



MV3-MECA Series USER GUIDE



Hot runner temperature control MV3 Series Multizone Controllers

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A	06/09/2017	Creation
B	04/04/2018	Add Model Declaration of Conformity
C	06/02/2020	New design

Translated from the original manual



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1) INTRODUCTION

Temperature controller to heat and maintain at temperature the hot runners located in a mold.

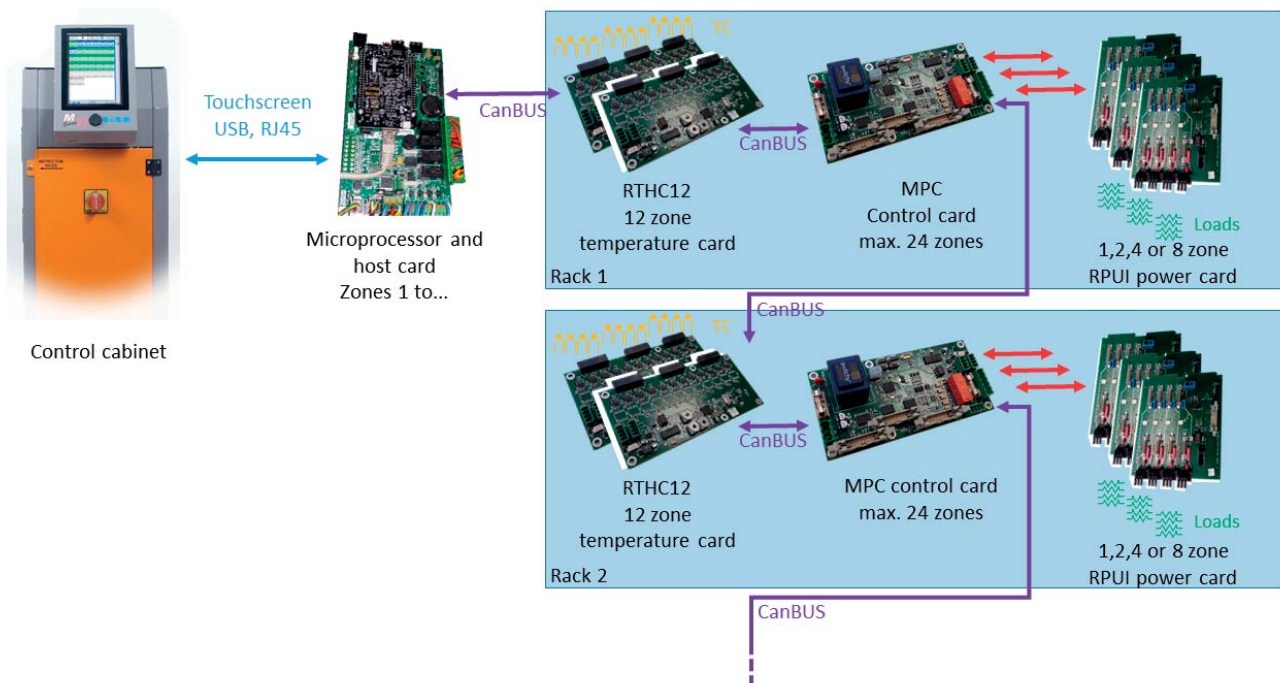
2) PRINCIPLE OF OPERATION

This range of controllers is dedicated to applications comprising a large number of zones to be controlled. This new generation of controllers use a processor card which can control a large number of zones simultaneously (e. g., 336 2A zones in an XL model). This card communicates over a CanBus network with modular electronic cards managing different controller functions.

The cards for the various functions of the controller are as follows:

- A single-processor card under LINUX and its host card
- Temperature acquisition cards, up to 12 zones each
- Power and current measurement cards, up to 8 zones each

Characteristics of the cards, see: 4) General characteristics of the electronic cards



3) GENERAL CHARACTERISTICS OF THE CONTROLLER

3.1) DEFINITION OF APPLICABLE STANDARDS

The device complies with the requirements of the following standards and relevant documents:

- Machinery Directive 2006/42/CE

With regard to the Low Voltage Directive 2014/35/EU:

- Product standard NF 61010-1

With regard to the Directive known as the Electromagnetic Compatibility Directive 2014/30/EU:

- Generic standard EN 61000-6-4 (emission)
- Generic standard EN 61000-6-2 (immunity)



3.2) NAMEPLATES AND CONNECTION

A nameplate affixed to the control unit specifies its characteristics:

Logo du fabricant Manufacturer's logo		Adresse du fabricant Manufacturer's address	
Type	A	S/N	B
	C		D
	E	CE	

- **A : The type:** see the list of possible models below
- **B : The serial number:**
- **C: The maximum permissible current** ; in addition to the installed circuit-breaker, it depends on the cross-section and length of the power cable
- **D : Build Year**
- **E : The power available** according to the voltage and the coupling of the power supply network

Other labels indicate the connection diagram for:

- thermocouples
- heating elements
- various inputs and outputs (alarms, standby...)
- external communication (RJ45, optional communication...)

