



USER MANUAL

UNDERCOUNTER REFRIGERATORS series ...	DM-940xx	DM-S-940xx
	DM-910xx	DM-S-93043
	DM-900xx	DM-S-910xx
	DM-90x0x	DM-S-900xx
	DM-940xx-c (ciągi)	DM-S-90x0x
CHILLING BASES series ...	DM-9470x	
	DM-9476x	
SALADETTE UNITS series ...	DM-9404x	
	DM-94060-c (ciągi)	
UNDERCOUNTER FREEZERS series ...	DM-9500x	DM-S-9500x
	DM-95044	DM-S-9504x
	DM-9050x	DM-S-9050x

NOTES:

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.**
- **It is forbidden to cover the blind of the condensing unit chamber because it may affect a proper operation of the device. A minimal distance in front of the blind of the condensing unit chamber should amount to 1 meter at least.**
- **The devices should be operated within the range of the ambient temperatures and relative air humidity proper for climate class (data specified on the rating plate).**
- **In case of the operation at the ambient temperature and relative air humidity above value proper to climate class the lowest declared operating temperature may not be achieved and the electricity consumption may be increased.**
- **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. Before scrapping the device should be completely protected by cutting off the supply cable.**
- **It is forbidden to store explosive substances, such as aerosol cans with combustible gas in the device.**
- **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.**
- **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 or R455A - data included in the rating plate). An expansion element is a capillary tube.

INTERIOR TEMPERATURE SET-UP

An electronic temperature controller sensor is located on the chamber wall. The controller is programmed in such a manner that the device achieves an interior temperature specified in the technical data. A method of required temperature set-up – see p.29.

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, drawers and blinds to remove freely the refrigeration unit for servicing and for free achievement of free access to clean the condenser.

The devices should be moved away from the wall to ensure free air circulation through the condenser.

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 3÷4 hours 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 undercounter 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 table 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.

Devices (DM-940xx, DM-S-940xx cooling tables; DM-95044, DM-S-95044 freezing tables; DM-9404x and DM-94060 salad counters) are equipped with automatic condensate drainage system. In other cooling and freezing tables, the condensate is drained to a tray pulled from underneath the refrigeration unit. Make sure to monitor level in the condensate container.



Do not move hard, rough objects (e.g. plates) on the sheet metal surface (top, chamber bottom) that can scratch the surface. Such scratches are not covered by the guarantee.

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 crate 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. Undercounter refrigerators of DM and DM-S series

Data		Catalogue number				
		94002 / 94062 90002*	94003 / 94063 90003*	94004 90004*	94001 90401*	94007 90407*
Width	mm	1325 1125*	1825 1625*	2325 2125*	1475 1275*	2050 1850*
Depth	mm	700 (600)			800	
Height	mm	850				
Number of doors	pcs	Depending on a model			2	3
Number of drawers	pcs					
Chamber capacity	l	2 x 110 (2 x 95)	3 x 110 (3 x 95)	4 x 110 (4 x 95)	2 x 150	3 x 150
Permissible loading	kg	60 (48)	90 (72)	120 (96)	84	126
Max. loading of shelf / drawers	kg	25 / 40				
Interior temperature	°C	-2...+10			+2...+10	
Power supply	V / Hz	230 / 50				
Rated current	W	Data specified on the rating plate				
Climatic class	-					
Compressor type	-					
Refrigerant type	-	R290 (R455A – optional)				
Refrigerant amount	kg	0,1 (0,5 – R455A)				
GWP	-	3 (146 – R455A)				

* undercounter refrigerators without refrigeration unit

Table 2. Undercounter refrigerators of DM and DM-S series with sink

Dane		Catalogue number		
		91002	91003	91004
Width	mm	1325	1825	2325
Depth	mm	700 (600)		
Height	mm	850		
Number of doors	pcs	Depending on a model		
Number of drawers	pcs			
Chamber capacity	l	2 x 110 (2 x 95)	3 x 110 (3 x 95)	4 x 110 (4 x 95)
Permissible loading	kg	60 (48)	90 (72)	120 (96)
Max. loading of shelf / drawers	kg	25 / 40		
Interior temperature	°C	-2...+10		
Power supply	V / Hz	230 / 50		
Rated current	W	Data specified on the rating plate		
Climatic class	-			
Compressor type	-			
Refrigerant type	-	R290 (R455A – optional)		
Refrigerant amount	kg	0,1 (0,5 – R455A)		
GWP	-	3 (146 – R455A)		

Table 3. Undercounter refrigerators of DM and DM-S series with glass door

Dane		Catalogue number		
		94005 90005*	94006 90006*	94008 90008*
Width	mm	1325 1125*	1825 1625*	2325 2125*
Depth	mm	700 (600)		
Height	mm	850		
Number of doors	pcs	2	3	4
Chamber capacity	l	2 x 110 (2 x 95)	3 x 110 (3 x 95)	4 x 110 (4 x 95)
Permissible loading	kg	60 (48)	90 (72)	120 (96)
Max. loading of shelf	kg	25 / 40		
Interior temperature	°C	+2...+10		
Power supply	V / Hz	230 / 50		
Rated current	W	Data specified on the rating plate		
Climatic class	-			
Compressor type	-			
Refrigerant type	-	R290 (R455A – optional)		
Refrigerant amount	kg	0,1 (0,5 – R455A)		
GWP	-	3 (146 – R455A)		

* undercounter refrigerators without refrigeration unit

Table 4. Undercounter refrigerators of DM and DM-S series with glass door and sink

Dane		Catalogue number		
		91005	91006	91008
Width	mm	1325	1825	2325
Depth	mm	700 (600)		
Height	mm	850		
Number of doors	pcs	2	3	4
Chamber capacity	l	2 x 110 (2 x 95)	3 x 110 (3 x 95)	4 x 110 (4 x 95)
Permissible loading	kg	60 (48)	90 (72)	120 (96)
Max. loading of shelf	kg	25 / 40		
Interior temperature	°C	+2...+10		
Power supply	V / Hz	230 / 50		
Rated current	W	Data specified on the rating plate		
Climatic class	-			
Compressor type	-			
Refrigerant type	-	R290 (R455A – optional)		
Refrigerant amount	kg	0,1 (0,5 – R455A)		
GWP	-	3 (146 – R455A)		

Table 5. Undercounter refrigerators of DM and DM-S series for preparation of pizza

Dane		Catalogue number			
		94042	94048	94049	94051
Width	mm	950	1475	1975	1475
Depth	mm	700	800	800	800
Height	mm	850 / 1120	850 / 1415	840 / 1000	840 / 1000
Number of doors	pcs	2			
Number of drawers	pcs	-	-	5	-
Chamber capacity	l	2 x 85	2 x 150		
Permissible loading	kg	48	72	96	72
Max. loading of shelf	kg	25			
Interior temperature	°C	0...+10			
Power supply	V / Hz	230 / 50			
Rated current	W	Data specified on the rating plate			
Climatic class	-				
Compressor type	-				
Refrigerant type	-	R290 (R455A – optional)			
Refrigerant amount	kg	0,105 (0,5 – R455A)	0,1 (0,5 – R455A)		
GWP	-	3 (146 – R455A)			

Table 6. Undercounter refrigerators for lines OSKAR/ZORIAN

Dane		Catalogue number		
		94002-C	94003-C	94044-C
Width	mm	1395	1895	1030
Depth	mm	700		
Height	mm	850		
Number of doors	pcs	Depending on a model		
Number of drawers	pcs			
Chamber capacity	l	2 x 110	3 x 110	2 x 85
Permissible loading	kg	60	90	96
Max. loading of shelf / drawers	kg	25 / 40		
Interior temperature	°C	-2...+10		
Power supply	V / Hz	230 / 50		
Rated current	W	Data specified on the rating plate		
Climatic class	-			
Compressor type	-			
Refrigerant type	-	R290 (R455A – optional)		
Refrigerant amount	kg	0,1 (0,5 – R455A)		0,105 (0,4 – R455A)
GWP	-	3 (146 – R455A)		

Table 7. Undercounter refrigerators for lines ERYK

Dane		Catalogue number						
		94012-E	94022-E	94032-E	DM-93043-E	DM-94043.0-	DM-94043.2-	DM-94044-E

		94013-E	94023-E	94033-E		E	E	
Width	mm	1325 1825	1325 1825	1325 1825	500	500	500	952
Depth	mm	705/800						
Height	mm	900						
Number of doors	pcs	Depending on a model			1	1	-	
Number of drawers	pcs				-	-	2	
Chamber capacity	l	2 x 110 3 x 110		2 x 95 3 x 95	80	80	80	2 x 85
Permissible loading	kg	60 90			96	96	96	96
Max. loading of shelf / drawers	kg	25 / 40						
Interior temperature	°C	-2...+10	0...+10		+2...+10	-2...+10		
Power supply	V / Hz	230 / 50						
Rated current	W	Data specified on the rating plate						
Climatic class	-							
Compressor type	-							
Refrigerant type	-	R290 (R455A – optional)						
Refrigerant amount	kg	0,1 (0,5 – R455A)			0,09 (0,25 – R455A)			0,105 (0,4 –R455A)
GWP	-	3 (146 – R455A)						

