



SDC35 and SDC36

Thermal regulator

ELECTRONIC EQUIPMENT

ACOUSTIC

WEIGHING

ANTI-TILTING

VALVES

TEMPERATURE

DETECT A FIRE®

FLOW/RATE

DENSITY

INTERFACE

PRESSURE

LEVEL



Compact Controllers

- Reduced Depth: 60 - 65 mm
- Front IP66, large and bright display
- Advanced software with logic and timer functions
- New algorithm for even more precise control
- Fast access to data
- Easy online and offline configuration with Smart SW PC-Loader (including real-time data acquisition)

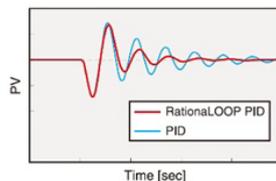


Control

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

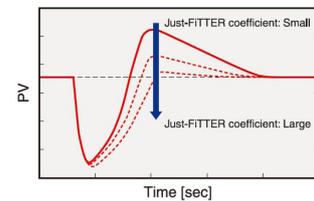
• Rationalloop PID (RA-PID)

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



• "Just FITTER"

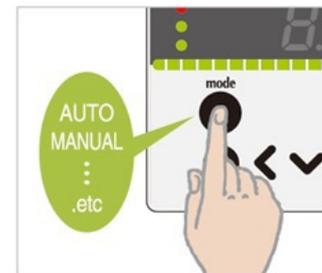
"Just FITTER" è un algoritmo di controllo che riduce il superamento del set point di temperatura con una risposta immediata



Operation

The following operations can be easily and quickly accessed by pressing the mode button:

- AUTO/MANUAL, RUN/READY, contact latch deletion, etc.



Configuration and monitoring SW

The software is the same for the entire SDC series. You can set the parameters and download them, or use the monitoring function to experimentally find the ideal parameters and save them with an 'upload'. You can save different setups for different applications, recall them and download them. The monitoring function allows you to view the regulator's performance and status in tabular format (loop page) and/or graphical format (trend page). With the use of special Terry Ferraris converters, you can monitor multiple regulators simultaneously. This allows you to use the SW as a small supervision package.

Indication

Programmable Logic

The entire SDC range allows you to develop simple END/OR logic for the creation of dedicated application 'solutions'.

Some special functions, such as the Timer and Programmer, come as standard.

This often translates into savings in hardware and cabling purchases, as everything can be integrated into a single device.

Technical specifications

PV Inputs	Type	Thermocouple, Pt 100, DC voltage, DC current											
	Measuring Range	See table of input types and measurement ranges											
	Cycle of Campion	0,1s											
Indication	Method	4-digit, 7-segment digital display											
	Accuracy	±0,5% FS ± 1 cifra											
Control Output	Model Number	RO	VO	CO	VC	VV	CC	VD	RI	CD	DO	DD	
	Control Mode	ON/OFF control, time-proportional PID, current-proportional PID											
	First Control Release	Relay	Voltage pulse	current	Voltage pulse	Voltage pulse	current	Voltage pulse	engine drive	current	direct current	direct current	
	Second Control Output	-	-	-	current	Voltage pulse	current	direct current	-	direct current	-	direct current	
	N. of PID groups	8 max.											
	Auto tuning PID	Automatic setting of PID values using the limit cycle method											
External switch input	N. Inputs	4 max.											
	Functions	selectable from PV, SP, deviation value, absolute value, alarm, timer output, heater line interruption alarm, etc.											
Event	N. Output	(on request) max. 2 inputs Ø5.8mm (QN206A), Ø12mm (QN212A)											
	Functions	3 max. (inside 8)											
Line break alarm	N. Inputs	2 (optional)											
Analogue Output	N. Output	3 max.											
	Type	selectable between PV, SP or MW											
Communication	Com. system	RS485											
	N. Connectable Units	maximum 31 units											
	Speed of com.	max 38.400bps											
Additional processes	Inspection certificate and traceability certification supported												
	Connection length.	Max 2m											
General	Nominal power supply	Model with AC power supply: 100-240 V AC, 50/60 Hz / Model with DC power supply: 240 V AC, 50/60 Hz, 24 V DC											
	Consumption	SDC35 AC-powered model: 12VA max. - DC-powered model: 12VA max. (24Vdc), 8W max. (24vdc) SDC36 Model with AC power supply: 12VA max. - Model with DC power supply: 12VA max. (24Vdc), 8W max. (24vdc)											
	Compliance with standards	CE marking (EN61010-1, EN61326) / cUL (UL61010-1) *											
	Weight (mass)	SDC35: 250g, SDC36: 300g											

