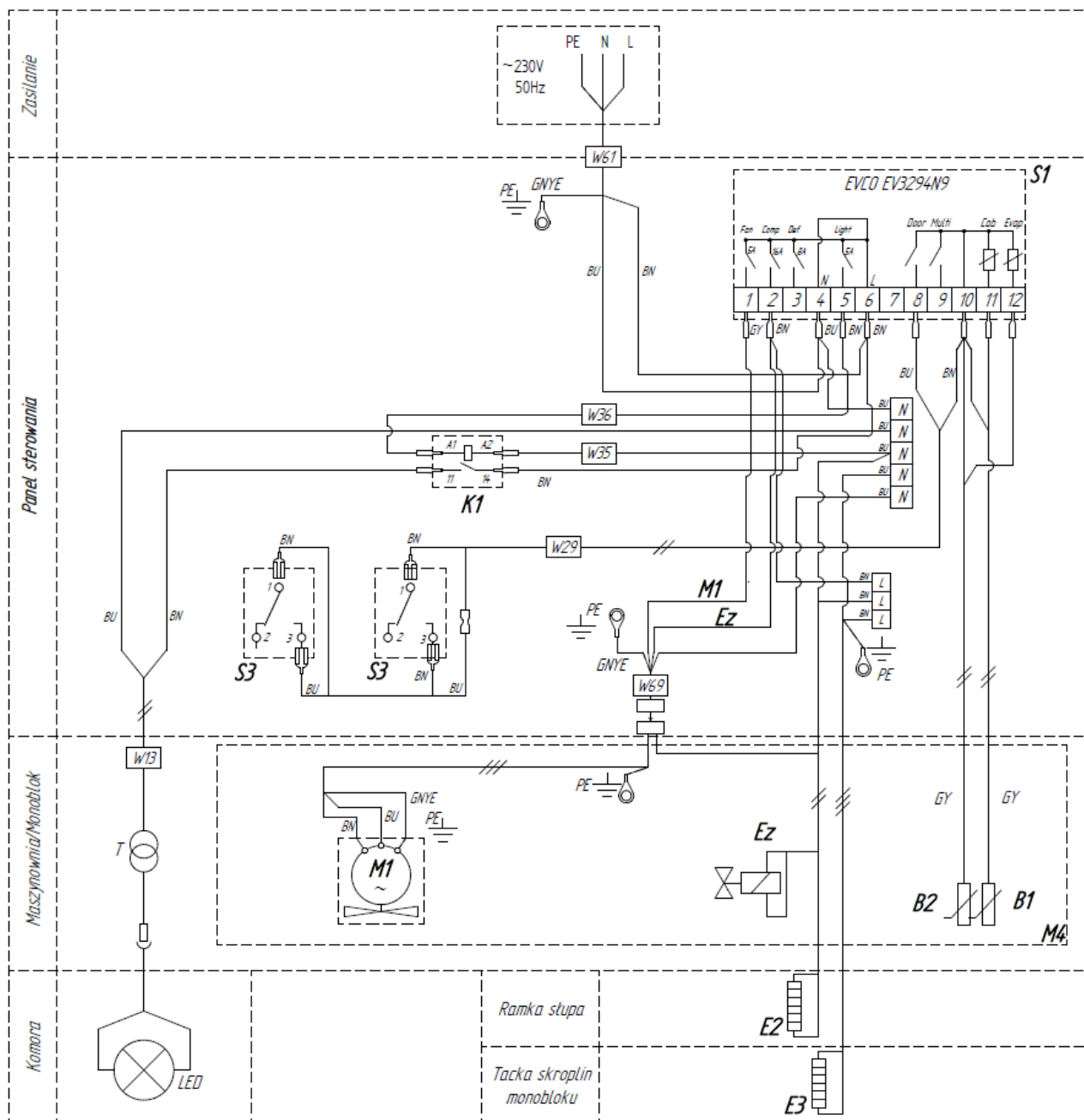
Applies to: DM-92601-BA, DM-92602-BA (no LED), DM-92612-BA, DM-92615-BA, DM-92616-BA (no LED), DM-92622-BA (no LED) – with controller EVCO EV3222N7



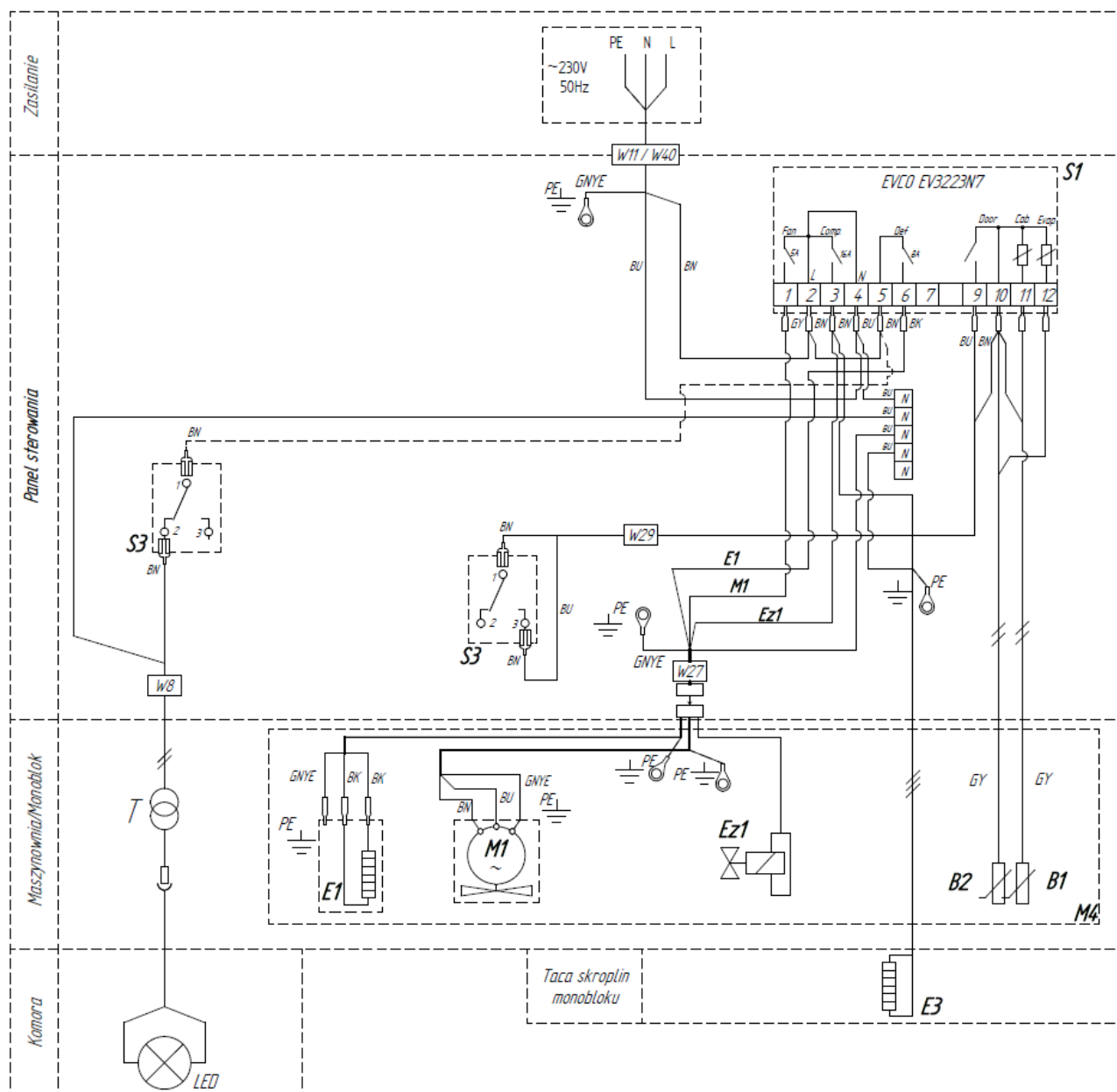
Applies to: DM-92602-BA, DM-92616-BA, DM-92622-BA – with LED and controller EVCO EV3294N9



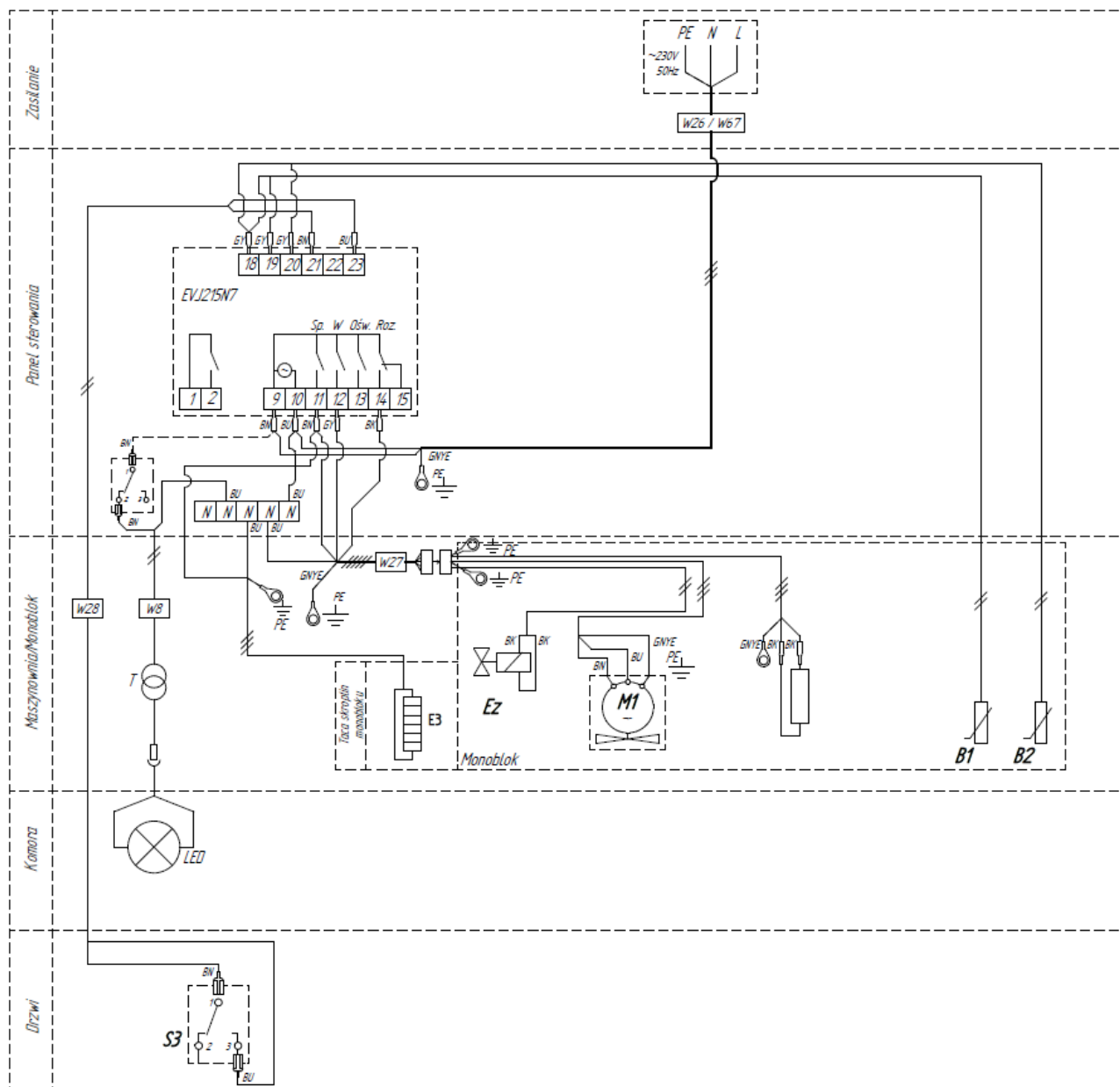
Applies to: DM-92603-BA – with controller EVCO EV3222N7

