

oerlikon
hrsflow

T-Flow HRS

Unmatched intuitive excellence for process control





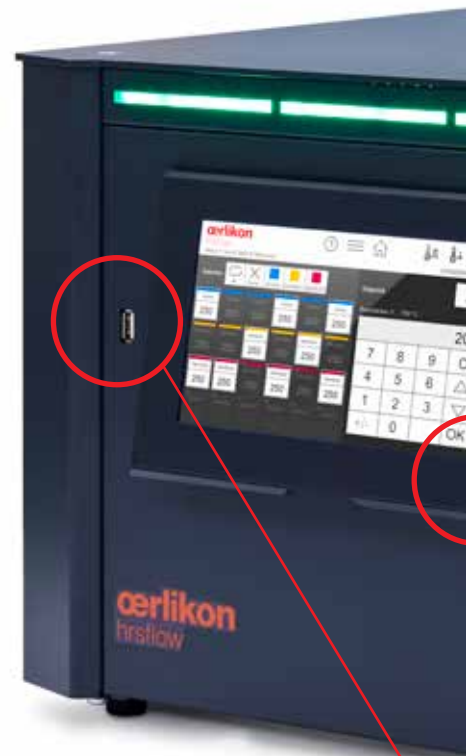
Effortless Process Control

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.



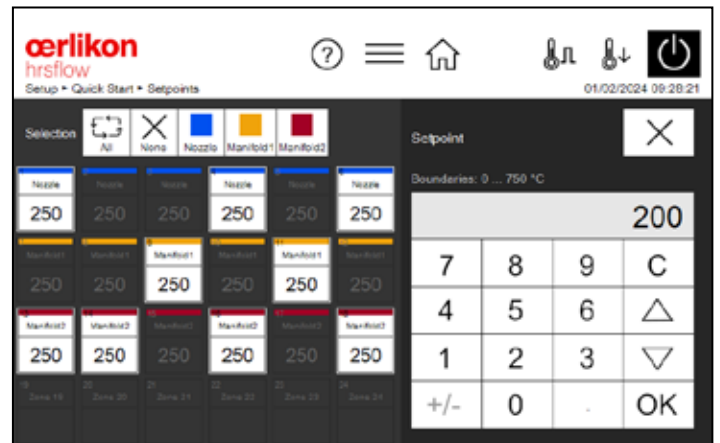
Flexible connections to the mold

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.



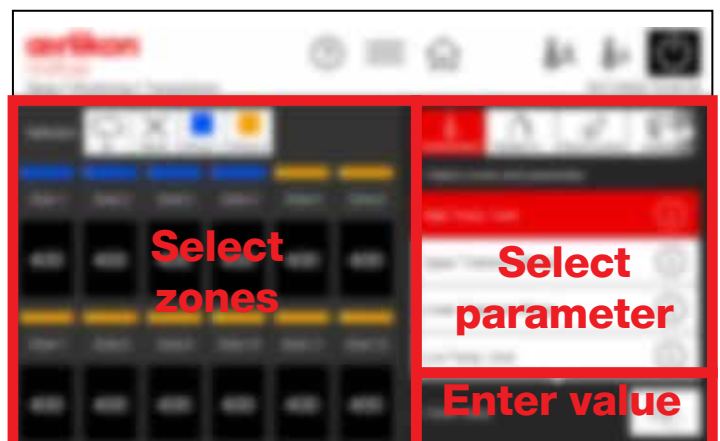
	Nozzle	Nozzle	Nozzle	Nozzle	Nozzle	Nozzle	Manifold1	Manifold1	Manifold1
Act [°C]	247	247	249	248	248	248	248	248	248
Set [°C]	250	250	250	250	250	250	250	250	250
P [W]	1,782	1,592	118	157	238	238	79	237	238
I [A]	13.5	11.5	0.9	1.2	1.8	1.8	0.6	1.8	1.8
	Manifold1	Manifold1	Manifold2	Manifold2	Manifold2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

