

T9481/2 Analogue Output Module Specification

Table 33 - Analogue Output Module Specification

Attribute	Value
Functional Characteristics	
Output channels	T9481: 3 T9482: 8
Performance Characteristics	
Safety integrity level	
Safety level degradation	1oo1D, 1oo2D
Safety accuracy	200 μ A
Self-test interval	< 1 hour, system dependent
Value of least significant bit (control)	0.98 μ A
Value of least significant bit (monitor)	3.9 μ A
Error at 25 °C $\pm$ 2 °C	
After 1 year at 40 °C	0.30 % + 10 μ A
After 2 years at 40 °C	0.35 % + 10 μ A
After 5 years at 40 °C	0.44 % + 10 μ A
Temperature drift	(0.01 % + 0.1 μ A) for each °C
Electrical Characteristics	
Module supply voltage:	
Voltage	Redundant +24 Vdc nominal; 18 Vdc to 32 Vdc range
Module supply power dissipation	3.6 W (12.3 BTU/hr.)
Output voltage:	
Maximum voltage without damage	$\pm$ 60 Vdc
Operating field supply voltage	18 - 32 Vdc
Output current	
Nominal	4 - 20 mA
Maximum range	0.1 - 24 mA
Calibrated accuracy at 25 °C	10 μ A
Output current control resolution	0.98 μ A, 15-bit
Output current control accuracy at 25 °C	$\pm$ 10 μ A
Output current monitoring resolution	3.9 μ A, 13-bit
Compliance voltage	3 Vdc to 32 Vdc
Maximum Compliance voltage slew rate	No limit identified within Compliance voltage range.
Load impedance	
Maximum range	0 - 750 Ω limited by compliance voltage
Typical	250 Ω
Maximum field loop power dissipation	0.77 W for each field loop (2.63BTU/hr.)
Mechanical Specification	
Dimensions (height $\times$ width $\times$ depth)	166 mm $\times$ 42 mm $\times$ 118 mm (6-1/2 in. $\times$ 1-21/32 in. $\times$ 4-21/32 in.)
Weight	290 g (10.5 oz.)
Casing	Plastic, non flammable

T9881/2 Termination Assemblies for Analogue Outputs

T9881 is a simplex 8 channel termination assembly and T882 is the dual termination assembly. Each channel has a capacitor in series with the output.

T9881/2 Analogue Output Termination Assembly Specification

Table 34 - Analogue Output Module TA Specification

Attribute	Value
Functional Characteristics	
Field connections	8; Wiring: Conductor cross section maximum 1.31 mm ² (16 AWG); Stripping length 6mm (¼ in.)
Modules supported	T9881: One T9882: Two
Electrical Characteristics	
Channel isolation	± 1.5 kVdc maximum withstand for 1 minute
Mechanical Specification	
Dimensions (height x width)	
T9881	132 mm × 42 mm (5-¼ in. × 1-21/32 in.)
T9882	132 mm × 84 mm (5-¼ in. × 3-5/16 in.)
Weight	
T9881	133 g (5 oz.)
T9882	260 g (10 oz.)