Table 8. Saladette units of DM and DM-S series

Dane		Catalogue number			
		94040	94041	94047	94060-C
Width	mm	950			1030
Depth	mm	700			
Height	mm	850			
Number of doors	pcs	2			
Chamber capacity	l	2 x 85			
Permissible loading	kg	2 x 64			
Max. loading of shelf	kg	25			
Interior temperature	°C	0...+10			
Power supply	V / Hz	230 / 50			
Rated current	W	Data specified on the rating plate			
Climatic class	-				
Compressor type	-				
Refrigerant type	-	R290 (R455A – optional)			
Refrigerant amount	kg	0,105 (0,4 – R455A)			
GWP	-	3 (146 – R455A)			

Table 9. Undercounter freezers of DM and DM-S series

Dane		Catalogue number				
		95002 90502*	95003 90503*	95043.0	95043.2	95044 95044.2.2
Width	mm	1325	1825	500		950

Depth	mm	700		530		700 (600)	700
Height	mm	850		890		850	
Number of doors	pcs	Depending on a model		1	-	2	2
Number of drawers	pcs			-	2	-	-
Chamber capacity	l	2 x 110	3 x 110	80		2 x 65	2 x 65
Permissible loading	kg	100	150	36		45 (36)	45
Max. loading of shelf / drawers	kg	25 / 40					
Interior temperature	°C	-21...-14 **				-21...-14	-18...-14
Power supply	V / Hz	230 / 50					
Rated current	W	Data specified on the rating plate					
Climatic class	-						
Compressor type	-						
Refrigerant type	-	R290 (R455A – optional)					
Refrigerant amount	kg	0,13 (0,55 – R455A)		0,06 (0,225 – R455A)		0,13 (0,55 – R455A)	0,13 (0,5 – R455A)
GWP	-	3 (146 – R455A)					

* undercounter refrigerators without refrigeration unit

Table 10. Undercounter refrigerators of DM and DM-S series with refrigeration unit in base

Dane		Catalogue number			
		93043	94043.0	94043.2	94044 90044*
Width	mm	500			950
Depth	mm	530			700 (600)
Height	mm	890			850
Number of doors	pcs	1	1	-	Depending on a model
Number of drawers	pcs	-	-	2	
Chamber capacity	l	80	80	80	2 x 85 (2 x 65)
Permissible loading	kg	20	20	20	45 (36)
Max. loading of shelf / drawers	kg	25 / 40			
Interior temperature	°C	+2...10	-2...10		
Power supply	V / Hz	230 / 50			
Rated current	W	Data specified on the rating plate			
Climatic class	-				
Compressor type	-				
Refrigerant type	-	R290 (R455A – optional)			
Refrigerant amount	kg	0,09 (0,25 – R455A)			0,105 (0,4 – R455A)
GWP	-	3 (146 – R455A)			

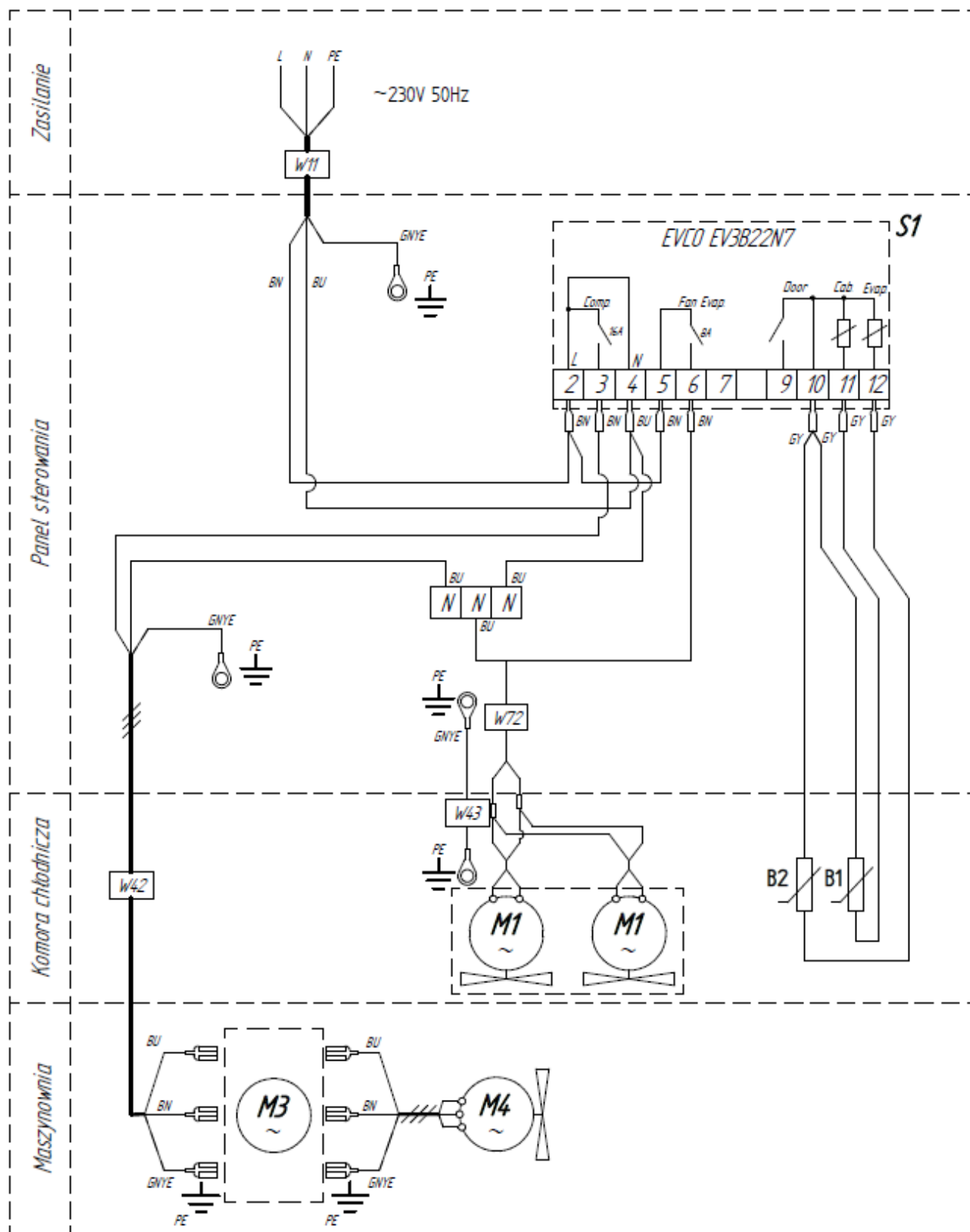
Table 11. Chilling bases

Dane		Catalogue number	
		94702	94703
Width	mm	1200	1600
Depth	mm	666	
Height	mm	620	
Number of drawers	pcs	4	6

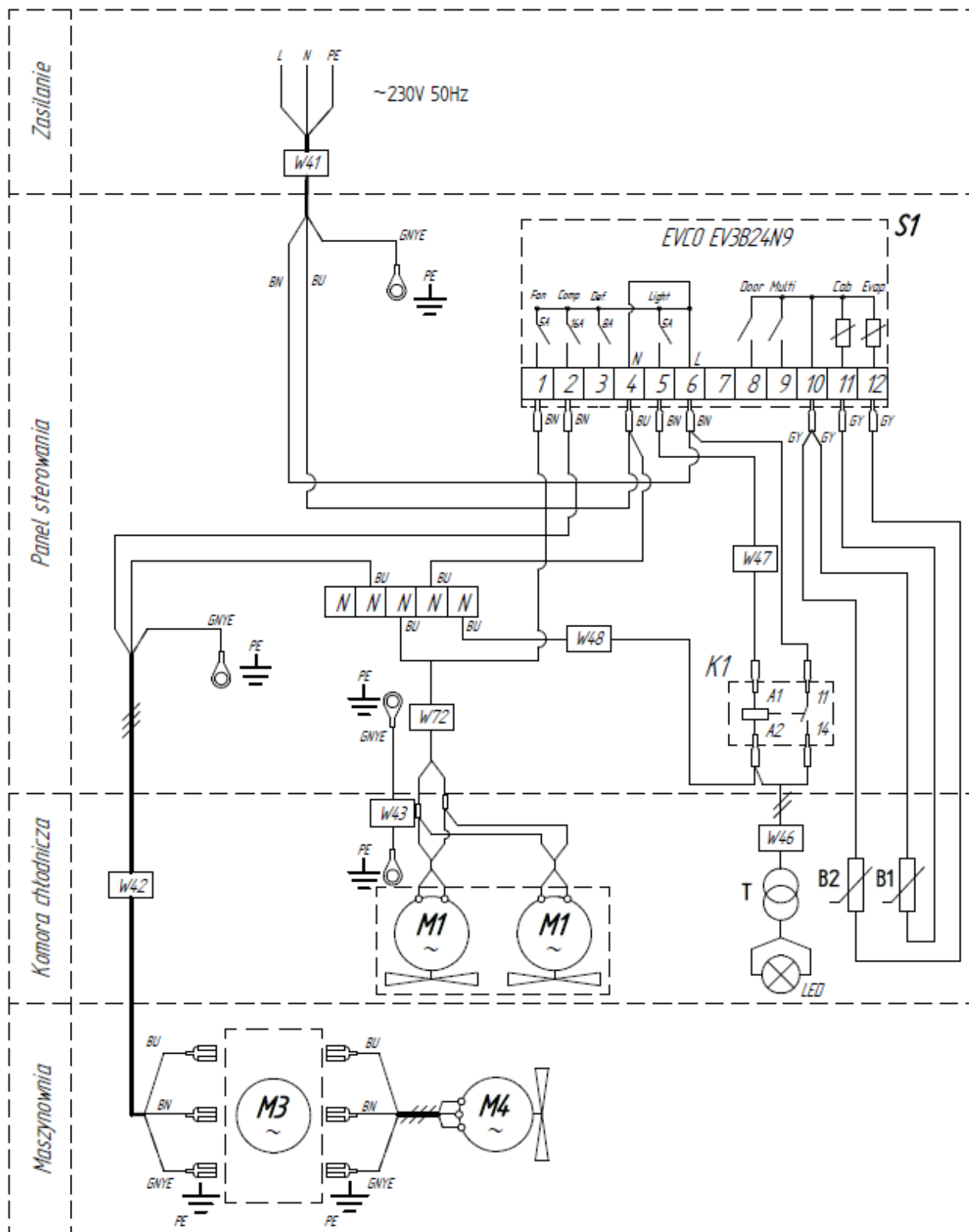
Chamber capacity	l	4 x GN 1/1 h=100	6 x GN 1/1 h=100
Permissible loading	kg	20	30
Max. loading of drawers	kg	40	
Interior temperature	°C	-2...10	
Power supply	V / Hz	230 / 50	
Rated current	W	Data specified on the rating plate	
Climatic class	-		
Compressor type	-		
Refrigerant type	-	R290 (R455A – optional)	
Refrigerant amount	kg	0,08 (0,2 – R455A)	
GWP	-	3 (146 – R455A)	