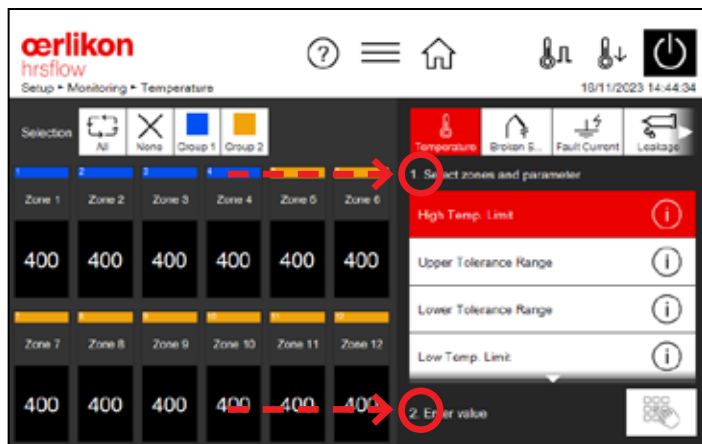
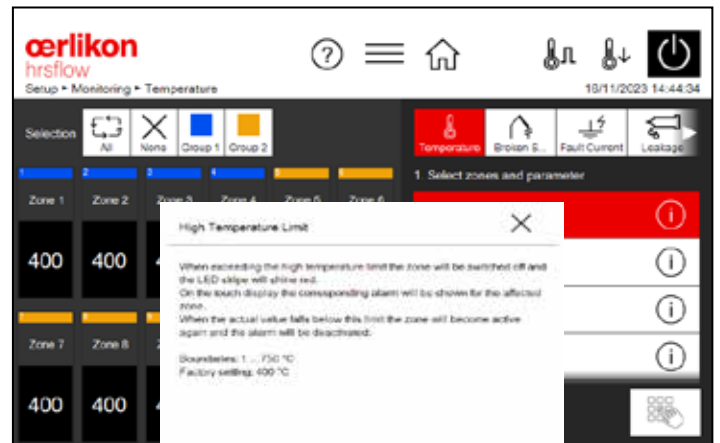
3. Consistent Operation

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.

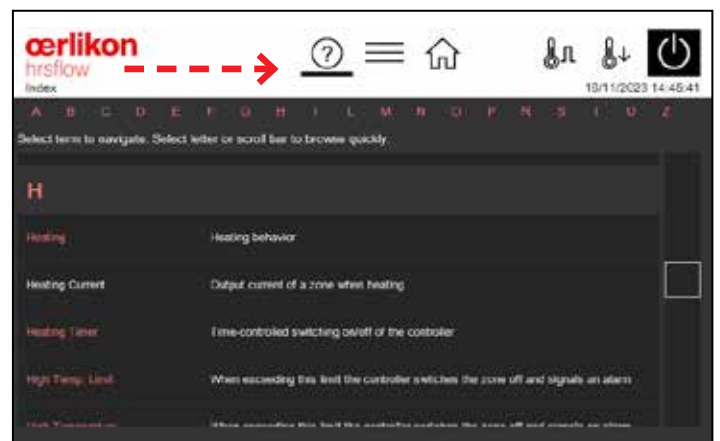


5. Guided operation

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

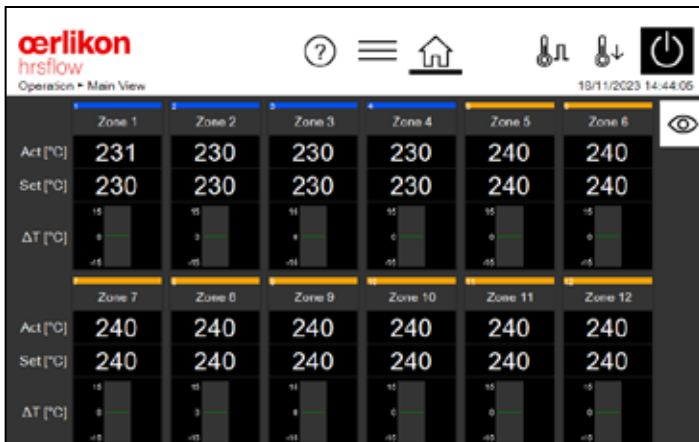
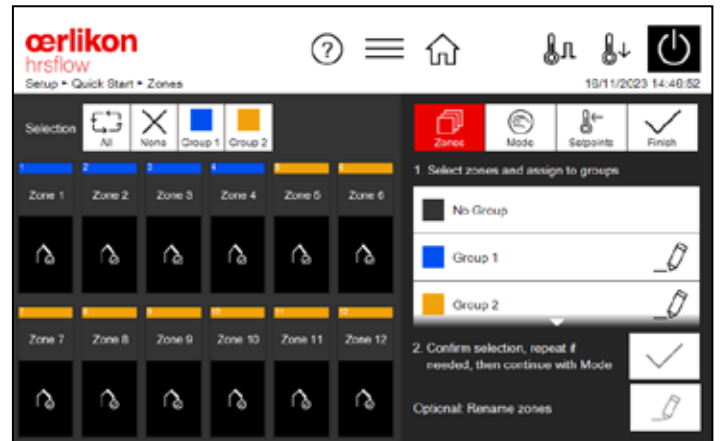
6. Keyword Index

