

# PRODUCT INFORMATION PACKET



Model No: ORM5454BF  
Catalog No: ORM5454BF

4-in-1® Condenser Fan Motor, 1/8-1/15 HP, 1 Ph, 60 Hz, 208-230 V, 1075 RPM, 1 Speed, 48 Frame, TEAO



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### Nameplate Specifications

Output HP	1/8-1/15 Hp	Output KW	0.10 kW
Frequency	60 Hz	Voltage	208-230 V
Current	0.8 A	Speed	1075 rpm
Service Factor	1	Phase	1
Duty	Air Over	Insulation Class	F
Frame	48	Enclosure	Totally Enclosed Air Over
Thermal Protection	Automatic	Ambient Temperature	70 °C
UL	Recognized	CSA	Y
CE	N	Number of Speeds	1

### Technical Specifications

Electrical Type	Permanent Split Capacitor	Starting Method	Across The Line
Poles	6	Rotation	Reversible
Mounting	Extended Studs	Motor Orientation	Any
Drive End Bearing	Ball	Opp Drive End Bearing	Ball
Frame Material	Rolled Steel	Shaft Type	Double Flat
Overall Length	11.37 in	Frame Length	3.37 in
Shaft Diameter	0.500 in	Shaft Extension	6.5 in
Outline Drawing	ORM5454BF-S01	Connection Drawing	614131-242

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GENERAL INFORMATION:

SHAFT RUNOUT: .001 [.03] T.I.R. PER INCH LENGTH OF EXTENSION

BEARINGS: BALL

MOUNTING POSITION: ALL ANGLE

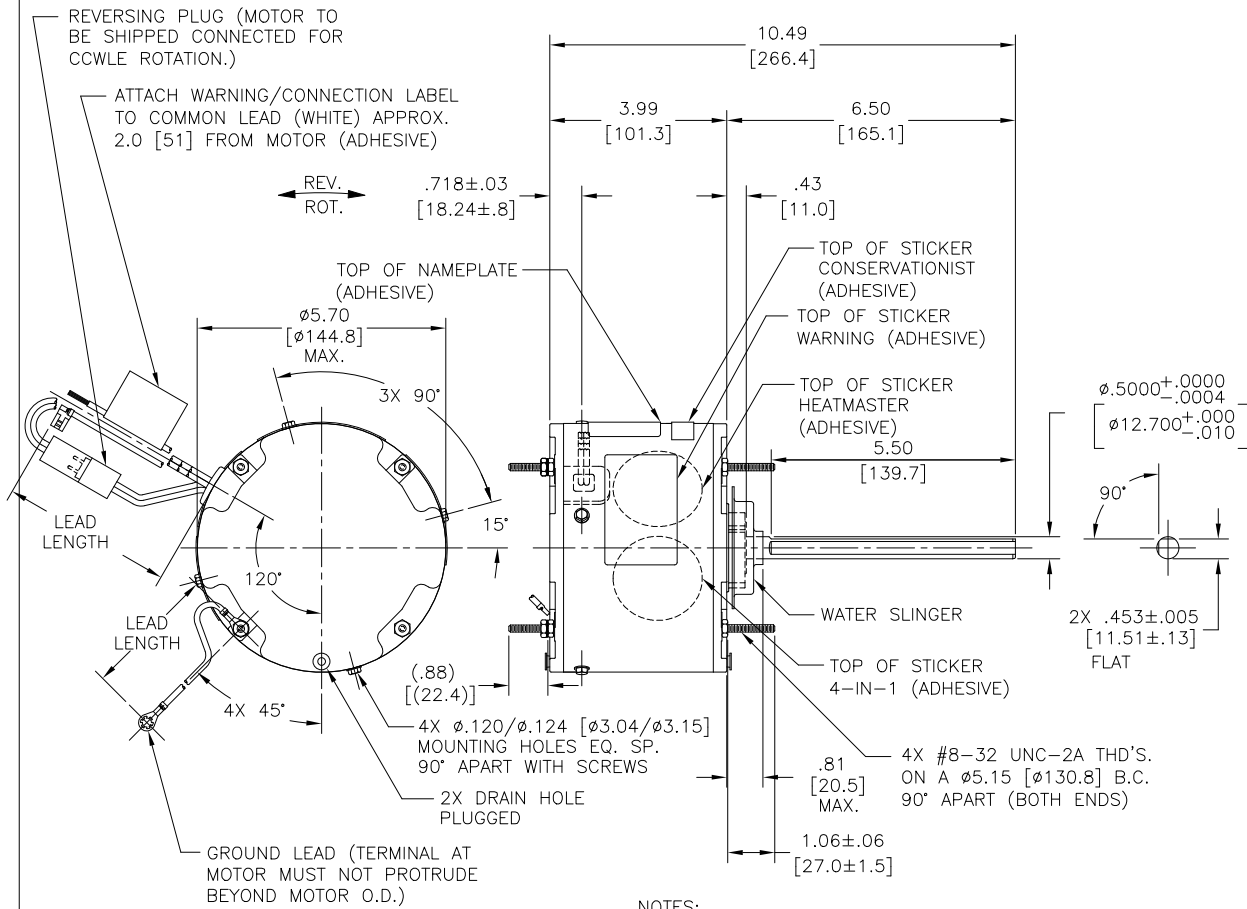
ELECTRICAL DATA:

OVERLOAD PROTECTOR: AUTOMATIC RESET (SESATA 7AM 304)

LINE LEADS: NO. 18 GA., .06 [1.5] THK. XLP 125°C INSUL.

REVERSING PLUGS: NO. 18 GA., .03 [.8] THK. XLP 125°C INSUL.

GROUND LEAD: NO. 18 GA., .03 [.8] THK. (GREEN) INSUL.

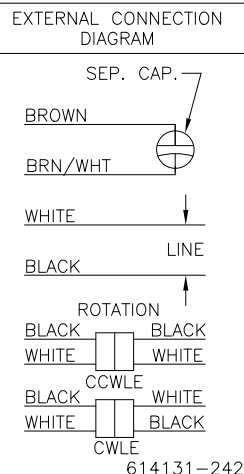


NOTES:

- ATTACH INSTRUCTION SHEET 69P9-3 ONTO SHAFT APPROX. 1.0" [25] FROM WATER SLINGER
- (4) EXTRA HEX NUTS 7555A19H01 ON LEAD END (FINGER TIGHT)

NAMEPLATE DATA:

MODEL NO.: F48AB72A01  
 CUST. P/N: ORM5454BF  
 HP: 1/8-1/15  
 ROT.: REVERSIBLE  
 RPM: 1075  
 TYPE: UF  
 FRAME: 48  
 VOLTS: 208-230  
 PH: 1  
 AMPS: 0.8  
 HZ: 60  
 INS.: F  
 AMB.: 70°C  
 DUTY: AIR OVER  
 CAP.: 5 MFD/370 V  
 ENCL: ENCLOSED  
 UL LOGO  
 CSA LOGO  
 THERMALLY PROTECTED



PERFORMANCE CURVE NO.	TORQUE @ 1075 RPM (25°C)	APPROVED SAMPLE	UL COMPONENT	CSA		
				FILE #	CCN #	FILE # CLASS #
C0000025	11.7 OZ. FT.	0801428A	E46412	PRGY2	LR43341	4211-01

COLOR	LENGTH	TERMINAL OR STRIP LENGTH
GREEN (GROUND)	12.0/13.0 [305/330]	#10 EYELET
BLACK/WHITE	3.0/5.0 [76/127]	REVERSING PLUG
BROWN	48.0/51.0 [1219/1295]	.25 [6.4] FLAG
BROWN/WHITE	48.0/51.0 [1219/1295]	.25 [6.4] FLAG
WHITE	48.0/51.0 [1219/1295]	.50 [12.7] SKIN
BLACK	48.0/51.0 [1219/1295]	.50 [12.7] SKIN