WIRING DIAGRAMS

***Applies to the following products: cooling tables with machine-room on the side, without lighting
DM-(S-)9400x, DM-(S-)9100x, DM-(S-)94048, DM-94049, DM-94051, DM-9401x-E, DM-9402x-E,
DM-9406x – with controller EVCO EV3B22N7***



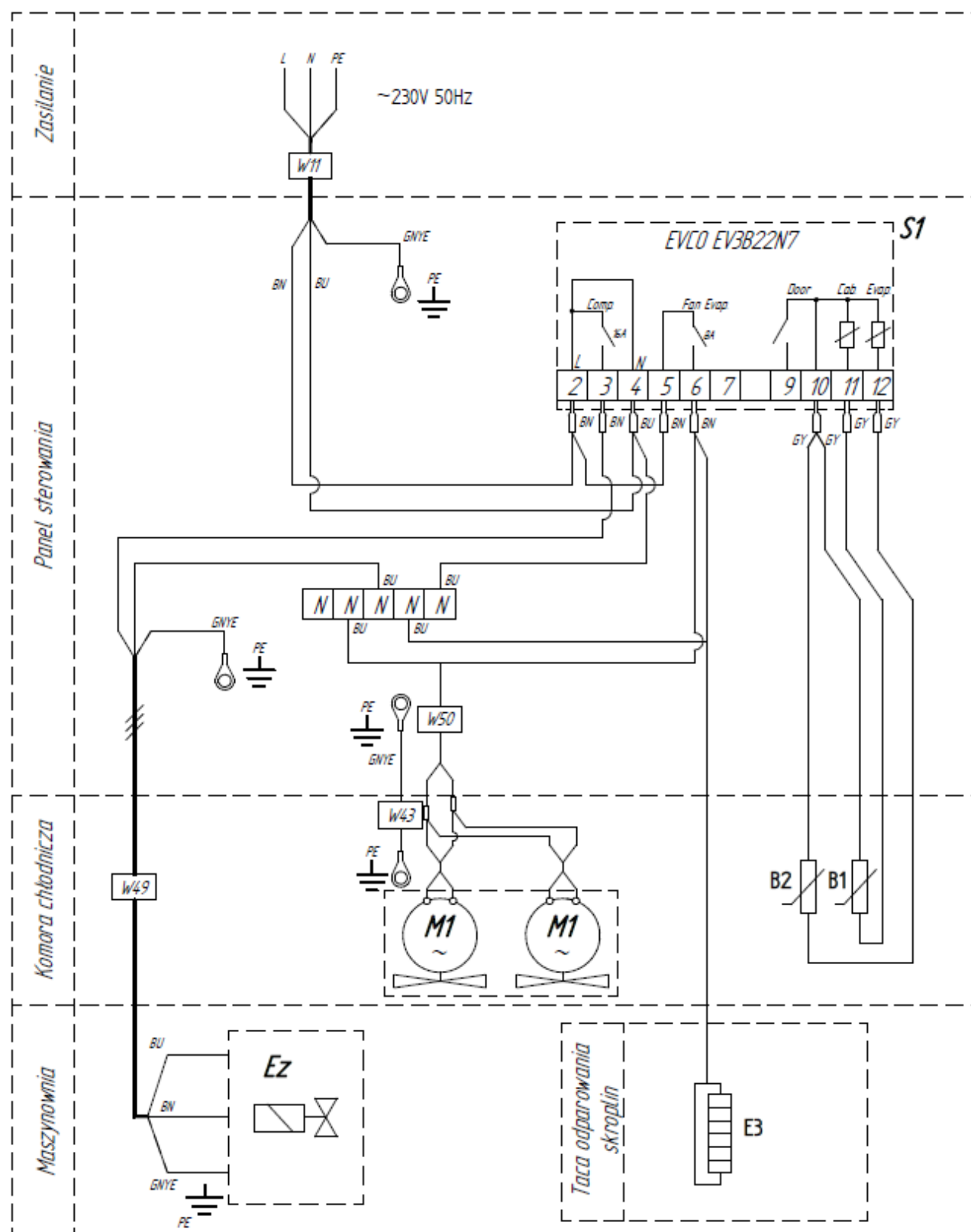
Applies to the following products: cooling tables with machine-room on the side, with lighting
DM-(S-)9400x, DM-(S-)9100x, DM-(S-)94048, DM-94049, DM-94051, DM-9401x-E, DM-9402x-E
– with controller EVCO EV3B24N9



Applies to the following products: cooling tables without refrigeration unit, with machine-room on the side, without lighting

DM-(S-)90002, DM-(S-)90044, DM-(S-)90401, DM-(S-)90407

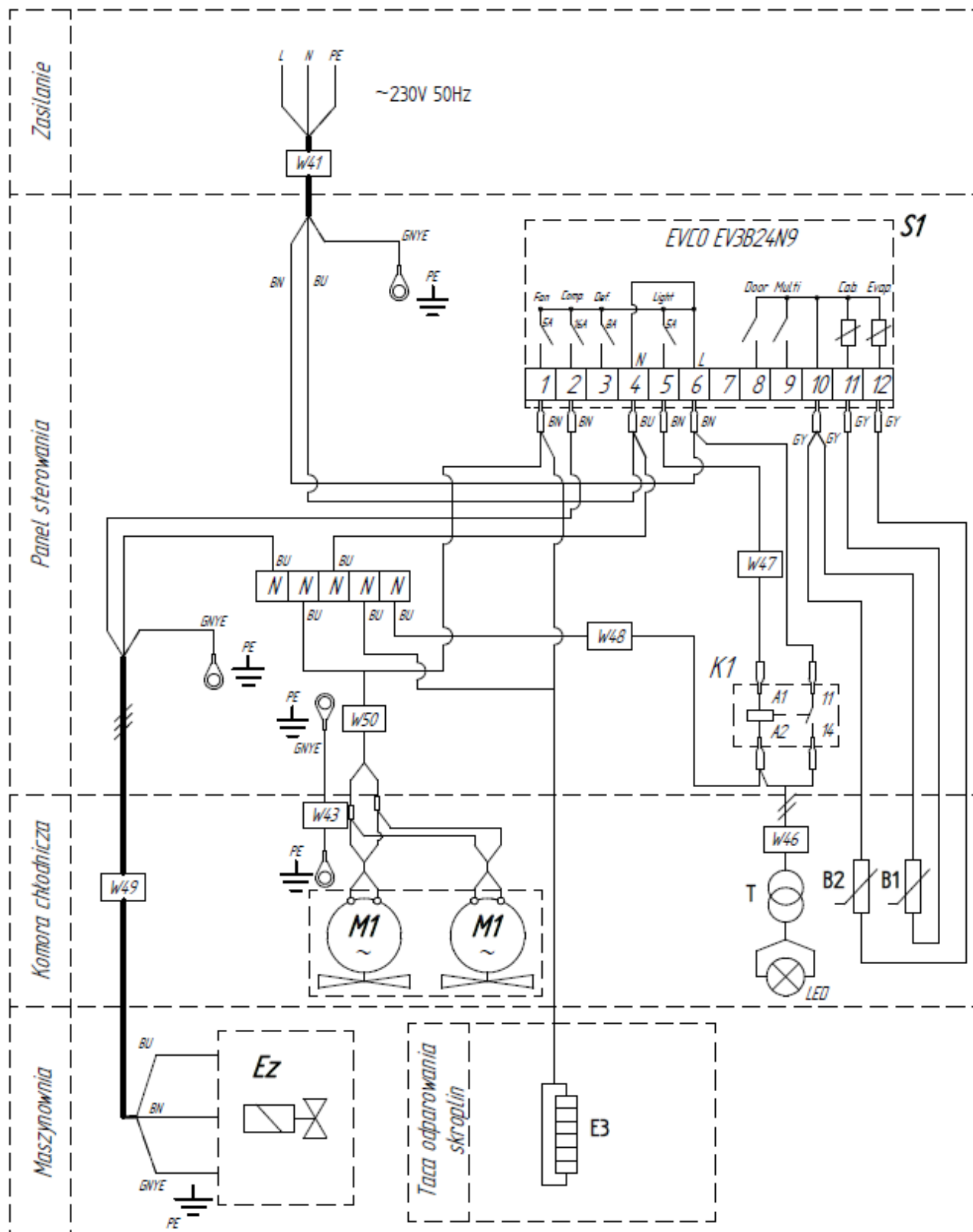
– with controller EVCO EV3B22N7



Applies to the following products: cooling tables without refrigeration unit, with machine-room on the side, with lighting

