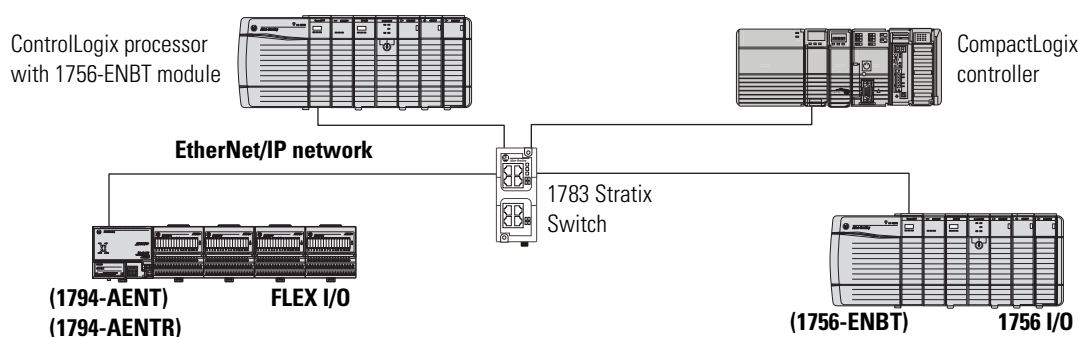


Figure 1 - EtherNet/IP Communication**FLEX I/O EtherNet/IP Adapter Specifications**

Attribute	1794-AENT	1794-AENTR	1794-AENTRXT
I/O module capacity	8		
Communication rate	10/100 Mbps		
Power consumption at 24V DC	9.6 W	9.3 W	
Power dissipation, max	7.3 W @ 19.2V DC	7.1 W @ 19.2V DC	6.1 W @ 19.2V DC
Thermal dissipation	24.9 BTU/hr @ 24V DC	24.2 BTU/hr @ 24V DC	20.8 BTU/hr @ 24V DC
Power supply 24V current load	450 mA	400 mA @ 24V DC 500 mA max	
Power supply input voltage, nom	24V DC		
Operating voltage range	19.2...31.2V DC (includes 5% AC ripple)		
Ethernet interface	1 – RJ-45 category 5	2 – RJ-45 category 5	
Dimensions (HxWxD), approx	87 x 94 x 69 mm 3.4 x 3.7 x 2.7 in.	87 x 94 x 92 mm 3.44 x 3.7 x 3.6 in.	

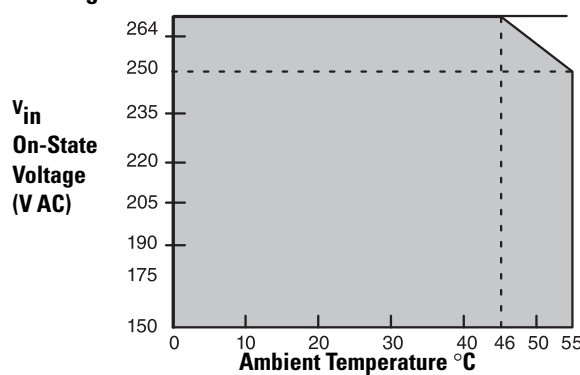
Device-Level Ring Topology

A DLR network is a single-fault tolerant ring network intended for the interconnection of automation devices. FLEX I/O modules can connect to a

Input Filter Times – DC Modules

Filter Times for Inputs	Maximum Times (ms)
	OFF to ON and ON to OFF
	1794-IB8, 1794-IB16, 1794-IB32, 1794-IV16, 1794-IC16, 1794-IB10XOB6, 1794-IB16XOB16P
Filter time 0 (default)	0.25
1	0.5
2	1
3	2
4	4
5	8
6	16
7	32

Derating Curve



The area within the curve represents the safe operating range for the module under various conditions of user supplied 220V AC supply voltages and ambient temperatures.

 = All mounting positions (including normal horizontal, vertical, inverted horizontal) safe operating range.

Modules Specifications

The following section shows more detailed module specifications in comparative groups to facilitate your selection based on your requirements.

