Specifications

Inputs per module	32 (4 groups of 8)
Module Location	1771–A1B thru –A4B I/O Chassis
Voltage Range	85 to 135V ac, 50/60Hz
Nominal Input Voltage	120V ac
Nominal Input Current	8.2mA @ 115V ac, 60Hz 6.8mA @ 115V ac, 50Hz
Minimum On–state Current	5.2mA @ 85V ac, 60Hz 4.2mA @ 85V ac, 50Hz
Maximum Off–state Current	2.3mA @ 30V ac, 60Hz 1.9mA @ 30V ac, 50Hz
Maximum Off–state Voltage	30V ac
Input Impedance	0.2uF in parallel with 200K ohms (13.3K ohms @ 60Hz)
Input Signal Delay	Off to On: 10.0ms (+7ms) On to Off: 20.0ms (±15ms)
Isolation Voltage	Tested to withstand 1000V for 60s.
Power Dissipation	4.5W (max); 1.0W (min)
Thermal Dissipation	15.4 BTU/hr (max); 3.4 BTU/hr (min)
Backplane Current	280mA @ 5V dc maximum
Conductors Wire Size Category	14–22 AWG (2.5–0.25mm^2) (max)[1] stranded copper rated at 60° or greater 3/64 inch (1.2mm) insulation (max) 2[1]
Environmental Conditions	
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) 32 to 140°F (0° to 60°C)
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 to 185°F (–40 to 85°C)
Relative Humidity	IEC 60068–2–30 (Test Db, Unpackaged, Nonoperating Damp Heat) 5 to 95%, noncondensing
Shock Operating Nonoperating	IEC 60068–2–27 (Test Ea, Unpackaged Shock) 30g 50g
Vibration	IEC 60068–2–6 (Test Fc, Operating) 2g @ 10–500Hz
ESD Immunity	IEC 61000–4–2 4kV indirect discharges
Radiated RF Immunity	IEC 61000–4–3 10V/m, with 1kHz sine–wave 80% AM from 30MHz to 1000MHz
EFT/B Immunity	IEC 61000–4–4 ±1kV @ 5kHz on signal ports
Surge Transient Immunity	IEC 61000–4–5 ±1kV line–line (DM) and ±2kV line–earth (CM) on signal ports
Conducted RF Immunity	IEC 61000–4–6 10V rms with 1kHz sine wave 80% AM from 150kHz to 30MHz

Emissions	CISPR 11 Group 1, Class A (with appropriate enclosure)	
Enclosure Type Rating	None (open–style)	
Keying	Between 16 and 18 Between 20 and 22	
Field Wiring Arm	1771-WN	
Wiring Arm Screw Torque	9 pound–inches (1.0Nm)	
Certifications (when product is marked)	UL	UL Listed Industrial Control Equipment
	CSA	CSA Certified Process Control Equipment
	CSA	CSA Certified Process Control Equipment for Class I, Division 2 Group A, B, C, D Hazardous Locations
	CE[3]	European Union 89/336/EEC EMC Directive, compliant with: EN 61000–6–4, Industrial Emissions EN 50082–2, Industrial Immunity EN 61236, Meas./Control/Lab., Industrial Requirements EN 61000–6–2, Industrial Immunity European Union 73/736/EEC EMC Directive, compliant with: EN 61131–2, Programmable Controllers
	C–Tick[3]	Australian Radiocommunications Act, compliant with: AS/NZS 2064, Industrial Emissions

[1] 14 gauge wire connected to all terminals may not allow the cover on the field wiring arm to close. A smaller gauge wire may be used.
[2] You use this conductor category information for planning conductor routing as described in publication 1770-4.1, Industrial Automation Wiring and Grounding Guidelines.
[3] See the Product Certification link at www.ab.com for Declarations of Conformity, Certificates and other certification details

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