

EWIKON

Valid for
item numbers:

69020.312 (12-zone)
69020.324 (24-zone)
69020.336 (36-zone)
69020.348 (48-zone)
69020.360 (60-zone)
69020.372 (72-zone)
69020.384 (84-zone)
69020.396 (96-zone)



HPS-C-PRO Hotrunner Controllers

Operating Manual

EWIKON

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Safety Instructions

Please read these operating instructions carefully prior to using the product.

The unit may be serviced only by qualified personnel. Be sure to withdraw the mains plug before opening the housing!

Never replace the controller cards unless the unit has been disconnected from the power supply. Do only use the same type of fuses (see *Fuse Replacement*).

Prior to inserting the mould cables, be sure to verify that all connectors have been properly connected (see *Connections*).

Check power supply cable and mould cables for potential defects on a regular basis! If the cable sheath is found to be defective, be sure to use a new connecting cable!



Intended Use

HPS-C-PRO units are industrial temperature controllers for controlling the melting temperature of hot-runner moulds. To this end, the controllers determine the temperature of the respective control zone via a Thermocouple. This input is then used to regulate the power output for the heating element.

To prevent overheating damage in case of malfunction, an external temperature fuse must be integrated into the heating circuits.

EWIKON shall not be liable for damage caused by improper use of the device.

General Information

A separate control zone is required for each load (zone) to be connected.

A “control zone” consists of a temperature sensor input and a load output including a fuse.

When connecting the mould cables, be sure to assign the cables to the correct connectors (see *Connections*).

Unused controller modules must be switched off.

A heat-resistant flexible cable must be used as a connecting lead for the load circuits. For the Thermocouple, a special compensating lead is required! Cables are available as original accessories.

Set-Up

The device includes built-in, powerful fans that reliably prevent overheating of the output stage during operation. The corresponding ventilation slots are located on the underside and the rear side of the device. Make sure that air supply through these openings is not obstructed.

Cleaning

The external surfaces of the device and the operating panel may be cleaned with a soft cloth saturated with alcohol. Please do not use acid cleaners or scouring agents. To prevent malfunction, the operating panel should only be cleaned after the device has been switched off.



Service

The device must be regularly subjected to a safety check complying with BGV A3 requirements (protection against accidents).

It is recommended to clean the dust filters at regular intervals. Depending on the operating period and working condition, the filters should be replaced in the cassette.

In addition, the ventilation slots should be checked for obstruction and cleaned if necessary. However, this task must be carried out by qualified service personnel and not by the user.

No other maintenance work is required for the device beyond the tasks specified above. Should malfunction occur, please contact EWIKON.

Disposal

Once the device has reached the end of its service life, please feel free to return it to the manufacturer for proper disposal.



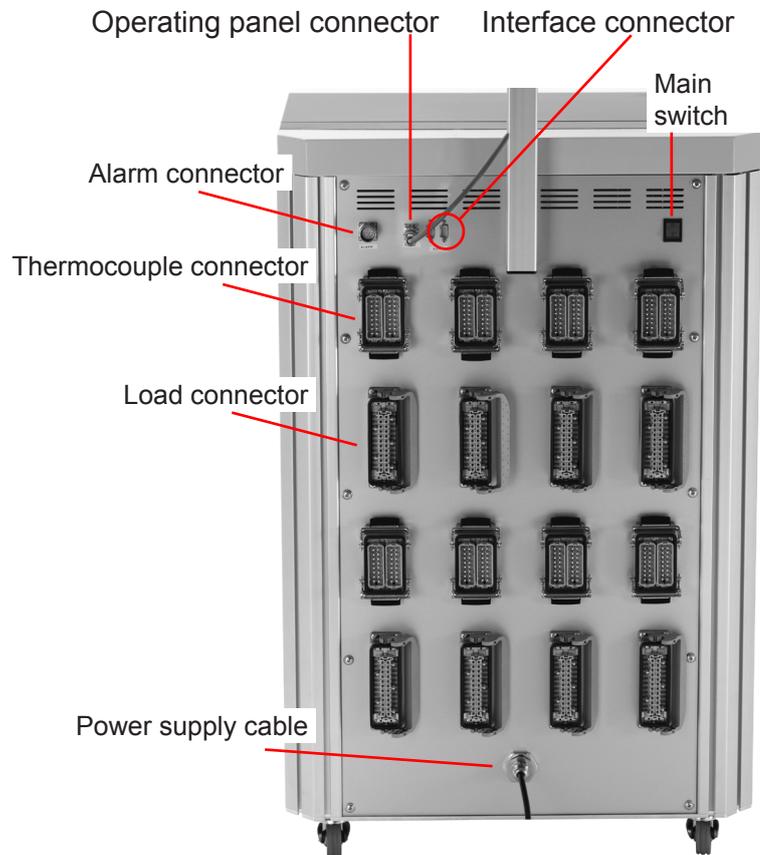
This device satisfies the essential protection requirements specified in pertinent EU Directives (as of 2010)

View of the Controller

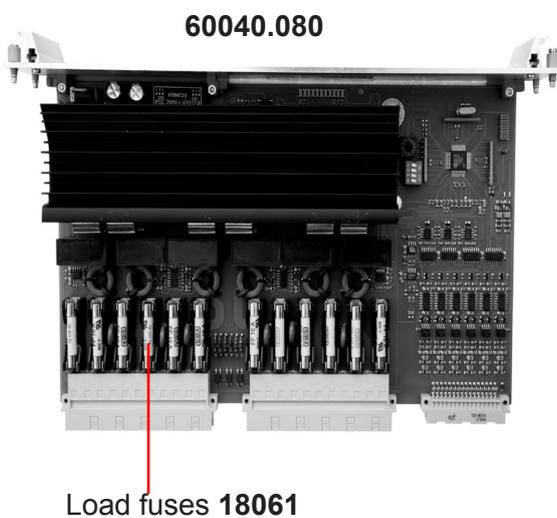
Front side



Rear side



Controller Board with Load Fuses



! PLEASE NOTE:

The controller boards are designed for 6 zones. For assignment, refer to the **Assigning Zones/Controller Boards** section.

Be sure to pull the mains plug before removing controller board(s)!

To replace fuses, unlock the corresponding controller board (rotate the 4 locks by 90°), then withdraw board.

Be sure to use replacement fuses of the same type (16 A FF), please also see **Fuse Replacement**.

Start-Up

The **HPS-C-PRO** hotrunner controllers are designed for connection to a three-phase power supply source (see **Technical Data**). The unit features a CEE plug for this purpose. The main switch, which completely disconnects the device from the power supply (mains), is located on the rear panel. After performing a careful cable check, connect the mould to the controller. The alarm connector (accessory) allows you to establish a connection to the injection moulding machine as well. Connect the power cable, switch on the controller with the main switch. Set the setpoint values. Be sure to switch off all control zones that are not being used currently (see **Parameter** menu).

TIP! The **HELP** button gives you access to the help function. This function explains all the operating/setting options offered in the currently active menu.