List of the functions available with link to input.



7. Grouping

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

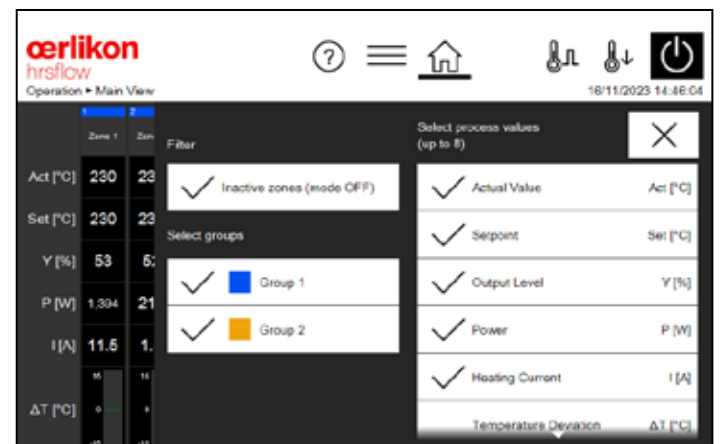


8. Home Page

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

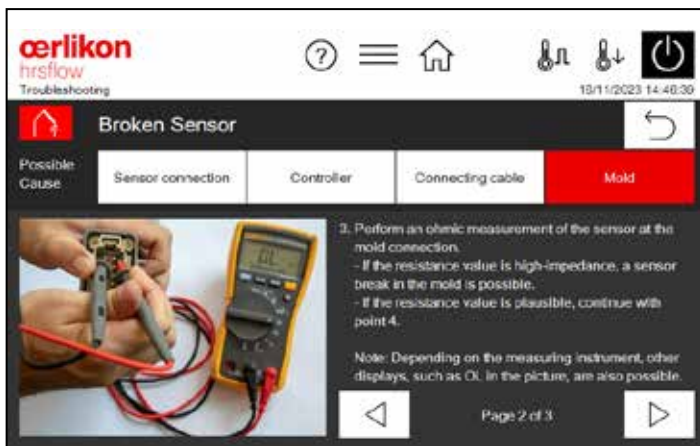
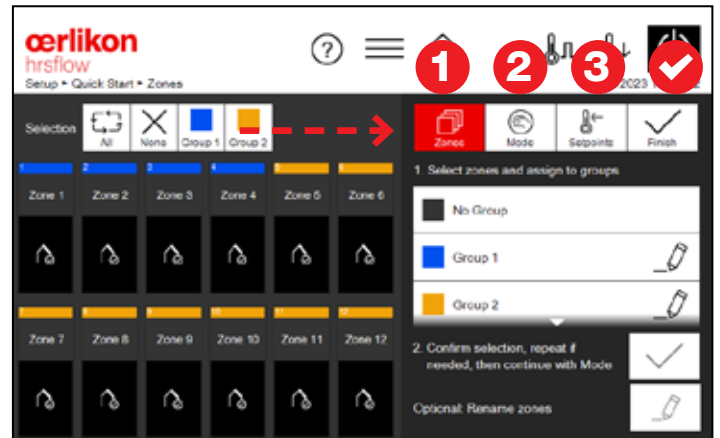
9. Personalized zone display

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



10. Quick Start

Assisted configuration for quick controller activation during tool change.

