Technical Data MCC

Fig. 1 Figure of MCC

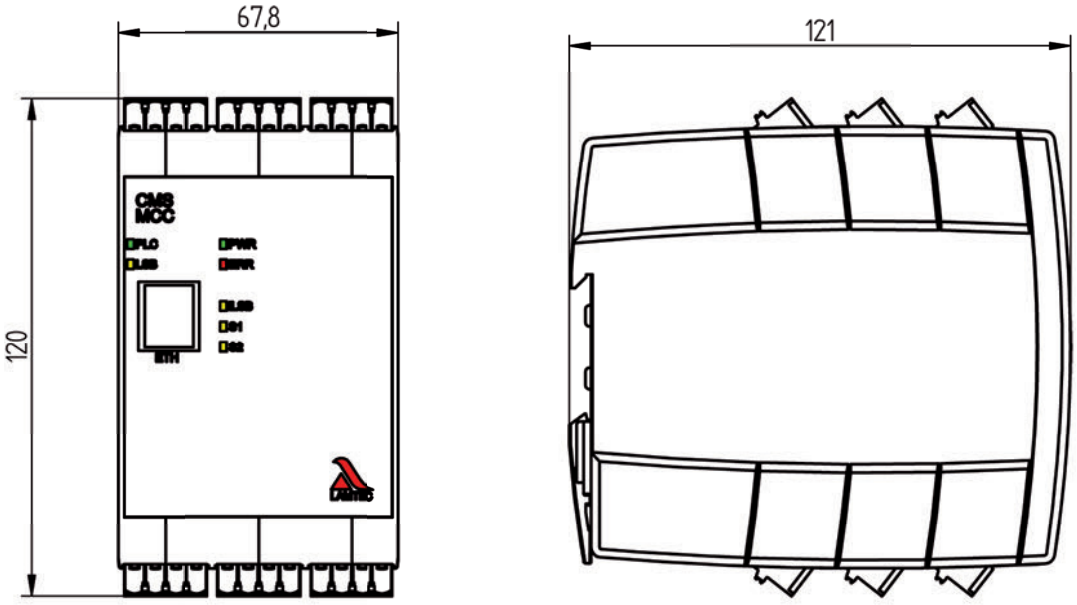

Fig. 2 MCC dimensional drawing

Part number	
MCC – Master Control Component	Type 668R0100-XX*

* XX = dependent on the configuration

Technical Data MCC	
Dimensions (H × W × D)	120 x 67.8 x 121 mm / 4.72 x 2.67 x 4.76” in
Weight	0.505 kg / 1.11 lb
Power supply:	
MCC	24 VDC +/-20 %, SELV
Inputs	230 V/120 V +10/-15 %, 47-63 Hz, 24 VDC ± 20 %
Outputs	230 V/120 V +10/-15 %, 47-63 Hz, 24 VDC ± 20 %
Maximum backup fuse/outputs	8 A fast acting
Current draw	minimum: 200 mA maximum: 335 mA
Maximum power consumption	10 W

Digital inputs		24 VDC	120 VAC	230 VAC
	nominal current	2.1 mA impedance 11 kΩ	2.1 mA impedance 75 kΩ	2.3 mA impedance 100 kΩ
	Due to the low inrush currents of the CMS, we recommend using appropriate contact material, e.g. gold-plated silver contacts or wiring the encoder contacts accordingly.			
	signal ON (min)	0.55 mA ≙ 6.9 VDC	0.97 mA ≙ 56 VAC	0.78 mA ≙ 77 VAC
	signal OFF (max)	0.27 mA ≙ 4 VDC	0.35 mA ≙ 21 VAC	0.35 mA ≙ 36 VAC
	cable length max. 200 m / 656.17 ft			

