Quality Certification Bureau Inc.
ISO 9001:2000 Registered QMS

Good company which always thinks much of customer - Samwon Tech Co., Ltd.

NOVA 541 SERIES

temperature controller



SAMWON TECH

www.samwontech.com

NOVA 541 SERIES

- Innovatively designed product
- Much smaller product size (length 78mm)
- Key-pad type
- 5 digits Display in minimum size
- Upgraded communication speed (Max 38400 bps)



❶ STATUS LAMP	❹ SP display (RED)
❷ PV display (RED)	❺ BUTTON
❸ MODEL	❻ Front loader for communication

ST541 (Digital controller)

- AUTO/MAN output function
- Reservation function of operation RUN/STOP
- Heating/Cooling output available
- Display Auxiliary output status



SP541 (Programmable controller)

- Total 30 segments of 2 patterns available
- Change Holding SP and Holding time during Soak segment
- Various auxiliary outputs(UP,DOWN,TS,PTEND, etc.)



SL541 (Limit controller)

- Reset RELAY after confirmed by user when Over Temperature occur
- Memory and Display Function of High and Low temperature
- Memory and Display time period from the power off to the reset



SPECIFICATIONS

Classification			ST541	SP541	SL541
Overall Size			48(W) x 48(H) x 78(L)mm		
PV/SP display			5 Digit LED Display Height (7 segment 4 1/2 digit)		
Sampling time			250ms		
Indication Accuracy			±0.1% of FS		
Control Loops and Modes			Single-loop control / Heating & Cooling	Single-loop control	High or Low
Running modes			Auto/Manual, RUN/STOP	Program / Reset	–
PID			3 PID Zones + 1 Deviation PID Zone		–
Number of Set Points			4 kinds of setups (SP1~SP4)	–	–
Number of Programs			–	2 Program patterns	–
Number of Segments			–	15segments x 2, Max 30	–
Sensor	PV Input		Universal Input (1 point)		
	Kind	T/C	K, J, E, T, R, B, S, L, N, U, W, Platinel Ⅱ, C		
		RTD	Pt100(1/100 display function), JPt100		
		VDC	-10~20mV DC, 0 ~ 100mV DC		
			0.4~2.0V DC, 1~5V DC, 0~10V DC, [4 ~ 20mA DC시 250Ω (±0.1%) Adherence]		
Control	Control Output		Universal Output(Max 3 points)		–
	Kind	Time-proportional PID	Relay, SSR(0 ~ 12V DC Pulse)		–
		Continuous PID	SCR(4~20mA DC), (0~20mA DC : Option)		–
EVENT (Max. 3 points)	Capacity		Basic 2 points		
	Alarm Types		22 Types(Upper/low limits in measuring, Upper / low limits in deviation, Upper / low limits in standby, HBA, SOAK ·····)		
	Inner SP Signal		2 Points(PV, SP, TSP)		–
	Program Time Signal		–	1 Point	–
	Others		–	1 Point (RUN, Pattern end, UP, DOWN, SOAK)	–
Retransmitting Output			4~20mA DC, 0~20mA DC(Option) (PV,SP,MV)		4~20mA DC, 0~20mA DC(Option) (PV,SP)
Digital input	Capacity		2 Points		–
	Type		SP selection, operation / stop	RUN, HOLD, STEP, RESET	–
Communication Protocols			PC-Link, MODBUS(ASCII,RTU), SYNC(MASTER,SLAVE) MAX : 38400bps		
Power Supply			100~240VAC, 50 ~ 60Hz / Below 6W in Max		

