

SC400 Controller

Multi-function



General

The SC400 Controller is a full featured lubrication control, offering “two plus one” functionality: Two independent lubrication zones may be programmed with a single controller, plus control of one automatic reservoir fill system.

The SC400 Controller has the ability to operate a single pump and two zone valves (e.g. frequent/ infrequent lubrication cycles) or two separate pumps (e.g. one oil pump & one grease pump). Each zone operates independently. (“Two zone” feature is not available for Dualine electric systems or for systems that require after blow).

For single zone systems, the SC400 Controller also offers two intervals (e.g. weekday /weekend). Using an external switch, the customer can quickly change lubrication intervals between two sets of off time. The SC400 also incorporates an automatic fill feature. The controller can activate a fill pump as needed to maintain proper fluid levels in the oil or grease reservoir.



Application

The SC400 operates in any of five system modes:

- + Series Progressive
- + Single Line Injector
- + Dualine (Hydraulic Reversing Valve)
- + Dualine (Electric Reversing Valve)
- + Continuous

Technical Data

Input Voltage	85 to 265 VAC, 50/60 Hz
Current Consumption	80 mA at 115 VAC (less load) 40 mA at 230 VAC (less load)
Pump Output Rating	8 amp (85 to 265 VAC)
Output Rating (line A & B)	8 amp (90 to 250 VAC)
Enclosure Rating	IP-56
Ambient Temp. Range	14°F to 131°F (-10°C to 55°C)
Storage Temp. Range	-40°F to 185°F (-40°C to 85°C)
Vibration	2 g at resonant (3 axis)
Idle Time Range	1 second to 100 days
Machine Cycle Counts	1 to 999,999 Counts (30 counts/second at 50% duty cycle)
Watchdog Timer	1 second to 60 minutes
Monitor Time	1 second to 24 hours
Timing Accuracy	0.01% (crystal controlled)
Cycle Counts On	1 to 999 counts
Over Counts	0 to 9
Net Weight	5 lb
Length x Width x Height	12.3" x 9.2" x 5"
Permanent Memory	FLASH
Fault Relay Contacts	5 amp



Features

- + Pump output may be powered externally or via control power.
- + Valve A, Valve B, and Fill pump may be powered externally or via control power.
- + Critical Inputs accept PNP, NPN, or mechanical switches.
- + 500 mA of 24 VDC is available to power customer's accessories.
- + Primary alarm inputs may be programmed for N.O. or N.C. functionality.
- + Separate Fault and Warning outputs-alarms may be monitored independently of non-critical events.
- + 2 zone operation (for Progressive, Injector and Dualine Hydraulic systems)
- + IP-56 enclosure, constructed of molded polyester fiberglass.
- + CE approved
- + Four supported languages (English, French, Spanish, German).
- + Machine watchdog and cycle monitoring.
- + Pause (stand-by), jog (manual operation).
- + Accepts all BDI electric reversing valves and cycle/pressure/"end-of-line" switches.

System Modes

Option availability depends on mode and the customers system. Use the table below to determine active options.

Available Features	Continuous	Series Progressive	Singe Line Injector	Dualine Hydraulic	Dualine Electric
2 Zones ¹		X	X	X	
2 Intervals ¹		X	X	X	X
Purge (Afterblow) ²		X	X	X	
Auto Fill Control	X	X	X	X	X
Lubrication System Cycle & Pressure Switch Monitoring	X	X	X	X	X
Machine Count Cycle Switch Monitoring		X	X	X	X
Lubrication Base Pump On Time Options					
Time		X		X	
Machine Cycles		X		X	
Dualine Half Cycle				X	X
Dualine Full Cycle				X	X
Idle Base Pump Off Time Options					
Time		X	X	X	X
Machine Cycles		X	X	X	X

¹ Via parameter, customer may select either 2 zones or 2 intervals.

² Purge is not available in 2 zone systems.

How to Order

Name	Part #
SC400 Controller	SC400

When ordering, specify by name and part number, e.g. SC400 Controller, Part #SC400.



Dimensional Schematics

Measurements shown in inches.