DM-(S-)90002, DM-(S-)90401, DM-(S-)90407

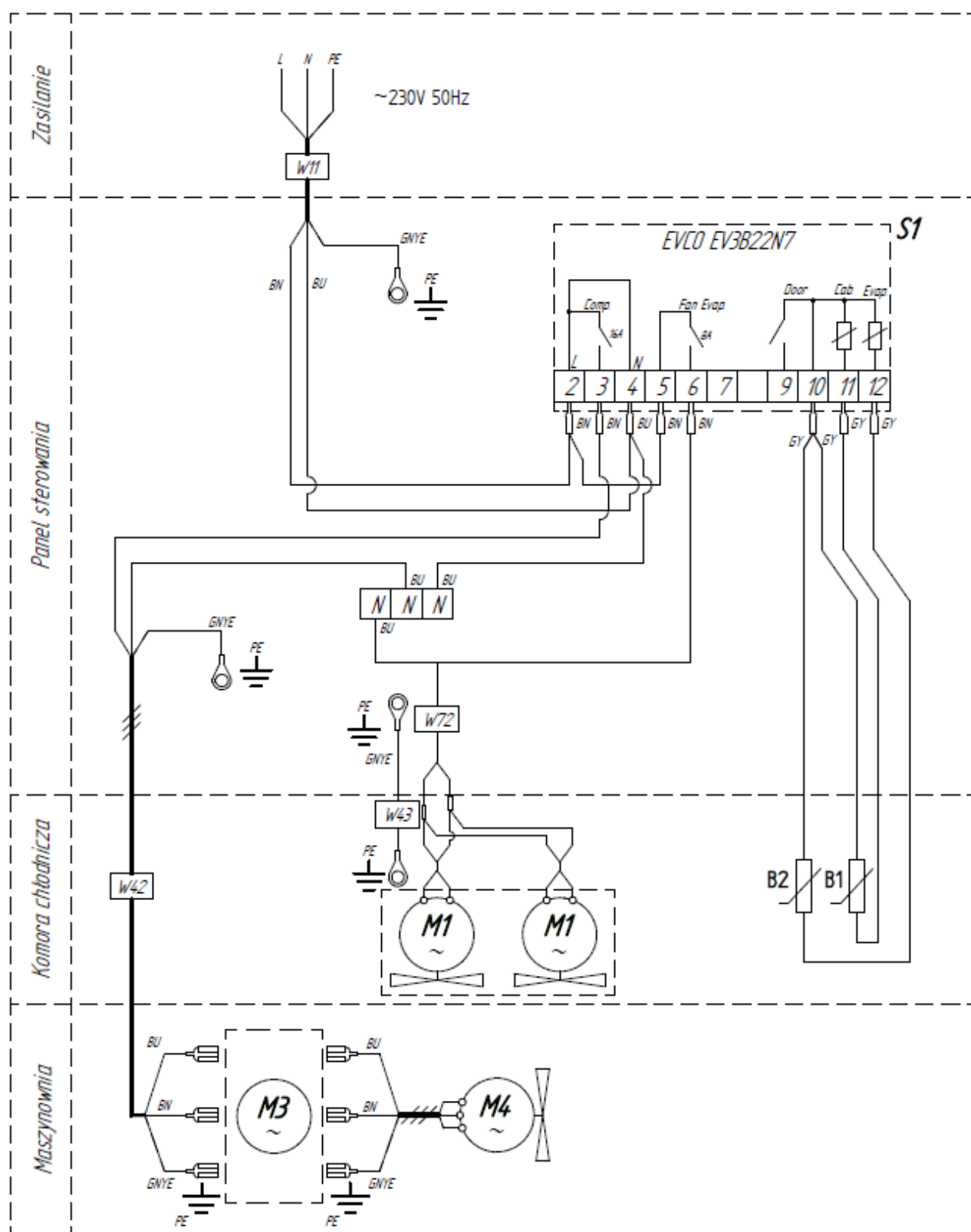
– with controller EVCO EV3B24N9



Applies to the following products: cooling tables, salad counters with machine-room on the bottom

DM-94040, DM-94041, DM-(S-)94042, DM-(S-)94044, DM-94047, DM-(S-)94060

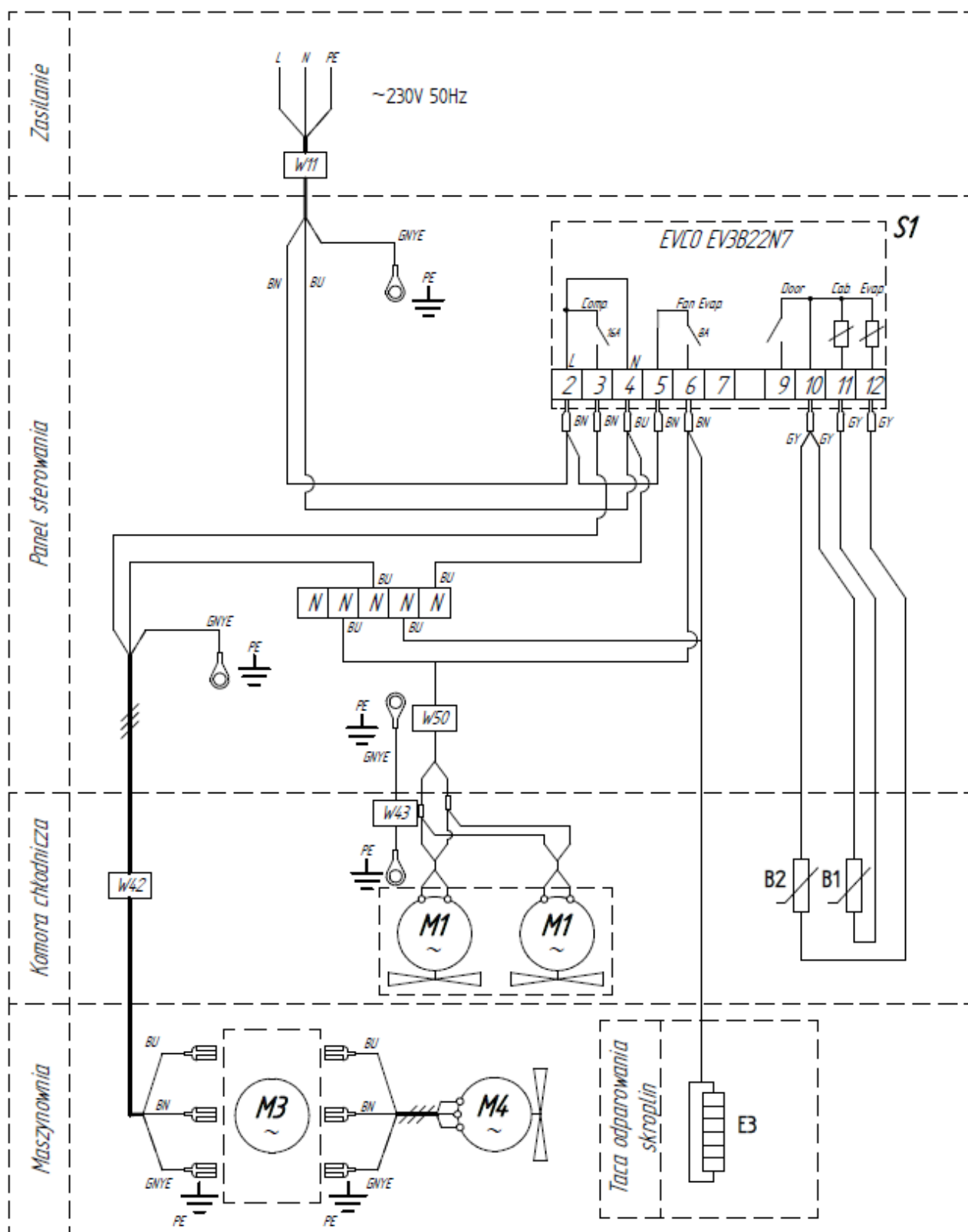
– with controller EVCO EV3B22N7



Applies to the following products: cooling tables with machine-room on the bottom

