



SDC15 Thermal regulator

ELECTRONIC
EQUIPMENT

ACOUSTIC

WEIGHING

ANTI-TILTING

VALVES

TEMPERATURE

DETECT
A FIRE®

FLOW/
RATE

DENSITY

INTERFACE

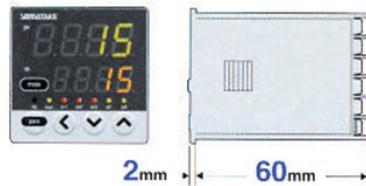
PRESSURE

LEVEL



Housing

The housing depth is only 60 mm, making the SDC 15 the shallowest temperature controller on the market. The front panel is only 2 mm thick and is therefore easy to install even in very narrow spaces. The front panel has been designed to comply with IP 66 standards, making the equipment watertight, so it is no longer resistant to dust and it is necessary to find specific places to install it.

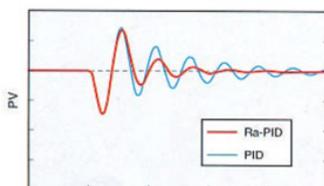


Control

The control capability has been significantly increased with the use of a brand new algorithm. A stable, disturbance-free control has been realised by introducing the sophisticated 'Rationalloop PID (RA-PID)' control logic and the 'Just FITTER' algorithm, which is particularly effective in minimising over-temperature.

• Rationalloop PID (RA-PID)

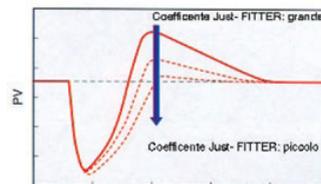
Control point tracking is almost completely eliminated by adding RA-PID to the conventional PID



Differenza tra RA-PID e PID

• "Just FITTER"

"Just FITTER" è un algoritmo di controllo che riduce il superamento del set point di temperatura con una risposta immediata



Con l'impiego di Just FITTER

Operation

Clearly visible liquid crystal display. SP, PV and alarm status can be checked at a glance

- SP and PV values are indicated by 2 different colours. The status of Run/Ready, alarm output and MV are indicated by LEDs. Run/Ready status can be checked quickly. Single-button programming using the 'mode' function.



- The status changes Auto/Manual, Run/Ready, alarm output and even the cancel function can be selected with the mode key. Operation is performed with one key.



Configuration and monitoring SW

For the entire SDC series, the SW is unique. Parameters can be set and downloaded, or the monitoring part can be used to experimentally find the ideal parameters and save them with an 'up load'. It is possible to save different set ups, for different applications, call them up and download them. The monitoring function makes it possible to display in tabular format (loop page) and/or graphical format (trend page), the progress and states of the controller. With the use of special Terry Ferraris converters, it is possible to monitor several regulators at the same time. This allows the SW to be used as a small supervision package. The report part can also be exported to excel for statistical studies or quality test reports of bech productions.

Programmable Logics

The entire SDC range allows the development of simple AND/OR logics for the realisation of dedicated application 'solutions'. Some special functions, such as the Timer and Programmer, are standard. This often results in savings in hardware purchases and wiring, as everything can be integrated in a single device.

Technical specifications

PV Inputs	Type	Selectable (Thermocouples, Pt 100, linear)
	Measuring Range	See table of measuring ranges
	Cycle of Campion	0,5s
	Accuracy	±0.5% FS ± 1 digit
Control	Control Mode	ON / OFF, PID Proportional Time, PID Proportional Current Selectable by model
	Control Action	<ul style="list-style-type: none"> Relay output: 1c (STDP) 250 Vac 3A SSR output: 19Vdc res. Int 82Ω Max. permissible current 24mA Current output: 0 ÷ 20mA, 4 ÷ 20mA sel.
Alarms	Output No.	3 Points
	Control Action	Relay output: 1a (SPST)
	Type	PV, DEV, Loop diagnosis, heater circuit break and others (32 types in total)
Digital input	N. Inputs	2 Points
	Functions	Auto/Manual gearbox, Run/Ready gearbox, set point change, cancellation and others (18 types in all)
CT output	Transform. corr. applic.	(on request) max. 2 inlets Ø5.8mm (QN206A), Ø12mm (QN212A)
Communication	Com. system	RS485 3-wire system
	N. Connectable Units	31
	Speed of com.	max. 38,400bps
Programming port	Connection	Dedicated cable
	Connection length	Max 2m
General	Amb. temp.	0÷50°C
	Power supply	100÷240Vac Mod. with power supply DC soon available
	Consumption	12VA max.
	Protection	IP 66 (NEMA 4X)
	Weight	150g panel mount (including bracket) 200g for rail mounting
	Certifications	CE, UL

Input Type and Measuring Ranges

Sensor	Sensor Type	Temperature ranges (°C)
Thermocouple	K	-200 ÷ 1200
		0 ÷ 1200
		0 ÷ 800
		0 ÷ 600
		0 ÷ 400
	J	-200 ÷ 400
		0 ÷ 800
		0 ÷ 600
	E	0 ÷ 600
	T	-200 ÷ 400
	R	0 ÷ 1600
	S	0 ÷ 1600
	B	0 ÷ 1800
	N	0 ÷ 1300
	WRe5-26	0 ÷ 1400
WRe5-26	0 ÷ 2300	
DIN U	-200 ÷ 400	
DIN L	-100 ÷ 800	

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		0 ÷ 800
		0 ÷ 600
		0 ÷ 400
	J	-200 ÷ 400
		0 ÷ 800
		0 ÷ 600
	E	0 ÷ 600
	T	-200 ÷ 400
	R	0 ÷ 1600
	S	0 ÷ 1600
	B	0 ÷ 1800
	N	0 ÷ 1300
	WRe5-26	0 ÷ 1400
WRe5-26	0 ÷ 2300	
DIN U	-200 ÷ 400	
DIN L	-100 ÷ 800	

Ordering codes

Tab.	Selection			Description				
I	Basic Mod.	C	15	Digital temperature controller				
II	Assembly	T	0	-	Panel mounting			
		S	-	0	Plinth mounting			
III	Control				Unit 1	Unit 2		
		RO	0	0	Relay (1a only for mod C155)			
		VO	0	-	SSR			
		VC	0	-	SSR		Current	
		-			SSR		SSR	
		CO	0	0	Current			
		CC	0	-	Current		Current	
IV	PV Inputs	T	0	0	Thermocouple			
		R	0	0	Resistance thermometer			
		L	0	0	SSR/Current			
V	Power supply	A	0	0	100 ÷ 240 Vca			
		D*	0	0	24 Vcc			
VI	Options (1)				EV(D0)	CT input 2 points	Dig. pulses (DI) 2 points	Communication RS - 485
		00	0	0	-	-	-	-
		01	0	0	3 Points	-	-	-
		02	0	-	3 Points	0	0	-
		03	0	-	3 Points	0	-	0
		04	0	0	2 Independ. points	-	-	-
		05	0	-	2 Independ. points	0	0	-
06	0	-	2 Independ. points	0	-	0		
VII	Options (2)	00	0	0	None			
		00	0	0	w/ Test data			
		Y0	0	0	w/ traceability Certification			

Software (on request)

Model No.	Name and Specifications
SLP-C35J50	SLP-C35J50 standard cable for C15

Options (on request)

Model No.	Name and Specifications
81446898-001	Terminal Case
81446391-001	Socket
QN206A	Current Transformer (5.8 mm)
QN212A	Current Transformer (12 mm)
81446442-002	Hard Case
81446443-001	Hard Case
81409654-001	Mounting Bracket (Included with C15T usable with C15S)