

oerlikon
hrsflow

T-Flow HRS

Unmatched intuitive excellence for process control





Effortless Process Control

Introducing T-Flow HRS, an innovative tool in thermal multi-zone controllers by Oerlikon HRSflow, designed to rethink the precision and reliability of hot runner temperature control in injection molding machines, offering high-quality performance across a spectrum of applications. Available in a variety of configurations, these controllers accommodate different heating zone requirements, ranging from 6 to 120, in increments of 6. The modular design of T-Flow HRS reflects a commitment to versatility, enabling integration into various injection molding setups. These new controllers embody a commitment to excellence, providing customers with the tools they need to elevate their molding processes.

Product range:



Small version: from 6 up to 12 zones
Medium version: from 18 up to 24 zones
Large version: from 30 up to 36 zones
Big version: from 42 up to 120 zones

Controller Structure: Built to Last with Unparalleled Reliability



Led stripe

the operational status can be easily identified from a distance according to alarms colour identification.

Tiltable & Integrated touch display

easy reading from any angle.

Service Friendly

fuses and power cards can be replaced without opening the device.

External Heat sink

it assures proper heat dissipation, improve the performance of the controller and extend its service life.

USB Port

it simplifies update installation, transfer of recipes and test protocols.



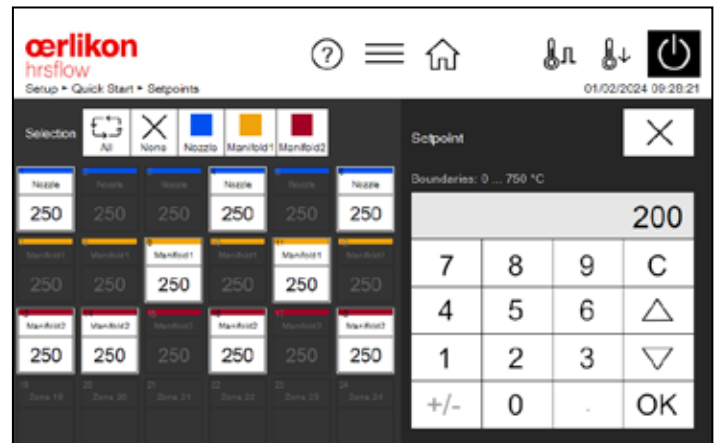
Flexible connections to the mold

plug-in system and assignment according to customer requirements.

Streamlined Features: Effortless Simplicity and Intuition

1. Intuitive user interface

It allows the controller to be operated without instructions or prior knowledge thanks to the self-explaining icons: the toolbar, buttons and text are clear and visible.



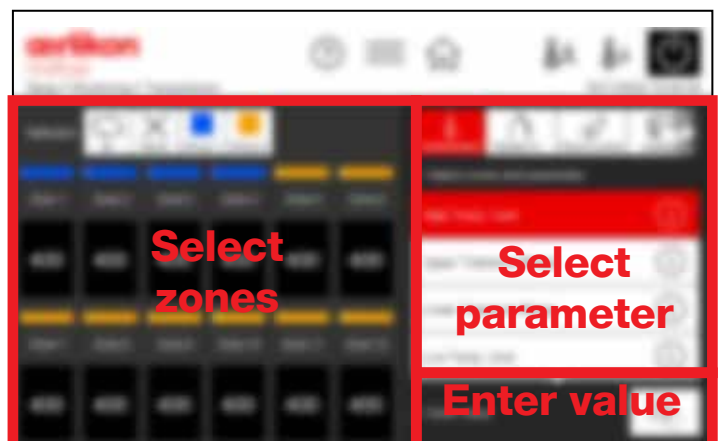
	Nozzle	Nozzle	Nozzle	Nozzle	Nozzle	Nozzle	Manifold1	Manifold1	Manifold1
Act [°C]	247	247	249	248	248	248	248	248	248
Set [°C]	250	250	250	250	250	250	250	250	250
P [W]	1,782	1,592	118	157	238	238	79	237	238
I [A]	13.5	11.5	0.9	1.2	1.8	1.8	0.6	1.8	1.8
	Manifold1	Manifold1	Manifold2	Manifold2	Manifold2	Manifold2	Manifold2	Manifold2	Manifold2
Act [°C]	248	249	248	248	248	248	248	248	248
Set [°C]	250	250	250	250	250	250	250	250	250
P [W]	118	118	79	238	238	118	238	197	158
I [A]	0.9	0.9	0.6	1.8	1.8	0.9	1.8	1.5	1.2

2. Smart navigation

All functions, zones and setpoints are well visible on the menu bar and reachable with one click.

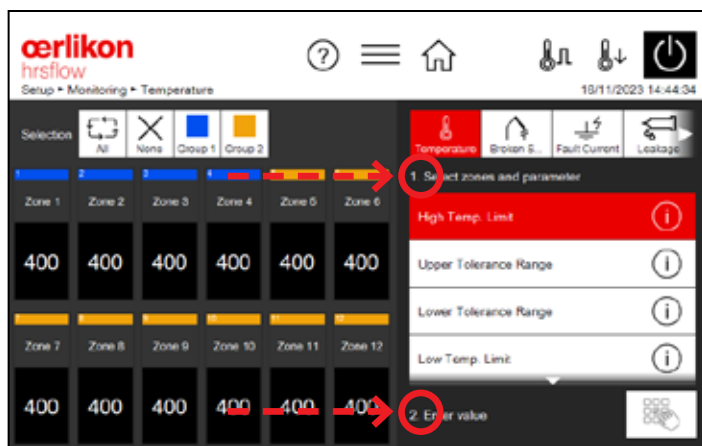
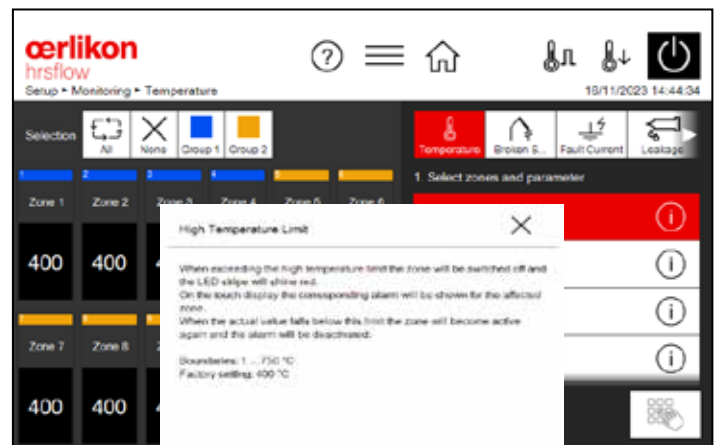
3. Consistent Operation

A dedicated scheme for parameterization, confirmation is requested for all entries.



4. Explanation at the touch of a button

All the functions and description are available with the touch of a button.

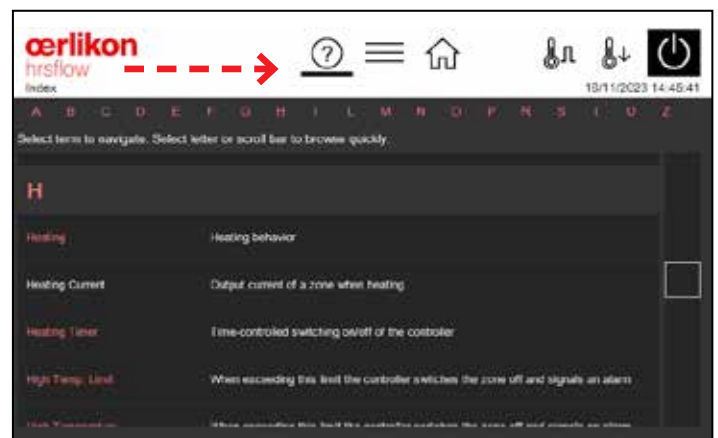


5. Guided operation

The controllers guide you step by step (1 > 2...).