Digital outputs	I_{max} = 2 A per output, maximum total current over all outputs: 8 A $\cos\varphi \geq 0.2$			
	For operation with PLC or similar, digital inputs: – Logical 1 = Output ON: U = 230 V/120 V/230 V incl. tolerance – Logical 0 = Output OFF see *Fig. 3 Output of the additional resistor when the output is switched ON* see *Fig. 4 Residual voltage when output is switched OFF*			
		24 VDC	120 VAC	230 VAC
	short circuit current	1.23 mA	1.41 mA	1.47 mA
	residual voltage by self-test functions see *Fig. 4 Residual voltage when output is switched OFF*)			
	cable length max. 200 m / 656.17 ft			

Flame sensor input	optical: flame sensor connection U_{nom} = 27 V ± 1 V Cable length max. FFS07/FFS08: 300 m / 984.25 ft, shielded FLS09: 100 m / 328.08 ft, shielded ionisation: supply voltage 230 VAC (120 VAC) I_{min} = 1 µA I_{max} = 50 µA Output for measurement values Ion Meas- and Ion Meas+ 0 ... 500 mV 1 mA corresponds to 10 mV depending on the cable used. Maximum line capacitance 12nF (including ionisation measurement output) depending on the cable used. Maximum line capacitance 12nF (including ionisation electrode)
Current output	0 ... 20 mA ± 2 % output current max.: 25 mA load max.: 1 kΩ, cable length max. 200 m / 656.17 ft, use shielded cables only!
Analogue input	Multifunctional input for the connection of: – potentiometer (2 kΩ ... 10 MΩ) – current input 0/4 ... 20 mA, Ri = 150 Ω – voltage input 0 ... 10 V, Ri = 100 MΩ reference voltage 10 V, short-circuit proof tolerance ± 2 % cable length max. 200 m / 656.17 ft,, use shielded cables only!
Fieldbus	MODBUS/TCP Ethernet specifications PROFINET Ethernet specifications LAMTEC SYSTEM BUS other fieldbus couplings via separate module Cable lengths: 0 - 40 m / 0 - 131.23 ft 2x2x0,22 mm^2 / 14x14x24 AWG twisted pairs with shielding, impedance 120 Ω 40 - 300 m / 131.23 ft - 984.25 ft 2x2x0,34 mm^2 / 14x14x22 AWG twisted pairs with shielding, impedance 120 Ω 300 - 500 m / 984.25 ft - 1,640.42 ft 2x2x0,50 mm^2 / 14x14x20 AWG twisted pairs with shielding, impedance 120 Ω
Flammability	UL94 V-0

Environmental Conditions		
Operation	permitted temperature range	-30 ... +70 °C (condensation prohibited) -22 ... +158 °F
	permitted humidity	5 % ... 95 % relative humidity
Transport/Storage	permitted temperature range	-40 ... +80 °C (condensation prohibited) -40 ... +176 °F
	permitted humidity	5 % ... 95 % relative humidity
Degree of protection	DIN EN 60529	IP20 (as long as all terminals are mounted)

