

## THE SCL SERIES - Sub-micro AC drive *with integral line filter*



Designed to comply with European Community standards for installation on 220/240 volt single-phase power systems. The integral line filter built into the SCL Series complies with the relevant EU Standards for EMC and RFI.

The compact packaging and comprehensive functionality makes the SCL an ideal drive to use on equipment requiring variable speed, soft starting or reversing operation.

The user manual and quick reference guide for the SCL Series Drive, and all AC Tech drives, are available in the AC Tech website Library: [www.actechdrives.com](http://www.actechdrives.com).

### General Specifications

**Power Range:** 0.25 to 2.2kW (0.33 to 3 HP)

#### Supply Power:

Single Phase: 208/220/240 VAC  
(+10/-15%) 50 / 60 Hz

**Motors:** The SCL is designed to operate standard polyphase induction motors rated for 208, 220 or 240 VAC from 0 to 240 Hz.

**Enclosure:** IP20 with finger safe terminals.

### Standard Features

**Easy Set-up and Operation:** The SCL is easy to use right out of the box or can be customized to meet your specific requirements any one of four convenient ways:

- From the front of the drive
- The Remote Keypad option
- The innovative EPM Programmer.
- A PC using AC Tech's free TechLink Software and the EPM Programmer.

**Motor Thermal Overload:** The SCL is an approved motor protection device for single motor applications.

**Control I/O:** Eleven isolated terminals provide connection for 0-10V or 4-20mA reference, 1 fixed and 3 programmable logic inputs and 1 programmable relay output.

**Quiet Operation:** Adjustable carrier frequency up to 10 kHz.

### SCL Options

#### NEMA 4X Remote Keypad:

Simple four wire connection to the SCL for operation and programming of the drive. High-impact plastic and gasket permit installation in NEMA 4X (IP65) environments.



#### DIN Rail Mounting Kit:

Allows easy mounting of the SCL Drive onto standard DIN Rail.



#### Dynamic Braking Kit:

Prepackaged resistor modules with control electronics provide easy mounting within the control cabinet.

#### Through Hole Mounting:

The SCL Series can be ordered for through hole mounting that puts the drive heat sink outside the electrical enclosure for better thermal management and space savings. Ships on black anodized heat sink with gasket that will meet NEMA 4 and NEMA 4X (IP65) construction.



#### EPM Programmer:

Copy drive programs in 2 seconds using The EPM Programmer! Then just plug the EPM into the SCL Series drive and it's ready for operation. The EPM Programmer also provides full programming capability using the backlit LCD display and file exchange with a Personal Computer.



# SCL Series Model Designation Code

The SCL Series model number gives a full description of the basic drive unit (see example below).

Example: SL210S

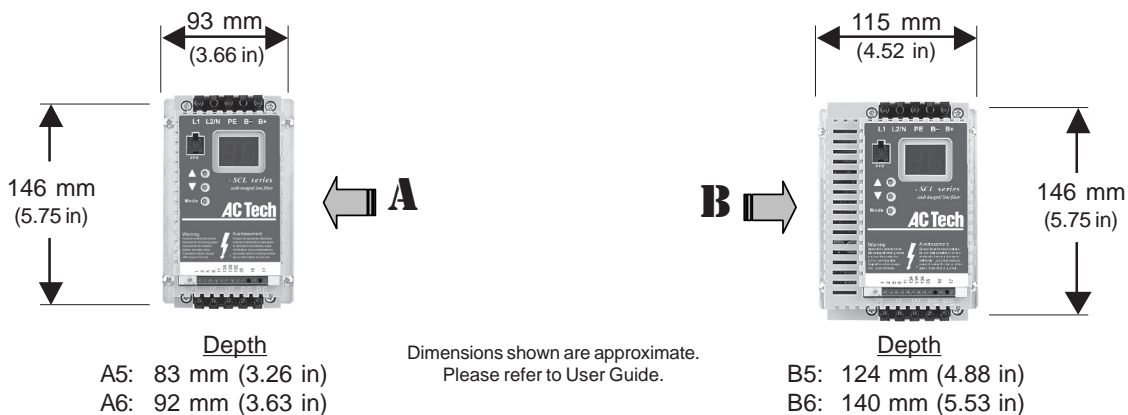
(SCL Series, 208/220/240 VAC, 1 HP, single phase input)

<b>SL</b>	<b>2</b>	<b>10</b>	<b>S</b>
<b>Series:</b> SL = SCL Series Variable Speed AC Motor Drive <i>with integral line filter</i>			
<b>Input Voltage:</b> 2 = 208 / 240 VAC, 1 $\phi$ or 3 $\phi$ , 50 or 60 Hz (208, 220, 230 and 240 volt)			
<b>Horsepower:</b> 04 = 0.33 HP (0.25 kW)                      15 = 1.5 HP (1.1 kW) 05 = 0.5 HP (0.37 kW)                      20 = 2 HP (1.5 kW) 08 = 0.75 HP (0.55 kW)                      30 = 3 HP (2.2 kW) 10 = 1 HP (0.75 kW)			
<b>Input Phase:</b> S = Single phase input only			