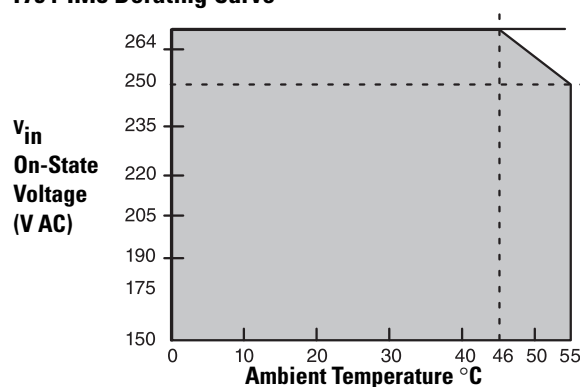
FLEX I/O Digital AC Input Modules

Digital AC Input Comparison

Specification	1794-IA8, 1794-IA8I	1794-IA16	1794-IM8	1794-IM16
Voltage, on-state input, nom	120V AC ⁽¹⁾		240V AC	
Terminal base unit	1794-TBN, 1794-TB2, 1794-TB3, 1794-TB3S, 1794-TBKD, 1794-TB3K, 1794-TB3SK, 1794-TBNK	1794-TB3, 1794-TB3S, 1794-TBN ⁽²⁾ , 1794-TB3K, 1794-TB3SK, 1794-TBNK	1794-TBN, 1794-TBNK	
Current, on-state input, nom	12 mA @ 120V AC, 60 Hz		10 mA @ 240V AC, 60 Hz	11 mA @ 240V AC, 60 Hz
Input impedance, nom	10.6 k Ω	10 k Ω	22.3 k Ω	22.2 k Ω
Voltage, on-state input, min	65V AC	74V AC	159V AC	
Voltage, off-state input, max	43V AC	20V AC	40V AC	
Current, on-state input, min	7.1 mA	5.5 mA @ 74V AC, 47 Hz	5.3 mA @ 159V AC, 47 Hz	
Current, off-state input, max	2.9 mA		2.6 mA	
Power dissipation, max	4.5 W @ 132V AC	6.4 W @ 132V AC	4.7 W @ 264V AC	6 W @ 264V AC
Thermal dissipation, max	15.3 BTU/hr @ 132V AC	21.8 BTU/hr @ 132V AC	16.2 BTU/hr @ 264V AC	20.47 BTU/hr @ 264V AC
Dimensions (HxWxD)	46 x 94 x 53 mm (1.8 x 3.7 x 2.1 in.) 94 x 94 x 69 mm (3.7 x 3.7 x 2.7 in.) installed			
Isolation voltage	120V (continuous), Basic Insulation Type Type tested at 1250V AC (1240V for 1794-IA8I) for 60 s, between field side and system No isolation between individual channels Routine tested to 2150V DC for 1 s, between field side and system No isolation between individual channels	120V (continuous), Basic Insulation Type Type tested at 1264V AC for 60 s, between field side and system No isolation between individual channels Routine tested at 2150V DC for 1 s, between field side and system No isolation between individual channels	250V (continuous), Basic Insulation Type, field side to backplane No isolation between individual channels Type tested at 1250V AC for 60 s	

(1) 1794-IA8I – isolated voltage

(2) Auxiliary terminal strips are required when using the 1794-TBN.

1794-IM8 Derating Curve

The area within the curve represents the safe operating range for the module under various conditions of user supplied 220V AC supply voltages and ambient temperatures.

 = All mounting positions (including normal horizontal, vertical, inverted horizontal) safe operating range.

FLEX I/O Digital AC Output Modules

Digital AC Output Comparison

Specification	1794-OA8, 1794-OA8I	1794-OA16	1794-OM8	1794-OM16
Voltage, on-state output, nom	120V AC ⁽²⁾		220V AC	240V AC
Terminal base unit	1794-TBN, 1794-TBNF, 1794-TB2, 1794-TB3, 1794-TB3S, 1794-TBKD, 1794-TBNK, 1794-TBNFK, 1794-TB3K, 1794-TB3SK	1794-TBN ⁽⁴⁾ , 1794-TBNF, 1794-TB2, 1794-TB3S, 1794-TBKD, 1794-TBNK, 1794-TBNFK, 1794-TB3K, 1794-TB3SK	1794-TBN, 1794-TBNF, 1794-TBNK, 1794-TBNFK	
Current, on-state output, min	5 mA per output			
Current, on-state output, max	500 mA pre output @ 55 °C ⁽³⁾ 750 mA per output @ 35 °C 1.0 A on 4 nonadjacent outputs and 500 mA on the remaining 4 outputs @ 30 °C	500 mA per output @ 55 °C ⁽⁵⁾	500 mA @ 55 °C ⁽⁶⁾	
Current, on-state output, per module	4.0 A (8 outputs @ 500 mA)	4.0 A (16 outputs @ 250 mA)	4.0 A (8 outputs @ 500 mA) ⁽⁵⁾	4.0 A (16 outputs @ 250 mA)
Leakage current, off-state output, max	2.25 mA		2.5 mA	
Voltage drop, on-state output, max	1.0V @ 0.5 A	1.5V @ 0.5 A		
Output surge current, max	7 A for 45 ms, repeatable every 8 s	7 A for 40 ms, repeatable every 8 s		
Voltage, on-state output, min ⁽¹⁾	85V AC		159V AC	
Voltage, on-state output, nom	120V AC		240V AC	
Voltage, on-state output, max	132V AC		264V AC	
Power dissipation, max	4.1 W @ 0.5 A 6.3 W @ 0.75 A 6.3 W @ 1.0 A	4.7 W @ 0.5 A	5 W @ 0.5 A	6 W @ 264V AC
Thermal dissipation, max	14.0 BTU/hr @ 0.5 A 21.1 BTU/hr @ 0.75 A 21.4 BTU/hr @ 1.0 A	16.1 BTU/hr @ 0.5 A	17.1 BTU/hr @ 0.5 A	20.47 BTU/hr @ 264V AC