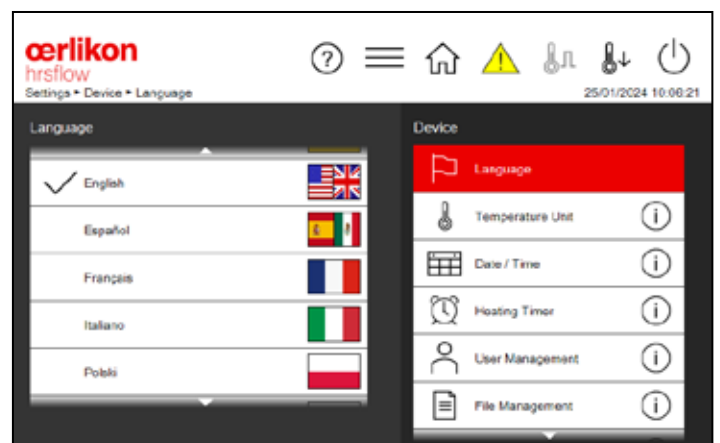


11. Integrated Service & Support

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

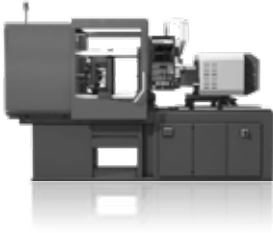
12. Languages

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

- Automatic control
- Manual control
- 2 adjustable setpoint values
- Percentage of load for each zone
- Current consumption for each zone
- Zones rename (8 digits max.)
- Unlimited mold recipe
- Electrical Data from mold saved for analysis Programmable display of zone data
- USB data transfer
- Four mode of Boost function: Positive – Negative – Period of time
- Choice of 4 Soft-start Programs: time duration -°C/minute - shifted - synchronized
- Real -Time Mold Surveillance for variations in electrical data
- Automatically switches to Manual Mode using last recorded Power Applied
- Zone slaving