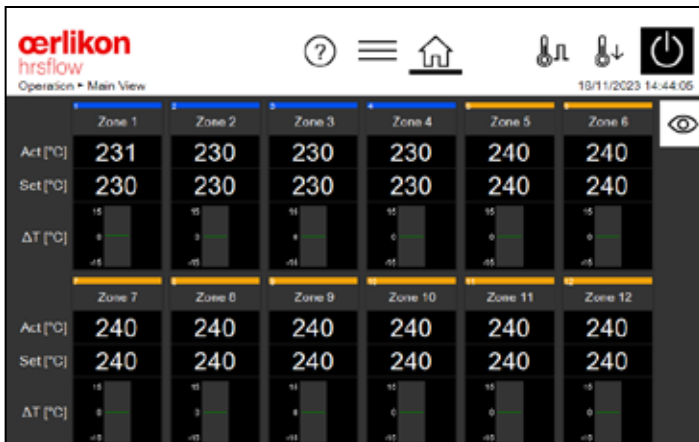
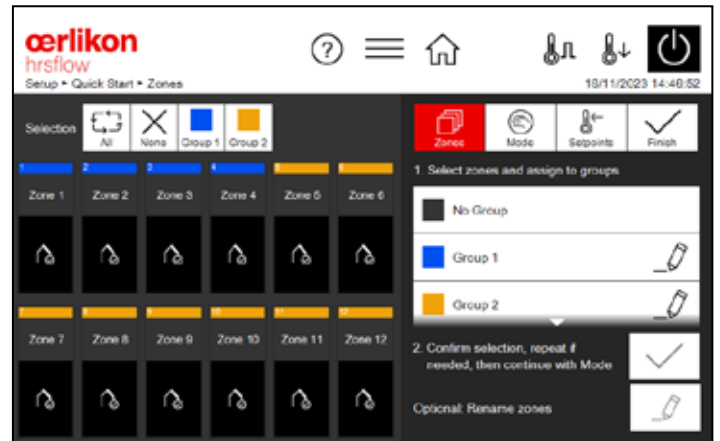
6. Keyword Index

List of the functions available with link to input.



7. Grouping

Several zones can be combined into groups and parameterised as one.

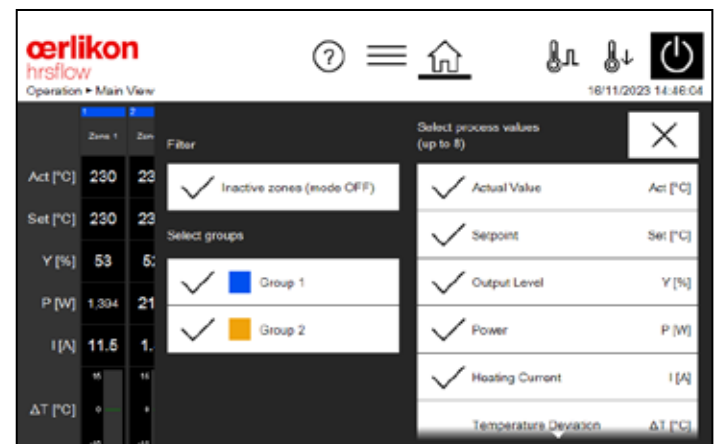


8. Home Page

The Home button displays the summary page for all the control zones that can be customized according to operator needing.

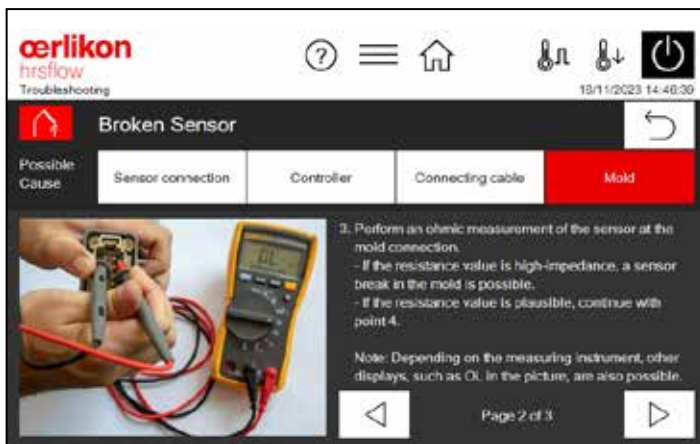
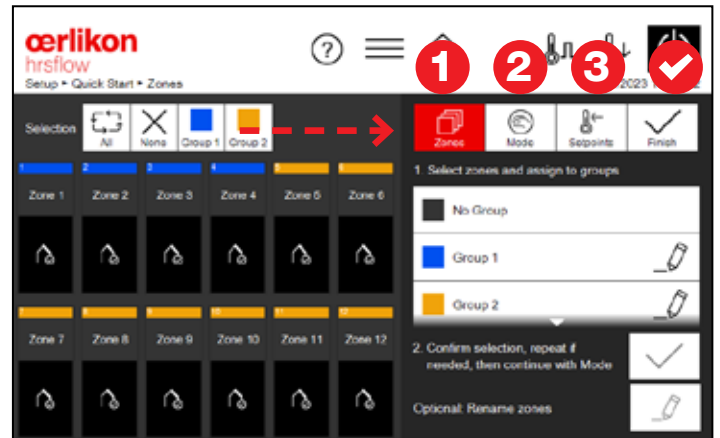
9. Personalized zone display

The operator can select from several process values and groups zones.



10. Quick Start

Assisted configuration for quick controller activation during tool change.

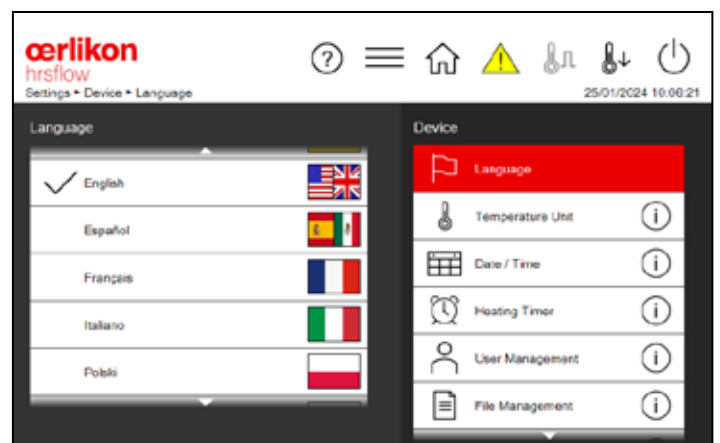


11. Integrated Service & Support

In case of alarm, it provides quick instructions to verify where the issue is located and how to solve it.

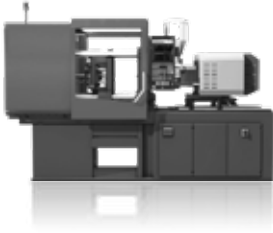
12. Languages

German, English, Spanish, French, Italian, Czech, Polish, Russian, Japanese, Chinese, Turkish, Portuguese.



Controller Operation Industry 4.0

Operation via injection molding machine



The controllers can be operated via the injection molding machine, that has installed a VNC client, without any restriction.

Operation with notebook/tablet



The hot runner controllers have a VNC server. So, they can be operated from an external device such as a notebook or a tablet, just installing a free VNC viewer.

Control Signals



The following functions can be activated under machine control without user having to take manual control. Boost, switching outputs on and off, enable the output signals, standby, switching additional heaters on and off.



Machine connection
flexible connection to the machine.

OPC UA Based on
Euromap 82.2 fully
integrated



Functions at a glance: The Essence of Flexibility

- Recipe management
- Further heating in case of sensor failure - Heating can be continued with a freely selectable output level, with the medium output level or with the output level of a reference zone
- Leakage Detection
- Chat recorder
- User levels with password protection
- Timer - switch outputs on and off automatically at specific days and times
- Auto Stand-by
- Combined heating, sequential heating or combination of both functions, gentle heating (Soft start)
- Wiring Check - it checks heating zones and thermocouples matching
- Thermodynamic analysis - it identifies irregular activities during heating



Service and Customer Support for your ultimate satisfaction

Our Customer Support and Service technicians provide the best assistance to ensure customer satisfaction. Fast, experienced and efficient, our team is always available to answer your questions and promptly address any concerns.