Applies to: DM-92609-BA – with LED controller EVCO EV3294N9

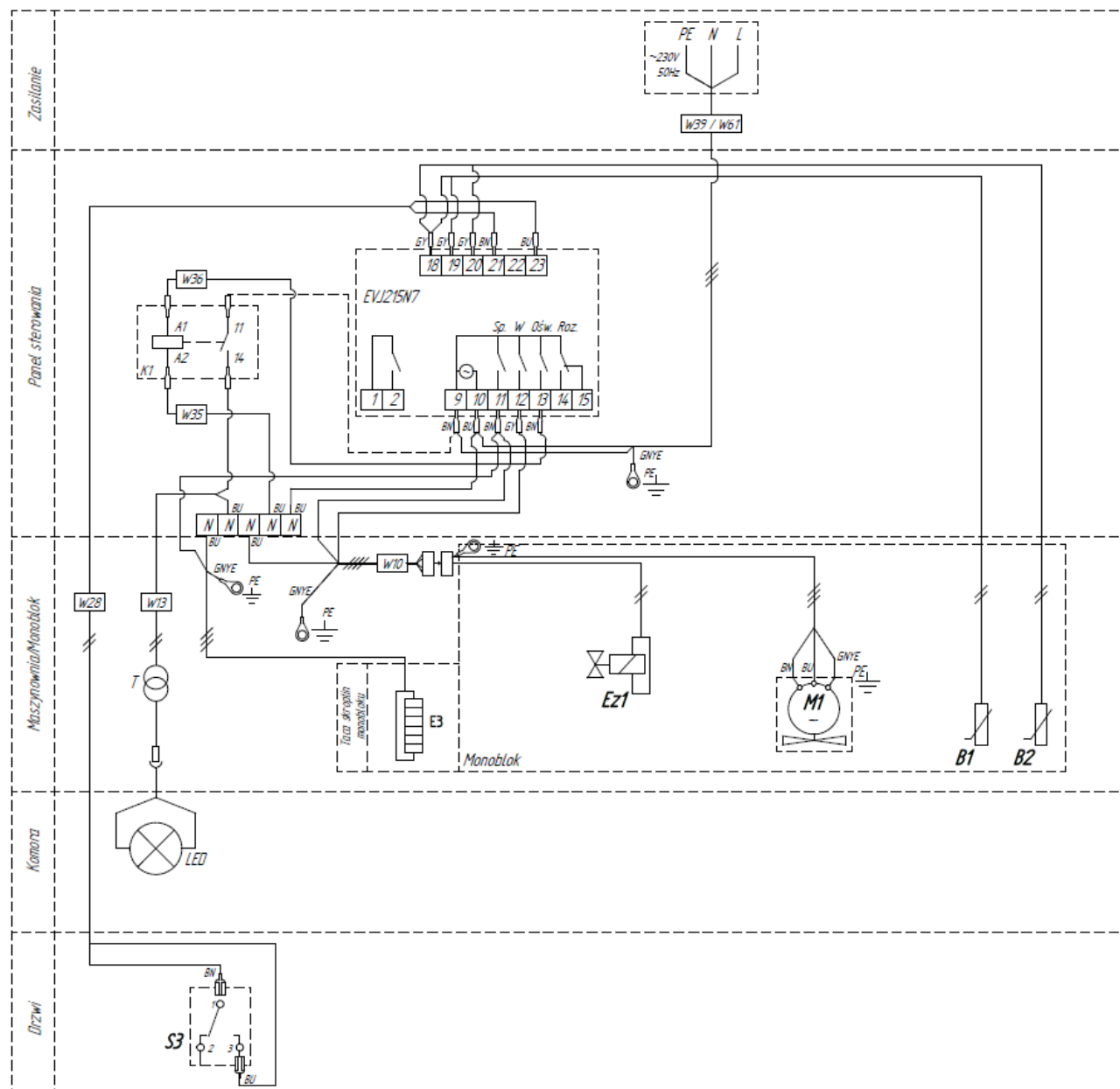
Applies to: DM-92621-BA, DM-92625-BA– with controller EVCO EV3223N7



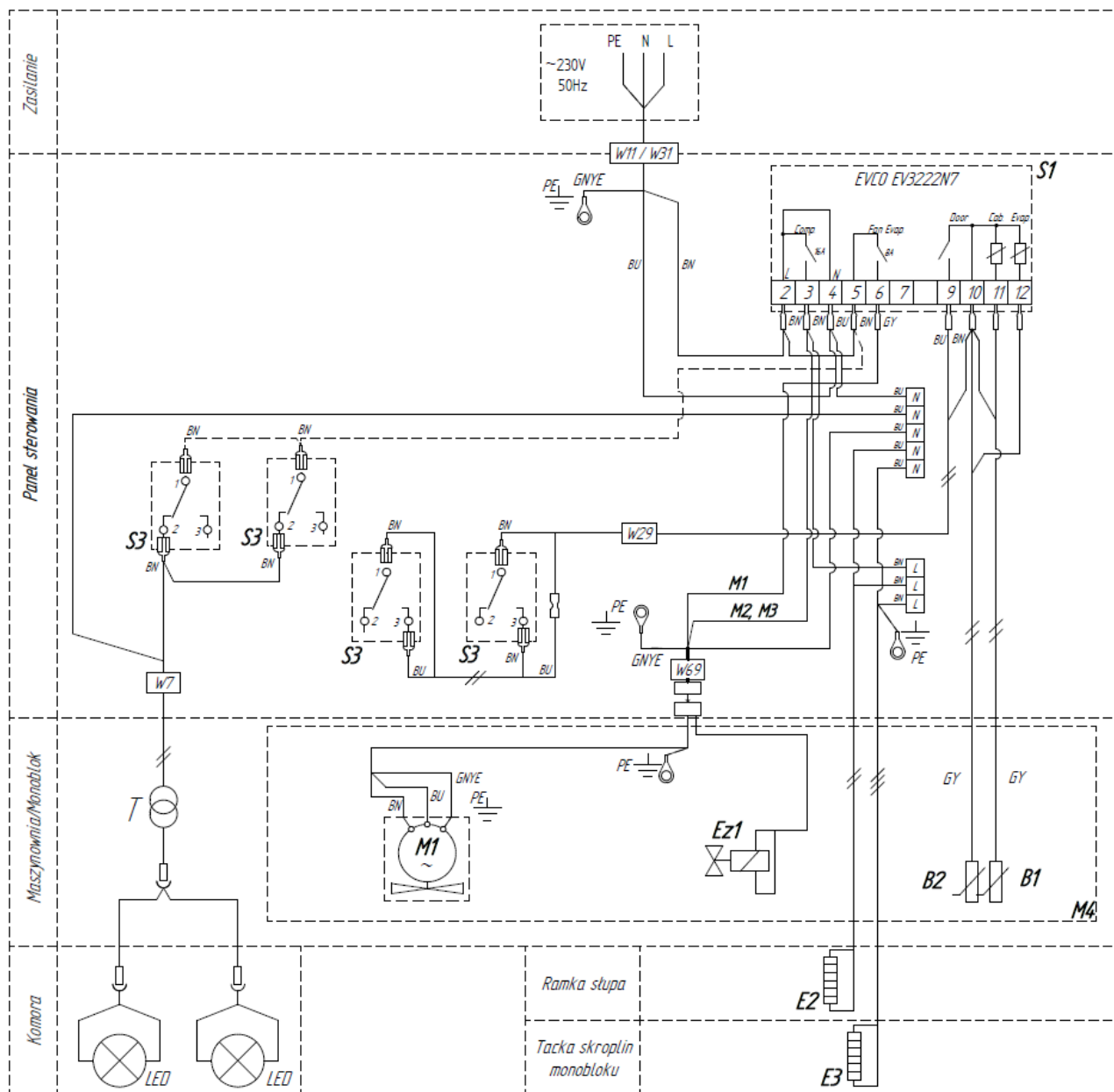
Applies to: DM-92621-BA, DM-92625-BA, DM-92131-BA – with controller EVCO EVJ215N7