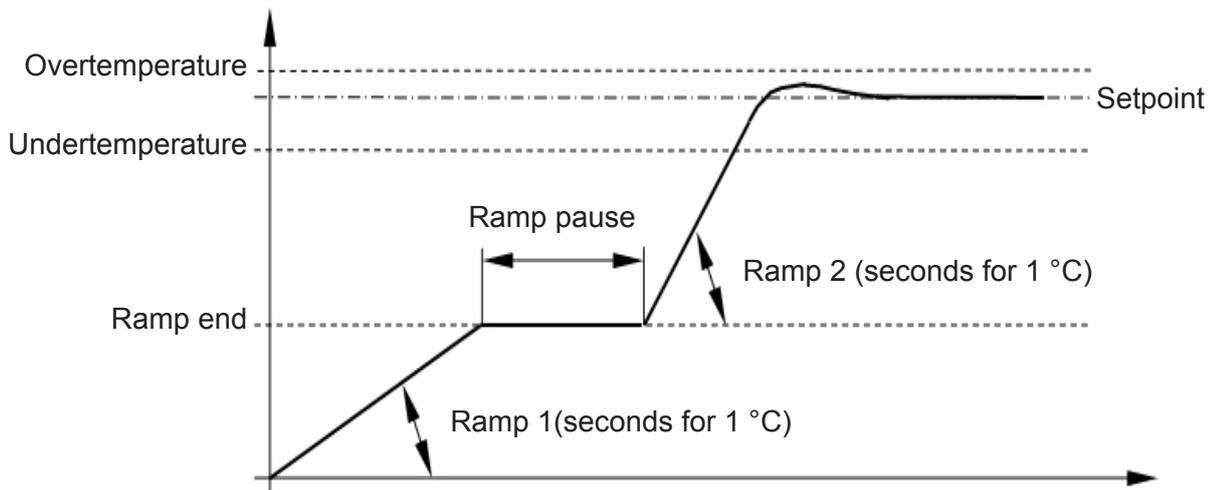
After having checked carefully that all setpoint values are correct, operate the **I/O** button to start the heating process.

This causes the controller to heat up all moulds in a uniform manner. Moist heating elements are dried in the process (soft start ramp). If the **compound heating** option is used, all zones are heated up at the same speed, thus preventing stress in the mould material. The heat-up speed of the soft start ramp can be adjusted via the **Options** menu.

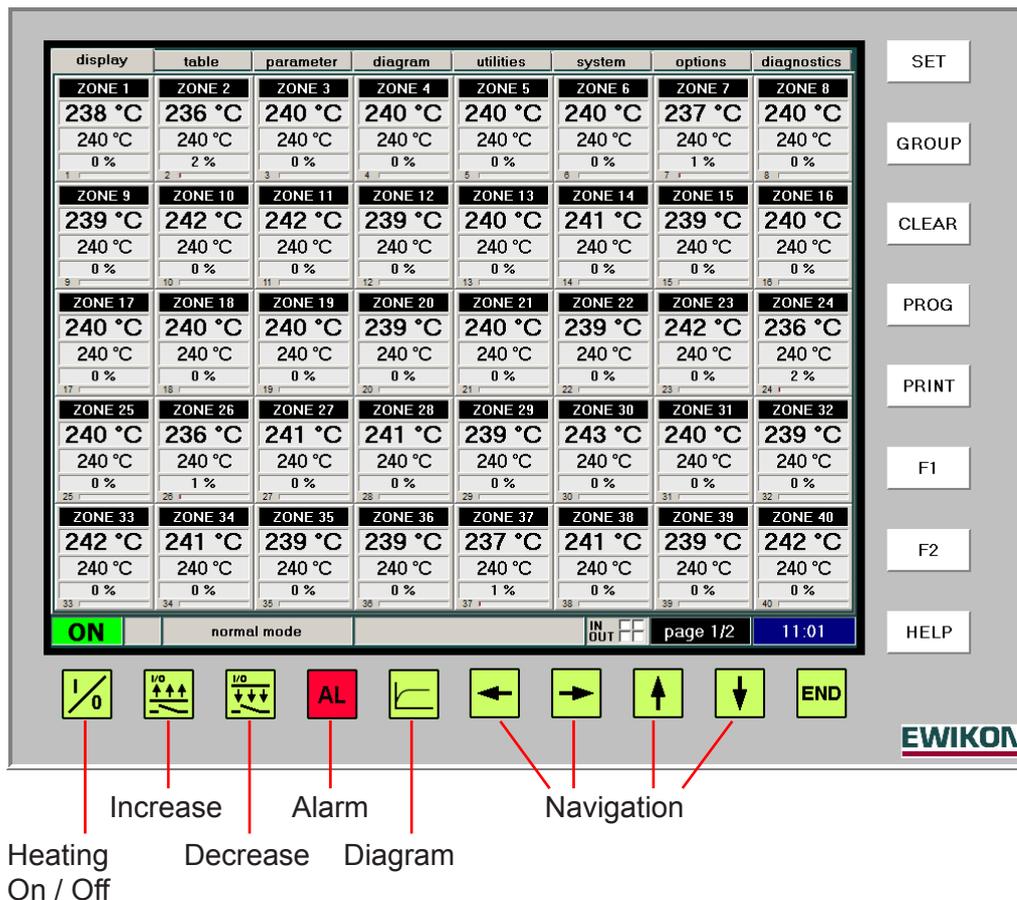
When heating up moulds for the first time, the controller automatically determines the best control parameters for the connected heating zone. Therefore, to ensure optimal control results, do not connect the device to warm moulds!

Soft Start Ramp

Active on: Restart, re-heating after decrease mode or after alarm message



Touchscreen Operating Panel



- Select menu:** The menus are selected directly via touchscreen.
- Help:** The **HELP** button calls up the help function in the current menu window.
- Setpoint:** Can be set directly via the **Parameter** menu. Select **display** from the menu or the **zone** table, then use the **SET** button to set the setpoint value. For groups, see **GROUP**.
- Zones OFF:** Zones can be deactivated individually via the **Parameter** menu.
- Group:** Select first zone and last zone, then use the **GROUP** button to create a group. You can add additional zones at your choice. Use the **SET** button to set the setpoint value, then use **CLEAR** to return to normal operation. The **F1** (fixed group) button allows you to define, designate and mark groups (e.g. for multi-component moulds).
- Start operation:** Activate the heating function with the **I/O** button.
- Increase:** Temporary temperature increase, either with **INCREASE** button or via alarm connector.
- Decrease:** Temperature reduction for all active zones with **DECREASE** button or via alarm connector.
- Alarms:** The **ALARM** button allows you to call up all currently active alarm messages.
- Print:** The **PRINT** button allows you to print the current screen content.
- Switch-off:** Firstly, terminate operation with the **I/O** button. Use the **END** button to close the operating system, then turn off the device via the main switch.