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

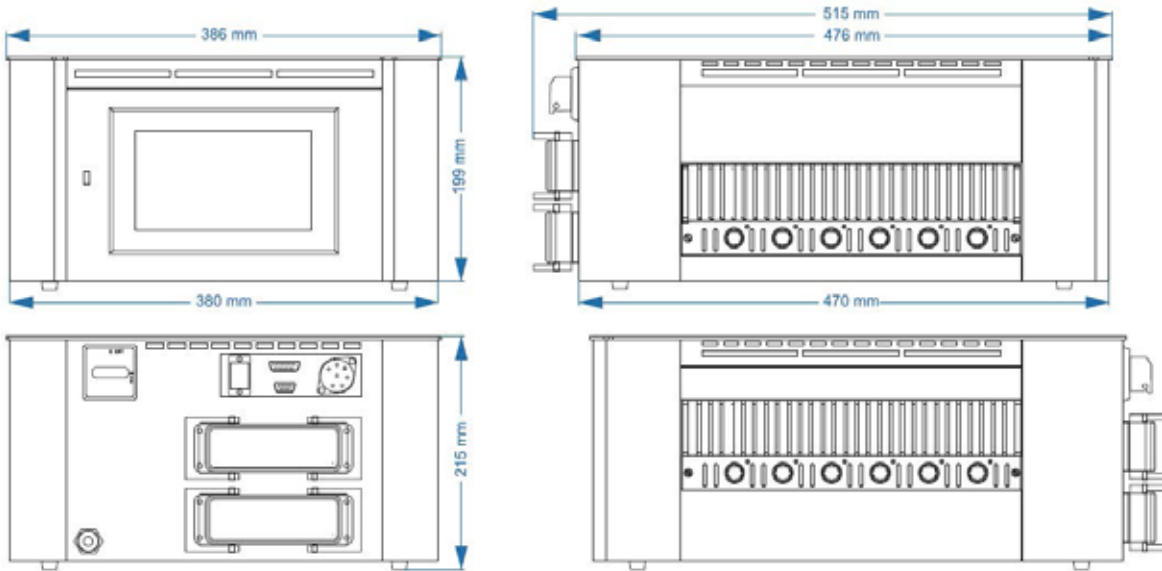


Technical Data

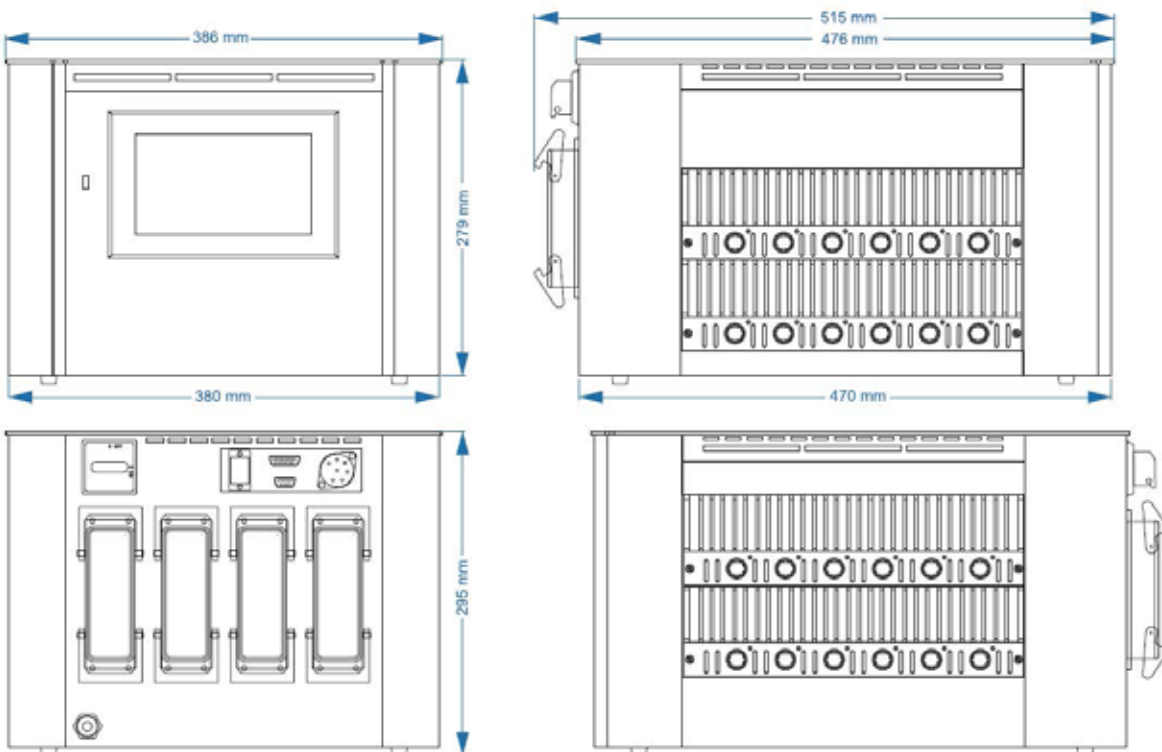
Operation and display	7" up to 36 - 10" up to 120
Housing	
Housing material	Galvanised steel
Protection type	IP 20
Environmental conditions	
Operation temperature	0...50°C
Humidity	0...90% rel. humidity, no condensation
Storage temperature	-25...+75 °C
Mains supply	
Supply voltage	3x 400 V AC, N, PE
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

