

EVO 3 CONTROL PANEL

EVO 3

THIRD GENERATION THREE-PHASE CONTROL PANEL

WAVE CONTROL



BASE CONTROL



SKILL CONTROL



TOP CONTROL



STOCK CONTROL



EVO 3: THE 5-IN-1 CONTROL PANEL

All the MB functions and operation logics, in a single control panel



EVO 3: KEY BENEFITS

- High quality INVERTER: 92% efficiency
- 4,3" colour TOUCHSCREEN
- Power managed: up to 0.75 kW
- Safety: 2 emergency contacts

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CONTROL PANELS

DEVICE SPECIFICATIONS

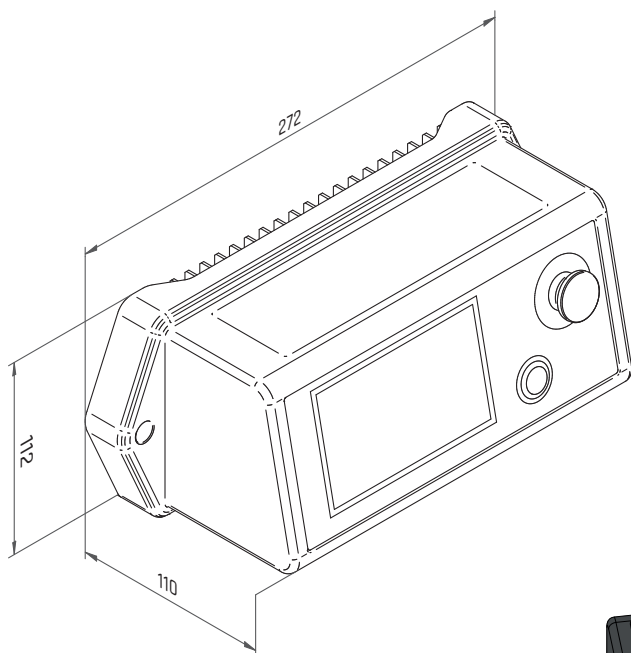
TECHNICAL SPECIFICATIONS

• Supply voltage	Three-phase AC, 380/480 V
• Supply voltage tolerance:	+10/-15 % (323/528 V)
• Supply voltage frequency:	47/63 Hz
• Output voltage:	Three-phase AC, 0/(line voltage x 0.95) V
• Output voltage frequency:	0/200 Hz (standard range 15/80 Hz)
• Rated power:	max 0.75 kW
• Signal inputs:	4 multifunction digital inputs, or 2 multifunction digital inputs + one 2-channel safety input
• Signal outputs:	2 multifunction relay outputs
• Operating temperature:	min -10/max +45 °C (min -40/max +104 °F) without restrictions min -10/max +50 °C (min -40/max +122 °F) with power reduction
• Installation altitude:	Up to 1000 m asl Higher altitudes are possible with 1%/100 m power derating
• Protection class:	IP54
• Weight:	1.2 kg

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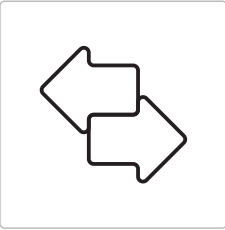
DIMENSIONS - STANDARD EQUIPMENT

CONTROL PANELS

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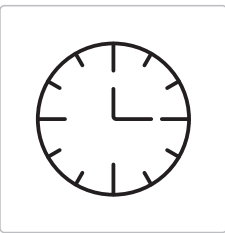
EQUIPMENT

- 1. M12 Power connector, for quick connection to the power supply
- 2. M12 Power connector, for quick connection to the motor
- 3. 4. 5. A-coded M12 connector, for quick connection to the digital inputs and outputs
- 6. Mushroom-head emergency button
- 7. Emergency reset button
- 8. Colour touchscreen operator interface
- 9. Buzzer for audible alerts



INVERTER (with metal detector management)