MAIN FRAME - OLE	ENCLOSED
END FRAME - OLE	ENCLOSED
MAIN FRAME - LE	ENCLOSED
END FRAME - LE	ENCLOSED

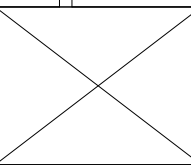
CUSTOMER	DISTRIBUTION SERVICE

LEAD DATA

DRAWING REVISION	REVISION BY	DATE
ECO	J. RUPERT	07-15-2021
NMR-0209653	J. RUPERT	07-15-2021

ECO DESCRIPTION  
 REVISED FOR UP ISSUE

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ENCLOSURE

DRAWN BY: J. RUPERT	DATE: 09-05-2008	APPROVED BY: C. BRANHAM	DATE: 09-05-2008
THIRD ANGLE PROJECTION	SIZE: C	DWG NO: ORM5454BF	SHEET: 1

REGAL Beilout America, Inc.

DESCRIPTION: MODEL-RFHP-48FR OUTLINE

MATERIAL: \_\_\_\_\_ PROCESS/FINISH: \_\_\_\_\_



- NOTES:
1. FOR USE WITH 614129 NAMEPLATE BLANK
  2. — — — — — INDICATES DIMENSION LIMITS
  3. DIE TO BE MADE FROM MASTER SUPPLIED BY REGAL REXNORD CORPORATION
  4. DIE MUST PRODUCE A LEGIBLE IMPRESSION.

DRAWING REVISION H	REVISION BY J. RUPERT	DATE 03-16-2022
ECO NMR-0213140	APPROVED BY J. RUPERT	DATE 03-16-2022
ECO DESCRIPTION REVISED FOR UP ISSUED		

TOLERANCES UNLESS OTHERWISE SPECIFIED			
DEC.	INCH	mm	ANGLE
.X	±0.1	[±2.5]	±0.5°
.XX	±0.02	[±0.51]	
.XXX	±0.005	[±0.127]	
.XXXX	±0.0005	[±0.0127]	
REMOVE BURRS & BREAK SHARP EDGES .003/.015 [0.076/.381] X 45°			
CORNER FILLETS R.02 [.51]			
MACHINED SURFACES			
	INCH	mm	
	125	3.2	
mm SHOWN IN [BRACKETS]			

