



KRYO | ELCO | ARKTIC

Refrigeration ECM Motors



FEATURES

- 4-20 watts (automatically operates at the watts needed by load)
- 1550 rpm
- 115-230 VAC (automatic).
Allowable voltage range 90-240 VAC
- CW & CCW (one wire connection)
- Standard 1/4-20 shaft thread
- Standard two-pin molded plug

Multiple standard mounting options

- Standard rear 3-hole and 4-hole mounting
- Two-sided mounting feet

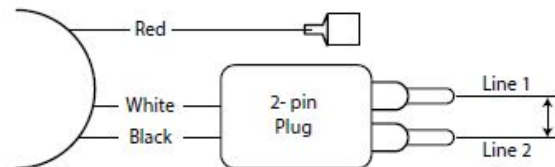
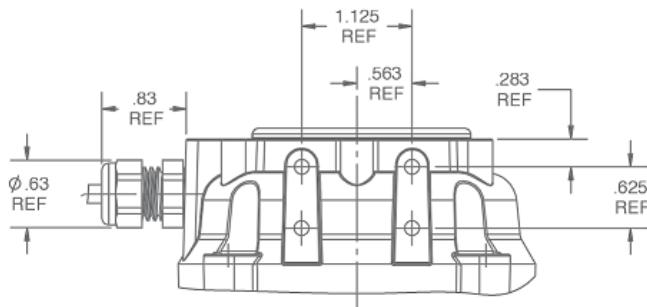
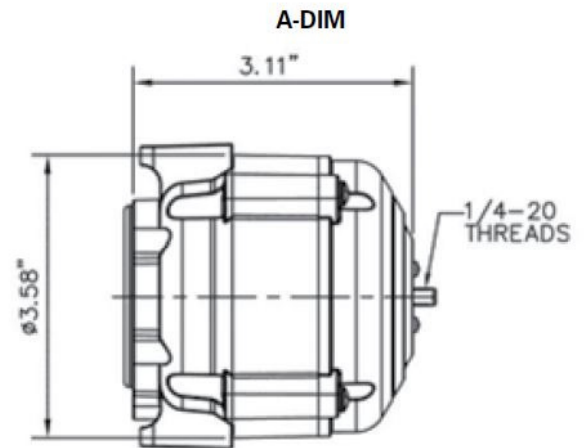
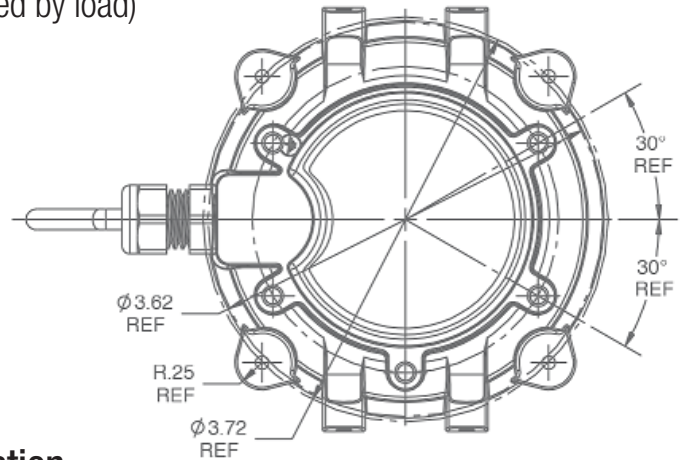
Can be used in evaporator and condenser application

BUILT TO SAVE ENERGY

- High efficiency ECM motors provide 41% greater efficiency over traditional shaded pole motors.

BUILT TO LAST

- IP66 and IP67 rating (water-tight, dust-tight and submersible)
- Long-life ball bearings
- Aluminum body
- Can operate in temperatures between -40° C and 55° C



Stock #	Watt	RPM	Speed	Volt	Amp	Rot.	Bearing	Enclosure	Shaft	A dim.
FA-MD5411S	4-20	1550	1	90-240	.20-.55	REV	BALL	IP66/IP67	1/4-20	3.11"

Stock No. 2117 - 90° cord adapter available separately

REPLACES 28 DIFFERENT MOTOR RATINGS

BUILT TO BE EASY TO INSTALL

- Standard two-pin molded plug (operates motor at 4-20 watts, 1550 rpm, CW rotation)
- 115-230 VAC (automatic)
- Allowable voltage range 90-240 VAC

BUILT TO SAVE ENERGY

- High efficiency ECM motors provide 41% greater efficiency over traditional shaded pole motors.

