

# IRIS control system

## Modular design

- Interfaces and options are flexibly expandable
- The controller automatically recognises new components
- One-click software updates via USB stick

## Simple operation

- 7-inch touchscreen with interactive user guidance
- Foldable display for ergonomic working
- Predefined actions for all common processes such as mold emptying, end of shift, emergency cooling
- Languages: DE, EN, ES, FR, IT, NL (others through future software updates)

## Continuous process monitoring

- User concept with three user levels and password protection
- Error messages with recommended actions
- Limit value monitoring
- Automatic adjustment of the pump rotation direction
- Automatic fill level monitoring – Dry run protection
- Monitoring of the process variables: Temperature, pressure, flow rate

## Customized functions

- Programmable time-resolved recipes
- Physical units and date format selectable
- Flexible timer functionality (*Release June 2024*)
- Export of the progression of error and process variables (*Release October 2024*)
- Export and import of the controller configuration (*Release October 2024*)

## Energy efficient

- Tailored pump performance thanks to a frequency converter fully integrated into the control logic
- Three pump control modes (Auto/Eco, flow rate setpoint, direct power setpoint)
- System-optimised control with energy-saving switching logic

## Intelligent interfaces

- OPC UA: Euromap 82.1 standard (*release May 2024*)
- RS-232/485, CL 20 mA, CAN (extension module 1)
- Profibus, Profinet, EtherNet/IP (extension module 2)
- Analog (0-10 V, 0/4-20 mA), digital (0/24V inputs, 0/230V relay outputs), external temperature sensor (extension module 3)

## Technical data

### Human-Machine Interface (HMI)

<b>Touch screen</b>	7-inch display with state-of-the-art PCAP touch technology
<b>Display</b>	IPS panel with specially increased luminosity (1000 cd/m <sup>2</sup> ), resolution 1024x600
<b>Protective glass</b>	Frosted to prevent reflections, optical bonding with display to maintain full luminosity
<b>Impact resistance class</b>	IK06 (IEC 62262) – impact energy of 1J
<b>Protection class</b>	IP54 (EN 60529) – against dust and splash water on all sides
<b>Audible alarm</b>	Volume max. 110 dB at 3.2 kHz
<b>Connection</b>	Proprietary multifunction cable

### Controller modules

<b>Protection class</b>	IP20 (EN 60529) – Protection against accidental contact
<b>Power supply and control voltage</b>	24 V DC
<b>Connection</b>	Ribbon cable for proprietary data bus, power supply and reset line
<b>Electromagnetic compatibility</b>	Classified as Class A, Group 1 and tested in accordance with EN 61326-1, EN 6100-6-2 and -6-4, EN 55011 (55011:2016 + A1:2017 + A11:202 + A2:2021)
<b>Type tests</b>	Carried out in accordance with EN 61010-1 and -2:201

# MP-888 Controller

## Structure

- Compact controller with predefined machine settings (according to appliance type)
- PID control with 2-point cooling switchable to PID cooling

## Operation and display

- Simple operation via key combinations
- Clear display of operating mode, setpoint actual temperature and flow rate
- Physical units selectable

## Functions and security

- Visual error messages
- Limit value monitoring for excessive temperature deviation between setpoint and actual value
- Flow monitoring

## Interfaces

- Analog: 0-10 V, (0)4-20 mA

## Technical data

- Control voltage: 230 V
- Languages: numerical parameters



# MP-988 Controller

## Structure

- Compact controller with predefined machine settings (according to appliance type)
- PID control with 2-point cooling switchable to PID cooling

## Operation and display

- Simple operation via key combinations
- Clear display of operating mode, setpoint actual temperature and flow rate
- Display of up to three measuring points
- Physical units selectable

## Functions and security

- Visual error messages
- Limit value monitoring in the event of excessive temperature deviation between setpoint and actual value
- Flow monitoring
- Optional control: tank temperature, return temperature or mould temperature
- Ramp control: 25 temperature points, 8 curves

## Interfaces

- Analog: 0-10 V, (0)4-20 mA, MP-988
- RS-485, RS-232, Current Loop, CAN, MP-988
- Profibus, Profinet, MP-988 Profibus version

## Technical data

- Control voltage: 230 V
- Languages: numerical parameters