Display Menu

| display | table | parameter | diagram | utilities | system | options | diagnostics |
|---|---|---|---|---|---|---|---|
| ZONE 1 238 °C 240 °C 0 % | ZONE 2 236 °C 240 °C 2 % | ZONE 3 240 °C 240 °C 0 % | ZONE 4 240 °C 240 °C 0 % | ZONE 5 240 °C 240 °C 0 % | ZONE 6 240 °C 240 °C 0 % | ZONE 7 237 °C 240 °C 1 % | ZONE 8 240 °C 240 °C 0 % |
| ZONE 9 239 °C 240 °C 0 % | ZONE 10 242 °C 240 °C 0 % | ZONE 11 242 °C 240 °C 0 % | ZONE 12 239 °C 240 °C 0 % | ZONE 13 240 °C 240 °C 0 % | ZONE 14 241 °C 240 °C 0 % | ZONE 15 239 °C 240 °C 0 % | ZONE 16 240 °C 240 °C 0 % |
| ZONE 17 240 °C 240 °C 0 % | ZONE 18 240 °C 240 °C 0 % | ZONE 19 240 °C 240 °C 0 % | ZONE 20 239 °C 240 °C 0 % | ZONE 21 240 °C 240 °C 0 % | ZONE 22 239 °C 240 °C 0 % | ZONE 23 242 °C 240 °C 0 % | ZONE 24 236 °C 240 °C 2 % |
| ZONE 25 240 °C 240 °C 0 % | ZONE 26 236 °C 240 °C 1 % | ZONE 27 241 °C 240 °C 0 % | ZONE 28 241 °C 240 °C 0 % | ZONE 29 239 °C 240 °C 0 % | ZONE 30 243 °C 240 °C 0 % | ZONE 31 240 °C 240 °C 0 % | ZONE 32 239 °C 240 °C 0 % |
| ZONE 33 242 °C 240 °C 0 % | ZONE 34 241 °C 240 °C 0 % | ZONE 35 239 °C 240 °C 0 % | ZONE 36 239 °C 240 °C 0 % | ZONE 37 237 °C 240 °C 1 % | ZONE 38 241 °C 240 °C 0 % | ZONE 39 239 °C 240 °C 0 % | ZONE 40 242 °C 240 °C 0 % |

ON normal mode IN OUT FF page 1/2 11:01

1/0 I/O I/O AL ← → ↑ ↓ END

SET
 GROUP
 CLEAR
 PROG
 PRINT
 F1
 F2
 HELP

EWIKON

Function: Standard view in operating mode. The screen displays all control zones belonging to the controller, with zone name, actual value, setpoint value and % output. In addition, the controller status, the alarm inputs and outputs and all active alarm messages are indicated as well.

Setting: Use the **SET** button to enter the setpoint value of your choice, then press **CLEAR** to return to operating mode. You can also make this setting for a whole group of control zones by selecting the corresponding zones with the **GROUP** function. The **NAVIGATION** buttons enable blockwise change of the 40 zones displayed (*left/right*) as well as individual steps (*up/down*).

Submenu: No submenus available.

TIP! The % **output** fields give you an overview of the connected heat load (nozzle or manifold). Once the set setpoint value has been reached, this output value should not be higher than 50%.

The **GROUP** and **F1** (fixed group) functions enable you to designate and mark different groups of heaters when using 2-component moulds. This facilitates the operation of the system.

Table Menu

| no. | name | temp. | setpoint | output | control | current | increase | decrease |
|-----|---------|-------|----------|--------|---------|---------|----------|----------|
| 1 | ZONE 1 | 24 °C | 200 °C | 0 % | °C | 0.0 A | 20 °C | 50 °C |
| 2 | ZONE 2 | 24 °C | 115 °C | 0 % | °C | 0.0 A | 20 °C | 50 °C |
| 3 | ZONE 3 | 24 °C | 145 °C | 0 % | °C | 0.0 A | 20 °C | 50 °C |
| 4 | ZONE 4 | 24 °C | 240 °C | 0 % | °C | 0.0 A | 20 °C | 50 °C |
| 5 | ZONE 5 | 24 °C | 115 °C | 0 % | °C | 0.0 A | 20 °C | 50 °C |
| 6 | ZONE 6 | 24 °C | 105 °C | 0 % | °C | 0.0 A | 20 °C | 50 °C |
| 7 | ZONE 7 | 24 °C | 165 °C | 0 % | °C | 0.0 A | 20 °C | 50 °C |
| 8 | ZONE 8 | 24 °C | 205 °C | 0 % | °C | 0.0 A | 20 °C | 50 °C |
| 9 | ZONE 9 | 24 °C | 160 °C | 0 % | °C | 0.0 A | 20 °C | 50 °C |
| 10 | ZONE 10 | 24 °C | 140 °C | 0 % | °C | 0.0 A | 20 °C | 50 °C |
| 11 | ZONE 11 | 25 °C | 110 °C | 0 % | °C | 0.0 A | 20 °C | 50 °C |
| 12 | ZONE 12 | 24 °C | 110 °C | 0 % | °C | 0.0 A | 20 °C | 50 °C |
| 13 | ZONE 13 | 24 °C | 190 °C | 0 % | °C | 0.0 A | 20 °C | 50 °C |
| 14 | ZONE 14 | 24 °C | 170 °C | 0 % | °C | 0.0 A | 20 °C | 50 °C |
| 15 | ZONE 15 | 24 °C | 170 °C | 0 % | °C | 0.0 A | 20 °C | 50 °C |
| 16 | ZONE 16 | 24 °C | 230 °C | 0 % | °C | 0.0 A | 20 °C | 50 °C |
| 17 | ZONE 17 | 24 °C | 195 °C | 0 % | °C | 0.0 A | 20 °C | 50 °C |
| 18 | ZONE 18 | 24 °C | 220 °C | 0 % | °C | 0.0 A | 20 °C | 50 °C |
| 19 | ZONE 19 | 24 °C | 145 °C | 0 % | °C | 0.0 A | 20 °C | 50 °C |
| 20 | ZONE 20 | 24 °C | 195 °C | 0 % | °C | 0.0 A | 20 °C | 50 °C |

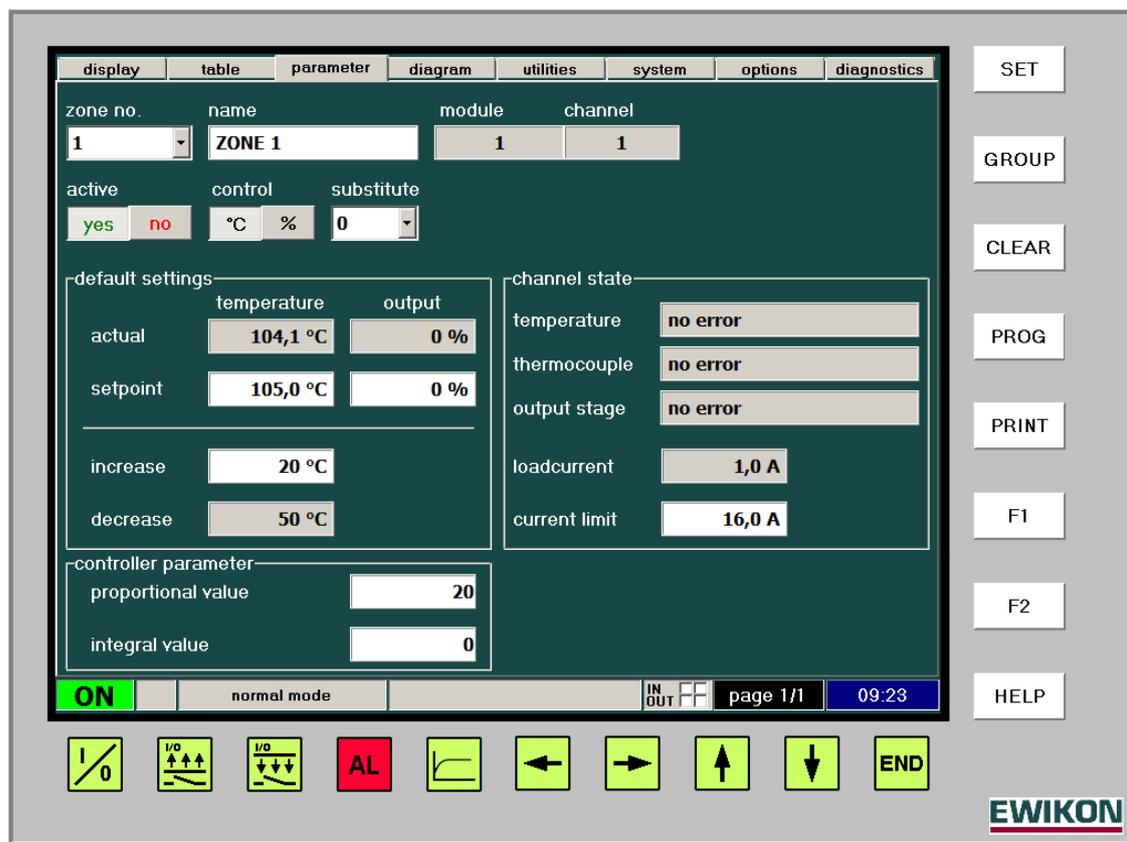
Navigation buttons: SET, GROUP, CLEAR, PROG, PRINT, F1, F2, HELP

