MAINS

CHECKOUT CONTROLLERS

PRODUCT CATALOGUE

We offer reliable construction, which are produced from the components. Our device is durable, fail-safe, and easy to assemble and work with. Below, there are a few words listed about its parameters.

1. Casing - made from ABS material, the thickness of its many parts exceeds 3 millimeters, thanks to which it will not be damaged easily.
2. The front panel is thick and hard, which allows mounting a controller with four screws that guarantee its steadiness.
3. Keyboard - made especially for us by the expert in this field, namely Qwerty. It is produced from 3M membranes that assure life counted in millions of switches.
4. Graphic design - allows creating the individual image of our controller according to costumer request.
5. Safety button - we use the highest quality of switches produced by ABB and EAO that are experts in electric accessories.
6. On/off switches - are highly reliable.
7. PBC - is printed on thick glass laminate with thick copper layer. It is produced according to the strictest norms.
8. Electronic components -are always of the highest quality in order to assure the longest possible life.
9. Connectors - endurance of high voltage socket is 16A/250V, which exceeds the normal height of voltage during regular operation. Different colours of connectors ease of assembly.
10. Photocell - is a construction worked out by us. It does not require any adjustment and is easy to assemble. It has high tolerance for axis deviation between transmitter and receiver. Its life span is over 10 years.
11. Our controllers have different kinds of inputs and outputs. They improve the safety and make the work at checkouts more ergonomic.
- input for motor cover sensor; protects against drawing objects under the cover
- input for thermal motor sensor; ensure protection against overheating
- output for controlling of checkout lighting; for comfort in work
- output for controlling of checkout lights indicating its work
- other necessary outputs such as output for controlling a bell, etc.

12. Outputs for main belts motors mostly have soft start option, which assure falling tall objects (ex. bottles).
13. Compact construction allows fast assembly of a controller in checkout box. Motor capacitors are already mounted inside a controller. Small size of casing does not require much space in checkout box.
14. Each controller has software that facilitates first installation in checkout box and allows fast checking of peripheries such as photocells, footswitches and sensors.

The 14 points listed are only the main features that characterize our devices. The final effects depend on teamwork of well-qualified employees who do their best to satisfy our costumers. Our manufacturing process undergoes in accordance with ISO9001. In the beginning of our company existence, we manufactured 1000-1500 devices annually. Nowadays, we manufacture 1000-2000 devices monthly. It means that there are thousands of building in which there are checkout boxes with Mains Controllers. Our devices are used not only in shopping malls but also in small shops in housing estate. You can see our controllers in the biggest chains of supermarkets all around the world.

The checkout box producers we guarantee the continuity of delivery, the most reasonable prices, and time saving consumed by controller assembly in checkout box.

Our products have 30 months warranty, we conduct professional service of checkout box controllers.

Post-warranty repairs of our controllers we can conduct within 24 hours (shipment of fixed controller is the next day after their delivery).

We believe in quality and reliability. Please, familiarize yourself with our offer.

Controller Mv4k1/2

This controller is designed for automatic operation or for operation in manual control mode with one or two conveyor belts

Two belts, two lights, double set of sensors.

Basic usage parameters:

- belt stopping with the use of a photocell
- control of a belt 1 with a footswitch 1
- control of a belt 2 with a footswitch 2
- automatic stopping of an empty belt
- two inputs for motor cover sensor
- inputs for motor thermal sensor
- two outputs for signal light or other lighting
- motor soft start of first conveyor belt
  (bottles do not fall while the belt starts running)
- setting key for the signal light work placed on a front keyboard
- setting of work time for a second belt
- photocell included
- controller integrated into one module
- mounting in the checkout box case or attached with a handle

Specifications

Power supply:	**220-240V AC 50/60Hz**
Max. power consumption:	**700VA**
Max. motor 1 power:	**200VA**
Max. motor 2 power:	**200VA**
Max. lamp 1 power:	**200VA**
Max. lamp 2 power:	**200VA**
Thermal sensor type:	**NC**
Inductive sensor type:	**npn, DC 12V**
Photocell type:	**Mains 940nm**
Operating temperature:	**5ºC～+40ºC**
Operating relative humidity (non-condensing):	**10%～80%**
Dimensions:	**178x55x224mm**
Mass (1 motor):	**630g**
Mass (2 motors):	**670g**

Controller Mv4k future

This controller is designed for automatic operation or for operation in manual control mode with one conveyor belt.

It is the newest version of Mv4k enriched with inputs for thermal sensors and an inductive motor.

Basic usage parameters:

- belt stopping with the use of a photocell
- control of a belt with a footswitch
- automatic stopping of an empty belt
- input for motor cover sensor
- input for motor thermal sensor
- two outputs for signal light or other lighting
- motor soft start (bottles do not fall while the belt starts running)
- setting key for the signal light work placed on a front keyboard
- photocell included
- controller integrated into one module
- mounting in the checkout box case or attached with a handle

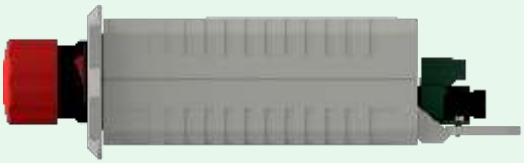
Specifications

Power supply:	**220-240V AC 50/60Hz**
Max. power consumption:	**550VA**
Max. motor power:	**200VA**
Max. lamp 1 power:	**100VA**
Max. lamp 2 power:	**100VA**
Thermal sensor type:	**NC**
Inductive sensor type:	**npn, DC 12V**
Photocell type:	**Mains 940nm**
Operating temperature:	**5ºC~+40ºC**
Operating relative humidity (non-condensing):	**10%~80%**
Dimensions:	**178x55x155mm**
Mass:	**615g**

Controller Mv7n

This controller is designed for automatic operation or for operation in manual control mode with one conveyor belt.

A simplified model of the controller Mv4.
Only the basic functions.