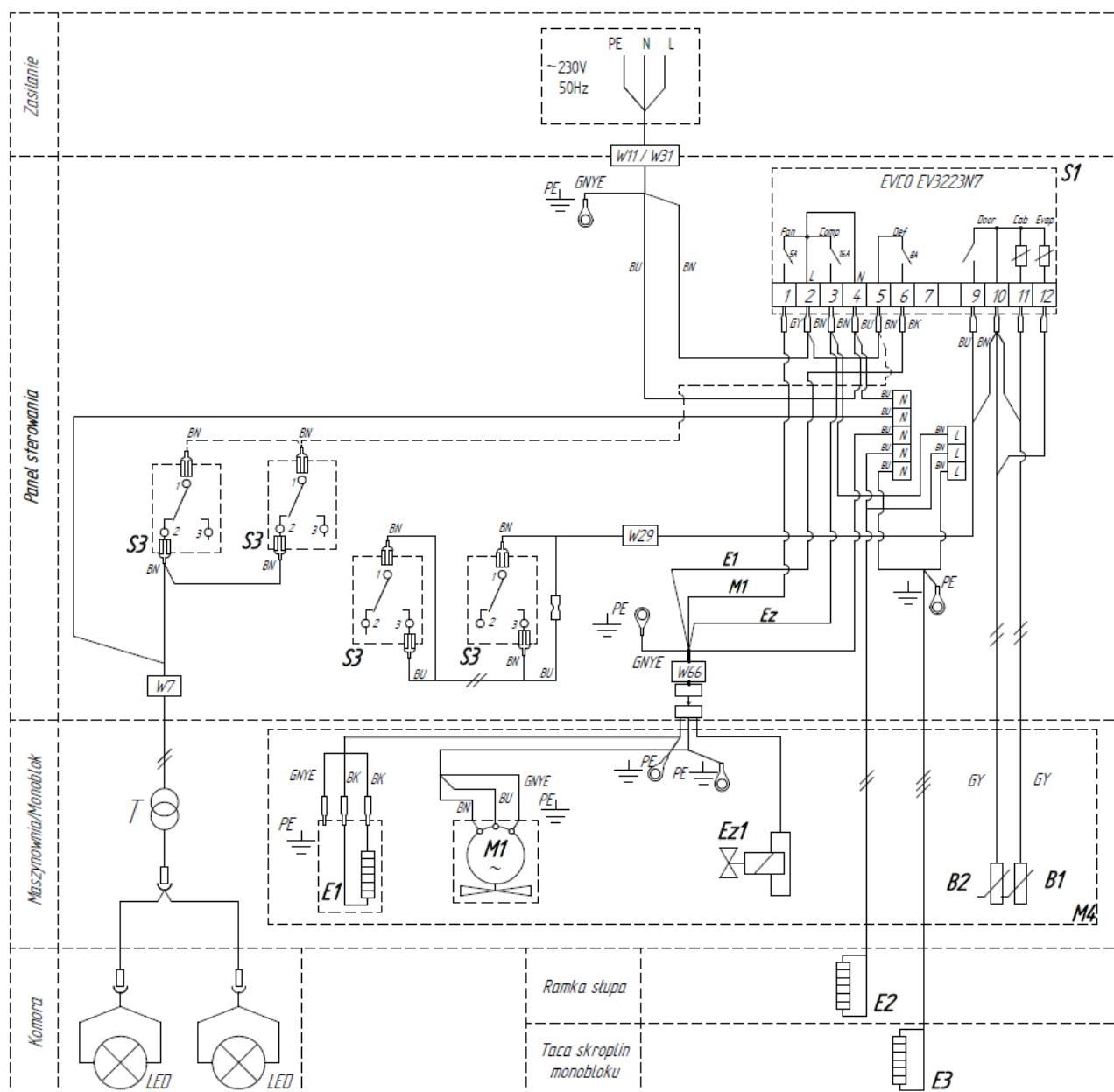
Applies to: DM-92622-BA, DM-92132-BA – with controller EVCO EVJ215N7



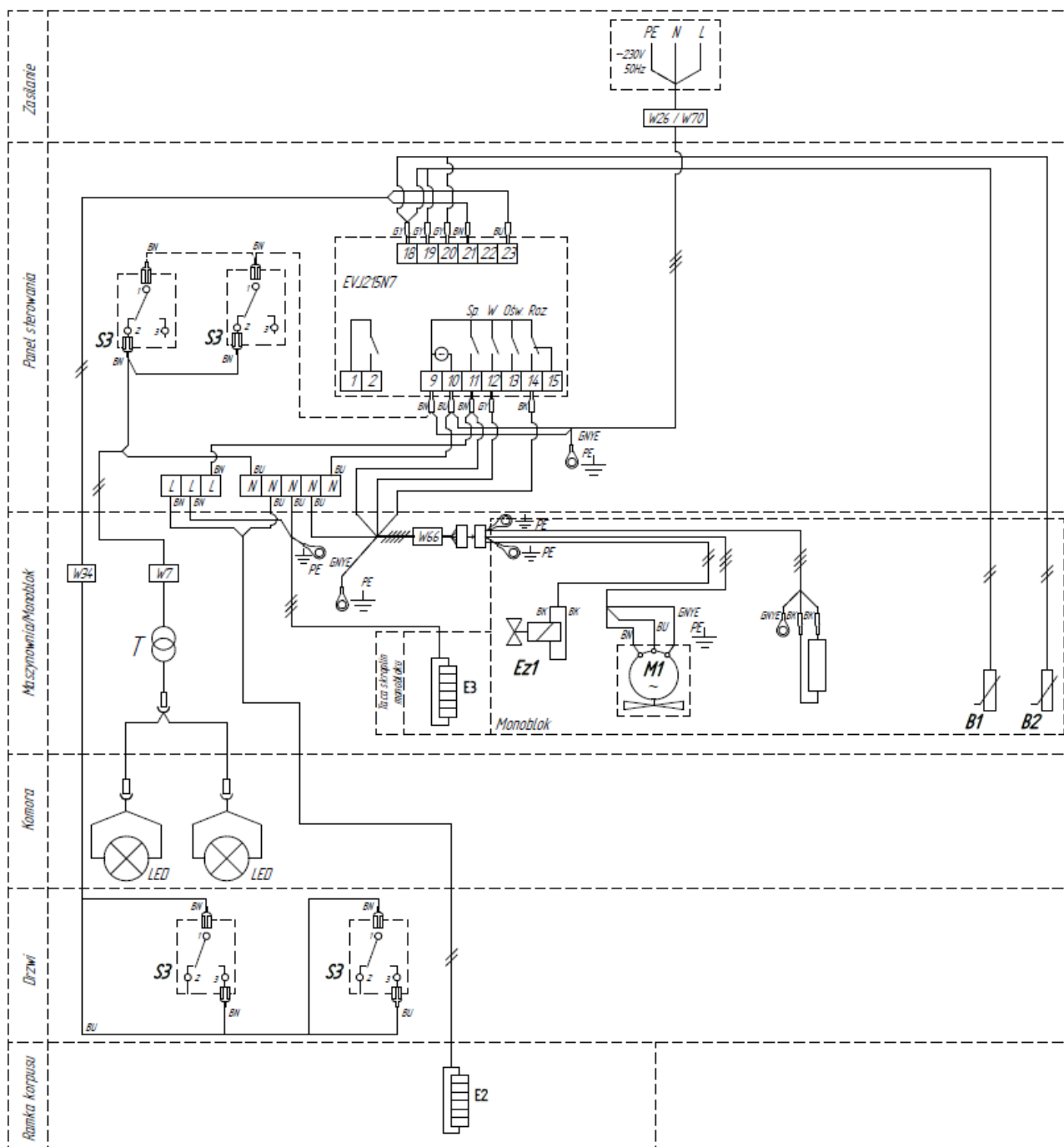
Applies to: DM-92604-BA, DM-92609-BA (no LED) – with controller EVCO EV3222N7