- Qualified Service team will be available for support 24/7
- System integration and control unit best practices
- 2 years of warranty to customers from delivery

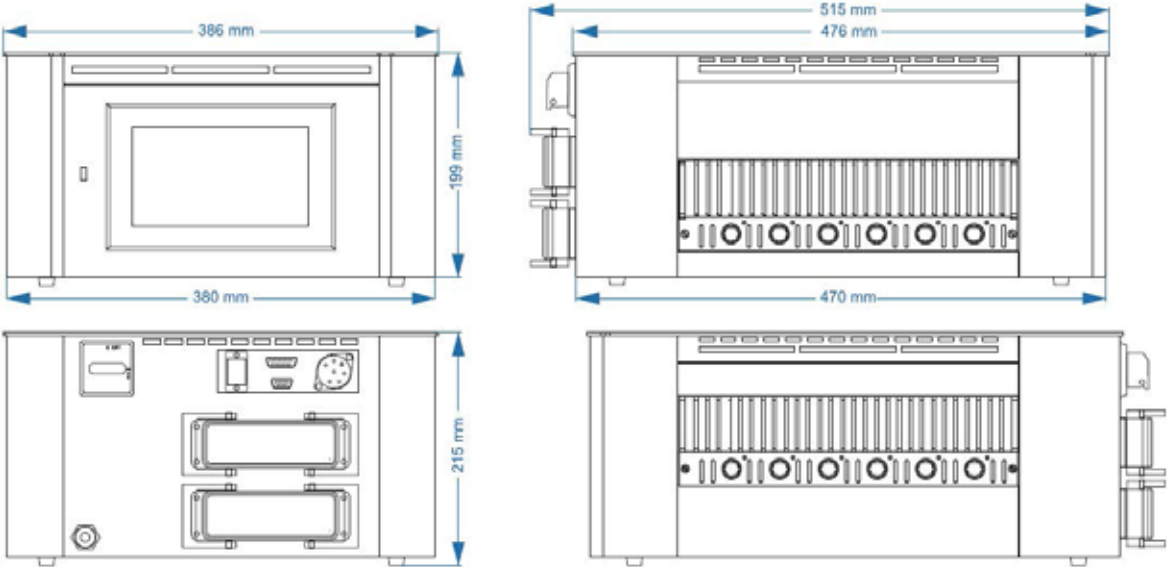


Technical Data

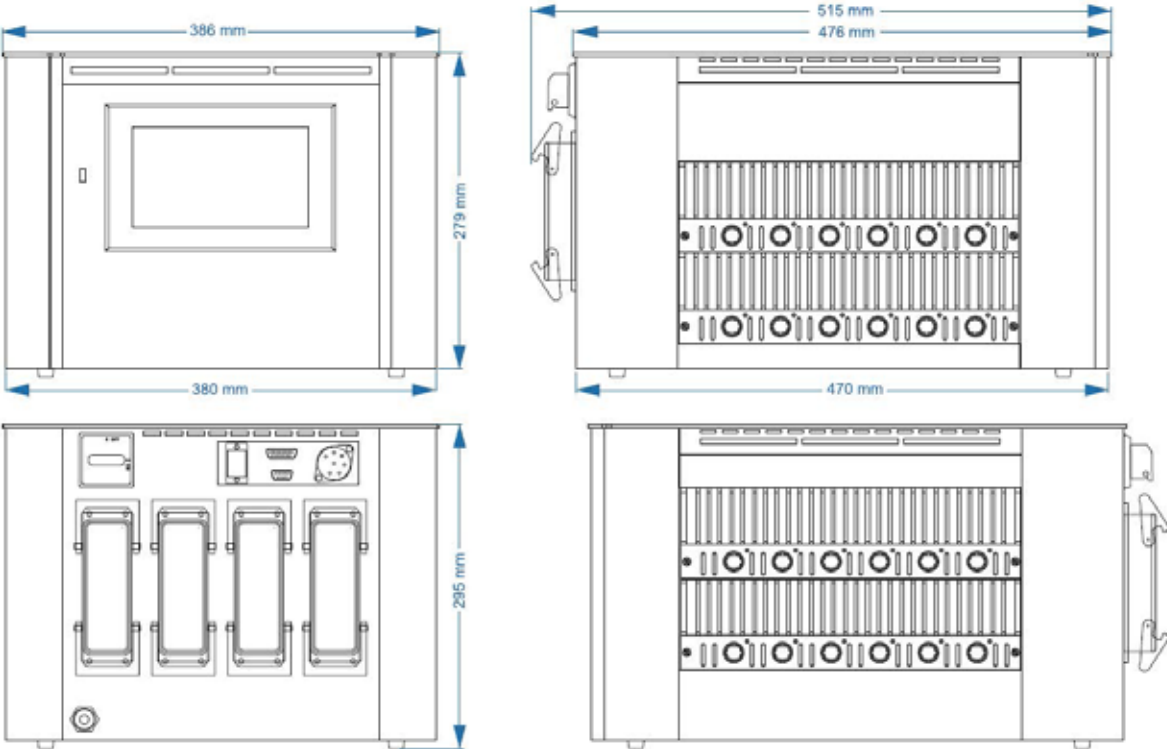
Operation and display	7" up to 36 - 10" up to 120
Housing	
Housing material	Galvanised steel
Protection type	IP 20
Environmental conditions	
Operation temperature	0...50°C
Humidity	0...90% rel. humidity, no condensation
Storage temperature	-25...+75 °C
Mains supply	
Supply voltage	3x 400 V AC, N, PE
Switchable to	3x 230 V AC, PE
Tolerance	+ 10% / -15%
Power consumption when idle	7 W + 5 W per power board
Control voltage	
Internal control voltage	+24VDC
Protection	1 x 2A medium delay (5 x 20mm)
Thermocouple inputs	
Thermocouple	FeCuNi (TYPE J) 0..830° switchable to: NiCr-Ni (TYPE K) 0..830°
Cold junction compensation	Integrated
Resolution	0.1 K
Accuracy	+/- 0,25K
Load outputs	
Bistable, electrically insulated	
per zone	1x heating, 230V AC switching
Control time (phase angle /pulse package)	10 ms at 50 Hz – 8.3 ms at 60 Hz
Current per zone	max. 16 A with 80% switch-on duration per zone
Minimum load	100W
Caution: observe the total load capacity of the electrical connection cable	
Signal shape	Pulse operation/phase control (automatic or manual selection)
Protection	2-pole; 6,3 x 32 mm Internal: SIBA TYPE 16A T External SIBA TYPE 16A GRL
Only use these fuse types!	2-polig; 6,3 x 32 mm
	Intern: SIBA TYPE 16A T
	Extern: SIBA TYPE 16A GRL
	Nur diese Sicherungstypen verwenden!
Alarm notification outputs	
3x relay contact	Potential-free for max. 250 VAC
Maximum current	4 A for $\cos \varphi = 1$; 2A for $\cos \varphi = 0.5$
Digital inputs	
Insulated, potential-free	16 – 30 V DC
Data interfaces	
Ethernet	CAT 5
RS485	D-SUB 9-pole
USB	USB 3.0 Standard