3.3) ELECTRICAL CHARACTERISTICS

Rated supply voltage	230 V three-phase	Can be changed by coupling inside the device. To be specified at the time of order.
	400 V three-phase + earth	
Range of supply voltage	207 – 253 V	If 230 V three-phase
	360 – 440 V	If 400 V three-phase + earth
Power supply frequency	50 / 60 Hz	
Class	III according to the EN 61010-1 standard	

The maximum permissible current for the device depends on the number of zones and the installed capacity per zone.

Each unit is equipped with a power cable sized according to the maximum permissible current.

Proposed Breaker (*)	Controller Size						Cable Size	Power in kW	
	XXS	XS	S	M	L	XL		230V Delta	400V Star + N
32	yes	yes	yes	yes	yes	yes	5g6mm2	13	22
40		yes	yes	yes	yes	yes	5g6mm2	16	28
63			yes	yes	yes	yes	5g10mm2	25	44
80				yes	yes	yes	5g16mm2	32	55
100				yes	yes	yes	5g25mm2	40	69
125				yes	yes	yes	5g25mm2	50	87
160				yes	yes	yes	5g50mm2	64	111

(*) The choice of breaker, among those proposed for a given controller, depends on the power of the heating elements in the mold.









3.4) WARNINGS

- The dimensioning of the permissible currents of the unit will be established during the pre-sale phase according to the nominal power ratings of the heating elements of the mold.
- It is imperative to respect the connection instructions, otherwise you run the risk of damaging the equipment.
- IMPORTANT:** for an operating 400V+N network, during the temperature rise phase and depending on the percentage of power used by each control zone, the neutral current may be higher than the current on one of the three phases. This overcurrent is controlled by the circuit-breaker fitted to the control unit. Power consumption depends on the nominal power of heating elements and the number of control zones used.

3.5) CHARACTERISTICS BY DEVICE TYPE

The name of the controller model is given by its size, the maximum number of control zones, and the type of interface.

Model	XXS	XS	S	M	L	XL
						
Max. number of zones (at 2.5A)	-	-	-	96	192	336
Max. number of zones (at 15A)	8	16	24	48	96	168
Max. number of zones(at 20A)	-	-	-	24	48	84
Max. number of zones(at 30A)	-	-	-	12	24	42
Mixed Configurations (*)	-	-	-	yes	yes	-
Touch Screen Size	7"	7"	7"	Standard 10" Optional 12"	Standard 10" Optional 12"	15"
(Overall) height in mm / inch	245 / 9.7	400 / 15.8	556 / 21,9	(10") 1240 / 48,8	(10") 1240 / 48,8	1765 / 69.5
Width in mm / inch	334 / 13.1	334 / 13.1	334 / 13.1	455 / 17.9	455 / 17,9	493 / 19.4
Depth in mm / inch (excluding subbases)	341 / 13,4	341 / 13.4	341 / 13.4	705 / 27.8	840 / 33.1	902 / 35.5
Weight in Kg / Lbs (example)	MV3-XXST7-S.08 10 / 22	MV3-XST7-S.12 18.5 / 40.8	MV3-ST7-S.24 25 / 55.2	MV3-MT10-S.48 95 / 209.5	MV3-LT10-S.96 120 / 264.6	MV3-XLT15-S.112 220 / 485.0

(*) On request, M and L controllers can be ordered with multiple power configurations, by zone type: B,S,M, respectively 2.5A, 15A, 20A.

Examples :

MV3-MT10-S8B16: MV3, size M, 10 inch touchscreen, 8 zones 15A, 16 zones 2.5A

MV3-LT10-M16B72: MV3, size L, 10 inch touchscreen, 16 zones 20A, 72 zones 2.5A



4) GENERAL CHARACTERISTICS OF THE ELECTRONIC CARDS

These cards are linked together by a CanBUS network, controlled by the processor card. This network allows the exchange of temperature values, power setpoint and any other control parameter.

4.1) MU3CB PROCESSOR CARD AND HOST CARD

The single-processor card and its host card are used to calculate the control of all the heating zones of the device, to manage the human-machine interface via touch screen, and to manage exchanges using various communication protocols.

Ref.	MU3CB
Rated supply voltage	12 V DC & 5VDC
Protection fuse	10A F type 5x20
Length	175 mm / 6.90 in
Width	100 mm / 3.94 in
Weight	182 g / 0.40 lb

LINUX software:

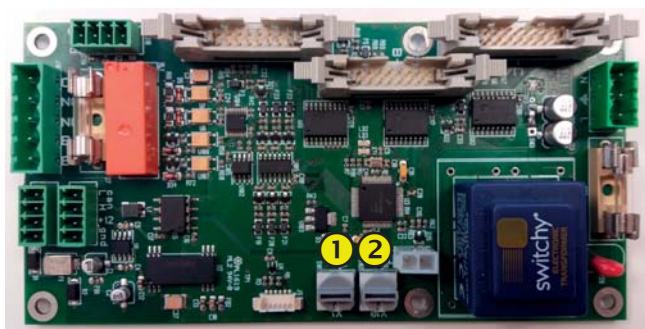
LINUX software and libraries are used in this controller.

The list of these can be found on the 'System Information' page of the touch screen interface (see touch screen user guide).