Bottom bar: OFF, ready, IN OUT, page 1/1, 08:54

Bottom icons: I/O, AL, navigation arrows, END

- Function:** This screen displays all control zones with zone name, actual value, setpoint value, percentage output, temperature unit, load current and increase and decrease temperatures. In addition, the controller status, the alarm inputs and outputs and all active alarm messages are indicated as well.
- Setting:** Use the **SET** button to enter the setpoint value, then press **CLEAR** to return to operating mode. You can also make this setting for a whole group of control zones by selecting the corresponding zones with the **GROUP** function.
- The **NAVIGATION** buttons enable blockwise change of the 20 zones displayed (**left/right**) as well as individual steps (**up/down**). Alternatively, the navigation bar provided on the right side of the screen can be used.
- Submenu:** No submenus available.

Parameter Menu



Function: This screen displays the parameter set for a zone. This menu allows you to designate zones and set the corresponding parameters.

Setting: The zones can be selected in the top left field and can be named in the next field to the right. The next line displays the controller board (module) on the left and the channel for the board in the next field. The following fields allow you to switch the zone ON and OFF or to switch to manual operation (% output). In manual operation, the output power must be additionally set under **default settings**.



IMPORTANT: There is no mould temperature monitoring in manual operation! Danger of destruction of the connected heating system! You can set an alternative sensor for providing the actual value for the zone in the event of sensor breakage in the **substitute** field.

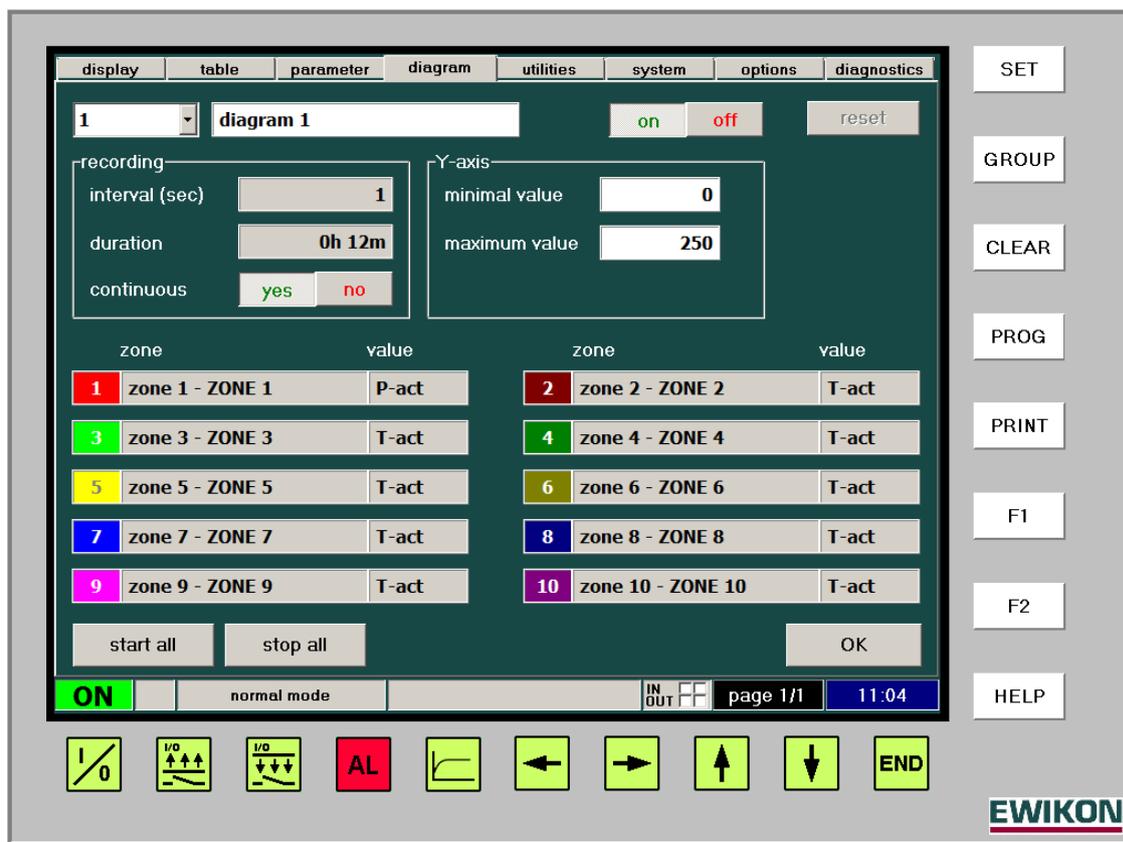
In the **default settings** block you can set the setpoint, **increase** and **decrease** values and the output power for manual operation (% output). Besides, the data recording function can be activated / deactivated here (see **Options** menu/setting).

The **channel state** block provides information on the operating status and the current load current of the respective zone. The **current limit** field allows you to set the maximum permissible output current. If the set level is exceeded, overcurrent alarm is automatically triggered.

Submenu: No submenus available.

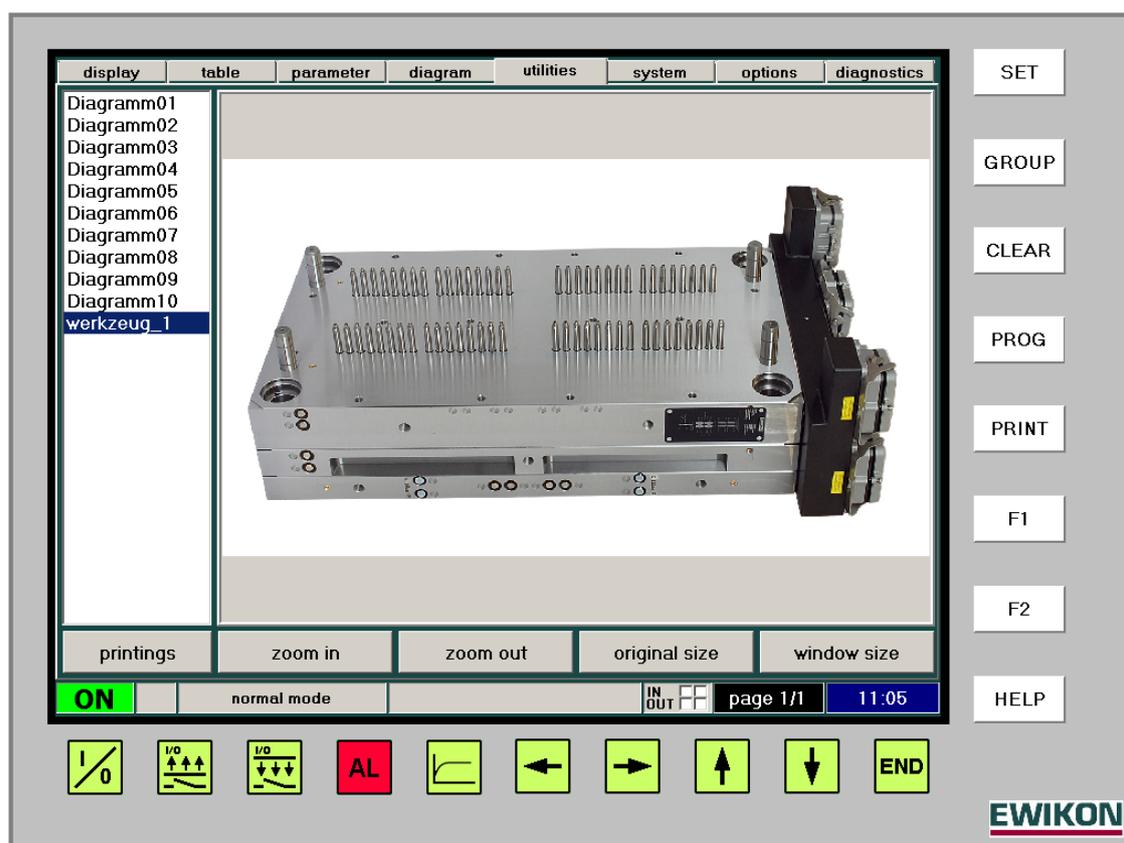
► Depending on access level some setting options may not be available