Sizes

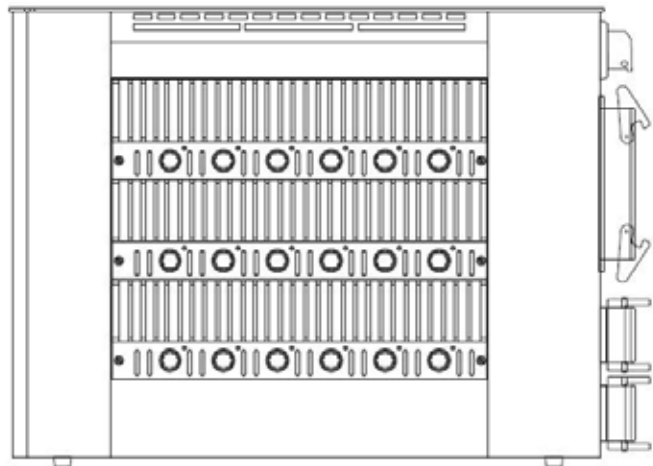
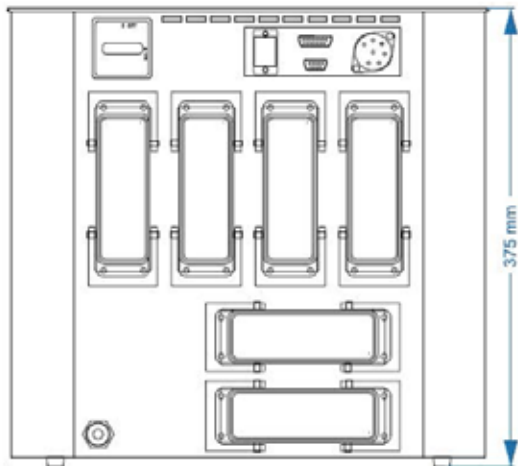
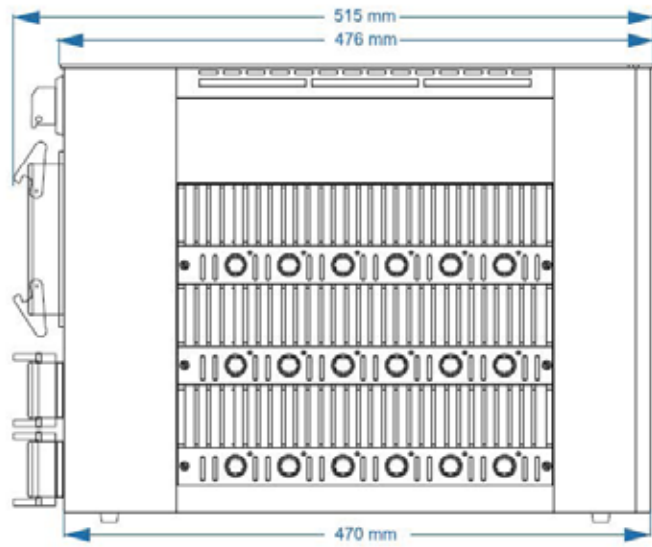
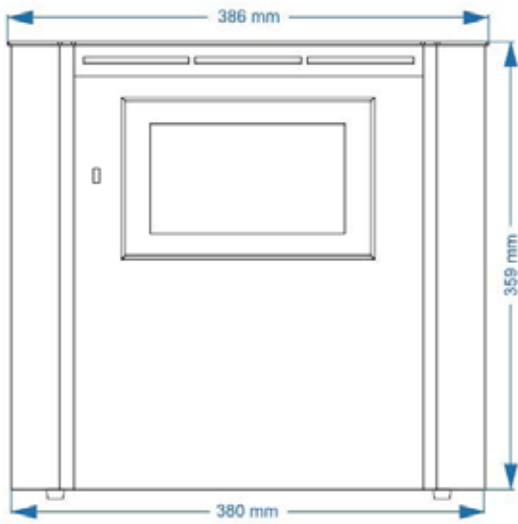
Tabletop devices 6/12 Zones



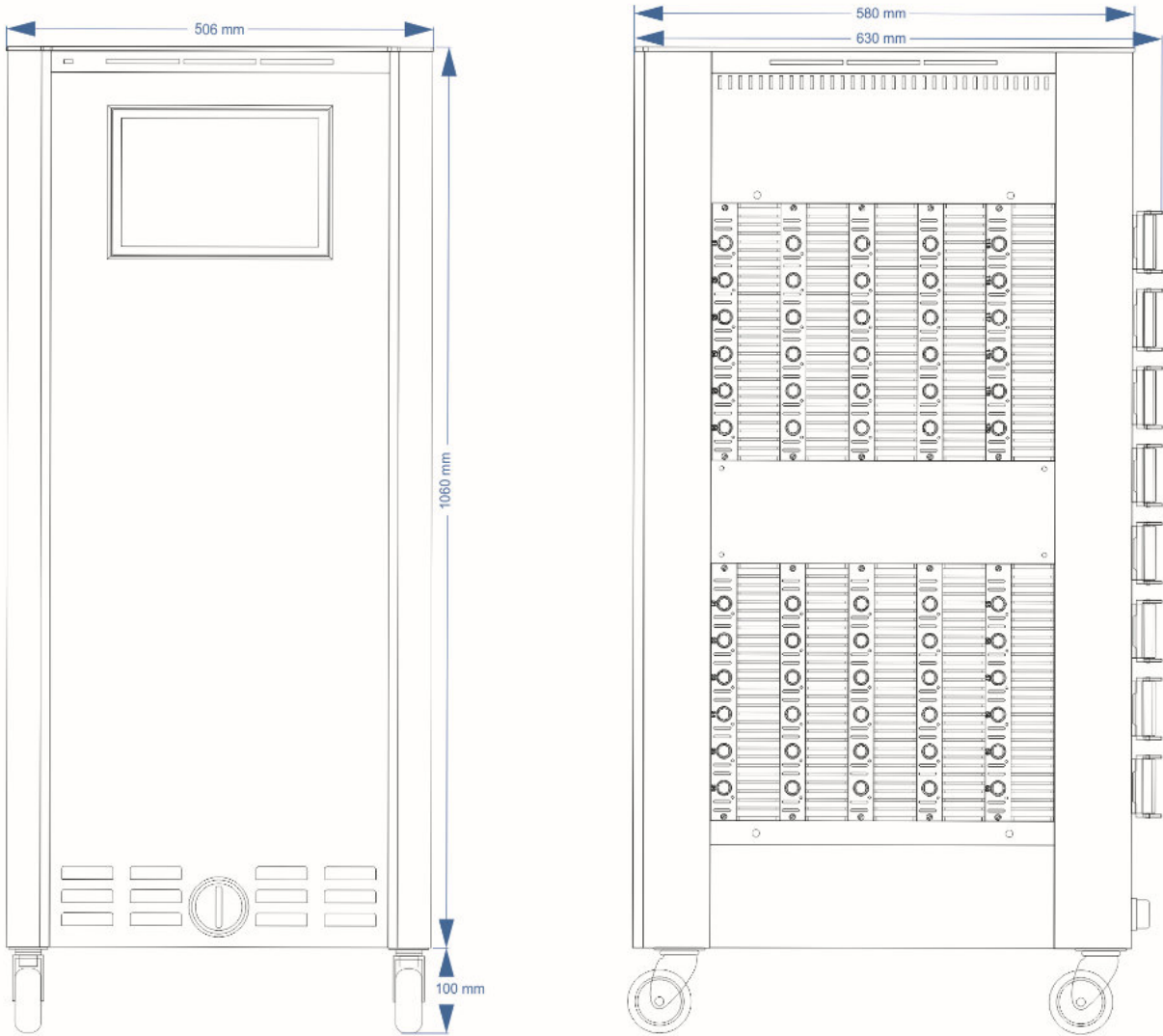
Tabletop devices 18/24 Zones



Tabletop devices 30/36 Zones



Large units on rollers 42 to 120 zones



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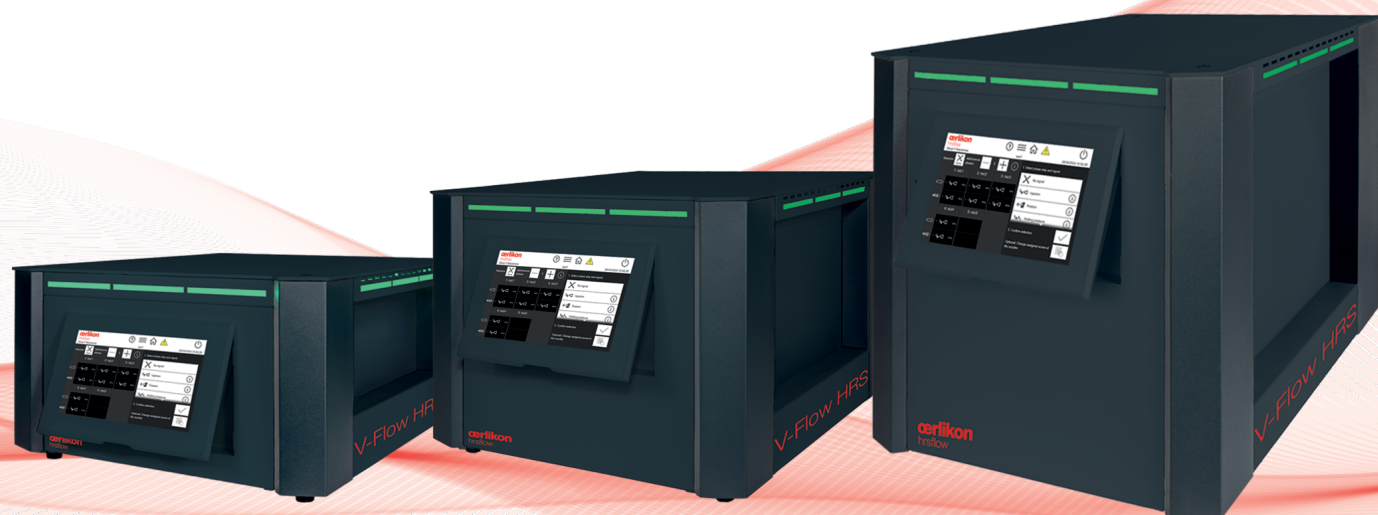
24/7 Service Hotline

Phone +1-855-HRS-FLOW
(1-855-477-3569)
usa.service@hrsflow.com

oerlikon
hrsflow

V-Flow HRS

Precision in Every Drop, Excellence in Every Part





Effortless Process Control

Introducing the V-Flow HRS from Oerlikon HRSflow, the next-generation sequential multi-zone controller designed for unmatched precision and reliability in valve gate nozzle control. Engineered to elevate part quality, streamline cycle times, and boost overall productivity, the V-Flow HRS sets a new benchmark in performance.