DM-S-93043, DM-93043-E, DM-94043.0-E, DM-94043.2-E, DM-(S)94043.0, DM-(S)94043.2

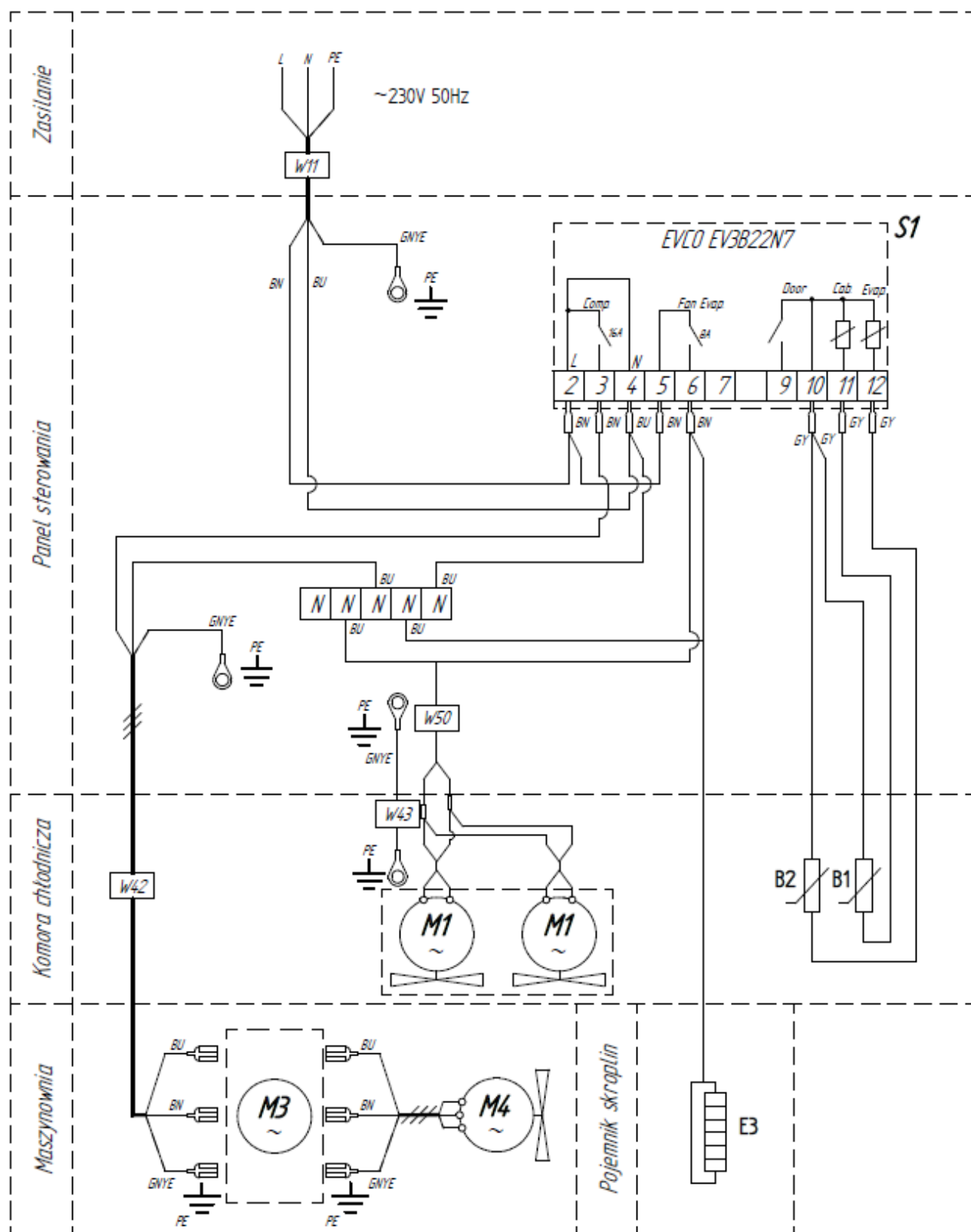
– with controller EVCO EV3B22N7



Applies to the following products: cooling tables with chilling vat, without lighting

DM-9403x-E

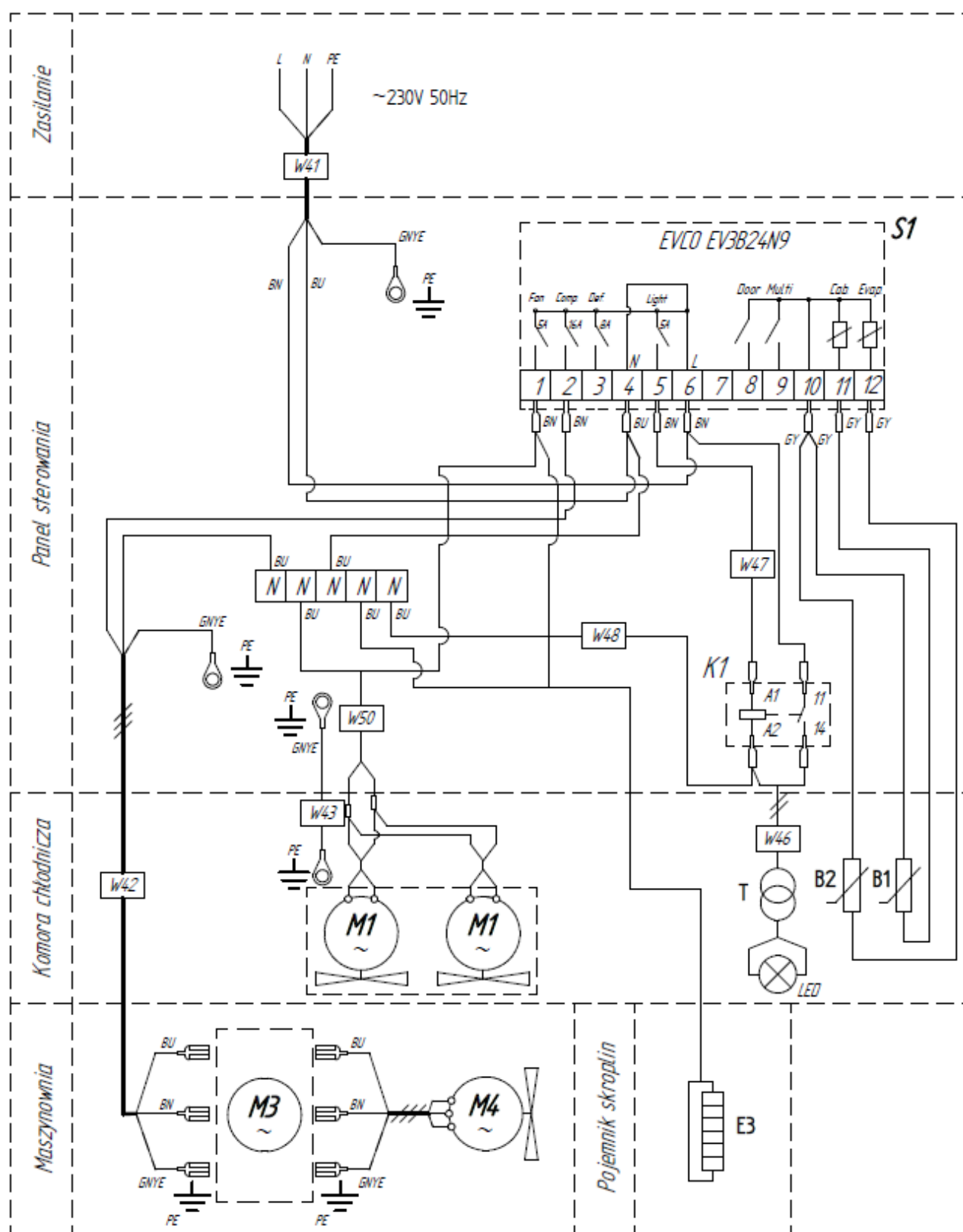
– with controller EVCO EV3B22N7



Applies to the following products: cooling tables with chilling vat, with lighting