Diagram Menu



- Function:** This screen enables you to define 10 different diagrams with 10 different curves each. Recording takes place during operation after pressing the **start all** button. You can stop the recording process with **stop all**.
- Setting:** You can select the diagrams in the top left corner. The fields to the right enable you to designate, activate and reset the respective diagram.
- The **recording** block allows you to select the recording intervals. The duration of the recording process is automatically determined by the program. You can also choose between continuous and non-continuous recording.
- The **Y-axis** block allows you to set the range of values for the recording.
- By clicking the **zone** field after selecting the zone of your choice, you can define the type of value to be recorded. Options include: setpoint or actual value, for temperature as well as % output power.
- Submenu:** Clicking the **OK** field or the **diagram** button calls up the view mode. To return please click the field/button again.

Utilities Menu



Function: This menu is used for displaying photos of any kind, e.g. mould halves or injection-moulded parts, as well as screen printouts for the system file.

Setting: On the bottom left, you can select between image and printout view. All saved files are shown in the list above this field.

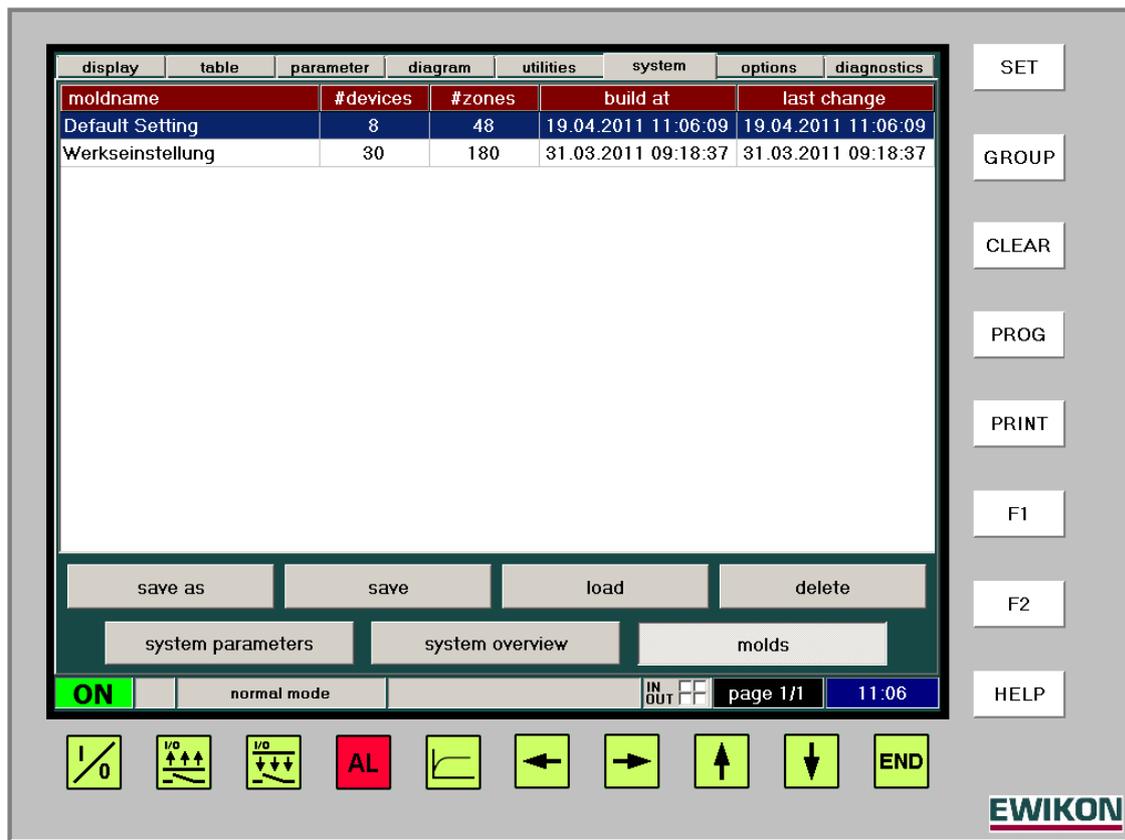
The **zoom in**, **zoom out**, **original size** and **window size** fields enable you to adjust the image as required.

Image files can be stored in the program directory under **images**, preferably as .jpg or .bmp files.

Submenu: Clicking the **printings / pictures** field switches between image view and printout view.

TIP! Photos of mould halves can easily be marked with the mould cavities (e.g. using WINDOWS® Paint). When stored as an image, such marking or lettering can be helpful in identifying zones and setting zone parameters.