Universally adaptable for all valve gate systems, including the most demanding high-performance applications, these controllers offer configurations ranging from 6 to 30 valves, in multiples of 6, and can efficiently manage up to 4 phases per cycle.

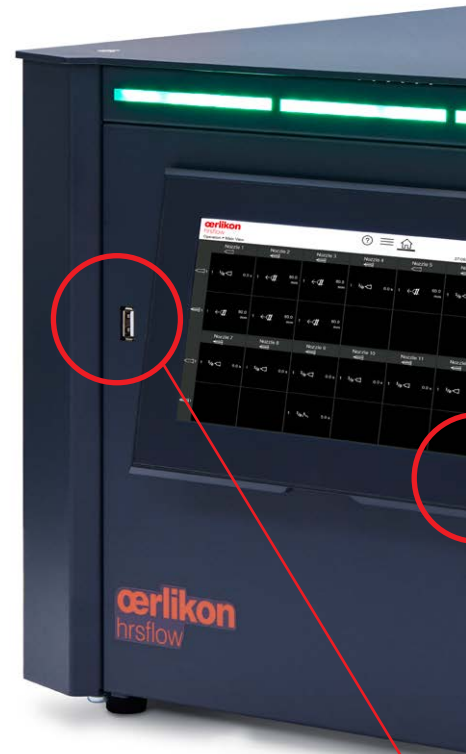
Experience the future of valve gate control with V-Flow HRS—where precision meets perfection.

Product range:

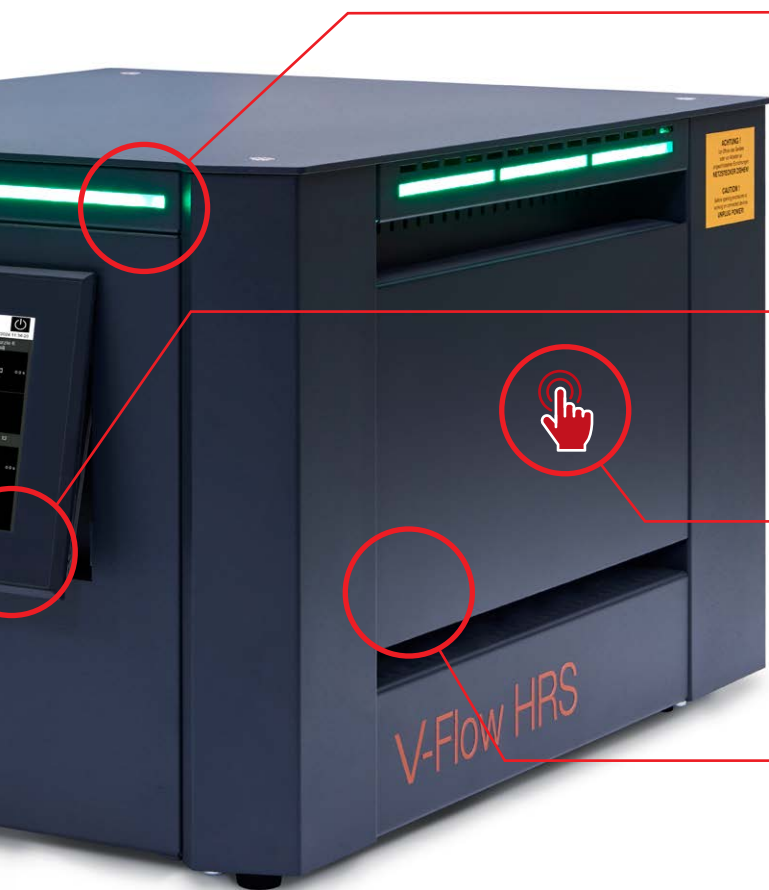
Small version: from 6 up to 12 zones

Medium version: from 18 up to 24 zones

Large version: 30 zones



Controller Structure: Built to Last with Unparalleled Reliability



Led stripe

the operational status can be easily identified from a distance according to alarms colour identification.

Tiltable & Integrated touch display

easy reading from any angle.

Service Friendly

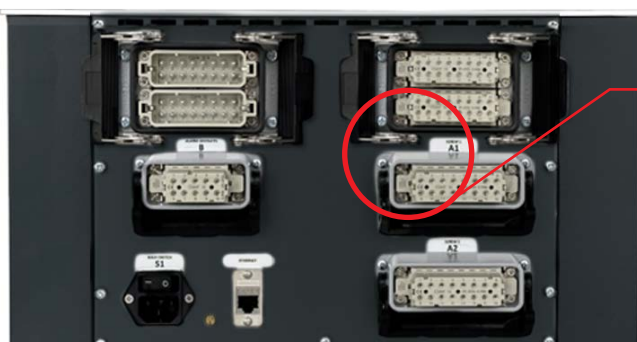
control cards with outputs electronically protected

Robust metal Housing

solid structure to assure reliable operations.

USB Port

it simplifies update installation, transfer of recipes and test protocols.



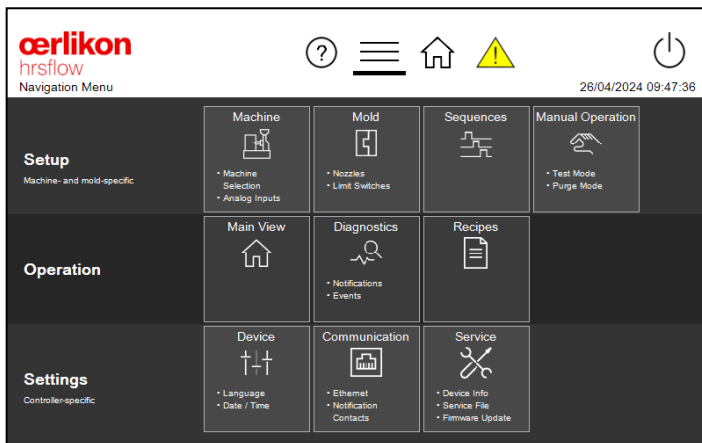
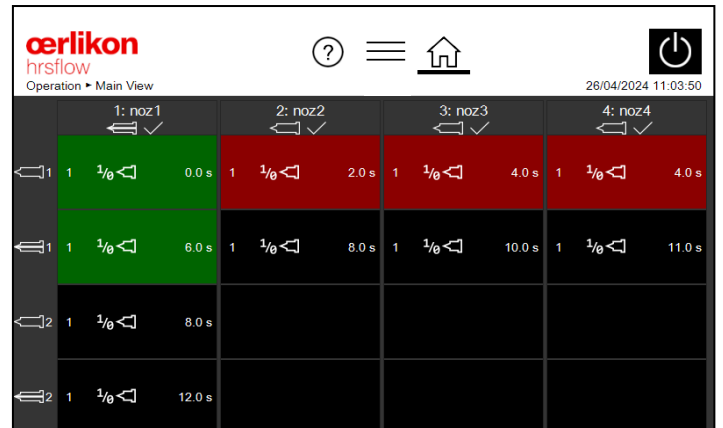
Flexible connection to the machine

- Valve outputs,
- Signal from injection molding machine Barrel 1 and 2
- Limit switch detection
- Ethernet and VNC
- Safety Contacts

Streamlined Features: Effortless Simplicity and Intuition

1. Intuitive user interface

It allows the controller to be operated without instructions or prior knowledge thanks to the self-explaining icons: the toolbar, buttons and text are clear and visible.

