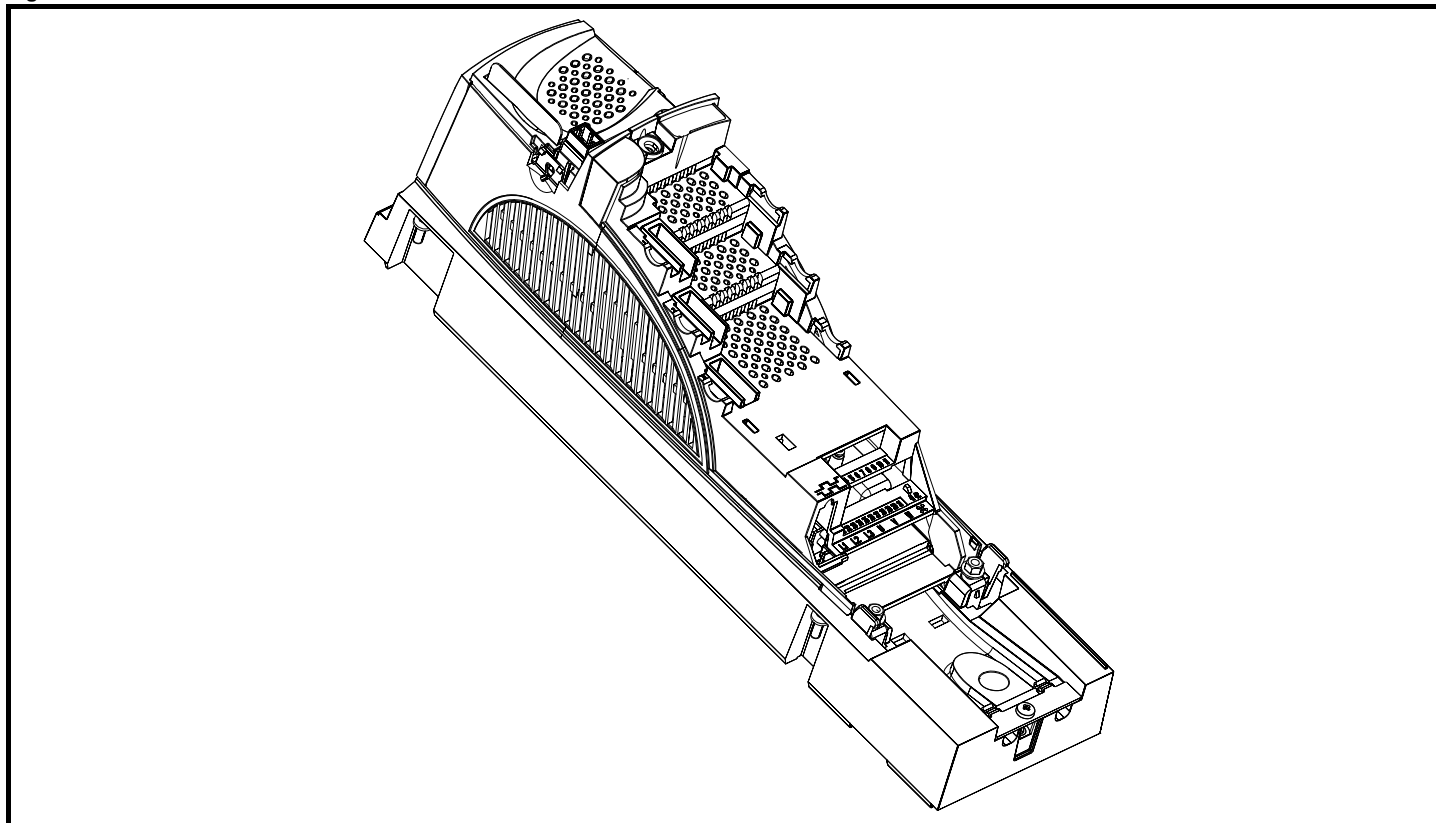


1 Introduction

The SP Control Platform is the control stage only of a Unidrive SP and is intended to be used where additional option modules or functions are required in a system but there is no requirement to run a motor.

Figure 1-1 SP Control Master



The SP Control Platform provides all the same functions as a Unidrive SP without the power electronics so it does not have the ability to run a motor. The three option module slots, encoder port, digital & analog I/O, onboard PLC program and the user functions in the drives software are all available.

The SP Control Platform identifies itself as a SP1401 (Pr 11.32 = 2.1A and Pr 11.33 = 400V).

The SP Control Platform requires a 24Vdc power supply. No under voltage trip will occur as the module operates as if it is in low voltage DC mode (Pr 6.44 = On (1)) with a fixed DC bus level in Pr 5.05 of approximately 44V.

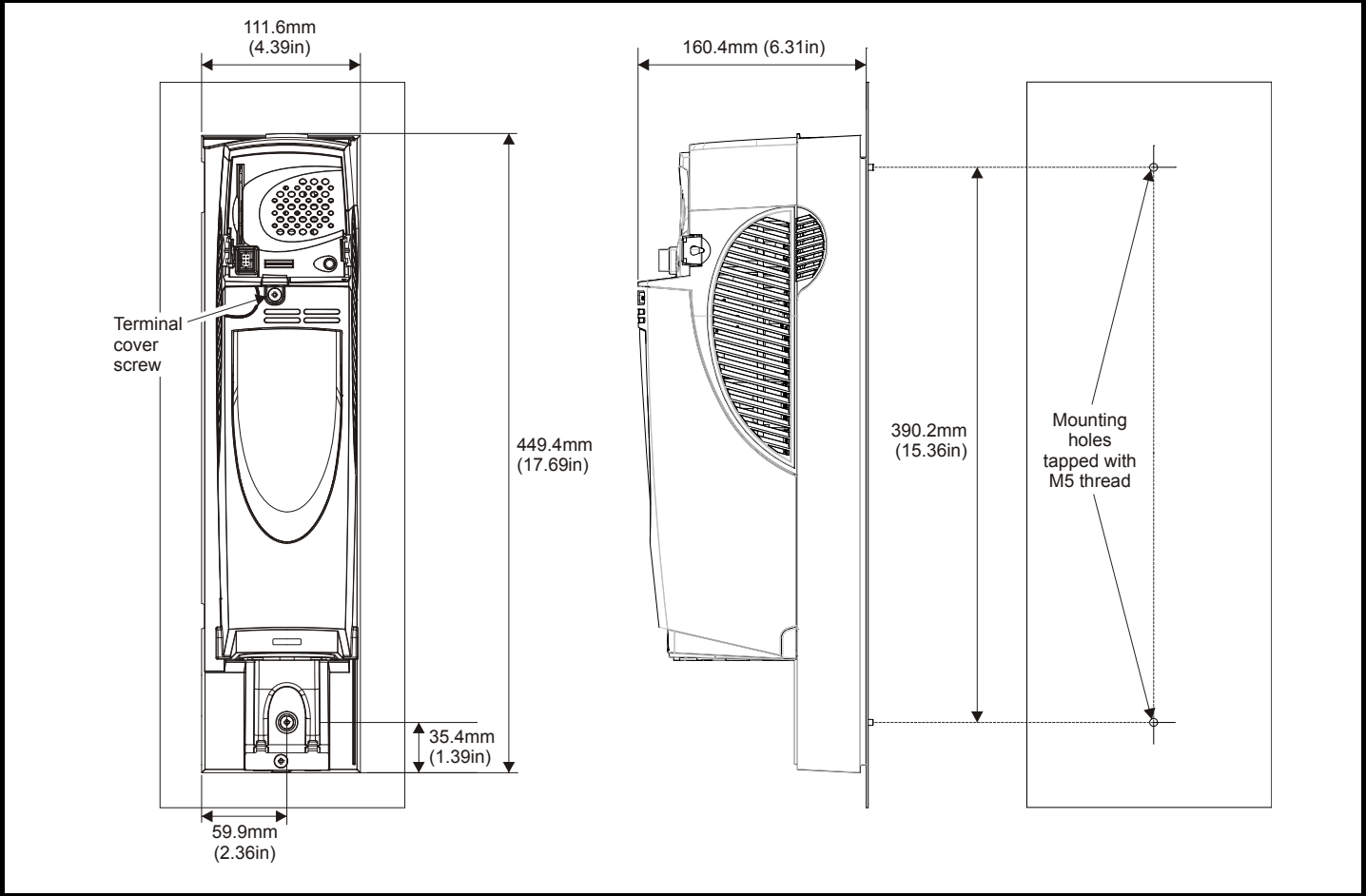
The SP Control Platform is supplied with two 11-way control connectors, one 2-way relay connector and grounding bracket.

2 Mechanical Installation

The SP Control Platform is the same physical size as a SM-Control Master.

The SP Control Platform can be mounted to a back plate using the two captive M5 screws as shown in Figure 2-1 overleaf.

Figure 2-1 Mounting the SP Control Platform



In order to expose the top mounting hole, the terminal covers need to be removed. This is done by undoing the terminal cover screw highlighted in Figure 2-1, and then removing the two plastic terminal covers. Use the 2 x M5 captive screws to mount the SP Control Platform module to pre-tapped holes using the dimensions shown in Figure 2-1.

NOTE

The SP Control Platform is not interchangeable with an SM-Control Master, as it does not have the necessary power module interface.

3 Electrical Installation

The SP Control Platform requires a 24Vdc power supply.

1	0V common
Function	Common connection for all external devices

2	+24V external input
Function	To supply the SP Control Platform
Nominal voltage	+24.0Vdc
Minimum continuous operating voltage	+19.2Vdc
Maximum continuous operating voltage	+30.0Vdc
Minimum start-up voltage	21.6Vdc
Maximum input current	2.5A, 24Vdc
Recommended power supply	60W 24Vdc nominal
Recommended fuse	3A, 50Vdc



A fuse or other over-current protection should be installed to the 24Vdc supply terminals

WARNING

41	Relay contact
42	
Default function	Module OK
Contact voltage rating	240Vac, installation over-voltage category II
Contact maximum current rating	2A AC 240V 4A DC 30V resistive load 0.5A DC 30V inductive load (L/R = 40ms)
Contact minimum recommended rating	12V, 100mA
Contact type	Normally open
Sampling period	4ms
Default contact condition	Closed when power is applied
Update period	4ms



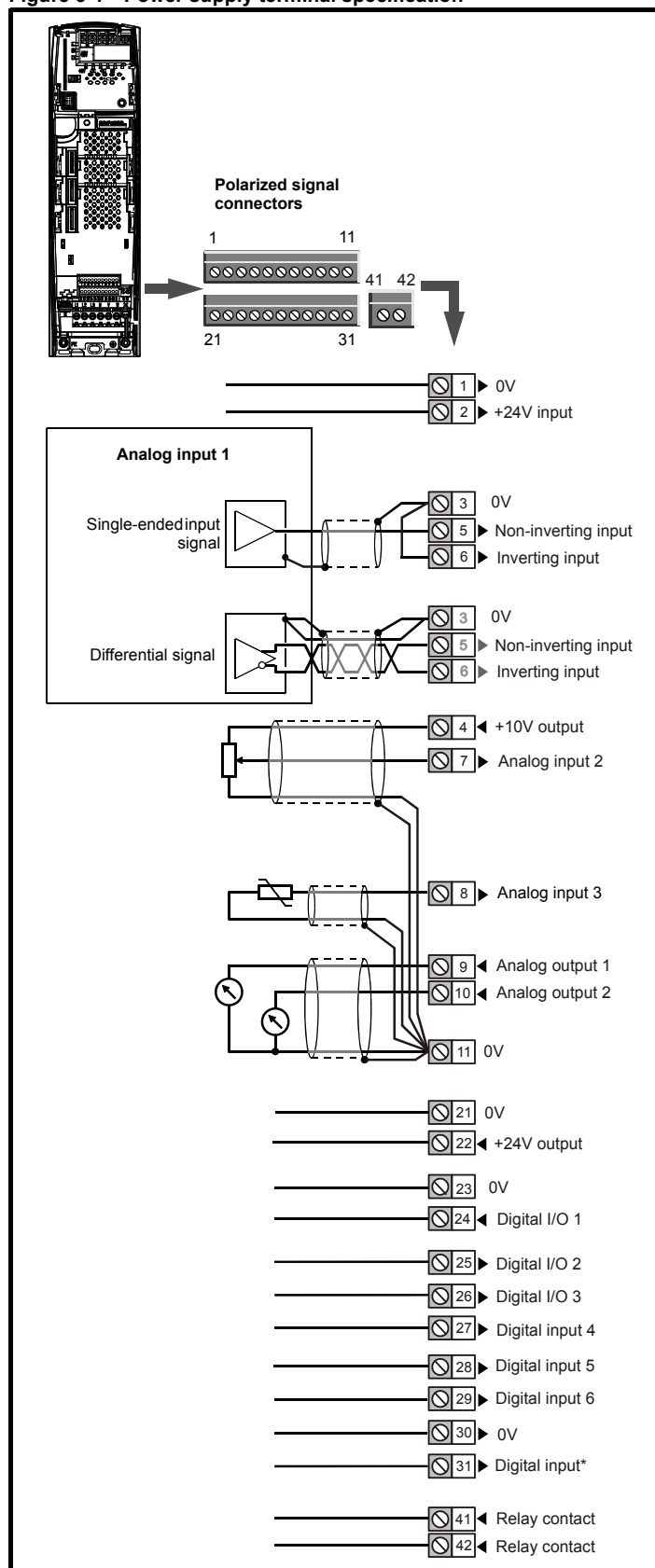
A fuse or other over-current protection should be installed to the relay circuits

WARNING

NOTE

Minimum and maximum voltage values include ripple and noise. Ripple and noise values must not exceed 5%.

Figure 3-1 Power supply terminal specification



*Destination is not programmable, however parameter status (Pr 8.09) can be used as source.

NOTE

All analog terminal functions can be programmed in Menu 7.

NOTE

All digital terminal functions (including relay) can be programmed in Menu 8.

NOTE

Refer to *Unidrive SP User Guide* for more information regarding configuring analog and digital terminal functions.

4 Using the SP Control Platform

Refer to the *Unidrive SP User Guide* for information regarding using and interfacing to the SP Control Platform. The grounding bracket should be fitted and used as described in the *Unidrive SP User Guide*.

4.1 Saving parameters

Due to the module operating as if it is in low voltage DC mode, a value of 1001 must be entered into Pr **xx.00** to perform a user save.

NOTE

No under voltage trip will occur on power down of the module. Therefore, no power down save parameters in the SP Control Platform or any Solutions Module (such as the SM-Applications range of Solutions Modules) will be saved when the 24V supply to the SP Control Platform is removed.



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