4.2) MPC CARD FOR POWER CARD CONTROL

The MPC card controls the RPUI power cards using power calculated by the single-processor card. It also provides low-voltage power to the connected RPUI power cards. This card communicates via Canbus, and has an address that can be adjusted (see photo below).

Ref.	MPC
Rated supply voltage	12 V DC & 230VAC
Protection fuse, for RPUI cards	1A T type 5x20
CTP resettable fuse	2.2A SMD-100F type
Length	160 mm / 6.30 in
Width	80 mm / 3.15 in
Weight	134 g / 0.30 lb



CanBus address encoding wheels
(see appendix)

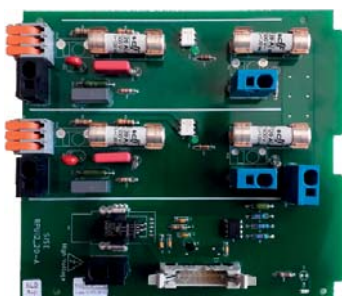
❶ X1: units

❷ X10: tens

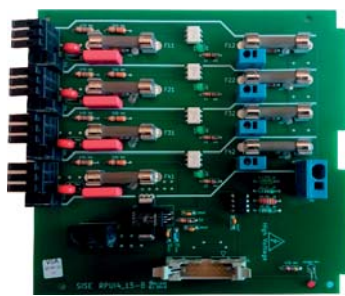
4.3) RPUI POWER CARD

The RPUI power card heats several control zones, each with a TRIAC, powered by the same phase of the electricity network. It also synchronizes their control with the waves of this phase.

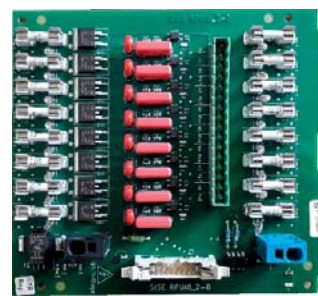
Ref.	RPUI1-30	RPUI2-20	RPUI4-15	RPUI8-2
Number of heated zones	1	2	4	8
Permissible current	30A	20A	15 A	2.5 A
Maximum power output per zone	6900 W	4600 W	3400 W	500 W
Rated supply voltage	12 V			
Power supply fuse	See MPC ref. card			
Max. voltage on load	230 V AC, 50/60Hz			
Nominal range of load voltage	207 – 253 V AC			
Maximum power output per zone	6900 W	4600 W	3400 W	500 W
Protective fuses 1 on phase, 1 on load	20 A type GG 10x38	20 A type GG 10x38	15 A FA type 6.3x32	2.5 A FA type 5x20
Length	163 mm / 6.42 in			
Width	148 mm / 5.83 in			
Weight	133 g	178 g	187 g / 0.41 lb	374 g / 0.82 lb



RPUI2_20 power card



RPUI4_15 power card



RPUI8_2 power card



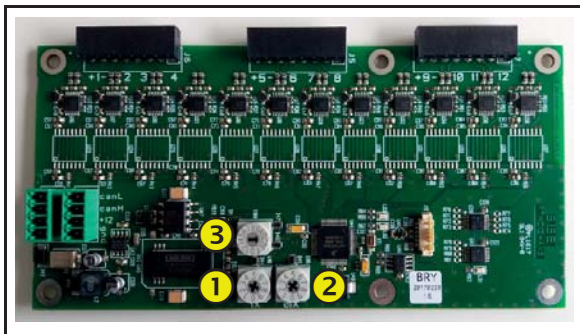
4.4) RTHC12 TEMPERATURE MEASUREMENT CARDS

The RTHC12 thermocouple card measures the temperatures read by thermocouples for up to 12 control zones (photo below).

This card communicates via Canbus, and has an address that can be adjusted (see photo below).

This card will function with both grounded and ungrounded thermocouples, as the card itself is grounded.

Ref.	RTHC12
Number of zones measured	12
Rated supply voltage	12V
Thermocouple type	J (or K upon request)
Length	160 mm / 6.30 in
Width	80 mm / 3.15 in
Weight	62 g / 1.37 lb



CanBus address encoding wheels (see appendix)

❶ X1 : units

❷ x10 : tens

❸ Maximum number of zones, hexadecimal coded

Zones	1	2	...	9	10	11	12
Code	1	2	...	9	A	B	C

5) INSTRUCTIONS FOR INSTALLATION

5.1) INSTALLATION AND OPERATING CONDITIONS

Installation in an industrial and dry environment.

Range of operating temperatures: from -10°C to $+60^{\circ}\text{C}$.

