

spirax/sarco®

EL3500 Multi Loop Controller

Description

The EL3500 controller is a 1/4 DIN panel mounted multi-loop controller suitable for constant set point applications and for use with the Spirax Sarco range of pneumatic and electric series actuators, valves and sensors.

Standard Model Number: DC3500-EO-1B20-210-00000-00-0

Technical Data

Mounting Arrangement	Panel mounted 1/4 DIN
Power Supply	90 to 264 VAC, 50/60 Hz, 24 VAC/DC optional
Power Consumption	24 VA maximum
Front Protection	NEMA 4x and IP66 (Front Face)
Accuracy	±0.10% of full scale input
Inputs	2 standard universal/analog inputs TC, RTD; mV, 0-5V, 1-5V, 0-20mA, 4-20mA
Input sampling rate	6 times per second
Alarms	One 5 - amp SPDT relays
Output	4 - 20 mA current output
Auxilliary Output	4 - 20mA current output
Control Algorithms	Configurable for PID-A, PID-B, PD with manual reset or On-Off control
Heat/Cool Capability	Provides split range control with independent PID tuning constants for heating and cooling.
Two Loops of Control	Two independent loops or internally cascaded loops in one device

Options

A variety of options are available to special order. These include additional inputs, alarms and communications. Contact Spirax Sarco for further details.

Features

Easy to Configure - A bright dedicated configuration display provides straightforward multilanguage prompts that allow easy set-up with minimum time and effort.

Autotune - This standard feature provides plug and play tuning algorithm, which will, at the touch of a button or through digital input, accurately identify and tune any process including those with deadtime and integration processes.

Fuzzy Logic - This feature uses fuzzy logic to suppress process variable overshoot which can result from setpoint changes or externally induced process disturbance. It operates independently from Autotune. It can be enabled or disabled.

Universal Inputs - Accepts RTD's, mA, mV or voltage input through simple configurations (other inputs also available).

Setpoint Ramp - A configurable ramp rate or a single programmable setpoint ramp up to 4-1/4 hours adds to start-up flexibility.

Heat/Cool Capability - Provides split-range control with independent PID tuning constants for heating and cooling, plus mixed output forms.

Manual/Automatic Modes - Bumpless, balanceless transfer between control modes.



Thermocouple Failsafe - Configurable for upscale or downscale burnout or failsafe output level.

Dual Setpoints - Simple push-button selection allows quick switchover from primary to alternate setpoint.

Installation and Commissioning

Installation and commissioning should be carried out in accordance with the instructions supplied with each controller.