System Menu



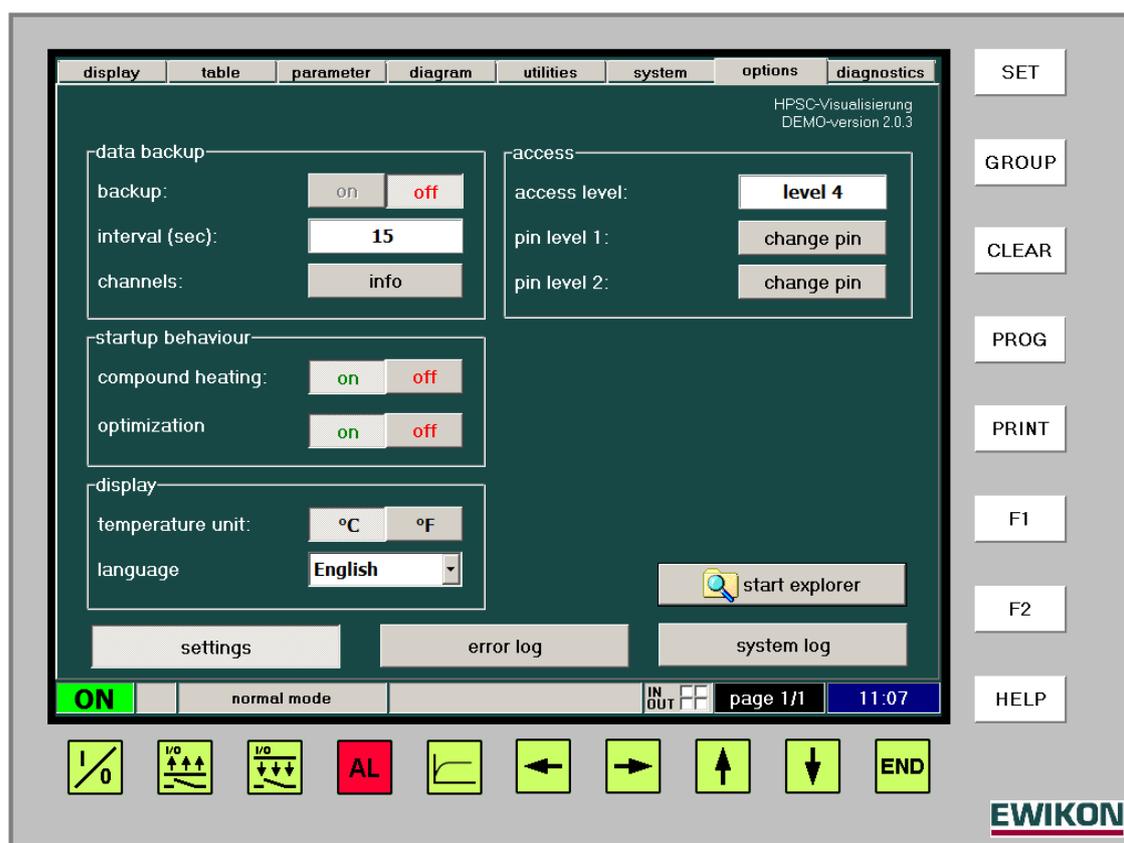
Function: This menu allows you to manage the mould memory and the system parameters. Besides, the system overview includes the status and the firmware version of the various controller boards.

Setting: In the *moulds* submenu, all parameter values of a running mould can be managed. The **save as**, **save**, **load** and **delete** fields can be used to navigate through this submenu. Once all parameters have been set correctly, they can be saved with **save as** by entering the designation for the part or simply the drawing number. If changes have been made to an existing mould, these are saved via the **save** field. To start control operations after the system had been switched off, the appropriate program must first be loaded via the **load** function. The read-only data record **default** stores the factory preset parameters.

The **system parameter** submenu allows you to enter "global" values that are valid for the entire system (e.g. soft start parameters).

Submenu: **System parameters** for entering parameter data for all zones;
System overview indicates status and firmware version for each controller board;
Moulds manages mould data with change history (mould memory).

Options Menu



Function: There are various access levels that differ in the scope of the setting and viewing options they provide. For levels 1 and 2, 4-digit numerical passwords are required. Level 1 (user level) is intended for production, level 2 (master level) for parameter setting. All higher access levels should only be used by system administrators!

Setting: The **access** block is used for entering the passwords for levels 1 and 2. Once the passwords have been saved, access will be possible only after entering the correct passwords! In the **startup behaviour** block, the corresponding function can be activated or deactivated.

If activated, the fastest zone (e.g. nozzles) will wait for the slowest zone (e.g. manifold).

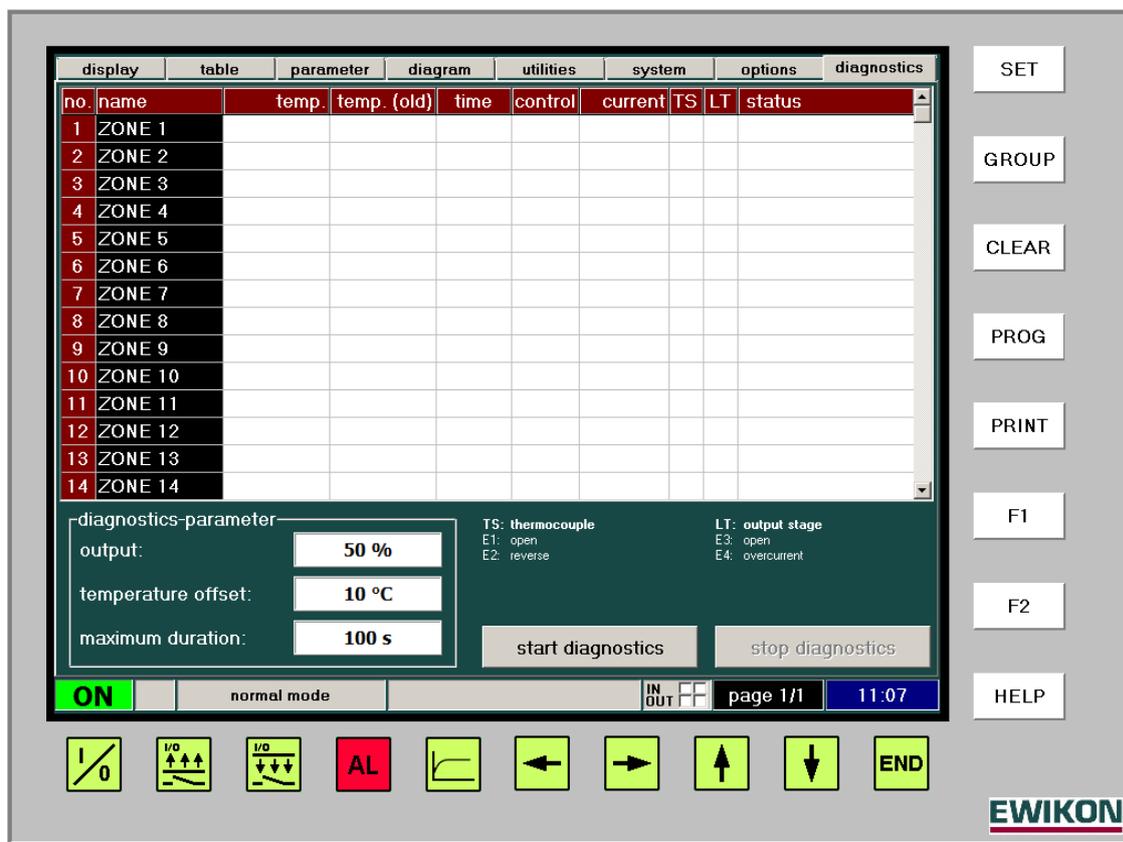
The **display** section allows you to select the basic unit (°C or °F) and the interactive language of your choice.

Data recording (e.g. for data assurance purposes) can be activated and deactivated in the **data backup** block. Besides, you can set the monitoring interval here. The **info** display field gives you a list of zones that have been activated for data recording. Such activation is carried out via the **actual / setpoint temperature** field of the **Parameters** menu, either individually or groupwise. The log data are stored in a special directory and can be retrieved from there as an ASCII file.

Submenu: **Start explorer** – direct access to the data management area of the operating system;
Error log – provides a list of all alarms that have been triggered with date and time;
System log – provides a list of all user actions with date and time.

► Depending on access level some setting options may not be available

Diagnostics Menu



Function: Checks the wiring of the connected mould and indicates wiring errors. Separate checks for each mould are performed. If the connected heating system reaches the temperature offset within the preset time, the zone is OK. Progress is indicated for each zone during the check. Wiring or system problems are indicated by an error message.

Setting: The **temperature offset** field is used for setting the temperature differential by which the temperature must be increased within the preset time interval. This value can be entered in the **maximum duration** field. The maximum output percentage can be set via the **output** field.