## SCL Series Drive Dimensions and Ratings

Output Voltage: 0 - 208 / 240 VAC 3 $\phi$							
Input: 208 / 240 VAC 1 $\phi$							
HP	(kW)	Output Amps	Input Amps	Model	Size	Weight kg.	Weight lbs.
0.33	(0.25)	1.9 / 1.7	3.9 / 3.4	SL204S	A5	0.9	2.0
0.5	(0.37)	2.8 / 2.4	5.8 / 5.0	SL205S	A5	0.9	2.0
0.75	(0.55)	3.7 / 3.2	6.9 / 6.0	SL208S	A6	1.2	2.6
1	(0.75)	4.8 / 4.2	10.6 / 9.2	SL210S	A6	1.6	3.6
1.5	(1.1)	6.9 / 6.0	13.9 / 12.0	SL215S	B5	1.8	4.0
2	(1.5)	8.1 / 7.0	18.4 / 16.0	SL220S	B5	1.9	4.1
3	(2.2)	11.0 / 9.6	24 / 21	SL230S	B6	2.2	4.9

<sup>1</sup> Estimated shipping weight including packaging.



# AC Tech

## THE SCM SERIES - Sub-micro AC drive *with basic I/O*

The compact packaging and comprehensive functionality makes the SCM an ideal drive to use on equipment requiring variable speed, soft starting or reversing operation.

The easy to use SCM series is configured and ready to use right out of the box for most simple applications. By simple reprogramming, the SCM can perform many application specific tasks such as multiple preset speeds, electronic braking and motor jogging to name a few.

The user manual and quick reference guide for the SCM Series Drive, and all AC Tech drives, are available in the AC Tech website Library: [www.actechdrives.com](http://www.actechdrives.com).



### General Specifications

**Power Range:** 1/3 to 5 HP (0.25 to 4 kW)

#### Supply Power:

Single Phase: 120, 208, 220 or 240 VAC

Three Phase: 208, 220, 240, 400 or 480 VAC  
(+10/-15%) 50 / 60 Hz

**Motors:** The SCM is designed to operate standard polyphase induction motors rated for 200, 230, 400 or 460 VAC from 0 to 240 Hz.

**Enclosure:** IP20 with finger safe terminals.

### Standard Features

**Easy Set-up and Operation:** The SCM is easy to use right out of the box or can be customized to meet your specific requirements any one of four convenient ways:

- From the front of the drive
- The optional Remote Keypad
- The innovative EPM Programmer.
- A PC using AC Tech's free TechLink Software and the EPM Programmer.

**Motor Thermal Overload:** The SCM is an approved motor protection device for single motor applications.

**Control I/O:** Eleven isolated terminals provide connection for 0-10V or 4-20mA reference, 1 fixed and 3 programmable logic inputs and 1 programmable relay output.

**Quiet Operation:** Adjustable carrier frequency up to 10 kHz.

### SCM Options

#### NEMA 4X Remote Keypad:

Simple four wire connection to the SCM for operation and programming of the drive. High-impact plastic and gasket permit installation in NEMA 4X (IP65) environments.



#### DIN Rail Mounting Kit:

Allows easy mounting of the SCM Drive onto standard DIN Rail.



#### Dynamic Braking Kit:

Prepackaged resistor modules with control electronics provide easy mounting within the control cabinet.

#### Through Hole Mounting:

The SCM Series can be ordered for through hole mounting that puts the drive heat sink outside the electrical enclosure for better thermal management and space savings. Ships on black anodized heat sink with gasket that will meet NEMA 4 and NEMA 4X (IP65) construction.



#### EPM Programmer:

Copy drive programs in 2 seconds using The EPM Programmer! Then just plug the EPM into the SCM Series drive and it's ready for operation. The EPM Programmer also provides full programming capability using the backlit LCD display and file exchange with a Personal Computer.



# SCM/SCL Series Model Designation Code

The drive model number gives a full description of the basic SCM and SCL drive unit (see example below).