Basic usage parameters:

- belt stopping with the use of a photocell
- control of a belt with a footswitch
- automatic stopping of an empty belt
- input for motor cover sensor
- output for signal light
- output for operation of checkout box lighting
- controller integrated into one module
- photocell included
- mounting in the checkout box case or attached with a handle

Specifications

Power supply:	**220-240V AC 50/60Hz**
Max. power consumption:	**450 VA Max.**
Motor power:	**200VA**
Max. lamp 1 power:	**100VA**
Max. lamp 2 power:	**100VA**
Thermal sensor type:	**NC**
Inductive sensor type:	**npn, DC 12V**
Photocell type:	**Mains 940nm**
Operating temperature:	**5ºC~+40ºC**
Operating relative humidity (non-condensing):	**10%~80%**
Dimensions:	**178x55x155mm**
Mass:	**565g**

Controller Mv4x/1 modbus

Programmable controller with led display. It works with one or more motors of the checkout box. The controller has the option of belt reversing, and a built-in Modbus port that allows the cooperation with inverters.

The controller can be connected to the Mv-4A module, which allows connection of additional single-phase motor, with the option of belt reversing. The MV-4A module is equipped with an additional set of photocells and sensors. It can be connected to the Mv-4B module, which enables the operation with a three-phase motor with the belt reversing option.

Basic usage parameters:

- DISPLAY - clear interface for communication with the user (it displays the current status, identifies alarms, and shows the controller working time)
- SOFT START of the motor (bottles do not fall while the motor starts running)
- REVERSE of the motor - possibility of reversing the belt by using the hand button or footswitch
- MODBUS - possibility of cooperation with inverters (optional)
- possibility of cooperation with additional modules Mv-4A and Mv-4B that extend the controller with additional single-phase motor or three-phase motor.
- TIME OUT of the belt - automatic stop of the belt when the belt is empty
- automatic stop of the belt by the photocell
- automatic control of auxiliary belt
- possibility of manual belt control, by using the footswitch
- safety switch
- input of the motor thermal sensor
- two inputs of additional sensors - configurable as the inputs of motor cover lift sensors, or as an external reversing button
- control possibility of three signal lamps or three lighting lamps
- possibility of ring control
- possibility to change the display's lighting brightness
- TEST function - enables the test of all installed sensors
- PAS SERVICE - function that enables the adjustment of the conveyor belt
- possibility of advanced device configuration by the installer and possibility of ordering a completely configured device
- possibility to save the 6 configurations of working parameters in the controller

Specifications

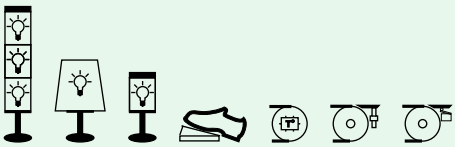
Power supply:	**220-240V AC 50/60Hz**
Max. power consumption:	**750VA**
Max. motor 1 power:	**200VA**
Max. lamp 1 power:	**75VA**
Max. lamp 2 power:	**75VA**
Max. lamp 3 power:	**75VA**
Thermal sensor type:	**NC**
Inductive sensor type:	**npn, DC 12V**
Photocell type:	**Mains 940nm**
Operating temperature:	**5ºC~+40ºC**
Operating relative humidity (non-condensing):	**10%~80%**
Dimensions:	**178x55x224mm**
Mass:	**720g**

Controller Mv4x/2

This programmable controller equipped with the display, is used to control two motors of the checkout box.
Its special feature is the ability of connection to the Mv-4A module, which gives us the connection of a third motor, with the possibility of reversing the belt, and has the inputs for additional photocells and sensors.
The controller can also work with the Mv-4B module supporting a three-phase motor.

Basic usage parameters:

- DISPLAY - clear interface for communication with the user (it displays the current status, identifies alarms, and shows the controller working time)
- SOFT START of the motor (bottles do not fall while the motor starts running)
- possibility of cooperation with additional modules Mv-4A and Mv-4B that extend the controller with additional single-phase motor or three-phase motor.
- REVERSE of additional module motor - possibility of reversing the belt of additional module Mv-4A or Mv-4B that by using the hand button
- TIME OUT of the belt - automatic stop of the belt when the belt is empty
- automatic stop of the belt by the photocell
- automatic control of auxiliary belt
- possibility of manual belts control, by using the footswitches
- safety switch
- inputs of motors thermal sensors
- two inputs of additional sensors - configured in the service menu as the inputs of the motor cover lift sensors, for example
- control possibility of three signal lamps or three lighting lamps
- possibility of ring control
- possibility to change the display's lighting brightness
- TEST function - enables the test of all installed sensors
- PAS SERVICE - function that enables the adjustment of the conveyor belt
- possibility of device configuration by the installer and possibility of ordering a completely configured device
- possibility to save permanently the 6 configurations of working parameters in the controller



Specifications

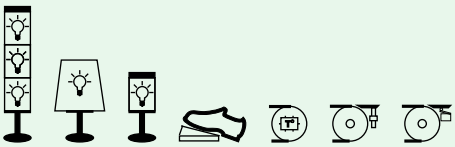
Power supply:	**220-240V AC 50/60Hz**
Max. power consumption:	**950VA**
Max. motor 1 power:	**200VA**
Max. motor 2 power:	**200VA**
Max. lamp 1 power:	**75VA**
Max. lamp 2 power:	**75VA**
Max. lamp 3 power:	**75VA**
Thermal sensor type:	**NC**
Inductive sensor type:	**npn, DC 12V**
Photocell type:	**Mains 940nm**
Operating temperature:	**5ºC~+40ºC**
Operating relative humidity (non-condensing):	**10%~80%**
Dimensions:	**178x55x275mm**
Mass (2 motors):	**910g**

Controller Mv4x/3

The controller which is used to control one motor of the box. It allows easy configuration of operating parameters and saving these parameters in the six memory banks. Thanks to this, we can choose which set of parameters settings we want to use, without fear of losing the current configuration.