Handling: Cabinets: by rolling them around

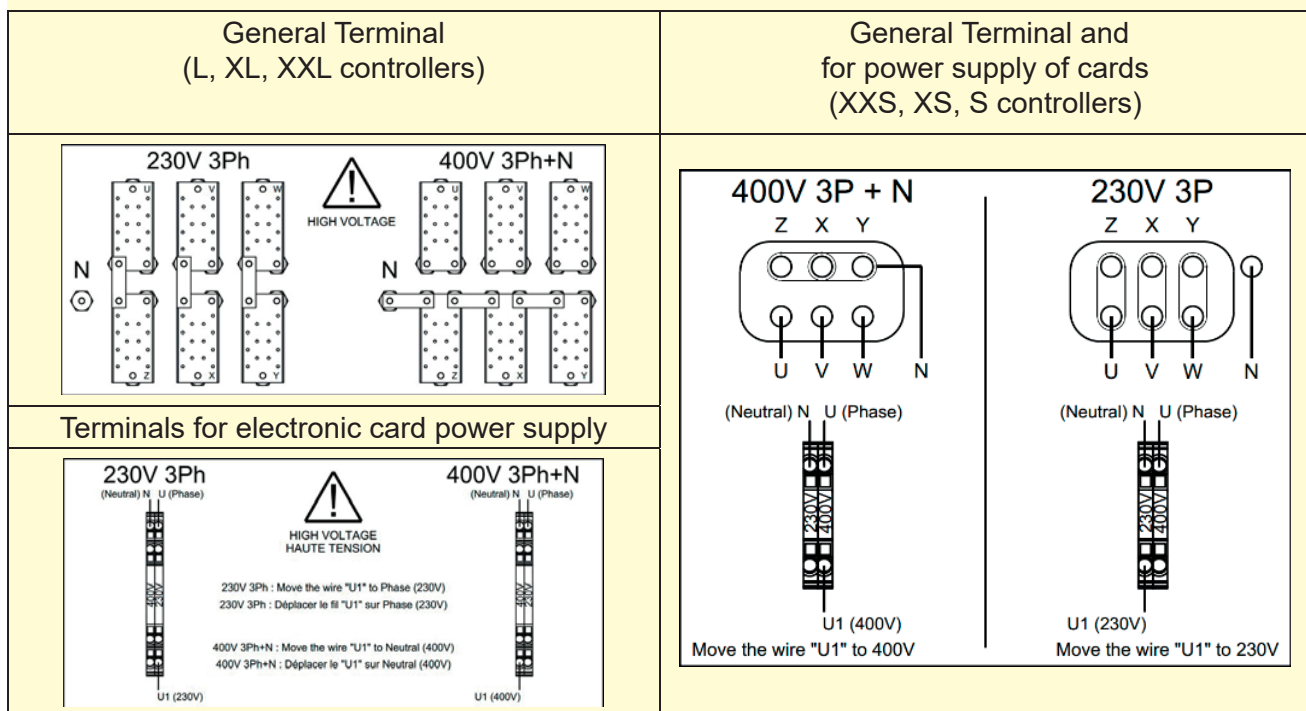
Units: using the 2 handles

Unpacking: avoid any shocks

5.2) CONNECTING TO THE MAINS

CAUTION:

- Before powering up, configure the 2 connections behind the front door of the controller according to your electrical network, otherwise the equipment may be damaged:



- At 400V + earth, the earth must be connected, if not any operation is impossible.
- Connection of the earth conductor protection is compulsory.
- It is imperative to respect the connection diagrams, otherwise you run the risk of damaging the equipment.
- It is recommended to use a 30mA differential breaker on the controller power supply.

5.3) ELECTROMAGNETIC COMPATIBILITY

If the installation and environmental conditions differ from the C. E. M. test conditions, it is the installer's responsibility to install one or more filters and, if necessary, a transformer device between the network and the power supply, as well as the shielding and additional protections required for the "C. E. M.".



6) INSTRUCTIONS OF USE

6.1) DIAGRAMS

Overall diagrams are provided in appendix
Electrical diagrams can be provided on request.

6.2) SAFETY CONDITIONS

The controller is equipped with:

- a **general interrupter**
- a **circuit-breaker** that protects the tool and controller, and is calibrated according to the number and type of power cards
- a **trip unit** linked to the circuit-breaker, activated by the single-processor card that detects bad supply voltages (lack of earth or phase), or a TRIAC short circuit.

The MU3CB single-processor card and its host card are protected by:

- a **fuse** against overcurrent

Each RTHC12 temperature card is protected by:

- a **resettable CTP fuse** against overcurrent

Each MPC control card is protected by:

- a **fuse** against overcurrent
- a **resettable CTP fuse**

Each RPUI power card is protected by:

- two **fuses** for the entire card
- **voltage monitoring** for the protection of the controller against earth and overvoltage faults
- an **overvoltage arrester** (GEMOV) on each zone , which grades voltage over 400 V, in order to protect the card
- a **fuse on the phase and earth of each zone**, to protect each TRIAC and load against overcurrent

Note: Refer to the spare parts table for the type and value of fuses.

6.3) CONNECTING THE ZONES TO BE CONTROLLED

CAUTION: In order to prevent mixing up zones and control errors, each heating zone number must match its respective thermocouple number.

6.3.1) Thermocouples

Thermocouples are connected on male HARTING plugs (when non-mixed wiring) and are located at the rear of the cabinet (see chapter 6.1, Diagrams).

The thermocouples can be J-type (Fer-Constantan), or optionally K-type (Ni.Cr/NiAL) or auxiliary inputs.

There are standards which define the colour of thermocouple wires, for example:

J thermocouple (+ = Iron, - = Constantan):

- European Standard: Iron: Black / Constantan: White
- French Standard: Iron: Yellow / Constantan: Black (before January 1994)
- German Standard : Iron: Red / Constantan: Blue
- English standard: Iron: Yellow / Constantan: Blue
- American standard: Iron: White / Constantan: Red

For the J type, the " + " is the wire which can be easily identified using a magnet.