Applies to: DM-92624-BA– with controller EVCO EV3223N7

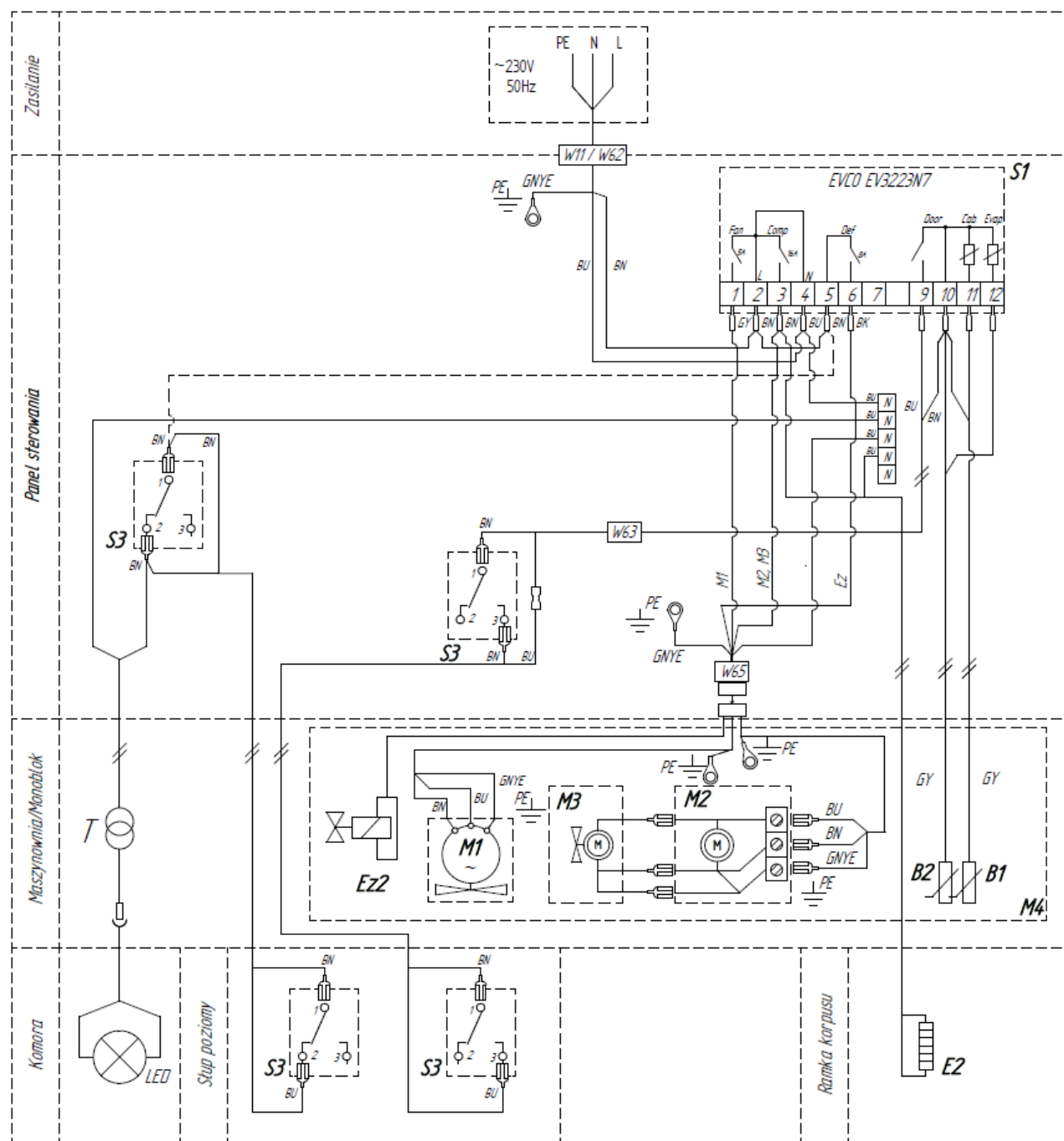


Applies to: DM-92624-BA– with controller EVJ215N7

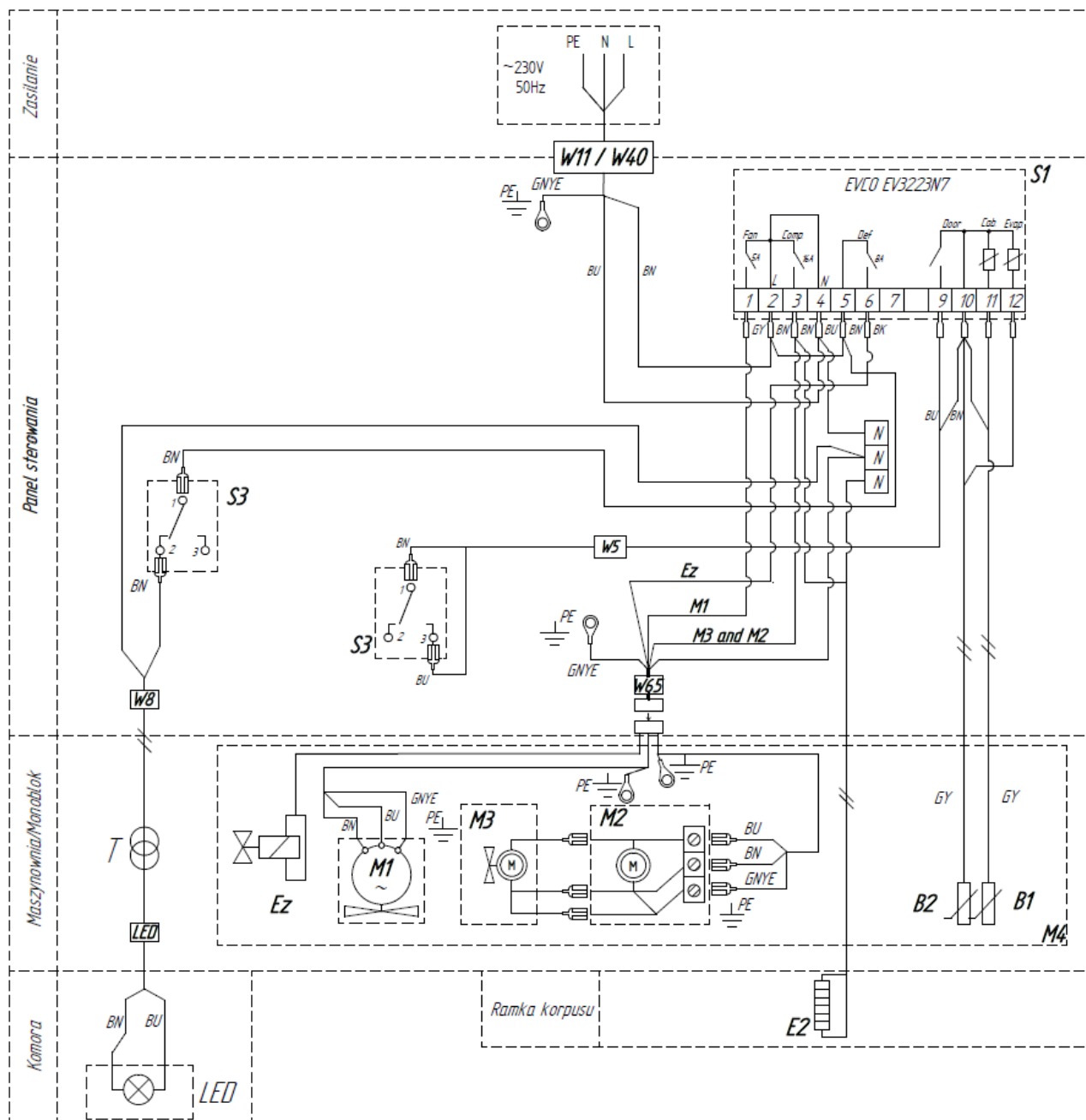


WIRING DIAGRAMS FOR UPRIGHT FREEZERS WITH CONDENSING UNITS:

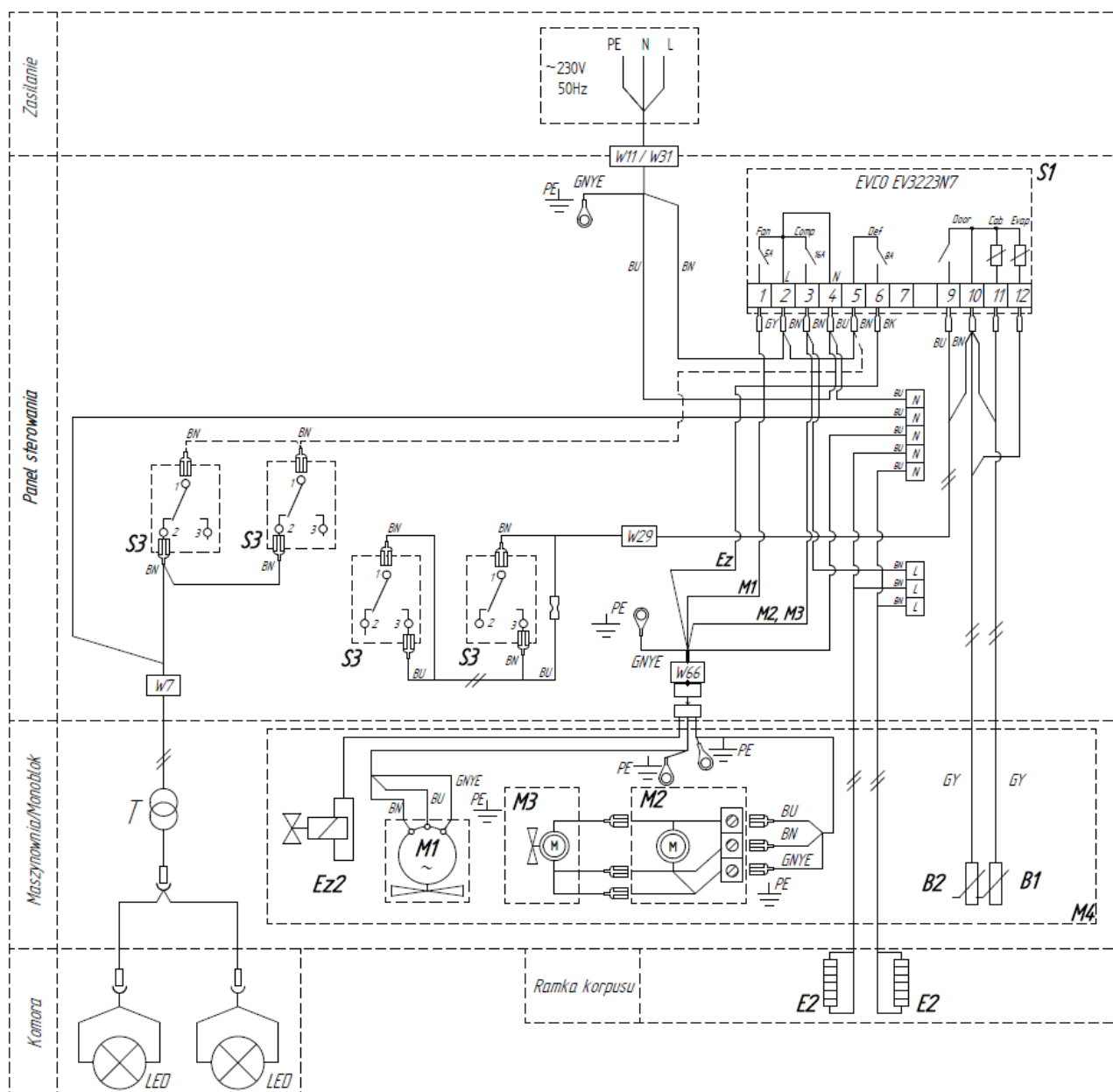
Applies to: DM-92606 – with controller EVCO EV3223N7



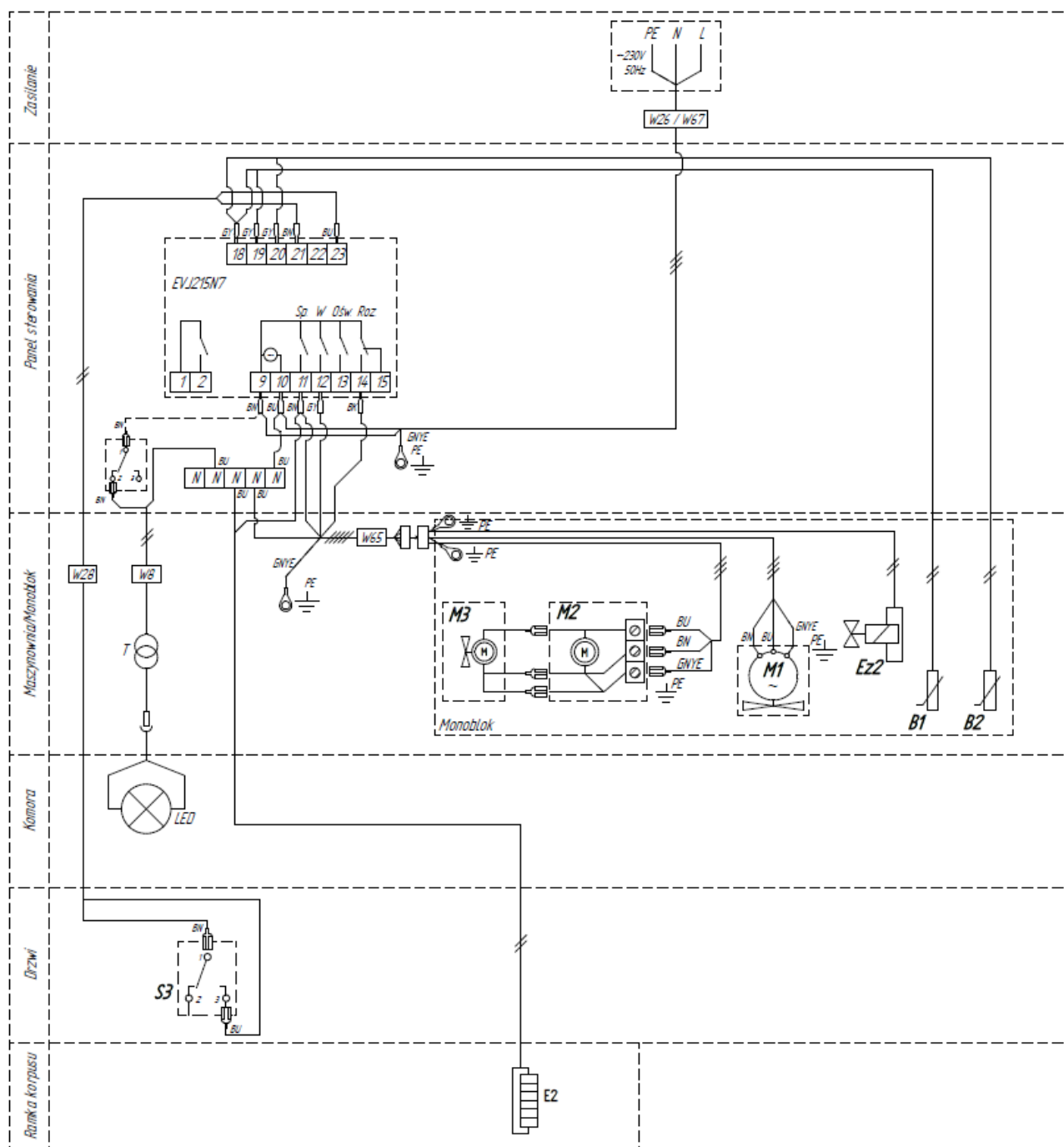
Applies to: DM-92607, DM-92614, DM-92617, DM-92627 – with controller EVCO EV3223N7