Basic usage parameters:

- DISPLAY - clear interface for communication with the user (it displays the current status, identifies alarms, and shows the controller working time)
- SOFT START of the motor (bottles do not fall while the motor starts running)
- TIME OUT of the belt - automatic stop of the belt when the belt is empty (working time is configured in the service menu)
- automatic stop of the belt by the photocell
- possibility of manual belt control, by using the footswitch
- safety switch
- input of motor thermal sensor
- two inputs of additional sensors - configured in the service menu as the inputs of the motor cover lift sensors, for example
- possibility to connect the external photocell
- control possibility of three signal lamps or three lighting lamps (the control is configured in the service menu)
- possibility of ring control
- possibility to change the display's lighting brightness
- TEST function - enables the test of all installed sensors
- PAS SERVICE - function that enables the adjustment of the conveyor belt
- possibility of device configuration by the installer and possibility of ordering a completely configured device
- possibility to save the 6 configurations of working parameters in the memory



Specifications

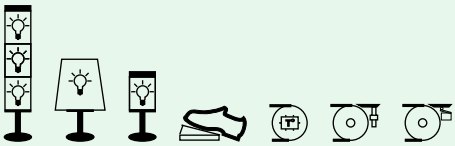
Power supply:	**220-240V AC 50/60Hz**
Max. power consumption:	**450VA**
Max. motor 1 power:	**200VA**
Max. lamp 1 power:	**75VA**
Max. lamp 2 power:	**75VA**
Max. lamp 3 power:	**75VA**
Thermal sensor type:	**NC**
Inductive sensor type:	**npn, DC 12V**
Photocell type:	**Mains 940nm**
Operating temperature:	**5ºC~+40ºC**
Operating relative humidity (non-condensing):	**10%~80%**
Dimensions:	**178x55x224mm**
Mass:	**635g**

Controller Mv4x/4

Programmable checkout controller. Controls a three-phase motor. Works with the following modules:

a) Mv-4A module to which we connect a single-phase motor, an additional photocell and sensors.

b) Mv-4B module supporting an additional three-phase motor. This module has the belt reversing function.



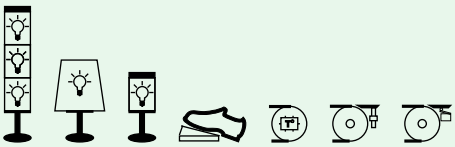
Basic usage parameters:

- DISPLAY - clear interface for communication with the user (it displays the current status, identifies alarms, and shows the controller working time)
- REVERSE of additional module motor - possibility of reversing the belt of additional module
- works with additional modules Mv-4A and Mv-4B that extend the controller with additional single-phase motor or three-phase motor.
- TIME OUT of the belt - automatic stop of the belt when the belt is empty
- automatic stop of the belt by the photocell
- automatic control of auxiliary belt
- possibility of manual belt control, by using the footswitch (each of the conveyor belts)
- safety switch
- input of thermal sensor for each motor (configured in the menu)
- two inputs of additional sensors - configured in the service menu as the inputs of the motor cover lift sensors, for example
- control possibility of three signal lamps or three lighting lamps (the control is configured)
- possibility of ring control
- possibility to change the display's lighting brightness
- TEST function - enables the test of all installed sensors
- PAS SERVICE - function that enables the adjustment of the conveyor belt
- possibility of device configuration by the installer and possibility of ordering a completely configured device - the possibility to save the 6 configurations of working parameters in the controller

Specifications

Power supply:	**3X400V AC 50/60Hz**
Max. power consumption:	**730VA**
Max. motor 1 power:	**200VA**
Max. lamp 1 power:	**75VA**
Max. lamp 2 power:	**75VA**
Max. lamp 3 power:	**75VA**
Thermal sensor type:	**NC**
Inductive sensor type:	**npn, DC 12V**
Photocell type:	**Mains 940nm**
Operating temperature:	**5ºC~+40ºC**
Operating relative humidity (non-condensing):	**10%~80%**
Dimensions:	**178x55x275mm**
Mass:	**805g**

Controller Mv4x/4 for 3 motors



The checkout controller, that controls three checkout motors. Works with the following modules:

a) Mv-4A module to which we connect the additional single-phase motor, an additional photocell and sensors.

b) Mv-4B module supporting an additional three-phase motor. This module has the belt reversing function.

Basic usage parameters:

- DISPLAY - clear interface for communication with the user (it displays the current status, identifies alarms, and shows the controller working time)
- SOFT START of the motor (bottles do not fall while the motor starts running)
- REVERSE of additional module motor - possibility of reversing the belt of additional module
- possibility of cooperation with additional modules Mv-4A and Mv-4B that extend the controller with additional single-phase motor or three phase motor.
- TIME OUT of the belt - automatic stop of the belt when the belt is empty
- automatic stop of the belt by the photocell
- automatic control of auxiliary belt
- possibility of manual belt control, by using the footswitch (each of the conveyor belts)
- safety switch
- input of thermal sensor for each motor (configured)
- two inputs of additional sensors - configured in the service menu as the inputs of the motor cover lift sensors, for example
- control possibility of three signal lamps or three lighting lamps
- possibility of ring control
- possibility to change the display's lighting brightness
- TEST function - enables the test of all installed sensors
- PAS SERVICE - function that enables the adjustment of the conveyor belt
- possibility of device configuration by the installer and possibility of ordering a completely configured device
- possibility to save the 6 configurations of working parameters in the controller

Specifications

Power supply:	**220-240V AC 50/60Hz**
Max. power consumption:	**1130VA**
Max. motor 1 power:	**200VA**
Max. motor 2 power:	**200VA**
Max. motor 3 power:	**200VA**
Max. lamp 1 power:	**75VA**
Max. lamp 2 power:	**75VA**
Max. lamp 3 power:	**75VA**
Thermal sensor type:	**NC**
Inductive sensor type:	**npn, DC 12V**
Photocell type:	**Mains 940nm**
Operating temperature:	**5ºC~+40ºC**
Operating relative humidity (non-condensing):	**10%~80%**
Dimensions:	**178x55x275mm**
Mass (3 motors):	**925g**

Extending module Mv4/A

Extending module for Mv-4x/1, Mv-4x/2 and Mv4x/4 controllers. It has the belt reversing option, and a built-in Modbus port.
In addition, the photocell and other sensors can be connected.

Basic usage parameters:

- SOFT START of the motor (bottles do not fall while the motor starts running)
- REVERSE of the motor - possibility of reversing the belt by using the hand button or footswitch
- MODBUS - Modbus communication protocol (optional)
- possibility of cooperation with Mv-4x/1, Mv-4x/2 and Mv4x/4 controllers
- TIME OUT of the belt - automatic stop of the belt when the belt is empty
- automatic stop of the belt by the photocell
- possibility of manual belt control, by using the footswitch
- input of the motor thermal sensor
- two inputs of additional sensors
- possibility to control the signal lamp

Specifications

Power supply:	**220-240V AC 50/60Hz**
Max. power consumption:	**280VA**
Max. motor 1 power:	**200VA**
Max. lamp 1 power:	**75VA**
Thermal sensor type:	**NC**
Inductive sensor type:	**npn, DC 12V**
Photocell type:	**Mains 940nm**
Operating temperature:	**5ºC~+40ºC**
Operating relative humidity (non-condensing):	**10%~80%**
Dimensions:	**178x55x155mm**
Mass:	**385g**

Extending module Mv4/B

Extending module for Mv-4x/1, Mv-4x/2 and Mv4x/4 controllers. It works with a three-phase motor. Enables belt reversing.