K thermocouple(+ = Chromel or Nickel-chromium, - = Alumel or Nickel-aluminium):

- European Standard: Chromel : Green / Alumel: White
- French Standard: Chromel : Yellow / Alumel: Blue (before January 1994)
- German Standard : Chromel : Red / Alumel: Green
- English standard: Chromel : Red / Alumel: Blue
- American standard: Chromel : Yellow / Alumel: Red

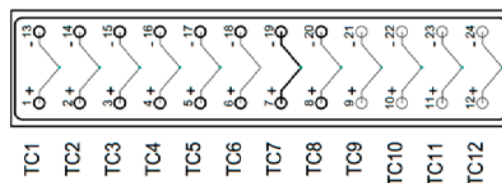
NB :

- For thermocouples, it is absolutely necessary to respect the polarity indicated on the wiring diagram. Wires between J or K thermocouples and connectors on the rear of the unit must be made of the same metal as the thermocouple (compensation leads) in order not to introduce parasite thermocouples.

Example of wiring diagram, for thermocouples:

24-pin 16A housing, Part No 09300240301

Male 24-pin 16A ES Press Quick Lock type connector, Part No 09330242648





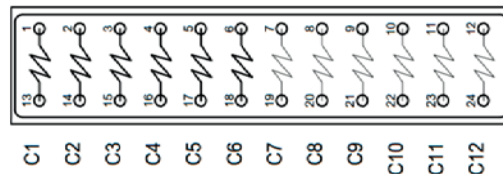
6.3.2) Heating elements

The heating elements are connected to female 16-pin 16A or 16-pin 16A HARTING HAN E connectors (varies according to standards, see chapter 6.1, Diagrams) located on the rear of the unit.

Example of wiring diagram, for loads:

24-pin 16A housing, Part No 09300240301

Female 24-pin 16A ES Press Quick Lock type connector, Part No 0933024748

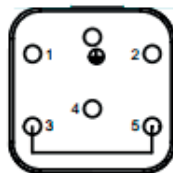


6.4) STANDBY SETPOINT AND NEUTRALIZE HEATING

HAN A type locking housing, Part No 09200030301

Female 5-pin 16A HAN Q Quick Lock type connector, Part No 09120052733

- 1-3 Standby setpoint
Standby setpoint
- 2-5 Neutralize Heating
Neutralize Heating



'Neutralize Heating' input:

Heating can be halted remotely using a cut-out between the terminals 2 and 5 of the HAN Q type socket.

'Standby setpoint' input:

The working or standby setpoint can be selected remotely via a switch connected between the terminals 1 and 3 of the HAN Q type socket.

Input configuration:

By default, these inputs are set to 'No action'.

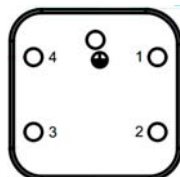
The input operation logic can be customized in the general configuration page on the controller's touch screen (see the touch screen user manual).

6.5) ALARMS

HAN A type locking housing, Part No 09200030301

Male 4-pin 16A HAN A Quick Lock type connector, Part No 09200042633

- 1-2 AL1 Alarm
AL1 Alarm
- 3-4 AL2 Alarm
AL2 Alarm



Alarms can be activated (siren, status light,...) from the dry contacts provided in the HAN Q12 type 4-pin crimping socket. They are available in working or idle mode (relay not controlled when no alarm is present).

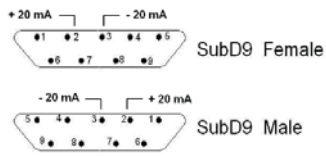
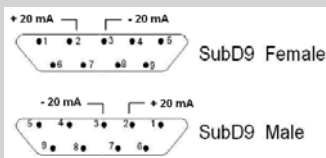


Configuration of alarm outputs:

By default, these outputs are set to 'No action'.

The output operation logic can be customized in the general configuration page on the controller's touch screen (see the touch screen user manual).

6.6) COMMUNICATION LINKS

Connection	Specifications	Connectivity
OPC UA	<ul style="list-style-type: none"> Protocol 82.2 	RJ45
VNC Server (default setting)	<ul style="list-style-type: none"> Accessible with any standard and free client software Fixed IP or DHCP address 	RJ45
Ethernet SPI (optional)	<ul style="list-style-type: none"> SPI protocol - Master-Slave type Point-to-point connection 	RJ45
Arburg type RS485 (optional)	<ul style="list-style-type: none"> Arburg protocol - Master-Slave type Bus type link with chaining of slaves Takes care that 20mA and -20mA polarities are correct Protocol to be used with Arburg / Engel / KM / Demag / Ferromatik Milacron Subd9 Male and female for chaining of slaves 	
Arburg current loop (optional)	<ul style="list-style-type: none"> Arburg protocol - Master-Slave type Bus type link with chaining of slaves Takes care that 20mA and -20mA polarities are correct Protocol to be used with Arburg / Engel / KM / Demag / Ferromatik Milacron Subd9 Male and female for chaining of slaves 	

Other protocols such as Modbus are available as an option.

