

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

Phase	1	Output HP	1/8-1/15 Hp
Output KW	0.10 kW	Voltage	208-230 V
Speed	1075 rpm	Service Factor	1.0
Frame	48	Enclosure	Totally Enclosed Air Over
Thermal Protection	Automatic	Ambient Temperature	70 °C
Frequency	60 Hz	Current	0.8 A
Duty	Air Over	Insulation Class	F
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
Connection Drawing	614131-242	Outline Drawing	ORM5454BF-S01

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GENERAL INFORMATION:

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

BEARINGS: BALL

MOUNTING POSITION: ALL ANGLE

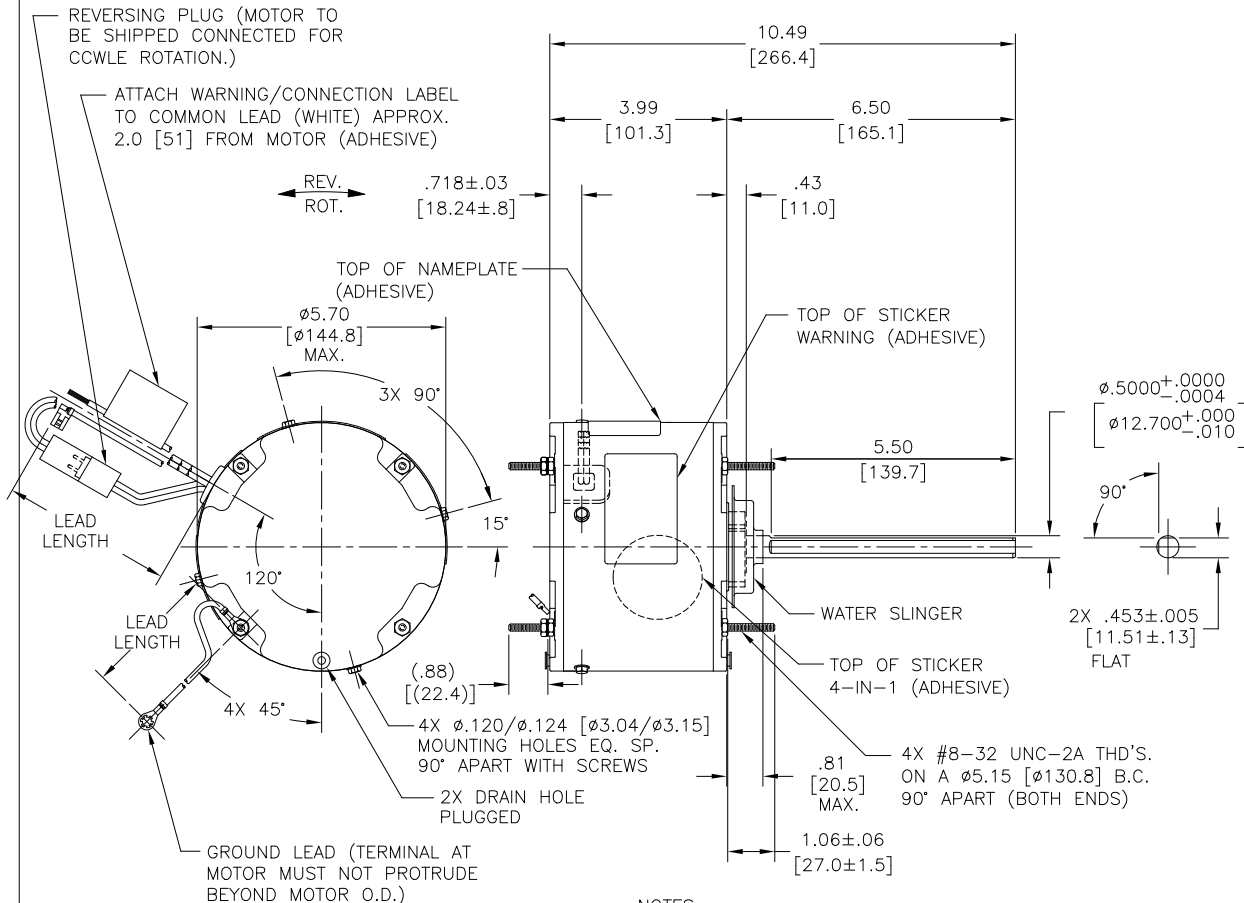
ELECTRICAL DATA:

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.