Basic usage parameters:

- 3 PHASES - three-phase motors control
- REVERSE of the motor - possibility of reversing the belt
- possibility of cooperation with Mv-4x/1, Mv-4x/2 and Mv4x/4 controllers
- possibility of automatic cooperation with Mv-4x/1, Mv-4x/2 and Mv4x/4 controllers
- possibility of manual belt control, by using the footswitch
- input of the motor thermal sensor
- input of additional sensor

Specifications

Power supply:	**3x400V AC 50/60Hz**
Max. power consumption:	**210VA**
Max. motor 1 power:	**200VA**
Thermal sensor type:	**NC**
Inductive sensor type:	**npn, DC 12V**
Photocell type:	**Mains 940nm**
Operating temperature:	**5ºC~+40ºC**
Operating relative humidity (non-condensing):	**10%~80%**
Dimensions:	**178x55x224mm**
Mass:	**550g**

Controller Mv8x

The controller that works with two checkout motors. A special function of this controller is the ability to work in a network and to collect information registered by the controller, and also the configuration of the controller by a PC.

Basic usage parameters:

- automatic control of the main belt
- automatic control of the auxiliary belt
  (one or two with an additional module)
- automatic stop of the belt by the photocell
- automatic start of the belt by the photocell
- automatic stop of the belt when the belt is empty
- working by using the footswitch
- working by using the additional buttons
- output controlling the checkout lighting
- output to the signal lamp (permanent or pulse)
- output to the ring
- front panel with operating keyboard and LED display
- safety switch
- main switch
- input of the motor thermal sensor
- input of the motor cover lift sensor (optional)
- soft start of the main motor, preventing objects from
  falling over during the conveyor belt start
- network operation, monitored from a PC

Specifications

Power supply:	**220-240V AC 50/60Hz**
Max. power consumption:	**700VA**
Max. power consumption with mod Mv4	**1050VA**
Max. motor 1 power:	**200VA**
Max. motor 2 power:	**200VA**
Max. lamp 1 power:	**100VA**
Max. lamp 2 power:	**100VA**
Thermal sensor type:	**NC**
Inductive sensor type:	**npn, DC 12V**
Photocell type:	**Mains 940nm**
Operating temperature:	**5ºC~+40ºC**
Operating relative humidity (non-condensing):	**10%~80%**
Dimensions:	**178x55x224mm**
Mass (2 motors):	**670g**

Controller Mv8xM

This controller works with two motors as standard. Additionally, it has the ability to control subsequent motors through the two built-in Modbus ports. The controller can therefore control four motors simultaneously. It is configured using the keyboard and information on the display.

Basic usage parameters:

- automatic control of the main belt
- automatic control of the auxiliary belt (maximum 3 additional motors)
- automatic stop of the belt by the photocell
- automatic start of the belt by the photocell
- automatic stop of the belt when the belt is empty
- working by using the footswitch
- working by using the additional buttons
- output controlling the checkout lighting
- output to the signal lamp (permanent or pulse)
- output to the ring
- front panel with operating keyboard and LED display
- safety switch
- main switch
- input of the motor thermal sensor
- input of the motor cover lift sensor (optional)
- soft start of the main motor, preventing objects from falling over during the conveyor belt start
- full regulation of the work of additional motors through the inverters

Specifications

Power supply:	**220-240V AC 50/60Hz**
Max. power consumption:	**700VA**
Max. power consumption with mod Mv4xA :	**1050VA**
Max. motor 1 power:	**200VA**
Max. motor 2 power:	**200VA**
Max. lamp 1 power:	**100VA**
Max. lamp 2 power:	**100VA**
Thermal sensor type:	**NC**
Inductive sensor type:	**npn, DC 12V**
Photocell type:	**Mains 940nm**
Operating temperature:	**5ºC~+40ºC**
Operating relative humidity (non-condensing):	**10%~80%**
Dimensions:	**178x55x224mm**
Mass (2 motors):	**670g**

Controller Mv12Nex1/2

This controller is designed for automatic operation or in control mode with one or two conveyor belts. It is other version of the controller Mv12Nex enriched with the option of second belt work.

Basic usage parameters:

- belt stopping with the use of a photocell
- control of a belt 1 with a footswitch 1
- control of a belt 2 with a footswitch 2
- automatic stopping of an empty belt
- input for motor cover sensor
- input for thermal sensor
- output for checkout box lighting
- outputs for signal lights
- motor soft start of first conveyor belt
  (bottles do not fall while the belt starts running)
- setting key for the signal light work placed on a front keyboard
- setting of work time for a second belt
- photocell included
- controller integrated into one module
- mounting in the checkout box case or attached with a handle

Specifications

Power supply:	**220-240V AC 50/60Hz**
Max. power consumption:	**750VA**
Max. motor 1 power:	**200VA**
Max. motor 2 power:	**200VA**
Max. lamp 1 power:	**100VA**
Max. lamp 2 power:	**100VA**
Max. lamp 3 power:	**100VA**
Thermal sensor type:	**NC**
Inductive sensor type:	**npn, DC 12V**
Photocell type:	**Mains 940nm**
Operating temperature:	**5ºC～+40ºC**
Operating relative humidit (non-condensing):	**10%～80%**
Dimensions (1 motor):	**178x55x224mm**
Dimensions (2 motors):	**178x55x240mm**
Mass (1 motor):	**695g**
Mass (2 motors):	**740g**

Controller Mv12Rk1/2

This is controller is designed for automatic operation or in cobtrol mode with one or two conveyor belts. Three lights controlled seperatly.