DM-9403x-E

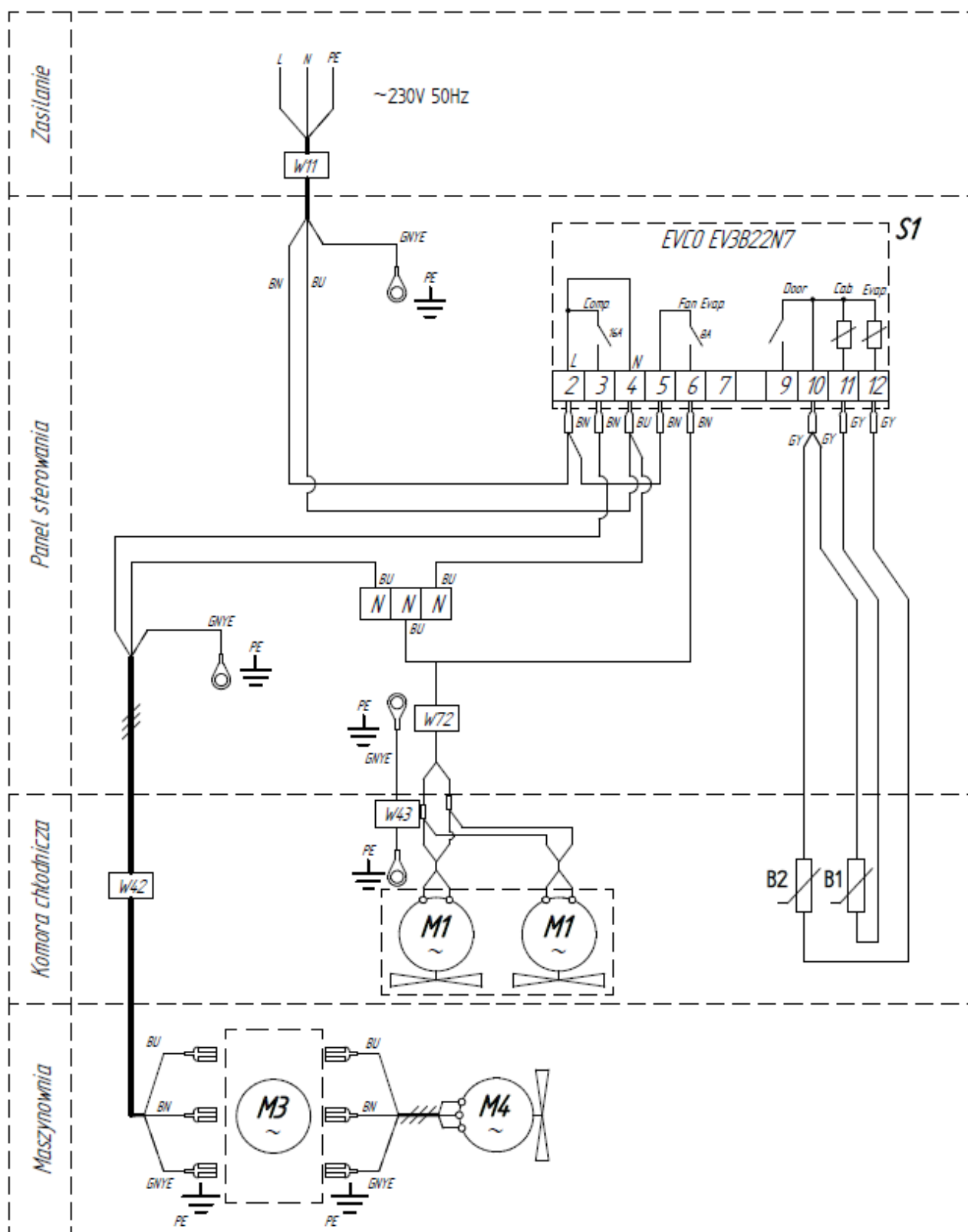
– with controller EVCO EV3B24N9



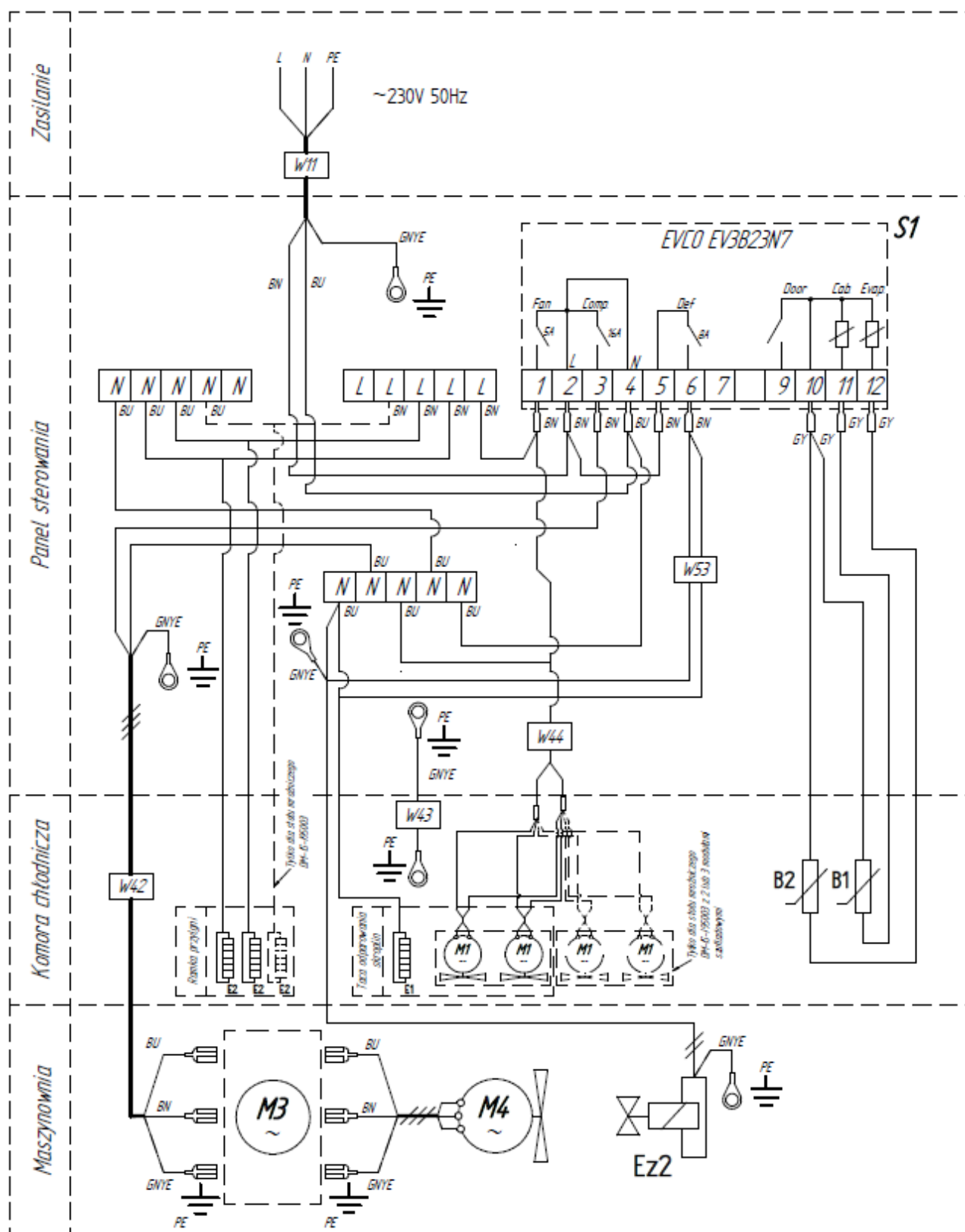
Applies to the following products: cooling bases

DM-9470x, DM-9476x,

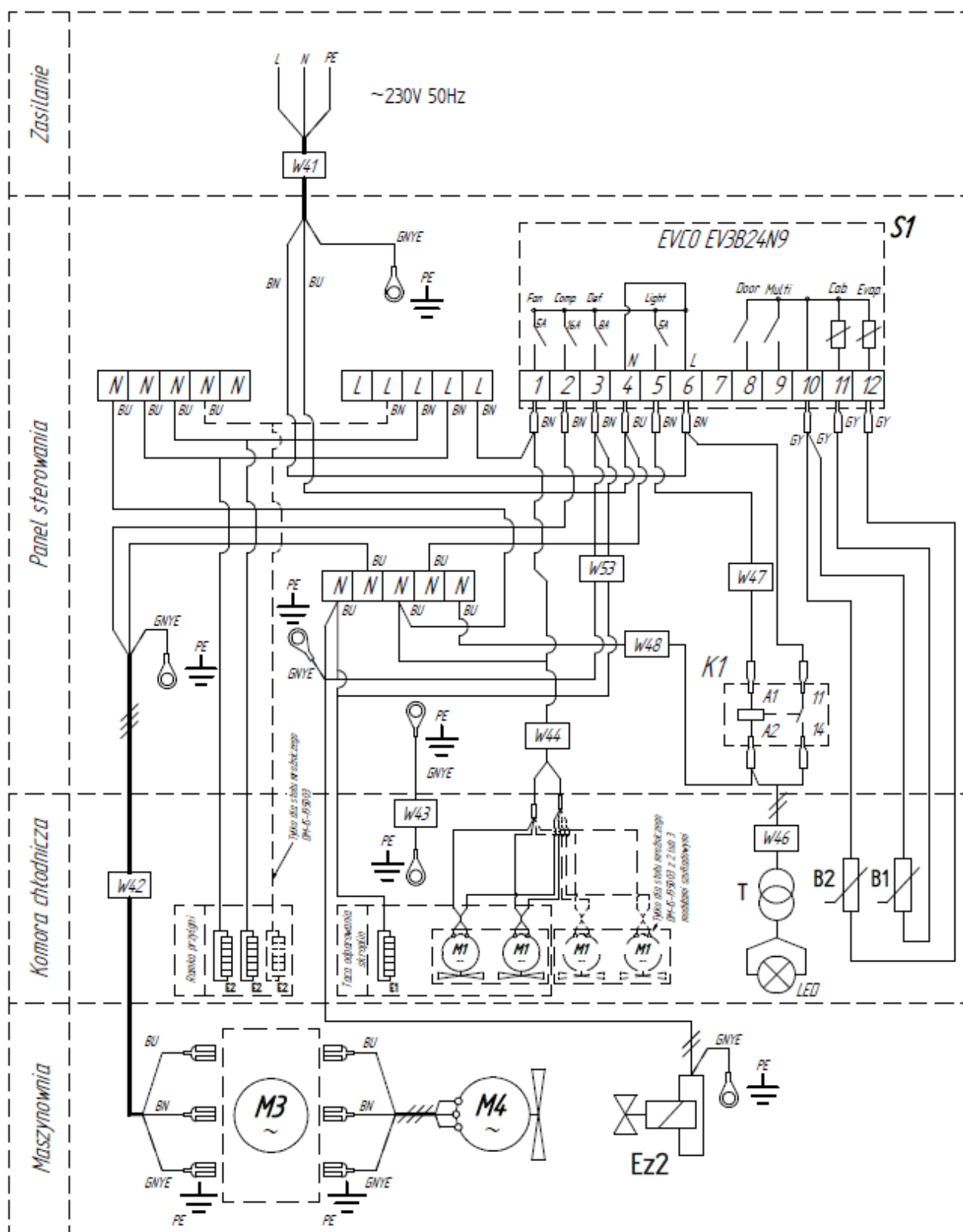
– with controller EVCO EV3B22N7



Applies to the following products: freezing tables with machine-room on the side, without lighting
 DM-(S-)9500x
 – with controller EVCO EV3B23N7