Dimensions

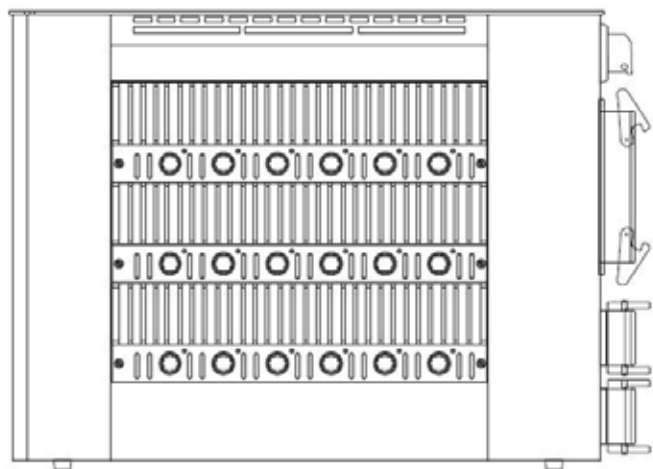
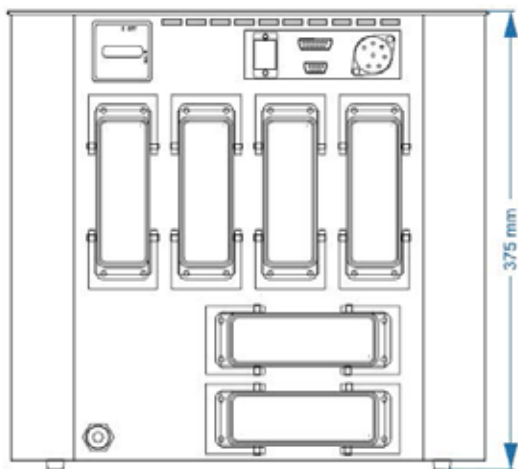
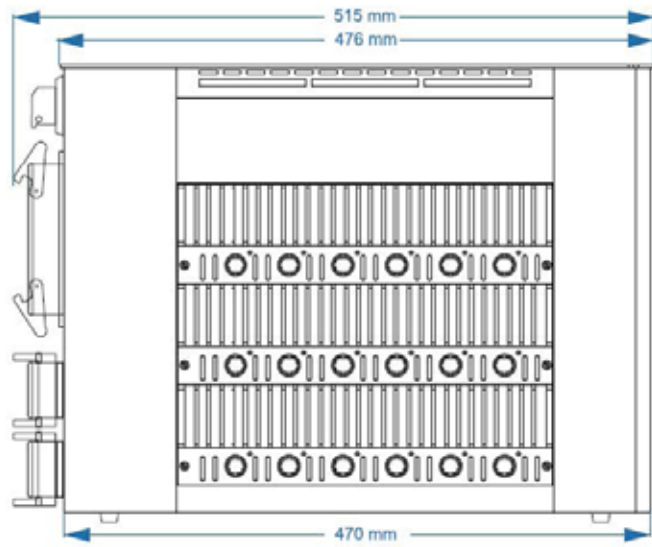
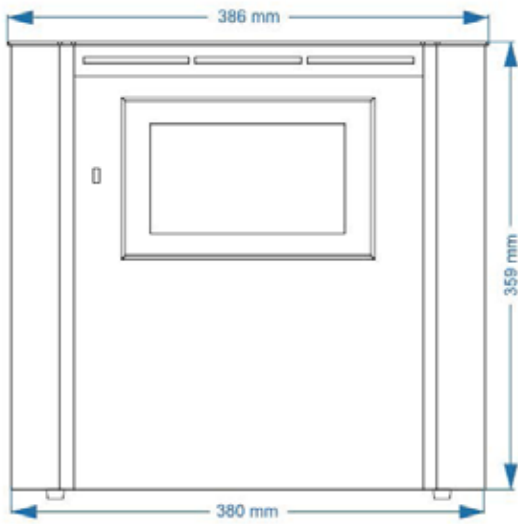
Tabletop devices 6/12 Zones