Example: SM210S

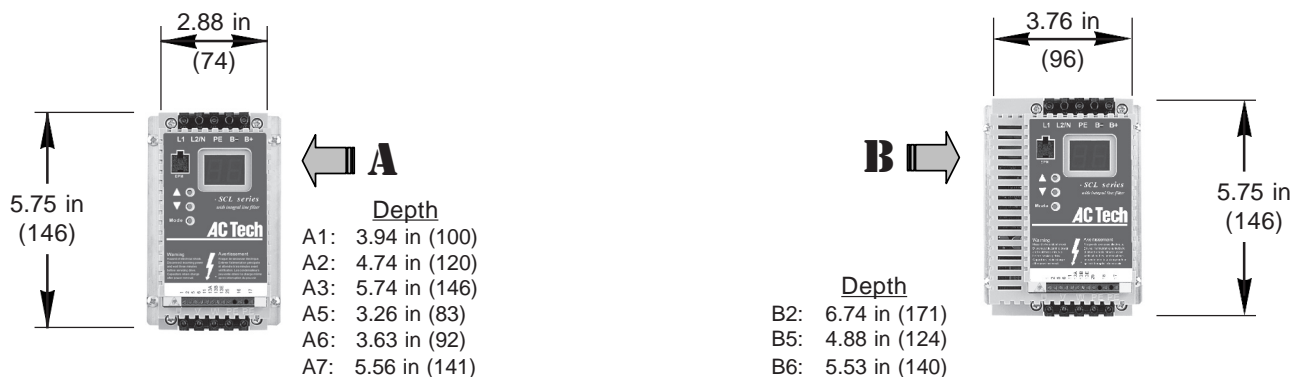
(SCM Series, 208 / 240 VAC, 1 HP (0.75 kW), single phase input)

<b>SM</b>	<b>2</b>	<b>10</b>	<b>S</b>
<b>Series:</b> SM = SCM Series <i>basic I/O</i> Variable Speed AC Motor Drive			
<b>Input Voltage:</b> 0 = 120 VAC, 1 $\phi$ , 50 or 60 Hz (110 to 120 volt, doubler circuit produces 230 volt output) 2 = 208 / 240 VAC, 1 $\phi$ or 3 $\phi$ , 50 or 60 Hz 4 = 400 / 480 VAC, 3 $\phi$ , 50 or 60 Hz			
<b>Horsepower:</b> 04 = 0.33 HP (0.25 kW)      15 = 1.5 HP (1.1 kW) 05 = 0.5 HP (0.37 kW)      20 = 2 HP (1.5 kW) 08 = 0.75 HP (0.55 kW)      30 = 3 HP (2.2 kW) 10 = 1 HP (0.75 kW)          50 = 5 HP (4 kW)			
<b>Input Phase:</b> S = Single phase input only No character indicates three phase input only			

## SCM Series Drive Dimensions and Ratings

SCM Series Models													
Output Voltage:		0 - 200 / 230 VAC 3 $\phi$								0 - 400 / 480 VAC 3 $\phi$			
HP (kW)	Output Amps	Input: 120 VAC 1 $\phi$			Input: 208 / 240 VAC 1 $\phi$			Input: 208 / 240 VAC 3 $\phi$			Input: 400 / 480 VAC 3 $\phi$		
		Model	Size	Input Amps	Weight <sup>1</sup> lbs (kg)	Model	Size	Input Amps	Weight <sup>1</sup> lbs (kg)	Model	Size	Input Amps	Weight <sup>1</sup> lbs (kg)
0.33 (0.25)	1.9 / 1.7	SM004S	A5	6.8	1.5 (0.5)	SM204S	A5	0.0	2.0 (0.9)				
0.5 (0.37)	2.8 / 2.4	SM005S	A5	9.2	1.5 (0.5)	SM205S	A5	1.6 / 1.4	2.0 (0.9)	SM205	A5	3.1 / 2.7	1.4 (0.6)
0.75 (0.55)	3.7 / 3.2					SM208S	A6	0.0	2.6 (1.2)				
1 (0.75)	4.8 / 4.2	SM010S	B5	16.6	2.7 (1.0)	SM210S	A6	3.0 / 2.5	3.6 (1.6)	SM210	A6	5.8 / 5.1	1.7 (0.8)
1.5 (1.1)	6.9 / 6.0	SM015S	B5	24.0	3.0 (1.1)	SM215S	B5	4.3 / 3.6	4.0 (1.8)	SM215	A7	8.0 / 6.9	2.4 (1.1)
2 (1.5)	8.1 / 7.0					SM220S	B5	4.8 / 4.0	4.1 (1.9)	SM220	A7	9.1 / 7.9	2.5 (1.1)
3 (2.2)	11.0 / 9.6					SM230S	B6	6.4 / 5.4	4.9 (2.2)	SM230	B6	12.4 / 10.8	3.0 (1.4)
5 (4.0)	17.5 / 15.2									SM250	B2	19.6 / 17.1	4.6 (2.1)
										SM410	A2	3.0 / 2.5	2.4 (1.1)
										SM415	A3	4.3 / 3.6	2.9 (1.3)
										SM420	A3	4.8 / 4.0	3.1 (1.4)
										SM430	B2	6.4 / 5.4	3.2 (1.5)
										SM450	B2	10.6 / 8.8	4.6 (2.1)

<sup>1</sup> Estimated UPS shipping weight in lbs. (kg) including packaging.



Dimensions shown are approximate. Please refer to User Guide.

# AC Tech