Input Type and Measurement Ranges

Sensor	Sensor Type	Temp. fields (°C)
Thermocouple	K	-200 ÷ 1200
		0 ÷ 1200
		0 ÷ 800
		0 ÷ 600
		0 ÷ 400
		-200 ÷ 400
		-200 ÷ 200
	J	0 ÷ 1200
		0 ÷ 800
		0 ÷ 600
		-200 ÷ 400
	E	0 ÷ 800
		0 ÷ 600
	T	-200 ÷ 400
	R	0 ÷ 1600
	S	0 ÷ 1600
	B	0 ÷ 1800
	N	0 ÷ 1300
	PL II	0 ÷ 1300
	WRe5-26	0 ÷ 1400
WRe5-26	0 ÷ 2300	
Ni-NiMo	0 ÷ 1300	
PR40-20	0 ÷ 1900	
DIN U	-200 ÷ 400	
DIN L	-100 ÷ 800	
Chrome-plated gold iron	0K ÷ 360K	

Sensor	Sensor Type	Temp. fields (°C)
RTD	Pt100	-200 ÷ 500
	JPt100	-200 ÷ 500
	Pt100	-200 ÷ 200
	JPt100	-200 ÷ 200
	Pt100	-100 ÷ 300
	JPt100	-100 ÷ 300
	Pt100	-100 ÷ 200
	JPt100	-100 ÷ 200
	Pt100	-100 ÷ 150
	JPt100	-100 ÷ 150
	Pt100	-50 ÷ 200
	JPt100	-50 ÷ 200
	Pt100	-50 ÷ 100
	JPt100	-50 ÷ 100
	Pt100	-60 ÷ 40
	JPt100	-60 ÷ 40
	Pt100	-40 ÷ 60
	JPt100	-40 ÷ 60
	Pt100	-100 ÷ 60
	JPt100	-100 ÷ 60
	Pt100	0 ÷ 100
	JPt100	0 ÷ 100
	Pt100	0 ÷ 200
	JPt100	0 ÷ 200
	Pt100	0 ÷ 300
JPt100	0 ÷ 300	
Pt100	0 ÷ 500	
JPt100	0 ÷ 500	
Linear	0 ÷ 10mV	Scalable in the range -1999 to 9999 Decimal point position can be changed
	-10 ÷ 10mV	
	0 ÷ 100mV	
	0 ÷ 1V	
	1 ÷ 5V	
	0 ÷ 5V	
	0 ÷ 10V	
	0 ÷ 20mA	
4 ÷ 20mA		

Ordering codes

Tab.	Selection	Description				
I	Basic model	C35T	Digital Indicator Controller (dimensions 48x96 mm)			
		C36T	Controller di Indicazione Digitale (dimensione 96x96 mm)			
II	Control		Unit 1	Unit 2	Reference	
		RO	Relay	-	-	
		VO	Voltage Impulse	-	-	
		CO	Current	-	-	
		DO	Continuous Voltage (Note 3)	-	-	
		R1	Engine Drive Relay	-	With MFB (Motor Feedback)	
		VC	Voltage Impulse	Current	-	
		VV	Voltage Impulse	Voltage Impulse	-	
		CC	Current	Current	-	
		VD	Voltage Impulse	Continuous Voltage (Note 3)	-	
		CD	Current	Continuous Voltage (Note 3)	-	
		DD	Continuous Voltage (Note 3)	Continuous Voltage (Note 3)	-	
III	Input Type	U	Ingresso Universale (Multiplo Completo)			
IV	Power supply	A	100 ÷ 240 Vca			
		D	24 Vca /24 Vcc			
V	Options (1) (NOTE 1) (NOTE 1) (NOTE 1)		EV (DO)	Auxiliary Output		
		1	3 Points	-		
		2	3 Points	Current		
		3	3 Points	Tension		
		4	2 Independ. points	-		
		5	2 Independ. points	Current		
		6	2 Independ. points	Tension		
VI	Options (2)		CT (NOTE 2)	DI	RSP	Communication
		0	-	-	-	-
		1	2 Points	4 Points	-	-
		2	2 Points	4 Points	-	RS -485
		3	2 Points	2 Points	Available	-
		4	2 Points	2 Points	Available	RS -485
VII	Additional Processing	00	None			
		00	w/ Test data			
		Y0	w/ traceability Certification			
		T0	w/ Tropicalisation			
		K0	w/ Anti-sulphurisation			
		B0	w/ Tropicalisation + Test data			
		L0	w/ Anti-sulphurisation + Test data			

Note 1: Not selectable with DC power supply model.

Note 2: CT is not applicable when control output R1 is selected.

Note 3: Selectable from 1 to 5 V, 0 to 5 V, or 0 to 10 V.

Software (on request)

Model No.	Name and Specifications
SLP-C35J50	SLP-C35 standard charger for SDC35/36 Version 2.0 CD with charging cable
SLP-C35J51	SLP-C35 standard charger for SDC35/36 Version 2.0 CD, operating manual, without charger cable

Options (on request)

Model No.	Name and Specifications
QN206A	Current Transformer (5.8 mm)
QN212A	Current Transformer (12 mm)
81446915-001	Hard Case for SDC35
81446916-001	Hard Case for SDC36
81441121-001	Soft Case for SDC35
81441122-001	Soft Case for SDC36
81446912-001	Terminal box for SDC35
81446913-001	Terminal box for SDC36
81409654-001	Mounting Bracket (Included with the Controller)