

## 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.

## General Specifications

Power Range: 0.33 to 15 HP ( 0.25 to 11 kW )

## Supply Power:

Single Phase: $120,208,220$ or 240 VAC
Three Phase: $\quad 208,220,240,400$ or 480 VAC (+10/-15\%) $50 / 60 \mathrm{~Hz}$

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 $0-10 \mathrm{~V}$ or $4-20 \mathrm{~mA}$ 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.


## AC Line Filters:

AC input line filters are available for all sub-micro drives to meet European requirements for susceptibility and emissions of electrical and radiated noise (EN 61800-3 and EN 5501). The filter is designed to mount to the electrical panel and has provisions for mounting the drive directly to the face of the filter.


## 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 Series Drive Dimensions and Ratings 

| Input Line Voltage: 120 Volt $1 \varnothing$ |  |  |  | Output Voltage: 0-230 Volt 3Ø |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| HP | (kW) | Input Amps $1 \varnothing$ | Output <br> Amps | IP 20 Dimensions |  |  |
|  |  |  |  | Model | Size |  |
| 0.33 | (0.25) | 6.8 | 1.9/1.7 | SM004S | A5 | 1.5 (0.7) |
| 0.5 | (0.37) | 9.2 | $2.8 / 2.4$ | SM005S | A5 | 1.5 (0.7) |
| 1 | (0.75) | 16.6 | 4.8 / 4.2 | SM010S | B5 | 2.7 (1.2) |
| 1.5 | (1.1) | 24 | 6.9 / 6.0 | SM015S | B5 | 3.0 (1.4) |



A
Depth
A1: 3.94 in (100)
A2: 4.74 in (120)
A3: 5.74 in (146)
A5: 3.26 in (83)
A6: 3.63 in (92)
A7: 5.56 in (141)

| Input Line Voltage: 208 / 240 Volt $1 \varnothing$ |  |  |  | Output Voltage: 0-200 / 230 Volt 3Ø |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | (kW) | Input <br> Amps | Output <br> Amps | IP 20 Dimensions |  |  |
|  |  |  |  | Model | Size |  |
| 0.33 | (0.25) | 3.9 / 3.4 | 1.9 / 1.7 | SM204S | A5 | 2.0 (0.9) |
| 0.5 | (0.37) | 5.8 / 5.0 | $2.8 / 2.4$ | SM205S | A5 | 2.0 (0.9) |
| 0.75 | (0.55) | 6.9 / 6.0 | 3.7 / 3.2 | SM208S | A6 | 2.6 (1.2) |
| 1 | (0.75) | 10.6 / 9.2 | $4.8 / 4.2$ | SM210S | A6 | 3.6 (1.6) |
| 1.5 | (1.1) | 13.9 / 12.0 | $6.9 / 6.0$ | SM215S | B5 | 4.0 (1.8) |
| 2 | (1.5) | 18.4 / 16.0 | 8.1 / 7.0 | SM220S | B5 | 4.1 (1.9) |
|  | (2.2) | $24 / 21$ | 11.0 / 9.6 | SM230S | B1 | 5.0 (2.3) |



## B

Depth B2: 6.74 in (171) B5: 4.88 in (124) B6: 5.53 in (140)

| Input Line Voltage: 208 / 240 Volt $\mathbf{3 Ø}$ |  |  |  | Output Voltage: 0-200 / 230 Volt 3Ø |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| HP | (kW) | Input <br> Amps | Output <br> Amps | IP 20 Dimensions |  |  |
|  |  |  |  | Model | Size | Weight ${ }^{1}$ |
| 0.5 | (0.37) | 3.1 / 2.7 | 2.8 / 2.4 | SM205 | A5 | 1.4 (0.6) |
| 1 | (0.75) | 5.8 / 5.1 | 4.8 / 4.2 | SM210 | A6 | 1.7 (0.8) |
| 1.5 | (1.1) | 8.0 / 6.9 | 6.9 / 6.0 | SM215 | A7 | 2.4 (1.1) |
| 2 | (1.5) | 9.1 / 7.9 | 8.1 / 7.0 | SM220 | A7 | 2.5 (1.1) |
| 3 | (2.2) | 12.4 / 10.8 | 11.0 / 9.6 | SM230 | B1 | 3.2 (1.5) |
| 5 | (3.7) | 19.6 / 17.1 | 17.5 / 15.2 | SM250 | BF | 4.6 (2.1) |
| 7.5 | (5.5) | $28 / 25$ | $25 / 22$ | SM275 | C1 | 7.3 (3.3) |
| 10 | (7.5) | $34 / 32$ | $30 / 28$ | SM2100 | C1 | 7.5 (3.4) |
| 15 | (11) | 54 / 48 | $48 / 42$ | SM2150 | D1 | 13.0 (5.9) |


| Input Line Voltage: 400 / 480 Volt $3 \varnothing$ |  |  |  | Output Voltage: 0-400/460 Volt 30 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| HP | (kW) | Input <br> Amps | Output <br> Amps | IP 20 Dimensions |  |  |
|  |  |  |  | Model | Size | Weight ${ }^{1}$ |
| 0.5 | (0.37) | 1.6 / 1.4 | 1.3 / 1.1 | SM405 | A1 | 2.0 (0.9) |
| 1 | (0.75) | 3.0 / 2.5 | 2.5 / 2.1 | SM410 | A2 | 2.4 (1.1) |
| 1.5 | (1.1) | 4.3 / 3.6 | 3.6 / 3.0 | SM415 | A3 | 2.9 (1.3) |
| 2 | (1.5) | 4.8 / 4.0 | 4.1 / 3.4 | SM420 | A3 | 3.1 (1.4) |
| 3 | (2.2) | 6.4 / 5.4 | 5.8 / 4.8 | SM430 | B1 | 3.2 (1.5) |
| 5 | (3.7) | 10.6 / 8.8 | $9.4 / 7.8$ | SM450 | BF | 4.6 (2.1) |
| 7.5 | (5.5) | 14.2 / 12.4 | 12.6 / 11.0 | SM475 | BF | 7.2 (3.3) |
| 10 | (7.5) | 18.1 / 15.8 | 16.1 / 14.0 | SM4100 | C1 | 7.5 (3.4) |
| 15 | (11) | 27 / 24 | $24 / 21$ | SM4150 | C1 | 8.0 (3.6) |



