

TEMPERATURE CONTROLLER

	ON-Panel mounting						In-Panel mounting			
	E5C2	E5CB	E5GC	E5CC	E5EC	E5AC	E5DC	EJ1N	NX-TC	
Size [mm]	48x48x86	48x48x60	48x24x90	48x48x60	48x96x60	96x96x60	22.5x96x85	31x95x109	12x100x80	
Picture										
Purpose	Easy to use approach and lower product cost		If more performance and flexibility are needed E5_C platform is the right answer.			Bigger machines where multi-loop features is needed				
Target application	Shrinking ovens, Burners, Edge-bender machine		Small size sealing machines ,Welding machines for PVC doors, Ovens			Extruders, vertical/horizontal sealing machines, thermoforming.				
Wiring terminals	Screw		Screw, Screwless	Screw, Push-in Plus		Screw	Screw, Push-in Plus	Screw, Screwless	Push-In Plus	
PV Character height	-	16mm	10.5mm	15,2mm	18mm	25mm	8.5mm	-	-	
N° of display	-	2	2	2	3	3	2	-	-	
Sensor input type	t/c, Pt100		t/c, Pt100, analog linear (current, voltage)						t/c, Pt100	
Potentiometer input			-			•			-	
n° of loops	1						2,4			
Control algorithm							PID, ON/OFF			
SP programmer	-					•				
PRR Valve control	-					•				
Autotuning method	-	AT				AT,ST				
Control output type	R	R, Q				R, Q, C			Q, C	
N° Alarm output	-	1R	2R	3R	4R		2R	2T, 2Q	-	
Sampling period	-	250 ms				50 ms			50 ms	
Power supply	100..240VCA		100..240VCA, 24VCA/DC						24VDC	
Event input	-	-	max 2	max 4	max 6		1	max 2	-	
Transfer output	-	-	•	•	•	•	•	•	-	
Load diagnostic	-	-	•	•	•	•	•	•	•	
Remote SP	-	-	-	•	•	•	-	•	-	
Logic operation	-	-	•	•	•	•	•	•	-	
RS-232	-	-	-	-	-	-	-	•	-	
RS-422	-	-	-	-	-	-	-	•	-	
RS-485	-	-	•	•	•	•	•	•	-	
Serial protocol	-	-	Modbus RTU, Compoway-F							
NT-link	-	-	-	-	-	-	-	•	-	
Ethernet-IP	-	-	-	-	-	-	-	-	•	
EtherCAT	-	-	-	-	-	-	-	-	•	
Devicet-NET	-	-	-	-	-	-	-	•	-	
Setting SW tool	-	Thermo Mini	CX-Thermo							
Programming cable	-	E58-CIFQ2	E58-CIFQ2					E58-CIFQ1		

Legend: R = relay V = linear voltage Q = logic output
 C = linear current t/c = thermocouple sensor T = transistor output

Knowledge base

PV	Present temperature Value
Autotuning	Mathematical method to define Proportional, Integral, Derivative parameters value
A.I.	Continuous autotuning algorithm based on Artificial Intelligence skills
Event input	Digital inputs used to activate some controller features like change SP, RUN/STOP status...
Transfer output	Linear output able to transmit temperature value to another device
Load diagnostic	Control proper functionality of the heaters and/or connected Solid State Relay/Contactor measuring amount of current via Current Transformator
Remote SP	Set Point can be changed via linear current signal and not anymore with front panel keys
Logic Operation	Basic ladder programming logic like PLC. To be used CX-Thermo Software is needed.
Potentiometer input	Used to measure position feedback from motorized valve
SP programmer	Allow to program several SP steps in order to manage complex temperature profiles
Modelli PRR	Dedicated control algorithm designed to control "position proportional valve"
Thermo Mini	Free setting software for E5CB series only
CX-Thermo	Setting software for programming E5_C series. It can be ordered as stand alone version or as part of CX-One package

Would you like to know more?

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