Basic usage parameters:

- belt stopping with the use of a photocell
- control of a belt 1 with a footswitch 1
- control of a belt 2 with a footswitch 2
- automatic stopping of an empty belt
- input for motor cover sensor
- input for thermal sensor
- outputs for signal lights
- motor soft start of first conveyor belt (bottles do not fall while the belt starts running)
- setting key for the signal light work placed on a front keyboard
- setting of work time for a second belt
- photocell included
- controller integrated into one module
- mounting in the checkout box case or attached with a handle

Specifications

Power supply:	**220-240V AC 50/60Hz**
Max. power consumption:	**750VA**
Max. motor 1 power:	**200VA**
Max. motor 2 power:	**200VA**
Max. lamp 1 power:	**100VA**
Max. lamp 2 power:	**100VA**
Max. lamp 3 power:	**100VA**
Thermal sensor type:	**NC**
Inductive sensor type:	**npn, DC 12V**
Photocell type:	**Mains 940nm**
Operating temperature:	**5ºC~+40ºC**
Operating relative humidity (non-condensing):	**10%~80%**
Dimensions (1 motor):	**178x55x224mm**
Dimensions (2 motors):	**178x55x240mm**
Mass (1 motor):	**695g**
Mass (2 motors):	**740g**

Controller MVI21

Controller is used to swtch on and off the signal lights of the box. There are versions for standard bulbs as well as optional versions for 5V or 24 V DC LED bulbs

Basic usage parameters:

- output 230V 100 VA for lighting
- three outputs 230V 100VA of signial lamps or:
- 5V DC 2A for LED lamps
- 12V DC 1A for LED lamps
- 15V DC 0,8A for LED lamps
- 24V DC 0,5A for LED lamps
- constant or pulse light
- mounting in the checkout box case or attached with a handle

Specifications:	**high voltage version:**
Power supply:	**220-240V AC 50/60Hz**
Max. consumption power:	**300VA**
Max. power lampy 1:	**100VA**
Max. power lampy 2:	**100VA**
Max. power lampy 3:	**100VA**
Specifications:	**low voltage version**
Power supply:	**220-240V AC 50/60Hz**
Max. consumption power:	**13VA**
Max. lamp power 1+2+3 (5V DC):	**10VA**
Power supply:	**220-240V AC 50/60Hz**
Max. consumption power:	**15VA**
Max. lamp power 1+2+3 (12V DC):	**12VA**
Power supply:	**220-240V AC 50/60Hz**
Max. consumption power:	**15VA**
Max. lamp power 1+2+3 (15V DC):	**12VA**
Power supply:	**220-240V AC 50/60Hz**
Max. consumption power:	**15VA**
Max. lamp power 1+2+3 (24V DC):	**12VA**
Operating temperature:	**5ºC~+40ºC**
Operating relative humidity (non-condensing):	**10%~80%**
Dimensions:	**178x55x224mm**
Mass:	**500g**

Controller Mv9 + ANT module

The MV9 controller module is a module controlling, and it works with the MV-ANT executive module - designed for mounting on the DIN rail.

Basic usage parameters:

- automated control of the checkout belt
- one belt control
- control of the motor cover sensor (option)
- automatic work by using the photocell
- automatic stop of the empty belt
- working by using the footswitch
- working by using the button on the keyboard of the controller for moving the belt
- output to the lamp circuit (permanent or pulse)
- soft start of the belt (bottles do not fall while the belt starts running)
- possibility to program the functions by using the controller keyboard

Specifications

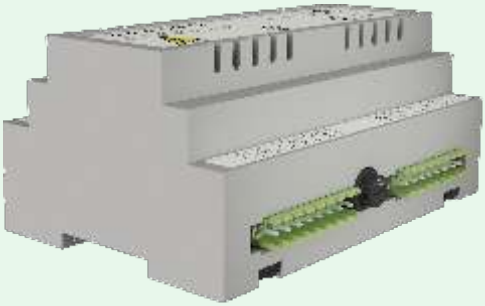
Power supply:	**220-240V AC 50/60Hz**
Max. power consumption:	**400VA**
Max. motor 1 power:	**200VA**
Max. lamp 1 power:	**100VA**
Max. lamp 2 power:	**100VA**
Thermal sensor type:	**NC**
Inductive sensor type:	**npn, DC 12V**
Photocell type:	**Mains 940nm**
Operating temperature:	**5ºC~+40ºC**
Operating relative humidity (non-condensing):	**10%~80%**
Dimensions:	**108x58x123mm**
Mass (1 motor):	**140g**

Controller Mv9 + Ex2 module

Executive module MV-EX2 - module for DIN rail - designed to control two conveyor belts.

Basic usage parameters:

- automated control of the checkout belt
- two belts control
- control of the motor cover sensor (option)
- automatic work by using of the photocell for the first belt
- automatic stop of the empty belt
- working by using the footswitch
- working by using the button on the keyboard of the controller for moving the first belt
- output to the lamp circuit (permanent or pulse)
- soft start of the first belt (bottles do not fall while the belt starts running)
- possibility to program the functions by using the controller keyboard



Specifications

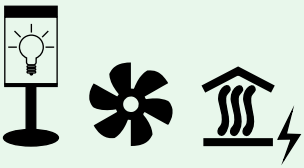
Power supply:	**220-240V AC 50/60Hz**
Max. power consumption:	**620VA**
Max. motor 1 power:	**200VA**
Max. motor 2 power:	**200VA**
Max. lamp 1 power:	**100VA**
Max. lamp 2 power:	**100VA**
Thermal sensor type:	**NC**
Inductive sensor type:	**npn, DC 12V**
Photocell type:	**Mains 940nm**
Operating temperature:	**5ºC~+40ºC**
Operating relative humidity (non-condensing):	**10%~80%**
Dimensions:	**108x63x118mm**
Mass:	**240g**

Controller MvS1

It is an integrated controller used to control the sauna temperature. It is equipped with display, temperature sensor and the system controlling the sauna heater contactor. It has the ability to connect sauna lighting and a fan.

