8. Use the controller

8.1 Start-up

8.1.1 Warnings

CAUTION! Check again that the equipment and wiring are correct as required in this manual. Make sure that the fan absorption does not exceed the maximum stated on the identification label. Keep people or things out of the work area.

8.1.2 Start-up procedure

Follow this procedure for correct controller start-up:

Step	Task	Reference in the manual
1	Complete all electrical power connections at mains voltage.	"Electrical installation" on page 18
2	Complete the input connections and remote controls.	"Connection to analogue inputs" on page 21 "Auxiliary On/Off inputs connection" on page 23 "OUT analog output connections" on page 23 "Relay output connection" on page 24
3	Turn on power.	-
4	Set the controller operation using DIP switch SW1.	"DIP switch SW1" on page 12

8.2 Default configurations

8.2.1 Configuration description

Three preset configurations are available that receive a signal on the input and replicate it in proportion on the power output:

IN1/IN2 input	Configuration
0–10 V dc Ri= 10 kΩ	0–10 V dc
4–20 mA Ri= 100 Ω	4–20 mA
3–30 Vdc/10 mA	PWM

8.3 Set the DIP switch

8.3.1 Getting started

Based on the switch settings, the functions enabled change. For details on setting the switches, see "DIP switch SW1" on page 12. For detailed information on the settings of switch 7, see "Modify the cosϕ of the motor" on page 29.

8.3.2 Set the switches

1. With the controller powered on, set the switch to the desired position.
2. Press the reset button: the **FAIL** status LED turns on.
3. Wait for the controller to restart: the **FAIL** status LED turns off.

8.4 Modify the cosϕ of the motor

8.4.1 Getting started

Setting the **cosϕ** parameter, it is possible to change the motor cosϕ factory value.

8.4.2 Set the cosϕ parameter

***NOTICE**: procedure reserved for expert personnel.*

1. Connect a 10 kΩ potentiometer to one of the analogue inputs (**IN1**/**IN2**).
2. Set switch 7 of DIP switch SW1 to ON. See "Set the DIP switch" on page 28.
3. Using the potentiometer, set the cosϕ perimeter to the desired value. When modifying, check the wave shape of the output current of one phase using an oscilloscope and a current transducer.
4. Set switch 7 of DIP switch SW1 to Off.