Model & Addition code

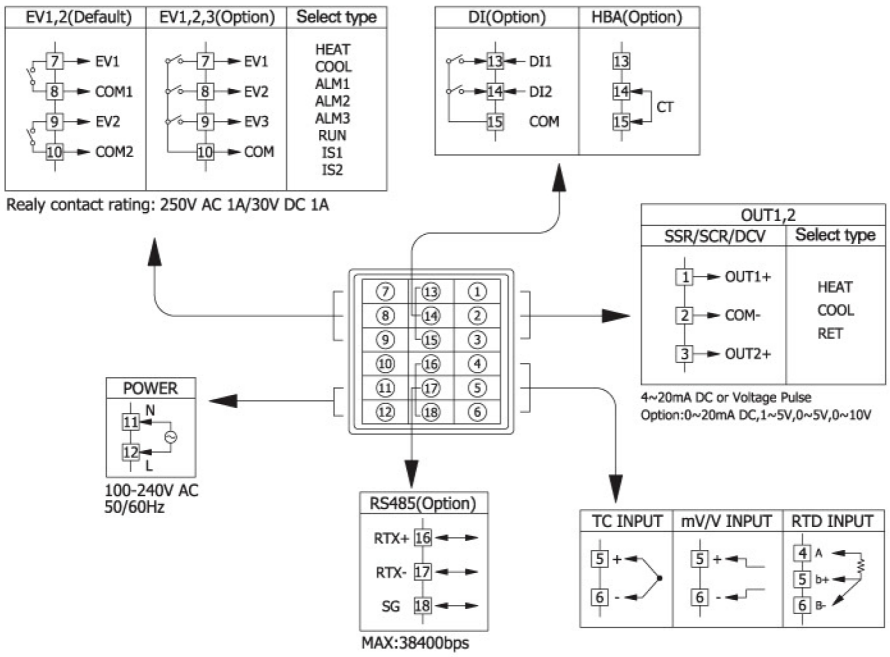
Model	Addition code	Description		
S*541	– □ □ / □ / □	Digital Controller	Programmable Controller	Limit Controller
Type	0	basic specification		
	1	Heating/cooling control	–	
Power	0	100~240V AC		
	1		24V DC	
Option 1	/RS	RS485 Communication	←	←
	/SUB	Dependent 3 Relays	←	–
	/DI	Digital Input 2 Points	←	–
	/HBA	Heater Break Alarm(50A)	←	–
Option 2	/DCV1	0~20mA DC	←	–
	/DCV2	0~5V DC	←	–
	/DCV3	1~5V DC	←	–
	/DCV4	0~10V DC	←	–

※ As for option 1, you can select only up to 3 options in Max.

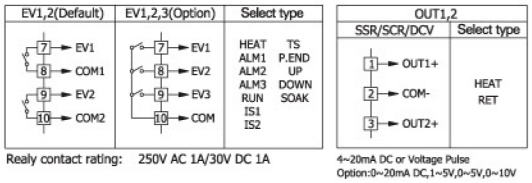
※ You can select only up to 3 options in Max. (applied for OUT1) and you cannot use OUT2 on DVC1 option.

TERMINAL ASSIGNMENT

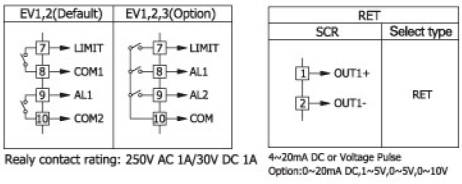
ST54I



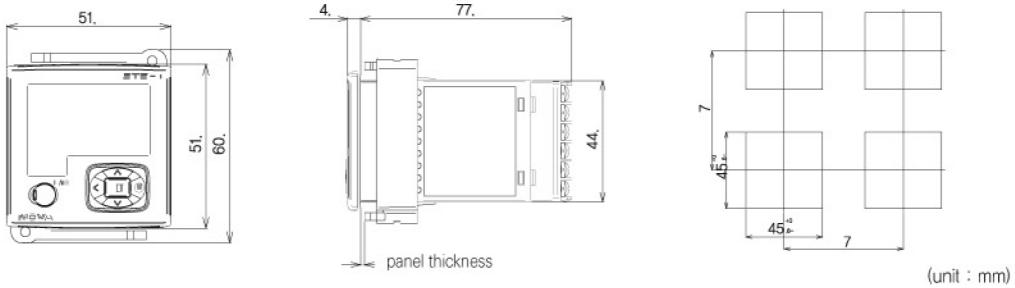
SP54I



SL54I



DIMENSION AND PANEL CUTOUT SIZE



CAUTION When you use this product, please surely read user manual attached in the product for your safety

SAMWON TECH
Buchon Techno-park 202-703, #192, Yakdae-Dong, Wonmi-Ku, Buchon-City, Kyunggi-Do, Korea. 430-733
TEL : 82-32-326-9120 Fax : 82-32-326-9119 E-mail : webmaster@samwontech.com