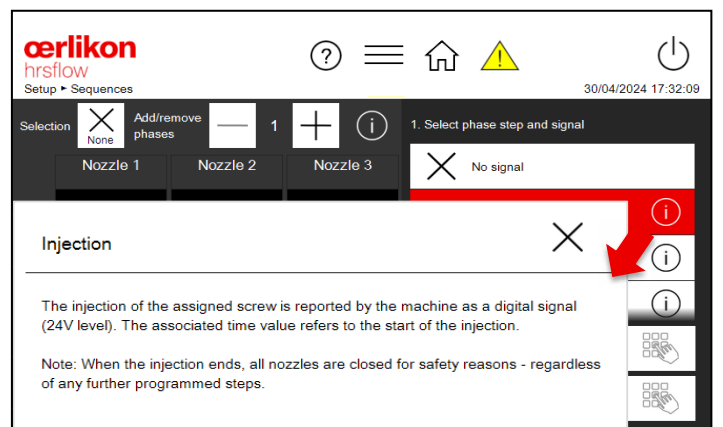


2. Smart navigation

All functions, zones and setpoints are well visible on the menu bar and reachable with one click.

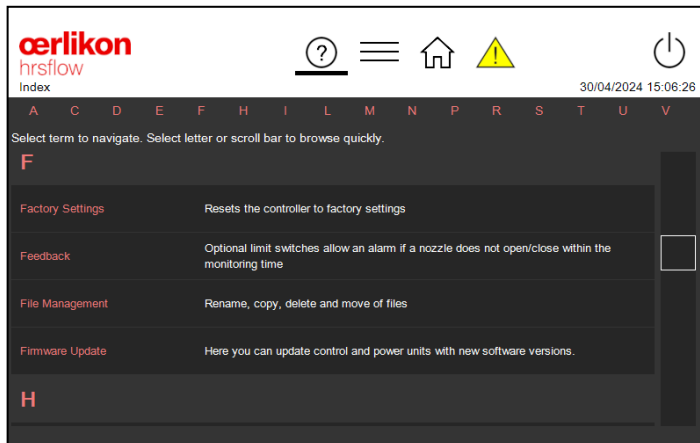
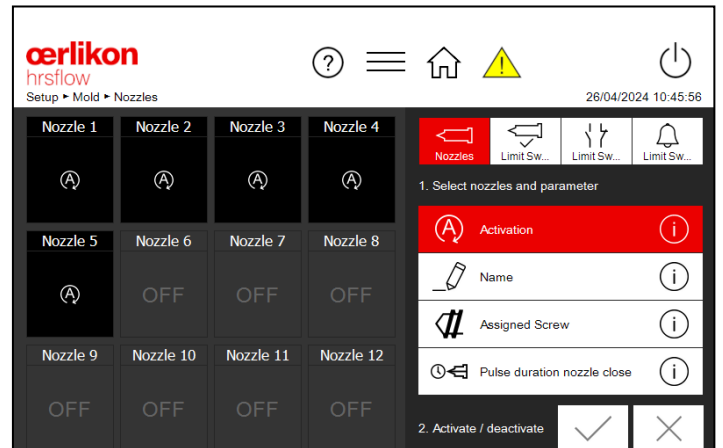
3. Explanation at the touch of a button

All the functions and description are available with the touch of a button.



4. Guided operation

The controllers guide you step by step (1 > 2...)

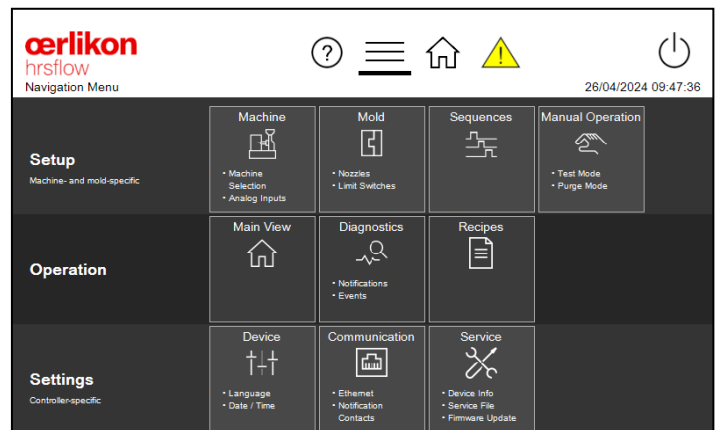


5. Keyword Index






List of the available functions. Pressing a function will send the user directly to the desired submenu.

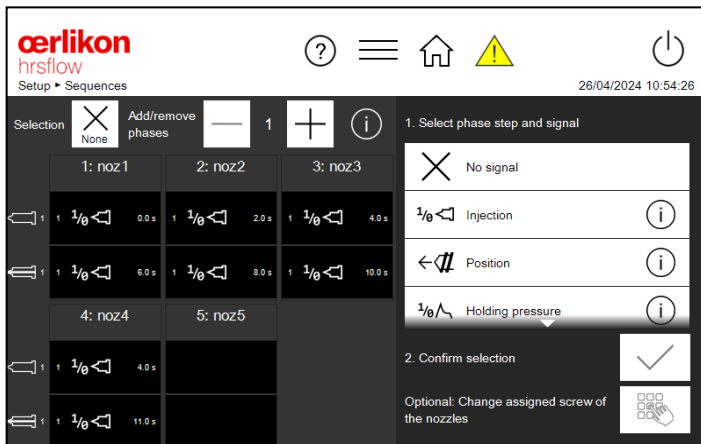
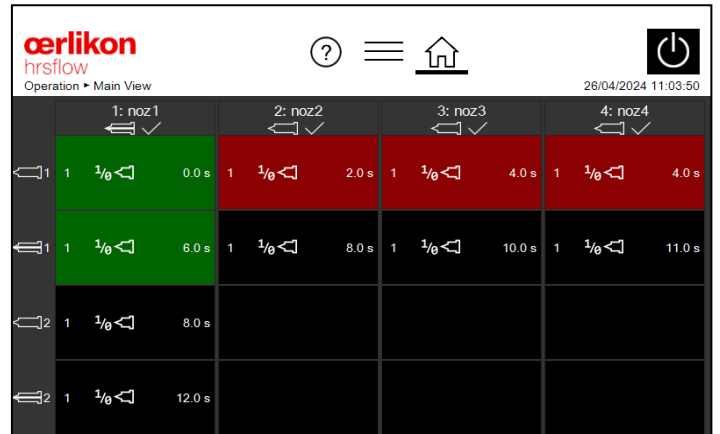
6. Quick Set Up

Assisted configuration for Machine, Mold, Sequences.



7. Clear display of status

-  Nozzle open
-  Nozzle closed
-  Current status
-  Trigger signal and value
-  All steps of a phase completed



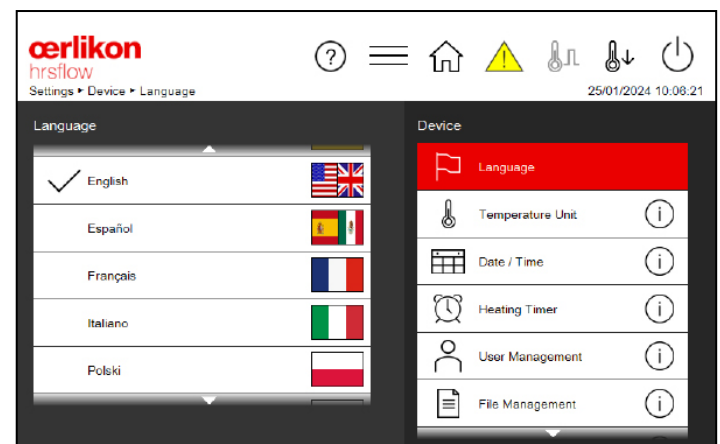
8. Easy to use sequence editor

“Graphical and tabular visualization of the sequence:

- Select phase quantity
- Select the valve and the desired opening/closing phase
- Select the trigger signal
- Confirm selection and insert the trigger signal value (example: delay, screw position value, etc.)”

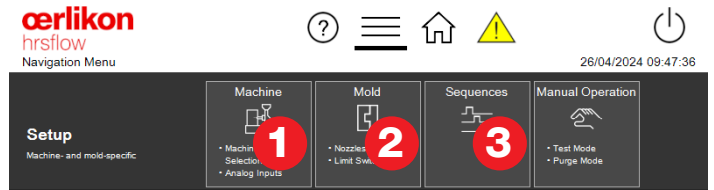
9. Languages

German, English, Spanish, French, Italian, Czech, Polish, Russian, Japanese, Chinese, Turkish, Portuguese.



