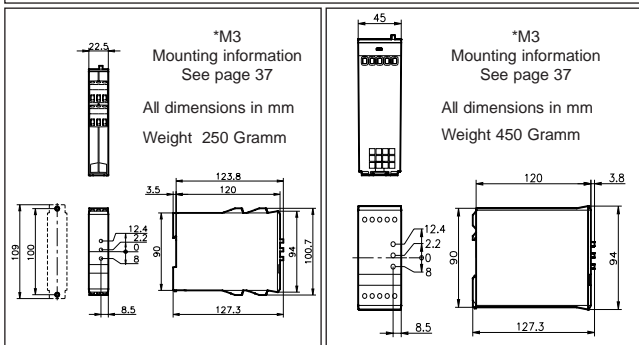
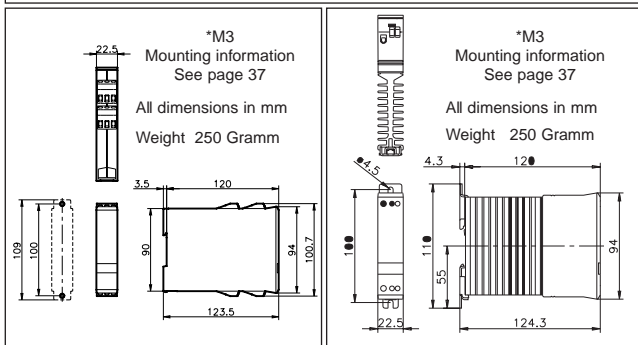


# Dimensions, weight, mounting and wiring instruction

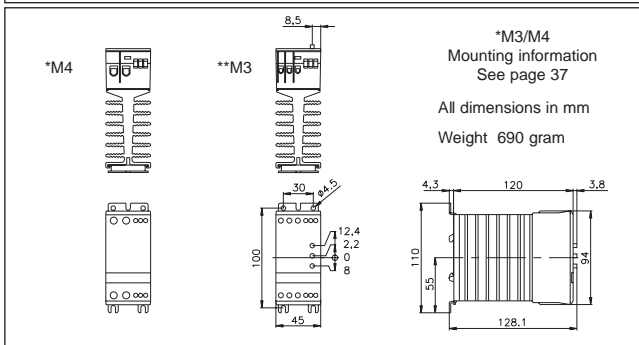
## Dimensions 22.5 mm module (SMC 3 3,5A SMC 32 15A)



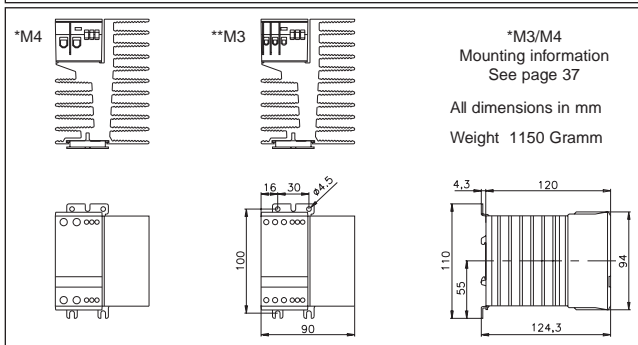
## Dimensions 22.5 mm module (MAUX / SC 1 15 A)



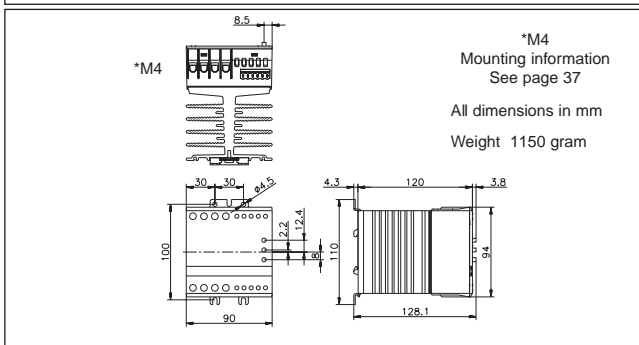
## Dimensions 45 mm module (SC1/2/3 SRC/SMC3 15A/STL/SPC 30A)



