

## Avtron AV67A THIN-LINE III™ Encoders



### Heavy Mill Duty Magnetic Modular Encoder 6.75" C-Face Mount

#### Magnetic Durability in a Compact Encoder

Heavy Mill Duty
Simple, Secure Installation
Wide-Gap Technology: No Sensor Scraping or Adjustment
4 to 50000 PPR
No Couplings or Bearings
Sealed Electronics
Self-Diagnostic LED and Alarm Output
Universal 5-24V Operation
3 Year No-Hassle Warranty
All models are protected against all short circuits and wiring errors

#### AV67A

AV67A THIN-LINE III™ heavy mill duty modular magnetic encoders fit 6.75" C-Face flanges typically found on Baldor Reliance motors. Other THIN-LINE III models, ranging from 115mm to 8.5", are available to fit other motor sizes.

THIN-LINE III encoders feature simple installation, durable construction, and clear diagnostics to eliminate encoder-related downtime:

First, the magnetic sensors are fully potted, to withstand dirt and liquids. No glass disks, no optics to clog. There are no moving, wearing parts!

The patented Wide-Gap™ Cam Screw Rotors™ put an end to sensor damage, are simpler to install, and stay securely mounted to the shaft.

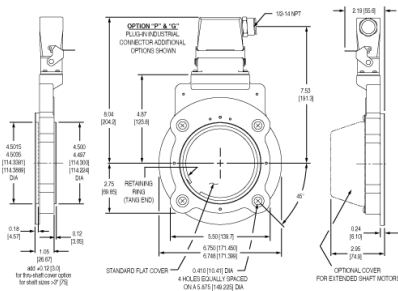
The universal 5-24V design drives longer cables and is protected against wiring errors and surges.

When you power up an AV67A, you know you installed it right: the green light tells you the digital self-tuning has set your AV67A optimally.

If at any time, the AV67A cannot produce ideal signals, the light changes to red, and the remote alarm contact activates. However, the encoder keeps working to give you time to schedule service. Any time there are wiring errors, the LED changes to orange.

With a real-world installation history of over 4,500,000 hour MTBF, AV67A encoders will keep your machine running 24/7/365!

## OUTLINE DRAWING



## MORE AV67A ADVANTAGES

- Replaces Avtron M67, Northstar/Dynapar™ RL67, S6; online cross reference guide available
- Shrugs off dirt, oil, and water contamination
- Highly resistant to electrical and magnetic motor and brake noise
- If damaged, electronics can be replaced without removing rotor
- Patented Cam Screw Rotor™ eliminates rotor slipping
- Built-in motor position guide and diagnostic check
- No air gap adjustment required
- Corrosion-resistant coating on all metal surfaces
- Second C-Face included for outboard brake/accessory mount
- Sealed thru-shaft option
- Fits shafts 0.500" - 3.188" [10 - 85 mm]
- Fits Baldor/Reliance RPM AC & DC III Motors
- 4,500,000+ hour MTBF design

## MORE AV67A SPECIFICATIONS

**Operating Power:** Volts: 5 - 24 VDC; Current: 100mA, no load

**Output Format:** A Quad B with Marker (A,/A, B,/B, Z,/Z)

**Frequency Range:**

@5, @ 1m cable, 250 kHz Max

@24V, @300m cable, #8 output, 45 kHz Max

**Max. Instantaneous Current Output:** 3000 mA

**PPR:** 4 - 50000

**Speed:** 5400 RPM Max. std., for higher speeds, consult factory

**Electronics:** Fully Encapsulated, IP67

**Temperature:** -40° to 100°C (150°C rotor)

**Vibration:** 18 g's

**Shock:** 1 meter drop test

**Chemical:** Polyurethane enamel paint protects against salt spray, mild acids, and bases.

**Weight:** 2-3 lbs (0.9 kg to 1.36 kg)

Check out our website for more detailed specifications, drawings, and installation instructions. [www.avtronencoders.com](http://www.avtronencoders.com)