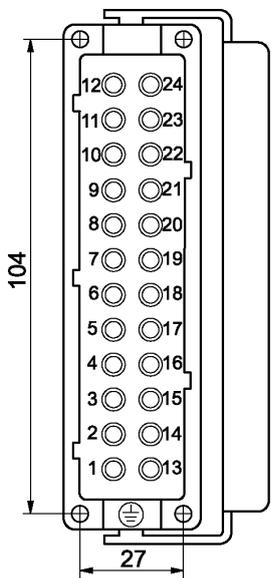
Clicking the **start diagnostics** field starts the check and clicking **stop diagnostics** terminates it. Given 96 zones, the diagnostic process can take a longer time if the time range is used fully!

Submenu: No submenus available.

TIP! Recording the results of the diagnostics helps you to identify defective heating zones later by assessing deviations from the % power output.

Connections (acc. to 16765-A)

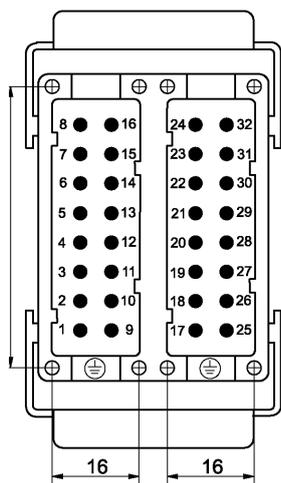
Load 24-pin



| Zone | PIN |
|--------------------------------|---------|
| 1, 13, 25, 37, 49, 61, 73, 85 | 1 / 13 |
| 2, 14, 26, 38, 50, 62, 74, 86 | 2 / 14 |
| 3, 15, 27, 39, 51, 63, 75, 87 | 3 / 15 |
| 4, 16, 28, 40, 52, 64, 76, 88 | 4 / 16 |
| 5, 17, 29, 41, 53, 65, 77, 89 | 5 / 17 |
| 6, 18, 30, 42, 54, 66, 78, 90 | 6 / 18 |
| 7, 19, 31, 43, 55, 67, 79, 91 | 7 / 19 |
| 8, 20, 32, 44, 56, 68, 80, 92 | 8 / 20 |
| 9, 21, 33, 45, 57, 69, 81, 93 | 9 / 21 |
| 10, 22, 34, 46, 58, 70, 82, 94 | 10 / 22 |
| 11, 23, 35, 47, 59, 71, 83, 95 | 11 / 23 |
| 12, 24, 36, 48, 60, 72, 84, 96 | 12 / 24 |

Earth conductor wired to housing!

Thermocouple 32-pin



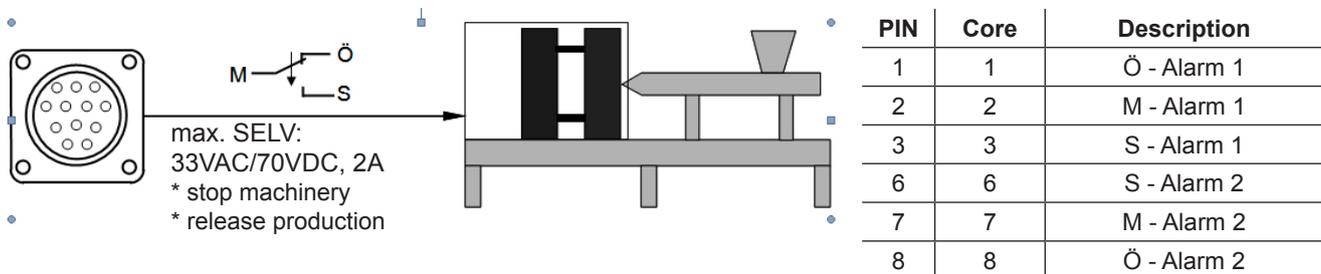
| Zone | PIN |
|--------------------------------|-------------|
| 1, 13, 25, 37, 49, 61, 73, 85 | 1 + / 9 - |
| 2, 14, 26, 38, 50, 62, 74, 86 | 2 + / 10 - |
| 3, 15, 27, 39, 51, 63, 75, 87 | 3 + / 11 - |
| 4, 16, 28, 40, 52, 64, 76, 88 | 4 + / 12 - |
| 5, 17, 29, 41, 53, 65, 77, 89 | 5 + / 13 - |
| 6, 18, 30, 42, 54, 66, 78, 90 | 6 + / 14 - |
| 7, 19, 31, 43, 55, 67, 79, 91 | 7 + / 15 - |
| 8, 20, 32, 44, 56, 68, 80, 92 | 8 + / 16 - |
| 9, 21, 33, 45, 57, 69, 81, 93 | 17 + / 25 - |
| 10, 22, 34, 46, 58, 70, 82, 94 | 18 + / 26 - |
| 11, 23, 35, 47, 59, 71, 83, 95 | 19 + / 27 - |
| 12, 24, 36, 48, 60, 72, 84, 96 | 20 + / 28 - |

Earth conductor wired to housing!

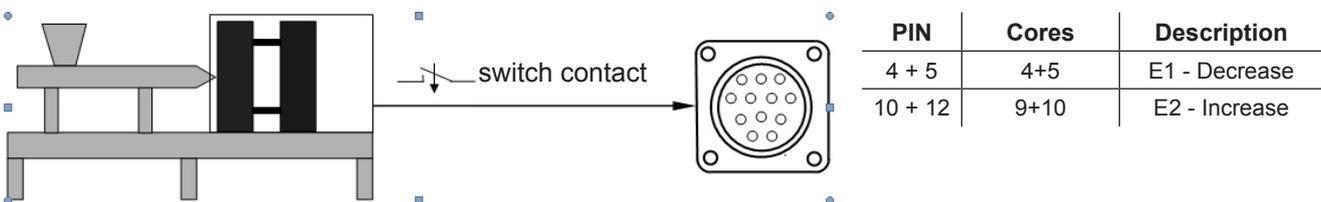
Connections

Alarm connector 12-pin (alarm cable 60070.021)

Alarm outputs: 1 = Overtemperature, 2 = Undertemperature



Alarm inputs: 1 = Decrease, 2 = Increase



Technical data

| | |
|-------------------------------|--|
| Working conditions: | Operation only in closed rooms, max. altitude 2000m M.S.L. Relative humidity up to 80 % at 30 °C (86 °F), moisture condensation not permitted, pollution severity level 2, operating temperature 10-40 °C (50-104 °F), storage temperature 0-50 °C (32-122 °F) |
| Controller housing: | Metal enclosure powder-coated, with handles or lockable castors |
| Touchscreen housing: | Aluminum housing, powder-coated; 12"-SVGA-LCD display with touchscreen, 1024 x 768 pixel |
| Power supply: | 4-conductor three-phase network, 230/400 VAC +/-10 %, 50-60 Hz, overvoltage class II, CEE 32 connector (12-36-zone), CEE 63 connector (48-96-zone) |
| Connected load: | approx. 22 kW with connector 32A / 43 KW with connector 63 A |
| Mould connection: | 12 zones to each 24-pin load connector and each 32-pin thermocouple connector |
| Thermocouple: | Fe-CuNi type J or L / NiCr-Ni type K |
| Power output: | Contactless semiconductor output stage, max 16 A, zero switching |
| Control range: | 50-500 °C (122-932 °F), precision better 1 °C (if hot runner permits) |
| Load fuse: | 16 A FF (super fast) |
| Controller boards: | Plug-in cards for 6 zones each, with load fuses; no tools required for board replacement |
| Controller connectors: | 1 alarm connector 12-pin, M23; 1 operating panel connector 10-pin, M16; 2 interface connectors 9-pin, SUB-D touchscreen: printer port USB and Ethernet |

Replacing fuses



WARNING

Danger of death from electric shock!