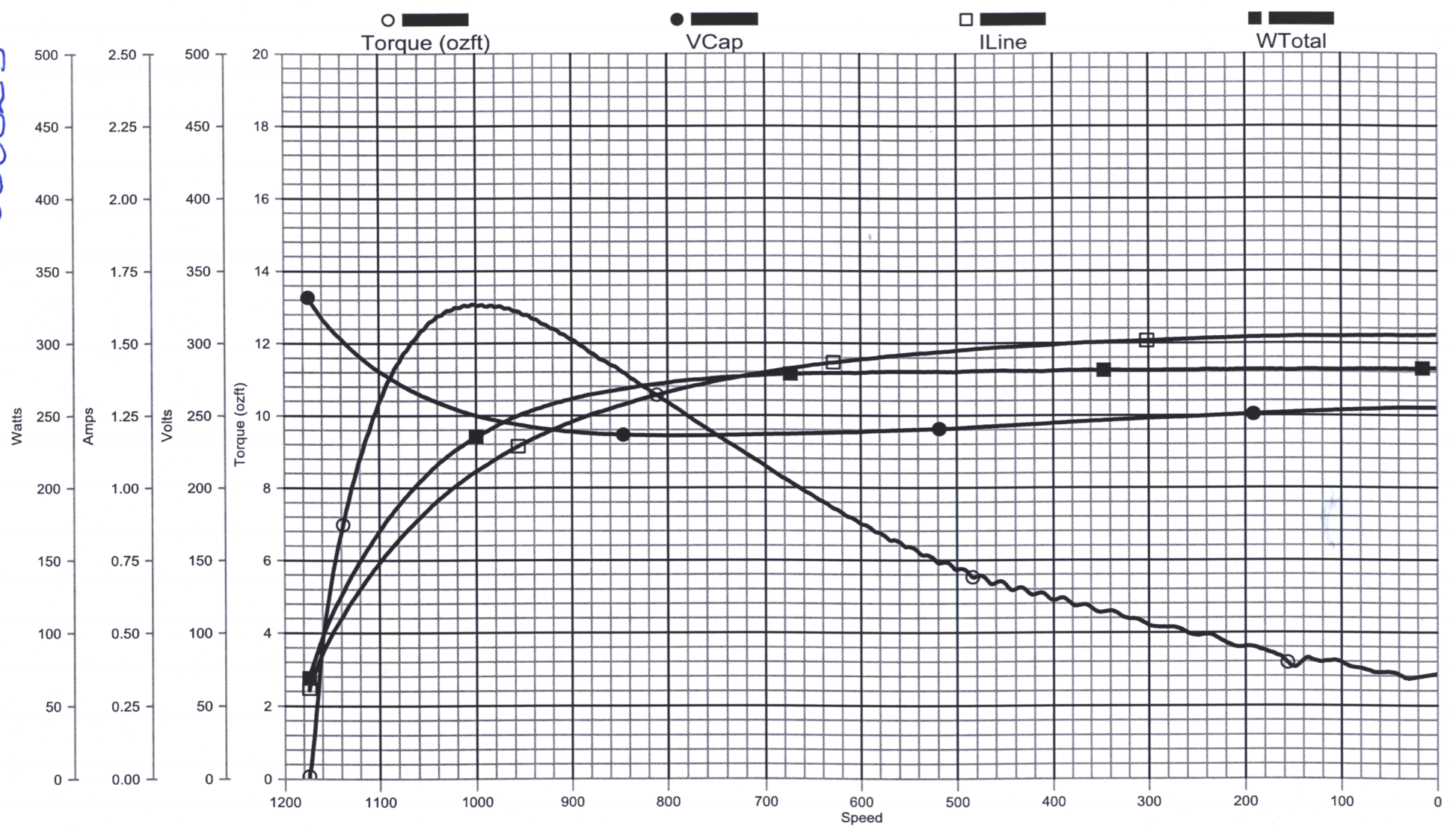
DRAWN BY: YL	
DATE: 04-15-2011	
APPROVED BY: HZ	
DATE: 04-15-2011	
REFERENCE	
THIRD ANGLE PROJECTION	

Regal Beloit America, Inc.	
DESCRIPTION CONNECTION DIAGRAM EXTERNAL	
MATERIAL	PROCESS/FINISH
SIZE A	DWG NO 4 of 10
614131-242	
SHEET 1	

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Performance Test Project: 0801428 (High Speed)

C0000025



C0000025

TRACKING #: 10067631  
 SBU: Heating & Air Cond  
 ENGINEER: CARLA BRANHAM  
 TECHNICIAN: DAN THOMPSON  
 TORQUE CELL: 50 inlb  
 NP RPM: 1075  
 # SPEEDS: 1  
 MOTOR #: 1  
 COMMENT 2:

CUSTOMER: DISTRIBUTION SERVICES  
 MODEL: 0801428A  
 FRAME: 48  
 PHASES: 1  
 VOLTS: 230.0  
 HERTZ: 60  
 RUN CAP: 5.00  
 COMMENT1:  
 COMMENT 3:

DESCRIPTION: SYNC-0  
 TYPE: PSC  
 BENCH: 1  
 HP: 0.13  
 ROTATION: CCW  
 BDT: 13.05  
 LRA: 1.53  
 LRT: 2.87  
 COMMENT 4:

Performance Test Results For 0801428

(High Speed)

06-20-2008

01:20 am

TRACKING #: 10067631  
 SBU: Heating & Air Cond  
 ENGINEER: CARLA BRANHAM  
 TECHNICIAN: DAN THOMPSON  
 TORQUE CELL: 50 inlb  
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 BDT: 13.05  
 LRA: 1.53  
 LRT: 2.87  
 COMMENT 4:

Resistance:

	Start	Main1	
	03-02	01-02	
Spec	10.00	0.00	
Before	62.415	36.910	@23.7 °C
After	62.918	37.374	@23.8 °C

Friction: -1.0233 ozft @ 200 RPM  
 Friction + Wind: -1.9737 ozft @ 1080 RPM  
 Inertia: 0.0094 ozft

Down Results (Torque In ozft):

% Load	Torque	RPM	VLine	VCap	VStart	ILine	IMain	IStart	WLine	WOut	% Eff	% PF	HP
NL	0.00	1174.2	229.9	331.4	203.5	0.32	0.44	0.63	70.3	0.0	0.0	95.6	0.00
NP+80	4.66	1155.0	229.9	313.5	191.6	0.46	0.41	0.60	105.2	47.8	45.4	99.5	0.06
NP+60	7.32	1135.0	229.7	299.9	181.5	0.58	0.47	0.57	131.9	73.7	55.9	99.0	0.10
NP-50*	8.33	1125.0	229.6	293.9	176.5	0.63	0.51	0.56	143.7	83.2	57.9	99.3	0.11
NP+40	9.24	1115.0	229.6	288.2	171.5	0.67	0.56	0.55	154.8	91.4	59.1	100.0	0.12
NP-25*	10.35	1100.0	229.6	280.7	164.3	0.74	0.63	0.53	169.8	101.0	59.5	99.9	0.14
NP+20	10.66	1095.0	229.7	278.7	162.1	0.76	0.65	0.53	174.6	103.6	59.3	100.0	0.14
NP	11.70	1075.0	229.9	270.4	153.4	0.84	0.75	0.51	191.7	111.6	58.2	99.3	0.15
FL	12.00	1066.9	229.9	267.5	150.1	0.87	0.78	0.51	197.8	113.6	57.4	98.9	0.15
NP-20	12.37	1055.0	230.0	263.5	145.2	0.91	0.84	0.50	206.3	115.8	56.1	98.6	0.16
NP+25*	12.52	1050.0	230.1	262.0	143.3	0.92	0.86	0.50	209.8	116.7	55.6	99.1	0.16
NP-40	12.79	1035.0	230.3	257.9	137.6	0.97	0.92	0.49	219.0	117.5	53.6	98.0	0.16
NP+50*	12.92	1025.0	230.2	255.3	134.0	1.00	0.96	0.49	224.2	117.5	52.4	97.4	0.16
NP-60	13.00	1015.0	230.1	252.9	130.4	1.02	0.99	0.48	228.8	117.1	51.2	97.5	0.16
BDT	13.05	1011.5	230.1	252.1	129.2	1.03	1.00	0.48	230.3	117.1	50.9	97.2	0.16
MT	13.07	1003.8	230.1	250.5	126.6	1.05	1.03	0.48	233.6	116.4	49.8	96.7	0.16
NP-80	13.05	995.0	230.1	248.9	123.8	1.07	1.06	0.47	236.9	115.2	48.6	96.2	0.15
NP-100	13.02	975.0	230.4	246.0	118.0	1.11	1.12	0.47	244.2	112.7	46.1	95.5	0.15
NP-200	11.65	875.0	230.1	237.4	93.9	1.26	1.35	0.45	265.0	90.5	34.1	91.4	0.12
NP-300	9.90	775.0	230.0	236.0	78.2	1.35	1.49	0.45	274.4	68.1	24.8	88.4	0.09
NP-400	8.18	675.0	229.9	237.1	66.7	1.41	1.59	0.45	278.5	49.0	17.6	85.9	0.07
HS	7.00	600.0	229.8	238.5	60.3	1.44	1.65	0.45	279.4	37.3	13.3	84.4	0.05
PUT	2.73	29.3	230.0	255.3	42.8	1.53	1.82	0.48	282.0	0.7	0.3	80.1	0.00
LR	2.87	0.0	229.9	255.3	42.8	1.53	1.82	0.48	282.3	0.0	0.0	80.3	0.00

