Specifications

Specifications – FLEX I/O Digital Sourcing Input Module 1794-IV32

Attribute	Value
Number of inputs	32, current, sourcing
Recommended terminal base unit	1794-TB32, 1794-TB32S, 1794-TB62DS, 1794-TB62EXD4X15
On-state voltage, min	19.2V DC
On-state voltage, nom	24V DC
On-state voltage, max	31.2V DC
On-state current, min	2.0 mA
On-state current, nom	4.1 mA @ 24V DC
On-state current, max	6.0 mA
Off-state voltage, max	5V DC
Off-state current, max	1.5 mA
Input impedance	6 kΩ
Isolation voltage	50V (continuous), Basic Insulation Type Type tested @ 850V DC for 60 s, between field side and system No isolation between individual channels
Input filter time(1) Off-to-On On-to-Off	See Input Filter Times table
Flexbus current	40 mA @ 5V DC
Power dissipation, max	6 W @ 31.2V DC
Thermal dissipation, max	20.5 BTU/hr @ 31.2V DC

(1) Input Off-to-On filter time is the time from a valid input signal to recognition by the module.
Input On-to-Off filter time is the time from the input signal dropping below the valid level to recognition by the module.

Specifications – FLEX I/O Digital Sinking Output Module 1794-OV32

Attribute	Value
Number of outputs	32, current, sinking
Recommended terminal base unit	1794-TB3, 1794-TB3S, 1794-TB3K, 1794-TB3SK
Output voltage, min	10V DC
Output voltage, nom	24V DC
Output voltage, max	31.2V DC
Output current rating	14 A max per module 6 A total for channels 0…15 8 A total for channels 16…31
On-state current	1.0 mA min per channel 500 mA max per channel
Surge current	2 A for 50 ms each, repeatable every 2 seconds
Off-state leakage, max	0.5 mA
Isolation voltage	50V (continuous), Basic Insulation Type Type tested at 707V DC for 60 s, between field side and system No isolation between individual channels
Output signal delay(1) Off-to-On On-to-Off	 0.5 ms 1.0 ms
Flexbus current	110 mA @ 5V DC
Power dissipation, max	4.4 W @ 31.2V DC
Thermal dissipation, max	8.53 BTU/hr @ 31.2V DC

(1) Delay time is the time from the receipt of an output On or Off command to the output actually turning On or Off.

General Specifications

Attribute	1794-IV32	1794-OV32
Terminal base screw torque	Determined by the installed terminal base	
Dimensions, approx. (H x W x D)	94 x 94 x 69 mm (3.7 x 3.7 x 2.7 in.)	
Indicators (field side)	32 yellow status indicators	
External DC power supply voltage, nom	24V DC	
External DC power voltage range	19.2…31.2V DC (includes 5% AC ripple)	10…31.2V DC (includes 5% AC ripple)
North American temp code	T4	
Keyswitch position	2	
Enclosure type rating	None (open-style)	
Weight, approx.	77 g (2.72 oz)	80 g (2.82 oz)
Wire size	Determined by the installed terminal base	
Wiring category[1]	2 – on signal ports	

(1) Use this Conductor Category information for planning conductor routing as described in the appropriate System Level Installation Manual. Also see the Industrial Automation Wiring and Grounding Guidelines, publication 1770-4.1, for more information.

Environmental Specifications

Attribute	Value
Operating temperature	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): 0…55 °C (32…131 °F)
Storage temperature	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)
Temperature, surrounding air, max	55 °C (131 °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…2000 MHz 10V/m with 200 Hz 50% Pulse 100% AM @ 900 MHz 10V/m with 200 Hz 50% Pulse 100% AM @ 1890 MHz 1V/m with 1 kHz sine-wave 80% AM from 2000…2700 MHz
EFT/B immunity	IEC 61000-4-4: ±2 kV @ 5 kHz on power ports ±2 kV @ 5 kHz on signal ports
Surge transient immunity	IEC 61000-4-5: ±1 kV line-line(DM) and ±2 kV line-earth(CM) on signal ports
Conducted RF immunity	IEC 61000-4-6: 10V rms with 1 kHz sine-wave 80% AM from 150 kHz…80 MHz