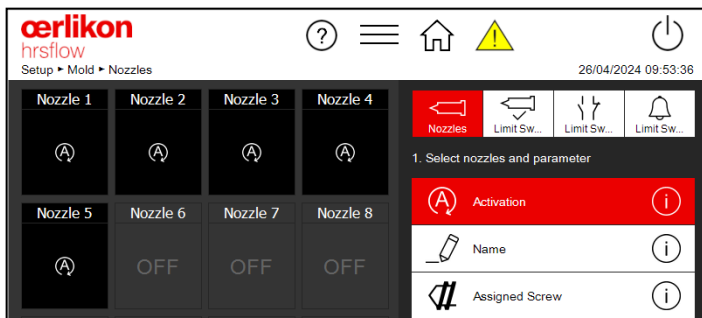
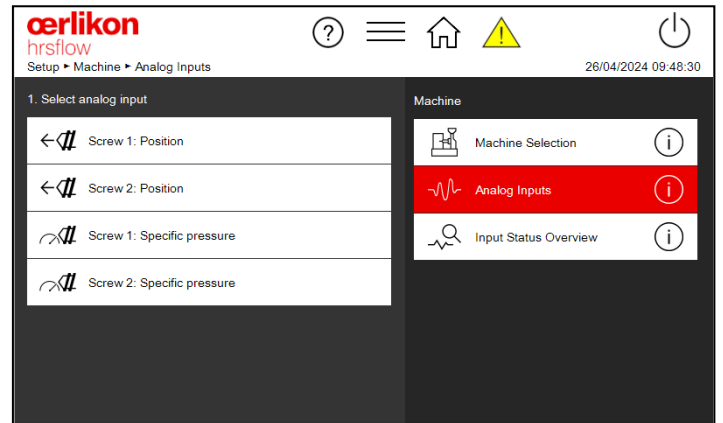
V-Flow

Quick Set up



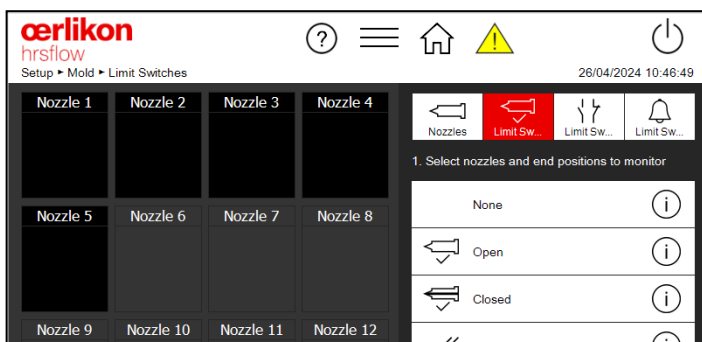
1. Machine

Define and configure IMM signals such as injection status, screw position, pressures, etc..



2. Mold

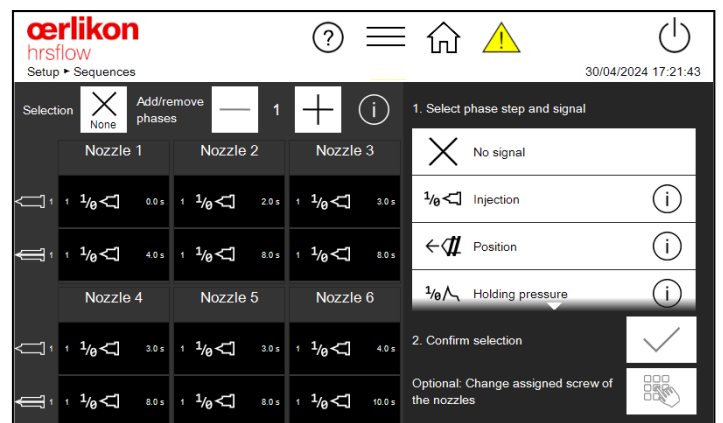
- **Nozzles:** Activate, name, assigned screw
- Configure **limit switches** (if the controller is equipped with the limit switches)



3. Edit opening/closing sequences

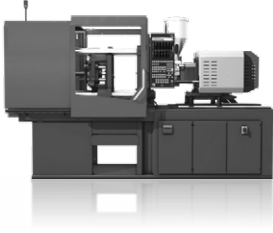
Phase steps:

- Start injection signal
- Screw position
- Switch-over signal
- Polymer volume injected



Controller Operation Industry 4.0

Operation via injection
molding machine



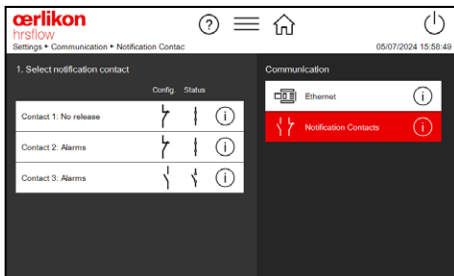
The controllers can be operated via the injection molding machine, that has installed a VNC client, without any restriction.

Operation with notebook/
tablet

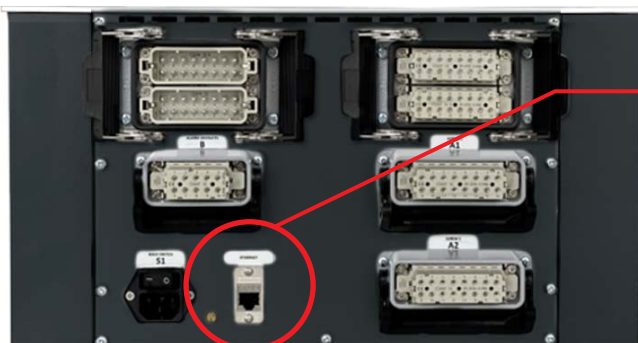


The hot runner controllers have a VNC server. So, they can be operated from an external device such as a notebook or a tablet, just installing a free VNC viewer.

Control Signals



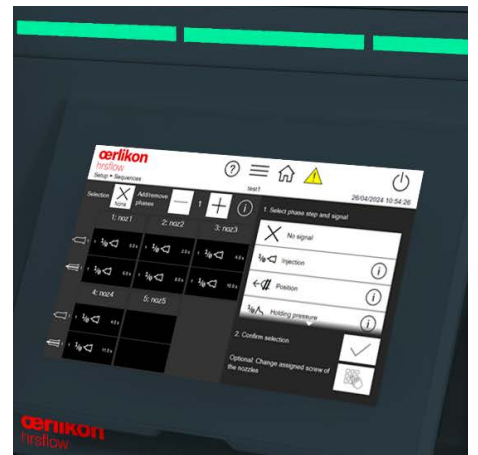
To ensure safe operation for the user, the V-flow Control Unit needs to be connected to the IMM. The available contacts can be adjusted according to specific requirements.



Machine connection
flexible connection to the machine.

Functions at a glance: The Essence of Flexibility

- Recipe management
- Manual operation
- User levels with password protection
- Screenshots management
- USB data transfer
- Network drive transfer
- Notifications on warnings and errors
- Events: history of user modifications and errors



Service and Customer Support for your ultimate satisfaction

Our Customer Support and Service technicians provide the best assistance to ensure customer satisfaction. Fast, experienced and efficient, our team is always available to answer your questions and promptly address any concerns.