- This function enables the conveyor belt to be operated continuously, adjusting its speed and running direction
- The operator can start or stop the conveyor by pressing the start and stop buttons on the colour touchscreen operator interface, which also displays the control panel status and real-time operating values
- The control panel can interface with other field devices via digital inputs and outputs (e.g. photocells, push-buttons, potential-free contact signals, metal detectors, emergency stop buttons or other safety devices)
- METAL DETECTOR:
 - The signal from the metal detector temporarily stops the conveyor and triggers an alarm, which remains active until reset by the operator
 - Before the alarm triggers, the running direction of the conveyor can be reversed for a period of time defined by the operator
 - The control panel can manage a temporary conveyor stop signal in case of a granulator overload



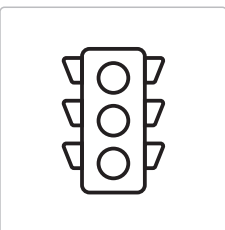
TIMED PAUSE/WORK

- The operator sets a work time and pause time on the control panel
- When the program starts, the conveyor moves intermittently, automatically alternating between work and pause phases lasting preset times
- The work cycle can be repeated indefinitely or for a programmable number of times
- The control panel can interface with other field devices via digital inputs and outputs (e.g. photocells, push-buttons, potential-free contact signals, metal detectors, emergency stop buttons or other safety devices)



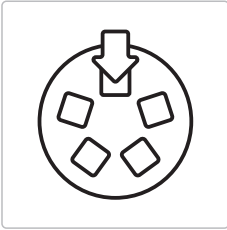
PULSE

- The Robot releases the product onto the conveyor and sends a voltage-free signal to the control panel
- The control panel starts and runs the conveyor for the set work time
- When the running time has elapsed, the conveyor stops to wait for the next signal from the robot
- The control panel can interface with other field devices via digital inputs and outputs (e.g. photocells, push-buttons, potential-free contact signals, metal detectors, emergency stop buttons or other safety devices)



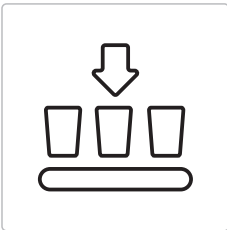
FEEDER

- The upstream machine (e.g. robot, assembly machine, IMM) sends a voltage-free motion signal to the control panel
- The control panel starts and runs conveyor for the duration of the signal from the robot
- As soon as the motion signal deactivates, the conveyor stops until it receives the next signal
- The control panel can interface with other field devices via digital inputs and outputs (e.g. photocells, push-buttons, potential-free contact signals, metal detectors, emergency stop buttons or other safety devices)



TV CONTROL

- The program enables the filling operations of a previously defined number of boxes located on a rotating table to be managed
- Possible product storage methods:
 - IMM cycle count (standard)
 - Box fill time setting (the control panel generates the IMM cycle count signal internally at a configurable time interval to simulate IMM operation when a direct connection is not possible)
- Operating logic:
 - The loading conveyor stops once the set fill level has been reached in the box
 - The table rotates to the next box and stops
 - The loading conveyor starts up again and the cycle resumes
 - When all the boxes have been filled, the control panel can be configured in one of two ways:
 1. The system triggers an alarm and remains paused until manually reset by the operator or
 2. The system resets all the boxes and restarts the work cycle automatically



IN-LINE

- The program enables the filling operations of several boxes positioned on a filling conveyor to be managed
- Possible product storage methods:
 - IMM cycle count (standard)
 - Box fill time setting (the control panel generates the IMM cycle count signal internally at a configurable time interval to simulate IMM operation when a direct connection is not possible)
- Operating logic:
 - When a first empty box enters the fill zone, the control panel transmits a signal and starts the loading conveyor
 - Once the set filling value has been reached:
 - > The loading conveyor stops
 - > The conveyor on which the boxes are located moves one step forward. This moves the full box forward and brings a new, empty box into the filling position
- The cycle repeats until one of the following conditions occurs:
 - The flat conveyor or the RUF is full of boxes (the "overflow" photocell triggers)
 - There are no more boxes to fill ("no boxes" alert)



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