Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts,Customers Priority,Honest Operation,and Considerate Service",our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!

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TECO SG2 (V3) Programmable Relay Specifications

General Specifications

Power Supply	
Input Power Voltage Range	12VDC Models: 10.4-14.4V 24VDC Models: 20.4-28.8V 110/220VAC: 85-265VAC
Power Consumption	12VDC: 12-point, 150mA 20-point: 150mA 24VDC: 12-point, 90mA 20-point: 150mA 100-240VAC: 90mA
Wire Size (all terminals)	26 to 14 AWG

Programming	
Programming languages	Ladder/Function Block
Program Memory	300 Lines or 260 Function Blocks
Programming storage media	Flash
Execution Speed	10ms/cycle

Built-in HMI	
Customizable screens	31 (H coils)
LCD Display	4 lines x 16 characters
Function Keys	8, 4 user-defined (Z inputs)

Auxiliary Coils	
Maximum Number	126 (63 M-coils, 63 N-coils)

Timers	
Maximum Number	31 T-coils
Timing ranges	0.01s–9999min

Counters	
Maximum Number	31 C-coils
Highest count	999999

RTC (Real Time Clock)	
Number available	31 R-coils
Resolution	1 min
Time span available	week, year, month, day, hour, min
Daylight Savings feature	Yes
Power off RTC retention	240 hours

Compare Instructions (Analog, Timer, or Counter Values)	
Number available	31 G-coils
Compare functions	EQ, LT, GT, LE, GE, NE

NEW! PID Control (Proportional-Integral-Derivative)	
Maximum Number	15 Loops (PI Coils)

NEW! Math Instructions	
Number available	62 (31 AS Coils, 31 MD Coils) up to 124 additional (plus unused T, C, R, G coils)
Math Operations	+ - x /

Data Multiplexer Instructions	
Number available	15 (MX Coils)
Resolution	2-bit, 4 data registers

Data Registers	
Number available	240 (DR Coils, 16-bit)

Shift Instruction	
Number available	1 8-bit (S Coil)

Analog Ramp Instructions	
Number available	31 (AR Coils)

Environmental	
Enclosure Type	IP20
Maximum Vibration	1G according to IEC60068-2-6
Operating Temperature Range	-4° to 131°F (-20° to 55°C)
Storage Temperature Range	-40° to 158°F (-40° to 70°C)
Maximum Humidity	90% (Relative, non-condensing)
Vibration	0.075mm amplitude; 1.0g acceleration
Weight	10-point: 230g; 8-point:190g; 20-point: 345g
Agency Approvals	cUL , CE, UL

Discrete Inputs	
Current consumption	4mA @12VDC 3.2mA @24VDC 1.3mA @100-240VAC
Input Signal "OFF" Threshold	12VDC: < 2.5VDC; 24VDC: < 5VDC; 110/220VAC: < 40VAC
Input Signal "ON" Threshold	12VDC: > 7.5VDC; 24VDC: > 15VDC; 110/220VAC: > 79VAC
Input On delay	DC: 5ms; 240VAC: 50ms; 120VAC: 90ms
Input Off Delay	DC: 3ms; 240VAC: 50ms; 120VAC: 90ms
Transistor Type	3-wire PNP Sensor compatible
High Speed Input frequency	1kHz
Standard Input frequency	< 40 Hz
Required protection	Inverse voltage protection required

Analog Inputs	
Resolution	10 bit
Acceptable Input Range	Base module: Analog input: 0-10VDC voltage, 24VDC when used as discrete input Expansion module: Analog input: 0-10VDC voltage or 0-20mA current
Input Signal "OFF" Threshold	< 5VDC (as 24VDC discrete input)
Input Signal "ON" Threshold	> 9.8VDC (as 24VDC discrete input)
Isolation	None
Short circuit protection	Yes
Total number available	Base module: A01-A04 Expansion module: A05-A08

Temperature Input (SG2-4PT Expansion Module)	
Sensor Type	3-wire PT100
Temperature input range	-100°C - 600°C
Resolution	3.5°C

Relay Outputs	
Contact material	Ag Alloy
Current rating	8A
HP rating	1/3HP@120V 1/2HP@250V
Maximum Load	Resistive: 8A/point; Inductive: 4A/point
Maximum operating time	15ms (normal condition)
Life expectancy (rated load)	100k operations
Minimum load	16.7mA

Transistor Outputs	
Pulse Outputs	1 PWM and 1 PWM or Pulse Output
PWM max. output frequency	0.5kHz (1ms on,1ms off)
Standard max. output frequency	100Hz
Voltage specification	10-28.8VDC
Current capacity	1A
Maximum Load	Resistive: 0.5A/point; Inductive: 0.3A/point
Minimum Load	0.2mA

Analog Outputs (SG2-2AO Expansion Module)	
Analog output range	0V–10V (load > 500 ohm), 0-20mA (load < 500 ohm)
Resolution	10-bit
Full scale accuracy	2.5%

Communication Options

Built-in RS485 Communication (SG2-20Vx-x units only)	
Modbus-RTU	Master/Slave mode, 4800-115.2kb, supports Modbus function codes 1, 3, 5, 6, 16
DataLink	Link up to 3 SG2-20Vx-x units (1-master, 2-slaves) at 38.4kb
Remote-I/O	Link up to 8 Remote-I/O slave units (SG2-20Vx-x only) to 1-master unit at 8.4kb

Dimensions

10/12-point Models — 20-point Models — Expansion Modules — All Modules