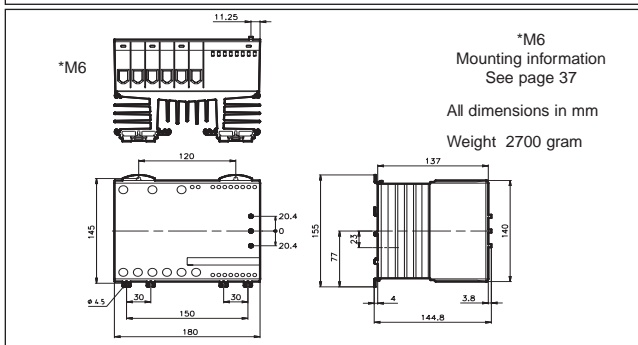
## Dimensions 90 mm module (Contactors, SPC 50A)



## Dimensions 90 mm module (SMC3/33SMB3)

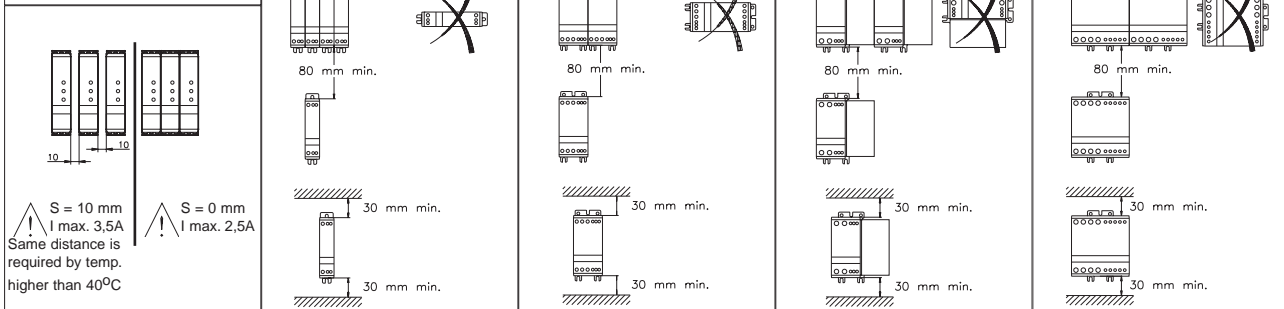


## Dimensions 180 mm module (SMC33)



**Mounting instructions all Modules.** All units with heatsink are designed for vertical mounting.  
If the units are mounted horizontally the load current must be reduced to 50% of the rated current.

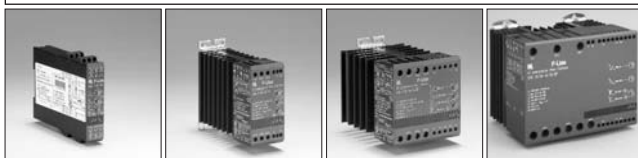
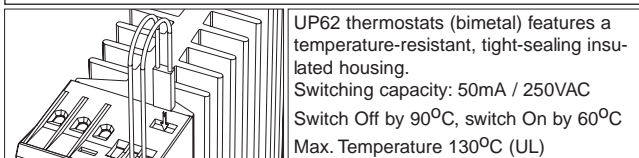
## Current change (SMC 3 XX03)



**Humidity:** The relative humidity of the air may not exceed 50% at a maximum temperature of + 40 0C. Higher relative humidities may be permitted at lower temperatures, e.g. 90% at + 20°C. Special measures may be necessary in cases of occasional condensation due to variations in temperature.

**Materials:** Housing: Self-extinguishing PPO UL94V1. Halogen free DIN rail adaptor: For 35 mm rails EN 50022 Heatsink: Aluminium. Black anodized Base: Electroplated steel Vibrations: EN60068-2-6: 5g 10 - 150 Hz

## Thermal overload protection UP62



# Dimensions, weight, mounting and wiring instruction

## Wiring connections (Module 22.5 / 45 / 90 mm)

Wiring type with or without cable / sleeves and other type of terminals * UL tested										
L1 T1 / L2 T2 / L3 T3 *M4 Power terminals	1 x 1,5 - 6 mm <sup>2</sup>	2 x 1,5 - 6 mm <sup>2</sup>	1 x 1,5 - 10 mm <sup>2</sup>	2 x 1,5 - 6 mm <sup>2</sup>	1 x 1 - 10 mm <sup>2</sup>	2 x 1 - 6 mm <sup>2</sup>	N.A.	Pozidriv 2 1.2 Nm Max.	6 mm 1,2 Nm Max.	
L1 T1 / L2 T2 / L3 T3 **M3 Power terminals	1 x 0,75 - 4 mm <sup>2</sup>	2 x 1.0 mm <sup>2</sup>	1 x 0,75 - 6 mm <sup>2</sup>	2 x 0,75 - 2.5 mm <sup>2</sup>	1 x 0,75 - 6 mm <sup>2</sup>	2 x 0,75 - 1.5 mm <sup>2</sup>	N.A.	Pozidriv 1 0.5 Nm Max.	4 mm 0,5 Nm Max.	
A1 A2 / 11 12 Input terminals	1 x 0,5 - 1.5 mm <sup>2</sup>	2 x 0.5 - 0.75 mm <sup>2</sup>	1 x 0.5 - 1.5 mm <sup>2</sup>	2 x 0.5 - 1.5 mm <sup>2</sup>	1 x 0.5 - 1.5 mm <sup>2</sup>	2 x 0,5 - 1.5 mm <sup>2</sup>	N.A.	N.A.	3 mm 0,5 Nm Max.	

## Wiring connections (Module 180 mm)

Wiring type with or without cable / sleeves and other type of terminals										
L1 T1 / L2 T2 / L3 T3 *M6 Power terminals	1 x b4 - b35 mm <sup>2</sup>	2 x b2 - b16 mm <sup>2</sup>	1 x a4 - a35 mm <sup>2</sup>	2 x a4 - a10 mm <sup>2</sup>	1 x a4 - b50 mm <sup>2</sup>	2 x b4 - b16 mm <sup>2</sup>	N.A.	Pozidriv 3 a4.0 Nm* b5.5 Nm* Max.	N.A.	

**\*Important: When using electric or pneumatic tools for screw terminals observe the maximum torque limits**

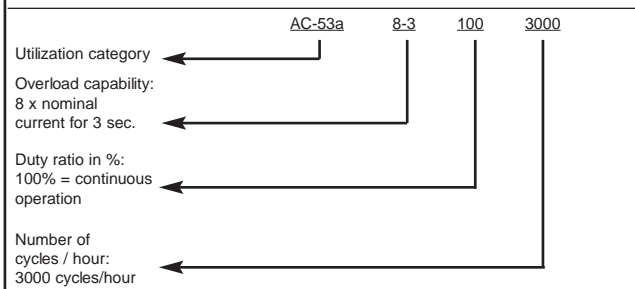
## GENERAL TECHNICAL INFORMATION

### Fuse overview related to I<sup>2</sup>t values for each item. Co-ordination Type 2

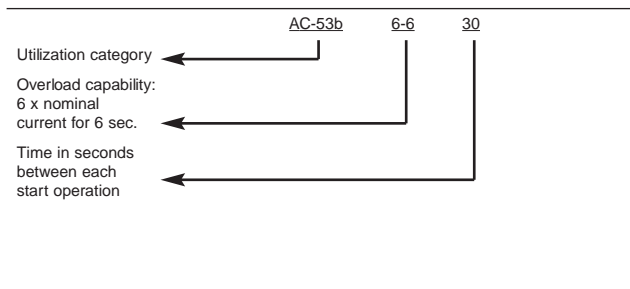
In connection with the protection of soft starters and electronic contactors use of semiconductor fuses will protect the semiconductor inside the product in case of short circuits and reduce the potential of SCR damage due to transient overload currents. Fuses e.g. from Ferraz, Siba, Bussmann can provide you with suitable fuses. When selecting fuses ensure that the fuse has a lower total clearing I<sup>2</sup>t rating than the SCR as indicated under each type in this catalogue and that the fuse is able to carry the start current for the actual start duration.  
Normal fuses can be used to protect the installation (co-ordination type 1) in case of short circuit. See the actual useable fuse values as informed under each product.

### Overload current profile in accordance with EN60947-4-2

#### Overload current profile (AC-53a without by-pass contactor) =X-Tx:8-3:100-3000



#### Overload current profile (AC-53b with by-pass contactor) = X-Tx:6-6:30



### Utilization category explanation

**AC-52a:** Control of slip ring motor stators / **AC-52b:** Control of slip ring motor stators with the controller bypasses during running / **AC-53a:** Control of squirrel cage motors / **AC-53b:** Control of squirrel cage motors with the controller bypasses during running / **AC-58a:** Control of hermetic refrigerant compressors with automatic resetting of overload releases / **AC-58b:** Control of hermetic refrigerant compressors with the controller bypassed during running and with automatic resetting of overload releases.

**NOTE:** The means of bypassing the semiconductor controller may be integral with the controller/starter or installed separately.