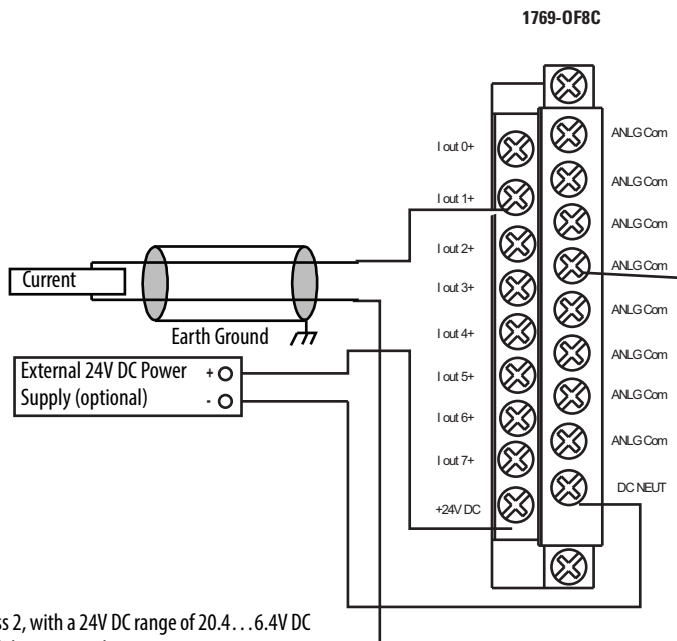


1769-0F8C

Compact current output analog module



The external power supply must be rated Class 2, with a 24V DC range of 20.4...6.4V DC and 60 mA minimum. Series B and later modules support this option.

Table 72 - Technical Specifications - 1769-0F8C

Attribute	1769-0F8C
Outputs	8 single-ended
Output range	0...20 mA 4...20 mA
Full scale range ⁽¹⁾	0...21 mA 3.2...21 mA
Resolution	16 bits (unipolar) 0...20 mA: 15.91 bits, 0.323 μ A/bit 4...20 mA: 15.59 bits, 0.323 μ A/bit
Current draw @ 5.1V	145 mA
Current draw @ 24V	140 mA
Heat dissipation, max	2.69 W
Conversion rate (all channels), max	5 ms
Step response to 63% ⁽²⁾	< 2.9 ms
Resistive load on current output	0...500 Ω (includes wire resistance)
Inductive load (current outputs), max	0.1 mH
Field calibration	None required
Accuracy ⁽³⁾	\pm 0.35% full scale @ 25 $^{\circ}$ C (77 $^{\circ}$ F)

Table 72 - Technical Specifications - 1769-OF8C

Attribute	1769-OF8C
Accuracy drift with temperature	±0.0058% per °C
Output ripple ⁽⁴⁾	±0.05% @ 0...50 kHz
Nonlinearity	±0.05%
Repeatability ⁽⁵⁾	±0.05%
Module error	±0.55%
Offset error	±0.05%
Output impedance	> 1 MΩ
Open and short-circuit protection	Yes
Short-circuit protection, max	21 mA
Output overvoltage protection	Yes
Output response at system powerup and power down	±0.5V DC spike for < 5 ms
Rated working voltage ⁽⁶⁾	30V AC/30V DC
Isolation voltage	500V AC or 710V DC for 1 min (qualification test), output group to bus 30V AC/30V DC working voltage (IEC Class 2 reinforced insulation)
Weight, approx	281 g (0.62 lb)
Dimensions (HxWxD), approx	118 x 35 x 87 mm (4.65 x 1.38 x 3.43 in.) Height with mounting tabs 138 mm (5.43 in.)
Slot width	1
Module location	DIN rail or panel mount
Power supply	1769-PA2, 1769-PB2, 1769-PA4, 1769-PB4
Optional 24V DC Class 2 power supply voltage range ⁽⁷⁾	20.4...26.4V DC
Power supply distance rating	8 modules
Terminal screw torque	0.68 N•m (6 lb•in)
Retaining screw torque	0.46 N•m (4.1 lb•in)
Wire size	(22...14 AWG) solid (22...16 AWG) stranded
Wire type	Cu-90 °C (194 °F)
Replacement terminal block	1769-RTBN18 (1 per kit)
Replacement door label	1769-RL2 (2 per kit)
Replacement door	1769-RD (2 per kit)
Vendor ID code	1
Product type code	10
Product code	40
Input words	11
Output words	9
Configuration words	64
Enclosure type rating	None (open style)

(1) The over- or under-range flag will come on when the normal operating range (over/under) is exceeded. The module will continue to convert the analog input up to the maximum full scale range. The flag automatically resets when within the normal operating range.

(2) Step response is the period of time between when the D/A converter was instructed to go from minimum to full range until the device is at 63% of full range.

- (3) Includes offset, gain, nonlinearity, and repeatability error terms.
- (4) Output ripple is the amount a fixed output varies with time, assuming a constant load and temperature.
- (5) Repeatability is the ability of the input module to register the same reading in successive measurements for the same input signal.
- (6) Rated working voltage is the maximum continuous voltage that can be applied at the input terminal, including the input signal and the value that floats above ground potential (for example, 10V DC input signal and 20V DC potential above ground).
- (7) If the optional 24V DC Class 2 power supply is used, the 24V DC current draw from the bus is 0 mA.

Table 73 - Certifications - 1769-OF8C

Certification⁽¹⁾	1769-OF8C
c-UL	C-UL certified (under CSA C22.2 No. 142) UL 508 listed Class I, Division 2 Group A,B,C,D Hazardous Locations (UL 1604, C-UL under CSA C22.2 No. 213)
CE	CE compliant for all applicable directives
C-Tick	C-Tick compliant for all applicable directives Australian Radiocommunications Act, compliant with: <ul style="list-style-type: none"> • AS/NZS CISPR 11; Industrial Enclosure

(1) When marked. See the Product Certification link at <http://www.ab.com> for Declarations of Conformity, Certificates, and other certification details.