Basic usage parameters:

- automatic control of switching on and switching off the heater heating
- automatic control of the sauna lighting
- automatic control of the sauna ventilation
- automatic temperature reading
- automatic sauna switching on after a pre-set time
- automatic sauna switching off after a pre-set time
- manual switching on or switching off the lightning and a fan
- manual switching of the controller work
- setting of your own sauna heating parameters
- output to the sauna lighting lamp
- output to the sauna fan
- output controlling the sauna heater contactor



Specifications

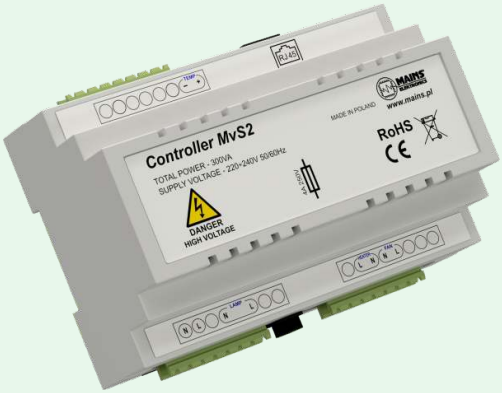
Power supply:	**~220-240V AC 50/60Hz**
Maximum total power consumption	**200W**
Maximum power consumption by the contactor relay	**30W**
Maximum power consumption of the lighting circuit	**150W**
Maximum power consumption of the fan circuit	**50W**
Maximum power consumption of control system	**4W**
Operating temperature:	**5ºC~+40ºC**
Operating relative humidity (non-condensing):	**10%~80%**
Dimensions:	**140x63x118mm**
Mass:	**385g**

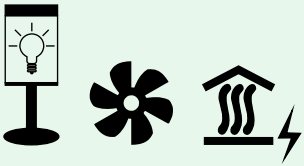
Controller MvS2

This is another controller used to control the sauna temperature. Its special feature is the ability to turn on and turn off the sauna remotely, by using a remote wi-fi relay.

Basic usage parameters:

- automatic control of switching on and switching off the heater heating
- automatic control of the sauna lighting
- automatic control of the sauna ventilation
- automatic temperature reading
- automatic sauna switching on after a pre-set time
- automatic sauna switching off after a pre-set time
- manual switching on or switching off the lightning and a fan
- manual switching of the controller work
- setting of your own sauna heating parameters
- output to the sauna lighting lamp
- output to the sauna fan
- output controlling the sauna heater contactor
- real time clock
- possibility of sauna heater heating switching on remotely





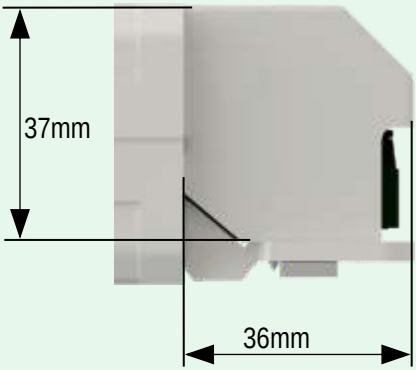
Specifications

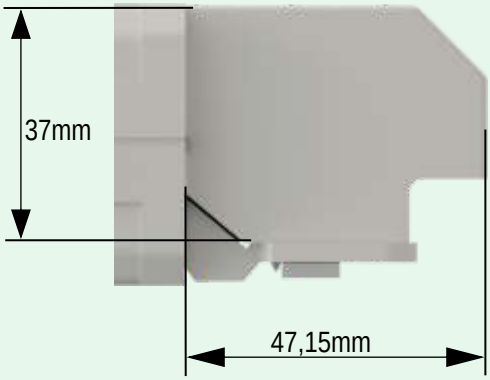
Power supply:	**~220-240V AC 50/60Hz**
Maximum total power consumption	**200W**
Maximum power consumption by the contactor relay	**30W**
Maximum power consumption of the lighting circuit	**150W**
Maximum power consumption of the fan circuit	**50W**
Maximum power consumption of control system	**4W**
Operating temperature:	**5ºC~+40ºC**
Operating relative humidity (non-condensing):	**10%~80%**
Dimensions:	**120x58x118mm**
Mass:	**285g**

Accessories

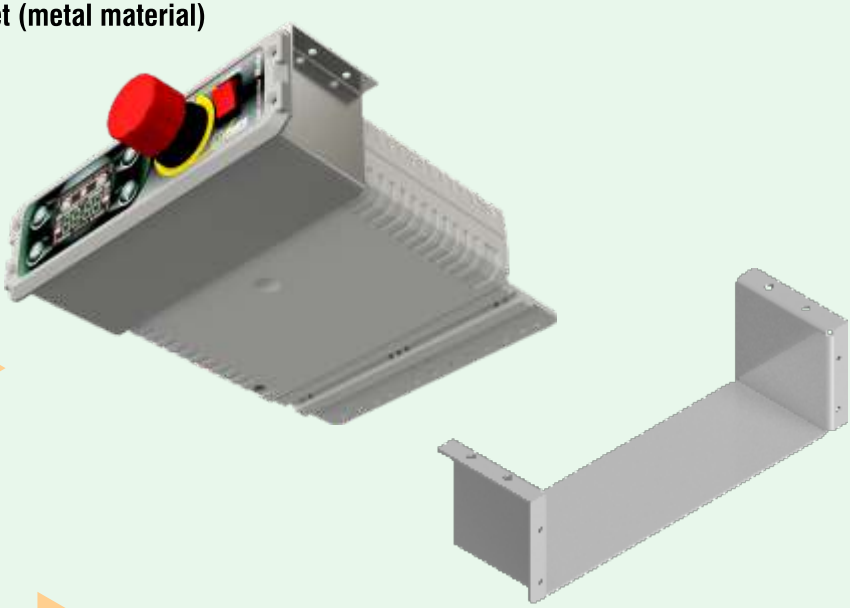
Controller connectors cover (ABS material)

The connectors cover on the back side of the controller is available in two lengths:



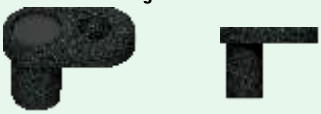


Controller mounting bracket (metal material)



Photocells

Photocell type A
It is fixed to the housing of checkout box with one screw.



Photocell type B
It is fixed to the housing of checkout box with two screws.

Photocell type C
It is fixed to the housing of checkout box by pushing in.

Photocell type D
It is fixed to the housing of checkout box with two screws.

Photocell type E
It is fixed to the housing of checkout box with one screw.

Photocell type S
It is fixed to the housing of checkout box with two screws.

Photocell type K
It is fixed to the housing of checkout box with two screws.

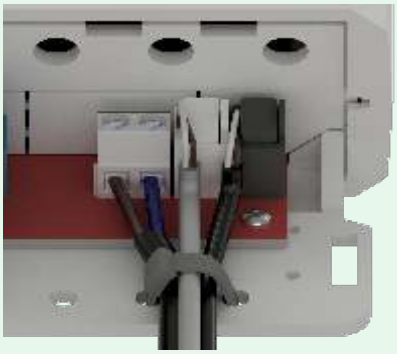
Types of MAINS photocells used for all controllers of our company.