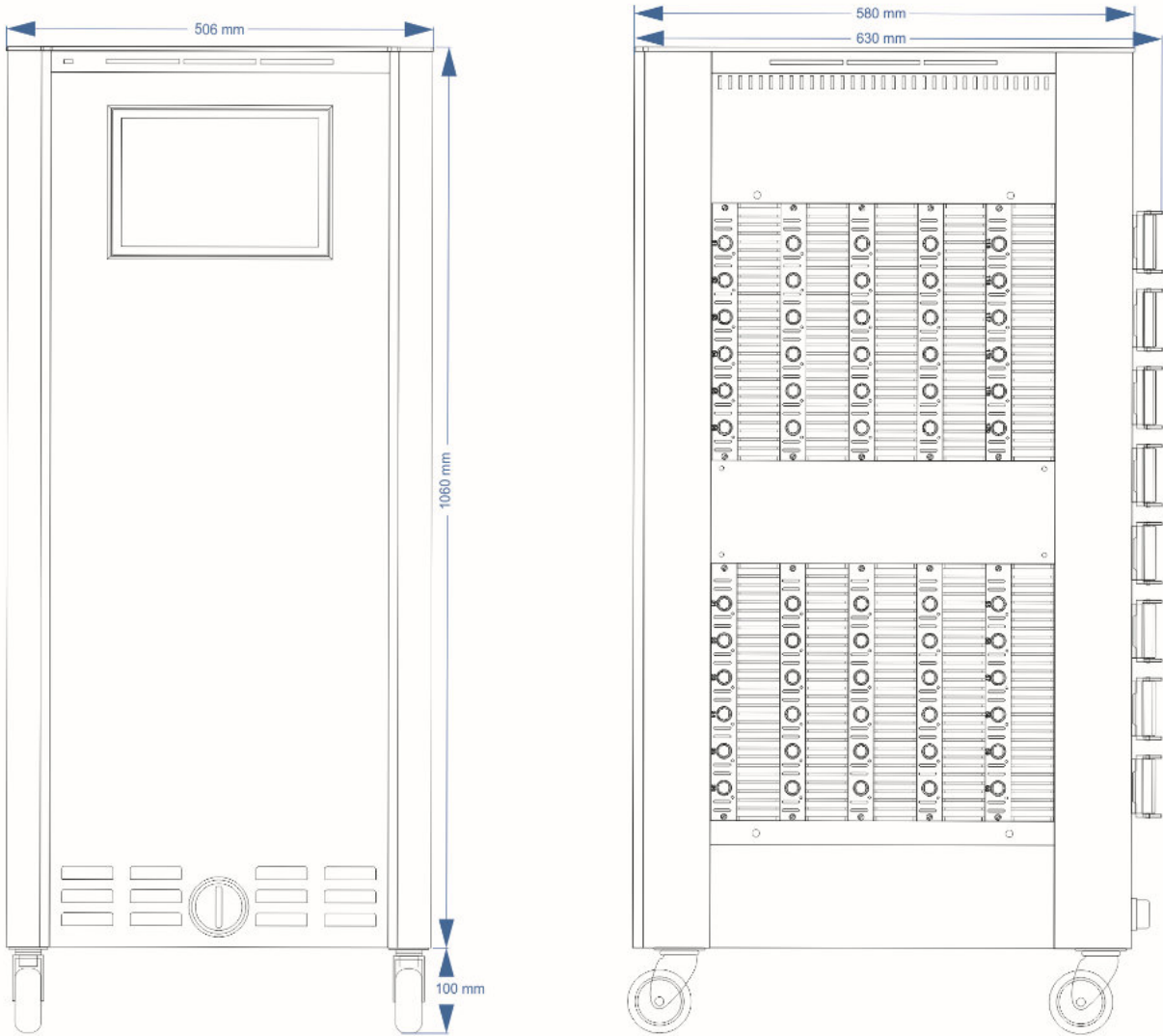
Tabletop devices 18/24 Zones



Tabletop devices 30/36 Zones



Large units on rollers 42 to 120 zones



Oerlikon HRSflow Italy

Production Plant
Headquarter
Via Piave, 4 - San Polo di Piave
31020 Treviso
Ph.+39 0422 750 111
info@hrsflow.com - www.hrsflow.com

24/7 Service Hotline

Tel +39 0422 750 555
service@hrsflow.com

Oerlikon HRSflow China

Production Plant INglass Tooling
& HotRunner Manufacturing (China)
Co. Ltd
No 385, Road 18, Xiasha,
Hangzhou Econ. & Tech.
Devel. Area, Zhejiang 310018
Phone +86 571 86686900
china@hrsflow.com

24/7 customer service for Asian countries

Phone +86 18858181211

Oerlikon HRSflow USA

Production Plant
Oerlikon HRSflow USA, LLC
920 74th Street - 49315 Byron Center, MI
Phone +1 616 228 6900
usa.hrsflow@oerlikon.com

24/7 Service Hotline

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