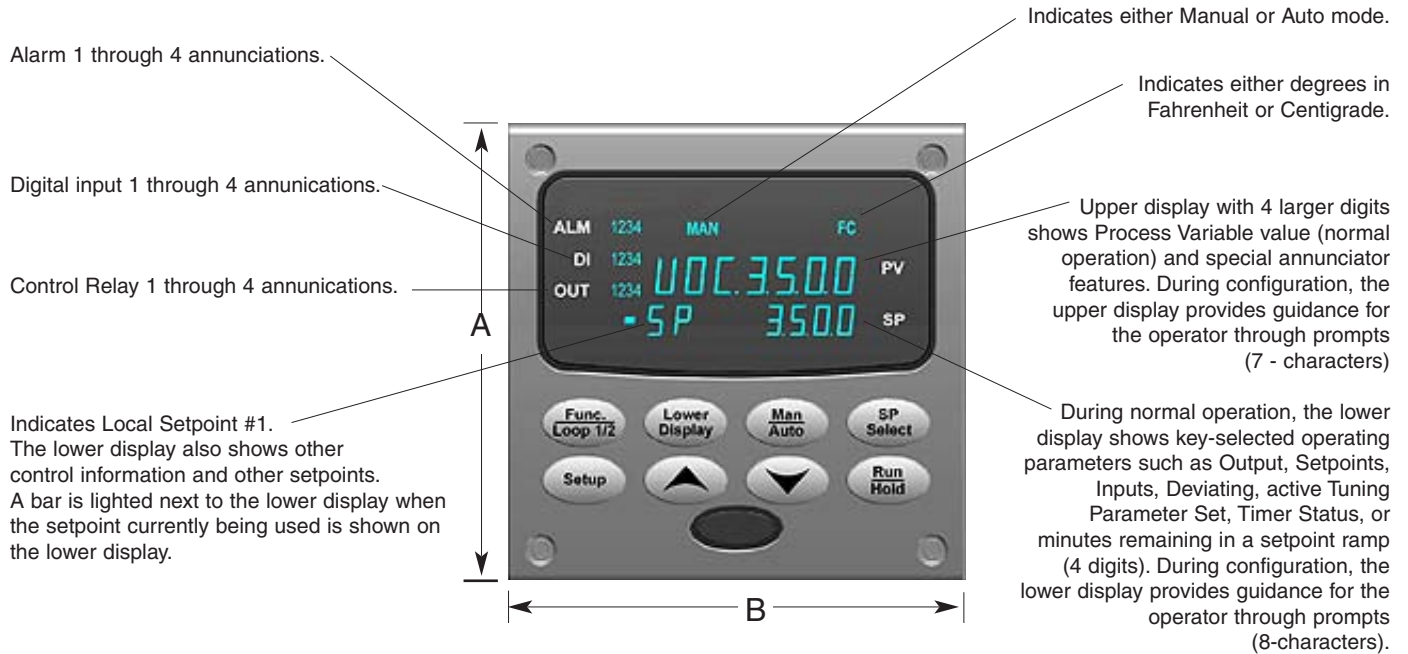
Mounting Arrangements

Controllers are panel mounted as standard using the brackets provided with the units.

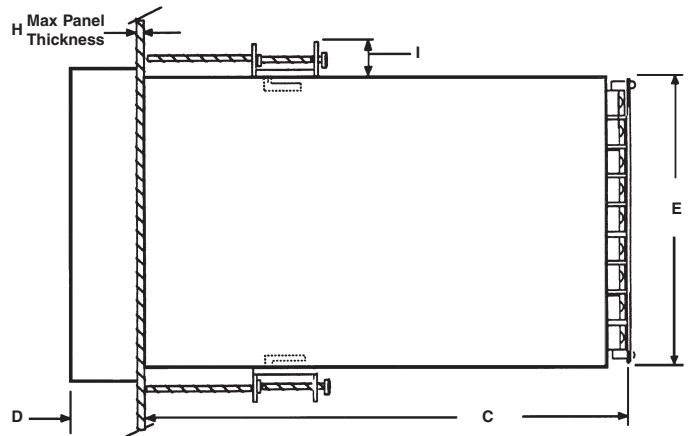
Local regulation may restrict the use of this product below the conditions quoted. Limiting conditions refer to standard connections only. In the interests of development and improvement of the product, we reserve the right to change the specification.

TI-1-615-US 06.06

EL3500 Multi Loop Controller



Dimensions (nominal) in inches and millimeters				
Controller				
A	B	C	D	E
3.78"	3.78"	5.82"	0.70"	3.57"
96	96	147.3	17.9	90.7
Panel Mounting Cut Out				
F	G	H	I	
3.62"	3.62"	0.75"	0.35"	
92	92	19	9	



EL3500 Wiring Diagram

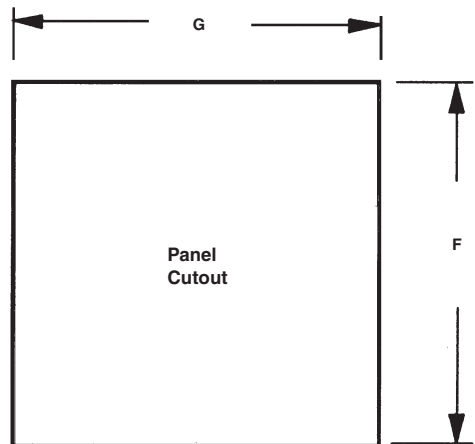
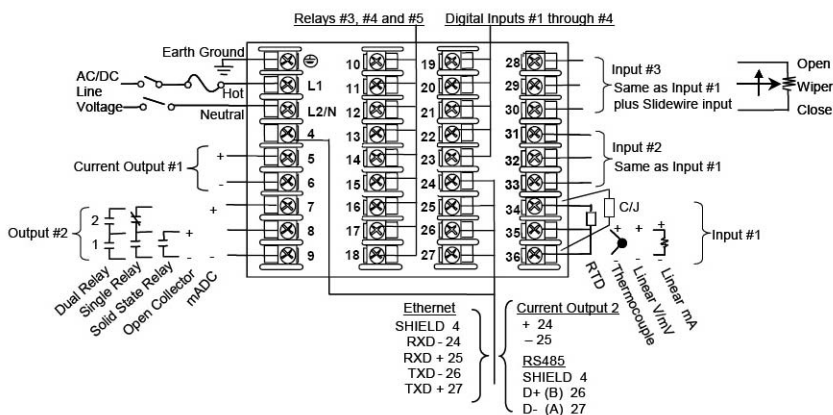


Figure 5—External Wiring Diagram

TI-1-615-US 06.06