Our photocells do not require any adjustment due to lighting condition. They have high tolerance for perpendicular axis deviation between transmitter and receiver, thanks to wich they are resistant to checkout box deformaion where they are mounted. Hermetic housing protects a photocell against spilling and pollution. They are reliable for over 10 years.

The photocells set includes a transmitter and receiver.
On re-quest, cable length can be adjusted to the dimensions of the box (cables longer than 4m are not recommended).
In standard version, our photocells are ended with a plug which is connected to the controller PCB. All photocells cooperate with Mains Cont-rollers only.
Thel MAINS photocells detect non-transparent objects.
Due to the inertia and type of motor, belt and detection system the stopping distance can be from 0.5 to 4.5 cm.
For the object to stop the belt, it must have the right size.

Specifications

Type:	**infrared**
Wave length:	**940nm**
Optimum range:	**0,7m**
Max. intensity of the external light	**800lux**
Max. perpendicular deviation of the axis	**7°**
Max. parallel movement from the axis	**0,05m**
Operating temperature	**5°C~540°C**
Operating humidity	**10%~85%**
Cable length	**2,2m**
Max. cable length	**4,0m**



Single footswitches

MAINS

Specifications:

Rating Load AC (with resistance load):	6 A / 250 VAC
Outgoing cable:	2m wire 2x0.75mm
Insulation resistance: (available with plug-in)	100MΩ /km
Dimensions:	72x96x26mm
Mass:	120g

6227-S

6210

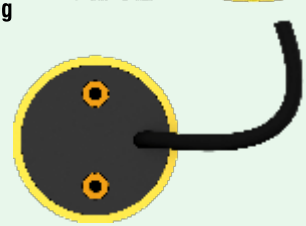
Specifications:

Rating Load AC (with resistance load):	3 A / 250 VAC
Outgoing cable:	2m wire 2x0.75mm
Insulation resistance: (available with plug-in)	100MΩ /km
Dimensions:	105x141x40mm
Mass:	375g

6241

Specifications:

Rating Load AC (with resistance load):	3A / 250 VAC
Outgoing cable:	2m wire 2x0.75mm
Insulation resistance: (available with plug-in)	100MΩ /km
Dimensions:	Ø40x16mm
Mass:	60g



Single footswitches

XF-201G

XF-201Y

Specifications:

Rating Load AC (with resistance load):	10 A / 250 VAC
Outgoing cable: (available with plug-in)	2m 2x0.75mm
Protection degree:	IP50
Mechanical life:	10000000 cycle
Max. contact resistance:	15 mΩ
Electrical life:	100000 cycle
Insulation resistance:	100MΩ/km
Dimensions:	80x82x34mm
Mass:	260g

Specifications:

Rating Load AC (with resistance load):	10 A / 250 VAC
Outgoing cable: (available with plug-in)	2m 2x0.75mm
Protection degree:	Ip50
Mechanical life:	10000000 cykli
Max. contact resistance:	15 mΩ
Electrical life:	100000 cykli
Insulation resistance	100MΩ/km
Dimensions:	98x140x32mm
Mass:	430g

XF-201YM

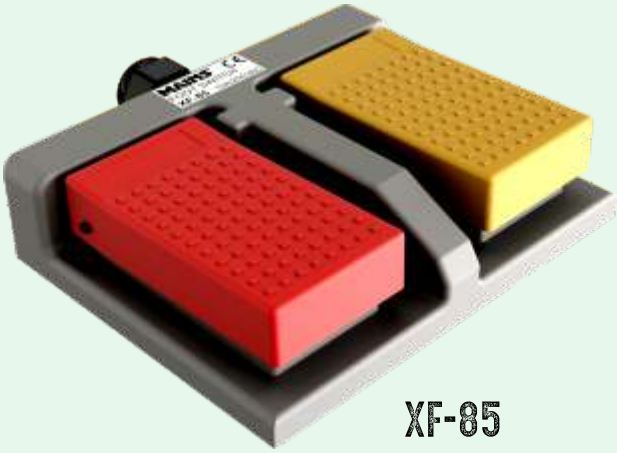
XF-201GM

XF-01

Specifications:

Rating Load AC (with resistance load):	10 A / 250 VAC
Outgoing cable: (available with plug-in)	2m 2x0.75mm
Protection degree:	Ip50
Mechanical life:	10000000 cycle
Max. contact resistance:	25 mΩ
Electrical life:	100000 cycle
Insulation resistance	100MΩ/km
Dimensions:	61x100x34mm
Mass:	170g

Double footswitches



XF-85

Specifications:

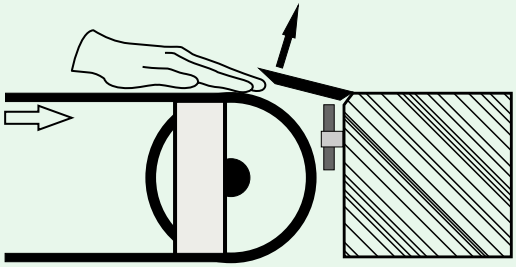
Rating Loa AC (with resistance load):	10 A / 250 VAC
Outgoina cable: (available with plug-in)	2m wire 3x0.75mm
Protection degree:	IP54
Mechanical life:	10000000 cycle
Max. contract resistance:	15 mΩ
Electrical life:	100000 cykli
Insulation resistance:	100MΩ/km
Dimensions:	150x120x36mm
Mass:	530g

XF-201D

Specifications:

Rating Loa AC (with resistance load):	10 A / 250VAC
Outgoina cable: (available with plug-in)	3m 2x0.75mm
Protection degree:	IP54
Electrical life:	10000000 cycle
Max. contract resistance:	15 mΩ
Electrical life:	100000 cykli
Insulation resistance:	100MΩ/km
Dimensions:	170x112x36mm
Mass:	720g

Cover sensors



During the operation of the box, some small items and even fingers can go under the motor guard. In order to protect against pulling into, we recommend the use sensors mounted under the motor guard. In our offer you can find inductive sensors and mechanical sensors.

