

WAYGUARD®

SGCP4000/MS4000

SIMPLE GRADE CROSSING PREDICTOR/MOTION SENSOR

Overview

SIEMENS SGCP 4000/MS 4000 is an electronic, microprocessor-based modular system designed to reliably detect the motion of an approaching train and start the crossing warning system.

Operation of the system is based on the maximum impedance of an unoccupied track circuit, which is determined by the location of termination shunts and the rate of change in impedance resulting from the physical location of a train as it moves within a track circuit.

System will apply a constant current AC signal to track and measure the resulting voltage level. These levels vary with approach track impedance, which also varies due to the distance of the train from the crossing.

System detects the inbound motion of the train and activates crossing warning equipment.

When the train has cleared the crossing, the system no longer senses inbound motion and allows the crossing warning signal system to recover.

When a train stops before reaching the crossing or reverses direction and backs away from the crossing, the system will recover after a short (programmable) time-out as inbound motion is no longer detected.



Model A80495 SGCP4000 / MS4000 is shown for reference purposes only. Actual unit selected may vary in mounting and features.

Features

- Available in single track non-redundant and redundant models.
- Uses proven GCP 4000/5000 modules. *(All of which hot swappable and interchangeable with GCP systems.)*
- Reduced system size for installation in a smaller equipment house.
- Provides a simple user interface in order to easily setup unit.
- Programming can be confirmed by an Office Configuration Check Number (OCCN) and the track calibration information can be confirmed by a Track Check Number (TCN).
- Provides a diagnostic history log and train move history log capable of interfacing to SEAR II Event Recorder/Analyzer for additional capability.
- Supports the use of an external island using a vital input.
- Transfer module can be removed and a strap can be used to force either main or standby operation without transfer module being present. *(On redundant A80490 models only.)*
- Can be configured as either a motion sensor or as a simple grade crossing predictor.

Physical Data

Specification

Series Designation		Models	
		A80495	A80490
Dimensions		Compact Version	Standard Version
Height		19.09 in (48.79 cm)	14.25 in (36.20 cm)
Width		5.88 in (14.94 cm)	10.16 in (25.81 cm)
Depth		10.86 in (27.58 cm)	10.86 in (27.58 cm)
Weight			
Empty		9.40 lb. (4.26 kg)	11.80 lb (5.35 kg)
Full Complement		11.65 lb (5.28 kg)	17.13 lb (7.77 kg)

General Data

Specification

Series Designation	ALL Models
Response Time (Rt)	5 Seconds
Relay Drive Outputs (Vo)	400 Ω – 1000 Ω load
Minimum Output Current @ MEDIUM transmit power	200 mA
Minimum Output Current @ HIGH transmit power	400 mA
Recorded I/O State Changes	3000 Minimum
Recorded Train Moves	100 Minimum

Parameters

ALL Models
5 Seconds
400 Ω – 1000 Ω load
200 mA
400 mA
3000 Minimum
100 Minimum

Ordering

Call to Order

+01 (800) 793-7233

Specify

Assembly Number

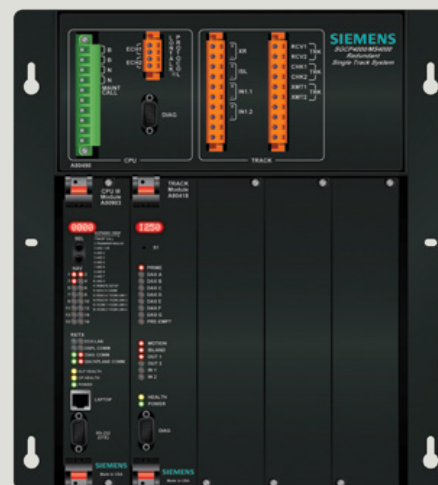
Non Redundant 1-Track Compact SSCP 4000/MS 4000

(Assembly No. NYK:8410804950000)



Non Redundant 1-Track Standard SSCP 4000/MS 4000

(Assembly No. NYK:8110804900001)



Redundant 1-Track Standard SSCP 4000/MS 4000

(Assembly No. NYK:8321804900001)





Customer Support

Please contact your local Siemens Customer Service representative for additional information, including demonstrations, presentations, and pricing.

Contact for information:

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