Rev: 05-12-17



# Avtron AV67 THIN-LINE III™ Encoders



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

# STRONGER and SMARTER

## **AV67**

Heavy Mill Duty
 Simple, Secure Installation
 All models are protected against all short circuits and wiring errors

Wide-Gap Technology: No Sensor Scraping or Adjustment

1 4 to 50000 PPR

No Couplings or Bearings

Sealed Electronics

Self-Diagnostic LED and Alarm Output

Universal 5-24V Operation

1 3 Year No-Hassle Warranty

AV67 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.

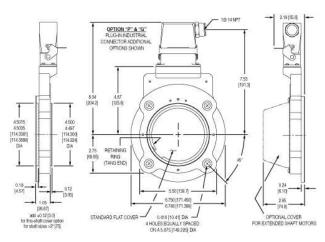
The universal 5-24V design drives longer cables and is protected against wiring errors and surges.

When you power up an AV67, you know you installed it right: the green light tells you the digital self-tuning has set your AV67 optimally.

If at any time, the AV67 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, AV67 encoders will keep your machine running 24/7/365!

#### **OUTLINE DRAWING**



Check out our website for more detailed specifications, drawings, and Temperature: -40° to 100°C (150°C rotor) installation instructions. www.avtronencoders.com

### **MORE AV67 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/accesory 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

#### **AV67 SPECIFICATIONS**

Operating Power: Volts: 5 - 24 VDC; Current: 80mA, 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

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)

### **SELECTION GUIDE**

	Housing Type		Cover Style	Line Driver		Right Output (PPR)		Modifications	
Model		Shaft Size (Thru-Shaft Rotor)			Single/Left Output (PPR)		Connector		
* Set Sc	1- Single Output	Co. None-etd. Shaft Size XX- None Thru-Shaft Rotor US	E- Extended Shaft Cover F- Flat Cover T- Flat Thru- Hole Cover with Shaft Seal D- Dome Cover	in/out 8- 5-24 V in, 5-24 V out high power 9- 5-24V in,	0- Non- V- 900 std. J- 960 F- 60 Y- 1200 H- 12	X- None	W-3 Ft. Cable, Sealed	000- No Modification 004- Add Housing Drain (single output only) 005- Super Magnetic Shielding 4xx- Special PPR Enter Ø in the PPR code(s), select the specia option code below 9xx- Special Cable Length, xx=length in feet 00W- Connector on 18" cable: Use w/ options "T", "U"	

		Con	nector Op	tions			
Mo	unted on Enco	der	Mounted on Flex cable			00W	
10 Pin MS	10 Pin EPIC	10 Pin mini MS	7 Pin MS*	10 Pin MSલ	10 Pin EPIC«	10 Pin mini MSa	(*)8 Pin M12
Not Available	G- w/ plug Northstar pinout P- w/ plug	R- w/ plug	Not Available	Y- w/o plug on conduit box (Large Encoder Pinout)	plug on	S- w/ plug	T- w/o plug (Turck Pinout) U- w/o plug (US Pinout)

(\*)Requires Special option 00W





Nidec-Avtron Makes the Most Reliable Encoders in the World

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All dimensions are in inches [millimeters] Specifications and features are subject to change without notice. EU-SMART™, SMARTSafe™, SMARTach II™, THIN-LINE™, THIN-LINE II™, WIDE-GAP™, and BULLSEYE32™ are trademarks of Nidec Avtron Automation. All other trademarks and registered trademarks are the property of their respective owners.