Inductive sensors:

MAL J8A3-02-Z/BY

Specifications:

Structure:	Roller screw
Thread size:	M8x1
Dimensions:	50mm
Power supply:	DC 6 ... 36 V
Load current:	≤ 200 mA
Electromagnetic compatibility:	according to EN 60947-5-2
Short-circuit protection (pulse):	yes
Protection against polarity change:	yes
Pulse attenuation at turn on power supply:	yes
Protection type:	IP 67
Ambient temperature from ...to:	-25°C ... +75 °C
Housing material:	Nickel-plated brass, plastic
Voltage drop:	≤ 2 V
Tightening torque:	6Nm
Maximal operating distance:	2 mm
Installation in metal:	undeveloped
Output functions:	Normally open
Connection method:	Cable, PVC, 2 m

MAN S08-04NPSZW2S

Specifications:

Structure:	Roller screw
Thread size:	M8x1
Dimensions:	50mm
Power supply:	DC 10 ... 30 V
Load current:	≤ 200 mA
Electromagnetic compatibility:	according to EN 60947-5-2
Short-circuit protection (pulse):	yes
Protection against polarity change:	yes
Pulse attenuation at turn on power supply:	yes
Protection type:	IP 67
Ambient temperature from ...to:	-25°C ... +75 °C
Housing material:	Nickel-plated brass, plastic
Voltage drop:	≤ 2 V
Tightening torque:	6Nm
Maximal operating distance:	4 mm
Installation in metal:	undeveloped
Output functions:	Normally open
Connection method:	Cable, PVC, 2 m

MAINS PS-08P

Specification:

Sensing distance:	8 mm
Type:	PNP, NO
Response frequency:	800Hz
Power supply:	DC 10 ... 30 V
Load current:	≤150 mA
Protection type:	IP 67
Ambient temperature from ... to:	-20 °C ... +80 °C
Housing material:	A B S
Dimensions:	17x17x29mm
Cable length:	1,5m

FOTEK PS-08P

Specification:

Sensing distance:	8 mm
Type:	PNP, NO
Response frequency:	800 Hz
How to connect:	Line, PVC, 1,5 m.
Power supply:	DC 10 ... 30 V
Load current:	≤ 150 mA
Protection type:	IP67
Ambient temperature from ... to:	-20°C ... +80 °C
Housing material:	ABS
Dimensions:	17x17x33mm
Cable length:	1,5m

Mechanical sensors:

XV-15-F9

XV-15-F11

XV-152-1C25

XV-154-1C25

XV-155-1C25

XV-156-1C25

Specifications:

Operating speed:	0.1mm-1m/s
Operating frequencyMechanical:	600times/min
Electrical:	30times/min
Insulation resistance:	100MΩ(Above) DC500V
Contact resistance:	25MΩ (initial value)
Withstand voltageNon-connection wire:	1000VAC
Every terminal:	1500VAC
Vibration Misoperation 10-55Hz	Amplitude: 1.5mm
Impact Durable:	1000m/s2
Misoperation:	300m/s2
LifeElectrical:	100,000above
Mechanical:	1,000,000above
Protection degree:	IP40
Operating temperature:	-25～+80°C
Operating humidity:	10%-85%

Signal lights
RGB/12V, RGB/230V

RGB LED light is intended for signalizing the checkout box working condition.

We joined three colours of a light into one module. The possibility of connecting colours gives extra colours such as yellow and white. In this case, the light can glow different colours alternately due to needs.

Additional fittings are light handles, which ease the lights assembly at the checkout box stand.

Specifications of the high voltage version 230VAC:

Power supply:	**220-240V AC 50/60Hz**
Max. power consumption:	**5VA**
Max. red colour power:	**1,5VA**
Max. green colour power:	**1,5VA**
Max. blue colour power:	**1,5VA**
Operating temperature:	**5ºC~+40ºC**
Operating relative humidity (non-condensing):	**10%~80%**
Dimensions:	**147x72mm**
Mass:	**200g**

Specifications of the low voltage version 12VDC:

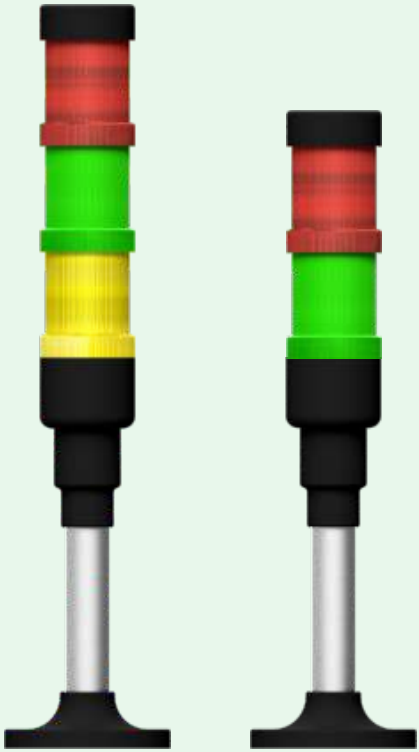
Power supply:	**12VDC**
Max. power consumption:	**5VA**
Max. red colour power:	**1,5VA**
Max. green colour power:	**1,5VA**
Max. blue colour power:	**1,5VA**
Operating temperature:	**5ºC~+40ºC**
Operating relativehumidity (non-condensing):	**10%~80%**
Dimensions:	**147x72mm**
Mass:	**180g**

Colour possibilities:

Fixing variations:

Signal lights

HBJD LED light is intended for signalizing the checkout box working condition



HBJD40 is the new seria of LED lamps, which are characterized by small sizes and they glow strong light. Available are versions for 230V AC and 12V DC. Lamps can be mounted in two ways as shown on the pictures. The colour possibilities are green, red, orange, white and blue.

Specifications of the high voltage version:

Power supply:	220-240V AC 50/60Hz
Max. power consumption:	5VA
Max. red colour power:	1,5VA
Max. green colour power	1,5VA
Max. blue colour power:	1,5VA
Operating temperature:	5C+40C
Operating relative humidity (non-condensing):	10%-80%
Dimensions:	147x172mm
Mass:	200g

Specifications of the low voltage version:

Power supply:	12V DC
Max. power consumption:	5VA
Max. red colour power:	1,5VA
Max. green colour power	1,5VA
Max. blue colour power:	1,5VA
Operating temperature:	5C+40C
Operating relative humidity (non-condensing):	10%-80%
Dimensions:	147x172mm
Mass:	210g

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nsure a long and safe use of our products, he used materials and components are of the highest quality. If you are interested in detailed parameters and functions
articular model, please contact our office. We are looking forward to hearing from you and further cooperation. We offer models for testing to checkout manufacturers.