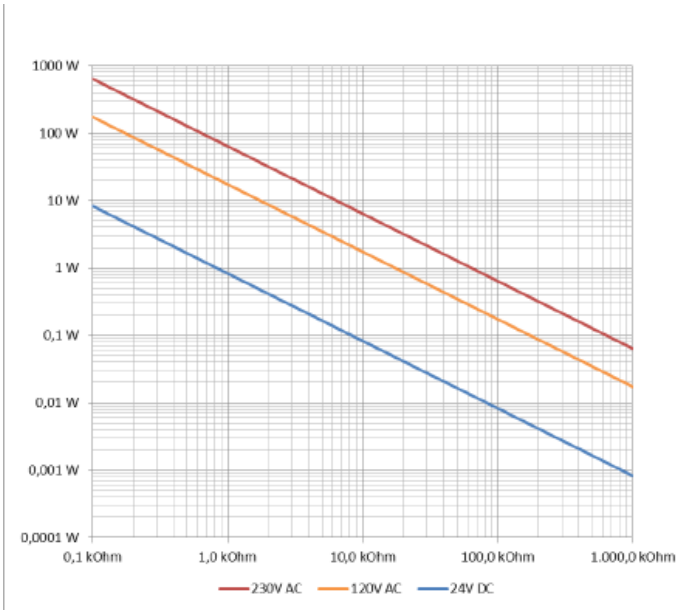

Fig. 3 Output of the additional resistor when the output is switched ON

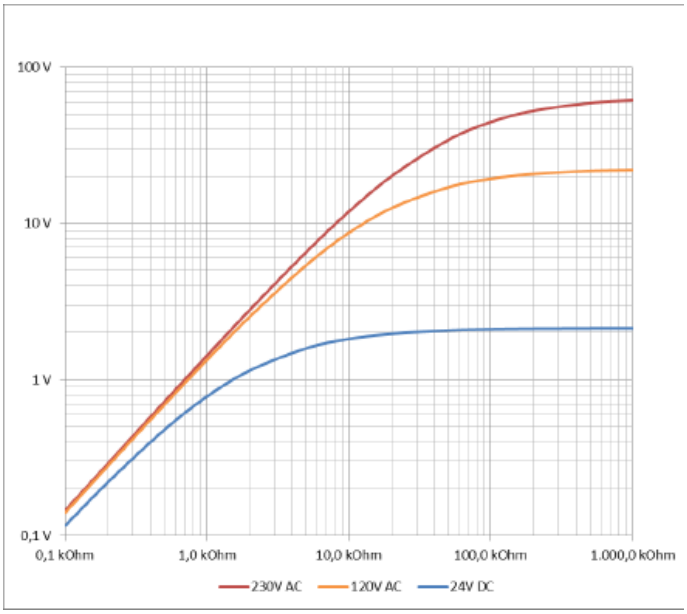

Fig. 4 Residual voltage when output is switched OFF

EU Declaration of Conformity	
2014/35/EU	Low Voltage Directive
2014/68/EU	Pressure Equipment Directive Kat. 4 Mod. B+D
(EU) 2016/426	Gas Appliance Regulation (GAR)
2011/65/EU	RoHS

NOTICE

The limits of the technical data must be strictly adhered to.

Order Information

Description/Type	Order no.
MCC Master Control Component, power supply 24 VDC/8 W Burner module	668R0100...

A 10 – VOLTAGE IN/OUT	Selection
INPUT 230 VAC/OUTPUT 230 VAC	230VAC
INPUT 120 VAC/OUTPUT 120 VAC	120VAC
INPUT 24 VDC/OUTPUT 230 VAC	24-230
INPUT 24 VDC/OUTPUT 120 VAC	24-120
INPUT 24 VDC/OUTPUT 24 VDC	24VDC

A 20 – FLAME MONITORING	Selection
EXTERNAL FLAME MONITORING VIA DIGITAL INPUT	0
INTERNAL FLAME MONITORING OPTICAL FFS...	OP
INTERNAL FLAME MONITORING IONISATION, SUPPLY VOLTAGE	IO-230

A 30 – CUSTOMER	Selection
STANDARD	S

A 40 – COLOUR	Selection
BLACK (STANDARD)	SW

A 50 – CONNECTOR SET	Selection
SCREW TERMINALS Connector set included	SC
SPRING TERMINALS Connector set included	FED
WITHOUT Connector set not included, must be ordered separately, see „Separate Connector Sets for MCC”	0

A 60 – MEMORY EXTENSION	Selection
WITHOUT	0

Separate connector sets for MCC

when attribute 50 „CONNECTOR SET“ = selection „0“

Description/Type	Order no.
Screw terminals MCC input 120/230 VAC / output 120/230 VAC	668R0085
Screw terminals MCC input 24 VDC / output 120/230 VAC	668R0086
Screw terminals MCC input 24 VDC / output 24 VDC	668R0087
Spring terminals MCC input 120/230 VAC / output 120/230 VAC	668R0095
Spring terminals MCC input 24 VDC / output 120/230 VAC	668R0096
Spring terminals MCC input 24 VDC / output 24 VDC	668R0097

Approvals

The information in this publication is subject to technical changes.

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