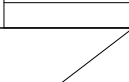
NAMEPLATE DATA:	EXTERNAL CONNECTION DIAGRAM
MODEL NO.: F48AB72A01 CUST. P/N: ORM5454BF HP: 1/8-1/15 ROT.: REVERSIBLE RPM: 1075 TYPE: UF FRAME: 48 VOLTS: 208-230 PH: 1 AMPS: 0.8 HZ: 60 INS.: F AMB.: 70°C DUTY: AIR OVER CAP.: 5 MFD/370 V ENCL: ENCLOSED UL LOGO CSA LOGO THERMALLY PROTECTED	SEP. CAP. BROWN BRN/WHT WHITE BLACK LINE ROTATION BLACK WHITE CCWLE WHITE BLACK CWLE

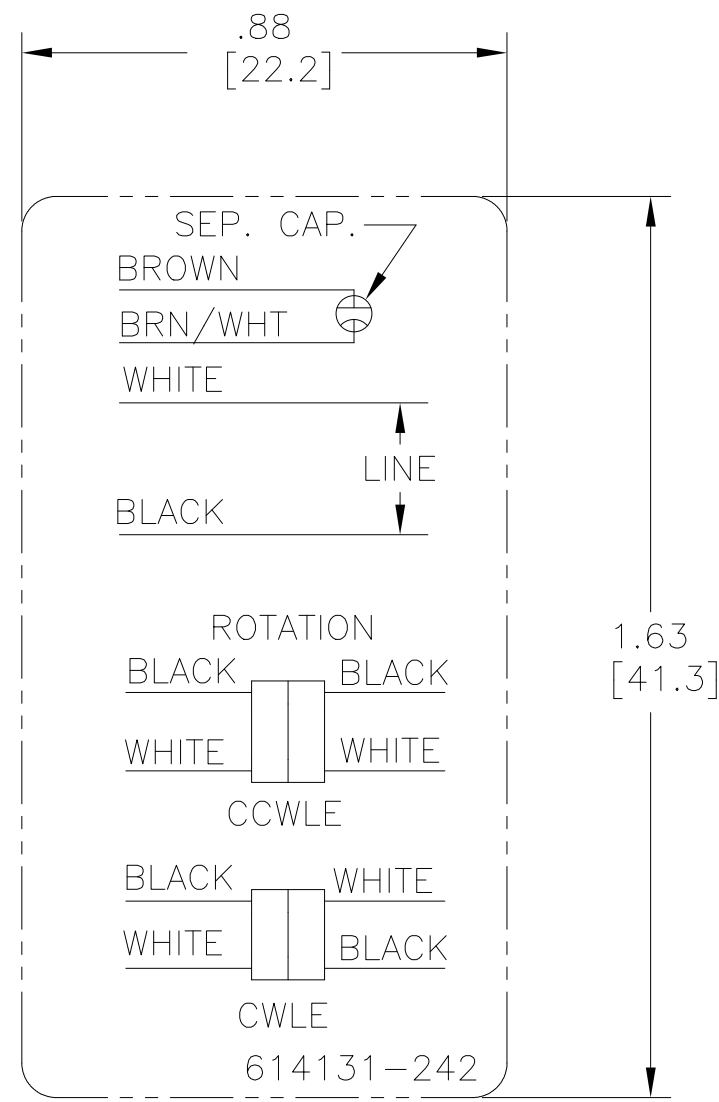
PERFORMANCE CURVE NO.	TORQUE @ 1075 RPM (25°C)	APPROVED SAMPLE	UL COMPONENT	CSA
C0000025	11.7 OZ. FT.	0801428A	E46412 PRGY2	LR43341 4211-01

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
COLOR	LENGTH	TERMINAL OR STRIP LENGTH

LEAD DATA		
DRAWING REVISION	REVISION BY	DATE
ECO	SURYA	11/11/2024
ECR-0238477	APPROVED BY	KEP
REMOVED CONSERVATION LABEL AS PER ECR.		
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MAIN FRAME - OLE	ENCLOSED
END FRAME - OLE	ENCLOSED
MAIN FRAME - LE	ENCLOSED
END FRAME - LE	ENCLOSED

ENCLOSURE		CUSTOMER	SERVICE	
	DRAWN BY: J. RUPERT	 Regal Beloit America, Inc.		
	DATE: 09-05-2008			
	APPROVED BY: C. BRANHAM			DESCRIPTION
	DATE: 09-05-2008			MODEL-RFHP-48FR OUTLINE
	REFERENCE			MATERIAL
THIRD ANGLE PROJECTION		SIZE DWG NO	SHEET	
		C	ORM5454BF	1