6.7) CABINET REAR LAYOUT EXAMPLE



Connectors

- Ethernet network
- Alarm contacts
- Standby setpoint and heating neutralization

Connectors for power and thermocouples

Power cable



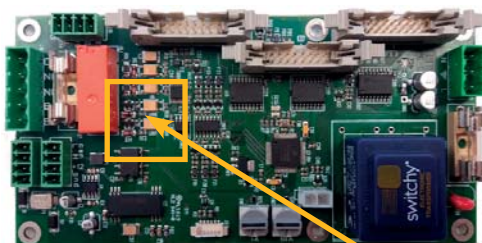
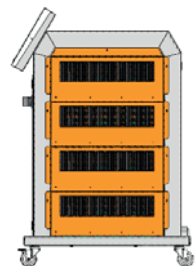
7) MAINTENANCE INSTRUCTIONS

7.1) WARNINGS

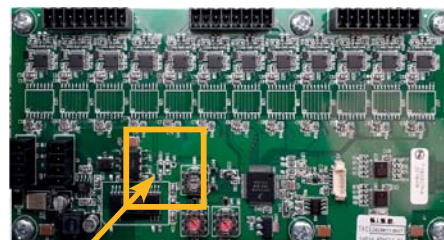
- Any intervention on the device should be carried out by authorized personnel.
- Any intervention inside the device must begin with the complete shutdown (except to view faulty fuses using the fusion indicators, or the status of LED indicators on electronic cards).
- Any replacement parts must have the same characteristics, in particular for fuses.

7.2) PROCEDURE FOR MAINTENANCE PERSONNEL

- Find information by viewing controller screens
 - o The MV3 controller display may remain energized while the power section is switched off, so that Maintenance instructions can be read.
 - o "Alarm list" and "Alarm history" screens: indicate the type of alarm and the zone involved.
 - o Controller display screen: indicates the heating capacity of the zone.
 - o Mold monitoring screen: indicates the electrical power of the installed heating elements, as well as power consumption.
 - o Moldscan Screen: analyse zone by zone, and search for heater and thermocouple failures.
 - o See the touch screen user manual for details.
- Check the status of the RPUI power card
 - o On the side of the cabinet, there is one red LED per power card. When this LED lights up, check: fuses, earth and phase presence, TRIACs.
- Check the status of the MPC power command cards, and the RTHC12 thermocouple cards. On each of these cards, there are:
 - o one green LED "LD2" and one red LED "LD3" showing the card status.



MPC



RTHC12

green LED
red LED

Green LED	Red LED	Card Status
Rapid Blinking	Rapid Blinking	Initialization
Double blinking	OFF	Normal Function
Rapid Blinking	Double blinking	Maintenance

- Check the fuses of the RPUI power card
 - Fuse fusion indication: 1 white light is located next to each fuse. It is lit when the corresponding fuse is out of service. In this case, it must be replaced.
NB: For a reliable indication of this light, connect the mold to the controller.
 - **NB:** Replace the fuse with another of the same type (see electrical diagrams and spare parts list).
- Check the heating of zone
 - On the RPUI power card, for each heating zone, the green LED light indicates the current heating power.
 - If the heating is irregular, check the power and thermocouple wires (standard, connection), as well as their condition (cut, pinched).

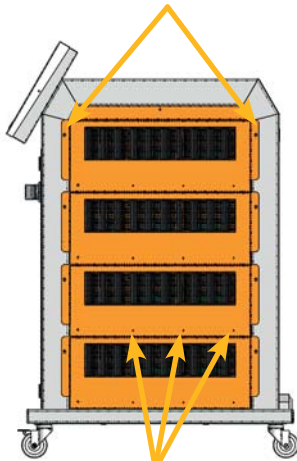
Green LED lighting	Zone temperature	Check
Continuous light	Decreasing, stagnant	Pinched, cut thermocouple? / Fuse, load / Fuse indicators on the RPUI card / Circuit-breaker inside the controller / connection procedure
Off	Rising	The TRIAC / Is the heating element grounded?
Blinking	Does not reach the setpoint	Pinched Thermocouple / TRIAC

7.3) ACCESS THE CARD TO TROUBLESHOOT

Each card and wire is marked in the cabinet, and you can directly open the panel matching the card.

① Locate the number of the zone to be repaired: see chapter 7.2) Procedure for maintenance personnel

Unscrew the panel corresponding to the card to be repaired

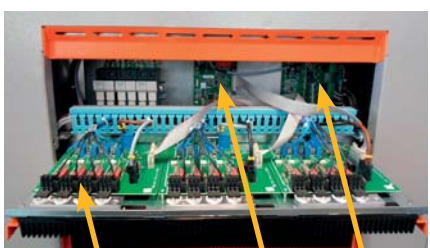


Lights indicating the faulty power card

② Open the panel to access the card, see 10.2).

③ Pull the panel out of its housing to access the cards inside the cabinet.

Lift the panel up and push it into the unit, then gently place it on the element underneath.



