Analog Output Schematic

This figure is a simplified schematic for Models 3805E, 3805H, and 3806E TMR Analog Output Modules.

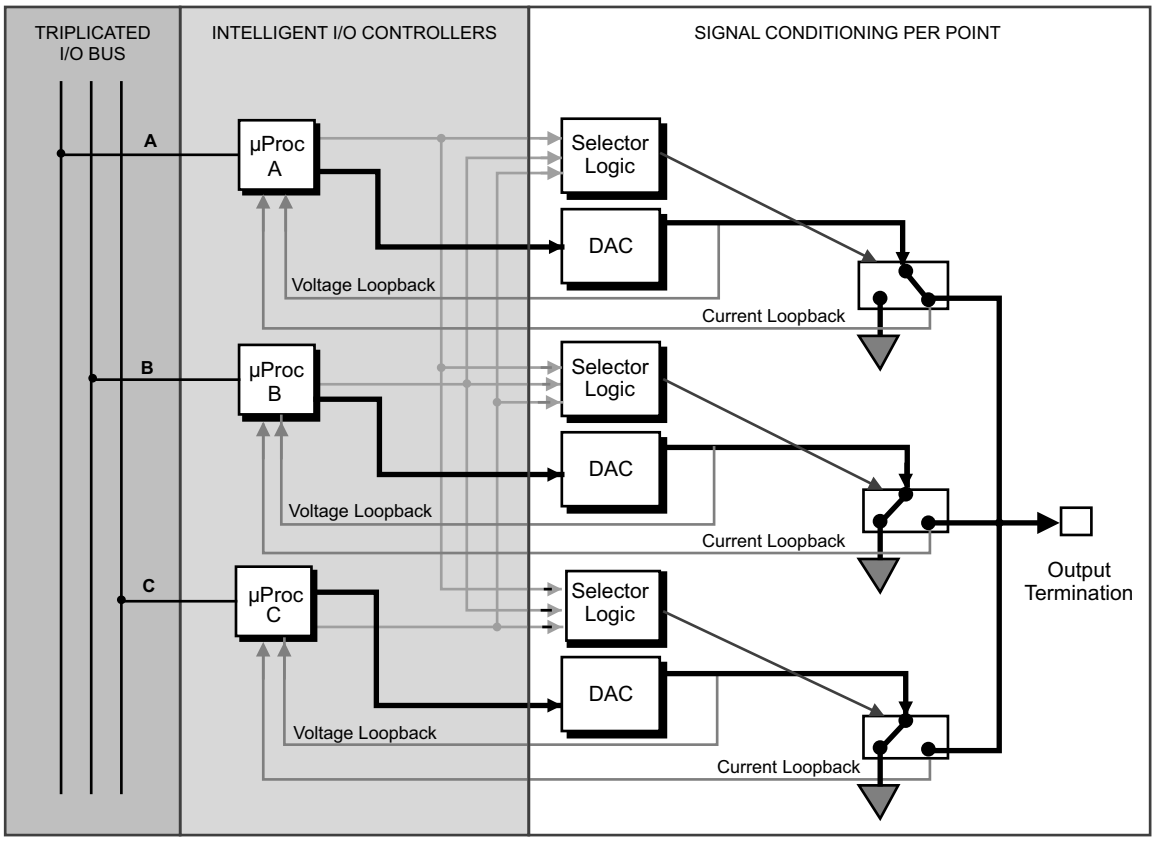

Figure 31 3805E, 3805H, and 3806E Simplified Schematic

Analog Output Front Panels

This figure shows the front panels of Models 3805E, 3805H, 3806E, and 3807.

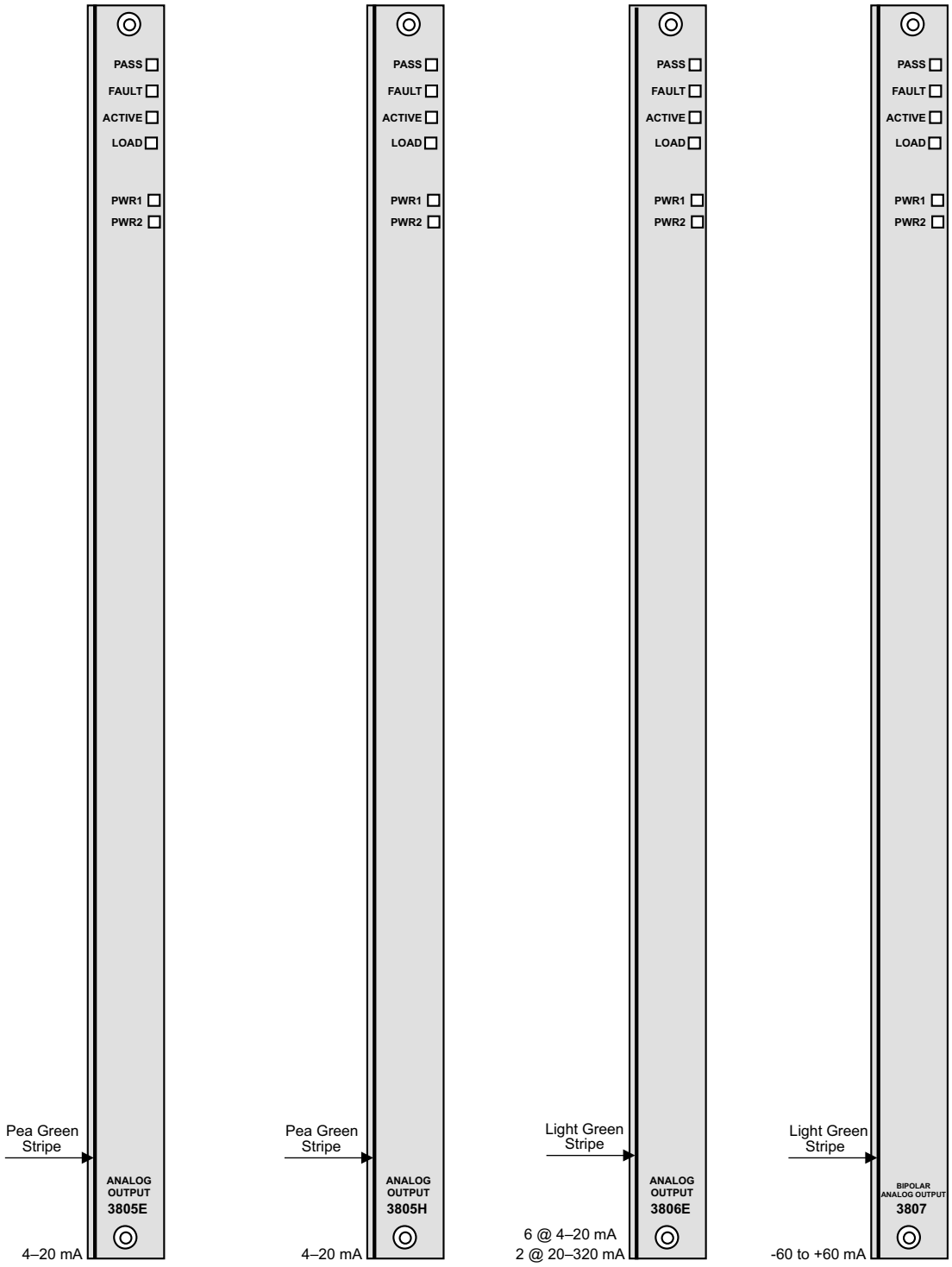

Figure 33 3805E, 3805H, 3806E, and 3807 Front Panels

3805E and 3805H Specifications

This table lists the specifications for the Model 3805E and 3805H TMR Analog Output Modules.

Table 25 3805E and 3805H Analog Output Specifications

Feature	Specification
Color code	Pea green
Number of output points	8, output, commoned return, DC-coupled
Resolution	12 bits
Output current range	4–20 mA (+6% over-range)
Output over-range capability	2–21.2 mA
Output accuracy	< 0.25% (in range of 4–20 mA) of FSR (0–21.2 mA), from 32° to 140° F (0° to 60° C)
External loop power (reverse voltage protected)	+42.5 VDC maximum +24 VDC nominal
Output loop power requirement: load	Required
Output loop power requirement: 250 Ω load	> 20V (1 A minimum)
Output loop power requirement: 500 Ω load	> 25V (1 A minimum)
Output loop power requirement: 750 Ω load	> 30V (1 A minimum)
Output loop power requirement: 1000 Ωload	> 35V (1 A minimum)
Output over-range protection	+42.5 VDC continuous, 0 VDC continuous
Switch time on channel failure	10 ms (typical), 20 ms (maximum)
Status indicator: Module status	Pass, Fault, Active, Load
Status indicator: Loop power status[a]	Pwr1, Pwr2
Output diagnostic fault coverage:	
Minimum input change	Not applicable
Output change sample period	Not applicable
Minimum period of mis-compares	Not applicable
Logic power	< 15 watts

a. The loop-power detectors which drive the Pwr1 and Pwr2 indicators identify the presence of loop power (greater than 20 VDC), and do not verify adequate loop power for the attached load.

Notes

- The Model 3805H module has been modified to support increased inductive loads. It is fully compatible for use in all applications of the Model 3805E module.
- For information about compliance with IEC 61508, Parts 1-7:2010, see TÜV Rheinland on page 22.