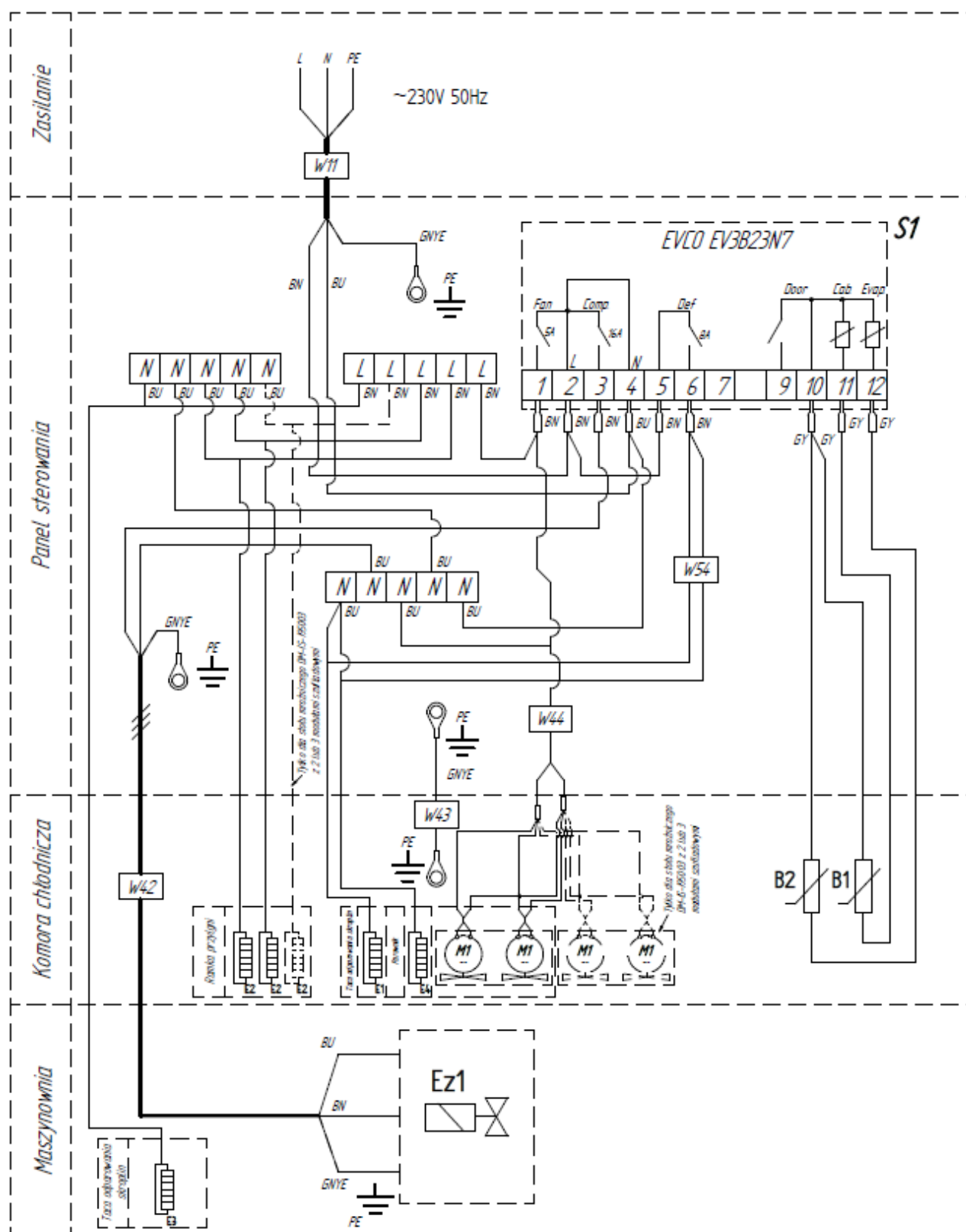
Applies to the following products: freezing tables with machine-room on the side, with lighting
DM-(S-)9500x
– with controller EVCO EV3B24N9



Applies to the following products: freezing tables without refrigeration unit, with machine-room on the side, without lighting

DM-(S-)9050x

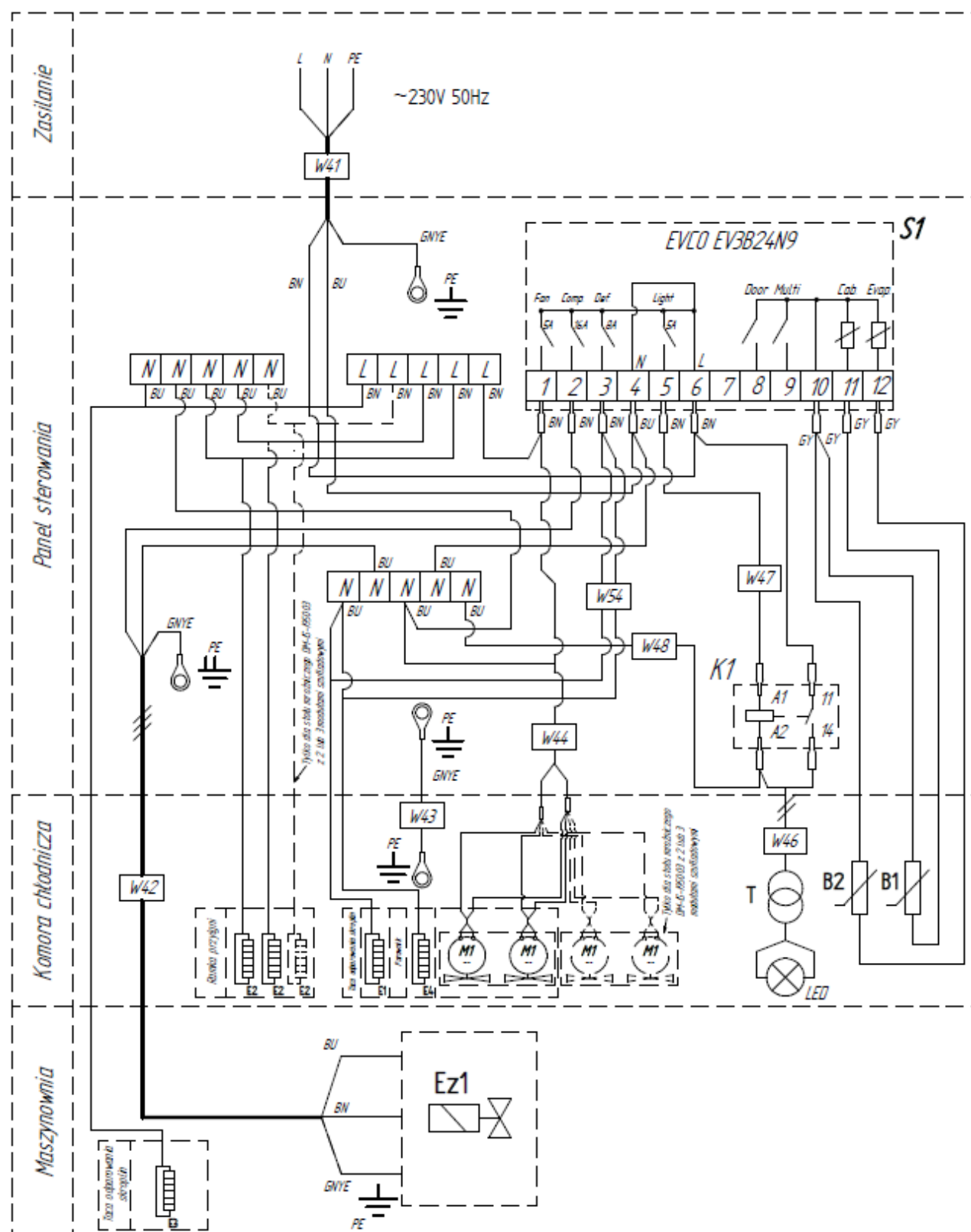
– with controller EVCO EV3B23N7



Applies to the following products: freezing tables without refrigeration unit, with machine-room on the side, with lighting