BUILT TO LAST

- IP66 and IP67 rating (water-tight, dust-tight and submersible)
- Long-life ball bearings
- Aluminum body
- Can operate in temperatures between -40° C and 55° C



FA-MD5469



FA-MD5470
FA-MD5471
FA-MD5472

Stock #	CFM	Watt	RPM	Speed	Volt	Amp	Rot.	Bearing	Enclosure	Mounting B.C	Morill Motors	Cross Reference
FA-MD5469 ¹	355	4-20	1550	1	90-240	.55-.20	CW	BALL	IP66/IP67	9.532"	5R024/5R033	
FA-MD5470 ²	355	4-20	1550	1	90-240	.55-.20	CW	BALL	IP66/IP67	9.800"	5R026/5R035	5470, EC5470FP
FA-MD5471 ²	390	4-20	1450	1	90-240	.55-.20	CW	BALL	IP66/IP67	9.800"	5R027/5R036	5471
FA-MD5472 ²	415	4-20	1550	1	90-240	.55-.20	CW	BALL	IP66/IP67	9.800"	5R028/5R037	5472, EC5472FP

Notes:

1 - Comes with right angle plug and 3-fan pack

2 - Includes straight plug and 3-fan pack

DUAL VOLTAGE, DROP-IN REPLACEMENT

Reduce your carbon foot print and electricity bill at the same time. Become more environmentally friendly! The ECM series allows efficiency rates up to 70%, 4-5 times more efficient than a traditional shaded pole fan motor. Higher efficiency means cooler motor operation, longer bearing expected life and reduced heat delivered to the refrigeration cycle, for a combined energy saving advantage and improved refrigeration quality.

The ECM-IP Series is widely used in industrial and commercial refrigeration for condensing and evaporating units, food and beverage coolers, freezers, supermarket display cases, walk-ins and reach-ins.



FEATURES

Increased life:

Life expectancy of 60,000+ hrs. with our sealed ball bearing option.

Moisture protection:

The ECM series offers IP65 & IP66 moisture protection grade, one of the highest in the industry.

Wide range of CFM:

Choose among three different factory preset RPM options and a wide range of fan blades from 6 to 10 inches diameter and various pitches, to satisfy all CFM needs.

Multiple mounting:

Compatible with ELCO's standard accessories, giving higher flexibility in motor mounting. Installation on a shroud, a grid or a mounting bracket.

Drop in replacement:

The ECM-IP Series motor is a direct drop-in replacement to our shaded pole motor (NU series) for an easy and hassle free "green turn".

Modular Design

Designed to mount ELCO standard (and third party) or integrated design fan blades, for extreme application flexibility and to cover a wide range of performance requirements.

Compact design:

The ECM compact design with its integrated plastic fan blade is ideal for reduced space depth applications.

Stock #	Watt	Volt	RPM	Amp	ELCO OEM #	A dim.	Cord length	Term. / Plug.
EC-HE0147	12	115	1450	0.18	EDA12153UC0147	3.61"	14"	3pin 90°
EC-HE0176	15	115	1600	0.22	EDA15253UC0176	4.00"	16"	2pin 90°
EC-HE0182	10	115	1550	0.19	EDA10153UC0182	3.61"	16"	2pin 90°

Cross Reference

Part #	OEM Name	OEM #
EC-HE0147	Arneg Canada & US	34410013 , 34410009, 24681010
EC-HE0176	Hill Phoenix	P078449H
EC-HE0182	Hill Phoenix	P079441C, P066237A

FEATURES

- Low power consumption for maximum operational efficiency
- Constant rotational speed for functional consistency
- Wide array of application compatibility



Stock #	Dia	Watt	RPM	Speed	Volt	Amp	Bearing	Enclosure	Shaft Diameter Length
FA-5R017⁻¹	3.3"	38	1550	1	115	0.90	UNIT	T.E	1/4" x 20" Thread
FA-5R018⁻¹	3.3"	38	1550	1	230	0.45	UNIT	T.E	1/4" x 20" Thread
FA-5R022⁻²	3.3"	38	1550	1	115	0.90	UNIT	T.E	1/4" x 20" Thread
FA-5R023⁻²	3.3"	38	1550	1	230	0.45	UNIT	T.E	1/4" x 20" Thread

Notes:

1 - Comes with dual flag connections

2 - Includes straight, 2 pin plug and bracket

Kryo SSC Motors

APPLICATIONS

The Kryo™ SSC motor is the next generation ECM with multi-watt range capability. Designed for use in commercial refrigeration, it can be used in other applications requiring efficiency and reliability. Available with mounting brackets, fan blades, and fan assembly hardware. Approved for use in applications where flammable refrigerant are present, and is comparable with applications where the use of pressurized water for wash down is a standard procedure.