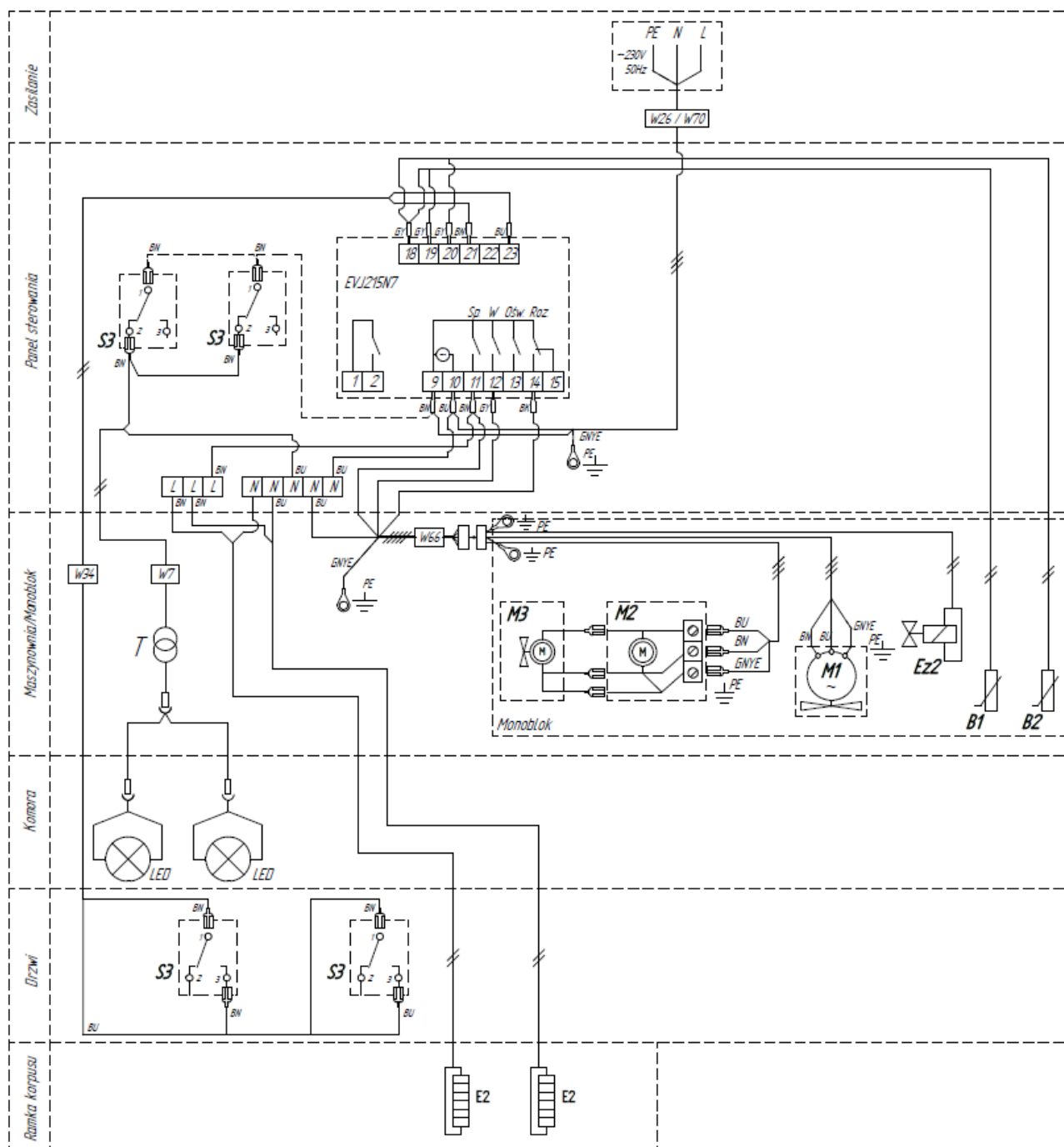


Applies to: DM-92608, DM-92628 – with controller EVCO EV3223N7



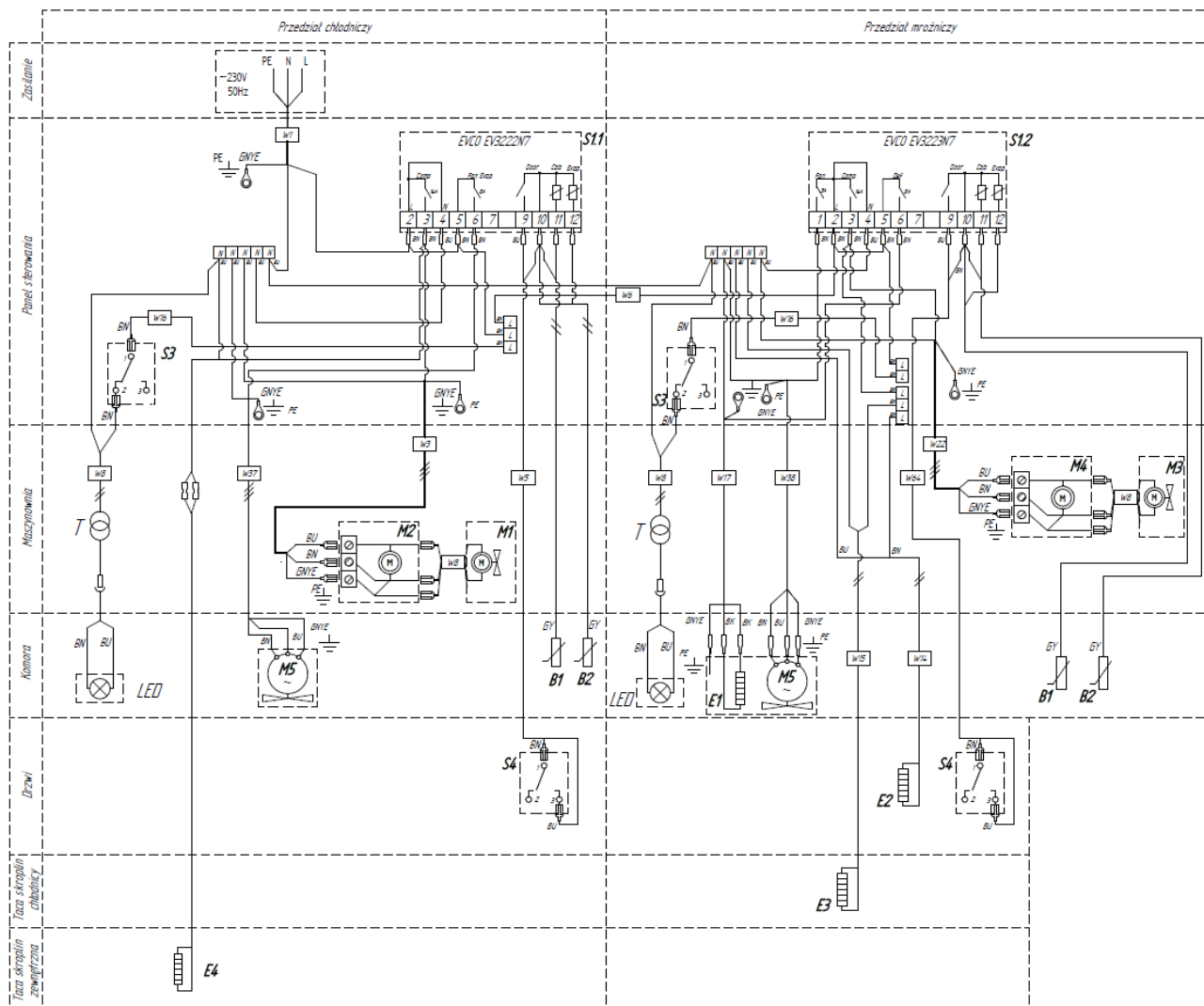
Applies to: DM-92627, DM-92137 – with controller EVJ215N7

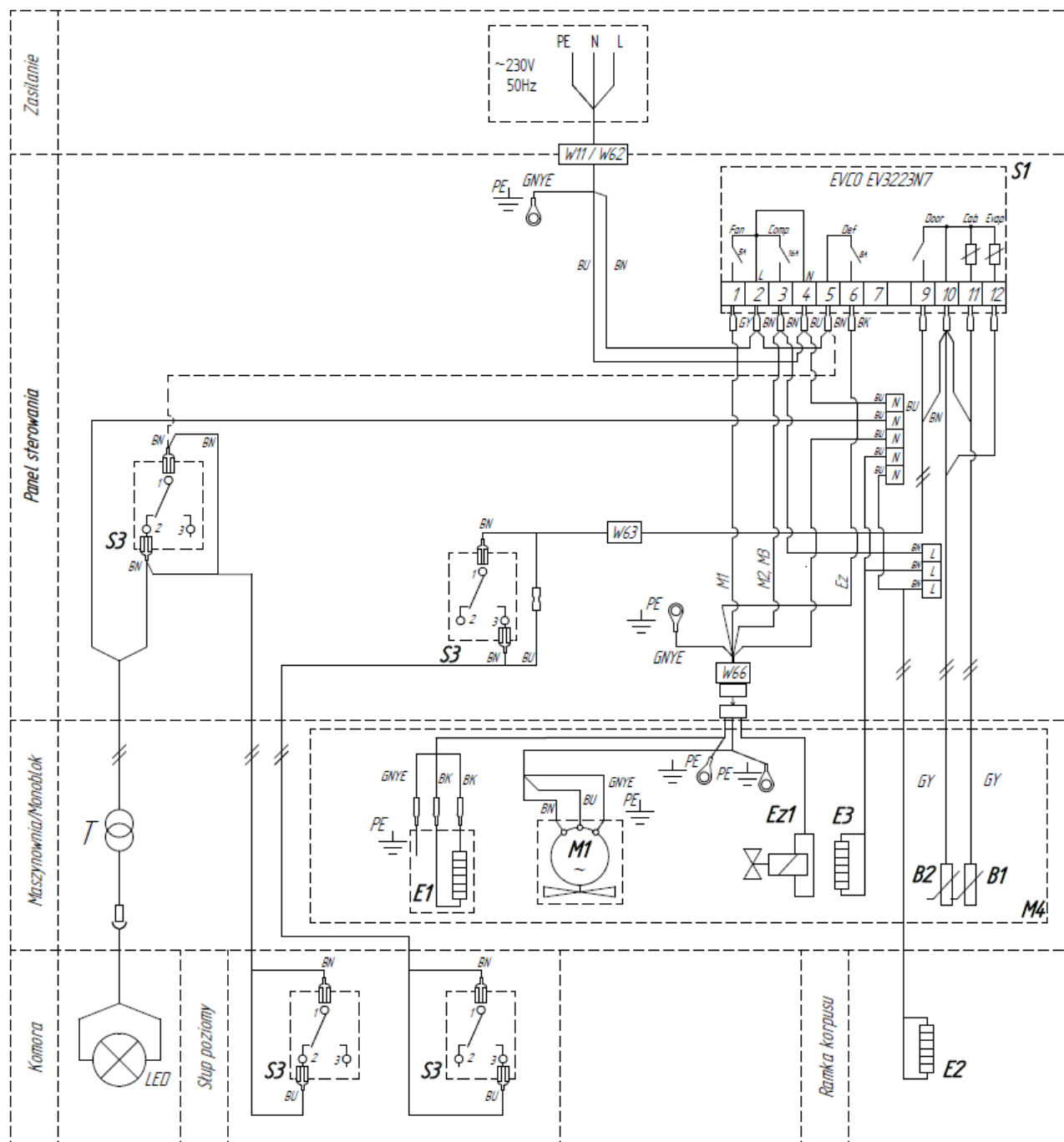


Applies to: DM-92628 – with controller EVCO EVJ215N7

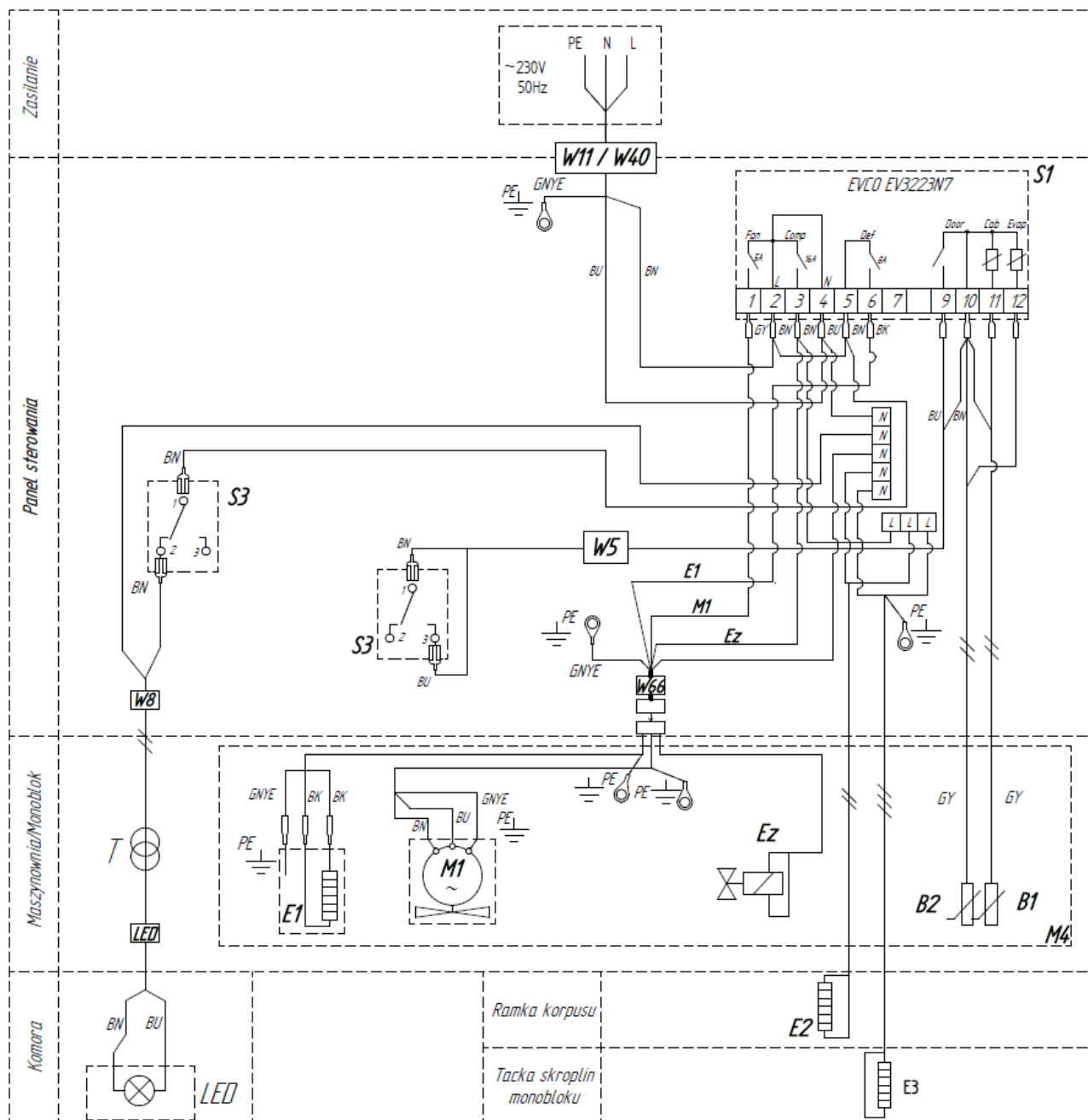
WIRING DIAGRAMS FOR UPRIGHT REFRIGERATORS & FREEZERS WITH CONDENSING UNITS:

Applies to: DM-92610 – with controller EVCO EV3222N7 and EV3223N7

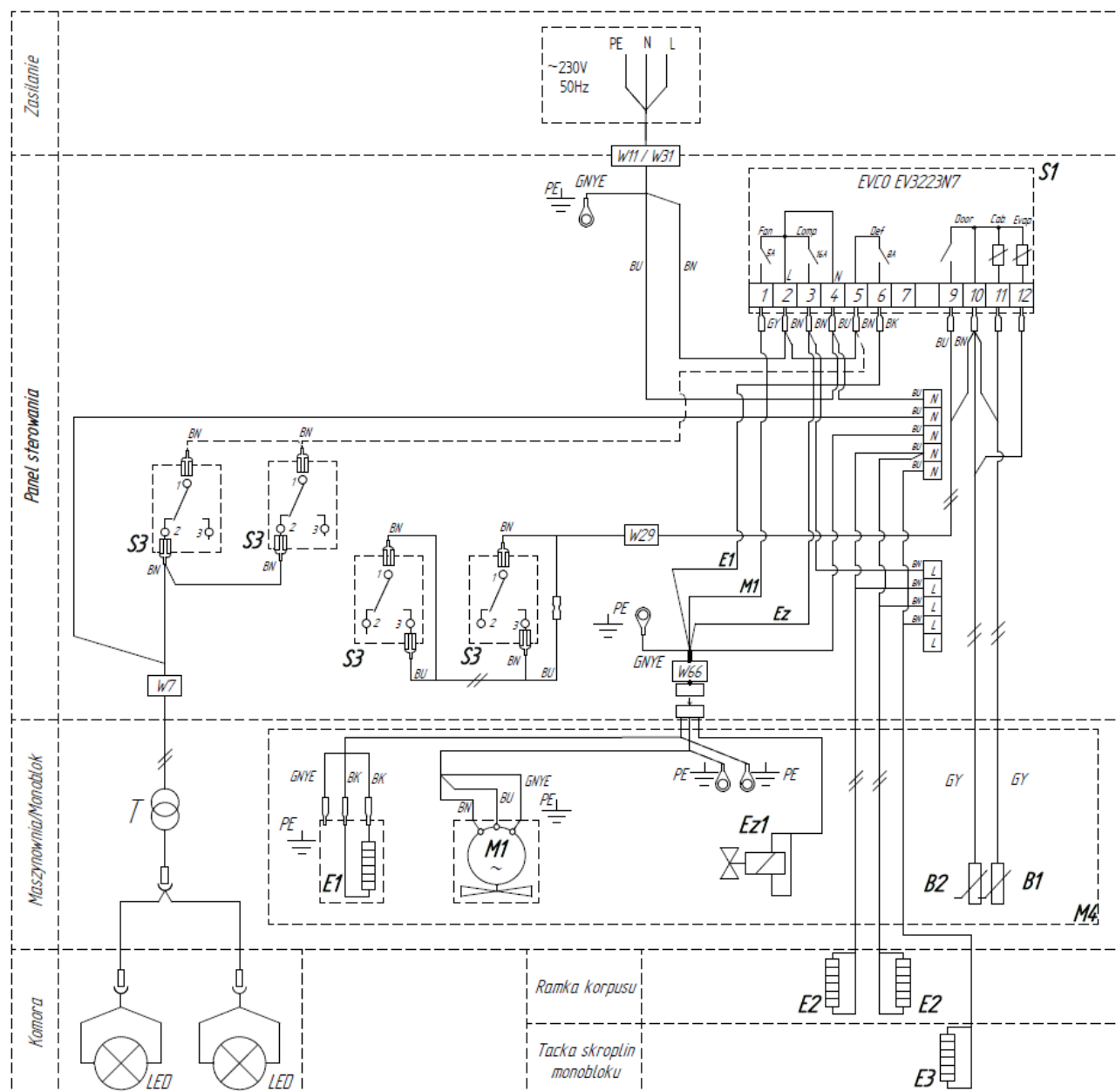


WIRING DIAGRAMS FOR UPRIGHT FREEZERS WITHOUT CONDENSING UNITS:**Applies to: DM-92606-BA – with controller EVCO EV3223N7**

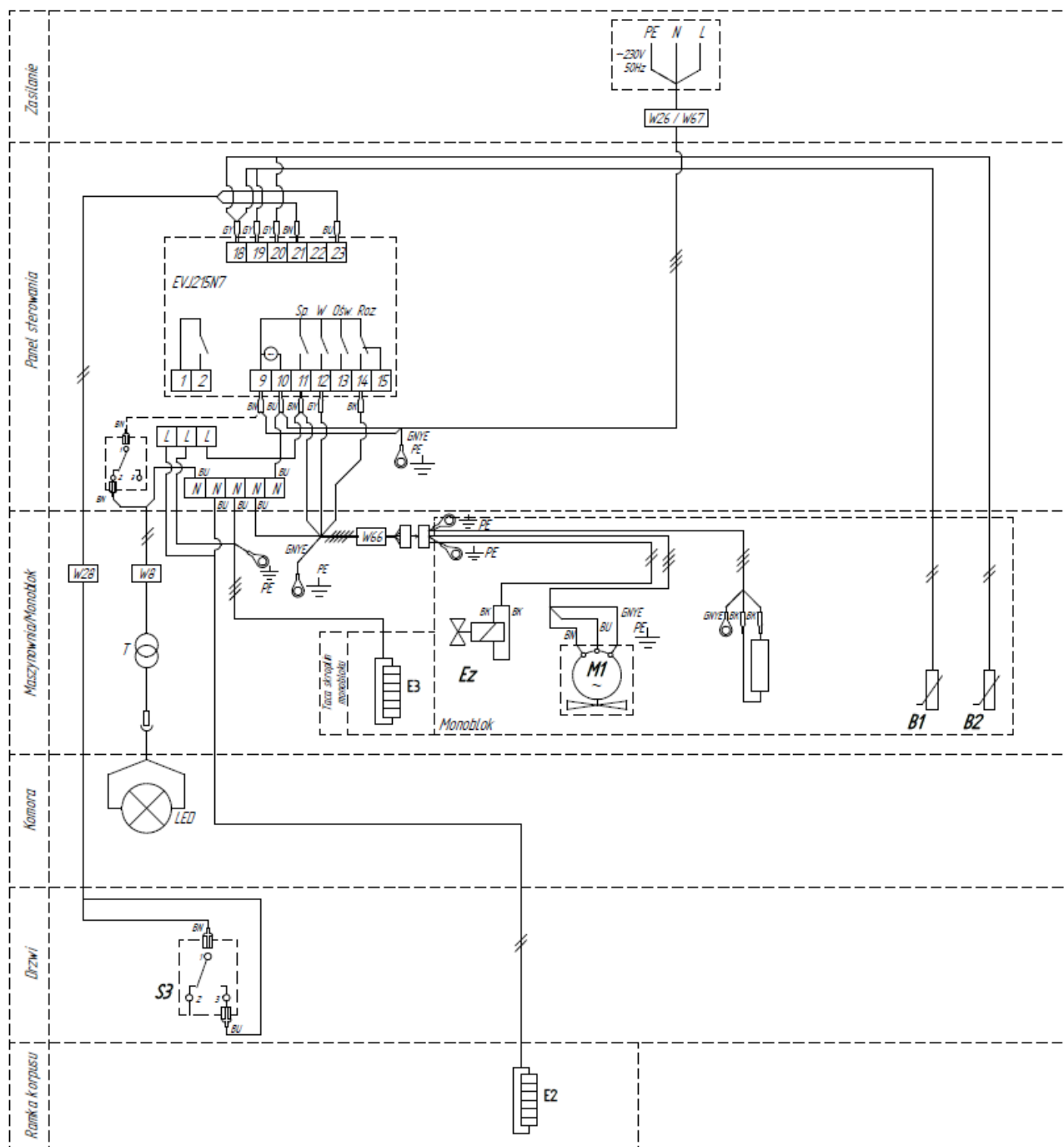
Applies to: DM-92607-BA, DM-92614-BA, DM-92617-BA, DM-92627-BA – with controller EVCO EV3223N7



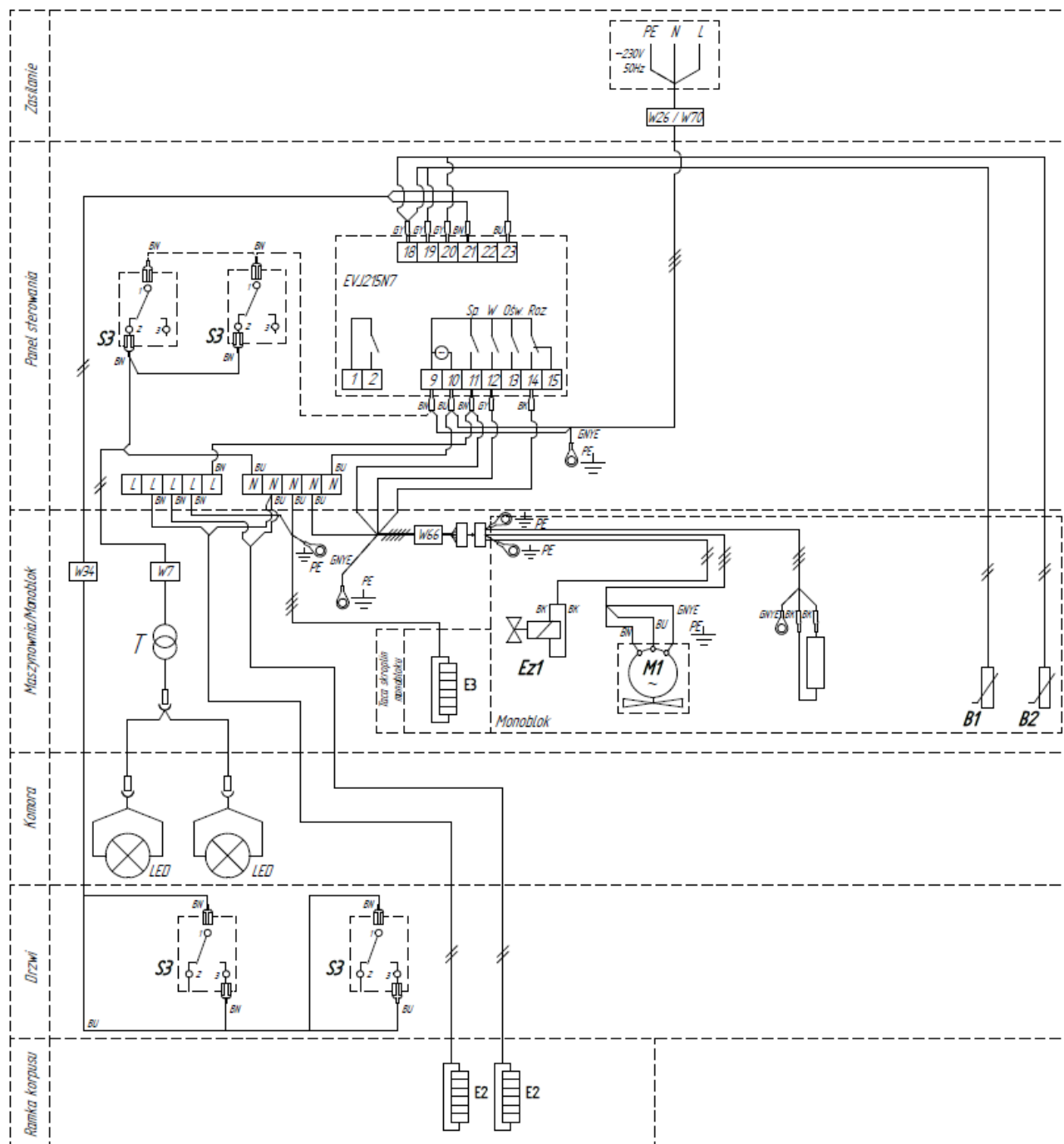
Applies to: DM-92608-BA, DM-92628-BA - with controller EVCO EV3223N7



Applies to: DM-92627-BA, DM-92137-BA – with controller EVCO EVJ215N7

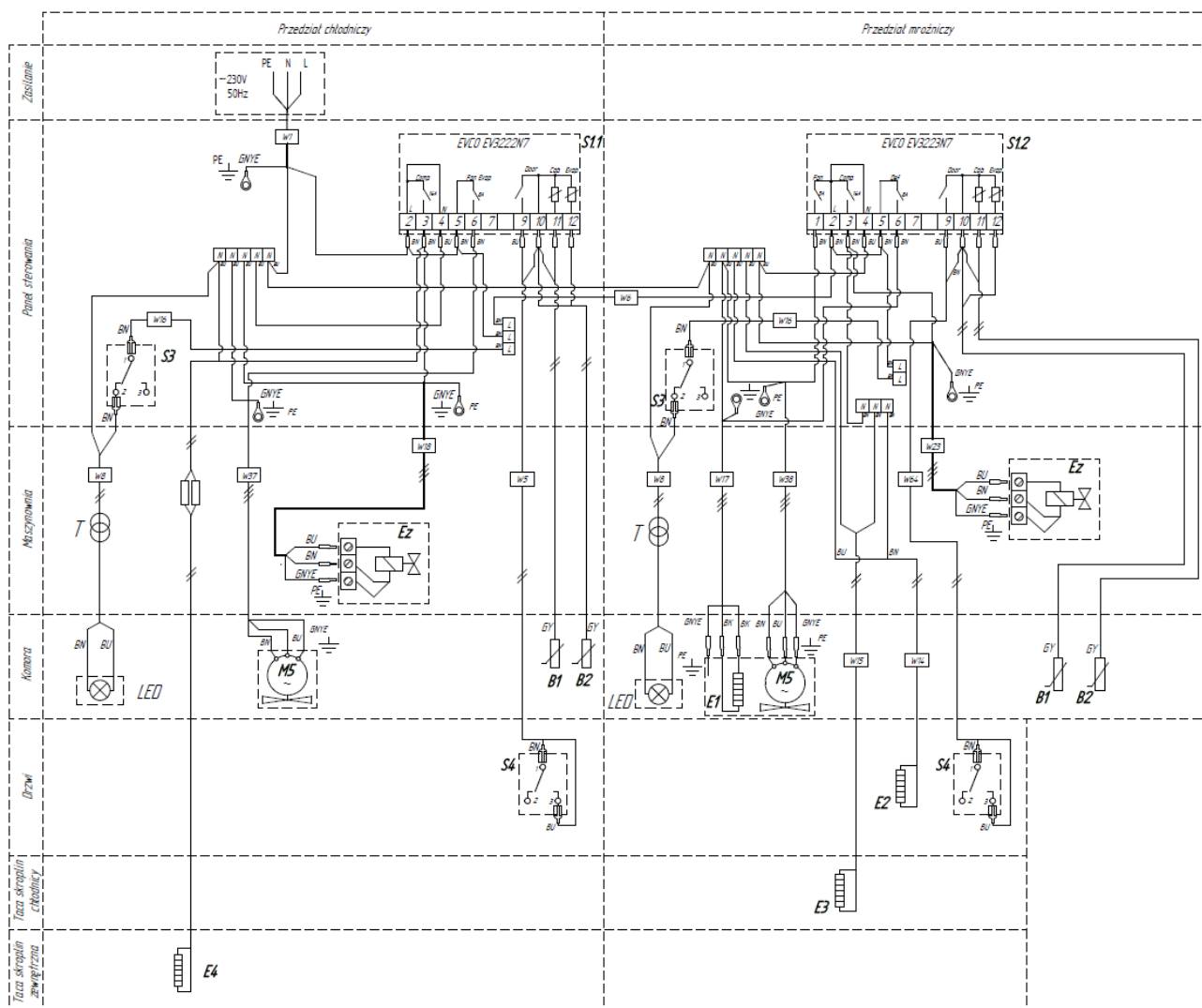


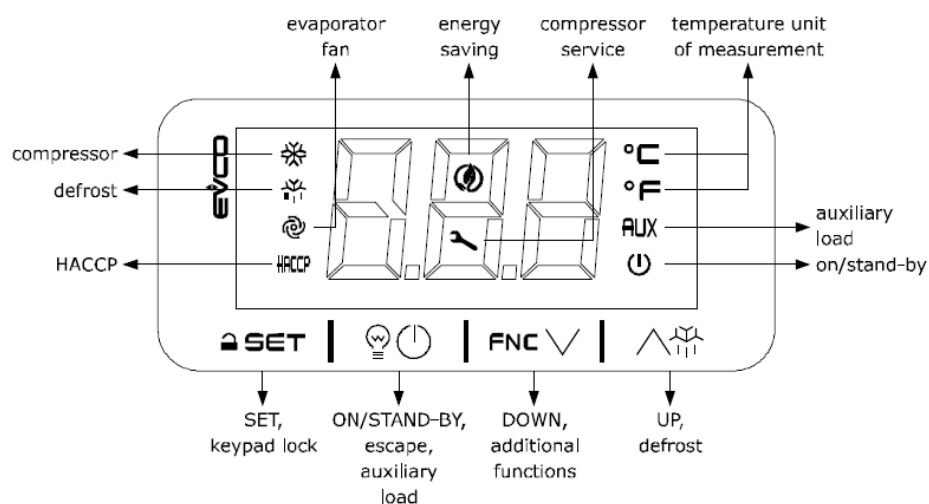
Applies to: DM-92628-BA – with controller EVCO EVJ215N7



WIRING DIAGRAMS FOR UPRIGHT REFRIGERATORS & FREEZERS WITHOUT CONDENSING UNITS:

Applies to: DM-92610-BA – with controller EVCO EV3222N7 and EV3223N7



GUIDE MANUAL FOR CONTROLLER EVCO (EV3222, EV3223 and EV3294)**1.1. Turning device on.**








|  | Press and hold ON / STAND-BY button for 4 s.

Controller displays temperature inside the cabinet.

1.2. Turning device off.

|  | Press and hold ON / STAND-BY button for 4 s.

Only red diode (switch symbol) will be lit on the display.

LED	ON	OFF	FLASHING
	compressor on	compressor off	-compressor protection active -setpoint being set
	defrost or pre-drip active	-	-defrost delay active -dripping active
	evaporator fan on	evaporator fan off	evaporator fan stop active
	-energy saving active -low consumption active	-	-
	view temperature	-	-
	device on	device off	-
	cabinet light on	cabinet light off	cabinet light on by digital input

1.3. Keypad lock/unlock.







Lock - the controller locks the keypad automatically after 30 sec. ("Loc" on display)

Unlock - press and hold any button for 1 sec. ("UnL" on display)


1.4. Changing temperature setpoint.

Check whether the keypad is not locked (see 1.3)




To display and modify the desired cabinet temperature:


- press   diode starts flashing,
- use  or  arrows to change the setpoint value,
- Exit: Press  or take no action for 15 sec, and  diode will go out.

1.5. Energy saving.

When the device operates in "energy saving" mode,  green diode is lit.

1.6. Display of temperatures measured with each sensor.


- press and hold  for 4 sec: the first parameter will appear on the display,
- use  or  arrows to display a parameter for a given sensor

(**Pb1** – cabinet temperature; **Pb2** – evaporator block temperature) and press  to display the temperature.


- exit: press  or take no action for 60 sec.

1.7. Defrosting.

During operation of the device at regular intervals the symbol appears on the display to notify that the device is operating in cooler defrosting mode. The defrosting cycle and its duration is factory pre-set and user cannot modify this parameter. If additional defrosting of cooler is needed, caused by difficult operating conditions of the device:

- press and hold  for 4 sec. If temperature detected by evaporator sensors is higher than defrosting end temperature, defrosting will not start.

1.8. Lighting (only for some devices with EV3294N9 controller).

To start cabinet lighting, press .

Caution! If lighting is switched on manually, it will **NOT** turn off automatically. To turn off the lighting, press the above button.

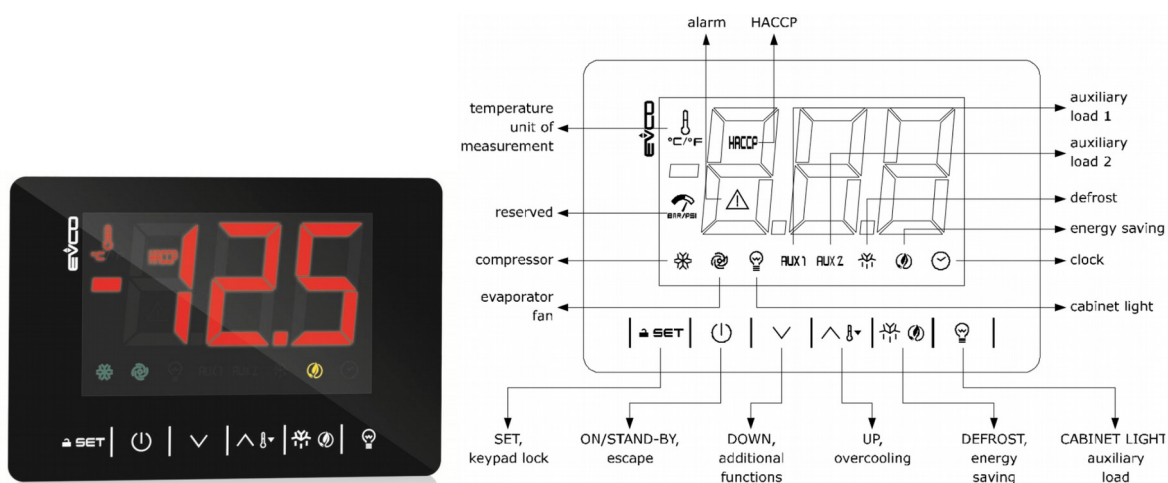
1.9. Meaning of displayed messages.

MESSAGE	MEANING
Loc	Keypad is locked
---	Unable to perform operation
ALARM	MEANING
AL	Low temperature alarm Solution: check chamber temperature and parameter Operation: device continues normal operation
AH	High temperature alarm Solution: check chamber temperature and parameter Operation: device continues normal operation
id	Door digital input alarm Solution: close the door Operation: device continues normal operation
dFd	Defrosting alarm (maximum defrosting duration time-out) Solution: • check connection of evaporator sensor to controller and cables • press any button to clear the alarm Operation: • device continues normal operation
Pr1	Chamber sensor fault Solution: • check connection of the sensor to controller and cables and chamber temperature Operation: • compressor on (operation time) will depend on factory-set parameters • defrosting will not start
Pr2	Evaporator sensor fault Solution: • check connection of the sensor to controller and cables and evaporator temperature Operation: • defrosting time will equal time in factory-set parameter

2.0. Alarm tone.

To stop alarm tone, press any button on the controller keypad.

GUIDE MANUAL FOR CONTROLLER EVCO EVJ215



1.1. Turning device on.

 Press and hold ON / STAND-BY button for 2 s.









Controller displays temperature inside the cabinet.

If alarm code is displayed, please refer to **1.8 Meaning of displayed messages**.

1.2. Turning device off.

 Press and hold ON / STAND-BY button for 2 s.

Only red diode (switch symbol) will be lit on the display.

LED	ON	OFF	FLASHING
	compressor on	compressor off	-compressor protection active -setpoint being set
	evaporator fan on	evaporator fan off	evaporator fan stop active
	cabinet light on	cabinet light off	cabinet light on by digital input
AUX 1	auxiliary function 1 on	auxiliary function 1 off	-auxiliary function 1 on by digital input -auxiliary function 1 delay active
AUX 2	auxiliary function 2 on	auxiliary function 2 off	-auxiliary function 2 on by digital input -auxiliary function 2 delay active
	defrost or pre-drip active	-	-defrost delay active -dripping active
	-energy saving active -low consumption active	-	-
	view time	-	set date, time and day of the current week
	view temperature	-	overcooling or overheating active
HACCP	saved HACCP alarm	-	new HACCP alarm saved
	alarm active	-	-

If after 30 sec no button is pressed, "Loc" will be displayed and keypad will lock automatically.




1.3. Keypad lock/unlock.

Lock - the controller locks the keypad automatically after 30 sec. ("Loc" on display)

Unlock - press and hold any button for 1 sec. ("UnL" on display)

1.4. Changing temperature setpoint.

Check whether the keypad is not locked (see 1.3).

1		Touch SET button
2		Touch UP/DOWN button within 15 sec. to set limit values
3		Touch SET button (or take no action for 15 sec.)

1.5. Defrosting.

Check whether the keypad is not locked, and super-cooling/super-frosting is not enabled.

1		Touch and hold DEFROST button for 2 sec.
---	---	--




1.6. Turning cabinet lighting on / off (available for some versions).


1		Touch the CABINET LIGHT key.
---	---	------------------------------

1.7. Alarm tone.

To stop alarm tone, press any button on the controller keypad.

1.8. Display of temperatures measured with each sensor.



- press and hold  for 4 sec: the first parameter will appear on the display,
- use  or  arrows to display a parameter for a given sensor,

(**Pb1** – cabinet temperature; **Pb2** – evaporator block temperature) and press  to display the temperature.

2. ADDITIONAL FUNCTIONS

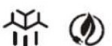

2.1. Turning super-cooling, super-freezing on / off.

Check whether the keypad is not locked (see 1.3).

1	 	Touch and hold UP button for 2 sec.
---	---	-------------------------------------


2.2. Turning energy saving on / off in manual mode.

Check whether the keypad is not locked (see 1.3).

1	 	Press DEFROST button
---	---	----------------------

Once adequate conditions are detected, the controller will switch to ECO mode automatically.

RATING PLATE

		Data concerning the producer		Place for product designation	
Name and type of product					
Factory number/year of production	<input type="text"/>	Rated voltage	<input type="text"/>		
Mass	<input type="text"/>	Current frequency	<input type="text"/>		
Climatic class	<input type="text"/>	Rated current	<input type="text"/>		
Type of refrigeration unit	<input type="text"/>	Max. lighting power	<input type="text"/>		
Refrigerant	<input type="text"/>	Heating system power	<input type="text"/>		
Refrigerant mass	<input type="text"/>	Temperature range	<input type="text"/>		

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