Before working on the controller make sure to pull mains plug!

The controller may only be serviced by qualified personnel with sufficient electrotechnical knowledge.

Each control card is designed for controlling 6 zones. For assignments, see below.

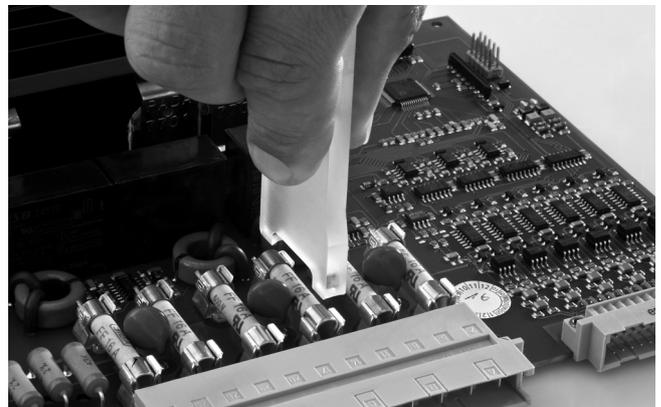
To replace the fuses 18061, unlock the controller board (rotate lock by 90°) and withdraw card. Use the auxiliary tool (attached to rear panel of housing or to the inner side of the front door) to exchange the fuses as illustrated below. Be sure to use only replacement fuses of the same type!

Proceed in reverse order to replace the card.

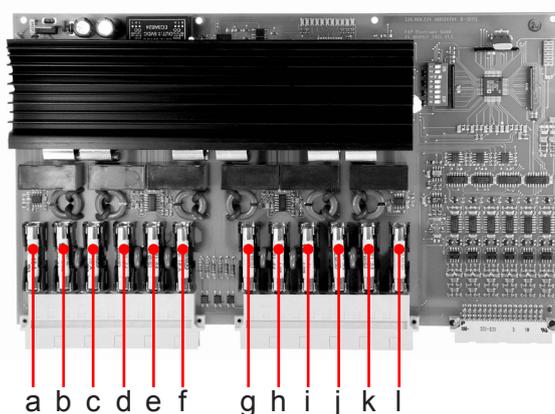
Removing fuses



Installing fuses



Assigning Zones / Controller Boards 60040.080



| Zone | Board | Fuse | Zone | Board | Fuse | Zone | Board | Fuse |
|------|-------|------|------|-------|------|------|-------|------|
| 1 | 1 | a+b | 33 | 6 | e+f | 65 | 11 | i+j |
| 2 | 1 | c+d | 34 | 6 | g+h | 66 | 11 | k+l |
| 3 | 1 | e+f | 35 | 6 | i+j | 67 | 12 | a+b |
| 4 | 1 | g+h | 36 | 6 | k+l | 68 | 12 | c+d |
| 5 | 1 | i+j | 37 | 7 | a+b | 69 | 12 | e+f |
| 6 | 1 | k+l | 38 | 7 | c+d | 70 | 12 | g+h |
| 7 | 2 | a+b | 39 | 7 | e+f | 71 | 12 | i+j |
| 8 | 2 | c+d | 40 | 7 | g+h | 72 | 12 | k+l |
| 9 | 2 | e+f | 41 | 7 | i+j | 73 | 13 | a+b |
| 10 | 2 | g+h | 42 | 7 | k+l | 74 | 13 | c+d |
| 11 | 2 | i+j | 43 | 8 | a+b | 75 | 13 | e+f |
| 12 | 2 | k+l | 44 | 8 | c+d | 76 | 13 | g+h |
| 13 | 3 | a+b | 45 | 8 | e+f | 77 | 13 | i+j |
| 14 | 3 | c+d | 46 | 8 | g+h | 78 | 13 | k+l |
| 15 | 3 | e+f | 47 | 8 | i+j | 79 | 14 | a+b |
| 16 | 3 | g+h | 48 | 8 | k+l | 80 | 14 | c+d |
| 17 | 3 | i+j | 49 | 9 | a+b | 81 | 14 | e+f |
| 18 | 3 | k+l | 50 | 9 | c+d | 82 | 14 | g+h |
| 19 | 4 | a+b | 51 | 9 | e+f | 83 | 14 | i+j |
| 20 | 4 | c+d | 52 | 9 | g+h | 84 | 14 | k+l |
| 21 | 4 | e+f | 53 | 9 | i+j | 85 | 15 | a+b |
| 22 | 4 | g+h | 54 | 9 | k+l | 86 | 15 | c+d |
| 23 | 4 | i+j | 55 | 10 | a+b | 87 | 15 | e+f |
| 24 | 4 | k+l | 56 | 10 | c+d | 88 | 15 | g+h |
| 25 | 5 | a+b | 57 | 10 | e+f | 89 | 15 | i+j |
| 26 | 5 | c+d | 58 | 10 | g+h | 90 | 15 | k+l |
| 27 | 5 | e+f | 59 | 10 | i+j | 91 | 16 | a+b |
| 28 | 5 | g+h | 60 | 10 | k+l | 92 | 16 | c+d |
| 29 | 5 | i+j | 61 | 11 | a+b | 93 | 16 | e+f |
| 30 | 5 | k+l | 62 | 11 | c+d | 94 | 16 | g+h |
| 31 | 6 | a+b | 63 | 11 | e+f | 95 | 16 | i+j |
| 32 | 6 | c+d | 64 | 11 | g+h | 96 | 16 | k+l |

We hereby confirm that the products described below conform to the essential protection requirements of the following European Directives

2006/95/EC „Low Voltage Directive“

and

2004/108/EC „EMC Directive“

with respect to their design type. This requires that the products are used for their intended purpose and that the assembly and operating instructions are observed.

Alterations made to the product will void the declaration of conformity.

Producer: EWIKON Heißkanalsysteme GmbH
Siegener Straße 35
35066 Frankenberg / Germany
phone: +49 (0) 6451 / 501-0

Product: **HPS-C-PRO hotrunner controllers
for the operation of 230 V hotrunner systems**

Type: **69020.312 ; 12-zone controller
69020.324 ; 24-zone controller
69020.336 ; 36-zone controller
69020.348 ; 48-zone controller
69020.360 ; 60-zone controller
69020.372 ; 72-zone controller
69020.384 ; 84-zone controller
69020.396 ; 96-zone controller**

Applied standards: DIN EN 61010-1: 2011-07 “Safety requirements for electrical equipment for measurement, control, and laboratory use - part 1”
DIN EN 61000-6-2: 2006-03 “Immunity for industrial environments”
DIN EN 61000-6-4: 2007-09 “Emission for industrial environments”

Note: It is necessary to use genuine connecting cables outside the device to meet the requirements according to DIN EN 61000-6-2 and DIN EN 61000-6-4.

Frankenberg, 02 April 2012



Dr. Peter Braun
Managing Director

EWIKON
Heißkanalsysteme GmbH
Siegener Straße 35
35066 Frankenberg
Tel: (+49) 64 51 / 50 10
Fax: (+49) 64 51 / 50 12 02
E-mail: info@ewikon.com
www.ewikon.com

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