FEATURES

- Energy efficient ECM technology / automatic torque variation
- IP65 environmental certification
- ATEX certified to EN60079
- No water intrusion during pressurized equipment wash down sanitation
- Can be used in applications with flammable refrigerants



Stock #	Dia	Watt	RPM	Speed	Volt	Amp	Rot.	Bearing	Enclosure	Shaft Diameter Length
FA-5R999⁻¹	3.3"	4-25	1550	1	115	0.6	CW	BALL	T.E	1/4" x 20" Thread

Notes:

1 - Comes with straight, 2 pin plug and IP65

FEATURES

- Low power consumption for maximum efficiency
- Constant rotational speed for functional consistency
- Wide array of application compatibility
- Drop-in replacement for an existing shaded pole and PSC
- evaporator cooler motors



Stock #	Dia	HP	RPM	Speed	Volt	Amp	Rot.	Bearing	Enclosure	Shaft Diameter Length	Cross Reference
FA-5100A	3.3"	1/15	1550	1	115	1.1	CW	BALL	T.E	5/16" X 2-5/8"	5100, 5103, 5105
FA-5101A	3.3"	1/15	1550	1	115	1.1	CCW	BALL	T.E	5/16" X 2-5/8"	5101, 5102, 5106
FA-5200A	3.3"	1/15	1550	1	208-230	0.63	CW	BALL	T.E	5/16" X 2-5/8"	5200, 5203
FA-5201A	3.3"	1/15	1550	1	208-230	0.63	CCW	BALL	T.E	5/16" X 2-5/8"	5201, 5202, 5206

APPLICATIONS

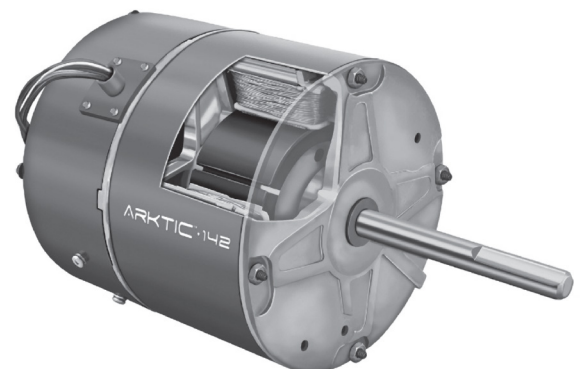
Our ARKTIC® 142 motors are primarily used in the evaporator of commercial refrigeration walk-in coolers and freezers as well as outdoor condensers, but can be used in many applications demanding high efficiency and dependability with output ratings between 1/5 – 1/3 HP including parallel rack fan motors.

MECHANICAL SUMMARY

- Type: NEMA 48 frame electronically commutated
- Shaft: 1/2" diameter, single flat
- Enclosure: Totally enclosed – air over required
- 50/60HZ
- Bearing: Ball bearing with low temperature grease
- Mounting: Belly band
- Operating Position: Horizontal or vertical shaft up
- Compliance: RoHS
- Efficiency: ~77% peak

ENVIRONMENTAL SUMMARY

- Storage Temp: -40°C to 80°C ambient
- Operating Temp: -40°C to 55°C ambient
- Design Life: 10 years, 83,720 hours on time (for typical evaporator fan applications)



Stock #	Speed	HP	RPM	Volt	Rot.	FLA @ NP	C Dim	Shaft Diameter Length
FA-5R002	1	1/5	1075	115	CW	4,6	9.53"	1/2" X 4.00"
FA-5R004	1	1/5	1075	230	CW	1.9-2.8	9.6"	1/2" X 4.00"
FA-5R005	1	1/3	1075	115	CCW	5.8	10.09"	1/2" X 4.00"
FA-5R007	1	1/3	1075	230	CCW	2.6-3.5	10.09"	1/2" X 4.00"