DM-(S-)9050x

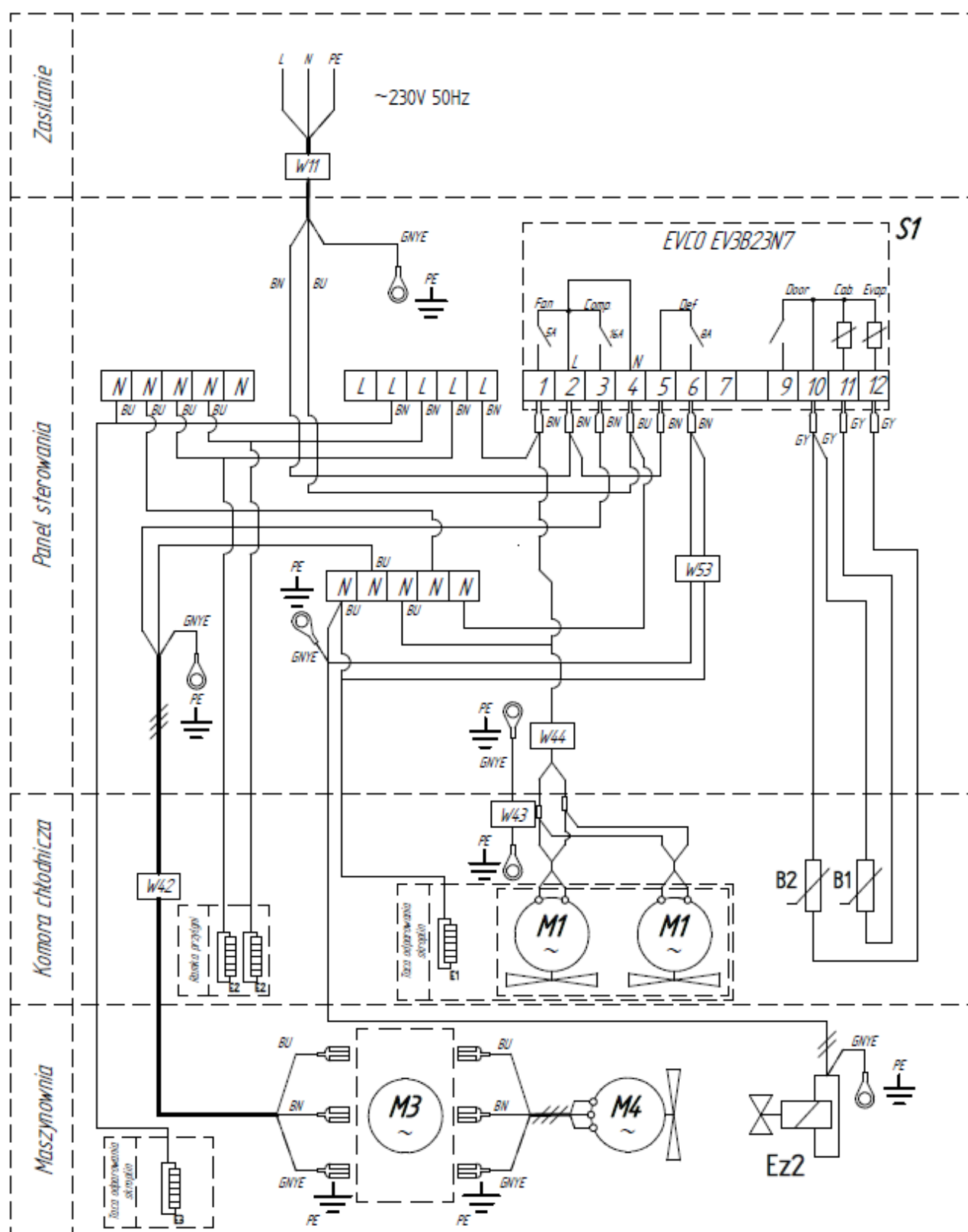
– with controller EVCO EV3B24N9



Applies to the following products: freezing tables with machine-room on the bottom

DM-(S-)95044, DM-(S-)95044.2.2

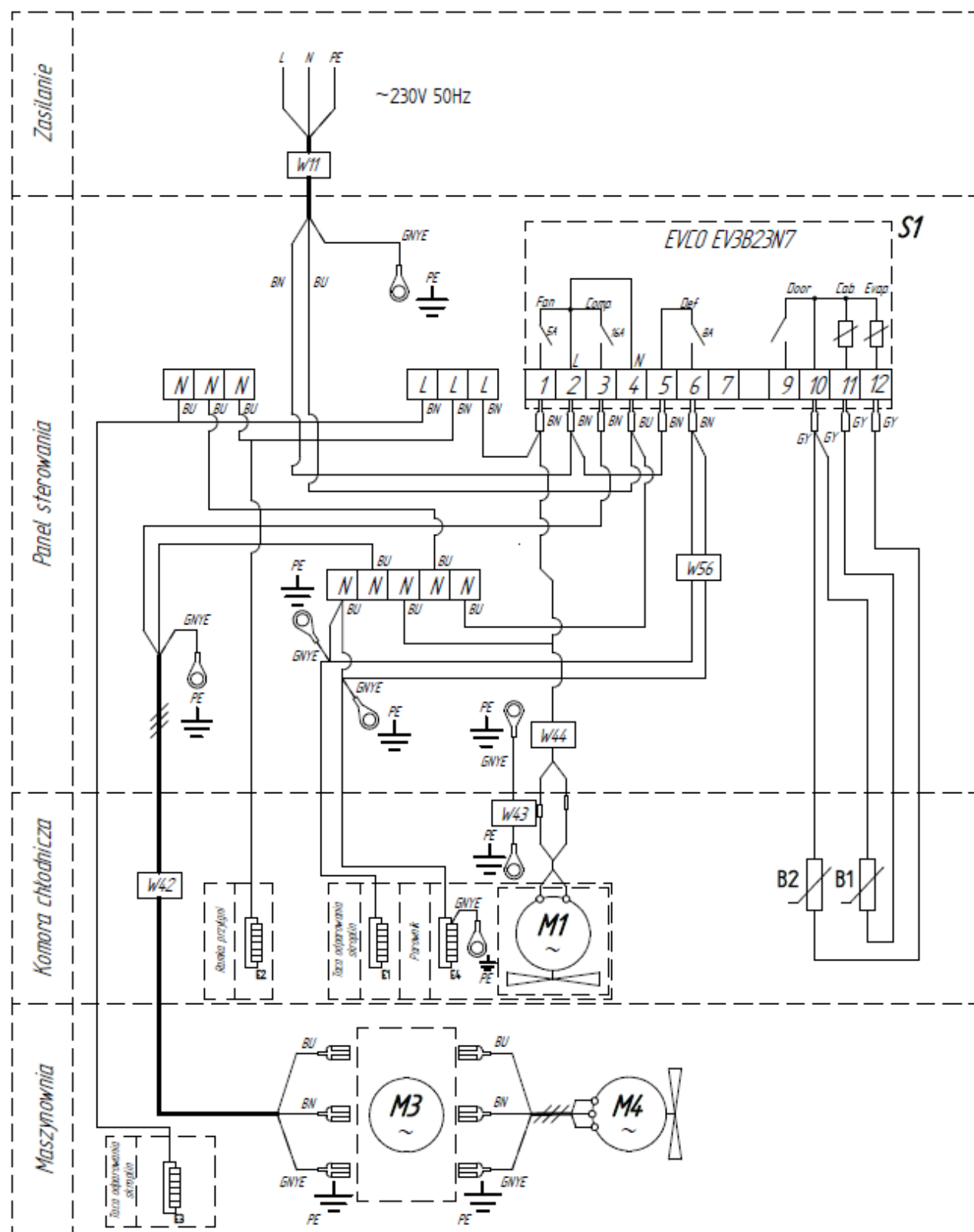
– with controller EVCO EV3B23N7

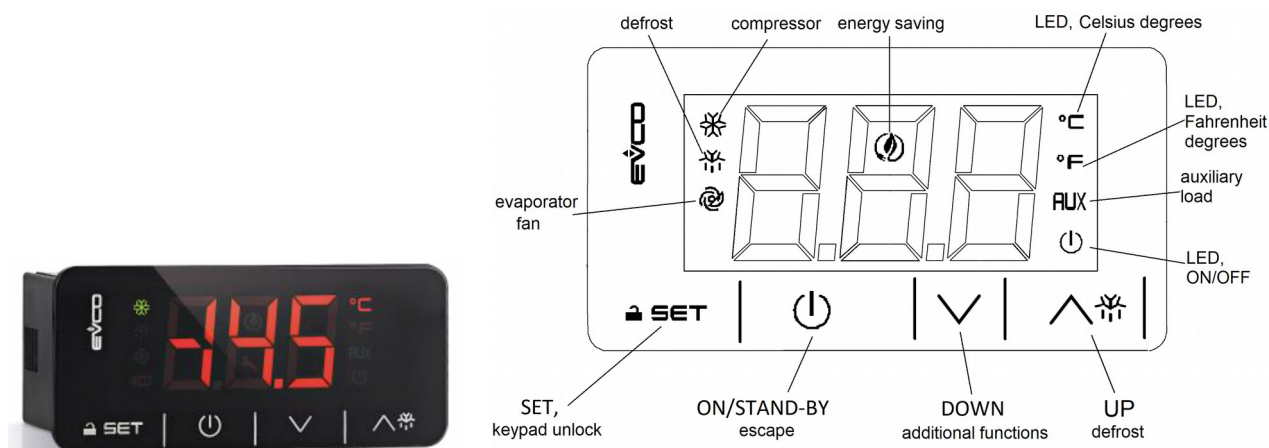


Applies to the following products: freezing tables with machine-room on the bottom

DM-P-95042, DM-S-95043.0, DM-S-95043.2

– with controller EVCO EV3B23N7





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, the display extinguishes and  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 EV3B24N9 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: <ul style="list-style-type: none"> • check connection of evaporator sensor to controller and cables • press any button to clear the alarm Operation: <ul style="list-style-type: none"> • device continues normal operation
Pr1	Chamber sensor fault Solution: <ul style="list-style-type: none"> • check connection of the sensor to controller and cables and chamber temperature Operation: <ul style="list-style-type: none"> • compressor on (operation time) will depend on factory-set parameters • defrosting will not start
Pr2	Evaporator sensor fault Solution: <ul style="list-style-type: none"> • check connection of the sensor to controller and cables and evaporator temperature Operation: <ul style="list-style-type: none"> • defrosting time will equal time in factory-set parameter

RATING PLATE

	Data concerning the producer		Place for product designation
<hr/>			
Name and type of product	<input type="text"/>		
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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