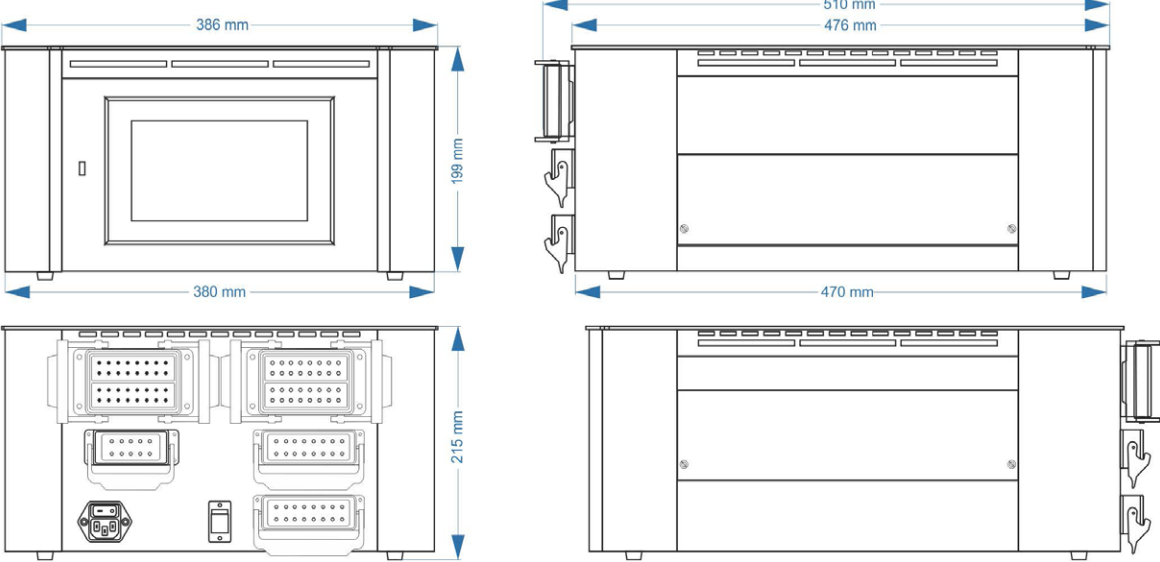
- Qualified Service team will be available for support 24/7
- System integration and control unit best practices
- 2 years of warranty to customers from delivery

Our Control Units are also equipped with a Service File feature: the service file contains technical data that provides all the necessary information for error analysis. It is helpful when a malfunction cannot be solved right away and therefore technical support is needed. The file, generated with one click, can then be sent by e-mail to Technical Support, helping to perform an in-depth analysis based on the data.

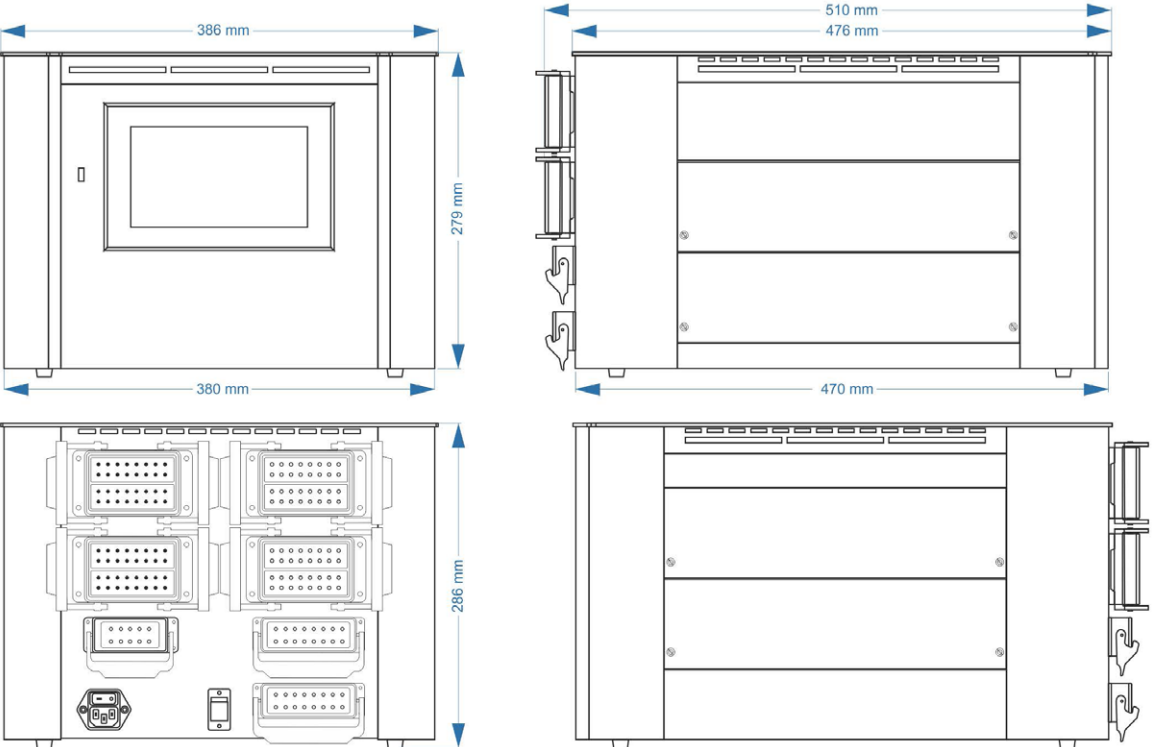


Sizes

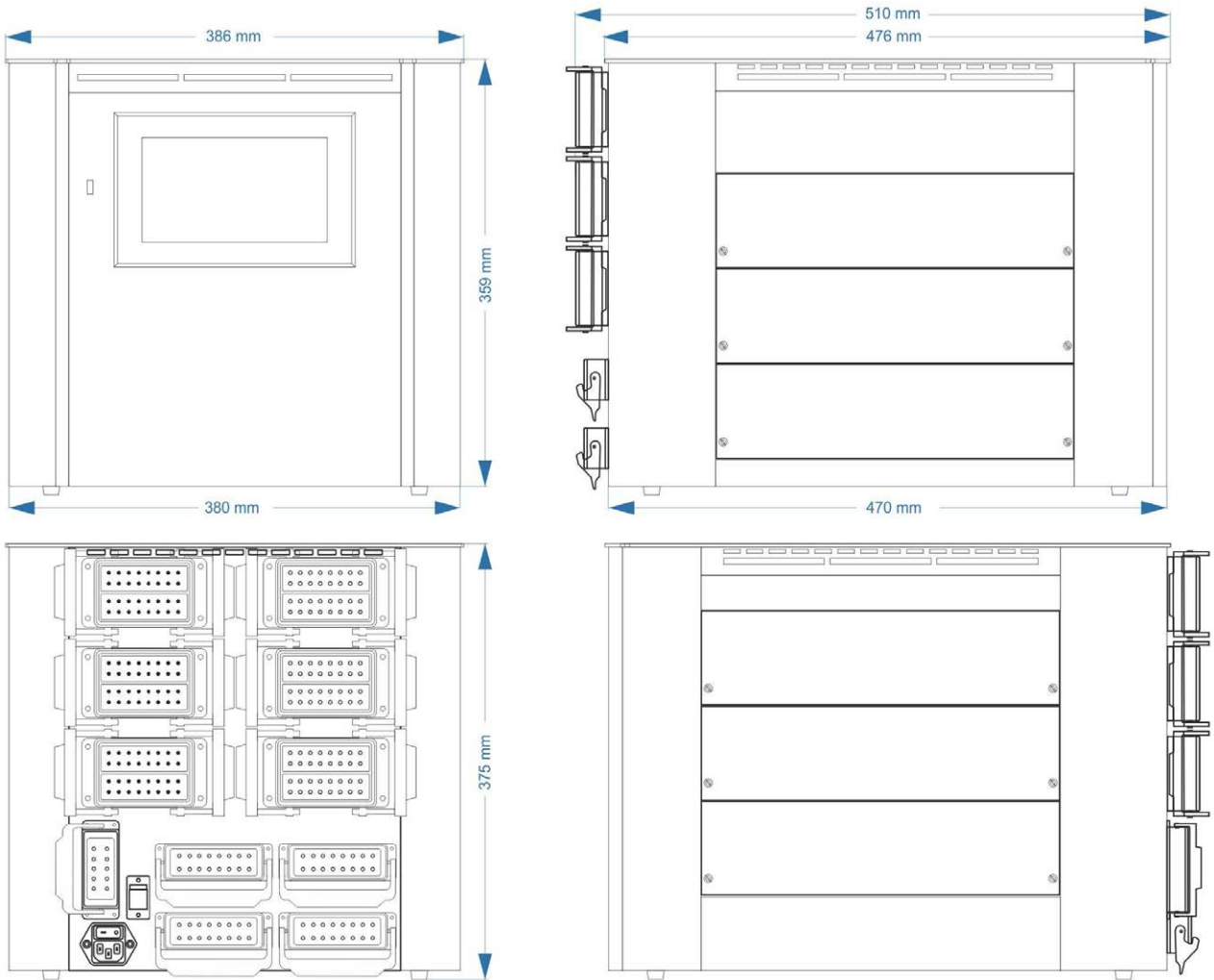
Tabletop devices 6/12 Zones



Tabletop devices 18/24 Zones



Tabletop devices 30 Zones



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