

Specifications

General Specifications

Attribute	Value
Number of outputs	4 isolated
Module location	1794-TB2, 1794-TB3, 1794-TB3S, 1794-TB3T, 1794-TB3TS, 1794-TBN terminal base.
Flexbus voltage	5V DC
Flexbus current	55 mA
External DC power supply, nom voltage range	24V DC 19.2...31.2V DC (includes 5% AC ripple)
External DC power supply current	210 mA @ 24V DC
Thermal dissipation, max	16 BTU/hr @ 31.2V DC
Power dissipation, max	4.7 W @ 31.2V DC
Isolation voltage	120V (continuous), Basic Insulation Type, channel to channel, channel to user, channel to system, and user power to system when used with 1794-TB2, 1794-TB3, 1794-TB3S, 1794-TB3T, or 1794-TB3TS. 250V (continuous), Basic Insulation Type, channel to channel, channel to user, channel to system, and user power to system when used with 1794-TBN. Type tested at 1000V AC for 60 s.
Data format	2's complement 2's complement % Binary Offset binary
Indicators	1 red/green power/status indicator
Keyswitch position	4
Dimensions, with module installed in base, approx. (H x W x D)	94.0 x 94.0 x 66.0 mm (3.7 x 3.7 x 2.6 in.)
Conductor category ⁽¹⁾	2 - on signal ports 2 - on power ports
Conductor wire size	Determined by installed terminal base
Wire type	Shielded on signal ports
North American temp code	T4A
IECEX temp code	T4
UKEX/ATEX temp code	T4

(1) Use this conductor category information for planning conductor routing. See the Industrial Automation Wiring and Grounding Guidelines, publication [1770-4.1](#).

Module Specifications - 1794-0F4I

Attribute	Value
Resolution	15 bits plus sign
Voltage	0.320 mV/cnt
Current	0.656 mA/cnt
Conversion type	Digital-to-analog converter
Update rate	2.5/5.0 ms all channels (see Table 4 on page 8.)
Output current terminal	0 mA output until module is configured 4...20 mA (configurable) 0...20 mA (configurable)
Output voltage terminal	0V output until module is configured ±10V (configurable) 0...10V (configurable) ±5V (configurable) 0...5V (configurable)
Step response to 63% of full-scale	< 25 µs
Current load on voltage output, max	3 mA
Resistive load on voltage output	0...750 Ω
Absolute accuracy	
Voltage terminal	0.1% full-scale @ 25 °C
Current terminal	0.1% full-scale @ 25 °C

Module Specifications - 1794-0F4I (Continued)

Accuracy drift with temperature Voltage terminal Current terminal	0.0012% full scale/°C 0.0025% full scale/°C
Calibration	Factory calibrated; recalibrate when necessary.
Maximum overload	30V continuous or 32 mA continuous, one channel at a time.

Environmental Specifications

Attribute	Value
Temperature, operating	IEC 60068-2-1 (Test Ad, Operating Cold), IEC 60068-2-2 (Test Bd, Operating Dry Heat), IEC 60068-2-14 (Test Nb, Operating Thermal Shock): -20...+55 °C (-4...+131 °F)
Temperature, surrounding air, max	55 °C (131 °F)
Temperature, nonoperating	IEC 60068-2-1 (Test Ab, Unpackaged Nonoperating Cold), IEC 60068-2-2 (Test Bb, Unpackaged Nonoperating Dry Heat), IEC 60068-2-14 (Test Na, Unpackaged Nonoperating Thermal Shock): -40...+85 °C (-40...+185 °F)
Relative humidity	IEC 60068-2-30 (Test Db, Unpackaged Damp Heat): 5...95% noncondensing
Vibration	IEC60068-2-6 (Test Fc, Operating): 5 g @ 10...500 Hz
Shock, operating	IEC60068-2-27 (Test Ea, Unpackaged shock): 30 g
Shock, nonoperating	IEC60068-2-27 (Test Ea, Unpackaged shock): 50 g
Emissions	IEC 61000-6-4
ESD immunity	IEC 61000-4-2: 6 kV contact discharges 8 kV air discharges
Radiated RF immunity	IEC 61000-4-3: 10V/m with 1 kHz sine wave 80% AM from 80...6000 MHz
EFT/B immunity	IEC 61000-4-4: ±2 kV @ 5 kHz on power ports ±2 kV @ 5 kHz on shielded signal ports
Surge transient immunity	IEC 61000-4-5: ±1 kV line-line(DM) and ±2 kV line-earth(CM) on power ports ±2 kV line-earth(CM) on shielded signal ports
Conducted RF immunity	IEC 61000-4-6: 10V rms with 1 kHz sine wave 80% AM from 150 kHz...80 MHz
Enclosure type rating	None (open-style)

Certifications

Attribute (when product is marked) ⁽¹⁾	Value
c-UL-us	UL Listed Industrial Control Equipment, certified for US and Canada. See UL File E65584. UL Listed for Class I, Division 2 Group A,B,C,D Hazardous Locations, certified for U.S. and Canada. See UL File E194810.
Ex	UK Statutory Instrument 2016 No. 1107 and European Union 2014/34/EU ATEX Directive, compliant with: EN IEC 60079-0; General Requirements EN IEC 60079-7; Explosive Atmospheres, Protection "e" II 3 G Ex ec IIC T4 Gc DEMKO 14 ATEX 1342501X UL22UKEX2378X
IECEX	IECEX System, compliant with: IEC 60079-0; General Requirements IEC 60079-7; Explosive Atmospheres, Protection "e" Ex ec IIC T4 Gc IECEX UL 14.0066X