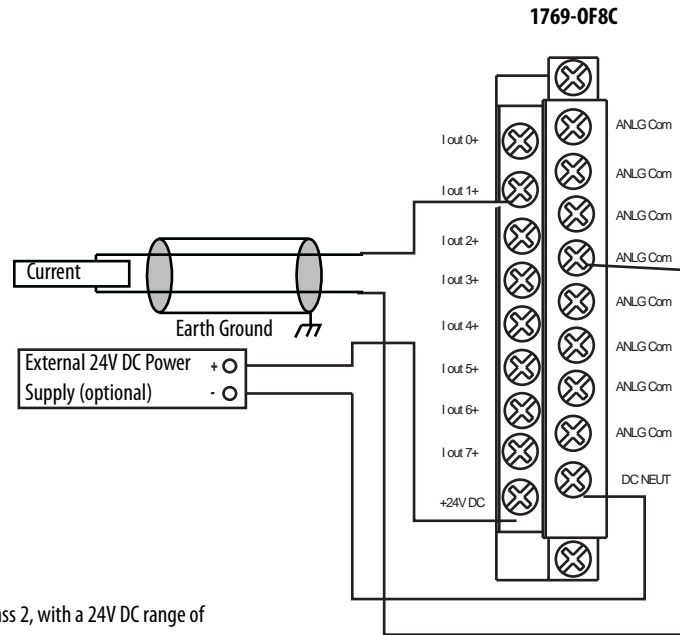


1769-0F8C

Compact current output analog module



The external power supply must be rated Class 2, with a 24V DC range of 20.4...26.4V DC and 60 mA minimum. Series B and later modules support this option.

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
Bus current draw	5V DC, 145 mA 24V DC, 185 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)
Accuracy drift with temperature	\pm 0.0058% per $^{\circ}$ C
Output ripple ⁽⁴⁾	\pm 0.05% @ 0...50 kHz
Nonlinearity	\pm 0.05%
Repeatability ⁽⁵⁾	\pm 0.05%
Module error	\pm 0.55%
Offset error	\pm 0.05%
Output impedance	> 1 M Ω

Technical Specifications - 1769-0F8C

Attribute	1769-0F8C
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 II 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 comes on when the normal operating range (over/under) is exceeded. The module continues 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 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 that a fixed output varies with time, which assumes 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, a 10V DC input signal and 20V DC potential above ground at the input terminal.
- (7) If the optional 24V DC Class 2 power supply is used, the 24V DC current draw from the bus is 0 mA.

See [Environmental Specifications - 1769 Compact I/O Modules](#) on page 3.

Certifications - 1769-OF8C

Certification ⁽¹⁾	1769-OF8C
c-UL	C-UL certified (under CSA C22.2 No. 142) UL Listed Industrial Control Equipment, certified for US and Canada. UL Listed for Class I, Division 2 Group A,B,C,D Hazardous Locations, certified for U.S. and Canada. See UL File E194810.
CE	European Union 2014/30/EU EMC Directive, compliant with: <ul style="list-style-type: none"> • EN 61000-6-2; Industrial Immunity • EN 61000-6-4; Industrial Emissions
RCM	Australian Radiocommunications Act, compliant with: <ul style="list-style-type: none"> • AS/NZS CISPR 11; Industrial Enclosure
EAC	Russian Customs Union TR CU 020/2011 EMC Technical Regulation

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