Power card
MPC control card
RTHC thermocouple card



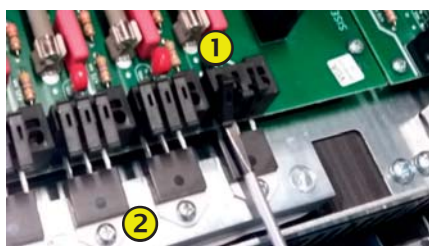
7.4) PROCEDURE FOR REPLACING A TRIAC

Locate the number of the zone to troubleshoot and open the corresponding panel: see the chapters 7.2) and 7.3).

To remove the TRIAC:

- ① Lift the plastic lever using a screwdriver
- ② Unscrew the TRIAC from the heatsink and remove it from the supporting bracket.

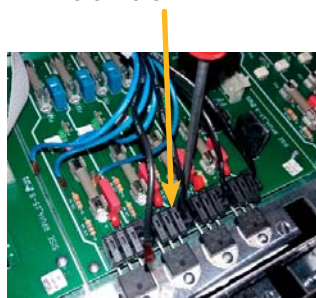
To install the TRIAC: Perform operations ① and ② in reverse order.



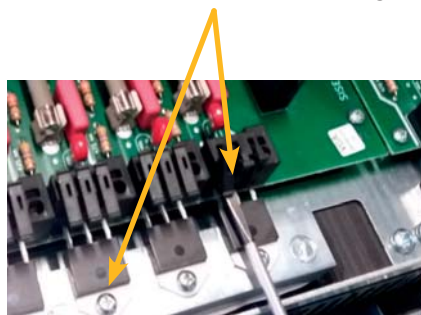
7.5) PROCEDURE FOR REPLACING A POWER CARD

- ① Locate the number of the zone to troubleshoot and open the corresponding panel: see the chapters 7.2) and 7.3).
- ② Dismount the card corresponding to the faulty zone.

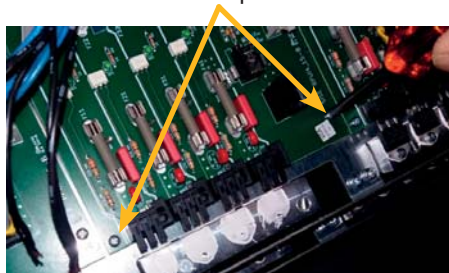
Disconnect all wires connected to the card with a 3.5 x 0.8 mm flat screwdriver



Remove and unscrew the TRIACs



Unscrew the power card



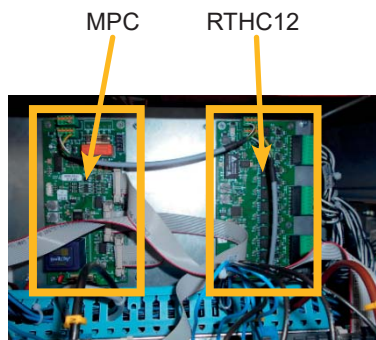
Pull the power card out of its slot



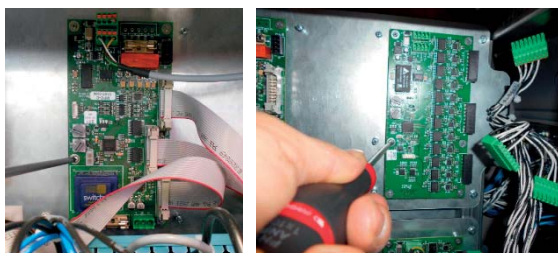
- ③ To put the card back in place, perform these operations in reverse order.

7.6) PROCEDURE FOR REPLACING AN RTHC OR MPC THERMOCOUPLE CARD

- ① Locate the number of the zone to troubleshoot and open the corresponding panel: see the chapters 7.2) and 7.3).
- ② Dismount the card corresponding to the faulty zone: it is held in place by clips, pull it towards you.



Disconnect the connectors,
then unscrew the locking screw(s).



- ③ Note the configuration of the encoder wheels, and replace the card with another one configured to the same settings.
- ④ To put the card back in place, perform these operations in reverse order.

7.7) SPARE PARTS LIST

Ref.	Description	Used for	Quantity
18524	2.5 A FA type fuse 5x20	RPUI8, 2.5A card	16
2088	15A FA type fuse 6.3x32	RPUI4-15 15A card	8
5262	20 A gG type fuse 10x38	RPUI2, 20A card	4
5263	32A gG type fuse 10x38	Power rack	6 / 2
5418	0.315A delayed fuse 5x20	MPC card	1
5413	3.15A delayed fuse 5x20	Power supply connector and light column	2
14566	TRIAC BTA26-800BWRG	RPUI4-15 15A card	4
17198	TRIAC BTA41-800B TO218	RPUI2, 20A card	2
18071	TRIAC BTA40- wired	RPUI1, 30A card	1
16131	RPUI8_2 card, 8 zones, 2.5A	TRIACS included with power card	2
14533	RPUI4_15 card, 4 zones, 15A		2
17088	RPUI2_20 card, 2 zones, 20A		2
17881	RPUI1_30 card, 1 zone, 30A		1
16978	MPC card	Auto Discovery	1
14536	RTHC12 card with insulated input, 12 zones		2
6447	MEANWELL PD110A power supply 5V/5A - 12V/6.5A, 230V 110W		1
15045	15 inch TFT display, DOM151XGA-PCT		1
16924	10.1 inch TFT display, WXVGA		1
16923	7 inch TFT display, WSVGA		1
12611	Beagle bone MU3CB-B card		1
11328	Beagle Bone Black Rev. C card		1



8) WARRANTY

The equipment is warranted for parts (except wear and tear) and labour, upon return to our facility. Warranty begins when the user takes possession, and is conditional on the equipment being used in accordance with our instructions for commissioning and maintenance (see General Conditions of Sale).