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# SELECTION GUIDE

MODEL	HOUSING TYPE	ROTOR BORE SIZE	COVER STYLE	LINE DRIVER	LEFT OUTPUT PPR	RIGHT OUTPUT PPR	CONNECTOR OPTIONS	MODIFICATIONS
AV67A	1 - Single Output 2 - Dual, Isolated Outputs	XX - No Rotor CA - 1/2 in. Thru-Shaft Rotor CB - 5/8 in. Thru-Shaft Rotor (universal) CC - 7/8 in. Thru-Shaft Rotor CD - 15/16 in. Thru-Shaft Rotor CE - 1 in. Thru-Shaft Rotor CF - 1 1/8 in. Thru-Shaft Rotor CG - 1 1/4 in. Thru-Shaft Rotor CH - 1 3/8 in. Thru-Shaft Rotor CT - 1 1/2 in. Thru-Shaft Rotor CJ - 1 5/8 in. Thru-Shaft Rotor CK - 1 3/4 in. Thru-Shaft Rotor CL - 1 7/8 in. Thru-Shaft Rotor CM - 2 in. Thru-Shaft Rotor CN - 2 1/8 in. Thru-Shaft Rotor CQ - 2 1/4 in. Thru-Shaft Rotor CP - 2 3/8 in. Thru-Shaft Rotor CR - 2 1/2 in. Thru-Shaft Rotor TS - 2 5/8 in. Thru-Shaft Rotor TW - 2 3/4 in. Thru-Shaft Rotor TU - 2 7/8 in. Thru-Shaft Rotor TV - 3 in. bore Thru-Shaft Rotor T4 - 3 1/8 in. Thru-Shaft Rotor T7 - 3 3/16 in. Thru-Shaft Rotor TZ - 3 1/4 in. Thru-Shaft Rotor D2 - 10mm Thru-Shaft Rotor DA - 11mm Thru-Shaft Rotor D3 - 12mm Thru-Shaft Rotor DB - 14mm Thru-Shaft Rotor DC - 15mm Thru-Shaft Rotor DD - 16mm Thru-Shaft Rotor D4 - 18mm Thru-Shaft Rotor DE - 19mm Thru-Shaft Rotor DF - 24mm Thru-Shaft Rotor DS - 25mm Thru-Shaft Rotor DG - 28mm Thru-Shaft Rotor DH - 30mm Thru-Shaft Rotor DT - 32mm Thru-Shaft Rotor DJ - 36mm Thru-Shaft Rotor DK - 38mm Thru-Shaft Rotor DL - 42mm Thru-Shaft Rotor DM - 45mm Thru-Shaft Rotor DN - 48mm Thru-Shaft Rotor DP - 52mm Thru-Shaft Rotor DR - 55mm Thru-Shaft Rotor DS - 60mm Thru-Shaft Rotor MU - 65mm Thru-Shaft Rotor MV - 70mm Thru-Shaft Rotor MW - 75mm Thru-Shaft Rotor MY - 80mm Thru-Shaft Rotor MZ - 85mm Thru-Shaft Rotor	E - Extended (Pie-Pan Style) Cover F - Flat Outboard Cover, Low-Profile T - Outboard Seal Plate for Thru-Shaft with V-Ring Seal X - No Cover Plate D - Sealed dome cover for rear motor/brake sealing G - Gasketed Extended (Pie-Pan Style) Cover for High-Dust Environments	6 - 5-24v in, 5-24v out (7272) Low Power Line Driver 8 - 5-24V In/Out (HX) Hi-Power Line Driver, Fully Protected Outputs 9 - 7-24V In, 5v Regulated Outputs (7272) Low Power Line Driver	F - 60 PPR G - 100 PPR H - 120 PPR A - 128 PPR L - 240 PPR N - 256 PPR P - 300 PPR E - 360 PPR B - 480 PPR Q - 500 PPR R - 512 PPR S - 600 PPR V - 900 PPR J - 960 PPR Y - 1024 PPR Z - 1200 PPR 3 - 2000 PPR 4 - 2048 PPR 5 - 2500 PPR D - 4096 PPR 8 - 4800 PPR 9 - 5000 PPR 0 - Special PPR	X - No Right Output F - 60 PPR G - 100 PPR H - 120 PPR A - 128 PPR L - 240 PPR N - 256 PPR P - 300 PPR E - 360 PPR B - 480 PPR Q - 500 PPR R - 512 PPR S - 600 PPR V - 900 PPR J - 960 PPR Y - 1024 PPR Z - 1200 PPR 3 - 2000 PPR 4 - 2048 PPR 5 - 2500 PPR D - 4096 PPR 8 - 4800 PPR 9 - 5000 PPR 0 - Special PPR	A - 10 Pin MS Connector, no plug, Avtron Pin Out B - 10 Pin MS Connector, no plug, Dynapar Pin Out C - 10 Pin MS Connector, with plug, Avtron Pin Out D - 10 Pin MS Connector, with plug, Dynapar Pin Out P - Industrial (EPIC Style) w/mating plug & remote alarm contact G - Ind1 w/Northstar Pinout (EPIC Style connector), w/mating plug, LED diagnostics Q - Ind1 w/Remote Base Mount for Baldor TEFC/EC Motors (EPIC style) w/LED Diagnostics + alarm output Z - Ind1 on 36 inch Cable (side entry) (EPIC Style) w/LED diagnostics + alarm output W - 36 inch Cable w/LED diagnostics + alarm output R - 10 pin Mini-MS style (Bayonet) w/LED diagnostics S - 10 pin Mini-MS style (Bayonet) on 18" cable w/LED diagnostics Y - 10 pin MS style connector on 12" cable w/LED diagnostics T - M12 connector on cable (Turck pinout) U - M12 connector on cable (US pinout)	000 - None 004 - Add Drain hole (Single Output Only) 005 - Super Magnetic Shielding Added 006 - Right Angle Cable Exit (for cable W or remote bases Q, Z) 016 - Remote Q Connector with 6" Cable Extension 00W - Special Connector on 36 in/1m cable 901 - 0.3m/1' Special Cable Length 902 - 0.6m/2' Special Cable Length 903 - 0.9m/3' Special Cable Length 905 - 1.5m/5' Special Cable Length 910 - 3m/10' Special Cable Length 915 - 4.5m/15' Special Cable Length 920 - 6m/20' Special Cable Length 925 - 8m/25' Special Cable Length 925 - 8m/25' Special Cable Length 930 - 9m/30' Special Cable Length 933 - 10m/33' Special Cable Length



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