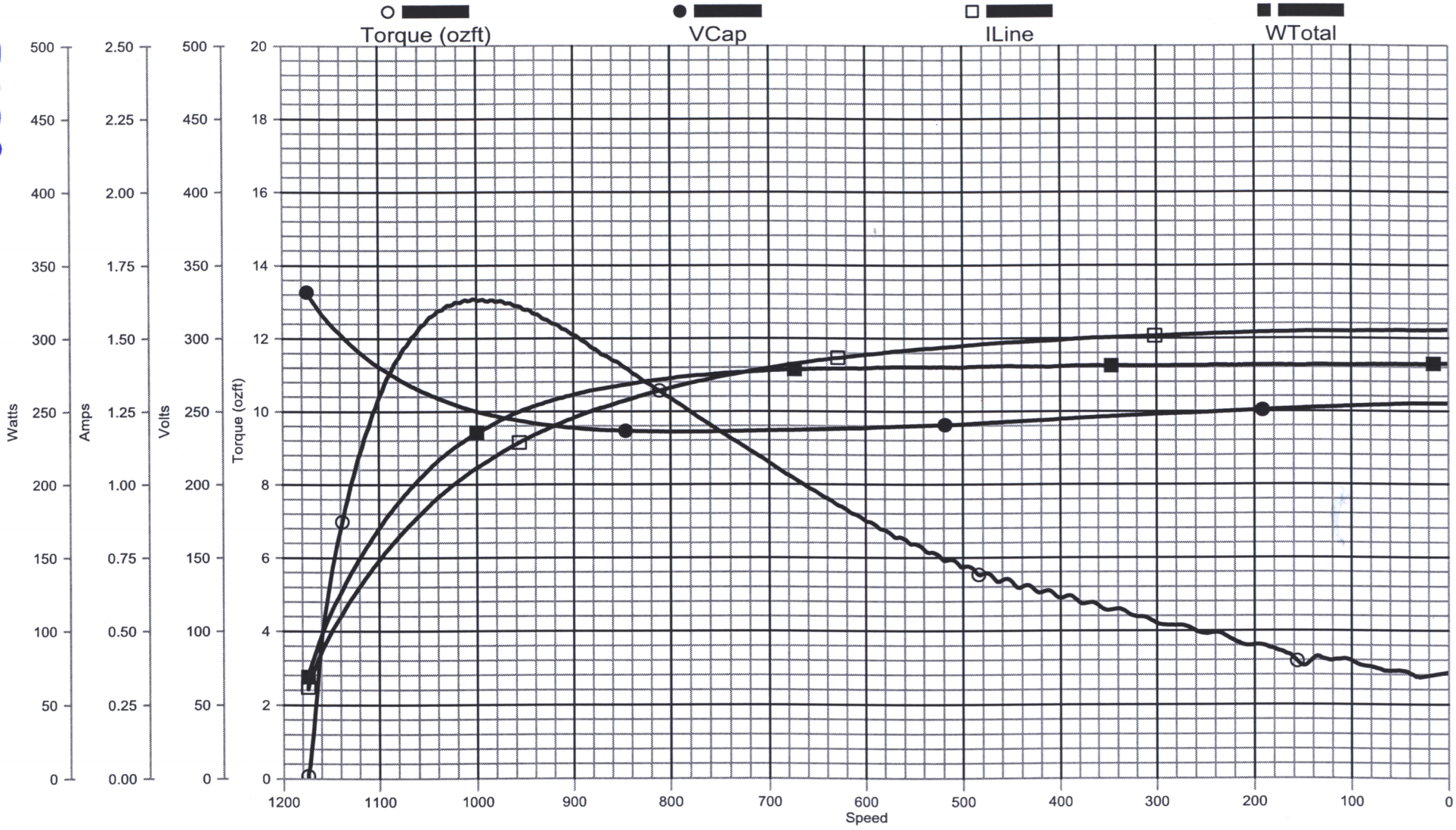
NOTES:

- 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	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 [.076/.381] X 45° CORNER FILLETS R.02 [.51] MACHINED SURFACES INCH 125 mm 3.2 mm SHOWN IN [BRACKETS]	DRAWN BY: YL	REGAL™ Regal Beloit America, Inc.		
ECO NMR-0213140	APPROVED BY J. RUPERT	DATE 03-16-2022		DATE: 04-15-2011	DESCRIPTION CONNECTION DIAGRAM EXTERNAL		
ECO DESCRIPTION REVISED FOR UP ISSUED				APPROVED BY: HZ			
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				REFERENCE	. . .		
			THIRD ANGLE PROJECTION 	SIZE A	DWG NO 4 of 10	SHEET 1	
				614131-242			

Performance Test Project: 0801428 (High Speed)

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:

C0000025

AO Smith

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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 ROTATION: CCW
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 LRA: 1.53
 LRT: 2.87
 COMMENT 4:

Resistance:

	Start	Mainl	
	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 & Rating Report

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:

Label Drive Bearing **BALL**
Type:

Label Opposite Drive **BALL**
Bearing Type:

Capacitor:

Capacitor Rating MFD: **5**

Capacitor Included: **N**

Capacitor Rating VAC: **370**

Control Code:

DC Design Number:

Form Factor:

Design Status:

Features:

Connection Diagram:

Lubrication Label
Diagram:

Outline Diagram: **ORM5454BF-S01**

Installation Diagram:

Warning Label
Diagram:

Outline Graphic:

Ambient Temperature: **70**

Insulation Class: **F**



Specification & Rating Report

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



Specification & Rating Report

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

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: