

loads. It is fully compatible for use in all applications of the 3805E module.

The Model 3806E and Model 3807 modules are optimized for turbomachinery control.

The Model 3806E High Current AO Module has two 20 to 320 mA outputs to drive servo actuators.

The Model 3807 BiPolar AO Module has four -60 to +60 mA outputs to drive servo coils in servo-control applications. The termination panel for the

Model 3807 contains four hard-wired coil diagnostic inputs. The Model 3807 is designed for control applications only, and should not be used in safety applications.

Analog Output Module Specifications

Model Number	3805E/3805H	3806E	3807																				
Type	TMR, AO	TMR, AO	TMR, AO																				
Output current range	4-20 mA output (+6% overrange)	4-20 mA and 20-320 mA	-60 to 60 mA																				
Number of points	8 output	6 (4-20 mA) output; 2 (20-320 mA) output	4 bipolar output																				
Isolated points	No, commoned return, DC coupled	No, commoned return, DC coupled	No, commoned return, DC coupled																				
Resolution	12 bits	12 bits	13 bits																				
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)	<0.25% (in range of 4-20 mA) of FSR (0-21.2 mA and 0-339.2 mA), from 32° to 140° F (0° to 60° C)	< 0.25% (in range of -60 to 60 mA) of Full Scale Range (FSR), from 0° to 60° C. FSR = 120 mA.																				
External loop power (reverse voltage protected)	+42.5 VDC, maximum +24 VDC, nominal	+42.5 VDC, maximum +24 VDC, nominal	24 VDC -15%/+20%, +5% ripple																				
Output loop power requirements	Max. load vs. external loop voltage <table> <tr> <th>Load (Ohms)</th><th>Loop power required</th><th>4-20 mA</th><th>16-320 mA</th></tr> <tr> <td>250</td><td>> 20 VDC (1 amp minimum)</td><td>20 VDC ≤ 275</td><td>≤15</td></tr> <tr> <td>500</td><td>> 25 VDC (1 amp minimum)</td><td>24 VDC ≤ 475</td><td>≤25</td></tr> <tr> <td>750</td><td>> 30 VDC (1 amp minimum)</td><td>28 VDC ≤ 650</td><td>≤40</td></tr> <tr> <td>1000</td><td>> 35 VDC (1 amp minimum)</td><td>32 VDC ≤ 825</td><td>≤50</td></tr> </table> Independent; For ± 60mA, maximum load is 150 ohms and is independent of variations in external loop power supply voltage.			Load (Ohms)	Loop power required	4-20 mA	16-320 mA	250	> 20 VDC (1 amp minimum)	20 VDC ≤ 275	≤15	500	> 25 VDC (1 amp minimum)	24 VDC ≤ 475	≤25	750	> 30 VDC (1 amp minimum)	28 VDC ≤ 650	≤40	1000	> 35 VDC (1 amp minimum)	32 VDC ≤ 825	≤50
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Over-range protection	+42.5 VDC, continuous	< +42.5 VDC	+36 VDC, continuous																				
Switch time on leg failure	< 10 ms, typical	< 10 ms, typical	< 10 ms, typical																				
Diagnostic Indicators																							
Module status (one each per module)	PASS, FAULT, ACTIVE, LOAD, PWR1, PWR2	PASS, FAULT, ACTIVE, LOAD, PWR1, PWR2	PASS, FAULT, ACTIVE, LOAD, PWR1, PWR2																				
Color code	Pea green	Light green	Light green																				