Exclusions:

- Lightning or overvoltage on factory plant power.
- Faulty electrical wiring and connection.
- Voltage placed on thermocouple cards due to bad wiring.
- Improper fluid used in temperature controller.
- Use of fuses not conforming to recommended type.

Repair, modification or replacement of parts during the warranty period does not extend the warranty period of the equipment.

Transport charges are the responsibility of the customer if outside the warranty period.

We decline any responsibility for damage resulting from faulty use or natural wear of certain components.

In all cases travel expenses of our personnel are the responsibility of the purchaser.

9) CONTACT US

For any more information, our after sales department remains at your disposal:

	<u>France</u>	<u>USA</u>	<u>Germany</u>
Tél :	+33 4 74 77 34 53	+1 404 495 5968	+49 711 664 98 48
Fax:	+33 4 74 73 90 18	+1 404 795 0849	+49 711 664 98 40
e-mail:	sise@sise-plastics.com	sales.us@sise-plastics.com	verkauf.de@sise-plastics.com
web:	www.sise-plastics.com	www.sise-plastics.com	www.sise-plastics.com



10) APPENDICES




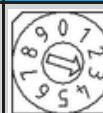


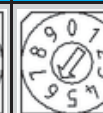













10.1) APPENDIX 1: MPC AND RTHC CARDS - ENCODER WHEELS

The encoding wheels of the MPC and RTHC cards are used to address the cards.
The address is a code for the number of the first zone wired to the card.

Two cards of different types can have the same address.

In the event of an address error, two cases may occur:

- Two cards of the same type have the same address: this case is detected and the cards involved switch to STOP mode (green LED flashing, red LED permanently lit).
- All cards of the same type have different addresses: the system is operating normally. However, there are missing zones on the screen.

	X1									
										
	Not used	01	02	03	04	05	06	07	08	09
	10	11	12	13	14	15	16	17	18	19
	20	21	22	23	24	25	26	27	28	29
	30	31	32	33	34	35	36	37	38	39
	40	41	42	43	44	45	46	47	48	49
	50	51	52	53	54	55	56	57	58	59
	60	61	62	63	64	65	66	67	68	69
	70	71	72	73	74	75	76	77	78	79
	80	81	82	83	84	85	86	87	88	89
	90	91	92	93	94	95	96	97	98	99



10.2) APPENDIX 2: MODEL OF EC/EU DECLARATION OF CONFORMITY



Régulation Canaux Chauds
Hot Runner Controls
Heißkanaltemperaturregelung
Thermorégulation Par Fluide
Mold Temperature Controls
Werkzeugtemperierung

Injection Séquentielle
Valve Gate Controls
Kaskadensteuerung
Supervision Production & Process
Production & Process Monitoring
Betriebsdatenerfassungssystem

DECLARATION DE CONFORMITE

Nous **S.I.S.E. - Voie Romaine - Groissiat - 01100 Oyonnax, France**

Déclarons sous notre seule responsabilité que les produits:

Régulateurs multizones Série MV3

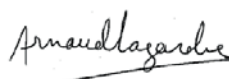
auxquels se réfère cette déclaration sont conformes à la norme ou autre document normatif :

- En ce qui concerne la Directive Basse Tension 2014/35/UE :
 - à la norme produit NF 61010-1
- En ce qui concerne la directive dite de compatibilité électromagnétique 2014/30/UE :
 - à la norme générique EN 61000-6-4 (émission)
 - à la norme générique EN 61000-6-2 (immunité)
- A la Directive RoHS 2011/65/UE & 2015/863/UE

Mr Lagarde, à Groissiat (01), est autorisé à constituer le dossier technique.

Oyonnax
02/11/2021

Arnaud LAGARDE
Directeur industriel



DECLARATION OF CONFORMITY

We **S.I.S.E. - Voie Romaine - Groissiat - 01100 Oyonnax, France**

Declare under our sole responsibility that the products:

Mv3 Series Multizone cabinets

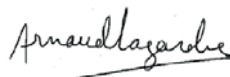
to which this declaration relates, are in conformity with the standard or other normative document:

- With regard to the Low Voltage Directive 2014/35/EU:
 - with product standard NF 61010-1
- With regard to the Directive 2014/30/EU relating to electromagnetic compatibility:
 - with generic emissions standard EN 61000-6-4 (emission)
 - with generic immunity standard EN 61000-6-2 (immunity)
- With the RoHS Directive 2011/65/EU & 2015/863/EU

Mr Lagarde, in Groissiat (01), is authorized to compile the technical file.

Oyonnax
02/11/2021

Arnaud LAGARDE
Industrial director




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With 2 subsidiaries
and a large international sales network,
SISE is your worldwide partner

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