LRA=LOCKED ROTOR AMPS      BDT =BREAKDOWN TORQUE      MT=MAX TORQUE  
 LRT=LOCKED ROTOR TORQUE      NP RPM=NAMEPLATE RPM

## Specification &amp; Rating Report




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 Item Number: **ORM5454BF**
Specification Number: **1**Model Number: **F48AB72A01**Carton Label Model  
Number:Customer Model  
Number:

Agency Type:

CE: **N**CSA: **Y**UL: **Y**

UL Explosion Proof Rating:

Sample Number:

Customer Specification  
Number:Catalog Number: **ORM5454BF**

CE Number:

CSA Number: **NO**UL Number: **NO**

Cubic Feet Per Minute:

F2 Assembly:

UPC Model Number:

UPC Catalog Number: **786674028259**Nameplate Drive  
Bearing Type:Nameplate Opposite  
Drive Bearing Type:

Capacitor:

Capacitor Rating MFD: **5**

Control Code:

DC Design Number:

Form Factor:

Connection Diagram:

Lubrication Label  
Diagram:Outline Diagram: **ORM5454BF-S01**Ambient Temperature: **70**Label Drive Bearing **BALL**  
Type:Label Opposite Drive **BALL**  
Bearing Type:Capacitor Included: **N**Capacitor Rating VAC: **370**

Design Status:

Features:

Installation Diagram:

Warning Label  
Diagram:

Outline Graphic:

Insulation Class: **F**



## Specification & Rating Report

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Protector: <b>AUTOMATIC</b>	Thermal Protection:
Nameplate Overload:	Label Overload:
IP Code:	
Nameplate Enclosure: <b>TEAO</b>	Label Enclosure: <b>TEAO</b>
Frame Length: <b>3.37</b>	Frame Length UOM:
Frame Diameter:	Frame Diameter UOM:
Frame Size: <b>48</b>	
Frame Material: <b>ROLLED STEEL</b>	End Frame Material:
Operator Instruction Manual:	
Nameplate Mounting:	Label Mounting: <b>EXT STUDS</b>
Base Height:	Base Height UOM:
Ring Diameter:	RingDiameterUOM:
Nameplate:	Carton Label:
Nameplate Location <b>B</b> Format:	
Brake:	Tachometer:
Layer Quantity:	Pallet Quantity:
Phase: <b>1</b>	CurrentType:
DC Pole:	
Poles: <b>6</b>	
Speeds: <b>1</b>	
Duty: <b>AIR OVER</b>	
Shaft Diameter: <b>1/2</b>	Shaft Diameter UOM: <b>IN</b>
Shaft Extension: <b>6.5</b>	Shaft Extension UOM: <b>IN</b>
Shaft Material:	Rotation: <b>REVERSIBLE</b>
Shaft Type: <b>DBL FLAT</b>	
Motor Type: <b>UF</b>	
Motor Use:	
Nameplate 1:	
Nameplate 2:	
Nameplate Text 1:	



## Specification & Rating Report

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Nameplate Text 2:

Nameplate Text 3:

Nameplate Text 4:

Label Text 1: **4-IN-1**

**HEATMASTER**

Label Text 2:

Label Text 3:

Label Text 4:

Brand Line:

Vendor Line:

Motor Weight:

Motor Weight UOM:

Shipping Weight:

Shipping Weight UOM:

Armature Field  
Winding:

Core Length:

Core Length UOM:

Winding Code:

Winding Specification:

Nameplate Only  
Instructions:

Nameplate & Label  
Instructions:

Label Only  
Instructions:



## Specification & Rating Report

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Rating Number: 1

Horsepower: **1/8-1/15**

Volts: **208-230**

Hertz: **60**

Field Current:

Revolutions Per **1075**

Minute:

Service Factor: **1.0**

Service Factor Amps:

NEMA Code:

NEMA Design:

Customer Nameplate Number:

Kilowatts:

Amps: **0.8**

Maximum Amps:

Armature Current:

Power Factor:

Service Factor Volts:

NEMA Nominal Efficiency:

NEMA Guaranteed Efficiency: